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**Subject: Carrier Corporation, Thompson Road Facility, Syracuse, New York
Corrective Action Order — Index CO 7-20051118-4
Site Registry No.: 734043
2019 Annual Site-Wide Groundwater Monitoring Report**

Dear Mr. Warner:

On behalf of Carrier Corporation, AECOM Technical Services, Inc. is hereby submitting the attached 2019 Annual Site-Wide Groundwater Monitoring Report.

Please call if you have any questions (919.461.1194).

Sincerely,



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ANNUAL SITE-WIDE GROUNDWATER MONITORING 2019

Carrier Corporation Site
Thompson Road, Syracuse, NY

Corrective Action Order – Index CO 7-20051118-4
NYSDEC Site Registry #734043

Project Number: 60617378

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1. Introduction

Carrier Corporation (Carrier) is performing environmental remediation activities at the Carrier Thompson Road Facility (Site) in Syracuse, Onondaga County, New York (**Figure 1**). Carrier retained AECOM Technical Services, Inc. (AECOM) to provide environmental engineering and investigation support services. Environmental work at the Site is being performed in accordance with the January 2006 Corrective Action Order on Consent (CO) negotiated with the New York State Department of Environmental Conservation (NYSDEC).

Groundwater at the Site has been sampled on a routine basis in accordance with the 2009 Site-Wide Monitoring Plan (SWMP) prepared by EnSafe, Inc. (EnSafe). At that time, the existing Site groundwater monitoring locations consisted of approximately 20 monitoring wells and 45 piezometers. Since 2009, a series of monitoring points were installed. As a result, there are currently 95 monitoring wells and over 38 piezometers located across the Site (see **Figure 2**).

Groundwater sampling at the Site was conducted semi-annually from 1990 through 1999, and then on an annual basis from 2000 to 2017 (NYSDEC approved the delay of annual sampling in 2016 due to significant investigation activity being performed).

AECOM prepared and submitted a revised Annual Site-Wide Groundwater Monitoring Plan (SWGMP) in October 2017. It was approved by the NYSDEC on October 27, 2017. The Annual SWGMP (as revised in 2017) was developed considering the following goals and criteria for groundwater presented in the CO:

- Groundwater monitoring must demonstrate compliance with all applicable state and federal water quality standards.
- If groundwater standards are not met, monitoring must demonstrate that natural attenuation continues to reduce the concentration of contaminants in the already contaminated areas; or that contaminant concentrations have stabilized and do not pose a significant threat to human health or the environment.
- Groundwater monitoring must continue to demonstrate that contaminants are not migrating off-Site and are not causing a threat to human health or the environment.

The Annual SWGMP includes inspection of wells, collection of water levels for use in determining groundwater flow, and collection and analyses of groundwater samples to evaluate groundwater quality.

The previous Site-wide groundwater monitoring event took place in October 2018. The findings were reported in the Annual Site-wide Groundwater Monitoring 2018 Report (AECOM February 2019). Groundwater monitoring and sampling was performed in November 2019 in accordance with the Annual SWGMP. This report presents the procedures and findings of the November 2019 sampling event.

In addition to the November 2019 sampling event, three piezometers located directly north of Building TR-7/7A were decommissioned which is summarized in this report.

2. Background

2.1 Facility Description

The Site is located in the northeast portion of Syracuse, New York, approximately one mile south of the New York State Thruway. The Site is bordered by New York State Route 298 to the north, Thompson Road to the west, Kinne Street to the east, and a baseball field and industrial area (Verizon) to the south. The Site is relatively flat with a slight downward slope to the north toward Sanders Creek. The Site consists of pavement, buildings, areas of lawn covering former slabs of demolished buildings, and general landscaping.

2.2 Site History

Prior to World War II, the property was utilized as farmland. Development of the Site as an industrial facility began around 1942. The facility was initially operated by General Electric and included manufacturing activities related to national defense. Subsequent Site operators included the Defense Corporation - a government-owned World War II manufacturing facility, and Syracuse University.

The Site was purchased in the 1950s by Carrier. The Carrier facility produced a variety of products associated with heating, ventilation, and air conditioning industry. Carrier continues to operate the facility, although several of the large, original buildings have been demolished.

Subsurface investigations have been conducted at the Site since the late 1980's. During the course of these investigations, numerous groundwater monitoring wells and piezometers were installed. Some of the investigations found volatile organic compound (VOC) and/or polychlorinated biphenyl (PCB) impacts in groundwater. Interim remedial measures have been, and continue to be, employed to address identified impacts.

2.3 Geology and Hydrogeology

The Site consists of three primary hydrostratigraphic units as follows:

Upper Water-Bearing Zone

- Fill composed of silty clay with varying amounts of gravel, cobbles, brick, metal, and concrete. This unit ranges in thickness from 1 foot (ft) to 8 ft.
- Silty clay with silt and sand lenses ranging in thickness from 2 ft to 15 ft.

Confining Clay Unit

- Gray clay confining unit ranging in thickness from 7 ft to 13 ft.

Lower Water-Bearing Zone

- Clayey silt to silt ranging in thickness from 6 ft to 10 ft.
- Red brown fine to medium sand, ranging in thickness from 2 ft to 6 ft.
- Dense clay/silt unit, ranging in thickness from 4 ft to 12 ft.
- Red brown to green gray weathered shale.

The shallow monitoring wells and all piezometers at the Site are screened in the upper water-bearing zone and deep monitoring wells are screened in the lower water-bearing zone. Depth to water in the upper water-bearing zone ranges approximately 1 ft to 14 ft below ground surface (bgs). Depth to water in the lower water-bearing zone ranges from artesian conditions to approximately 8 ft bgs. The artesian conditions are present in two wells (MW-54D and TR3-GB-03) in the former Building TR-3 area. Overall, horizontal groundwater flow is to the north-northwest across the Site in the upper water-bearing zone and westerly in the lower water-bearing zone.

2.4 Existing Groundwater Monitoring Well Network

There are currently 95 monitoring wells and over 38 piezometers present at the Site. Ten of the 95 monitoring wells are screened in the lower water-bearing zone and the remainder are screened in the upper water-bearing zone. The piezometers are all screened in the upper water-bearing zone.

The monitoring points were installed to monitor groundwater conditions at various areas including:

- Former Solid Waste Management Units (SWMUs) 1, 2, 3, and 4, which were concrete and steel storage tanks located in the area between buildings TR-1 and TR-4, north of building TR-6.
- Former Building TR-1, located in the western portion of the Site.
- Former Building TR-2, located in the northwestern portion of the Site, north of former Building TR-1.
- Parking Lot R, located in the north central portion of the Site, a paved portion of former Building TR-3.
- Building TR-3 North Wall/Storm Water Treatment Plant (SWTP), located in the north central portion of the Site.
- Manhole MH3 located inside the SWTP.
- Former Administrative and Research (A&R) Building, located in the northeastern portion of the Site.
- Former Debris Pile, located in the southeastern portion of the Site.

For selection of water level monitoring and groundwater sampling points in the Annual SWGMP, the existing monitoring well/piezometer network was considered to consist of the following three subsets:

1. Perimeter Wells— consisting of monitoring wells located along the perimeter of the Site. These locations are monitored and sampled to assess groundwater conditions up-gradient, down-gradient, and side-gradient of the Site.
2. Area Specific Wells/Piezometers – consisting of monitoring points installed in Area of Concerns (AOCs), SWMUs, and other areas of investigation. These locations are monitored and sampled to assess groundwater conditions in the vicinity of known areas of contamination. These specific areas are:
 - Former Building TR-1
 - Former Building TR-3 and Parking Lot R
 - Existing SWTP
 - Former A&R Building
 - Former SWMUs 1 through 4
3. Miscellaneous Interior Wells/Piezometers – consisting of locations not included in items 1 and 2 above.

Not all monitoring wells and piezometers at the Site are monitored and/or sampled. Refer to **Table 1** for a summary of program wells. For the Annual SWGMP, in areas where the monitoring well and/or piezometer density is high, representative wells and/or piezometers have been selected for the monitoring and sampling program.

Monitoring wells and piezometers have been installed at the former landfill referred to as AOC G west of Thompson Road. However, this Annual SWGMP focuses on the Thompson Road Campus portion of the Site where on-going operations occur and does not include AOC G.

3. Site-Wide Groundwater Monitoring Activities

3.1 Monitoring Point Inspections

A comprehensive inspection of the 133 monitoring wells and piezometers listed in **Table 2** was made for general exterior conditions. The 94 locations selected for groundwater level monitoring were also inspected for interior conditions. The inspections determined the condition of each monitoring point's exterior and interior (as appropriate), such as concrete pad, bolts, lid, curb box, riser, annular space, and J-plug. The findings of the monitoring point inspections are summarized on **Table 2**.

The following wells could not be located in the 2017 inspection or the 2018 inspection and are presumed to be paved or sodded over:

Monitoring Well/Piezometer	Status
AR-SB-04	Presumed sodded over. Part of monitoring program for water level measurements.
B001-08	Presumed paved over. Part of monitoring program for water level measurements.
B001-14	Presumed paved or sodded over. Well not part of the current monitoring program.
FDPZ02	Presumed sodded over. Well not part of the current monitoring program.
FDPZ04	Presumed sodded over. Well not part of the current monitoring program.
MW-11	Could not be located. Beneath temporary access road installed for the TR-3 North Wall sheet pile installation project. Well not part of the current monitoring program.
MW-20	Presumed paved over. Part of monitoring program for water level measurements.
MW-53	Could not be located. Well is the area of the TR-3 North Wall sheet pile installation. Well not part of the current monitoring program.
MW-59	Could not be located. Beneath temporary access road installed for the TR-3 North Wall sheet pile installation project. Well not part of the current monitoring program.
SSIPZ05	Could not be located, the other wells of this type in the vicinity are PVC stick-ups (with no steel protective casing). Part of monitoring program for water level measurements.
DCDPZ04	Obstruction in the well at approximately 2 ft. Part of monitoring program for water level measurements.

3.1.1 Piezometer Decommission

Carrier identified three piezometers located directly north of Building TR-7/7A, which are not currently identified in the SWGMP. The piezometers were decommissioned following NYSDEC policy (CP-43: Groundwater Monitoring Well Decommissioning Policy), which specifies that the piezometers casings be removed and the bore hole grouted as the piezometer casing is being removed. The piezometer decommission logs are located in **Appendix A**.

3.2 Water Level Monitoring

On November 11 and 12, 2019, water levels were measured from 89 of the 94 monitoring wells and piezometers specified in the Annual SWGMP. The following points specified in the Annual SWGMP could not be accessed: AR-SB-04 (unable to locate), B001-08 (paved over), MW-20 (paved over), SSIPZ05 (unable to locate), and DCDPZ04 (obstruction). Water level measurements were performed using an electronic oil/water interface probe.

The measurements included determination of the thickness of light non-aqueous phase liquid (LNAPL), where present. Both the lower and upper water-bearing zones were monitored. Water level measurement for monitoring wells and piezometers are presented in **Table 2**.

Water level measurements were used to determine direction of groundwater flow across the Site through the generation of potentiometric contour maps of both the upper and lower water-bearing zones. In addition, some areas require closer evaluation for the purposes describe below:

- Monitoring points have been included in the former A&R Building area to evaluate the apparent groundwater mounding condition observed during the A&R area investigation in 2016.
- Monitoring points have been included in the former Buildings TR-1 and TR-3 area to evaluate LNAPL thickness and potential migration.
- Monitoring points have been included in the former Building TR-3 area to evaluate the horizontal well capture zone.

The groundwater elevation and LNAPL thickness measurements are presented in **Table 2**. Where LNAPL is present, the groundwater elevations shown on **Table 2** have been corrected to account for the LNAPL. The groundwater elevation in November 2019 was, on average, 1.01 ft higher than the previous monitoring event in October 2018.

3.2.1 Upper Water-Bearing Zone Groundwater Flow

Groundwater contours for the upper water-bearing zone are presented in **Figure 3**. Generally, flow across the Site is north-northwest across the majority of the Site. Exceptions are as follows:

- A groundwater mound beneath the former A&R building – Water elevations in monitoring wells AR-MW-02 and AR-MW-03 remain higher than nearby wells. This condition is attributed to a higher rate of recharge in the vicinity of the wells where impervious surfaces (concrete slabs, former building foundations and associate infrastructure) are not present. In 2019 the height of the mound is higher than in 2018 as would be expected when overall water elevations are higher. The influence of this mound is likely to be limited to areas in its immediate vicinity with minimal impact on the overall shallow flow system at the Site.
- Water table mound beneath former TR-1 building – A groundwater mound beneath the former TR-1 building and presence of LNAPL complicates groundwater flow interpretation in this area. Water elevations in monitoring wells MW-26 and MW-29 are higher than other nearby wells. As with the mound near the A&R Building, this mound appears indicative of an area of enhanced recharge, coupled with fine grained soil resulting in minimal flux away from the mound. LNAPL was encountered in five monitoring wells in this area.
- Complex water table interpretation South of the SWTP - Several areas have shown isolated water table mounds and depressions. These conditions are likely transient and reflect recharge in areas lacking impervious surfaces coupled with fine grained soil the results in a minimal flux away from mounded areas. In this area drainage near storm sewer backfill may contribute to lower water levels recorded at wells B100104 and B100105. This complex condition was consistent with what was observed in 2018.
- Flow intercepted by the horizontal well and sheet pile wall at former Building TR-3 – Monitoring points in and around former Building TR-3 show the capture zone formed by the combination of the horizontal well and sheet pile wall. A detail of this area is provided in **Figure 4**. The horizontal well, which typically discharges approximately 3 gallons per minute (when the pump is actively on – the pump cycles on/off based on groundwater level floats), is capturing groundwater as designed. This is evidenced by the absence of a mounding condition and the presence of water table depression behind the sheet-pile wall.

3.2.2 Lower Water-Bearing Zone Groundwater Flow

Groundwater contours for the lower water-bearing zone are presented in **Figure 5**. Flow in the lower water-bearing zone is generally in a westerly direction.

3.2.3 LNAPL Thickness Results

Monitoring in the former Building TR-1 and TR-3 areas included evaluating LNAPL thickness and potential migration. As shown below, LNAPL was observed at the same wells in 2019 as in 2018 with only minor changes in thickness (with the exception of a large increase in thickness in SSIPZ04). LNAPL was not observed at any new locations indicating that the LNAPL has not migrated.

Monitoring Point	2018 LNAPL Thickness (Ft)	2019 LNAPL Thickness (Ft)
DNDPZ01	0.75	0.70
DNDPZ04	0.18	Not measured due to obstruction.
MW-25	2.01	2.12
MW-31	0.24	0.01
MW-33	0.07	0.01
MW-46	0.20	0.55
PLR001	0.01	0.16
SSIPZ02	Sheen	Not detected
SSIPZ04	0.02	2.20

3.3 Groundwater Sampling

Groundwater samples were collected from 33 monitoring wells (**Table 1**) using USEPA/NYSDEC low-flow sampling procedure. No piezometers were sampled. All wells were sampled using a peristaltic pump, with dedicated tubing used at each well. In-line filters (for PCB samples) were also dedicated and disposed of after sampling. Water quality parameters of pH, conductivity, temperature, dissolved oxygen (DO), oxygen reduction potential (ORP), and turbidity were periodically recorded during well purging.

Samples were collected into laboratory supplied containers and delivered to SGS North America Inc. (SGS), a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory located in Dayton, NJ. The samples were delivered under Chain of Custody protocol. Thirty-two locations were analyzed for VOCs, five locations (MW-19, MW-23, MW-26, MW-38, and MW-44) were analyzed for PCBs (filtered and unfiltered samples), and ten locations were analyzed for 1,4-dioxane. Samples scheduled for PCB analyses were filtered in the field. Copies of the Field Purge Logs are included in **Appendix B**.

3.3.1 Disposition of Investigation-Derived Waste

Groundwater generated during well purging and sampling activities was managed as investigation-derived waste (IDW) and was transferred to the on-Site SWTP for treatment. The interface probe was decontaminated by spraying with Alconox and potable water solution, wiping with paper towels, followed by a potable water rinse (wiping the probe with clean paper towels prevented the accumulation of soapy water which cannot be treated at the SWTP).

Solid IDW (e.g., tubing, paper towels, and personal protective equipment) was disposed of in the solid waste dumpster at the SWTP.

4. Laboratory Analytical Results

Samples from 33 locations were submitted to SGS for analysis of VOCs with five locations also analyzed for PCBs (filtered and unfiltered). Ten locations were analyzed for 1,4-dioxane. Three duplicate samples and two matrix spike/matrix spike duplicate (MS/MSD) pairs were submitted for VOC analysis for quality assurance/quality control (QA/QC) purposes. Similarly, one duplicate sample and one MS/MSD pair were submitted for analysis of PCBs and 1,4-dioxane.

Upon receipt of the analytical results, data validation was performed by an AECOM chemist following NYSDEC DER-10 and USEPA Region II data validation procedures. The data validation results are presented in a Data Usability Summary Report (DUSR) provided in **Appendix C**.

The DUSR presents deviations from the relevant QC requirements and the associated qualifications to the sample data warranted by these deviations. QC items discussed in detail in the DUSR include surrogate sample recoveries, matrix spike recoveries, duplicate sample analyses, instrument calibration, and performance and method and field blank sample analyses. The report also presents copies of the laboratory reporting forms with hand written qualifications made by the data validator. The data presented in the summary tables included in this report reflect these qualifications. Overall, validation showed that the data were of adequate quality for use in a quantitative evaluation of groundwater quality in accordance with the requirements of the Annual SWGWMP.

Validated laboratory analytical results are presented in **Table 3** and **Figure 6**. The groundwater analytical results are compared to the NYS Ambient Water Quality Standards (AWQS) and Guidance Values in Technical & Operational Guidance Series (TOGS) Version 1.1.1, June 1998, with June 2004 Addendum. A statistical summary of the results is presented as **Table 4**. Statistics include the number of detections, frequency of detections, range of detections (minimum, maximum, average), number of exceedances, and the location of the maximum value. The following presents a summary of the results:

- PCBs were not detected in filtered or unfiltered samples from the five wells sampled (MW-19, MW-23, MW-26, MW-38, and MW-44).
- VOCs were detected in 23 of the 33 samples.
- Twelve samples had one or more VOCs present at a concentration higher than its respective TOGS guidance value.
- The most commonly detected VOC group was chlorinated VOCs, which were detected at concentrations above groundwater criteria in 12 samples. The chlorinated VOCs detected at concentrations exceeding criteria include trichloroethene (TCE), tetrachloroethene (PCE) and their breakdown products chloroethane, cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1,1-trichloroethane (1,1,1-TCA), and vinyl chloride (VC).
 - Concentrations of chlorinated VOCs exceeding groundwater criteria ranged from 3.1 micrograms per liter (µg/L) VC to 144,000 µg/L TCE.
 - TCE concentrations were highest at locations MW-18, MW-69, and TR3-PW-01 where concentrations ranged from 488 to 144,000 µg/L. The highest concentration occurred at TR3-PW-01. Concentrations ranged from below detection limits to 202 µg/L at the other wells.
 - PCE concentration was the highest at location TR3-PW-01 at 71.3 µg/L.
 - Cis-1,2-DCE concentrations were highest at locations MW-18, MW-23, and TR3-PW-01. Concentrations ranged from 1,930 to 14,300 µg/L. The highest concentration occurred at TR3-PW-01. Concentrations ranged from below detection limits to 715 µg/L at the other wells.
 - The highest concentration of VC occurred in MW-18 at 769 µg/L.
 - The highest concentrations of chloroethane, 1,1,1-TCA, and 1,1-DCA occurred in well MW-23 at detected concentrations of 12.4, 84.4 and 178 µg/L, respectively.

- Water quality measurements recorded at the time of sample collection (see purge logs in **Appendix B**) indicate low DO and ORP in some of the wells with the highest VOC concentrations (e.g., MW-18, MW-23, and TR3-PW-01) suggesting that groundwater conditions are favorable for anaerobic degradation (reductive dechlorination). The presence of TCE breakdown products (e.g. cis-1,2-DCE and VC) further suggests that reductive dechlorination is ongoing.
- The only non-chlorinated VOCs detected at concentrations above the groundwater criteria were ethylbenzene, toluene, and xylene, which were only detected in well MW-23.
- 1,4-dioxane was detected in five of the ten wells sampled at concentrations ranging from 0.049 µg/L to 2.9 µg/L. The highest concentration occurred at MW-70 which was consistent with historical results.

5. Evaluation of Findings

Evaluation of the data is discussed in the following sections by area. Comparisons are made to historical data that is attached for reference in **Appendix D**.

5.1 Perimeter Well Network

Table 1 lists the twelve monitoring wells located along the Site perimeter that were sampled to evaluate whether contaminants are migrating on- or off-Site. One of the twelve perimeter wells (MW-71) contained compounds at concentrations above the groundwater criteria.

Monitoring well MW-71 is located on the western edge of the Site and is adjacent to the former Building TR-1 area. Compounds exceeding criteria in MW-71 were TCE (66.8 µg/L), cis-1,2-DCE (40.8 µg/L) and VC (6.2 µg/L). The groundwater criteria for TCE, cis-1,2-DCE and VC are 5 µg/L, 5 µg/L and 2 µg/L, respectively.

5.2 Former A&R Building Area

Monitoring wells AR-MW-02 and AR-MW-06 in the former A&R Building area were sampled:

- AR-MW-02 is located within the groundwater mound at the former A&R building. No CVOCs were detected in this well in 2019. This is consistent with results from 2016, 2017, and 2018.
- AR-MW-06 is located downgradient of the groundwater mound near the former A&R building. This well had concentrations of cis-1,2-DCE and TCE at concentrations exceeding groundwater criteria in 2018. However, in 2019 both cis-1,2-DCE and TCE were present but at a concentration below the groundwater criteria.

5.3 Former Building TR-1 Area

Three wells in the former Building TR-1 area were sampled (MW-23, MW-26, and MW-38), along with perimeter monitoring wells MW-19 and MW-71. The samples were analyzed for VOCs and PCBs in MW-19, MW-23, MW-26, and MW-38.

- PCBs have historically been detected in wells MW-23, MW-26, and MW-38. No PCBs were detected in these wells in 2019.
- Monitoring well MW-23 is located off the west-northwest side of the area and has historically contained elevated levels of VOCs. VOC results from the November 2019 sampling event were consistent with the results from 2018. The highest concentrations of chloroethane, 1,1,1-TCA, 1,1-DCA, ethylbenzene, toluene, and xylene detected during the November 2019 sampling event occurred at this well. However, perimeter monitoring well MW-19, located approximately 60 ft to the northwest and downgradient of MW-23, exhibited no exceedances of groundwater criteria.
- Monitoring well MW-26 is located in the west-central area of former Building TR-1 where elevated VOCs were previously detected. TCE was detected above criteria in 2018 but detected below the criteria in 2019.
- Monitoring well MW-38 is located on the northwest, downgradient side of former Building TR-1. TCE was detected but below the criteria in 2019.

5.4 Former Building TR-3/SWTP Area and Parking Lot R

In 2016, a sheet pile wall was installed on the north side of former Building TR-3 to contain known concentrations of VOCs in groundwater beneath the former building footprint. A horizontal well was also installed upgradient of the sheet pile wall to capture impacted groundwater. The groundwater is treated at the adjacent SWTP, which is located in the northeast corner of former Building TR-3.

Historically, the area of highest VOC concentrations has been reported in monitoring wells located west of the SWTP.

Nine monitoring wells in the former Building TR-3/SWTP area were analyzed for VOCs (MW-18, MW-44, MW-45, MW-48, MW-50, MW-57, MW-58, MW-66, and TR3-PW-01). One of those wells (MW-44) was also analyzed for PCBs. Also, two perimeter wells, MW-79 and TR3-MW-02, are also being used to evaluate groundwater quality in the former Building TR-3/SWTP area.

Monitoring well MW-18 is located on the north side of the SWTP, just south (upgradient) of the sheet pile wall. Groundwater analytical data dating back to 2001 for MW-18 show considerable fluctuations in VOC concentrations with TCE and cis-1,2-DCE typically having the highest concentrations. The TCE and cis-1,2-DCE concentrations in November 2019 were lower than those measured in 2018. See **Appendix D** for historic sampling results.

TR3-PW-01 is located approximately 150 ft west of MW-18 and is also just south of the sheet pile wall. TR3-PW-01 was sampled following its installation in 2016 (prior to installation of the sheet pile wall) and contained TCE at a concentration of 195,000 µg/L. The TCE concentration has since dropped to 137,000 µg/L in November 2017, dropped to 94,500 µg/L in October 2018 and increased to 144,000 µg/L in November 2019. While these concentrations are approximately 9 to 20% of the solubility limit of TCE and suggest that free-phase TCE maybe bound within the fine grained soil near this location, the fluctuating concentrations may reflect the active capture of impacted groundwater by the horizontal well and sheet pile wall.

Wells MW-50 and MW-57 are located farther west of TR3-PW-01, south of the sheet pile wall. The 2019 results from these wells again showed limited impacts. MW-50 reported no detectable VOCs above criteria. MW-57 reported cis-1,2-DCE (317 µg/L) and VC (270 µg/L) above the groundwater criteria and slightly higher than measured in 2018. These results are consistent with the past and suggest no material change in the conditions near these wells.

Wells MW-58 and MW-66 are located north (downgradient) of the sheet pile wall but south of Sanders Creek. These wells have limited sampling history, having only been sampled in 2014, 2015, 2017 and 2018. Well MW-58 concentrations remained below criteria with the exception cis-1,2-DCE (27.5 µg/L) which is consistent with 2018. In well MW-66, concentrations of cis-1,2-DCE, TCE and VC remained above criteria but slightly lower than in 2018. The 2019 results show that the elevated VOC concentrations detected south (upgradient) of the sheet pile wall are not observed on the north (downgradient) side of the wall. These results suggest the sheet pile wall and horizontal well are operating as designed and are maintaining hydraulic containment of the TCE impacted groundwater.

No VOCs were detected at concentrations exceeding criteria in the downgradient perimeter wells (MW-79 and TR3-MW-02) located north of Sanders Creek.

Monitoring wells MW-44 and MW-45 are located south (upgradient) of the sheet pile wall in an area within the footprint of former Building TR-3 and currently referred to as Parking Lot R. Consistent with prior sampling events, analytical results from monitoring well MW-44 did not exceed criteria and the result from MW-45 exceeded criteria for cis-1,2-DCE (17 µg/L) and TCE (162 µg/L), which is consistent with 2018.

Monitoring well MW-48 is located on the south side of the SWTP in an area where elevated VOCs have historically been detected. The detected TCE concentration of 20.6 µg/L was consistent with 2018.

5.5 SWMUs 1 through 4

Two monitoring wells, MW-03S and MW-03D, are located in this former SWMU area south of Building TR-18S. Groundwater sampling of these two wells dates back to 1985. The highest VOC concentrations are detected at MW-03S where cis-1,2-DCE is the primary compound reported. The historic high cis-1,2-DCE concentration of 32,000 µg/L was detected in 1990. Cis-1,2-DCE has decreased since that time with concentrations ranging between 390 to 863 µg/L from 2014 to 2018. In 2019 the cis-1,2-DCE concentration was 715 µg/L. The detection of cis-1,2-DCE, at 7.4 µg/L, in MW-03D was consistent with the historical results.

5.6 Miscellaneous Interior Wells

Monitoring wells MW-69, MW-70, MW-75, and MW-84 were installed in 2017 to provide groundwater quality data for locations within the interior of the Site and were selected for inclusion in the Annual SWGMP.

- Monitoring well MW-69 is located between buildings TR-4 and TR-6. The VOCs 1,1-DCA, cis-1,2-DCE, trans-1,2-DCE, TCE, and VC were detected at concentrations exceeding groundwater criteria in 2019; however, these concentrations decreased from 2018.
- Monitoring well MW-70 is located within the footprint of former Building TR-2. No compounds were detected at concentrations exceeding groundwater criteria during the November 2019 sampling event.
- Monitoring well MW-75 is located between buildings TR-5 and TR-19. No compounds were detected at concentrations exceeding groundwater criteria during the November 2019 sampling event.
- Monitoring well MW-84 is located between buildings TR-4 and TR-5. No compounds were detected at concentrations exceeding groundwater criteria during the November 2019 sampling event.

6. Summary and Recommendations

Monitoring and sampling was performed in November 2019 in accordance with the Annual SWGMP.

Wells/piezometers AR-SB-04, B001-08, B001-14, FDPZ02, FDPZ04, MW-11, MW-20, MW-53, MW-59, and SSIPZ05 could not be found for the third consecutive year. With the exception MW-11 and MW-59 which are beneath a temporary access road installed for the TR-3 North Wall sheet pile installation project, all these wells were likely destroyed by paving or landscaping at the site. All wells with the exception of AR-SB-04, B001-08, MW-20, and SSIPZ05 are currently not part of the Annual SWGMP. These four wells were scheduled for water level measurements; however, there are sufficient nearby wells that are currently part of the Annual SWGMP for water level measurements which provides adequate coverage.

As required by the remedial goals and criteria for groundwater presented in the CO, the November 2019 groundwater analytical data identifies locations that are within compliance with applicable TOGS. For locations with groundwater exceedances, the analytical data are consistent with or lower than historical results. The data, specifically DO and ORP, show that groundwater conditions are favorable for reductive dechlorination in some of the areas (e.g., MW-18, MW-23, and TR3-PW-01) with elevated VOC contamination. The presence of TCE breakdown products across the well network also supports this conclusion.

The decrease of concentrations, when compared to historical results, in wells directly downgradient of the sheet pile wall (MW-58 and MW-66) along with the groundwater depression directly upgradient of the wall, shows that the sheet pile wall and horizontal well are effective in containing and capturing known VOC-contaminated groundwater.

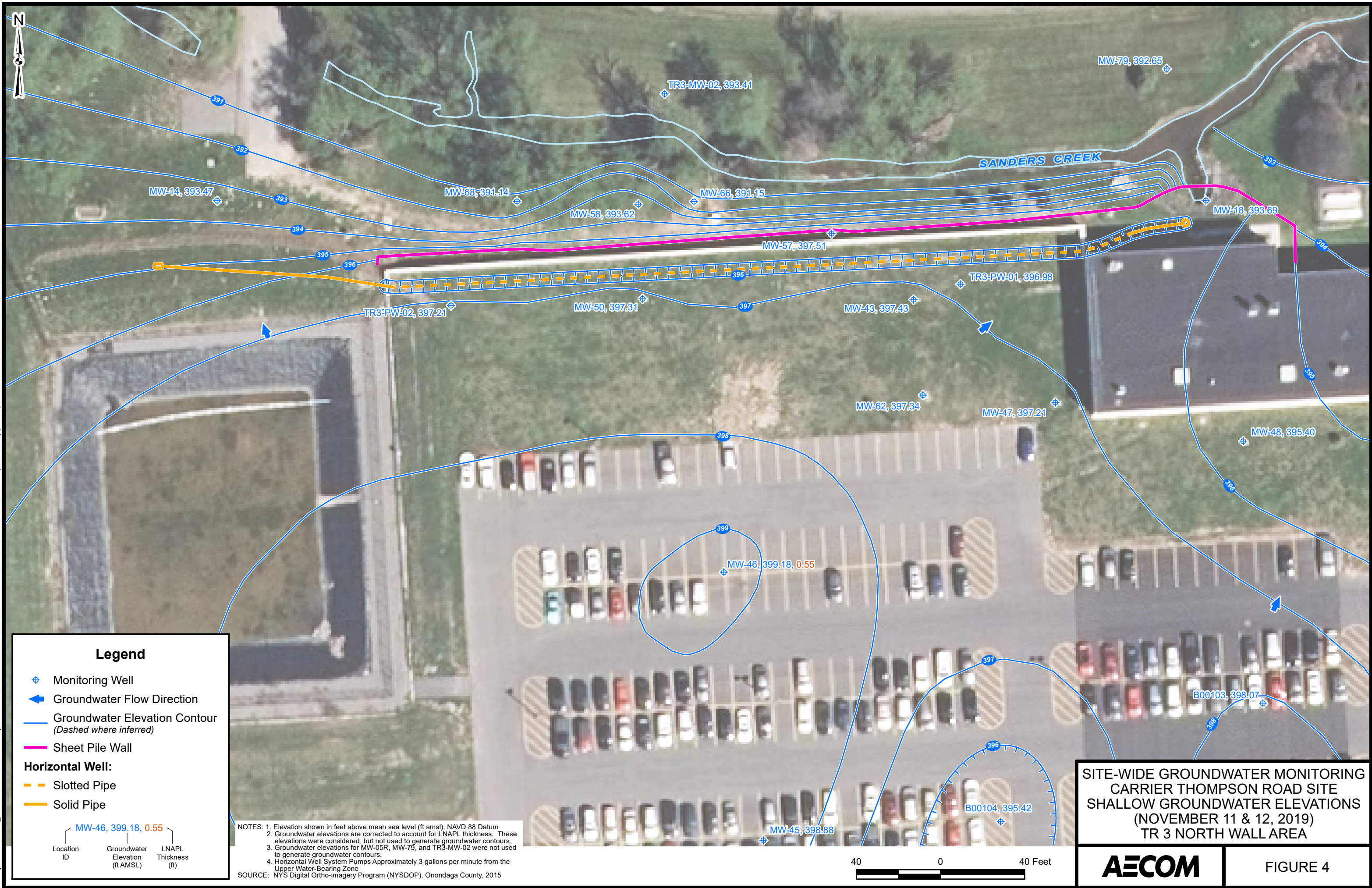
Contaminant concentrations observed at MW-23 are consistent with concentrations observed in 2018. Contaminant concentrations were not observed at MW-19 which is a nearby on-Site well downgradient of MW-23, which strongly suggests that contaminants detected in MW-23 are not migrating off-Site. To further evaluate the contaminant concentrations in MW-23, the 2019 sample purge log was reviewed and found to exhibit evidence of strongly reducing conditions (low DO and ORP) and very low permeability (over 5 feet of drawdown when purging at only 125 to 145 milliliters per minute). Under these conditions, small residual concentrations of contaminants can persist and result in detections of degradation byproducts from reductive dechlorination within the isolated environment in and adjacent to the well. The 2019 data shows that at this well, cis-1,2-DCE, a degradation byproduct of TCE, had a concentration more than ten times that of TCE. The ratio of cis-1,2-DCE to TCE suggest that biodegradation is occurring at this location.

With the potential exception of well MW-71, the groundwater data demonstrate that contaminants are not migrating off-Site. However, a new monitoring well will be installed downgradient of MW-71 consistent with methods/procedures used in the installation of MW-71. A brief letter work plan will be provided to NYSDEC prior to installation. The DO in this well shows groundwater conditions are favorable for reductive dechlorination and TCE breakdown product (cis-1,2-DCE and VC) are present in MW-71. The area directly off-Site is Thompson Road and beyond that is Carrier-owned property. Monitoring at MW-71 will continue as part of the Annual SWGMP.

The next Annual SWGMP event is tentatively scheduled for September 2020.

Figures

J:\Projects\60310231_UTCAOCGRIM\ISC\GIS\Maps\Site-Wide\GW REPORT 2019\04 SHALLOW GROUNDWATER ELEVATIONS (NOV 2019) (INSET).mxd 2/13/2020



J:\Projects\60310231_UTCAOCGRIM\SCGIS\Maps\Site-Wide\GW REPORT 2019\05 DEEP GROUNDWATER ELEVATIONS (NOV 2019).mxd 2/12/2020

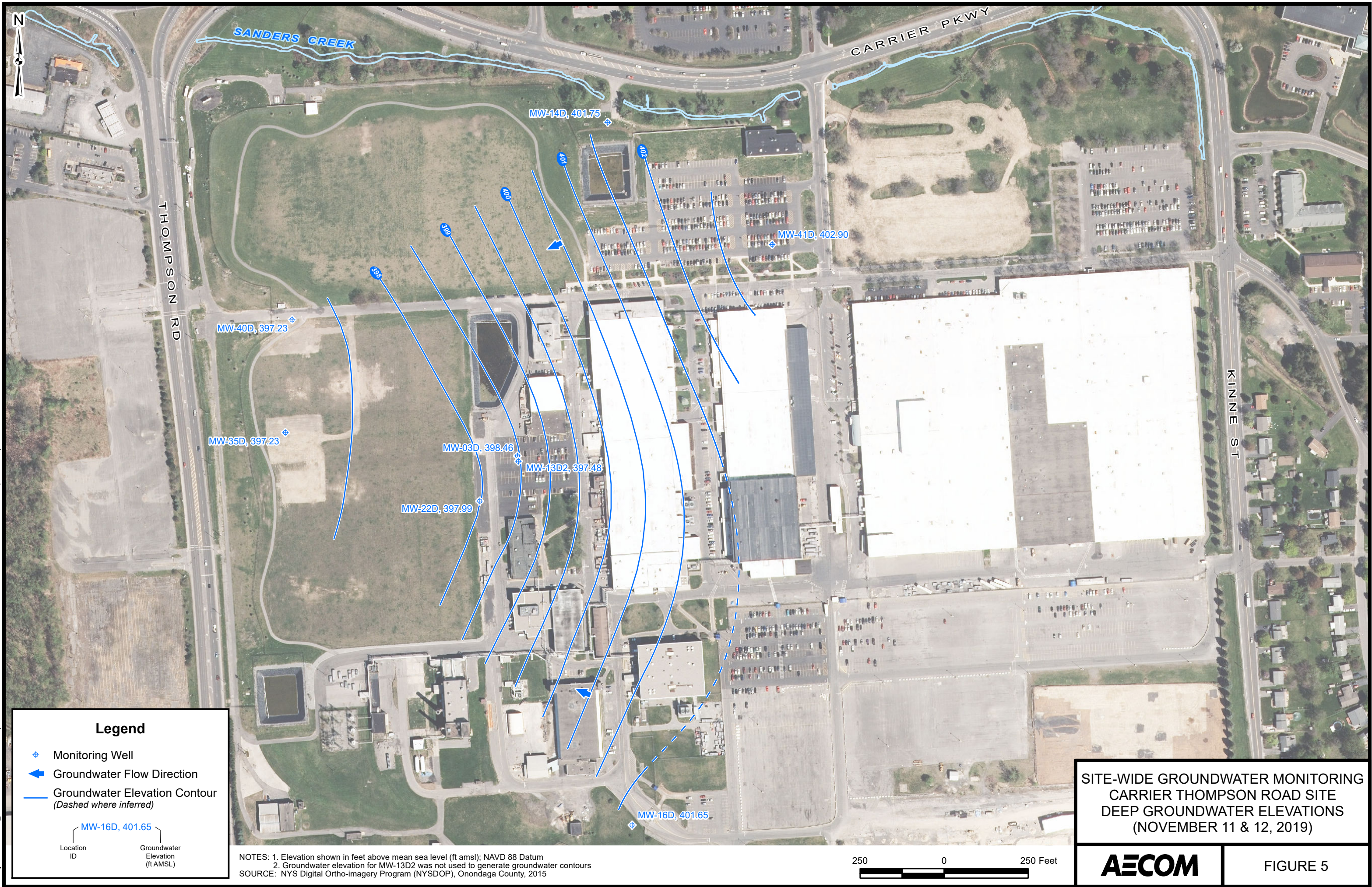


FIGURE 6

Tables

TABLE 1
CARRIER THOMPSON ROAD SITE
SITE-WIDE GROUNDWATER MONITORING PROGRAM
PROPOSED WELLS

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (inches)	Proposed Wells For:			
				Water Levels	VOC Analysis	PCB Analysis	Emerging Contaminant
Perimeter	DP-MW-04	Upper	2	x	x		x
Perimeter	MW-05R	Upper	2	x			
Perimeter	MW-09	Upper	2	x	x		
Perimeter	MW-10	Upper	2	x	x		x
Perimeter	MW-14	Upper	2	x	x		x
Perimeter	MW-14D	Lower	2	x			x
Perimeter	MW-16D	Lower	2	x			
Perimeter	MW-17	Upper	2	x	x		x
Perimeter	MW-19	Upper	2	x	x	x	
Perimeter	MW-21	Upper	2	x	x		
Perimeter	MW-42	Upper	2	x			
Perimeter	MW-71	Upper	2	x	x		x
Perimeter	MW-73	Upper	2	x			
Perimeter	MW-76	Upper	2	x	x		
Perimeter	MW-77	Upper	2	x	x		
Perimeter	MW-79	Upper	2	x	x		
Perimeter	TR3-MW-02	Upper	2	x	x		
Area Subtotal				17	12	1	6
A&R	AR-MW-01	Upper	2	x			
A&R	AR-MW-02	Upper	2	x	x		x
A&R	AR-MW-03	Upper	2	x			
A&R	AR-MW-04	Upper	2	x			
A&R	AR-MW-05	Upper	2	x			
A&R	AR-MW-06	Upper	2	x	x		
A&R	AR-SB-02	Upper	1	x			
A&R	AR-SB-04	Upper	1				
Area Subtotal				7	2	0	1
TR-1	DCDPZ01	Upper	1	x			
TR-1	DCDPZ02	Upper	1	x			
TR-1	DCDPZ03	Upper	1	x			
TR-1	DCDPZ04	Upper	1	x			
TR-1	MW-06	Upper	2	x			
TR-1	MW-23	Upper	2	x	x	x	
TR-1	MW-24	Upper	2	x			
TR-1	MW-25	Upper	4	x			
TR-1	MW-26	Upper	2	x	x	x	
TR-1	MW-27	Upper	2	x			
TR-1	MW-28	Upper	2	x			
TR-1	MW-29	Upper	4	x			
TR-1	MW-30	Upper	4	x			
TR-1	MW-31	Upper	2	x			
TR-1	MW-32	Upper	2	x			
TR-1	MW-33	Upper	2	x			
TR-1	MW-34	Upper	2	x			
TR-1	MW-35D	Lower	2	x			
TR-1	MW-36	Upper	4	x			
TR-1	MW-37	Upper	2	x			
TR-1	MW-38	Upper	2	x	x	x	
TR-1	MW-40D	Lower	2	x			
TR-1	SSIPZ01	Upper	1	x			
TR-1	SSIPZ02	Upper	1	x			
TR-1	SSIPZ03	Upper	1	x			
TR-1	SSIPZ04	Upper	1	x			
TR-1	SSIPZ05	Upper	1	x			
Area Subtotal				27	3	3	0

TABLE 1
CARRIER THOMPSON ROAD SITE
SITE-WIDE GROUNDWATER MONITORING PROGRAM
PROPOSED WELLS

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (inches)	Proposed Wells For:			
				Water Levels	VOC Analysis	PCB Analysis	Emerging Contaminant
TR-3 and Parking Lot R	B001-03	Upper	1	x			
TR-3 and Parking Lot R	B001-04	Upper	1	x			
TR-3 and Parking Lot R	B001-05	Upper	1	x			
TR-3 and Parking Lot R	B001-06	Upper	1	x			
TR-3 and Parking Lot R	B001-07	Upper	1	x			
TR-3 and Parking Lot R	B001-08	Upper	1	x			
TR-3 and Parking Lot R	B001-09	Upper	1	x			
TR-3 and Parking Lot R	B001-10	Upper	1	x			
TR-3 and Parking Lot R	MW-18	Upper	2	x	x		
TR-3 and Parking Lot R	MW-20	Upper	2	x			
TR-3 and Parking Lot R	MW-41D	Lower	2	x			
TR-3 and Parking Lot R	MW-43	Upper	2	x			
TR-3 and Parking Lot R	MW-44	Upper	2	x	x	x	
TR-3 and Parking Lot R	MW-45	Upper	2	x	x		
TR-3 and Parking Lot R	MW-46	Upper	2	x			
TR-3 and Parking Lot R	MW-47	Upper	2	x			
TR-3 and Parking Lot R	MW-48	Upper	2	x	x		
TR-3 and Parking Lot R	MW-50	Upper	2	x	x		
TR-3 and Parking Lot R	MW-57	Upper	2	x	x		
TR-3 and Parking Lot R	MW-58	Upper	2	x	x		
TR-3 and Parking Lot R	MW-62	Upper	2	x			
TR-3 and Parking Lot R	MW-66	Upper	2	x	x		
TR-3 and Parking Lot R	MW-68	Upper	2	x			
TR-3 and Parking Lot R	PLR001	Upper	1	x			
TR-3 and Parking Lot R	TR3-PW-01	Upper	4	x	x		
TR-3 and Parking Lot R	TR3-PW-02	Upper	4	x			
Area Subtotal				26	9	1	0
SWMU 1-4	MW-03D	Lower	2	x	x		x
SWMU 1-4	MW-03S	Upper	2	x	x		x
SWMU 1-4	MW-13D2	Lower	2	x			
SWMU 1-4	MW-22D	Lower	2	x			
Area Subtotal				4	2	0	2
Miscellaneous Interior	MW-08	Upper	2	x			
Miscellaneous Interior	MW-49	Upper	2	x			
Miscellaneous Interior	MW-69	Upper	2	x	x		
Miscellaneous Interior	MW-70	Upper	2	x	x		x
Miscellaneous Interior	MW-72	Upper	2	x			
Miscellaneous Interior	MW-74	Upper	2	x			
Miscellaneous Interior	MW-75	Upper	2	x	x		
Miscellaneous Interior	MW-78	Upper	2	x			
Miscellaneous Interior	MW-81	Upper	2	x			
Miscellaneous Interior	MW-82	Upper	2	x			
Miscellaneous Interior	MW-83	Upper	2	x			
Miscellaneous Interior	MW-84	Upper	2	x	x		
Area Subtotal				12	4	0	1
Total				93	32	5	10

Notes:

A&R - Administration and Research

PCB - Polychlorinated biphenyl

SWMU - Solid Waste Management Unit

VOC - Volatile Organic Compound

Emerging Contaminant - 1,4-Dioxane

TABLE 2
SITE-WIDE GROUNDWATER MONITORING PROGRAM
WATER LEVELS AND WELL INSPECTION SUMMARY
CARRIER CORPORATION THOMPSON ROAD FACILITY
November 11 and 12, 2019

Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (inches ID)	Northing	Easting	Measuring Point Elevation feet	Depth to Free Phase Product feet	Depth to Water (BTOR) feet	Free Phase Product Thickness feet	Groundwater Elevation feet	Well Inspection Summary				
										Lock	Surface Seal	Protective Casing OR Roadbox (Lid/collar) Condition	Riser	Comments
Perimeter Area														
DP-MW-04	Upper	2	1122974.74	954593.56	408.38	-	2.35	-	406.03	No lock	OK	OK	OK	
MW-05R	Upper	2	1125014.53	952292.73	396.81	-	2.73	-	394.08	Lock OK (#2537 key)	OK	OK	OK	
MW-09	Upper	2	1123038.00	952979.38	406.20	-	6.35	-	399.85	Lock OK (#2537 key)	OK	OK	OK	
MW-10	Upper	2	1124386.24	952118.57	402.79	-	8.15	-	394.64	No lock	OK	OK	OK	
MW-11	Upper	2	1124861.02	953926.15	402.23	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Under gravel
MW-14	Upper	2	1124855.30	953333.70	403.60	-	4.28	-	399.32	Lock OK (#2537 key)	OK	OK	OK	
MW-14D	Lower	2	1124855.10	953337.00	403.68	-	0.69	-	402.99	Lock OK (#2537 key)	OK	OK	OK	
MW-16D	Lower	2	1122764.69	953409.36	406.13	-	4.48	-	401.65	No lock	OK	OK	OK	
MW-17	Upper	2	1124999.53	952462.72	397.02	-	7.69	-	389.33	No lock	OK	OK	OK	
MW-19	Upper	2	1124108.76	952143.57	404.72	-	8.72	-	396.00	No lock	OK	OK	OK	
MW-21	Upper	2	1124973.70	952730.22	402.52	-	9.46	-	393.06	No lock	OK	OK	OK	
MW-42	Upper	2	1124967.30	953212.96	396.57	-	5.96	-	390.61	Lock Corroded (#2537 key)	OK	OK	OK	
MW-59	Upper	2	1124872.74	953831.00	394.58	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Under gravel
MW-65	Upper	2	1124983.12	952943.49	401.77	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-71	Upper	2	1123463.97	952230.85	404.95	-	9.26	-	395.69	No lock	OK	OK	OK	
MW-73	Upper	2	1124257.22	951987.57	403.40	-	7.93	-	395.47	No lock	OK	OK	OK	
MW-76	Upper	2	1123627.57	955141.81	406.07	-	7.20	-	398.87	No lock	OK	OK	OK	
MW-77	Upper	2	1124047.75	955105.46	404.81	-	8.49	-	396.32	No lock	OK	OK	OK	
MW-79	Upper	2	1124917.99	953785.24	395.69	-	3.04	-	392.65	No lock	OK	OK	OK	
MW-80	Upper	2	1124983.12	952943.49	392.31	NM	NM	NM	NM	No lock	OK	OK	OK	
TR3-MW-01	Upper	2	1124885.97	953692.42	392.86	NM	NM	NM	NM	No lock	OK	OK	OK	
TR3-MW-02	Upper	2	1124906.18	953546.57	395.46	-	2.05	-	393.41	No lock	OK	OK	OK	
A&R Area														
AR-MW-01	Upper	2	1124770.59	954418.68	403.76	-	3.51	-	400.25	No lock	OK	OK	OK	
AR-MW-02	Upper	2	1124764.40	954292.16	403.40	-	3.18	-	400.22	No lock	OK	OK	OK	
AR-MW-03	Upper	2	1124754.76	954149.74	403.41	-	3.31	-	400.10	No lock	OK	OK	OK	
AR-MW-04	Upper	2	1124515.46	954180.87	404.50	-	6.72	-	397.78	No lock	OK	OK	OK	
AR-MW-05	Upper	2	1124466.37	954310.19	404.87	-	8.34	-	396.53	No lock	OK	OK	OK	
AR-MW-06	Upper	2	1124531.93	954445.06	404.63	-	8.74	-	395.89	No lock	OK	OK	OK	
AR-SB-02	Upper	1	1124990.10	954142.60	396.19	-	1.47	-	394.72	No lock	OK	NA	OK	
AR-SB-04	Upper	1	1125037.71	954296.60	395.86	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate
TR-1 Area														
DCDPZ01	Upper	1	1123895.47	952479.75	407.28	7.25	7.95	0.70	399.84	No lock	OK	OK	OK	
DCDPZ02	Upper	1	1123938.80	952468.92	407.00	-	9.34	-	397.66	No lock	OK	OK	OK	
DCDPZ03	Upper	1	1123882.13	952353.09	407.23	-	9.53	-	397.70	No lock	OK	OK	OK	
DCDPZ04	Upper	1	1123917.13	952351.42	407.36	-	NM	NM	NM	No lock	OK	OK	OK	Obstruction in well at approximately 2 feet.
FDPZ01	Upper	1	1124189.61	952343.92	407.23	NM	NM	NM	NM	No lock	OK	OK	OK	
FDPZ02	Upper	1	1124233.78	952328.09	408.45	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate
FDPZ03	Upper	1	1124197.11	952463.92	406.78	NM	NW	NM	NM	No lock	OK	OK	OK	
FDPZ04	Upper	1	1124228.78	952446.42	407.40	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate
MW-06	Upper	2	1124275.42	952570.22	406.21	-	10.88	-	395.33	Lock OK (#2537 key)	OK	OK	OK	
MW-23	Upper	2	1124068.77	952177.73	403.54	-	8.49	-	395.05	No lock	OK	OK	OK	
MW-24	Upper	2	1124038.77	952184.40	404.58	-	8.05	-	396.53	No lock	OK	OK	OK	
MW-25	Upper	4	1123764.64	952464.75	406.25	7.23	9.35	2.12	398.45	No lock	OK	OK	OK	
MW-26	Upper	2	1123802.12	952438.56	406.65	-	4.65	-	402.00	No lock	OK	OK	OK	
MW-27	Upper	2	1123753.79	952424.39	406.19	-	7.05	-	399.14	No lock	OK	OK	OK	
MW-28	Upper	2	1123769.62	952481.06	406.15	-	7.08	-	399.07	No lock	OK	OK	OK	
MW-29	Upper	4	1123774.62	952380.23	406.19	-	5.50	-	400.69	No lock	OK	OK	OK	
MW-30	Upper	4	1123895.44	952378.56	407.08	-	9.09	-	397.99	No lock	OK	OK	OK	
MW-31	Upper	2	1123932.11	952388.93	406.46	8.65	8.66	0.01	397.81	No lock	OK	OK	OK	
MW-32	Upper	2	1123867.11	952410.22	406.67	-	7.98	-	398.69	No lock	OK	OK	OK	
MW-33	Upper	2	1123903.80	952446.42	406.71	7.8	7.81	0.01	398.91	No lock	OK	OK	OK	
MW-34	Upper	2	1123899.61	952363.56	406.73	-	8.75	-	397.98	No lock	OK	OK	OK	
MW-35D	Lower	2	1123932.11	952377.73	407.33	-	10.10	-	397.23	No lock	OK	OK	OK	
MW-36	Upper	4	1124197.92	952411.89	407.66	-	11.25	-	396.41	No lock	OK	OK	OK	
MW-37	Upper	2	1124204.59	952396.06	406.74	-	10.35	-	396.39	No lock	OK	OK	OK	
MW-38	Upper	2	1124268.75	952406.06	404.45	-	8.32	-	396.13	No lock	OK	OK	OK	
MW-39	Upper	2	1124196.26	952447.72	406.87	-	NM	-	NM	No lock	OK	OK	OK	
MW-40D	Lower	2	1124267.92	952397.72	404.36	-	7.13	-	397.23	No lock	OK	OK	OK	
SSIPZ01	Upper	1	1123762.14	952385.59	406.45	-	NM	-	NM	-	-	-	-	Destroyed
SSIPZ02	Upper	1	1123752.14	952490.59	406.41	-	7.58	-	398.83	No lock	OK	OK	OK	
SSIPZ03	Upper	1	1123778.81	952359.76	406.83	-	8.72	-	398.11	No lock	OK	OK	OK	
SSIPZ04	Upper	1	1123807.97	952478.09	406.48	8.35	10.55	2.2	397.54	No lock	OK	OK	OK	
SSIPZ05	Upper	1	1123733.81	952464.75	405.98	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate

TABLE 2
SITE-WIDE GROUNDWATER MONITORING PROGRAM
WATER LEVELS AND WELL INSPECTION SUMMARY
CARRIER CORPORATION THOMPSON ROAD FACILITY
November 11 and 12, 2019

Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (inches ID)	Northing	Easting	Measuring Point Elevation feet	Depth to Free Phase Product feet	Depth to Water (BTOR) feet	Free Phase Product Thickness feet	Groundwater Elevation feet	Well Inspection Summary				
										Lock	Surface Seal	Protective Casing OR Flushmount Roadbox (Lid/collar) Condition	Riser	Comments
TR-3 and Parking Lot R Area														
B001-01	Upper	1	1124697.08	953785.55	NA	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only, dug out to expose, ~ 6" of soil over roadbox.
B001-02	Upper	1	1124697.08	953817.22	NA	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	
B001-03	Upper	1	1124616.48	953830.95	405.33	-	7.26	-	398.07	No lock	OK	OK	OK	External inspection only, dug out to expose, ~ 6" of soil over roadbox.
B001-04	Upper	1	1124560.22	953706.30	404.14	-	8.72	-	395.42	No lock	OK	OK	OK	
B001-05	Upper	1	1124454.18	953638.67	404.31	-	8.78	-	395.53	No lock	OK	OK	OK	
B001-06	Upper	1	1124486.48	953826.98	405.46	-	5.03	-	400.43	No lock	OK	OK	OK	
B001-07	Upper	1	1124723.54	953981.12	400.53	-	4.70	-	395.83	No lock	OK	OK	OK	
B001-08	Upper	1	1124626.25	953982.21	NA	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Paved over
B001-09	Upper	1	1124650.12	953947.21	401.26	-	5.58	-	395.68	No lock	OK	OK	OK	
B001-10	Upper	1	1124537.03	953956.04	402.38	-	6.03	-	396.35	No lock	OK	OK	OK	
MW-18	Upper	2	1124855.40	953803.88	397.71	-	4.02	-	393.69	No lock	OK	OK	OK	
MW-20	Upper	2	1124515.42	953828.88	404.10	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Paved over
MW-41D	Lower	2	1124491.66	953825.70	405.39	-	2.49	-	402.90	No lock	OK	OK	OK	
MW-43	Upper	2	1124808.28	953664.88	405.11	-	7.69	-	397.42	No lock	OK	OK	OK	
MW-44	Upper	2	1124546.23	953378.53	404.45	-	6.17	-	398.28	No lock	OK	OK	OK	
MW-45	Upper	2	1124551.23	953593.53	404.13	-	5.25	-	398.88	No lock	OK	OK	OK	
MW-46	Upper	2	1124678.75	953574.72	404.13	4.80	5.35	0.55	399.18	No lock	OK	OK	OK	
MW-47	Upper	2	1124759.44	953732.29	405.01	-	7.80	-	397.21	No lock	OK	OK	OK	
MW-48	Upper	2	1124741.00	953821.67	405.33	-	9.93	-	395.40	No lock	OK	OK	OK	
MW-50	Upper	2	1124808.71	953536.03	405.27	-	7.96	-	397.31	No lock	OK	OK	OK	
MW-51	Upper	4	1124773.74	953768.05	403.60	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
MW-52	Upper	4	1124791.04	953758.91	400.01	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
MW-53	Upper	2	1124845.40	953738.05	398.07	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate
MW-54	Upper	4	1124775.41	953742.22	404.92	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
MW-54D	Lower	2	1124845.16	953721.92	398.46	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-55	Upper	2	1124844.49	953701.90	397.83	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-56	Upper	2	1124841.61	953676.89	398.41	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-57	Upper	2	1124839.71	953625.90	398.06	-	0.55	-	397.51	No lock	OK	OK	OK	
MW-58	Upper	2	1124853.70	953533.98	396.53	-	2.91	-	393.62	No lock	OK	OK	OK	
MW-60	Upper	2	1124836.40	953785.63	398.24	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-61	Upper	2	1124820.56	953720.04	404.81	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-62	Upper	2	1124762.97	953669.35	405.28	-	7.94	-	397.34	No lock	OK	OK	OK	
MW-66	Upper	2	1124854.94	953560.48	396.37	-	5.22	-	391.15	No lock	OK	Has slid downhill	Riser pushed against casing	Box slid downhill, riser tight against side of collar. Functional, so decided against replacing.
MW-67	Upper	2	1124829.20	953471.96	398.58	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-68	Upper	2	1124855.04	953476.28	397.40	-	6.26	-	391.14	No lock	OK	OK	OK	
PLR001	Upper	1	1124467.93	953858.05	405.10	5.14	5.3	0.16	399.92	No lock	OK	OK	OK	
PLR002	Upper	1	1124512.07	953914.35	NA	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
PLR056	Upper	1	1124751.00	953801.06	405.39	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
PLR057	Upper	1	1124748.99	953772.23	405.36	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
PLR058	Upper	1	1124757.26	953743.80	405.12	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
PLR060	Upper	1	1124803.00	953740.94	405.26	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
PLR061	Upper	1	1124831.52	953738.60	404.77	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
TR3-GB-03	Lower	2	1124467.93	953858.05	398.49	NM	NM	NM	NM	No lock	OK	OK	OK	
TR3-PW-01	Upper	4	1124815.67	953687.16	405.03	-	8.05	-	396.98	No lock	OK	OK	OK	
TR3-PW-02	Upper	4	1124805.52	953444.97	405.59	-	8.38	-	397.21	No lock	OK	OK	OK	
SWMU 1-4 Area														
MW-03D	Lower	2	1123862.95	953068.54	405.64	-	7.18	-	398.46	Lock OK (#2537 key)	OK	OK	OK	
MW-03S	Upper	2	1123862.95	953053.54	404.54	-	6.82	-	397.72	Lock OK (#2537 key)	OK	OK	OK	
MW-13D2	Lower	2	1123847.11	953071.04	402.71	-	5.23	-	397.48	No lock	OK	OK	OK	
MW-22D	Lower	2	1123728.61	952956.41	404.34	-	6.35	-	397.99	No lock	OK	OK	OK	
Remaining Wells														
B001-11	Upper	1	1123957.96	953583.89	NA	NM	NM	NM	NM	No lock	OK	OK	OK	
B001-12	Upper	1	1123892.97	953589.72	NA	NM	NM	NM	NM	No lock	OK	OK	OK	
B001-13	Upper	1	1124026.77	953577.27	403.16	NM	NM	NM	NM	No lock	OK	OK	OK	
B001-14	Upper	1	1124113.78	953574.72	NA	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate-paved or sodded over
B001-15	Upper	1	1124161.28	953574.72	NA	NM	NM	NM	NM	No lock	OK	OK	OK	
B001-16	Upper	1	1124235.44	953562.22	NA	NM	NM	NM	NA	No lock	OK	OK	OK	
DP-MW-01	Upper	2	1123220.64	954880.49	405.82	NM	NM	NM	NM	No lock	OK	OK	OK	
DP-MW-02	Upper	2	1123133.30	955153.64	407.22	NM	NM	NM	NM	No lock	OK	OK	OK	
DP-MW-03	Upper	2	1122921.52	954901.99	409.76	NM	NM	NM	NM	No lock	OK	OK	OK	
DP-MW-05	Upper	2	1122995.89	954882.97	409.93	NM	NM	NM	NM	No lock	OK	OK	OK	
MW-08	Upper	2	1123604.65	953918.88	404.00	-	5.36	-	398.64	No lock	OK	OK	OK	
MW-49	Upper	2	1124635.39	953204.37	407.66	-	10.71	-	396.95	No lock	OK	OK	OK	
MW-69	Upper	2	1123575.09	953238.60	403.70	-	4.88	-	398.82	No lock	OK	OK	OK	
MW-70	Upper	2	1124609.37	952918.96	406.24	-	10.52	-	395.72	No lock	OK	OK	OK	
MW-72	Upper	2	1123133.97	952768.81	404.10	-	4.58	-	399.52	No lock	OK	OK	OK	
MW-74	Upper	2	1123318.97	953446.58	405.64	-	7.09	-	398.55	No lock	OK	OK	OK	
MW-75	Upper	2	1123849.47	954074.99	405.29	-	7.06	-	398.23	No lock	OK	OK	OK	
MW-78	Upper	2	1124424.80	954858.90	402.58	-	7.02	-	395.56	No lock	OK	OK	OK	
MW-81	Upper	2	1124341.64	954033.81	406.10	-	7.45	-	398.65	No lock	OK	OK	OK	
MW-82	Upper	2	1124398.72	954533.30	404.19	-	8.46	-	395.73	No lock	OK	OK	OK	
MW-83	Upper	2	1124336.76	954304.18	404.92	-	5.33	-	399.59	No lock	OK	OK	OK	
MW-84	Upper	2	1123704.67	953673.48	403.57	-	6.83	-	396.74	No lock	OK	OK	OK	

TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID			AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-111319-1
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/14/19	11/14/19	11/14/19	11/13/19	11/13/19
Parameter	Units	Criteria*					Field Duplicate (1-1)
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	1.3 U
1,1-Dichloroethane	UG/L	5	0.57 U	0.57 U	0.57 U	0.57 U	20.3
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 UJ	5.2
1,2-Dichloroethene (cis)	UG/L	5	0.51 U	2.1	0.51 U	7.4	678 D
1,2-Dichloroethene (trans)	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	1.7 J
4-Methyl-2-pentanone	UG/L	-	1.9 U	1.9 U	1.9 U	R	4.6 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	1.8 U
Cyclohexane	UG/L	-	0.78 U	0.78 U	0.78 U	0.78 U	2 U
Ethylbenzene	UG/L	5	0.6 U	0.6 U	0.6 U	0.6 U	1.5 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R	R	R	R	R
Tetrachloroethene	UG/L	5	0.9 U	0.9 U	0.9 U	0.9 U	2.2 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	1.3 U
Trichloroethene	UG/L	5	0.53 U	1.5	0.53 U	0.53 U	2.1 J
Trichlorofluoromethane	UG/L	5	0.84 U	0.84 U	0.84 U	0.84 U	2.1 U
Vinyl chloride	UG/L	2	0.79 U	0.79 U	0.79 U	0.79 UJ	39.2
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	1.5 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	0.7 U	NA	0.69 U	0.049 U	0.805

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			MW-03S	MW-09	MW-09	MW-10	MW-14
Sample ID			MW-03S	FD-111419-1	MW-09	MW-10	MW-14
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/13/19	11/14/19	11/14/19	11/13/19	11/15/19
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.3 U	0.54 U	0.62 J	0.54 U	0.54 U
1,1-Dichloroethane	UG/L	5	19.1	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	4.6	0.59 U	0.59 U	0.59 UJ	0.59 U
1,2-Dichloroethene (cis)	UG/L	5	715 D	0.51 U	0.51 U	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	2.1 J	0.54 U	0.54 U	0.54 U	0.54 U
4-Methyl-2-pentanone	UG/L	-	4.6 U	1.9 U	1.9 U	R	1.9 U
Chloroethane	UG/L	5	1.8 U	0.73 U	0.73 U	0.73 U	0.73 U
Cyclohexane	UG/L	-	2 U	0.78 U	0.78 U	0.78 U	0.78 U
Ethylbenzene	UG/L	5	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R	R	R	R	R
Tetrachloroethene	UG/L	5	2.2 U	0.9 U	0.9 U	0.9 U	0.9 U
Toluene	UG/L	5	1.3 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	1.9 J	2.1	2.3	0.53 U	0.53 U
Trichlorofluoromethane	UG/L	5	2.1 U	0.84 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	34.2	0.79 U	0.79 U	0.79 UJ	0.79 U
Xylene (total)	UG/L	5	1.5 U	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	0.795	NA	NA	0.0491 J	0.71 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			MW-14D	MW-17	MW-18	MW-19	MW-21
Sample ID			MW-14D	MW-17	MW-18	MW-19	MW-21
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/15/19	11/13/19	11/18/19	11/13/19	11/15/19
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	NA	0.54 U	11 U	0.54 U	0.54 U
1,1-Dichloroethane	UG/L	5	NA	0.57 U	32.3	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	NA	0.59 UJ	43.4	0.59 UJ	0.59 U
1,2-Dichloroethene (cis)	UG/L	5	NA	0.51 U	7,160 D	0.55 J	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	NA	0.54 U	53.4	0.54 U	0.54 U
4-Methyl-2-pentanone	UG/L	-	NA	R	58.1 J	R	1.9 U
Chloroethane	UG/L	5	NA	0.73 U	15 U	0.73 U	0.73 U
Cyclohexane	UG/L	-	NA	0.78 U	54.5 J	0.78 U	0.78 U
Ethylbenzene	UG/L	5	NA	0.6 U	12 U	0.6 U	0.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	NA	R	243 J	R	R
Tetrachloroethene	UG/L	5	NA	0.9 U	18 U	0.9 U	0.9 U
Toluene	UG/L	5	NA	0.53 U	11 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	NA	0.53 U	2,810	1.1	5.0
Trichlorofluoromethane	UG/L	5	NA	0.84 U	17 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	NA	0.79 UJ	769	0.79 UJ	0.79 U
Xylene (total)	UG/L	5	NA	0.59 U	12 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	0.69 U	0.049 U	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			MW-23	MW-26	MW-38	MW-44	MW-44
Sample ID			MW-23	MW-26	MW-38	FD-111519	MW-44
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/13/19	11/13/19	11/13/19	11/15/19	11/15/19
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	84.4	0.54 U	0.54 U	1.3	1.3
1,1-Dichloroethane	UG/L	5	178	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	13.7	0.59 UJ	0.59 UJ	0.59 U	0.59 U
1,2-Dichloroethene (cis)	UG/L	5	1,930 D	0.51 U	0.51 U	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	10.6	0.54 U	0.54 U	0.54 U	0.54 U
4-Methyl-2-pentanone	UG/L	-	9.3 U	R	R	1.9 U	1.9 U
Chloroethane	UG/L	5	12.4	0.73 U	0.73 U	0.73 U	0.73 U
Cyclohexane	UG/L	-	3.9 U	0.78 U	0.78 U	0.78 U	0.78 U
Ethylbenzene	UG/L	5	15.5	0.6 U	0.6 U	0.6 U	0.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R	R	R	R	R
Tetrachloroethene	UG/L	5	4.5 U	0.9 U	0.9 U	0.9 U	0.9 U
Toluene	UG/L	5	31.3	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	202	1.9	4.7	4.7	4.2
Trichlorofluoromethane	UG/L	5	4.2 U	0.84 U	3.5	0.84 U	0.84 U
Vinyl chloride	UG/L	2	64.7	0.79 UJ	0.79 UJ	0.79 U	0.79 U
Xylene (total)	UG/L	5	10.3	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	NA	NA	NA

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TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			MW-45	MW-48	MW-50	MW-57	MW-58
Sample ID			MW-45	MW-48	MW-50	MW-57	MW-58
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/15/19	11/15/19	11/15/19	11/18/19	11/18/19
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1-Dichloroethane	UG/L	5	0.57 U	0.83 J	0.66 J	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	0.59 U	1.2	0.59 U
1,2-Dichloroethene (cis)	UG/L	5	17.0	2.5	0.51 U	317 D	27.5
1,2-Dichloroethene (trans)	UG/L	5	3.9	0.54 U	0.54 U	0.81 J	0.54 U
4-Methyl-2-pentanone	UG/L	-	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Cyclohexane	UG/L	-	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Ethylbenzene	UG/L	5	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R	R	R	R	R
Tetrachloroethene	UG/L	5	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	162	20.6	0.53 U	0.96 J	2.4
Trichlorofluoromethane	UG/L	5	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	1.2	0.79 U	0.79 U	270 D	0.79 U
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	NA	NA	NA

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CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			MW-66	MW-69	MW-70	MW-71	MW-75
Sample ID			MW-66	MW-69	MW-70	MW-71	MW-75
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/18/19	11/14/19	11/15/19	11/13/19	11/14/19
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	1.3 U	0.54 U	0.54 U	0.54 U
1,1-Dichloroethane	UG/L	5	0.57 U	9.1	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	0.59 U	2.3 J	0.59 U	0.59 U	0.59 U
1,2-Dichloroethene (cis)	UG/L	5	174	69.1	0.51 U	40.8	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	6.5	8.6	0.54 U	2.7	0.54 U
4-Methyl-2-pentanone	UG/L	-	1.9 U	4.6 U	1.9 U	1.9 U	1.9 U
Chloroethane	UG/L	5	0.73 U	1.8 U	0.73 U	0.73 U	0.73 U
Cyclohexane	UG/L	-	0.78 U	2 U	0.78 U	0.78 U	0.78 U
Ethylbenzene	UG/L	5	0.6 U	1.5 U	0.6 U	0.6 U	0.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R	R	R	R	R
Tetrachloroethene	UG/L	5	0.9 U	2.2 U	0.9 U	0.9 U	0.9 U
Toluene	UG/L	5	0.53 U	1.3 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	14.8	488	0.53 U	66.8	0.53 U
Trichlorofluoromethane	UG/L	5	0.84 U	2.1 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	3.1	40.3	0.79 U	6.2	0.79 U
Xylene (total)	UG/L	5	0.59 U	1.5 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	2.9	2.55	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

UJ - Not detected. The reported quantitation limit is an estimated value. 'R' - the data is rejected.

Only Detected Results Reported.

Detection Limits shown are MDL

TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			MW-76	MW-77	MW-79	MW-84	TR3-MW-02
Sample ID			MW-76	MW-77	MW-79	MW-84	TR3-MW0092
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/14/19	11/14/19	11/18/19	11/14/19	11/18/19
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1-Dichloroethane	UG/L	5	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
1,2-Dichloroethene (cis)	UG/L	5	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Methyl-2-pentanone	UG/L	-	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Cyclohexane	UG/L	-	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Ethylbenzene	UG/L	5	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R	R	R	R	R
Tetrachloroethene	UG/L	5	0.9 U	0.9 U	0.9 U	2.4	0.9 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichlorofluoromethane	UG/L	5	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

UJ - Not detected. The reported quantitation limit is an estimated value. 'R' - the data is rejected.

Only Detected Results Reported.

Detection Limits shown are MDL

TABLE 3
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-NOVEMBER 2019

Location ID			TR3-PW-01
Sample ID			TR3-PW-01
Matrix			Groundwater
Depth Interval (ft)			-
Date Sampled			11/18/19
Parameter	Units	Criteria*	
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/L	5	11 U
1,1-Dichloroethane	UG/L	5	11 U
1,1-Dichloroethene	UG/L	5	101
1,2-Dichloroethene (cis)	UG/L	5	14,300 D
1,2-Dichloroethene (trans)	UG/L	5	50.8
4-Methyl-2-pentanone	UG/L	-	37 U
Chloroethane	UG/L	5	15 U
Cyclohexane	UG/L	-	16 U
Ethylbenzene	UG/L	5	12 U
Methyl ethyl ketone (2-Butanone)	UG/L	50	R
Tetrachloroethene	UG/L	5	71.3
Toluene	UG/L	5	11 U
Trichloroethene	UG/L	5	144,000 D
Trichlorofluoromethane	UG/L	5	17 U
Vinyl chloride	UG/L	2	245
Xylene (total)	UG/L	5	12 U
Semivolatile Organic Compounds			
1,4-Dioxane	UG/L	-	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

UJ - Not detected. The reported quantitation limit is an estimated value. 'R' - the data is rejected.

Only Detected Results Reported.

Detection Limits shown are MDL

TABLE 4
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
STATISTICAL SUMMARY OF GROUNDWATER RESULTS - NOVEMBER 2019

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Freq. of Detections	Range of Detections			No. Exceed	Location of Max Value
						Min	Max	Avg		
Volatile Organic Compounds										
1,1,1-Trichloroethane	UG/L	5	33	4	12.1%	0.620	84.40	21.91	1	MW-23
1,1-Dichloroethane	UG/L	5	33	6	18.2%	0.660	178.0	40.00	4	MW-23
1,1-Dichloroethene	UG/L	5	33	6	18.2%	1.20	101.0	27.70	3	TR3-PW-01
1,2-Dichloroethene (cis)	UG/L	5	33	14	42.4%	0.550	1.43E+04	1,769	11	TR3-PW-01
1,2-Dichloroethene (trans)	UG/L	5	33	9	27.3%	0.810	53.40	15.49	5	MW-18
4-Methyl-2-pentanone	UG/L	-	27	1	3.7%	58.10	58.10	58.10	0	MW-18
Chloroethane	UG/L	5	33	1	3.0%	12.40	12.40	12.40	1	MW-23
Cyclohexane	UG/L	-	33	1	3.0%	54.50	54.50	54.50	0	MW-18
Ethylbenzene	UG/L	5	33	1	3.0%	15.50	15.50	15.50	1	MW-23
Methyl ethyl ketone (2-Butanone)	UG/L	50	1	1	100.0%	243.0	243.0	243.0	1	MW-18
Tetrachloroethene	UG/L	5	33	2	6.1%	2.40	71.30	36.85	1	TR3-PW-01
Toluene	UG/L	5	33	1	3.0%	31.30	31.30	31.30	1	MW-23
Trichloroethene	UG/L	5	33	19	57.6%	0.960	1.44E+05	7,779	9	TR3-PW-01
Trichlorofluoromethane	UG/L	5	33	1	3.0%	3.50	3.50	3.50	0	MW-38
Vinyl chloride	UG/L	2	33	9	27.3%	1.20	769.0	159.3	8	MW-18
Xylene (total)	UG/L	5	33	1	3.0%	10.30	10.30	10.30	1	MW-23

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. CI



Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 4
CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
STATISTICAL SUMMARY OF GROUNDWATER RESULTS - NOVEMBER 2019

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Freq. of Detections	Range of Detections			No. Exceed	Location of Max Value
						Min	Max	Avg		
Semivolatile Organic Compounds										
1,4-Dioxane	UG/L	-	10	5	50.0%	0.049	2.90	1.40	0	MW-70

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. CI



Concentration Exceeds Criteria

Only Detected Results Reported.

APPENDIX A

PIEZOMETER DECOMMISSION LOGS

FIGURE 3 **WELL DECOMMISSIONING RECORD**

Site Name:	UTC/Carrier- Thompson Road Syracuse Site	Well I.D.:	PZWE15
Site Location:	Syracuse, NY	Driller:	Sean Pepling
Drilling Co.:	Parratt-Wolff, Inc.	Inspector:	R. Murphy (AECOM)
		Date:	11/14/19

DECOMMISSIONING DATA (Fill in all that apply)		WELL SCHEMATIC*	
<u>OVERDRILLING</u> Interval Drilled Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing		Depth (feet) 	
<u>CASING PULLING</u> Method employed Casing retrieved (feet) Casing type/dia. (in.)		Jack ~16 (Stick-up well) PVC 1"OD x3/4"ID	
<u>CASING PERFORATING</u> Equipment used Number of perforations/foot Size of perforations Interval perforated		15.25	
<u>GROUTING</u> Interval grouted (FBLs) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.) Volume of grout used (gal.)		0-15.25 1 (for all 3 Piezometers) 1 12 Portland 1/2 0 1 batch All (split between 3 holes)	

COMMENTS:
 Used rod to knock out bottom of well prior to filling with grout using handpump and 1/2" diameter HDPE tubing.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Parratt-Wolff, Inc.
 Drilling Contractor

Robert J. Murphy
 Department Representative

FIGURE 3 WELL DECOMMISSIONING RECORD

Site Name:	UTC/Carrier- Thompson Road Syracuse Site	Well I.D.:	PZWE14
Site Location:	Syracuse, NY	Driller:	Sean Pepling
Drilling Co.:	Parratt-Wolff, Inc.	Inspector:	R. Murphy (AECOM)
		Date:	11/14/19

DECOMMISSIONING DATA (Fill in all that apply)		WELL SCHEMATIC*	
<u>OVERDRILLING</u>		Depth (feet)	
Interval Drilled			
Drilling Method(s)			
Borehole Dia. (in.)			
Temporary Casing Installed? (y/n)			
Depth temporary casing installed			
Casing type/dia. (in.)			
Method of installing			
<u>CASING PULLING</u>			
Method employed	Jack		
Casing retrieved (feet)	8.5		
Casing type/dia. (in.)	PVC 1"OD x3/4"ID		
<u>CASING PERFORATING</u>			
Equipment used			
Number of perforations/foot		8.0	
Size of perforations			
Interval perforated			
<u>GROUTING</u>			
Interval grouted (FBLs)	0-8		
# of batches prepared	1 (for all 3 Piezometers)		
<u>For each batch record:</u>			
Quantity of water used (gal.)	1		
Quantity of cement used (lbs.)	12		
Cement type	Portland		
Quantity of bentonite used (lbs.)	1/2		
Quantity of calcium chloride used (lbs.)	0		
Volume of grout prepared (gal.)	1 batch		
Volume of grout used (gal.)	All (split between 3 holes)		

COMMENTS:
Used rod to knock out bottom of well prior to filling with grout using handpump and 1/2" diameter HDPE tubing.

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

APPENDIX B

LOW FLOW GROUNDWATER PURGING/SAMPLING LOGS

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: AR-MW-02
Date: 11/14/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	<u>Geopump</u>		Tubing Type:	<u>LDPE + silicone</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>		
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>3.12</u>	Depth to Well Bottom:	<u>12.80</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u></u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>5.97</u>		Estimated Purge Volume (liters):	<u></u>		

Sample ID: A2-MW-02 Sample Time: 1610 QA/QC: none
Sample Parameters: VOCS & 1,4 Dioxane

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: AR-MW-06
Date: 11/14/19 Sampling Personnel: R. Minsford Company: AECOM

Purging/ Sampling Device:	Geopump 2		Tubing Type:	Hose / silicone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	8.70		Depth to Well Bottom:	13.34		Well Diameter:
			4.64					Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	2.9		Estimated Purge Volume (liters):		

Sample ID: AR-mw-06 Sample Time: 1611 QA/QC: none

Sample Parameters: VOCs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1541	7.17	11.3	1.34	0.75	27.9	60.9	210	8.70
1546	7.13	12.9	1.38	0.37	19.5	66.7	170	9.15
1551	7.10	12.5	1.47	0.36	14.4	72.0	170	9.38
1556	7.06	12.4	1.43	0.35	13.8	77.4	170	9.58
1601	7.05	12.2	1.39	0.26	9.14	80.4	170	9.71
1606	7.06	12.3	1.38	0.22	9.25	81.2	170	9.81
1611	7.06	12.4	1.37	0.20	6.50	82.0	170	9.87
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Remarks:

EB-111419-1645
TB-111419

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: JP-MW-09
Date: 11/14/19 Sampling Personnel: T. Urygin Company: AECOM

Purging/ Sampling Device:	<u>6 comp</u>	Tubing Type:	<u>LDPE + silicone</u>	Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>2.10</u>	Depth to Well Bottom:	<u>11.60</u>
		Well Diameter:	<u>2</u>	Screen Length:	<u></u>
Casing Type:	<u>PVC</u>	Volume in 1 Well Casing (liters):	<u>5.86</u>	Estimated Purge Volume (liters):	<u></u>

Sample ID: DP-MW-04 Sample Time: 1340 QA/QC: none
Sample Parameters: VOCs & 1-4, Dioxene

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1310	7.13	10.9	1.239	3.40	25.2	-8.0	200	2.10
1315	6.87	11.0	1.271	6.75	20.3	-8.0	200	2.10
1320	6.84	11.0	1.277	0.54	18.8	-9.4	200	2.22
1325	6.82	11.7	1.282	0.38	12.1	-12.1	200	2.44
1330	6.81	11.9	1.284	0.32	11.4	-14.3	200	2.44
1335	6.81	11.8	1.286	0.29	10.0	-16.2	200	2.55
1340	6.81	11.7	1.289	0.28	10.2	-17.7	200	2.58
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-031
Date: 11/13/19 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	<u>2 pump</u> <u>1 1/2" core</u>		Tubing Type:	<u>Line silicone</u>	Pump/Tubing Inlet Location:	<u>Screen midpoint</u>			
Measuring Point:	<u>Below Top of Riser</u>	<u>Initial Depth to Water:</u>	<u>7.17</u>	<u>Depth to Well Bottom:</u>	<u>29.80</u>	<u>Well Diameter:</u>	<u>2"</u>	<u>Screen Length:</u>	<u></u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>13.96</u>	Estimated Purge Volume (liters):	<u></u>			

Sample ID: MW-03D Sample Time: 0844 QA/QC: MS/MSD

Sample Parameters: VOCS + 1-4, p.o.xane

PURGE PARAMETERS

[illegible]

Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft (vol_{cyl} = $\pi r^2 h$)

Remarks:

TRIP TB111319-1 (2)
EB ~~11410000~~ 1630 (2) all parameters

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-035
Date: 11/13/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	<u>Gas pump</u>		Tubing Type:	<u>LDPE silicone</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>9.05'</u>	Depth to Well Bottom:	<u>15.65'</u>	Well Diameter:	<u>2'</u>
			<u>6.69 actual</u>		<u>13.97 actual</u>		Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	<u>4.69</u>		Estimated Purge Volume (liters):	

Sample ID: MW-03S Sample Time: 0750 QA/QC: Field Dep
Sample Parameters: VOCs + 1,4-Dioxane FD-111819-1

PURGE PARAMETERS

[illegible]

Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;

4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-09
Date: 11/14/19 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	Geopump 2		Tubing Type:	Teflon/silicone		Pump/Tubing Inlet Location:	Screen midpoint
Measuring Point:	Below Top of Riser	Initial Depth to Water: 6.30	Depth to Well Bottom:	17.46	Well Diameter:	2"	Screen Length:
			11.16				
Casing Type:	PVC		Volume in 1 Well Casing (liters):	6.9	Estimated Purge Volume (liters):		

Sample ID: mu-09 Sample Time: 1040
QA/QC: DUPLICATE
Sample Parameters: VOCs
(FD-111419-1)

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-10
Date: 11/13/19 Sampling Personnel: T. U. Bacon Company: AECOM

Purging/ Sampling Device:	6" CPVC 11'		Tubing Type:	LDPE + silicone		Pump/Tubing Inlet Location:	Screen midpoint				
Measuring Point:	Below Top of Riser	Initial Depth to Water:	6.13		Depth to Well Bottom:	14.85		Well Diameter:	2"	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters):	3.98		Estimated Purge Volume (liters):					

Sample ID: MW-10 Sample Time: 1350 QA/QC: None
Sample Parameters: VOCs & 1,4-Dioxane

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-14D
Date: 11/15/19 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	6 comp		Tubing Type:	HDPE + silicone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	0.55	Depth to Well Bottom:	49.68	Well Diameter:	2"	Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	30.13		Estimated Purge Volume (liters):		

Sample ID: MW-141D Sample Time: 1353 QA/QC: None
Sample Parameters: 1-4 Dioxane only

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1238	7.07	11.2	4.04	0.02	23.7	106.1	420	0.85
1243	7.23	11.4	4.07	0.14	35.1	100.4	420	5.30
1248	7.21	11.4	4.07	0.08	35.5	102.2	420	7.18
1253	7.20	11.5	4.07	0.07	51.2	98.7	420	8.30
1258	7.19	11.6	4.07	0.07	64.1	95.2	420	9.28
1303	7.19	11.8	4.07	0.06	62.1	90.2	420	10.26
1308	7.19	11.7	4.08	0.05	72.9	86.9	420	11.10
1313	7.19	11.7	4.08	0.05	78.4	81.5	420	11.89
1318	7.18	11.7	4.07	0.05	75.8	78.3	420	12.55
1323	7.17	11.8	4.07	0.04	67.1	74.1	420	13.20
1328	7.16	11.8	4.08	0.04	57.5	71.4	420	13.90
1333	7.16	11.7	4.08	0.04	50.1	68.8	420	14.45
1338	7.16	11.6	4.08	0.04	40.9	68.7	420	14.88
1343	7.15	11.7	4.07	0.04	36.5	70.6	420	15.28
1348	7.16	11.7	4.07	0.05	30.0	71.8	420	15.76
1353	7.15	11.6	4.08	0.05	31.3	73.0	420	15.87
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	--	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-19
Date: 11/15/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	Geopump		Tubing Type:	HDPE silicone		Pump/Tubing Inlet Location:	Screen midpoint				
Measuring Point:	Below Top of Riser	Initial Depth to Water:	9.51		Depth to Well Bottom:	21.17		Well Diameter:	2"	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters):	7.19		Estimated Purge Volume (liters):					

Sample ID: MW-14 Sample Time: 1325 QA/QC: none
Sample Parameters: VOCs + 1,4-Dioxane

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1240	6.94	11.9	1.671	2.15	9.5	-117	220	9.51
1245	6.89	12.4	1.727	1.24	19.4	-113	220	10.55
1250	6.88	12.1	1.727	0.89	34.2	-104	220	11.13
1255	6.88	12.3	1.735	0.64	31.7	-101	220	11.42
1300	6.88	12.6	1.740	0.49	21.6	-102	220	11.71
1305	6.88	12.7	1.755	0.41	13.5	-107	220	12.00
1310	6.88	12.5	1.764	0.39	17.5	-103	220	12.22
1315	6.84	12.5	1.773	0.33	8.7	-107	220	12.42
1320	6.89	12.5	1.781	0.22	8.1	-107	220	12.71
1325	6.89	12.3	1.785	0.21	6.6	-108	220	12.93
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($V_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carter-Thompson Road Well I.D.: 11W-17
Date: 11/13/15 Sampling Personnel: T. O'Brien Company: AECOM

Purging/ Sampling Device:	<u>0-20" P</u>		Tubing Type:	<u>LDPE + Silica</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>8.11</u>	Depth to Well Bottom:	<u>15.15</u>	Well Diameter:	<u>2"</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>4.34</u>		Estimated Purge Volume (liters):	
Screen Length:							

Sample ID: MW-17 Sample Time: 1510 QA/QC: None
Sample Parameters: VOCs & 1-4 Dioxane

PURGE PARAMETERS

[illegible]

marked as

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-10
Date: 11/18/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	<u>Leak pump</u>		Tubing Type:	<u>LDPE & sil. cone</u>	Pump/Tubing Inlet Location:	<u>Screen midpoint</u>			
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>3.46</u>	Depth to Well Bottom:	<u>9.28</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u></u>
Casing Type:	<u>PVC</u>	Volume in 1 Well Casing (liters):	<u>3.28</u>	Estimated Purge Volume (liters):	<u></u>				

Sample ID: mw-18 Sample Time: 1335 QA/QC: MS/MSD
Sample Parameters: VOCs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-19
Date: 11/13/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	Geopump		Tubing Type:	Idpervsilicate		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	16.62		Well Diameter:	2"		Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	4.9		Estimated Purge Volume (liters):		

Sample ID: MW-19 + MW-19-F Sample Time: 1150 QA/QC: MS/MSD

Sample Parameters: VOCs + PCBs (f. ltered + unf. ltered)

MS/MSD oil PCBs only - filtered +
unfiltered

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-21
Date: 11/15/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	<u>Geopump</u>		Tubing Type:	<u>LDPE + silicone</u>	Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	Below Top of Riser	Initial Depth to Water: <u>10.12</u>	Depth to Well Bottom:	<u>14.84</u>	Well Diameter:	<u>2"</u> Screen Length: <u> </u>
Casing Type:	PVC		Volume in 1 Well Casing (liters):	<u>2.91</u>	Estimated Purge Volume (liters):	<u> </u>

Sample ID: MW-21 Sample Time: 1040 QA/QC: none
Sample Parameters: VOCs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1005	7.64	11.9	0.963	2.34	28.2	71.2	220	10.12
1010	7.36	12.7	0.959	1.39	18.9	73.8	220	10.28
1015	7.12	13.4	0.954	1.17	4.64	87.9	220	10.48
1020	7.08	12.7	0.955	1.07	290	96.5	220	10.28
1025	7.07	13.4	0.955	0.93	2.53	79.7	220	10.28
1030	7.07	13.1	0.955	0.83	5.10	101.8	220	10.28
1035	7.06	13.5	0.955	0.79	1.93	104.8	220	10.28
1040	7.06	13.6	0.956	0.76	2.19	106.0	220	10.28
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-23
Date: 11/13/19 Sampling Personnel: T. Urbina R. Murphy Company: AECOM

Purging/ Sampling Device:	Geopipe 2		Tubing Type:	Teflon LDPE / Sil. zone	Pump/Tubing Inlet Location:	Screen midpoint
Measuring Point:	Below Top of Riser	Initial Depth to Water: 8.55	Depth to Well Bottom: 16.32	Well Diameter: 2"	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters): 7.77	4.8	Estimated Purge Volume (liters):	

Sample ID: MW-23
MW-23-F Sample Time: 1346 QA/QC: None

Sample Parameters: VOCs + PCBs (filtered & unfiltered)

PURGE PARAMETERS

	TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
	1306	7.17	11.7	1.26	0.95	77.8	0.4	145	8.55
	1311	7.34	13.0	1.33	0.17	17.4	-55.8	145	9.95
	1316	7.34	13.8	1.34	0.17	7.12	-66.4	125	10.58
	1321	7.31	12.9	1.33	0.20	7.52	-66.3	125	11.05
	1326	7.30	12.9	1.33	0.14	6.11	-66.7	125	11.50
	1331	7.28	13.0	1.32	0.20	5.54	-69.5	125	12.07
	1336	7.23	13.4	1.31	0.20	4.21	-71.6	125	12.47
	1341	7.29	13.1	1.31	0.23	3.71	-80.3	125	13.30
	1346	7.24	13.0	1.31	0.24	3.27	-79.4	125	13.68
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---		

pump will not
go any lower

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks: New Fla.

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-26
Date: 11/13/19 Sampling Personnel: R Murphy Company: AECOM

Purging/ Sampling Device:	Geopump		Tubing Type:		Pump/Tubing Inlet Location:	Screen midpoint
Measuring Point:	Below Top of Riser	Initial Depth to Water: 4.08	Depth to Well Bottom: 21.57	Well Diameter: 2"	Screen Length:	
Casing Type:	PVC	Volume in 1 Well Casing (liters): 17.49	10.8	Estimated Purge Volume (liters):		

Sample ID: mw-26 + mw-26-T Sample Time: 1652 QA/QC: none
Sample Parameters: VOCS ; PCBs (filtered + unfiltered)

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1557	7.77	10.0	0.735	4.89	21.96	161.8	205	9.08
1602	7.79	11.4	0.629	4.26	9.78	42.6	205	4.65
1607	7.46	11.9	0.591	5.26	6.16	72.1	210	5.51
1612	7.39	12.5	0.560	6.81	2.73	108.9	210	6.32
1617	7.37	12.5	0.561	6.76	4.82	110.6	210	7.10
1622	7.36	12.5	0.561	6.91	4.01	118.1	210	7.71
1627	7.35	12.5	0.561	7.03	3.16	122.1	210	8.30
1632	7.35	12.5	0.560	6.76	3.02	120.0	210	8.78
1637	7.34	12.4	0.560	6.56	2.97	117.3	210	9.48
1642	7.34	12.4	0.560	5.43	1.77	117.6	210	10.45
1647	7.34	12.3	0.561	5.17	2.19	118.3	210	10.79
1652	7.33	12.6	0.560	5.66	1.96	119.4	210	11.31
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/t; 1 inch diameter well = 154 ml/t; 2 inch diameter well = 617 ml/t;
4 inch diameter well = 2470 ml/t ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617 378 Site: THOMPSON RD
UTC-CARRIER Well I.D.: MW-38
Date: 11/13/19 Sampling Personnel: R. MURPHY Company: URS Corporation

Purging/ Sampling Device:	<u>Geopump 2</u>		Tubing Type:	<u>Teflon/silicone</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>8.46</u>	Depth to Well Bottom:	<u>14.78</u>	Well Diameter:	<u>2"</u>
			<u>6.32</u>				
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>3.9</u>		Estimated Purge Volume (liters):	

Sample ID: MW-38 Sample Time: 1505 QA/QC: None
Sample Parameters: VOCs, PCBs (filtered + unfiltered)

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP -E _h (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1435	6.97	13.8	0.84	6.52	17.5	53.2	210	8.46
1440	7.15	14.0	0.82	5.52	35.7	44.4	180	9.55
1445	7.15	14.2	0.80	5.43	18.1	55.1	180	10.63
1450	7.10	14.2	0.80	5.43	38.8	60.9	180	11.26
1455	7.11	13.7	0.81	5.15	30.3	67.4	150	11.66
1500	7.06	14.0	0.83	5.10	22.5	73.0	150	12.15
1505	7.08	14.0	0.83	5.07	20.2	74.7	150	12.46
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/t; 1 inch diameter well = 154 ml/t; 2 inch diameter well = 617 ml/t;
4 inch diameter well = 2470 ml/t ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-44
Date: 11/15/19 Sampling Personnel: T. U. S. G. A. Company: AECOM

Purging/ Sampling Device:	<u>Geopump</u>		Tubing Type:	<u>LOPEd silicone</u>	Pump/Tubing Inlet Location:	<u>Screen midpoint</u>			
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>6.40</u>	Depth to Well Bottom:	<u>15.70</u>	Well Diameter:	<u>2"</u>	Screen Length:	<u></u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>5.86</u>	Estimated Purge Volume (liters):				

Sample ID: MW-44 + MW-44-F Sample Time: 0530 QA/QC: Field Dup
Sample Parameters: VOCs + PCBs (filtered + non-filtered) FD-111519
Field Dup on VOCs + PCBs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carner-Thompson Road Well I.D.: MW-45
Date: 11/15/19 Sampling Personnel: R. MURPHY Company: AECOM

Purging/ Sampling Device:	GEOPUMP 2		Tubing Type:	LOPE/SILICONE		Pump/Tubing Inlet Location:	Screen midpoint				
Measuring Point:	Below Top of Riser	Initial Depth to Water:	5.22		Depth to Well Bottom:	13.10		Well Diameter:	2"	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters):		SOFT		Estimated Purge Volume (liters):				

Sample ID: MW-45 Sample Time: 0858 QA/QC: NONE
Sample Parameters: VOCs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

Sample very silty
Consider Redevolving well?

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrner-Thompson Road Well I.D.: MW-4S
Date: 11/5/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	<u>Geopump</u>	Tubing Type:	<u>LDPE + silicone</u>	Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	Below Top of Riser	Initial Depth to Water:	<u>9.63</u>	Depth to Well Bottom:	<u>18.30</u>
				Well Diameter:	<u>2"</u>
				Screen Length:	<u></u>
Casing Type:	<u>PVC</u>	Volume in 1 Well Casing (liters):	<u>5.35</u>	Estimated Purge Volume (liters):	<u></u>

Sample ID: MW-48 Sample Time: 1450 QA/QC: none
Sample Parameters: 100-s

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-50
Date: 11/15/19 Sampling Personnel: R. MuzPHI Company: AECOM

Purging/ Sampling Device:	Geopump 2		Tubing Type:	Teflon/Silicone	Pump/Tubing Inlet Location:	Screen midpoint
Measuring Point:	Below Top of Riser	Initial Depth to Water: 7.97	Depth to Well Bottom: 20.95	Well Diameter: 2"	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters): 8.01	Estimated Purge Volume (liters):		

Sample ID: MW-50 Sample Time: 1505 QA/QC: NONE

Sample Parameters: VOCs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1425	7.60	12.2	3.79	1.24	288	61.6	330	7.97
1430	7.64	13.0	3.82	0.25	104	-16.8	330	7.97
1435	7.64	13.3	3.72	0.15	21.7	-35.4	330	7.97
1440	7.67	13.4	3.16	0.37	33.3	-26.7	330	7.97
1445	7.65	13.5	2.19	3.88	32.4	-16.3	330	7.97
1450	7.61	13.4	1.79	4.80	22.7	-0.2	330	7.97
1455	7.59	13.2	1.76	4.77	15.9	8.4	330	7.97
1500	7.58	13.4	1.76	4.65	9.32	15.0	330	7.97
1505	7.56	13.4	1.78	4.51	6.53	18.1	330	7.97
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/t; 1 inch diameter well = 154 ml/t; 2 inch diameter well = 617 ml/t;
4 inch diameter well = 2470 ml/t ($vol_{wd} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-57
Date: 11/18/19 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	Geopump		Tubing Type:	HDPE + silicone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	0.53		Depth to Well Bottom:	Well Diameter:	2"	Screen Length:
			21.35	21.88				
Casing Type:	PVC		Volume in 1 Well Casing (liters):	13.2		Estimated Purge Volume (liters):		

Sample ID: MW-57 Sample Time: 1403 QA/QC: None
Sample Parameters: VOCs

PURGE PARAMETERS

200ish

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cy} = \pi r^2 h$)

Remarks:

~~May~~ There is teflon tubing down the well, attempted to extract and could not, used new LOPE/silicone to sample

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-58
Date: 11/18/19 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	Peristaltic		Tubing Type:	LDPE/silicone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	3.17		Depth to Well Bottom:	23.50		Well Diameter:
			20.33					Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	12.5		Estimated Purge Volume (liters):		

Sample ID: MW-58 Sample Time: 1139 QA/QC: None

Sample Parameters: VOLs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carter-Thompson Road Well I.D.: MW-66
Date: 11/18/19 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	Peristaltic Pump		Tubing Type:	Teflon / Silicone	Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	5.94	Depth to Well Bottom:	22.60	Well Diameter:	Screen Length:
Casing Type:	PVC		1666	Volume in 1 Well Casing (liters):	10.3	Estimated Purge Volume (liters):	

Sample ID: MW-66 Sample Time: 1048 QA/QC: None

Sample Parameters: VOCs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-69
Date: 11/14/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	Co. pump		Tubing Type:	LDPE + silicone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	4.53	Depth to Well Bottom:	13.50	Well Diameter:	2"	Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	5.53		Estimated Purge Volume (liters):		

Sample ID: MW-69 Sample Time: 1030 QA/QC: none
Sample Parameters: VOLs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0950	7.39	10.5	4.676	3.50	97.3	83.3	150	4.53
0955	7.03	12.2	5.336	0.49	40.7	86.7	150	5.00
1000	7.00	12.2	5.315	0.36	30.2	82.1	150	5.22
1005	6.98	12.2	5.217	0.36	31.5	84.1	150	5.34
1010	6.94	12.1	4.961	0.44	19.0	92.1	150	5.50
1015	6.89	12.6	4.765	0.58	47.3	103.2	150	5.69
1020	6.89	12.8	4.626	0.80	40.3	110.1	150	5.91
1025	6.89	12.6	4.608	0.81	41.4	116.2	150	6.15
1030	6.89	12.9	4.599	0.85	34.8	118.1	150	6.33
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-70
Date: 11/15/19 Sampling Personnel: R. MURPHY Company: AECOM

Purging/ Sampling Device:	_____		Tubing Type:	_____	Pump/Tubing Inlet Location:	_____	Screen midpoint
Measuring Point:	Below Top of Riser	Initial Depth to Water:	10.56	Depth to Well Bottom:	19.70	Well Diameter:	_____
			9.4				Screen Length: _____
Casing Type:	PVC		Volume in 1 Well Casing (liters):	5.6	Estimated Purge Volume (liters):	_____	

Sample ID: MW-70 Sample Time: 1055 QA/QC: none
Sample Parameters: VOCs + 1-4 Dioxane

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

Bump Rate
(Snap
Ecrit)

$$\begin{array}{r} 1.55 \\ 2.4 \\ 2.4 \end{array}$$

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: Mw-71
Date: 11/13/19 Sampling Personnel: R. M. P. M. Company: AECOM

Purging/ Sampling Device:	Cocopump 2		Tubing Type:	DPE/3.0" corr		Pump/Tubing Inlet Location:	Screen midpoint				
Measuring Point:	Below Top of Riser	Initial Depth to Water:	9.25		Depth to Well Bottom:	15.00		Well Diameter:	2"	Screen Length:	
Casing Type:	PVC		9.75		Volume in 1 Well Casing (liters):	355 L		Estimated Purge Volume (liters):			

Sample ID: MW-71 Sample Time: 1155 QA/QC: —
Sample Parameters: VOCs + 1,4-Dioxane

210

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1125	7.33	12.7	0.96	2.07	45.8	-15.1	210	9.25
1130	7.41	13.4	0.93	0.37	+103	-39.0	210	9.56
1135	7.39	13.3	0.97	0.25	62.2	-53.2	210	9.69
1140	7.40	13.7	0.93	0.16	30.0	-61.7	210	9.76
1145	7.36	13.5	0.94	0.16	20.2	-62.4	210	9.81
1150	7.33	13.4	0.95	0.16	flail	-64.9	210	9.86
1155	7.33	13.3	0.96	0.15	5.93	-65.5	210	9.89
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-75
Date: 11/14/19 Sampling Personnel: T. J. Bean Company: AECOM

Purging/ Sampling Device:	Geopump		Tubing Type:	LDPE silicone		Pump/Tubing Inlet Location:	Screen midpoint				
Measuring Point:	Below Top of Riser	Initial Depth to Water:	6.75		Depth to Well Bottom:	9.90		Well Diameter:	2	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters):	1.93		Estimated Purge Volume (liters):					

Sample ID: NW-75 Sample Time: 1125 QA/QC: None
Sample Parameters: VOCs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-76
Date: 11/14/9 Sampling Personnel: R. MURPHY / T. URSAN Company: AECOM

Purging/ Sampling Device:	Geopump		Tubing Type:	LDPE / sil. cone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	6.90		Depth to Well Bottom:	14.30		Well Diameter:
Casing Type:	PVC		7.40		Volume in 1 Well Casing (liters):	4.6		Estimated Purge Volume (liters):

Sample ID: MW-7C Sample Time: 1457 QA/QC: None

Sample Parameters: VOCs

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-11
Date: 11/14/19 Sampling Personnel: R. Muehly Company: AECOM

Purging/ Sampling Device:	GEOPUMP 2		Tubing Type:	EPE + silicone		Pump/Tubing Inlet Location:	Screen midpoint	
Measuring Point:	Below Top of Riser	Initial Depth to Water:	8.46		Depth to Well Bottom:	14.15		Well Diameter:
			5.69			2"		Screen Length:
Casing Type:	PVC		Volume in 1 Well Casing (liters):	3.5		Estimated Purge Volume (liters):		

Sample ID: Mw-77 Sample Time: 1347 QA/QC: None
Sample Parameters: VOcs

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1322	6.94	12.6	0.77	1.20	36.7	98.7	195	8.46
1327	6.80	13.8	0.74	0.21	36.6	91.4	195	9.09
1332	6.76	13.7	0.74	0.15	17.0	95.8	195	9.33
1337	6.76	14.0	0.75	0.13	7.46	88.7	195	9.62
1342	6.71	14.1	0.74	0.13	7.84	87.9	195	9.72
1347	6.69	14.0	0.74	0.12	6.91	86.0	195	10.03
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($V_{cyl} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-19
Date: 11/15/14 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	<u>Geopump</u>		Tubing Type:	<u>HVPE + silicone</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>2.25</u>	Depth to Well Bottom:	<u>10.00</u>	Well Diameter:	<u>2"</u>
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>4.47</u>		Estimated Purge Volume (liters):	<u>..</u>

Sample ID: MW-79 Sample Time: 1010 QA/QC: none

Sample Parameters: VOCS

PURGE PARAMETERS

[illegible]

Tolerance:	0.1	---	3%	10%	10%	+ or - 10	----

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/t; 1 inch diameter well = 154 ml/t; 2 inch diameter well = 617 ml/t;
4 inch diameter well = 2470 ml/t ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: MW-84
Date: 11/14/17 Sampling Personnel: R. Murphy Company: AECOM

Purging/ Sampling Device:	<u>Geopump 2</u>		Tubing Type:	<u>LDPE/silicone</u>		Pump/Tubing Inlet Location:	<u>Screen midpoint</u>
Measuring Point:	<u>Below Top of Riser</u>	Initial Depth to Water:	<u>6.75</u>	Depth to Well Bottom:	<u>10.95</u>	Well Diameter:	<u>2"</u>
			<u>4.2</u>				Screen Length:
Casing Type:	<u>PVC</u>		Volume in 1 Well Casing (liters):	<u>2.6</u>		Estimated Purge Volume (liters):	

Sample ID: MW-84 Sample Time: 1206 QA/QC: None
Sample Parameters: VOCs only

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: T123 MW-02
Date: 11/18/19 Sampling Personnel: T. Urban Company: AECOM

Purging/ Sampling Device:	6" ecpump		Tubing Type:	LDPE + silicone	Pump/Tubing Inlet Location:	Screen midpoint			
Measuring Point:	Below Top of Riser	Initial Depth to Water:	1.96	Depth to Well Bottom:	11.65	Well Diameter:	2"	Screen Length:	
Casing Type:	PVC		Volume in 1 Well Casing (liters):	5.95	Estimated Purge Volume (liters):				

Sample ID: TR3-MW-02 Sample Time: 1055 QA/QC: None
Sample Parameters: vol%

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{cyl}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 60617378 Site: UTC/Carrier-Thompson Road Well I.D.: TR3-Pw-01
Date: 11/18/19 Sampling Personnel: T. Urban / R. Murphy Company: AECOM

Purging/
Sampling
Device: Geopump Pump/Tubing
Inlet
Location: Screen midpoint
Tubing Type: LDPE + silicone

Measuring Below Top of Initial Depth
Point: Riser to Water: 8.44 Depth to
Well Bottom: 28.38 Well
Diameter: 4" Screen
Length:

Casing
Type: PVC Volume in 1
Well Casing
(liters): Estimated
Purge
Volume
(liters):

Sample ID: TR3-PW-01 Sample Time: 15:30 QA/QC: None

Sample Parameters: VOL 5

PURGE PARAMETERS

[illegible]

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft ($\text{vol}_{\text{well}} = \pi r^2 h$)

Remarks:

APPENDIX B
UTC/CARRIER
SITE-WIDE GROUNDWATER MONITORING PROGRAM RATIONALE

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (Inches ID)	Historical LNAPL (Y/N)	Proposed Wells For:			DATE	TIME	DTP	DTW	COMMENT	
					Water Levels	Sampling							
						VOCs	PCBs	1,4-D.					
Perimeter	DP-MW-04	Upper	2	NO	x	x		x	11/11/19	1139	NP	2.35	no tubing
Perimeter	MW-05R	Upper	2	NO	x				11/11/19	1304	NP	2.73	
Perimeter	MW-09	Upper	2	NO	x	x			11/11/19	1415	NP	6.35	tubing
Perimeter	MW-10	Upper	2	NO	x	x		x	11/11/19	1302	NP	8.15	tubing
Perimeter	MW-11	Upper	2	NO					11/12/19	1040			inserted in gravel drive
Perimeter	MW-14	Upper	2	NO	x	x		x	11/11/19	1633	NP	9.28	tubing
Perimeter	MW-14D	Lower	2	NO	x			x	11/11/19	1632	NP	0.69	1-4, dioxane only tubing
Perimeter	MW-16D	Lower	2	NO	x				11/11/19	1422	NP	4.48	tubing
Perimeter	MW-17	Upper	2	NO	x	x		x	11/11/19	1312	NP	7.69	
Perimeter	MW-19	Upper	2	NO	x	x	x		11/11/19	1256	NP	8.72	tubing
Perimeter	MW-21	Upper	2	NO	x	x			11/11/19	1402	NP	9.46	tubing
Perimeter	MW-42	Upper	2	NO	x				11/11/19	1623	NP	5.96	tubing
Perimeter	MW-59	Upper	2	NO					11/12/19	1040			inserted in gravel drive
Perimeter	MW-65	Upper	2	NO					11/11/19	1630			OK
Perimeter	MW-71	Upper	2	NO	x	x		x	11/11/19	1246	NP	9.26	no tubing
Perimeter	MW-73	Upper	2	NO	x				11/11/19	10:52	NP	7.93	tubing
Perimeter	MW-76	Upper	2	NO	x	x			11/11/19	1309	NP	7.20	tubing
Perimeter	MW-77	Upper	2	NO	x	x			11/11/19	1516	NP	8.49	tubing
Perimeter	MW-79	Upper	2	NO	x	x			11/11/19	1516	NP	8.49	tubing 1640 NP 3.04
Perimeter	MW-80	Upper	2	NO					11/11/19	1320			OK
Perimeter	TR3-MW-01	Upper	2	NO					11/11/19	1642			OK
Perimeter	TR3-MW-02	Upper	2	NO	x	x			11/11/19	1645	NP	2.05	tubing
Area Subtotal					17	12	1	6					
A&R	AR-MW-01	Upper	2	NO	x				11/11/19	1605	NP	3.51	n tubing
A&R	AR-MW-02	Upper	2	NO	x	x		x	11/11/19	1606	NP	3.18	" "
A&R	AR-MW-03	Upper	2	NO	x				11/11/19	1607	NP	3.31	" "
A&R	AR-MW-04	Upper	2	NO	x				11/11/19	1640	NP	6.72	" "
A&R	AR-MW-05	Upper	2	NO	x				11/11/19	1612	NP	3.34	" "
A&R	AR-MW-06	Upper	2	NO	x	x			11/11/19	1614	NP	8.74	tubing
A&R	AR-SB-02	Upper	1	NO	x				11/12/19	1030	NP	1.47	no tubing
A&R	AR-SB-04	Upper	1	NO	x				11/12/19	1028	-	-	destroyed - not found
Area Subtotal					8	2	0	1					
TR-1	DCDPZ01	Upper	1	YES	x				11/12/19	1434	7.25	7.45	

APPENDIX B
UTC/CARRIER
SITE-WIDE GROUNDWATER MONITORING PROGRAM RATIONALE

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (Inches ID)	Historical LNAPL (Y/N)	Proposed Wells For:				DATE	TIME	DTP	DTW	COMMENT
					Water Levels	Sampling							
						VOCs	PCBs	1,4-D.					
TR-1	DCDPZ02	Upper	1	NO	x				11/12/19	1445	NP	9.34	tubing
TR-1	DCDPZ03	Upper	1	NO	x				11/12/19	1501	NP	9.53	tubing
TR-1	DCDPZ04	Upper	1	YES	x				11/12/19	1522	--	--	obstruction in well ~2'
TR-1	FDPZ01	Upper	1	NO					11/12/19	1533			OK
TR-1	FDPZ02	Upper	1	NO					11/12/19	1533			Missing
TR-1	FDPZ03	Upper	1	NO					11/12/19	1543			OK
TR-1	FDPZ04	Upper	1	NO					11/12/19	1541			Missing
TR-1	MW-06	Upper	2	NO	x				11/11/19	1345	NP	10.88	tubing
TR-1	MW-23	Upper	2	NO	x	x	x		11/11/19	1254	NP	8.49	tubing
TR-1	MW-24	Upper	2	NO	x				11/11/19	1250	NP	9.03	tubing
TR-1	MW-25	Upper	4	YES	x				11/12/19	1405	7.23	9.35	No tubing
TR-1	MW-26	Upper	2	NO	x	x	x		11/12/19	1427	NP	4.65	tubing
TR-1	MW-27	Upper	2	NO	x				11/12/19	1410	NP	7.05	
TR-1	MW-28	Upper	2	NO	x				11/12/19	1403	NP	7.08	tubing
TR-1	MW-29	Upper	4	NO	x				11/12/19	1422	NP	5.50	
TR-1	MW-30	Upper	4	NO	x				11/12/19	1505	NP	9.09	tubing
TR-1	MW-31	Upper	2	YES	x				11/12/19	1526	8.65	8.66	tubing
TR-1	MW-32	Upper	2	NO	x				11/12/19	1457	NP	7.98	tubing
TR-1	MW-33	Upper	2	YES	x				11/12/19	1452	7.80	7.81	
TR-1	MW-34	Upper	2	NO	x				11/12/19	1519	NP	8.75	
TR-1	MW-35D	Lower	2	NO	x				11/12/19	1524	NP	10.10	tubing
TR-1	MW-36	Upper	4	NO	x				11/12/19	1546	NP	11.25	
TR-1	MW-37	Upper	2	NO	x				11/12/19	1534	NP	10.35	
TR-1	MW-38	Upper	2	NO	x	x	x		11/11/19	1237	NP	8.32	tubing
TR-1	MW-39	Upper	2	NO					11/12/19	1545			OK
TR-1	MW-40D	Lower	2	NO	x				11/11/19	1235	NP	7.13	tubing
TR-1	SSIPZ01	Upper	1	NO	x				11/12/19	1420	--	--	destroyed - missing from upper pipe
TR-1	SSIPZ02	Upper	1	YES	x				11/12/19	1359	NP	7.58	tubing
TR-1	SSIPZ03	Upper	1	NO	x				11/12/19	1423	NP	8.72	
TR-1	SSIPZ04	Upper	1	YES	x				11/12/19	1429	8.35	10.55	
TR-1	SSIPZ05	Upper	1	NO	x				11/14/19	1353	--	--	Missing
Area Subtotal					27	3	3	0					
TR-3 and Parking Lot R	B001-01	Upper	1	NO					11/12/19	1122			OK under sed

APPENDIX B
UTC/CARRIER
SITE-WIDE GROUNDWATER MONITORING PROGRAM RATIONALE

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (Inches ID)	Historical LNAPL (Y/N)	Proposed Wells For:				DATE	TIME	DTP	DTW	COMMENT
					Water Levels	Sampling							
						VOCs	PCBs	1,4-D.					
TR-3 and Parking Lot R	B001-02	Upper	1	NO					11/12/19	1122			OK - blower sed
TR-3 and Parking Lot R	B001-03	Upper	1	NO	x				11/12/19	0922	NP	7.26	
TR-3 and Parking Lot R	B001-04	Upper	1	NO	x				11/12/19	0935	NP	8.72	
TR-3 and Parking Lot R	B001-05	Upper	1	NO	x				11/12/19	0849	NP	8.79	no tubing
TR-3 and Parking Lot R	B001-06	Upper	1	YES	x				11/12/19	0904	NP	5.03	no tubing
TR-3 and Parking Lot R	B001-07	Upper	1	NO	x				11/12/19	1023	NP	4.70	no tubing
TR-3 and Parking Lot R	B001-08	Upper	1	NO	x				11/12/19	1015	-	-	paved over
TR-3 and Parking Lot R	B001-09	Upper	1	NO	x				11/12/19	0947	NP	5.58	
TR-3 and Parking Lot R	B001-10	Upper	1	NO	x				11/12/19	0947	NP	5.58	6.03 NP @ 1011
TR-3 and Parking Lot R	MW-18	Upper	2	NO	x	x			11/12/19	1047	NP	4.02	tubing
TR-3 and Parking Lot R	MW-20	Upper	2	YES	x				11/12/19	0905	-	-	paved over
TR-3 and Parking Lot R	MW-41D	Lower	2	NO	x				11/12/19	0957	NP	2.49	
TR-3 and Parking Lot R	MW-43	Upper	2	NO	x				11/12/19	1156	NP	7.68	
TR-3 and Parking Lot R	MW-44	Upper	2	NO	x	x	x		11/12/19	0930	NP	6.17	tubing
TR-3 and Parking Lot R	MW-45	Upper	2	NO	x	x			11/12/19	0755	NP	5.25	tubing
TR-3 and Parking Lot R	MW-46	Upper	2	YES	x				11/12/19	0735	NP	4.90 5.35	tubing
TR-3 and Parking Lot R	MW-47	Upper	2	NO	x				11/12/19	1147	NP	7.90	tubing
TR-3 and Parking Lot R	MW-48	Upper	2	NO	x	x			11/12/19	1126	NP	7.93	tubing
TR-3 and Parking Lot R	MW-50	Upper	2	NO	x	x			11/12/19	1202	NP	7.96	tubing
TR-3 and Parking Lot R	MW-51	Upper	4	NO					11/12/19	1141			OK
TR-3 and Parking Lot R	MW-52	Upper	4	NO					11/12/19	1141			OK
TR-3 and Parking Lot R	MW-53	Upper	2	NO					11/12/19	1059			missing
TR-3 and Parking Lot R	MW-54	Upper	4	NO					11/12/19	1059			missing OK @ 1144
TR-3 and Parking Lot R	MW-54D	Lower	2	NO					11/12/19	1059			OK
TR-3 and Parking Lot R	MW-55	Upper	2	NO					11/12/19	1100			OK
TR-3 and Parking Lot R	MW-56	Upper	2	NO					11/12/19	1100			OK
TR-3 and Parking Lot R	MW-57	Upper	2	NO	x	x			11/12/19	1101	NP	0.55	tubing
TR-3 and Parking Lot R	MW-58	Upper	2	NO	x	x			11/11/19	1705	NP	2.91	
TR-3 and Parking Lot R	MW-60	Upper	2	NO					11/12/19	1037			OK
TR-3 and Parking Lot R	MW-61	Upper	2	NO					11/12/19	1145			OK
TR-3 and Parking Lot R	MW-62	Upper	2	NO	x				11/12/19	1211	NP	7.94	
TR-3 and Parking Lot R	MW-66	Upper	2	NO	x	x			11/11/19	1700	NP	5.22	no tubing
TR-3 and Parking Lot R	MW-67	Upper	2	NO					11/12/19	1101			OK

APPENDIX B
UTC/CARRIER
SITE-WIDE GROUNDWATER MONITORING PROGRAM RATIONALE

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (inches ID)	Historical LNAPL (Y/N)	Proposed Wells For:				DATE	TIME	DTP	DTW	COMMENT
					Water Levels	Sampling							
						VOCs	PCBs	1,4-D.					
TR-3 and Parking Lot R	MW-68	Upper	2	NO	x				11/11/19	1725	NP	6.26	
TR-3 and Parking Lot R	PLR001	Upper	1	YES	x				11/12/19	0907	5.14	5.36	
TR-3 and Parking Lot R	PLR002	Upper	1	NO					11/12/19	0910			OK
TR-3 and Parking Lot R	PLR056	Upper	1	NO					11/12/19	1124			OK
TR-3 and Parking Lot R	PLR057	Upper	1	NO					11/12/19	1124			OK
TR-3 and Parking Lot R	PLR058	Upper	1	NO					11/12/19	1144			OK
TR-3 and Parking Lot R	PLR060	Upper	1	NO					11/12/19	1142			OK
TR-3 and Parking Lot R	PLR061	Upper	1	NO					11/12/19	1142			OK
TR-3 and Parking Lot R	TR3-GB-03	Lower	2	NO					11/12/19	1115			OK
TR-3 and Parking Lot R	TR3-PW-01	Upper	4	NO	x	x			11/12/19	1151	NP	8.05	tubing
TR-3 and Parking Lot R	TR3-PW-02	Upper	4	NO	x				11/12/19	1205	NP	8.38	no tubing
Area Subtotal					26	9	1	0					
SWMU 1-4	MW-03D	Lower	2	NO	x	x		x	11/11/19	1204	NP	7.18	no tubing
SWMU 1-4	MW-03S	Upper	2	NO	x	x		x	11/11/19	1203	NP	6.52	no tubing
SWMU 1-4	MW-13D2	Lower	2	NO	x				11/11/19	1205	NP	5.23	
SWMU 1-4	MW-22D	Lower	2	NO	x				11/11/19	1157	NP	6.35	
Area Subtotal					4	2	0	2					
Remaining	B001-11	Upper	1	NO					11/11/19	1452			OK
Remaining	B001-12	Upper	1	NO					11/11/19	1452			OK
Remaining	B001-13	Upper	1	NO					11/11/19	1453			OK
Remaining	B001-14	Upper	1	NO					11/11/19	1453			can't locate
Remaining	B001-15	Upper	1	NO					11/11/19	1454			OK
Remaining	B001-16	Upper	1	NO					11/11/19	1454			OK
Remaining	DP-MW-01	Upper	2	NO					11/11/19	1130			OK
Remaining	DP-MW-02	Upper	2	NO					11/11/19	1133			OK
Remaining	DP-MW-03	Upper	2	NO					11/11/19	1122			OK
Remaining	DP-MW-05	Upper	2	NO					11/11/19	1120			OK
Remaining	MW-08	Upper	2	NO	x				11/11/19	1435	NP	5.36	tubing
Remaining	MW-49	Upper	2	NO	x				11/12/19	0836	NP	10.71	tubing
Remaining	MW-69	Upper	2	NO	x	x			11/11/19	1411	NP	4.88	tubing
Remaining	MW-70	Upper	2	NO	x	x		x	11/11/19	1435	NP	10.52	no tubing
Remaining	MW-72	Upper	2	NO	x				11/11/19	1419	NP	4.58	tubing
Remaining	MW-74	Upper	2	NO	x				11/11/19	1429	NP	7.09	tubing

APPENDIX B
UTC/CARRIER
SITE-WIDE GROUNDWATER MONITORING PROGRAM RATIONALE

Area	Monitoring Well/ Piezometer	Water-bearing Zone (Upper/ Lower)	Well Diameter (Inches ID)	Historical LNAPL (Y/N)	Proposed Wells For:				DATE	TIME	DTP	DTW	COMMENT
					Water Levels	Sampling							
						VOCs	PCBs	1,4-D.					
Remaining	MW-75	Upper	2	NO	x	x			11/11/19	1442	NP	7.06	tubing
Remaining	MW-78	Upper	2	NO	x				11/11/19	1522	NP	7.02	tubing
Remaining	MW-81	Upper	2	NO	x				11/11/19	1552	NP	7.45	tubing
Remaining	MW-82	Upper	2	NO	x				11/11/19	1601	NP	8.46	no tubing
Remaining	MW-83	Upper	2	NO	x				11/11/19	1556	NP	5.33	tubing
Remaining	MW-84	Upper	2	NO	x	x			11/11/19	1448	NP	6.83	tubing
Area Subtotal					12	4	0	1					
Total:					94	32	5	10					

APPENDIX C

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

**ANNUAL SITE-WIDE GROUNDWATER MONITORING
CARRIER SITE
THOMPSON ROAD, SYRACUSE, NY
SITE ID# 734043**

Analyses Performed by:

**SGS NORTH AMERICA, INC.
DAYTON, NJ 08810**

Prepared for:

**CARRIER CORPORATION
SYRACUSE, NY 13214**

Prepared by:

**AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202**

JANUARY 2020

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TABLES

(Following Text)

Table 1	Validated Groundwater Sample Analytical Results
Table 2	Validated Field QC Sample Analytical Results

ATTACHMENTS

Attachment A – Form 1s

Attachment B – Support Documentation

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation*, Appendix 2B - *Guidance for Data Deliverables and the Development of Data Usability Summary Reports*, May 2010.

The data being evaluated is from the November 13-18, 2019 sampling of 32 groundwater (GW) samples, 3 field duplicates (FD), 3 matrix spike/matrix spike duplicates (MS/MSDs), 3 equipment blanks (EB), and 4 trip blanks.

II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION PROCEDURES

The analytical laboratory that performed the analyses is SGS North America, Inc., located in Dayton, NJ. The samples were analyzed for the following parameters. Not all samples were analyzed for all parameters.

Matrix	Parameter	Method
Groundwater	Volatile Organic Compounds (VOC) plus Tentatively Identified Compounds (TICs)	SW8260C
	Polychlorinated Biphenyls (PCBs) (Total and Dissolved)	SW8082A
	1,4-Dioxane	SW8270D SIM

A limited data validation was performed following the guidelines in the following USEPA Region II documents:

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry*, SW-846 Method 8260B & 8260C, SOP HW-24, Rev. 4, October 2014;
- *Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry*, SW-846 Method 8270D, SOP HW-22, Rev. 5, December 2010; and

- *Polychlorinated Biphenyl (PCB) Aroclor Data Validation*, SOP HW-37A, Rev. 0, February 2018.

Qualifications applied to the data during the limited data validation include 'R' (rejected), 'J' (estimated concentration), and 'UJ' (estimated quantitation limit). Definitions of USEPA data qualifiers are presented at the end of this text. The validated analytical results are presented on Tables 1 and 2. Copies of marked-up laboratory analytical summaries (Form 1s) are presented in Attachment A on a per sample delivery group (SDG) basis. Documentation supporting the qualification of data is presented in Attachment B on a per sample delivery group basis. Only analytical deviations affecting data usability are discussed in this report.

III. DATA DELIVERABLE COMPLETENESS

Full deliverable data packages (i.e., NYSDEC Category B or equivalent) were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

IV. SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved and under proper chain-of-custody. All samples were analyzed within the required holding times.

V. NON-CONFORMANCES

- **Instrument Calibration**

The relative response factors (RRF) for 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, bromomethane, and/or methyl acetate in the VOC initial calibrations (ICAL) and/or continuing calibration standards (CCAL) were less than the QC limit of 0.100. The non-detect results for these compounds in the associated samples, as listed on the instrument performance check forms, were qualified 'R' and the detected results were qualified 'J'.

The percent difference (%D) between the ICAL average RRF and the RRF in one or more of the CCALs associated with the GW and field QC samples exceeded the QC limit of 20% for one or more of the following VOCs: 1,1-dichloroethene, 1,2,3-trichlorobenzene, bromomethane, and/or vinyl chloride. The results for these compounds in the associated samples, as listed on the instrument performance check forms, were qualified 'UJ'.

Support documentation (i.e., instrument performance check form, continuing calibration summary form) is provided in Attachment B.

- **Field Duplicates**

Good field and analytical precision is defined as the following:

1. If both the sample and field duplicate (FD) results are greater than 2x the reporting limit (RL), the relative percent difference (RPD) between the two results must be less than 50%.
2. If both the sample and FD results are less than 2x the RL, the absolute difference between the two results must be less than the RL.

Results not meeting the criteria above resulted in both the sample and field duplicate being qualified 'J' or 'UJ'.

Field duplicates were collected at the following sample locations and exhibited good field and analytical precision with any exceptions noted below:

Parent Sample ID	Field Duplicate ID	Parameters Qualified 'J' or 'UJ'
GROUNDWATERS		
MW-03S	FD-111319-1	---
MW-09	FD-111419-1	---
MW-44	FD-111519	---

VI. SAMPLE RESULTS AND REPORTING

All quantitation/detection limits were reported in accordance with method requirements and were adjusted for sample volume, and dilution factors. Results below the quantitation limits were qualified 'J' by the laboratory.

Several samples for VOCs were analyzed utilizing dilutions due to sample matrix. The detection limits for the non-detect compounds represent the lowest achievable at the dilution used during the analysis. Those compounds being reported from a secondary dilution have been qualified 'D'.

The TIC "system artifact" was crossed off in the VOC samples.

VII. SUMMARY

All sample analyses were found to be compliant with the method and validation criteria, except where previously noted. Those results qualified 'R' are considered unusable. Those results qualified 'J' and 'UJ' are considered conditionally usable. All other sample results are usable as reported. AECOM does not recommend the recollection of any samples currently.

Prepared By: Ann Marie Kropovitch, Chemist



Date:

1/15/20

Reviewed By: Peter R. Fairbanks, Senior Chemist



Date:

1/15/20

DEFINITIONS OF USEPA DATA QUALIFIERS

- U – The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- (J+) - The result is an estimated quantity. The associated numerical value is biased high.
- (J-) - The result is an estimated quantity. The associated numerical value is biased low.
- UJ – The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R – The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
- D – The sample result was reported from a secondary dilution analysis.
- NJ – The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-111319-1
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/14/19	11/13/19	11/13/19
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5 U	5 U	5 U	5 U	13 U
1,1,2-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,1-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	20.3
1,1-Dichloroethene	UG/L	1 U	1 U	1 U	1 UJ	5.2
1,2,3-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 UJ	2.5 U
1,2,4-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,2-Dibromo-3-chloropropane	UG/L	2 U	2 U	2 U	2 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,2-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,2-Dichloroethene (cis)	UG/L	1 U	2.1	1 U	7.4	678 D
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1 U	1 U	1.7 J
1,2-Dichloropropane	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,3-Dichloropropene (cis)	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,3-Dichloropropene (trans)	UG/L	1 U	1 U	1 U	1 U	2.5 U
1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	2.5 U
2-Hexanone	UG/L	5 U	5 U	5 U	R	13 U
4-Methyl-2-pentanone	UG/L	5 U	5 U	5 U	R	13 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-111319-1
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/14/19	11/13/19	11/13/19
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
Bromochloromethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
Bromodichloromethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
Bromoform	UG/L	1 U	1 U	1 U	1 U	2.5 U
Bromomethane	UG/L	R	R	2 U	2 UJ	R
Carbon disulfide	UG/L	2 U	2 U	2 U	2 U	5 U
Carbon tetrachloride	UG/L	1 U	1 U	1 U	1 U	2.5 U
Chlorobenzene	UG/L	1 U	1 U	1 U	1 U	2.5 U
Chloroethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
Chloroform	UG/L	1 U	1 U	1 U	1 U	2.5 U
Chloromethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
Cyclohexane	UG/L	5 U	5 U	5 U	5 U	13 U
Dibromochloromethane	UG/L	1 U	1 U	1 U	1 U	2.5 U
Dichlorodifluoromethane	UG/L	2 U	2 U	2 U	2 U	5 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	2.5 U
Isopropylbenzene (Cumene)	UG/L	1 U	1 U	1 U	1 U	2.5 U
Methyl acetate	UG/L	R	R	5 U	5 U	R
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	1 U	1 U	1 U	1 U	2.5 U
Methylcyclohexane	UG/L	5 U	5 U	5 U	5 U	13 U
Methylene chloride	UG/L	2 U	2 U	2 U	2 U	5 U
Styrene	UG/L	1 U	1 U	1 U	1 U	2.5 U
Tetrachloroethene	UG/L	1 U	1 U	1 U	1 U	2.5 U
Toluene	UG/L	1 U	1 U	1 U	1 U	2.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-111319-1
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/14/19	11/13/19	11/13/19
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
Trichloroethene	UG/L	1 U	1.5	1 U	1 U	2.1 J
Trichlorofluoromethane	UG/L	2 U	2 U	2 U	2 U	5 U
Vinyl chloride	UG/L	1 U	1 U	1 U	1 UJ	39.2
Xylene (total)	UG/L	1 U	1 U	1 U	1 U	2.5 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	1.1 U	NA	1.1 U	0.098 U	0.805
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID		AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-111319-1
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/14/19	11/13/19	11/13/19
Parameter	Units					Field Duplicate (1-1)
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-03S	MW-09	MW-09	MW-10	MW-14
Sample ID		MW-03S	FD-111419-1	MW-09	MW-10	MW-14
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/14/19	11/14/19	11/13/19	11/15/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	2.5 U	1 U	0.62 J	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	13 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	19.1	1 U	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	4.6	1 U	1 U	1 UJ	1 U
1,2,3-Trichlorobenzene	UG/L	2.5 U	1 U	1 U	1 UJ	1 U
1,2,4-Trichlorobenzene	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	5 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	715 D	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	2.1 J	1 U	1 U	1 U	1 U
1,2-Dichloropropane	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	2.5 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	2.5 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	13 U	5 U	5 U	R	5 U
4-Methyl-2-pentanone	UG/L	13 U	5 U	5 U	R	5 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-03S	MW-09	MW-09	MW-10	MW-14
Sample ID		MW-03S	FD-111419-1	MW-09	MW-10	MW-14
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/14/19	11/14/19	11/13/19	11/15/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Bromochloromethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	2.5 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	R	2 U	2 U	2 UJ	2 U
Carbon disulfide	UG/L	5 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	UG/L	2.5 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	2.5 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
Chloroform	UG/L	2.5 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	13 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	2.5 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	5 U	2 U	2 U	2 U	2 U
Ethylbenzene	UG/L	2.5 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	2.5 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	R	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	2.5 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	13 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	5 U	2 U	2 U	2 U	2 U
Styrene	UG/L	2.5 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	2.5 U	1 U	1 U	1 U	1 U
Toluene	UG/L	2.5 U	1 U	1 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-03S	MW-09	MW-09	MW-10	MW-14
Sample ID		MW-03S	FD-111419-1	MW-09	MW-10	MW-14
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/14/19	11/14/19	11/13/19	11/15/19
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Trichloroethene	UG/L	1.9 J	2.1	2.3	1 U	1 U
Trichlorofluoromethane	UG/L	5 U	2 U	2 U	2 U	2 U
Vinyl chloride	UG/L	34.2	1 U	1 U	1 UJ	1 U
Xylene (total)	UG/L	2.5 U	1 U	1 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	0.795	NA	NA	0.0491 J	0.71 J
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-03S	MW-09	MW-09	MW-10	MW-14
Sample ID		MW-03S	FD-111419-1	MW-09	MW-10	MW-14
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/14/19	11/14/19	11/13/19	11/15/19
Parameter	Units		Field Duplicate (1-1)			
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Sample ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/13/19	11/18/19	11/13/19	11/15/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	NA	1 U	20 U	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	NA	1 U	20 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	NA	5 U	100 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	NA	1 U	20 U	1 U	1 U
1,1-Dichloroethane	UG/L	NA	1 U	32.3	1 U	1 U
1,1-Dichloroethene	UG/L	NA	1 UJ	43.4	1 UJ	1 U
1,2,3-Trichlorobenzene	UG/L	NA	1 UJ	20 U	1 UJ	1 U
1,2,4-Trichlorobenzene	UG/L	NA	1 U	20 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	NA	2 U	40 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	NA	1 U	20 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	NA	1 U	20 U	1 U	1 U
1,2-Dichloroethane	UG/L	NA	1 U	20 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	NA	1 U	7,160 D	0.55 J	1 U
1,2-Dichloroethene (trans)	UG/L	NA	1 U	53.4	1 U	1 U
1,2-Dichloropropane	UG/L	NA	1 U	20 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	NA	1 U	20 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	NA	1 U	20 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	NA	1 U	20 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	NA	1 U	20 U	1 U	1 U
2-Hexanone	UG/L	NA	R	100 U	R	5 U
4-Methyl-2-pentanone	UG/L	NA	R	58.1 J	R	5 U
Acetone	UG/L	NA	R	R	R	R
Benzene	UG/L	NA	0.5 U	10 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Sample ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/13/19	11/18/19	11/13/19	11/15/19
Parameter	Units					
Volatile Organic Compounds						
Bromochloromethane	UG/L	NA	1 U	20 U	1 U	1 U
Bromodichloromethane	UG/L	NA	1 U	20 U	1 U	1 U
Bromoform	UG/L	NA	1 U	20 U	1 U	1 U
Bromomethane	UG/L	NA	2 UJ	40 U	2 UJ	2 U
Carbon disulfide	UG/L	NA	2 U	40 U	2 U	2 U
Carbon tetrachloride	UG/L	NA	1 U	20 U	1 U	1 U
Chlorobenzene	UG/L	NA	1 U	20 U	1 U	1 U
Chloroethane	UG/L	NA	1 U	20 U	1 U	1 U
Chloroform	UG/L	NA	1 U	20 U	1 U	1 U
Chloromethane	UG/L	NA	1 U	20 U	1 U	1 U
Cyclohexane	UG/L	NA	5 U	54.5 J	5 U	5 U
Dibromochloromethane	UG/L	NA	1 U	20 U	1 U	1 U
Dichlorodifluoromethane	UG/L	NA	2 U	40 U	2 U	2 U
Ethylbenzene	UG/L	NA	1 U	20 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	NA	1 U	20 U	1 U	1 U
Methyl acetate	UG/L	NA	5 U	R	5 U	5 U
Methyl ethyl ketone (2-Butanone)	UG/L	NA	R	243 J	R	R
Methyl tert-butyl ether	UG/L	NA	1 U	20 U	1 U	1 U
Methylcyclohexane	UG/L	NA	5 U	100 U	5 U	5 U
Methylene chloride	UG/L	NA	2 U	40 U	2 U	2 U
Styrene	UG/L	NA	1 U	20 U	1 U	1 U
Tetrachloroethene	UG/L	NA	1 U	20 U	1 U	1 U
Toluene	UG/L	NA	1 U	20 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Sample ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/13/19	11/18/19	11/13/19	11/15/19
Parameter	Units					
Volatile Organic Compounds						
Trichloroethene	UG/L	NA	1 U	2,810	1.1	5.0
Trichlorofluoromethane	UG/L	NA	2 U	40 U	2 U	2 U
Vinyl chloride	UG/L	NA	1 UJ	769	1 UJ	1 U
Xylene (total)	UG/L	NA	1 U	20 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	1.1 U	0.098 U	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1221	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1232	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1242	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1248	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1254	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1260	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1262	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1268	UG/L	NA	NA	NA	0.33 U	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1221	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1232	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1242	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1248	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1254	UG/L	NA	NA	NA	0.33 U	NA

Flags assigned during chemistry validation are shown.

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Sample ID		MW-14D	MW-17	MW-18	MW-19	MW-21
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/13/19	11/18/19	11/13/19	11/15/19
Parameter	Units					
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1262	UG/L	NA	NA	NA	0.33 U	NA
Aroclor 1268	UG/L	NA	NA	NA	0.33 U	NA

Flags assigned during chemistry validation are shown.

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CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-23	MW-26	MW-38	MW-44	MW-44
Sample ID		MW-23	MW-26	MW-38	FD-111519	MW-44
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/13/19	11/15/19	11/15/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	84.4	1 U	1 U	1.3	1.3
1,1,1,2-Tetrachloroethane	UG/L	5 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	25 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	5 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	178	1 U	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	13.7	1 UJ	1 UJ	1 U	1 U
1,2,3-Trichlorobenzene	UG/L	5 U	1 UJ	1 UJ	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	5 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	10 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	5 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	5 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	5 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	1,930 D	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	10.6	1 U	1 U	1 U	1 U
1,2-Dichloropropane	UG/L	5 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	5 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	5 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	5 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	5 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	25 U	R	R	5 U	5 U
4-Methyl-2-pentanone	UG/L	25 U	R	R	5 U	5 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-23	MW-26	MW-38	MW-44	MW-44
Sample ID		MW-23	MW-26	MW-38	FD-111519	MW-44
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/13/19	11/15/19	11/15/19
Parameter	Units					
Volatile Organic Compounds						
Bromochloromethane	UG/L	5 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	5 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	5 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	R	2 UJ	2 UJ	2 U	2 U
Carbon disulfide	UG/L	10 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	UG/L	5 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	5 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	12.4	1 U	1 U	1 U	1 U
Chloroform	UG/L	5 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	5 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	25 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	5 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	10 U	2 U	2 U	2 U	2 U
Ethylbenzene	UG/L	15.5	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	5 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	R	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	5 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	25 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	10 U	2 U	2 U	2 U	2 U
Styrene	UG/L	5 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	5 U	1 U	1 U	1 U	1 U
Toluene	UG/L	31.3	1 U	1 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-23	MW-26	MW-38	MW-44	MW-44
Sample ID		MW-23	MW-26	MW-38	FD-111519	MW-44
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/13/19	11/15/19	11/15/19
Parameter	Units					
Volatile Organic Compounds						
Trichloroethene	UG/L	202	1.9	4.7	4.7	4.2
Trichlorofluoromethane	UG/L	10 U	2 U	3.5	2 U	2 U
Vinyl chloride	UG/L	64.7	1 UJ	1 UJ	1 U	1 U
Xylene (total)	UG/L	10.3	1 U	1 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	NA	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1221	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1232	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1242	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1248	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1254	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1260	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1262	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1268	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1221	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1232	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1242	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1248	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1254	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-23	MW-26	MW-38	MW-44	MW-44
Sample ID		MW-23	MW-26	MW-38	FD-111519	MW-44
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/13/19	11/15/19	11/15/19
Parameter	Units					
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1262	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor 1268	UG/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-45	MW-48	MW-50	MW-57	MW-58
Sample ID		MW-45	MW-48	MW-50	MW-57	MW-58
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/15/19	11/15/19	11/18/19	11/18/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	0.83 J	0.66 J	1 U	1 U
1,1-Dichloroethene	UG/L	1 U	1 U	1 U	1.2	1 U
1,2,3-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	17.0	2.5	1 U	317 D	27.5
1,2-Dichloroethene (trans)	UG/L	3.9	1 U	1 U	0.81 J	1 U
1,2-Dichloropropane	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	5 U	5 U	5 U	5 U	5 U
Acetone	UG/L	R	R	R	10 U	R
Benzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-45	MW-48	MW-50	MW-57	MW-58
Sample ID		MW-45	MW-48	MW-50	MW-57	MW-58
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/15/19	11/15/19	11/18/19	11/18/19
Parameter	Units					
Volatile Organic Compounds						
Bromochloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	1 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	UG/L	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	UG/L	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
Chloroform	UG/L	1 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	1 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	5 U	5 U	5 U	5 U	R
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	5 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	2 U	2 U	2 U	2 U	2 U
Styrene	UG/L	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	1 U	1 U	1 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-45	MW-48	MW-50	MW-57	MW-58
Sample ID		MW-45	MW-48	MW-50	MW-57	MW-58
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/15/19	11/15/19	11/18/19	11/18/19
Parameter	Units					
Volatile Organic Compounds						
Trichloroethene	UG/L	162	20.6	1 U	0.96 J	2.4
Trichlorofluoromethane	UG/L	2 U	2 U	2 U	2 U	2 U
Vinyl chloride	UG/L	1.2	1 U	1 U	270 D	1 U
Xylene (total)	UG/L	1 U	1 U	1 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	NA	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
 CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-45	MW-48	MW-50	MW-57	MW-58
Sample ID		MW-45	MW-48	MW-50	MW-57	MW-58
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/15/19	11/15/19	11/15/19	11/18/19	11/18/19
Parameter	Units					
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-66	MW-69	MW-70	MW-71	MW-75
Sample ID		MW-66	MW-69	MW-70	MW-71	MW-75
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/18/19	11/14/19	11/15/19	11/13/19	11/14/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5 U	13 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	9.1	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	1 U	2.3 J	1 U	1 U	1 U
1,2,3-Trichlorobenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	2 U	5 U	2 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	174	69.1	1 U	40.8	1 U
1,2-Dichloroethene (trans)	UG/L	6.5	8.6	1 U	2.7	1 U
1,2-Dichloropropane	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	1 U	2.5 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
2-Hexanone	UG/L	5 U	13 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	5 U	13 U	5 U	5 U	5 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-66	MW-69	MW-70	MW-71	MW-75
Sample ID		MW-66	MW-69	MW-70	MW-71	MW-75
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/18/19	11/14/19	11/15/19	11/13/19	11/14/19
Parameter	Units					
Volatile Organic Compounds						
Bromochloromethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
Bromoform	UG/L	1 U	2.5 U	1 U	1 U	1 U
Bromomethane	UG/L	2 U	5 U	2 U	R	2 U
Carbon disulfide	UG/L	2 U	5 U	2 U	2 U	2 U
Carbon tetrachloride	UG/L	1 U	2.5 U	1 U	1 U	1 U
Chlorobenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
Chloroethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
Chloroform	UG/L	1 U	2.5 U	1 U	1 U	1 U
Chloromethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
Cyclohexane	UG/L	5 U	13 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	1 U	2.5 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	2 U	5 U	2 U	2 U	2 U
Ethylbenzene	UG/L	1 U	2.5 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	1 U	2.5 U	1 U	1 U	1 U
Methyl acetate	UG/L	R	13 U	5 U	R	5 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	1 U	2.5 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	5 U	13 U	5 U	5 U	5 U
Methylene chloride	UG/L	2 U	5 U	2 U	2 U	2 U
Styrene	UG/L	1 U	2.5 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	1 U	2.5 U	1 U	1 U	1 U
Toluene	UG/L	1 U	2.5 U	1 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-66	MW-69	MW-70	MW-71	MW-75
Sample ID		MW-66	MW-69	MW-70	MW-71	MW-75
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/18/19	11/14/19	11/15/19	11/13/19	11/14/19
Parameter	Units					
Volatile Organic Compounds						
Trichloroethene	UG/L	14.8	488	1 U	66.8	1 U
Trichlorofluoromethane	UG/L	2 U	5 U	2 U	2 U	2 U
Vinyl chloride	UG/L	3.1	40.3	1 U	6.2	1 U
Xylene (total)	UG/L	1 U	2.5 U	1 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	NA	NA	2.9	2.55	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

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Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-66	MW-69	MW-70	MW-71	MW-75
Sample ID		MW-66	MW-69	MW-70	MW-71	MW-75
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/18/19	11/14/19	11/15/19	11/13/19	11/14/19
Parameter	Units					
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-76	MW-77	MW-79	MW-84	TR3-MW-02
Sample ID		MW-76	MW-77	MW-79	MW-84	TR3-MW0092
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/18/19	11/14/19	11/18/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	5 U	5 U	5 U	5 U	5 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
 CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-76	MW-77	MW-79	MW-84	TR3-MW-02
Sample ID		MW-76	MW-77	MW-79	MW-84	TR3-MW0092
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/18/19	11/14/19	11/18/19
Parameter	Units					
Volatile Organic Compounds						
Bromochloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	1 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	R	2 U	2 U	2 U	2 U
Carbon disulfide	UG/L	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	UG/L	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
Chloroform	UG/L	1 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	1 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	R	5 U	R	5 U	R
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	5 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	2 U	2 U	2 U	2 U	2 U
Styrene	UG/L	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	1 U	1 U	1 U	2.4	1 U
Toluene	UG/L	1 U	1 U	1 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
 CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-76	MW-77	MW-79	MW-84	TR3-MW-02
Sample ID		MW-76	MW-77	MW-79	MW-84	TR3-MW0092
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/18/19	11/14/19	11/18/19
Parameter	Units					
Volatile Organic Compounds						
Trichloroethene	UG/L	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	UG/L	2 U	2 U	2 U	2 U	2 U
Vinyl chloride	UG/L	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	1 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	NA	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	NA	NA	NA
Aroclor 1221	UG/L	NA	NA	NA	NA	NA
Aroclor 1232	UG/L	NA	NA	NA	NA	NA
Aroclor 1242	UG/L	NA	NA	NA	NA	NA
Aroclor 1248	UG/L	NA	NA	NA	NA	NA
Aroclor 1254	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		MW-76	MW-77	MW-79	MW-84	TR3-MW-02
Sample ID		MW-76	MW-77	MW-79	MW-84	TR3-MW0092
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/14/19	11/14/19	11/18/19	11/14/19	11/18/19
Parameter	Units					
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	NA	NA	NA	NA	NA
Aroclor 1262	UG/L	NA	NA	NA	NA	NA
Aroclor 1268	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		11/18/19
Parameter	Units	
Volatile Organic Compounds		
1,1,1-Trichloroethane	UG/L	20 U
1,1,2,2-Tetrachloroethane	UG/L	20 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	100 U
1,1,2-Trichloroethane	UG/L	20 U
1,1-Dichloroethane	UG/L	20 U
1,1-Dichloroethene	UG/L	101
1,2,3-Trichlorobenzene	UG/L	20 U
1,2,4-Trichlorobenzene	UG/L	20 U
1,2-Dibromo-3-chloropropane	UG/L	40 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	20 U
1,2-Dichlorobenzene	UG/L	20 U
1,2-Dichloroethane	UG/L	20 U
1,2-Dichloroethene (cis)	UG/L	14,300 D
1,2-Dichloroethene (trans)	UG/L	50.8
1,2-Dichloropropane	UG/L	20 U
1,3-Dichlorobenzene	UG/L	20 U
1,3-Dichloropropene (cis)	UG/L	20 U
1,3-Dichloropropene (trans)	UG/L	20 U
1,4-Dichlorobenzene	UG/L	20 U
2-Hexanone	UG/L	100 U
4-Methyl-2-pentanone	UG/L	100 U
Acetone	UG/L	200 U
Benzene	UG/L	10 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		11/18/19
Parameter	Units	
Volatile Organic Compounds		
Bromochloromethane	UG/L	20 U
Bromodichloromethane	UG/L	20 U
Bromoform	UG/L	20 U
Bromomethane	UG/L	40 U
Carbon disulfide	UG/L	40 U
Carbon tetrachloride	UG/L	20 U
Chlorobenzene	UG/L	20 U
Chloroethane	UG/L	20 U
Chloroform	UG/L	20 U
Chloromethane	UG/L	20 U
Cyclohexane	UG/L	100 U
Dibromochloromethane	UG/L	20 U
Dichlorodifluoromethane	UG/L	40 U
Ethylbenzene	UG/L	20 U
Isopropylbenzene (Cumene)	UG/L	20 U
Methyl acetate	UG/L	100 U
Methyl ethyl ketone (2-Butanone)	UG/L	R
Methyl tert-butyl ether	UG/L	20 U
Methylcyclohexane	UG/L	100 U
Methylene chloride	UG/L	40 U
Styrene	UG/L	20 U
Tetrachloroethene	UG/L	71.3
Toluene	UG/L	20 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		11/18/19
Parameter	Units	
Volatile Organic Compounds		
Trichloroethene	UG/L	144,000 D
Trichlorofluoromethane	UG/L	40 U
Vinyl chloride	UG/L	245
Xylene (total)	UG/L	20 U
Semivolatile Organic Compounds		
1,4-Dioxane	UG/L	NA
Polychlorinated Biphenyls		
Aroclor 1016	UG/L	NA
Aroclor 1221	UG/L	NA
Aroclor 1232	UG/L	NA
Aroclor 1242	UG/L	NA
Aroclor 1248	UG/L	NA
Aroclor 1254	UG/L	NA
Aroclor 1260	UG/L	NA
Aroclor 1262	UG/L	NA
Aroclor 1268	UG/L	NA
Dissolved Polychlorinated Biphenyls		
Aroclor 1016	UG/L	NA
Aroclor 1221	UG/L	NA
Aroclor 1232	UG/L	NA
Aroclor 1242	UG/L	NA
Aroclor 1248	UG/L	NA
Aroclor 1254	UG/L	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		11/18/19
Parameter	Units	
Dissolved Polychlorinated Biphenyls		
Aroclor 1260	UG/L	NA
Aroclor 1262	UG/L	NA
Aroclor 1268	UG/L	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
 CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		EB-111319	TB-111319-1	EB-111419	TB-111419	TB-111519
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/14/19	11/14/19	11/15/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)	Equipment Blank (1-1)	Trip Blank (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	UG/L	1 UJ	1 UJ	1 U	1 U	1 U
1,2,3-Trichlorobenzene	UG/L	1 UJ	1 UJ	1 U	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
2-Hexanone	UG/L	5 U	R	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	R	R	5 U	5 U	5 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
 CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		EB-111319	TB-111319-1	EB-111419	TB-111419	TB-111519
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/14/19	11/14/19	11/15/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)	Equipment Blank (1-1)	Trip Blank (1-1)	
Volatile Organic Compounds						
Bromochloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Bromoform	UG/L	1 U	1 U	1 U	1 U	1 U
Bromomethane	UG/L	2 UJ	2 UJ	2 U	2 U	2 U
Carbon disulfide	UG/L	2 U	2 U	2 U	2 U	2 U
Carbon tetrachloride	UG/L	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Chloroethane	UG/L	1 U	1 U	1 U	1 U	1 U
Chloroform	UG/L	1 U	1 U	1 U	1 U	1 U
Chloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Cyclohexane	UG/L	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	UG/L	2 U	2 U	2 U	2 U	2 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	1 U	1 U	1 U	1 U	1 U
Methyl acetate	UG/L	5 U	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2-Butanone)	UG/L	R	R	R	R	R
Methyl tert-butyl ether	UG/L	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	UG/L	5 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	2 U	2 U	2 U	2 U	2 U
Styrene	UG/L	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	UG/L	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	1 U	1 U	1 U	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		EB-111319	TB-111319-1	EB-111419	TB-111419	TB-111519
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/14/19	11/14/19	11/15/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)	Equipment Blank (1-1)	Trip Blank (1-1)	
Volatile Organic Compounds						
Trichloroethene	UG/L	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	UG/L	2 U	2 U	2 U	2 U	2 U
Vinyl chloride	UG/L	1 UJ	1 UJ	1 U	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	1 U	1 U	1 U
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	0.095 U	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1221	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1232	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1242	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1248	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1254	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1260	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1262	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1268	UG/L	0.33 U	NA	NA	NA	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1221	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1232	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1242	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1248	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1254	UG/L	0.33 U	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		EB-111319	TB-111319-1	EB-111419	TB-111419	TB-111519
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/19	11/13/19	11/14/19	11/14/19	11/15/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)	Equipment Blank (1-1)	Trip Blank (1-1)	
Dissolved Polychlorinated Biphenyls						
Aroclor 1260	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1262	UG/L	0.33 U	NA	NA	NA	NA
Aroclor 1268	UG/L	0.33 U	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-111819	TB-111819-1
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		11/18/19	11/18/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/L	1 U	1 U
1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5 U	5 U
1,1,2-Trichloroethane	UG/L	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	1 U
1,1-Dichloroethene	UG/L	1 U	1 U
1,2,3-Trichlorobenzene	UG/L	1 U	1 U
1,2,4-Trichlorobenzene	UG/L	1 U	1 U
1,2-Dibromo-3-chloropropane	UG/L	2 U	2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1 U	1 U
1,2-Dichlorobenzene	UG/L	1 U	1 U
1,2-Dichloroethane	UG/L	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	1 U	1 U
1,2-Dichloropropane	UG/L	1 U	1 U
1,3-Dichlorobenzene	UG/L	1 U	1 U
1,3-Dichloropropene (cis)	UG/L	1 U	1 U
1,3-Dichloropropene (trans)	UG/L	1 U	1 U
1,4-Dichlorobenzene	UG/L	1 U	1 U
2-Hexanone	UG/L	5 U	5 U
4-Methyl-2-pentanone	UG/L	5 U	5 U
Acetone	UG/L	R	R
Benzene	UG/L	0.5 U	0.5 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-111819	TB-111819-1
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		11/18/19	11/18/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
Bromochloromethane	UG/L	1 U	1 U
Bromodichloromethane	UG/L	1 U	1 U
Bromoform	UG/L	1 U	1 U
Bromomethane	UG/L	2 U	2 U
Carbon disulfide	UG/L	2 U	2 U
Carbon tetrachloride	UG/L	1 U	1 U
Chlorobenzene	UG/L	1 U	1 U
Chloroethane	UG/L	1 U	1 U
Chloroform	UG/L	1 U	1 U
Chloromethane	UG/L	1 U	1 U
Cyclohexane	UG/L	5 U	5 U
Dibromochloromethane	UG/L	1 U	1 U
Dichlorodifluoromethane	UG/L	2 U	2 U
Ethylbenzene	UG/L	1 U	1 U
Isopropylbenzene (Cumene)	UG/L	1 U	1 U
Methyl acetate	UG/L	R	R
Methyl ethyl ketone (2-Butanone)	UG/L	R	R
Methyl tert-butyl ether	UG/L	1 U	1 U
Methylcyclohexane	UG/L	5 U	5 U
Methylene chloride	UG/L	2 U	2 U
Styrene	UG/L	1 U	1 U
Tetrachloroethene	UG/L	1 U	1 U
Toluene	UG/L	1 U	1 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-111819	TB-111819-1
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		11/18/19	11/18/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds			
Trichloroethene	UG/L	1 U	1 U
Trichlorofluoromethane	UG/L	2 U	2 U
Vinyl chloride	UG/L	1 U	1 U
Xylene (total)	UG/L	1 U	1 U
Semivolatile Organic Compounds			
1,4-Dioxane	UG/L	NA	NA
Polychlorinated Biphenyls			
Aroclor 1016	UG/L	NA	NA
Aroclor 1221	UG/L	NA	NA
Aroclor 1232	UG/L	NA	NA
Aroclor 1242	UG/L	NA	NA
Aroclor 1248	UG/L	NA	NA
Aroclor 1254	UG/L	NA	NA
Aroclor 1260	UG/L	NA	NA
Aroclor 1262	UG/L	NA	NA
Aroclor 1268	UG/L	NA	NA
Dissolved Polychlorinated Biphenyls			
Aroclor 1016	UG/L	NA	NA
Aroclor 1221	UG/L	NA	NA
Aroclor 1232	UG/L	NA	NA
Aroclor 1242	UG/L	NA	NA
Aroclor 1248	UG/L	NA	NA
Aroclor 1254	UG/L	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20

CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
CARRIER SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-111819	TB-111819-1
Matrix		Water Quality	Water Quality
Depth Interval (ft)		-	-
Date Sampled		11/18/19	11/18/19
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Dissolved Polychlorinated Biphenyls			
Aroclor 1260	UG/L	NA	NA
Aroclor 1262	UG/L	NA	NA
Aroclor 1268	UG/L	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 1/15/20
 CHECKED BY: PRF 1/15/20

Detection Limits shown are PQL

ATTACHMENT A

FORM 1s

JC98550

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-03D	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-1	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D186968.D	1	11/20/19 12:01	KC	n/a	n/a	V2D8050
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	7.4	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Handwritten: 11/14/19
SGS

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Report of Analysis

Client Sample ID:	MW-03D	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-1	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND <i>R</i>	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND <i>JS</i>	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND <i>JS</i>	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-03S	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-2	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L317784.D	2.5	11/25/19 11:33	KC	n/a	n/a	VL9330
Run #2	L317785.D	25	11/25/19 12:00	KC	n/a	n/a	VL9330

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND ^R	25	15	ug/l	
71-43-2	Benzene	ND	1.3	1.1	ug/l	
74-97-5	Bromochloromethane	ND	2.5	1.2	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	1.5	ug/l	
75-25-2	Bromoform	ND	2.5	1.6	ug/l	
74-83-9	Bromomethane ^b	ND ^R	5.0	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND ^R	25	17	ug/l	
75-15-0	Carbon disulfide	ND	5.0	2.4	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	1.4	ug/l	
108-90-7	Chlorobenzene	ND	2.5	1.4	ug/l	
75-00-3	Chloroethane	ND	2.5	1.8	ug/l	
67-66-3	Chloroform	ND	2.5	1.3	ug/l	
74-87-3	Chloromethane	ND	2.5	1.9	ug/l	
110-82-7	Cyclohexane	ND	13	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.5	1.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.5	1.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.5	1.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.5	1.3	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	3.4	ug/l	
75-34-3	1,1-Dichloroethane	19.1	2.5	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	1.5	ug/l	
75-35-4	1,1-Dichloroethene	4.6	2.5	1.5	ug/l	
156-59-2	cis-1,2-Dichloroethene	715 ^c	25	13	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.1	2.5	1.3	ug/l	J
78-87-5	1,2-Dichloropropane	ND	2.5	1.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	1.1	ug/l	
100-41-4	Ethylbenzene	ND	2.5	1.5	ug/l	
76-13-1	Freon 113	ND	13	4.9	ug/l	
591-78-6	2-Hexanone	ND	13	5.1	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-03S	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-2	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.5	1.6	ug/l	
79-20-9	Methyl Acetate	ND ^R	13	2.0	ug/l	
108-87-2	Methylcyclohexane	ND	13	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	1.3	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	4.6	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	2.5	1.7	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	1.6	ug/l	
127-18-4	Tetrachloroethene	ND	2.5	2.2	ug/l	
108-88-3	Toluene	ND	2.5	1.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	1.3	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	1.3	ug/l	
79-01-6	Trichloroethene	1.9	2.5	1.3	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	34.2	2.5	2.0	ug/l	
	m,p-Xylene	ND	2.5	2.0	ug/l	
95-47-6	o-Xylene	ND	2.5	1.5	ug/l	
1330-20-7	Xylene (total)	ND	2.5	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	98%	81-124%
2037-26-5	Toluene-D8	100%	103%	80-120%
460-00-4	4-Bromofluorobenzene	96%	96%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	~~1.51~~	~~23~~	~~ug/l~~	~~J~~
	Total TIC, Volatile		0	ug/l	

- (a) Diluted due to high concentration of target compound.
 (b) Associated CCV outside of control limits low.
 (c) Result is from Run# 2

Handwritten: OK 11/14/19

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	FD-111319-1	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-3	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L317786.D	2.5	11/25/19 12:27	KC	n/a	n/a	VL9330
Run #2	L317787.D	25	11/25/19 12:54	KC	n/a	n/a	VL9330

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND ^R	25	15	ug/l	
71-43-2	Benzene	ND	1.3	1.1	ug/l	
74-97-5	Bromochloromethane	ND	2.5	1.2	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	1.5	ug/l	
75-25-2	Bromoform	ND	2.5	1.6	ug/l	
74-83-9	Bromomethane ^b	ND ^R	5.0	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND ^R	25	17	ug/l	
75-15-0	Carbon disulfide	ND	5.0	2.4	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	1.4	ug/l	
108-90-7	Chlorobenzene	ND	2.5	1.4	ug/l	
75-00-3	Chloroethane	ND	2.5	1.8	ug/l	
67-66-3	Chloroform	ND	2.5	1.3	ug/l	
74-87-3	Chloromethane	ND	2.5	1.9	ug/l	
110-82-7	Cyclohexane	ND	13	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.5	1.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.5	1.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.5	1.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.5	1.3	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	3.4	ug/l	
75-34-3	1,1-Dichloroethane	20.3	2.5	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	1.5	ug/l	
75-35-4	1,1-Dichloroethene	5.2	2.5	1.5	ug/l	
156-59-2	cis-1,2-Dichloroethene	678 ^c ^D	25	13	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.7	2.5	1.3	ug/l	J
78-87-5	1,2-Dichloropropane	ND	2.5	1.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	1.1	ug/l	
100-41-4	Ethylbenzene	ND	2.5	1.5	ug/l	
76-13-1	Freon 113	ND	13	4.9	ug/l	
591-78-6	2-Hexanone	ND	13	5.1	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 2 of 2

Client Sample ID:	FD-111319-1	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-3	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.5	1.6	ug/l	
79-20-9	Methyl Acetate	ND	13	2.0	ug/l	
108-87-2	Methylcyclohexane	ND	13	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	1.3	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	4.6	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	2.5	1.7	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	1.6	ug/l	
127-18-4	Tetrachloroethene	ND	2.5	2.2	ug/l	
108-88-3	Toluene	ND	2.5	1.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	1.3	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	1.3	ug/l	
79-01-6	Trichloroethene	2.1	2.5	1.3	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	39.2	2.5	2.0	ug/l	
	m,p-Xylene	ND	2.5	2.0	ug/l	
95-47-6	o-Xylene	ND	2.5	1.5	ug/l	
1330-20-7	Xylene (total)	ND	2.5	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	97%	102%	81-124%
2037-26-5	Toluene-D8	100%	102%	80-120%
460-00-4	4-Bromofluorobenzene	98%	100%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.51	23	ug/l	J
	Total TIC, Volatile		0	ug/l	

- (a) Diluted due to high concentration of target compound.
 (b) Associated CCV outside of control limits low.
 (c) Result is from Run# 2

check 11/14/19

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID: MW-10	Date Sampled: 11/13/19
Lab Sample ID: JC98550-7	Date Received: 11/14/19
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260C	
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D186970.D	1	11/20/19 13:00	KC	n/a	n/a	V2D8050
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-10	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-7	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND <i>R</i>	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND <i>JS</i>	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND <i>JS</i>	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	94%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-9	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2D186979.D	1	11/20/19 17:24	KC	n/a	n/a	V2D8050

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-17	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-9	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND <i>R</i>	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND <i>OK</i>	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND <i>OK</i>	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-19	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-4	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D186969.D	1	11/20/19 12:30	KC	n/a	n/a	V2D8050
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.55	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-4	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND <i>R</i>	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND <i>JS</i>	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	1.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND <i>JS</i>	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-6	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L317788.D	5	11/25/19 13:21	KC	n/a	n/a	VL9330
Run #2	L317791.D	50	11/25/19 14:43	KC	n/a	n/a	VL9330

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	50	30	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.9	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane ^b	ND <i>R</i>	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	50	34	ug/l	
75-15-0	Carbon disulfide	ND	10	4.8	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	12.4	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
110-82-7	Cyclohexane	ND	25	3.9	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	6.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	6.8	ug/l	
75-34-3	1,1-Dichloroethane	178	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	13.7	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1930 ^c <i>D</i>	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	10.6	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	15.5	5.0	3.0	ug/l	
76-13-1	Freon 113	ND	25	9.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-6	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	25	4.0	ug/l	
108-87-2	Methylcyclohexane	ND	25	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
100-42-5	Styrene	ND	5.0	3.5	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	31.3	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	84.4	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	202	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
75-01-4	Vinyl chloride	64.7	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	6.6	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	10.3	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	81-124%
2037-26-5	Toluene-D8	101%	102%	80-120%
460-00-4	4-Bromofluorobenzene	98%	98%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	~~1.51~~	~~33~~	~~ug/l~~	~~J~~
	Total TIC, Volatile		0	ug/l	

- (a) Diluted due to high concentration of target compound.
 (b) Associated CCV outside of control limits low.
 (c) Result is from Run# 2

check 11/14/19

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-26	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-10	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2D186980.D	1	11/20/19 17:54	KC	n/a	n/a	V2D8050

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-26	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-10	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND <i>R</i>	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND <i>JS</i>	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	1.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND <i>JS</i>	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	MW-38	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-8	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2D186978.D	1	11/20/19 16:55	KC	n/a	n/a	V2D8050

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-38	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-8	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND <i>R</i>	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND <i>JS</i>	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	4.7	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	3.5	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND <i>JS</i>	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

Handwritten signature and date 11/16/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-71	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-5	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L317783.D	1	11/25/19 11:06	KC	n/a	n/a	VL9330
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>R</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	40.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.7	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-71	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-5	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	66.8	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	6.2	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	98%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.51	19	ug/l	J
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

Signature
11/14/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	EB-111319	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-12	Date Received:	11/14/19
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2D186976.D	1	11/20/19 15:56	KC	n/a	n/a	V2D8050

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>JS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>JS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: EB-111319
 Lab Sample ID: JC98550-12
 Matrix: AQ - Equipment Blank
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/13/19

Date Received: 11/14/19

Percent Solids: n/a

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

OK
11/16/19

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	TB-111319-1	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-11	Date Received:	11/14/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2D186975.D	1	11/20/19 15:27	KC	n/a	n/a	V2D8050

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>SS</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene ^a	ND <i>SS</i>	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND <i>R</i>	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TB-111319-1	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-11	Date Received:	11/14/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride ^a	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

4.15
4

4.15
4

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-03D	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-1	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88488.D	1	11/22/19 12:00	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		29-124%
321-60-8	2-Fluorobiphenyl	54%		23-122%
1718-51-0	Terphenyl-d14	77%		22-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-03S	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-2	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88489.D	1	11/22/19 12:19	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.795	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		29-124%
321-60-8	2-Fluorobiphenyl	57%		23-122%
1718-51-0	Terphenyl-d14	79%		22-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	FD-111319-1	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-3	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88490.D	1	11/22/19 12:39	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.805	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		29-124%
321-60-8	2-Fluorobiphenyl	53%		23-122%
1718-51-0	Terphenyl-d14	76%		22-130%


 11/19/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-10	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-7	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88492.D	1	11/22/19 17:29	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.0491	0.098	0.049	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%		29-124%
321-60-8	2-Fluorobiphenyl	46%		23-122%
1718-51-0	Terphenyl-d14	83%		22-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-17	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-9	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88493.D	1	11/22/19 17:49	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		29-124%
321-60-8	2-Fluorobiphenyl	55%		23-122%
1718-51-0	Terphenyl-d14	79%		22-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-71	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-5	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88491.D	1	11/22/19 17:10	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	2.55	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		29-124%
321-60-8	2-Fluorobiphenyl	54%		23-122%
1718-51-0	Terphenyl-d14	82%		22-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	EB-111319	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-12	Date Received:	11/14/19
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8270D BY SIM SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M88494.D	1	11/22/19 18:09	HSS	11/18/19 15:00	OP24056A	E4M4107
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.095	0.048	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		29-124%
321-60-8	2-Fluorobiphenyl	62%		23-122%
1718-51-0	Terphenyl-d14	92%		22-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-19	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-4	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443033.D	1	11/18/19 18:53	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		37-139%
877-09-8	Tetrachloro-m-xylene	100%		37-139%
2051-24-3	Decachlorobiphenyl	79%		16-135%
2051-24-3	Decachlorobiphenyl	89%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-19	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-4F	Date Received:	11/14/19
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	XX2443034.D	1	11/18/19 19:12	RK	11/18/19 09:00	OP24057	GXX6861

Run #1	Initial Volume	Final Volume
Run #2	300 ml	2.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		37-139%
877-09-8	Tetrachloro-m-xylene	92%		37-139%
2051-24-3	Decachlorobiphenyl	76%		16-135%
2051-24-3	Decachlorobiphenyl	88%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-6	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443039.D	1	11/18/19 20:43	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		37-139%
877-09-8	Tetrachloro-m-xylene	239% ^a		37-139%
2051-24-3	Decachlorobiphenyl	76%		16-135%
2051-24-3	Decachlorobiphenyl	96%		16-135%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-6F	Date Received:	11/14/19
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443040.D	1	11/18/19 21:02	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		37-139%
877-09-8	Tetrachloro-m-xylene	116%		37-139%
2051-24-3	Decachlorobiphenyl	78%		16-135%
2051-24-3	Decachlorobiphenyl	94%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-26	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-10	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443043.D	1	11/18/19 21:56	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		37-139%
877-09-8	Tetrachloro-m-xylene	122%		37-139%
2051-24-3	Decachlorobiphenyl	93%		16-135%
2051-24-3	Decachlorobiphenyl	107%		16-135%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-26	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-10F	Date Received:	11/14/19
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443044.D	1	11/18/19 22:15	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		37-139%
877-09-8	Tetrachloro-m-xylene	109%		37-139%
2051-24-3	Decachlorobiphenyl	85%		16-135%
2051-24-3	Decachlorobiphenyl	99%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-38	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-8	Date Received:	11/14/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443273.D	1	11/22/19 19:51	TR	11/21/19 06:00	OP24157	GXX6867
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		37-139%
877-09-8	Tetrachloro-m-xylene	79%		37-139%
2051-24-3	Decachlorobiphenyl	82%		16-135%
2051-24-3	Decachlorobiphenyl	76%		16-135%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-38	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-8F	Date Received:	11/14/19
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443274.D	1	11/22/19 20:09	TR	11/21/19 06:00	OP24157	GXX6867
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		37-139%
877-09-8	Tetrachloro-m-xylene	85%		37-139%
2051-24-3	Decachlorobiphenyl	87%		16-135%
2051-24-3	Decachlorobiphenyl	82%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	EB-111319	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-12	Date Received:	11/14/19
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443045.D	1	11/18/19 22:33	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		37-139%
877-09-8	Tetrachloro-m-xylene	78%		37-139%
2051-24-3	Decachlorobiphenyl	67%		16-135%
2051-24-3	Decachlorobiphenyl	77%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	EB-111319	Date Sampled:	11/13/19
Lab Sample ID:	JC98550-12F	Date Received:	11/14/19
Matrix:	AQ - Equip Blank Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443050.D	1	11/19/19 00:05	RK	11/18/19 09:00	OP24057	GXX6861
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		37-139%
877-09-8	Tetrachloro-m-xylene	81%		37-139%
2051-24-3	Decachlorobiphenyl	65%		16-135%
2051-24-3	Decachlorobiphenyl	75%		16-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

JC98635

Report of Analysis

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Client Sample ID:	AR-MW-02	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-9	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L317794.D	1	11/25/19 16:04	KC	n/a	n/a	VL9330

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>R</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

check
11/13/20

Report of Analysis

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Client Sample ID:	AR-MW-02	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-9	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	1.51	27	ug/l	J
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

Handwritten: 11/13/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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JC98635

Report of Analysis

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Client Sample ID:	AR-MW-06	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-10	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L317795.D	1	11/25/19 16:31	KC	n/a	n/a	VL9330

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>R</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.1	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AR-MW-06	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-10	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	1.5	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	~~1.51~~	~~25~~	~~ug/l~~	~~J~~
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

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ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	DP-MW-04	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-6	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C171907.D	1	11/23/19 20:40	MD	n/a	n/a	V2C7725
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	DP-MW-04	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-6	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-09	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-2	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C171890.D	1	11/23/19 12:34	MD	n/a	n/a	V2C7725
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-09	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-2	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.62	1.0	0.54	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	2.3	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	86%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	FD-111419-1	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-3	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2C171891.D	1	11/23/19 13:02	MD	n/a	n/a	V2C7725

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

check 11/13/20

Report of Analysis

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Client Sample ID:	FD-111419-1	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-3	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	2.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-69	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-1	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2C171909.D	2.5	11/23/19 21:38	MD	n/a	n/a	V2C7725
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	25	15	ug/l	
71-43-2	Benzene	ND	1.3	1.1	ug/l	
74-97-5	Bromochloromethane	ND	2.5	1.2	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	1.5	ug/l	
75-25-2	Bromoform	ND	2.5	1.6	ug/l	
74-83-9	Bromomethane	ND	5.0	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	25	17	ug/l	
75-15-0	Carbon disulfide	ND	5.0	2.4	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	1.4	ug/l	
108-90-7	Chlorobenzene	ND	2.5	1.4	ug/l	
75-00-3	Chloroethane	ND	2.5	1.8	ug/l	
67-66-3	Chloroform	ND	2.5	1.3	ug/l	
74-87-3	Chloromethane	ND	2.5	1.9	ug/l	
110-82-7	Cyclohexane	ND	13	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.5	1.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.5	1.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.5	1.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.5	1.3	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	3.4	ug/l	
75-34-3	1,1-Dichloroethane	9.1	2.5	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	1.5	ug/l	
75-35-4	1,1-Dichloroethene	2.3	2.5	1.5	ug/l	J
156-59-2	cis-1,2-Dichloroethene	69.1	2.5	1.3	ug/l	
156-60-5	trans-1,2-Dichloroethene	8.6	2.5	1.3	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	1.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	1.1	ug/l	
100-41-4	Ethylbenzene	ND	2.5	1.5	ug/l	
76-13-1	Freon 113	ND	13	4.9	ug/l	
591-78-6	2-Hexanone	ND	13	5.1	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-69	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-1	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.5	1.6	ug/l	
79-20-9	Methyl Acetate	ND	13	2.0	ug/l	
108-87-2	Methylcyclohexane	ND	13	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	1.3	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	4.6	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	2.5	1.7	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	1.6	ug/l	
127-18-4	Tetrachloroethene	ND	2.5	2.2	ug/l	
108-88-3	Toluene	ND	2.5	1.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	2.5	1.3	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^c	ND	2.5	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	1.3	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	1.3	ug/l	
79-01-6	Trichloroethene	488	2.5	1.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	40.3	2.5	2.0	ug/l	
	m,p-Xylene	ND	2.5	2.0	ug/l	
95-47-6	o-Xylene	ND	2.5	1.5	ug/l	
1330-20-7	Xylene (total)	ND	2.5	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Diluted due to high concentration of target compound.

(b) This compound in BS is outside in house QC limits bias high.

(c) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-75	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-4	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C171892.D	1	11/23/19 13:31	MD	n/a	n/a	V2C7725
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

check 11/30

Report of Analysis

Client Sample ID:	MW-75	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-4	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	102%		80-120%		
17060-07-0	1,2-Dichloroethane-D4	98%		81-124%		
2037-26-5	Toluene-D8	100%		80-120%		
460-00-4	4-Bromofluorobenzene	91%		80-120%		

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-76	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-8	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L317793.D	1	11/25/19 15:37	KC	n/a	n/a	VL9330

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND <i>R</i>	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Handwritten: 11/30

Report of Analysis

Client Sample ID:	MW-76	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-8	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

4.8

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	~~1.51~~	~~28~~	~~ug/l~~	~~J~~
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.

Handwritten: 11/3/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-77	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-7	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C171908.D	1	11/23/19 21:09	MD	n/a	n/a	V2C7725
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-77	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-7	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-84	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-5	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2C171906.D	1	11/23/19 20:12	MD	n/a	n/a	V2C7725

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Surge
11/13/20

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-84	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-5	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	2.4	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	EB-111419	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-12	Date Received:	11/15/19
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2C171900.D	1	11/23/19 17:20	MD	n/a	n/a	V2C7725

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

OK 11/3/20

Report of Analysis

Client Sample ID:	EB-111419	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-12	Date Received:	11/15/19
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	TB-111419	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-11	Date Received:	11/15/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C171899.D	1	11/23/19 16:51	MD	n/a	n/a	V2C7725
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

check 11/13/20

Report of Analysis

Page 2 of 2

Client Sample ID:	TB-111419	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-11	Date Received:	11/15/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene ^b	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	98%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	AR-MW-02	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-9	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	6P486588.D	1	11/27/19 18:50	JC	11/20/19 04:20	OP24122	E6P2806

Run #1	Initial Volume	Final Volume
Run #2	940 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	1.1	0.70	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	79%		26-114%
1718-51-0	Terphenyl-d14	80%		16-122%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DP-MW-04	Date Sampled:	11/14/19
Lab Sample ID:	JC98635-6	Date Received:	11/15/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P486589.D	1	11/27/19 19:13	JC	11/20/19 04:20	OP24122	E6P2806
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	1.1	0.69	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		28-126%
321-60-8	2-Fluorobiphenyl	83%		26-114%
1718-51-0	Terphenyl-d14	70%		16-122%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

JC98713

Report of Analysis

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Client Sample ID:	MW-44	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-1	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157185.D	1	11/22/19 18:13	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-44	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-1	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.3	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	4.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

- (a) This compound in BS is outside in house QC limits bias high.
 (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	FD-111519	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-2	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157186.D	1	11/22/19 18:42	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

check 11/22/20

Report of Analysis

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Client Sample ID:	FD-111519	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-2	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.3	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	4.7	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

- (a) This compound in BS is outside in house QC limits bias high.
 (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-45	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-3	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157187.D	1	11/22/19 19:11	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.0	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	3.9	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-45	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-3	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	162	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	1.2	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	108%		80-120%		
17060-07-0	1,2-Dichloroethane-D4	106%		81-124%		
2037-26-5	Toluene-D8	102%		80-120%		
460-00-4	4-Bromofluorobenzene	97%		80-120%		
CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	Total TIC, Volatile		0	ug/l		

- (a) This compound in BS is outside in house QC limits bias high.
 (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-21	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-4	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	3B157188.D	1	11/22/19 19:40	DG	n/a	n/a	V3B7068

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>✓</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>✓</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

check
11/3/20

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-21	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-4	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	5.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	105%		80-120%		
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%		
2037-26-5	Toluene-D8	102%		80-120%		
460-00-4	4-Bromofluorobenzene	97%		80-120%		
CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	Total TIC, Volatile		0	ug/l		

- (a) This compound in BS is outside in house QC limits bias high.
 (b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-70	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-5	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157200.D	1	11/23/19 01:29	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 2 of 2

Client Sample ID:	MW-70	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-5	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-14	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-6	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157201.D	1	11/23/19 01:58	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 2 of 2

Client Sample ID:	MW-14	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-6	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-48	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-8	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157202.D	1	11/23/19 02:26	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	0.83	1.0	0.57	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.5	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	MW-48	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-8	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	20.6	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-50	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-9	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157203.D	1	11/23/19 02:55	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	0.66	1.0	0.57	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-50	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-9	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	TB-111519	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-10	Date Received:	11/16/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B157192.D	1	11/22/19 21:40	DG	n/a	n/a	V3B7068
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane ^a	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

OK 11/22/19

Report of Analysis

Page 2 of 2

Client Sample ID:	TB-111519		
Lab Sample ID:	JC98713-10	Date Sampled:	11/15/19
Matrix:	AQ - Trip Blank Water	Date Received:	11/16/19
Method:	SW846 8260C	Percent Solids:	n/a
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

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VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) This compound in BS is outside in house QC limits bias high.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-14	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-6	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P486376.D	1	11/20/19 16:06	JC	11/20/19 05:00	OP24122	E6P2799
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.71	1.0	0.66	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		28-126%
321-60-8	2-Fluorobiphenyl	83%		26-114%
1718-51-0	Terphenyl-d14	84%		16-122%

ND = Not detected MDL = Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: MW-14D
 Lab Sample ID: JC98713-7
 Matrix: AQ - Ground Water
 Method: SW846 8270D SW846 3510C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/15/19
 Date Received: 11/16/19
 Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P486377.D	1	11/20/19 16:29	JC	11/20/19 05:00	OP24122	E6P2799
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	1.1	0.69	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		28-126%
321-60-8	2-Fluorobiphenyl	81%		26-114%
1718-51-0	Terphenyl-d14	82%		16-122%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-70	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-5	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P486375.D	1	11/20/19 15:44	JC	11/20/19 05:00	OP24122	E6P2799
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	2.9	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		28-126%
321-60-8	2-Fluorobiphenyl	76%		26-114%
1718-51-0	Terphenyl-d14	85%		16-122%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-44	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-1	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G187118.D	1	11/20/19 14:21	TR	11/20/19 06:30	OP24129	G2G4828
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		37-139%
877-09-8	Tetrachloro-m-xylene	103%		37-139%
2051-24-3	Decachlorobiphenyl	89%		16-135%
2051-24-3	Decachlorobiphenyl	93%		16-135%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-44-F	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-1F	Date Received:	11/16/19
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2443161.D	1	11/20/19 14:29	TR	11/20/19 06:30	OP24129	GXX6863
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		37-139%
877-09-8	Tetrachloro-m-xylene	125%		37-139%
2051-24-3	Decachlorobiphenyl	83%		16-135%
2051-24-3	Decachlorobiphenyl	111%		16-135%

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FD-111519	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-2	Date Received:	11/16/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	2G187119.D	1	11/20/19 14:37	TR	11/20/19 06:30	OP24129	G2G4828

Run #1	Initial Volume	Final Volume
Run #2	300 ml	2.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		37-139%
877-09-8	Tetrachloro-m-xylene	109%		37-139%
2051-24-3	Decachlorobiphenyl	92%		16-135%
2051-24-3	Decachlorobiphenyl	99%		16-135%

OK
11/16/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FD-111519	Date Sampled:	11/15/19
Lab Sample ID:	JC98713-2F	Date Received:	11/16/19
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	XX2443162.D	1	11/20/19 14:48	TR	11/20/19 06:30	OP24129	GXX6863

Run #1	Initial Volume	Final Volume
Run #2	300 ml	2.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	0.13	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	0.17	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	0.12	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		37-139%
877-09-8	Tetrachloro-m-xylene	112%		37-139%
2051-24-3	Decachlorobiphenyl	76%		16-135%
2051-24-3	Decachlorobiphenyl	102%		16-135%

Handwritten signature
11/13/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

JC98767

Report of Analysis

Page 1 of 2

Client Sample ID: MW-18
 Lab Sample ID: JC98767-7
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L317841.D	20	11/27/19 10:05	KC	n/a	n/a	VL9333
Run #2	L317842.D	200	11/27/19 10:32	KC	n/a	n/a	VL9333

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	120	ug/l	
71-43-2	Benzene	ND	10	8.5	ug/l	
74-97-5	Bromochloromethane	ND	20	9.6	ug/l	
75-27-4	Bromodichloromethane	ND	20	12	ug/l	
75-25-2	Bromoform	ND	20	13	ug/l	
74-83-9	Bromomethane	ND	40	33	ug/l	
78-93-3	2-Butanone (MEK)	243	200	140	ug/l	
75-15-0	Carbon disulfide	ND	40	19	ug/l	
56-23-5	Carbon tetrachloride	ND	20	11	ug/l	
108-90-7	Chlorobenzene	ND	20	11	ug/l	
75-00-3	Chloroethane	ND	20	15	ug/l	
67-66-3	Chloroform	ND	20	10	ug/l	
74-87-3	Chloromethane	ND	20	15	ug/l	
110-82-7	Cyclohexane	54.5	100	16	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	40	24	ug/l	
124-48-1	Dibromochloromethane	ND	20	11	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	9.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	11	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	11	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	40	27	ug/l	
75-34-3	1,1-Dichloroethane	32.3	20	11	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	12	ug/l	
75-35-4	1,1-Dichloroethene	43.4	20	12	ug/l	
156-59-2	cis-1,2-Dichloroethene	7160 ^b	200	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	53.4	20	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	9.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	8.6	ug/l	
100-41-4	Ethylbenzene	ND	20	12	ug/l	
76-13-1	Freon 113	ND	100	39	ug/l	
591-78-6	2-Hexanone	ND	100	41	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-18	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-7	Date Received:	11/19/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	20	13	ug/l	
79-20-9	Methyl Acetate	ND <i>P</i>	100	16	ug/l	
108-87-2	Methylcyclohexane	ND	100	12	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	10	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	58.1	100	37	ug/l	J
75-09-2	Methylene chloride	ND	40	20	ug/l	
100-42-5	Styrene	ND	20	14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	13	ug/l	
127-18-4	Tetrachloroethene	ND	20	18	ug/l	
108-88-3	Toluene	ND	20	11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	10	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	11	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	11	ug/l	
79-01-6	Trichloroethene	2810	20	11	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	17	ug/l	
75-01-4	Vinyl chloride	769	20	16	ug/l	
	m,p-Xylene	ND	20	16	ug/l	
95-47-6	o-Xylene	ND	20	12	ug/l	
1330-20-7	Xylene (total)	ND	20	12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	81-124%
2037-26-5	Toluene-D8	99%	102%	80-120%
460-00-4	4-Bromofluorobenzene	96%	98%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Diluted due to high concentration of target compound.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-57	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-8	Date Received:	11/19/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E157871.D	1	11/27/19 19:35	CSF	n/a	n/a	V2E7012
Run #2	2E157872.D	10	11/27/19 20:06	CSF	n/a	n/a	V2E7012

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	1.2	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	317 ^a	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.81	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-57
 Lab Sample ID: JC98767-8
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

4.8
4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	0.96	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	270 ^a D	10	7.9	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	81-124%
2037-26-5	Toluene-D8	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	98%	99%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

Check
11/21/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID: MW-58
 Lab Sample ID: JC98767-6
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L317861.D	1	11/27/19 19:19	KC	n/a	n/a	VL9333
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	27.5	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: MW-58
 Lab Sample ID: JC98767-6
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19

Date Received: 11/19/19

Percent Solids: n/a

4.6
4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	2.4	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.51	18	ug/l	J
	Total TIC, Volatile		0	ug/l	

detected MIBK

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID: MW-66
 Lab Sample ID: JC98767-5
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L317860.D	1	11/27/19 18:52	KC	n/a	n/a	VL9333
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	174	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	6.5	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Handwritten: OK 11/30

Report of Analysis

Page 2 of 2

Client Sample ID: MW-66
 Lab Sample ID: JC98767-5
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

4.5
4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	14.8	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	3.1	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	94%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	~~1.51~~	~~20~~	~~ug/l~~	~~J~~
	Total TIC, Volatile		0	ug/l	

Handwritten: 11/13/20

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-79	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-3	Date Received:	11/19/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L317858.D	1	11/27/19 17:58	KC	n/a	n/a	VL9333
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-79	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-3	Date Received:	11/19/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.51	30	ug/l	J
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	TR3-MW0092	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-4	Date Received:	11/19/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L317859.D	1	11/27/19 18:25	KC	n/a	n/a	VL9333
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND R	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND R	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

OK
11/20

Report of Analysis

Client Sample ID: TR3-MW0092
 Lab Sample ID: JC98767-4
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

4.4

4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	~~system artifact~~	~~1.51~~	~~31~~	~~ug/l~~	~~J~~
	Total TIC, Volatile		0	ug/l	

check 11/20/19

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: TR3-PW-01
 Lab Sample ID: JC98767-9
 Matrix: AQ - Ground Water
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2E157860.D	20	11/27/19 13:28	CSF	n/a	n/a	V2E7012
Run #2	2E157861.D	200	11/27/19 14:00	CSF	n/a	n/a	V2E7012
Run #3	2E157862.D	2000	11/27/19 14:30	CSF	n/a	n/a	V2E7012

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	120	ug/l	
71-43-2	Benzene	ND	10	8.5	ug/l	
74-97-5	Bromochloromethane	ND	20	9.6	ug/l	
75-27-4	Bromodichloromethane	ND	20	12	ug/l	
75-25-2	Bromoform	ND	20	13	ug/l	
74-83-9	Bromomethane	ND	40	33	ug/l	
78-93-3	2-Butanone (MEK)	ND	200	140	ug/l	
75-15-0	Carbon disulfide	ND	40	19	ug/l	
56-23-5	Carbon tetrachloride	ND	20	11	ug/l	
108-90-7	Chlorobenzene	ND	20	11	ug/l	
75-00-3	Chloroethane	ND	20	15	ug/l	
67-66-3	Chloroform	ND	20	10	ug/l	
74-87-3	Chloromethane	ND	20	15	ug/l	
110-82-7	Cyclohexane	ND	100	16	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	40	24	ug/l	
124-48-1	Dibromochloromethane	ND	20	11	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	9.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	11	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	11	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	40	27	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	11	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	12	ug/l	
75-35-4	1,1-Dichloroethene	101	20	12	ug/l	
156-59-2	cis-1,2-Dichloroethene	14300 ^b	200	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	50.8	20	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	9.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	8.6	ug/l	
100-41-4	Ethylbenzene	ND	20	12	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TR3-PW-01	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-9	Date Received:	11/19/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
76-13-1	Freon 113	ND	100	39	ug/l	
591-78-6	2-Hexanone	ND	100	41	ug/l	
98-82-8	Isopropylbenzene	ND	20	13	ug/l	
79-20-9	Methyl Acetate	ND	100	16	ug/l	
108-87-2	Methylcyclohexane	ND	100	12	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	10	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	37	ug/l	
75-09-2	Methylene chloride	ND	40	20	ug/l	
100-42-5	Styrene	ND	20	14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	13	ug/l	
127-18-4	Tetrachloroethene	71.3	20	18	ug/l	
108-88-3	Toluene	ND	20	11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	10	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	11	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	11	ug/l	
79-01-6	Trichloroethene	144000 c ^D	2000	1100	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	17	ug/l	
75-01-4	Vinyl chloride	245	20	16	ug/l	
	m,p-Xylene	ND	20	16	ug/l	
95-47-6	o-Xylene	ND	20	12	ug/l	
1330-20-7	Xylene (total)	ND	20	12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	107%	104%	110%	80-120%
17060-07-0	1,2-Dichloroethane-D4	106%	104%	108%	81-124%
2037-26-5	Toluene-D8	100%	99%	100%	80-120%
460-00-4	4-Bromofluorobenzene	99%	99%	96%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Diluted due to high concentration of target compound.

(b) Result is from Run# 2

(c) Result is from Run# 3

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: EB-111819
 Lab Sample ID: JC98767-2
 Matrix: AQ - Equipment Blank
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19
 Date Received: 11/19/19
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L317857.D	1	11/27/19 17:31	KC	n/a	n/a	VL9333
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND <i>R</i>	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND <i>R</i>	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: EB-111819
 Lab Sample ID: JC98767-2
 Matrix: AQ - Equipment Blank
 Method: SW846 8260C
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Date Sampled: 11/18/19

Date Received: 11/19/19

Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND <i>R</i>	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID: TB-111819-1	Date Sampled: 11/18/19
Lab Sample ID: JC98767-1	Date Received: 11/19/19
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8260C	
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L317856.D	1	11/27/19 17:03	KC	n/a	n/a	VL9333

Run #1	Purge Volume
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND ^R	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND ^R	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-111819-1	Date Sampled:	11/18/19
Lab Sample ID:	JC98767-1	Date Received:	11/19/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	AECOMNYB: Carrier, Thompson Road, Syracuse, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

done
11/30

ATTACHMENT B

SUPPORT DOCUMENTATION

JC98550

G^U, EP, WTB

FR # 1215 6027 5920

JC98550

CHAIN OF CUSTODY RECORD						AECOM													
PROJECT NO. 60617378			SITE NAME UTC - Cameron - 54-1000			LAB <u>SGS</u>													
SAMPLERS (PRINT/SIGNATURE) Toni V. Kington Under // 202 MAR 2019 / 10:00 AM						COOLER <u>1</u> of <u>1</u>													
DELIVERY SERVICE: <u>FED EX</u> AIRBILL NO.: _____						PAGE <u>1</u> of <u>2</u>													
LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	46.14 L	1 L	100 mL	100 mL	100 mL	100 mL	100 mL	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. (IF APPLICABLE)	
MW-03D	11/13/19	0844	G	MW-03D	WG	5	3	2						E12	N				
MW-03D	11/13/19	0844	G	MW-03D-MS	WG	5	3	2						E20	MS				
MW-03D	11/13/19	0844	G	MW-03D-MSU	WG	5	3	2						V311	SD				
MW-03S	11/13/19	0850	G	MW-03S	WG	5	3	2							N				
FD-1	11/13/19	-	G	FD-111319-1	WG	5	3	2						mw-03S	FD				
MW-19	11/13/19	1150	G	MW-19	WG	5	3	2							N				
MW-19-F	11/13/19	1150	G	MW-19-F	WG	2								FIELD FILTERED	N				
MW-71	11/13/19	1155	G	MW-71	WG	5	3	2							N				
MW-23	11/13/19	1346	G	MW-23	WG	5	3	2							N				
MW-23-F	11/13/19	1346	G	MW-23-F	WG	2								FIELD FILTERED	N				
MW-10	11/13/19	1350	G	MW-10	WG	5	3	2							N				
MW-38	11/13/19	1525	G	MW-38	WG	5	3	2							N				
MW-17	11/13/19	1510	G	MW-17	WG	5	3	2							N				
AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS WL - LEACHATE GS - SOIL GAS WC - DRILLING WATER WO - OCEAN WATER WS - SURFACE WATER WQ - WATER FIELD CC LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE TB# - TRIP BLANK SD# - MATRIX SPIKE DUPLICATE RB# - RINSE BLANK FR# - FIELD REPLICATE N# - NORMAL ENVIRONMENTAL SAMPLE MS# - MATRIX SPIKE (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)																			
RELINQUISHED BY (SIGNATURE) R. King			DATE 11/13/19	TIME 1830	RECEIVED BY (SIGNATURE) FED EX			DATE 11/13/19	TIME 1530	SPECIAL INSTRUCTIONS Call Ann Marie Kropivitch @ 716-236-5636 w/ Any Questions									
RELINQUISHED BY (SIGNATURE) Fed Ex			DATE 11/14/19	TIME 0930	RECEIVED FOR LAB BY (SIGNATURE)			DATE 11/14/19	TIME 930	ASSESSMENT <u>3B</u>									
Distribution: Original accompanies shipment, copy to coordinator field files																			

5.1



JC98550: Chain of Custody

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SGS

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JC98550

5.1

JC98550: Chain of Custody
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CASE NARRATIVE / CONFORMANCE SUMMARY



Client: United Technologies Corporation

Job No JC98550

Site: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Report Date 12/2/2019 12:33:43 P

On 11/14/2019, 12 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC98550 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V2D8050

- ▣ All samples were analyzed within the recommended method holding time.
- ▣ All method blanks for this batch meet method specific criteria.
- ▣ Sample(s) JC98550-1MS, JC98550-1MSD were used as the QC samples indicated.
- ▣ JC98550-10 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-1 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-8 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- ▣ JC98550-8 for Bromomethane: Associated CCV outside of control limits low.
- ▣ JC98550-9 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-1 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-9 for Bromomethane: Associated CCV outside of control limits low.
- ▣ JC98550-9 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-10 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-12 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-10 for Bromomethane: Associated CCV outside of control limits low.
- ▣ JC98550-8 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-12 for Bromomethane: Associated CCV outside of control limits low.
- ▣ JC98550-4 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- ▣ JC98550-4 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-1 for Bromomethane: Associated CCV outside of control limits low.
- ▣ JC98550-1 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- ▣ JC98550-10 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- ▣ JC98550-11 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-8 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-4 for Bromomethane: Associated CCV outside of control limits low.
- ▣ JC98550-4 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-7 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- ▣ JC98550-7 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- ▣ JC98550-12 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- ▣ JC98550-7 for Vinyl chloride: Associated CCV outside of control limits low.
- ▣ JC98550-9 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.

Monday, December 02, 2019

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JC98550

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V2D8050

- JC98550-11 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low.
- JC98550-11 for Bromomethane: Associated CCV outside of control limits low.
- JC98550-11 for Vinyl chloride: Associated CCV outside of control limits low.
- JC98550-12 for 1,1-Dichloroethene: Associated CCV outside of control limits low.
- JC98550-7 for Bromomethane: Associated CCV outside of control limits low.

Matrix: AQ

Batch ID: VL9330

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC98550-6MS, JC98550-6MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for cis-1,2-Dichloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for Bromomethane are outside control limits for sample JC98550-6MSD. Outside control limits due to matrix interference.
- JC98550-2: Diluted due to high concentration of target compound.
- JC98550-3: Diluted due to high concentration of target compound.
- JC98550-6: Diluted due to high concentration of target compound.
- JC98550-6 for Bromomethane: Associated CCV outside of control limits low.
- JC98550-2 for Bromomethane: Associated CCV outside of control limits low.
- JC98550-3 for Bromomethane: Associated CCV outside of control limits low.
- JC98550-5 for Bromomethane: Associated CCV outside of control limits low.

MS Semi-volatiles By Method SW846 8270D BY SIM

Matrix: AQ

Batch ID: OP24056A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC98550-1MS, JC98550-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ

Batch ID: OP24057

- All samples were extracted within the recommended method holding time.
- Sample(s) JC98102-9FMS, JC98102-9FMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC98550-6 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.

Matrix: AQ

Batch ID: OP24157

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC98550

Account: UTC United Technologies Corporation

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9330-BFB

Injection Date: 11/25/19

Lab File ID: L317777.D

Injection Time: 08:05

Instrument ID: GCMSL

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	8907	16.5	Pass
75	30.0 - 60.0% of mass 95	23544	43.7	Pass
95	Base peak, 100% relative abundance	53824	100.0	Pass
96	5.0 - 9.0% of mass 95	3379	6.28	Pass
173	Less than 2.0% of mass 174	90	0.17 (0.18) ^a	Pass
174	50.0 - 120.0% of mass 95	49248	91.5	Pass
175	5.0 - 9.0% of mass 174	3726	6.92 (7.57) ^a	Pass
176	95.0 - 101.0% of mass 174	46917	87.2 (95.3) ^a	Pass
177	5.0 - 9.0% of mass 176	2980	5.54 (6.35) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL9330-CC9325	L317777.D	11/25/19	08:05	00:00	Continuing cal 20
VL9330-BS	L317779.D	11/25/19	09:13	01:08	Blank Spike
VL9330-MB	L317781.D	11/25/19	10:07	02:02	Method Blank
ZZZZZZ	L317782.D	11/25/19	10:39	02:34	(unrelated sample)
JC98550-5	L317783.D	11/25/19	11:06	03:01	MW-71
JC98550-2	L317784.D	11/25/19	11:33	03:28	MW-03S
JC98550-2	L317785.D	11/25/19	12:00	03:55	MW-03S
JC98550-3	L317786.D	11/25/19	12:27	04:22	FD-111319-1
JC98550-3	L317787.D	11/25/19	12:54	04:49	FD-111319-1
JC98550-6	L317788.D	11/25/19	13:21	05:16	MW-23
JC98550-6MS	L317789.D	11/25/19	13:48	05:43	Matrix Spike
JC98550-6MSD	L317790.D	11/25/19	14:15	06:10	Matrix Spike Duplicate
JC98550-6	L317791.D	11/25/19	14:43	06:38	MW-23
ZZZZZZ	L317793.D	11/25/19	15:37	07:32	(unrelated sample)
ZZZZZZ	L317794.D	11/25/19	16:04	07:59	(unrelated sample)
ZZZZZZ	L317795.D	11/25/19	16:31	08:26	(unrelated sample)
ZZZZZZ	L317796.D	11/25/19	16:58	08:53	(unrelated sample)
ZZZZZZ	L317797.D	11/25/19	17:25	09:20	(unrelated sample)
ZZZZZZ	L317800.D	11/25/19	18:46	10:41	(unrelated sample)
ZZZZZZ	L317801.D	11/25/19	19:13	11:08	(unrelated sample)

6.4.5



Initial Calibration Summary

Page 1 of 5

Job Number: JC98550
 Account: UTC United Technologies Corporation
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9325-ICC9325
 Lab FileID: L317680.D

Response Factor Report GCMSL

Method : C:\MSDCHEM\1\METHODS\ML9325.M (RTE Integrator)
 Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
 Last Update : Thu Nov 21 11:59:45 2019
 Response via : Initial Calibration

Calibration Files

8 =L317678.D 0.5 =L317674.D 4 =L317677.D 50 =L317680.D
 100 =L317681.D 1 =L317675.D 200 =L317682.D 20 =L317679.D
 2 =L317676.D 0.2 =L317673.D = =

Compound	8	0.5	4	50	100	1	200	20	2	0.2	Avg	%RSD

1) I tert butyl alcohol-d9 -----ISTD-----												
2) 1,4-dioxane	0.106	0.104	0.097	0.093		0.098	0.105	0.098		0.100	4.79	
3) ethanol	0.113	0.114	0.114	0.115	0.105	0.114	0.103	0.120	0.113	0.112	4.62	
4) tertiary butyl alcohol	1.189	1.133	1.146	1.141	1.064	1.208	1.091	1.131	1.065	1.130	4.43	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane	0.476	0.407	0.421	0.512	0.506	0.432	0.511	0.492	0.466	0.522	8.73	
7) dichlorodifluoromethane	0.626		0.587	0.668	0.679		0.666	0.666	0.529	0.632	8.77	
8) chloromethane	0.482	0.602	0.464	0.516	0.505	0.493	0.510	0.513	0.461	0.505	8.24	
9) vinyl chloride	0.538	0.567	0.536	0.590	0.573	0.548	0.568	0.595	0.539	0.561	3.75	
10) bromomethane	0.125		0.133	0.123	0.141		0.141	0.123	0.127	0.131	6.18	
11) chloroethane	0.258	0.241	0.269	0.267	0.247	0.268	0.229	0.270	0.262	0.257	5.73	
12) vinyl bromide	0.303	0.331	0.292	0.322	0.308	0.265	0.305	0.337	0.294	0.306	7.14	
13) trichlorofluoromethane	0.608		0.597	0.616	0.601	0.455	0.568	0.641	0.553	0.580	9.89	
14) ethyl ether	0.235	0.222	0.225	0.246	0.232	0.203	0.228	0.244	0.215	0.228	5.97	
15) 2-chloropropane	0.647	0.722	0.610	0.642	0.605	0.620	0.569	0.647	0.651	0.635	6.66	
16) acrolein	0.098		0.106	0.107	0.101		0.099	0.101		0.102	3.64	
17) freon 113	0.272		0.261	0.295	0.281		0.270	0.298	0.246	0.275	6.65	
18) 1,1-dichloroethene	0.344	0.374	0.326	0.350	0.328	0.360	0.322	0.351	0.346	0.389	6.09	
19) acetone	0.053		0.050	0.053	0.050	0.050	0.047	0.050	0.049	0.050	3.86	
20) acetonitrile	0.040		0.041	0.040	0.037		0.035	0.038	0.041	0.039	6.06	
21) iodomethane *This compound fails Initial Calibration criteria*	0.011		0.077	0.143		0.177	0.026			0.087	83.33	
22) iso-butyl alcohol	0.026		0.028	0.028	0.027	0.029	0.024	0.028	0.030	0.028	6.12	
23) carbon disulfide												

6.7.5

6

Initial Calibration Summary

Page 2 of 5

Job Number: JC98550
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9325-ICC9325
Lab FileID: L317680.D

	0.902	0.883	0.895	0.847	1.052	0.832	0.895	0.957	0.908	7.63
24) methylene chloride	0.353	0.365	0.345	0.361	0.343	0.330	0.342	0.369	0.350	3.70
25) methyl acetate	0.097	0.090	0.099	0.093		0.093	0.092	0.072	0.091	9.95
26) methyl tert butyl ether	1.178	1.103	1.170	1.183	1.106	1.079	1.074	1.185	1.182	6.67
27) trans-1,2-dichloroethene	0.361	0.395	0.360	0.378	0.348	0.378	0.343	0.368	0.368	4.60
28) hexane	0.516	0.474	0.538	0.536	0.416	0.515	0.540	0.432	0.496	9.93
29) di-isopropyl ether	1.255	1.287	1.231	1.214	1.120	1.250	1.061	1.248	1.237	8.31
30) ethyl tert-butyl ether	1.188	1.111	1.183	1.213	1.134	1.215	1.109	1.218	1.183	3.92
31) 2-butanone	0.070	0.058	0.064	0.073	0.069	0.064	0.067	0.068	0.067	6.61
32) 1,1-dichloroethane	0.678	0.649	0.676	0.662	0.610	0.649	0.589	0.681	0.667	4.88
33) chloroprene	0.548	0.520	0.527	0.554	0.532	0.536	0.523	0.566	0.562	5.57
34) acrylonitrile	0.192	0.197	0.209	0.198	0.188	0.194	0.197	0.168	0.193	6.13
35) vinyl acetate	0.099	0.098	0.106	0.097		0.099	0.101	0.093	0.099	3.79
36) ethyl acetate	0.088	0.079	0.087	0.088		0.087	0.087	0.082	0.085	4.06
37) 2,2-dichloropropane	0.528	0.552	0.538	0.534	0.491	0.593	0.480	0.544	0.611	7.33
38) cis-1,2-dichloroethene	0.398	0.422	0.404	0.400	0.377	0.408	0.366	0.411	0.412	4.43
39) propionitrile	0.081	0.087	0.078	0.081	0.072	0.084	0.068	0.079	0.081	7.38
40) methyl acrylate	0.089	0.081	0.081	0.075		0.072	0.079	0.075	0.079	6.92
41) bromochloromethane	0.204	0.204	0.202	0.198	0.181	0.207	0.175	0.204	0.199	5.73
42) tetrahydrofuran	0.082	0.076	0.080	0.075		0.073	0.078	0.075	0.077	4.21
43) chloroform	0.653	0.723	0.622	0.628	0.593	0.666	0.581	0.638	0.677	6.80
44) dibromofluoromethane (s)	0.380	0.394	0.387	0.391	0.398	0.389	0.397	0.388	0.395	1.44
45) methacrylonitrile	0.203	0.210	0.213	0.214	0.200	0.215	0.199	0.204	0.199	3.18
46) 1,1,1-trichloroethane	0.538	0.575	0.530	0.558	0.540	0.570	0.548	0.550	0.521	3.73
47) cyclohexane	0.547	0.555	0.532	0.516		0.491	0.564	0.499	0.529	5.32
48) 1,1-dichloropropene	0.473	0.497	0.477	0.480	0.453	0.513	0.450	0.479	0.474	6.32
49) carbon tetrachloride	0.441	0.418	0.451	0.468	0.445	0.455	0.443	0.466	0.462	3.79
50) isopropyl acetate	0.109	0.109	0.119	0.112		0.110	0.116	0.116	0.113	3.49
51) tert amyl alcohol	0.024	0.025	0.026	0.024	0.024	0.022	0.024	0.025	0.024	4.83
52) I 1,4-difluorobenzene	-----ISTD-----									
53) 1,2-dichloroethane-d4 (s)										

6.7.5



Continuing Calibration Summary

Page 1 of 3

Job Number: JC98550
 Account: UTC United Technologies Corporation
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9330-CC9325
 Lab FileID: L317777.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...2619\vl9330\l317777.d Vial: 2
 Acq On : 25 Nov 2019 8:05 am Operator: EddieH
 Sample : cc9325-20 Inst : GCMSL
 Misc : MS39340,VL9330,5,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML9325.M (RTE Integrator)
 Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
 Last Update : Thu Nov 21 11:59:45 2019
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	109	0.00	3.05
2	1,4-dioxane	0.100	0.098	2.0	102	0.00	5.26
3	ethanol	0.112	0.114	-1.8	104	0.00	2.48
4 M	tertiary butyl alcohol	1.130	1.101	2.6	106	0.00	3.10
5 I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	4.27
6	chlorodifluoromethane	0.474	0.532	-12.2	109	0.00	1.65
7	dichlorodifluoromethane	0.632	0.599	5.2	91	0.00	1.63
8	chloromethane	0.505	0.479	5.1	94	0.00	1.80
9	vinyl chloride	0.562	0.541	3.7	92	0.00	1.88
10	bromomethane	0.131	0.084	35.9#	69	0.00	2.12
11	chloroethane	0.257	0.249	3.1	93	0.00	2.21
12	vinyl bromide	0.306	0.326	-6.5	98	0.00	2.35
13	trichlorofluoromethane	0.580	0.625	-7.8	99	0.00	2.39
14	ethyl ether	0.228	0.238	-4.4	98	0.00	2.57
15	2-chloropropane	0.635	0.666	-4.9	104	0.00	2.66
16	acrolein	0.102	0.097	4.9	97	0.00	2.67
17	freon 113	0.275	0.323	-17.5	110	0.00	2.74
18	1,1-dichloroethene	0.349	0.368	-5.4	106	0.00	2.75
19	acetone	0.050	0.051	-2.0	102	0.00	2.76
20	acetonitrile	0.039	0.039	0.0	104	0.00	2.95
21	iodomethane	0.087	0.035	59.8#	140	0.00	2.87
22	iso-butyl alcohol	0.028	0.027	3.6	100	0.00	4.41
23	carbon disulfide	0.908	0.929	-2.3	105	0.00	2.92
24	methylene chloride	0.350	0.361	-3.1	99	0.00	3.08
25	methyl acetate	0.091	0.102	-12.1	113	0.00	2.97
26	methyl tert butyl ether	1.160	1.175	-1.3	100	0.00	3.24
27	trans-1,2-dichloroethene	0.368	0.370	-0.5	102	0.00	3.26
28	hexane	0.496	0.602	-21.4#	113	0.00	3.44
29	di-isopropyl ether	1.235	1.229	0.5	100	0.00	3.55
30	ethyl tert-butyl ether	1.179	1.215	-3.1	101	0.00	3.79
31	2-butanone	0.067	0.070	-4.5	104	0.00	3.91
32 M	1,1-dichloroethane	0.648	0.666	-2.8	99	0.00	3.56
33	chloroprene	0.533	0.584	-9.6	104	0.00	3.61
34	acrylonitrile	0.193	0.197	-2.1	101	0.00	3.22
35	vinyl acetate	0.099	0.105	-6.1	105	0.00	3.53
36	ethyl acetate	0.085	0.091	-7.1	105	0.00	3.92
37	2,2-dichloropropane	0.541	0.562	-3.9	104	0.00	3.96
38	cis-1,2-dichloroethene	0.400	0.415	-3.7	102	0.00	3.94
39	propionitrile	0.079	0.081	-2.5	104	0.00	3.96
40	methyl acrylate	0.079	0.080	-1.3	102	0.00	3.97
41	bromochloromethane	0.197	0.198	-0.5	98	0.00	4.11

6.7.9



Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC98550

Account: UTC United Technologies Corporation

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2D8050-BFB

Injection Date: 11/20/19

Lab File ID: 2D186961.D

Injection Time: 08:13

Instrument ID: GCMS2D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	17488	19.6	Pass
75	30.0 - 60.0% of mass 95	44291	49.6	Pass
95	Base peak, 100% relative abundance	89328	100.0	Pass
96	5.0 - 9.0% of mass 95	6135	6.87	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	83493	93.5	Pass
175	5.0 - 9.0% of mass 174	6532	7.31 (7.82) ^a	Pass
176	95.0 - 101.0% of mass 174	80544	90.2 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	5402	6.05 (6.71) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D8050-CC7967	2D186961.D	11/20/19	08:13	00:00	Continuing cal 20
V2D8050-BS	2D186963.D	11/20/19	09:31	01:18	Blank Spike
V2D8050-MB	2D186965.D	11/20/19	10:30	02:17	Method Blank
ZZZZZZ	2D186966.D	11/20/19	11:02	02:49	(unrelated sample)
ZZZZZZ	2D186967.D	11/20/19	11:32	03:19	(unrelated sample)
JC98550-1	2D186968.D	11/20/19	12:01	03:48	MW-03D
JC98550-4	2D186969.D	11/20/19	12:30	04:17	MW-19
JC98550-7	2D186970.D	11/20/19	13:00	04:47	MW-10
JC98550-1MS	2D186972.D	11/20/19	13:59	05:46	Matrix Spike
JC98550-1MSD	2D186973.D	11/20/19	14:28	06:15	Matrix Spike Duplicate
JC98550-11	2D186975.D	11/20/19	15:27	07:14	TB-111319-1
JC98550-12	2D186976.D	11/20/19	15:56	07:43	EB-111319
ZZZZZZ	2D186977.D	11/20/19	16:26	08:13	(unrelated sample)
JC98550-8	2D186978.D	11/20/19	16:55	08:42	MW-38
JC98550-9	2D186979.D	11/20/19	17:24	09:11	MW-17
JC98550-10	2D186980.D	11/20/19	17:54	09:41	MW-26

6.4.2



Initial Calibration Summary

Page 1 of 5

Job Number: JC98550
 Account: UTC United Technologies Corporation
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2D7967-ICC7967
 Lab FileID: 2D185354.D

Response Factor Report MS2D

Method : C:\msdchem\1\METHODS\M2D7967.M (RTE Integrator)
 Title : SW-846 Method 8260C / EPA 624, DB624 60m x 0.25mm Thu Sep 26 10:58:10 2019
 Last Update : Thu Sep 26 10:58:10 2019
 Response via : Initial Calibration

Calibration Files

1 =2D185349.D 2 =2D185350.D 100 =2D185355.D 50 =2D185354.D
 20 =2D185353.D 200 =2D185356.D 4 =2D185351.D 0.5 =2D185348.D
 8 =2D185352.D 0.2 =2D185347.D = =

Compound	1	2	100	50	20	200	4	0.5	8	0.2	Avg	%RSD
1) I tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol												
	0.872	1.039	1.005	0.966	1.003	0.960		0.939		0.969	5.63	
3) ethanol												
	0.125	0.139	0.114	0.117	0.118	0.103	0.129	0.117		0.120	8.97	
4) 1,4-dioxane												
	0.109	0.102	0.094	0.105	0.091			0.088		0.099	8.46	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane												
	0.585	0.555	0.591	0.559	0.545	0.575	0.522	0.462	0.540	0.548	7.13	
7) dichlorodifluoromethane												
	0.395	0.459	0.443	0.434	0.460	0.416		0.442		0.436	5.34	
8) chloromethane												
	0.670	0.656	0.639	0.627	0.625	0.606	0.660	0.722	0.631	0.649	5.23	
9) vinyl chloride												
	0.600	0.609	0.631	0.611	0.595	0.606	0.637	0.582	0.608	0.621	0.610	2.69
10) 1,3-butadiene												
	0.374	0.392	0.419	0.400	0.394	0.401	0.376	0.376		0.391	3.99	
11) bromomethane												
	0.435	0.439	0.409	0.392	0.394	0.363	0.436	0.503	0.403	0.419	9.56	
12) chloroethane												
	0.300	0.297	0.310	0.299	0.298	0.283	0.310	0.261	0.298	0.295	5.10	
13) trichlorofluoromethane												
	0.548	0.602	0.622	0.596	0.598	0.604	0.621	0.467	0.622	0.587	8.57	
14) vinyl bromide												
	0.303	0.306	0.340	0.323	0.313	0.321	0.330	0.316		0.319	3.77	
15) ethyl ether												
	0.221	0.215	0.223	0.218	0.218	0.221	0.200	0.208		0.216	3.55	
16) acrolein												
	0.060	0.061	0.063	0.058	0.053			0.058		0.059	5.87	
17) 1,1-dichloroethene												
	0.383	0.365	0.368	0.359	0.354	0.357	0.347	0.325	0.354	0.357	4.40	
18) freon 113												
	0.264	0.297	0.290	0.281	0.296	0.248		0.268		0.278	6.61	
19) 2-chloropropane												
	0.930	0.827	0.785	0.779	0.789	0.743	0.782	0.802		0.804	6.93	
20) acetone												
	0.032	0.032	0.031	0.031	0.031	0.031	0.032	0.031		0.031	2.12	
21) acetonitrile												
	0.046	0.048	0.047	0.046	0.048	0.048		0.046		0.047	2.15	
22) iodomethane												
	0.519	0.514	0.563	0.529	0.511	0.555	0.493	0.503	0.508	0.522	4.47	
23) carbon disulfide												

6.7.1



Initial Calibration Summary

Page 2 of 5

Job Number: JC98550
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2D7967-ICC7967
Lab FileID: 2D185354.D

	1.108	1.019	1.082	1.029	0.996	1.035	0.955	1.109	0.983	1.035	5.27	
24) methylene chloride	0.481	0.412	0.428	0.413	0.408	0.415	0.401	0.516	0.404	0.431	9.29	
25) methyl acetate	0.271	0.293	0.284	0.286	0.295	0.280		0.275		0.283	3.08	
26) methyl tert butyl ether	0.974	0.988	1.080	1.039	0.992	1.068	0.949	0.955	0.971	0.884	0.990	5.97
27) trans-1,2-dichloroethene	0.382	0.368	0.397	0.379	0.373	0.385	0.352	0.355	0.367	0.373	3.87	
28) hexane	0.461	0.480	0.535	0.516	0.512	0.528	0.446		0.477	0.494	6.63	
29) di-isopropyl ether	1.454	1.436	1.513	1.480	1.432	1.455	1.380	1.387	1.401	1.390	1.433	3.07
30) 2-butanone	0.025	0.037	0.036	0.034	0.039	0.031		0.032		0.033	14.02	
31) 1,1-dichloroethane	0.774	0.754	0.780	0.756	0.742	0.750	0.724	0.740	0.730	0.685	0.744	3.63
32) chloroprene	0.625	0.582	0.626	0.608	0.588	0.611	0.536	0.499	0.571	0.583	7.31	
33) acrylonitrile		0.140	0.135	0.132	0.142	0.114		0.127		0.132	7.77	
34) vinyl acetate		0.074	0.067	0.065	0.075			0.057		0.068	10.53	
35) ethyl tert-butyl ether	1.228	1.192	1.295	1.255	1.214	1.245	1.153	1.127	1.173	1.137	1.202	4.58
36) ethyl acetate		0.055	0.053	0.059	0.055	0.045		0.048		0.052	9.46	
37) 2,2-dichloropropane	0.587	0.541	0.556	0.533	0.523	0.537	0.498	0.491	0.520	0.532	5.47	
38) cis-1,2-dichloroethene	0.435	0.420	0.453	0.434	0.422	0.439	0.404	0.399	0.416	0.425	4.08	
39) propionitrile	0.042	0.044	0.050	0.050	0.048	0.051	0.045		0.046	0.047	7.43	
40) tert-butyl formate	0.302	0.294	0.378	0.343	0.334	0.370	0.303		0.311	0.329	9.76	
41) bromochloromethane	0.204	0.195	0.221	0.213	0.208	0.218	0.198		0.201	0.207	4.58	
42) tetrahydrofuran	0.105	0.103	0.103	0.101	0.107	0.097		0.102		0.103	2.98	
43) chloroform	0.824	0.751	0.741	0.724	0.710	0.718	0.712	0.831	0.711	0.747	6.42	
44) dibromofluoromethane (s)	0.475	0.476	0.467	0.474	0.471	0.461	0.471	0.477	0.476	0.478	0.472	1.11
45) methacrylonitrile	0.104	0.147	0.143	0.138	0.151	0.124		0.126		0.133	12.55	
46) 1,1,1-trichloroethane	0.654	0.576	0.623	0.594	0.575	0.608	0.558	0.573	0.571	0.592	5.19	
47) cyclohexane	0.453	0.491	0.531	0.503	0.505	0.525	0.512		0.516	0.504	4.84	
48) 1,1-dichloropropene	0.554	0.521	0.557	0.535	0.520	0.545	0.491	0.510	0.516	0.528	4.15	
49) isobutyl alcohol		0.015	0.014	0.014	0.016	0.014		0.014		0.015	6.38	
50) carbon tetrachloride	0.510	0.487	0.540	0.506	0.487	0.528	0.457	0.478	0.478	0.497	5.30	
51) tert-amyl alcohol		0.016	0.015	0.014	0.018	0.013		0.013		0.015	11.84	
52) I 1,4-difluorobenzene	-----ISTD-----											
53) 1,2-dichloroethane-d4 (s)												

6.7.1



Initial Calibration Summary

Page 3 of 5

Job Number: JC98550
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2D7967-ICC7967
Lab FileID: 2D185354.D

	0.357	0.361	0.352	0.356	0.356	0.350	0.359	0.361	0.362	0.361	0.358	1.13
54) benzene	1.135	1.063	1.084	1.054	1.044	1.042	1.015	1.073	1.020	1.159	1.069	4.37
55) iso-octane	0.624	0.680	0.729	0.717	0.709	0.721	0.618		0.664		0.683	6.44
56) tert-amyl methyl ether	0.764	0.712	0.784	0.765	0.748	0.754	0.728	0.721	0.723	0.720	0.742	3.29
57) heptane	0.144	0.162	0.159	0.160	0.163	0.138		0.147		0.153		6.52
58) isopropyl acetate	0.052	0.049	0.046	0.053	0.044			0.043		0.048		8.72
59) 1,2-dichloroethane	0.439	0.397	0.398	0.385	0.381	0.389	0.388	0.512	0.374		0.407	10.70
60) n-butyl alcohol	0.007	0.006	0.006	0.007	0.005			0.005		0.006		12.79
61) ethyl acrylate	0.238	0.326	0.308	0.289	0.339	0.264		0.265		0.290		12.66
62) trichloroethene	0.280	0.253	0.280	0.266	0.261	0.280	0.244	0.226	0.256	0.230	0.258	7.72
63) 2-nitropropane	0.059	0.054	0.052	0.062	0.044			0.046		0.053		13.32
64) 2-chloroethyl vinyl ether	0.141	0.145	0.179	0.175	0.166	0.180	0.151	0.129	0.154		0.158	11.39
65) methyl methacrylate	0.126	0.166	0.159	0.152	0.172	0.134		0.141		0.150		11.34
66) 1,2-dichloropropane	0.287	0.276	0.303	0.292	0.287	0.293	0.282	0.263	0.279		0.285	4.06
67) dibromomethane	0.156	0.155	0.176	0.170	0.164	0.176	0.160	0.130	0.161		0.161	8.75
68) methylcyclohexane	0.347	0.367	0.414	0.397	0.377	0.414	0.327		0.364		0.376	8.24
69) bromodichloromethane	0.360	0.348	0.394	0.372	0.354	0.388	0.347	0.327	0.346		0.360	5.98
70) epichlorohydrin	0.017	0.023	0.022	0.021	0.024	0.019		0.019		0.021		11.54
71) cis-1,3-dichloropropene	0.412	0.390	0.476	0.451	0.427	0.471	0.387	0.371	0.404	0.366	0.415	9.58
72) 4-methyl-2-pentanone	0.076	0.079	0.096	0.092	0.089	0.099	0.083	0.066	0.084		0.085	12.40
73) 3-methyl-1-butanol	0.007	0.011	0.010	0.009	0.012	0.009		0.009		0.009		16.10
74) I chlorobenzene-d5	-----ISTD-----											
75) toluene-d8 (s)	1.268	1.270	1.229	1.243	1.260	1.206	1.271	1.264	1.269	1.268	1.255	1.75
76) toluene	0.734	0.688	0.711	0.683	0.675	0.689	0.658	0.729	0.677	0.708	0.695	3.52
77) trans-1,3-dichloropropene	0.372	0.365	0.453	0.430	0.409	0.452	0.375	0.333	0.379		0.397	10.55
78) ethyl methacrylate	0.271	0.279	0.359	0.340	0.324	0.364	0.287		0.298		0.315	11.60
79) 1,1,2-trichloroethane	0.204	0.207	0.226	0.222	0.215	0.224	0.214	0.194	0.213		0.213	4.78
80) tetrachloroethene	0.244	0.234	0.259	0.240	0.239	0.253	0.233	0.229	0.233		0.241	4.16
81) 1,3-dichloropropane	0.421	0.393	0.445	0.430	0.418	0.437	0.396	0.400	0.401		0.416	4.62
82) 2-hexanone	0.063	0.074	0.094	0.091	0.088	0.097	0.082		0.083		0.084	13.23
83) butyl acetate												

6.7.1



Continuing Calibration Summary

Page 1 of 3

Job Number: JC98550
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2D8050-CC7967
Lab FileID: 2D186961.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...21\v2d8050\2d186961.d Vial: 2
Acq On : 20 Nov 2019 8:13 am Operator: krizhkac
Sample : CC7967-20 Inst : MS2D
Misc : MS39120,V2D8050,5,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2D7967.M (RTE Integrator)
Title : SW-846 Method 8260C / EPA 624, DB624 60m x 0.25mm Thu Sep 26 10:58:10 2019
Last Update : Thu Sep 26 10:58:10 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	80	0.00	7.25
2	tertiary butyl alcohol	0.969	1.040	-7.3	86	0.00	7.38
3	ethanol	0.120	0.101	15.8	68	0.00	5.89
4	1,4-dioxane	0.099	0.082	17.2	69	0.00	12.03
5 I	pentafluorobenzene	1.000	1.000	0.0	101	-0.01	9.95
6	chlorodifluoromethane	0.548	0.467	14.8	87	0.00	3.86
7	dichlorodifluoromethane	0.436	0.470	-7.8	109	0.00	3.84
8	chloromethane	0.649	0.545	16.0	88	0.01	4.22
9	vinyl chloride	0.610	0.485	20.5#	82	0.01	4.44
10	1,3-butadiene	0.391	0.472	-20.7#	121	0.00	4.46
11	bromomethane	0.419	0.326	22.2#	84	0.00	5.05
12	chloroethane	0.295	0.237	19.7	80	0.00	5.20
13	trichlorofluoromethane	0.587	0.519	11.6	88	0.00	5.68
14	vinyl bromide	0.319	0.257	19.4	83	0.01	5.56
15	ethyl ether	0.216	0.176	18.5	82	0.00	6.09
16	acrolein	0.059	0.057	3.4	91	0.00	6.32
17	1,1-dichloroethene	0.357	0.281	21.3#	80	0.00	6.51
18	freon 113	0.278	0.231	16.9	83	0.00	6.52
19 m	2-chloropropane	0.804	0.617	23.3#	79	0.00	6.28
20	acetone	0.031	0.025	19.4	81	0.00	6.56
21	acetonitrile	0.047	0.042	10.6	92	0.00	7.02
22	iodomethane	0.522	0.441	15.5	87	0.00	6.79
23	carbon disulfide	1.035	0.839	18.9	85	0.00	6.92
24	methylene chloride	0.431	0.365	15.3	90	0.00	7.27
25	methyl acetate	0.283	0.259	8.5	92	0.00	7.07
26	methyl tert butyl ether	0.990	0.906	8.5	92	-0.01	7.69
27	trans-1,2-dichloroethene	0.373	0.313	16.1	85	-0.01	7.70
28	hexane	0.494	0.424	14.2	84	0.00	8.11
29	di-isopropyl ether	1.433	1.287	10.2	91	-0.01	8.41
30	2-butanone	0.033	0.031	6.1	92	0.00	9.22
31	1,1-dichloroethane	0.744	0.634	14.8	86	0.00	8.36
32	chloroprene	0.583	0.486	16.6	84	0.00	8.50
33	acrylonitrile	0.132	0.116	12.1	89	0.00	7.64
34	vinyl acetate	0.068	0.056	17.6	86	0.00	8.38
35	ethyl tert-butyl ether	1.202	1.115	7.2	93	-0.01	8.97
36	ethyl acetate	0.052	0.048	7.7	84	0.00	9.28
37	2,2-dichloropropane	0.532	0.492	7.5	95	-0.01	9.27
38	cis-1,2-dichloroethene	0.425	0.366	13.9	88	0.00	9.24
39	propionitrile	0.047	0.043	8.5	91	-0.01	9.32
40	tert-butyl formate	0.329	0.282	14.3	85	-0.01	9.78
41	bromochloromethane	0.207	0.191	7.7	92	0.00	9.62

6.7.4



Continuing Calibration Summary

Page 3 of 3

Job Number: JC98550

Sample: V2D8050-CC7967

Account: UTC United Technologies Corporation

Lab FileID: 2D186961.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

99 S	4-bromofluorobenzene (s)	0.905	0.845	6.6	96	0.00	16.83
100	bromobenzene	0.693	0.630	9.1	94	-0.01	17.05
101	1,1,2,2-tetrachloroethane	0.630	0.581	7.8	95	0.00	16.96
102	trans-1,4-dichloro-2-bute	0.157	0.020	87.3#	13#	0.00	17.03
103	1,2,3-trichloropropane	0.158	0.149	5.7	96	0.00	17.04
104	n-propylbenzene	2.826	2.483	12.1	89	-0.01	17.11
105	2-chlorotoluene	0.599	0.542	9.5	90	0.00	17.26
106	4-chlorotoluene	1.757	1.589	9.6	93	0.00	17.37
107	1,3,5-trimethylbenzene	1.966	1.822	7.3	93	0.00	17.30
108	tert-butylbenzene	1.642	1.470	10.5	90	0.00	17.69
109	1,2,4-trimethylbenzene	1.990	1.851	7.0	93	0.00	17.73
110	sec-butylbenzene	2.422	2.160	10.8	90	-0.01	17.92
111	1,3-dichlorobenzene	1.242	1.137	8.5	94	-0.01	18.07
112	p-isopropyltoluene	2.025	1.870	7.7	92	0.00	18.05
113	1,4-dichlorobenzene	1.305	1.142	12.5	94	0.00	18.16
114	1,2-dichlorobenzene	1.219	1.121	8.0	95	0.00	18.55
115	benzyl chloride	0.975	0.976	-0.1	104	0.00	18.29
116	n-butylbenzene	1.007	0.862	14.4	85	0.00	18.47
117	1,2-dibromo-3-chloropropa	0.117	0.099	15.4	88	0.00	19.28
118	nitrobenzene	0.017	0.011	35.3#	95	0.00	19.48
119	1,3,5-trichlorobenzene	0.899	0.841	6.5	94	0.00	19.46
120	hexachlorobutadiene	0.415	0.367	11.6	91	0.00	20.16
121	naphthalene	1.563	1.122	28.2#	74	0.00	20.28

	----- True	Calc.	% Drift	-----			
122	2-ethylhexyl acrylate	4.000	1.802	54.9#	22	0.00	20.06

	----- AvgRF	CCRF	% Dev	-----			
123	1,2,4-trichlorobenzene	0.755	0.618	18.1	84	0.00	20.03
124 m	1,2,3-trichlorobenzene	0.693	0.548	20.9#	81	0.00	20.50
125	hexachloroethane	0.365	0.335	8.2	96	0.00	18.81

	----- True	Calc.	% Drift	-----			
126	2-methylnaphthalene	10.000	5.194	48.1#	38	0.00	21.33

	----- AvgRF	CCRF	% Dev	-----			
127	bis(chloromethyl) ether			NA			
128	ethylenimine			NA			

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

2D185353.D M2D7967.M

Wed Nov 20 21:34:39 2019

6.7.4



JC98635

GW
WB
WB

MB-11419-187

JC98635

CHAIN OF CUSTODY RECORD							AECOM				
PROJECT NO. 60617378			SITE NAME JTC-CARRIER-Symposium				LAB SGS				
SAMPLERS (PRINT/SIGNATURE) Tom V. [Signature] / [Signature] / [Signature]							COOLER _____ of _____				
DELIVERY SERVICE: FedEx AIRBILL NO.:							PAGE 1 of 1				
LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (RPMAS ONLY)
1 MW-69	11/14/19	1030	Grab	MW-69	WG	3					
2 MW-09	11/14/19	1040	Grab	MW-09	WG	3					
3 FD-1	11/14/19	-	Grab	FD-111419-1	WQ	3					
4 MW-75	11/14/19	1125	Grab	MW-75	WG	3					
5 MW-84	11/14/19	1206	Grab	MW-84	WG	3					
6 DP-MW-04	11/14/19	1340	Grab	DP-MW-04	WG	5					
7 MW-77	11/14/19	1347	Grab	MW-77	WG	3					
8 MW-76	11/14/19	1457	Grab	MW-76	WG	3					
9 AR-MW-02	11/14/19	1610	Grab	AR-MW-02	WG	5					
10 AR-MW-06	11/14/19	1611	Grab	AR-MW-06	WG	3					
11 TB-1	11/14/19	-	Grab	TB-111419	WQ	2					
12 EB-1	11/14/19	1645	Grab	EB-111419	WQ	3					

AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE	SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER	WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS	WL - LEACHATE GS - SOIL GAS WC - DRILLING WATER	WO - OCEAN WATER WS - SURFACE WATER WD - WATER FIELD QC	LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE
TS# - TRIP BLANK SD# - MATRIX SPIKE DUPLICATE	RB# - RINSE BLANK FR# - FIELD REPLICATE	NP - NORMAL ENVIRONMENTAL SAMPLE MS# - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)		

RELINQUISHED BY (SIGNATURE) [Signature]	DATE 11/14/19	TIME 1730	RECEIVED BY (SIGNATURE) FED EX	DATE 11/14/19	TIME 1730	SPECIAL INSTRUCTIONS Call Ann Marie Krupar for E. 716-556-5636 w/ any questions. Initial Assessment <u>2B</u> Label Verification _____
RELINQUISHED BY (SIGNATURE) [Signature]	DATE 11/14/19	TIME 0925	RECEIVED FOR LAB BY (SIGNATURE) [Signature]	DATE 11/14/19	TIME 0925	

Distribution: Original accompanies shipment, copy to coordinator field files

Form B 1215 6025828

2.925P SR-7 116

5.1
5

CASE NARRATIVE / CONFORMANCE SUMMARY



Client: United Technologies Corporation

Job No JC98635

Site: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Report Date 12/5/2019 8:40:10 AM

On 11/15/2019, 11 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC98635 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V2C7725

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC98635-2MS, JC98635-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene are outside control limits. High percent recoveries and no associated positive reported in the QC batch.
- JC98635-1: Diluted due to high concentration of target compound.
- JC98635-1 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-1 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-3 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-12 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-6 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-7 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-6 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-4 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-5 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-3 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-2 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-12 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-11 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-11 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-2 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-5 for 1,2,3-Trichlorobenzene: This compound in BS is outside in house QC limits bias high.
- JC98635-7 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.
- JC98635-4 for 1,2,4-Trichlorobenzene: Associated CCV and BS outside of control limits high, sample was ND.

Matrix: AQ

Batch ID: VL9330

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC98550-6MS, JC98550-6MSD were used as the QC samples indicated.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for cis-1,2-Dichloroethene: are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Thursday, December 05, 2019

Page 1 of 2

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: VL9330

- RPD(s) for MSD for Bromomethane are outside control limits for sample JC98550-6MSD. Outside control limits due to matrix interference.
- JC98635-8 for Bromomethane: Associated CCV outside of control limits low.
- JC98635-10 for Bromomethane: Associated CCV outside of control limits low.
- JC98635-9 for Bromomethane: Associated CCV outside of control limits low.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ

Batch ID: OP24122

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC98635
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2C7725-BFB	Injection Date: 11/23/19
Lab File ID: 2C171886.D	Injection Time: 10:15
Instrument ID: GCMS2C	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	21883	16.8	Pass
75	30.0 - 60.0% of mass 95	58869	45.1	Pass
95	Base peak, 100% relative abundance	130541	100.0	Pass
96	5.0 - 9.0% of mass 95	8584	6.58	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	131739	100.9	Pass
175	5.0 - 9.0% of mass 174	10264	7.86 (7.79) ^a	Pass
176	95.0 - 101.0% of mass 174	131352	100.6 (99.7) ^a	Pass
177	5.0 - 9.0% of mass 176	8624	6.61 (6.57) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C7725-CC7685	2C171886.D	11/23/19	10:15	00:00	Continuing cal 20
V2C7725-BS	2C171887.D	11/23/19	10:57	00:42	Blank Spike
V2C7725-MB	2C171889.D	11/23/19	11:54	01:39	Method Blank
JC98635-2	2C171890.D	11/23/19	12:34	02:19	MW-09
JC98635-3	2C171891.D	11/23/19	13:02	02:47	FD-111419-1
JC98635-4	2C171892.D	11/23/19	13:31	03:16	MW-75
JC98635-2MS	2C171896.D	11/23/19	15:25	05:10	Matrix Spike
JC98635-3DUP	2C171898.D	11/23/19	16:23	06:08	Duplicate
JC98635-11	2C171899.D	11/23/19	16:51	06:36	TB-111419
JC98635-12	2C171900.D	11/23/19	17:20	07:05	EB-111419
ZZZZZZ	2C171901.D	11/23/19	17:49	07:34	(unrelated sample)
ZZZZZZ	2C171902.D	11/23/19	18:17	08:02	(unrelated sample)
ZZZZZZ	2C171903.D	11/23/19	18:46	08:31	(unrelated sample)
ZZZZZZ	2C171904.D	11/23/19	19:14	08:59	(unrelated sample)
ZZZZZZ	2C171905.D	11/23/19	19:43	09:28	(unrelated sample)
JC98635-5	2C171906.D	11/23/19	20:12	09:57	MW-84
JC98635-6	2C171907.D	11/23/19	20:40	10:25	DP-MW-04
JC98635-7	2C171908.D	11/23/19	21:09	10:54	MW-77
JC98635-1	2C171909.D	11/23/19	21:38	11:23	MW-69



Initial Calibration Summary

Page 1 of 5

Job Number: JC98635
 Account: UTC United Technologies Corporation
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2C7685-ICC7685
 Lab FileID: 2C170991.D

Response Factor Report Instrument #1

Method : C:\MSDCHEM\1\METHODS\M2C7685.M (RTE Integrator)
 Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
 Last Update : Thu Oct 31 12:16:57 2019
 Response via : Initial Calibration

Calibration Files

1 =2C170986.D 2 =2C170987.D 100 =2C170992.D 50 =2C170991.D
 20 =2C170990.D 200 =2C170993.D 0.5 =2C170985.D 4 =2C170988.D
 8 =2C170989.D 0.2 =2C170984.D = =

Compound	1	2	100	50	20	200	0.5	4	8	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9 -----ISTD-----												
2) ethanol										0.000#	-1.00	
3) tertiary butyl alcohol												
0.962 1.235 1.132 1.090 1.072 1.140								1.170 1.051		1.106	7.46	
4) 1,4-dioxane												
0.083 0.097 0.095 0.100 0.095								0.089 0.099		0.094	6.57	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane												
1.012 1.016 0.989 1.017 0.971 0.880 1.097 1.016 0.959										0.995	5.85	
7) dichlorodifluoromethane												
0.994 1.024 1.112 1.116 1.031 1.010 0.945 1.004 1.019 0.834										1.009	7.94	
8) chloromethane												
1.172 1.115 1.101 1.099 1.063 0.997 1.228 1.087 1.076 1.264										1.120	7.12	
9) vinyl chloride												
0.954 1.016 1.029 1.047 0.982 0.931 1.055 0.997 0.992 0.946										0.995	4.27	
10) 1,3-butadiene												
0.788 0.735 0.683 0.703 0.694 0.615								0.715 0.690		0.703	6.96	
11) bromomethane												
0.731 0.679 0.657 0.646 0.622 0.609 0.757 0.661 0.648										0.668	7.22	
12) chloroethane												
0.498 0.493 0.492 0.481 0.467 0.467								0.484 0.476		0.482	2.43	
13) trichlorofluoromethane												
0.975 0.996 1.034 1.028 0.978 0.965 0.976 1.001 0.993										0.994	2.42	
14) vinyl bromide												
0.459 0.505 0.532 0.520 0.488 0.499								0.488 0.482		0.497	4.60	
15) ethyl ether												
0.317 0.322 0.324 0.314 0.318 0.309 0.275 0.320 0.295										0.310	5.14	
16) 2-chloropropane												
1.273 1.247 1.107 1.105 1.081 1.015								1.101 1.051		1.123	8.08	
17) acrolein												
0.171 0.164 0.164 0.154								0.124 0.142		0.153	11.36	
18) freon 113												
0.539 0.517 0.503 0.505 0.495 0.464 0.566 0.540 0.510										0.515	5.77	
19) 1,1-dichloroethene												
0.603 0.591 0.540 0.548 0.546 0.499 0.589 0.592 0.549										0.562	6.05	
20) acetone												
0.078 0.082 0.083 0.082 0.083 0.075								0.083 0.083		0.081	3.43	
21) iodomethane												
0.848 0.880 0.897 0.874 0.846 0.843 0.866 0.861 0.832										0.861	2.39	
22) acetonitrile												
										0.000#	-1.00	
23) carbon disulfide												

6.9.1



Initial Calibration Summary

Page 2 of 5

Job Number: JC98635

Sample: V2C7685-ICC7685

Account: UTC United Technologies Corporation

Lab FileID: 2C170991.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

	1.635	1.581	1.614	1.608	1.548	1.506	1.607	1.568	1.529	1.577	2.72
24)	methylene chloride										
	0.740	0.688	0.632	0.617	0.622	0.589	0.689	0.650	0.607	0.648	7.46
25)	methyl acetate										
	0.809	0.714	0.727	0.713	0.661		0.675	0.670		0.710	7.13
26)	methyl tert butyl ether										
	1.686	1.750	1.727	1.679	1.669	1.614	1.656	1.732	1.633	1.930	1.708
27)	trans-1,2-dichloroethene										
	0.587	0.585	0.519	0.523	0.529	0.489	0.587	0.542	0.518	0.537	0.542
28)	hexane										
	0.438	0.430	0.398	0.405	0.385	0.375	0.377	0.399	0.394	0.356	0.396
29)	di-isopropyl ether										
	1.906	1.947	1.866	1.881	1.895	1.710	1.893	1.913	1.836	2.140	1.899
30)	1,1-dichloroethane										
	1.008	1.021	0.900	0.922	0.925	0.841	0.942	0.986	0.912	0.995	0.945
31)	chloroprene										
	0.788	0.815	0.793	0.804	0.780	0.756	0.715	0.792	0.757	0.741	0.774
32)	acrylonitrile										
	0.306	0.339	0.357	0.333	0.339	0.325		0.330	0.312		0.330
33)	vinyl acetate										
	0.120	0.114	0.111	0.105			0.114	0.108			0.112
34)	ethyl tert-butyl ether										
	1.692	1.659	1.772	1.692	1.706	1.654	1.604	1.665	1.586	1.649	1.668
35)	2-butanone										
	0.095	0.104	0.103	0.099	0.102	0.095		0.099	0.098		0.099
36)	ethyl acetate										
	0.127	0.134	0.147	0.115			0.130	0.133			0.131
37)	2,2-dichloropropane										
	0.745	0.788	0.684	0.693	0.691	0.634	0.787	0.748	0.706	0.719	0.719
38)	cis-1,2-dichloroethene										
	0.648	0.611	0.544	0.549	0.565	0.514	0.682	0.615	0.571		0.589
39)	propionitrile										
	0.147	0.156	0.133	0.132	0.142	0.117	0.123	0.150	0.143	0.136	0.138
40)	bromochloromethane										
	0.316	0.327	0.301	0.301	0.302	0.285	0.280	0.316	0.301		0.303
41)	tetrahydrofuran										
	0.111	0.108	0.114	0.102			0.123	0.116			0.112
42)	chloroform										
	1.032	1.067	0.910	0.920	0.925	0.854	1.105	0.977	0.922	1.131	0.984
43)	t-butyl formate										
	0.379	0.412	0.490	0.462	0.435	0.443		0.400	0.402		0.428
44)	dibromofluoromethane (s)										
	0.458	0.449	0.463	0.462	0.460	0.469	0.451	0.452	0.458	0.447	0.457
45)	methacrylonitrile										
	0.271	0.274	0.309	0.297	0.293	0.290	0.234	0.293	0.279		0.282
46)	1,1,1-trichloroethane										
	0.841	0.830	0.865	0.849	0.823	0.817	0.850	0.832	0.788	0.825	0.832
47)	cyclohexane										
	0.820	0.805	0.800	0.805	0.775	0.728	0.805	0.770	0.782	0.925	0.801
48)	1,1-dichloropropene										
	0.673	0.715	0.622	0.636	0.638	0.588	0.688	0.697	0.644	0.777	0.668
49)	carbon tetrachloride										
	0.719	0.726	0.696	0.685	0.665	0.662	0.642	0.700	0.663	0.541	0.670
50)	isobutyl alcohol										
										0.000#	-1.00
51)	I 1,4-difluorobenzene -----ISTD-----										
52)	1,2-dichloroethane-d4 (s)										
	0.386	0.381	0.339	0.351	0.368	0.323	0.388	0.382	0.382	0.388	0.369
53)	n-butyl alcohol										

6.9.1



SGS

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JC98635

Continuing Calibration Summary

Page 1 of 3

Job Number: JC98635

Sample: V2C7725-CC7685

Account: UTC United Technologies Corporation

Lab FileID: 2C171886.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...19\v2c7725\2c171886.d Vial: 2
 Acq On : 23 Nov 2019 10:15 am Operator: mariceld
 Sample : cc7685-20 Inst : Instrument #1
 Misc : MS39202,V2C7725,w,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C7685.M (RTE Integrator)
 Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
 Last Update : Thu Oct 31 12:16:57 2019
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	91	-0.02	8.18
2	ethanol			NA			
3	tertiary butyl alcohol	1.106	1.161	-5.0	98	-0.03	8.31
4	1,4-dioxane	0.094	0.119	-26.6#	108	0.00	12.23
5 I	pentafluorobenzene	1.000	1.000	0.0	97	0.00	10.65
6	chlorodifluoromethane	0.995	0.920	7.5	92	0.00	4.37
7	dichlorodifluoromethane	1.009	1.070	-6.0	101	0.00	4.33
8	chloromethane	1.120	1.164	-3.9	106	0.00	4.78
9	vinyl chloride	0.995	1.086	-9.1	107	0.00	5.05
10	1,3-butadiene	0.703	0.772	-9.8	108	0.00	5.10
11	bromomethane	0.668	0.722	-8.1	112	0.00	5.76
12	chloroethane	0.482	0.522	-8.3	109	0.00	5.96
13	trichlorofluoromethane	0.994	1.008	-1.4	100	0.00	6.49
14	vinyl bromide	0.497	0.612	-23.1#	122	0.00	6.35
15	ethyl ether	0.310	0.308	0.6	94	0.00	6.92
16	2-chloropropane	1.123	0.978	12.9	88	-0.02	7.16
17	acrolein	0.153	0.153	0.0	90	0.01	7.19
18	freon 113	0.515	0.502	2.5	98	0.00	7.43
19	1,1-dichloroethene	0.562	0.573	-2.0	102	0.00	7.43
20	acetone	0.081	0.084	-3.7	98	-0.01	7.39
21	iodomethane	0.861	0.903	-4.9	103	0.00	7.70
22	acetonitrile			NA			
23	carbon disulfide	1.577	1.674	-6.2	105	0.00	7.87
24	methylene chloride	0.648	0.654	-0.9	102	0.00	8.23
25	methyl acetate	0.710	0.628	11.5	85	0.00	7.93
26	methyl tert butyl ether	1.708	1.629	4.6	95	0.00	8.62
27	trans-1,2-dichloroethene	0.542	0.547	-0.9	100	0.00	8.64
28	hexane	0.396	0.369	6.8	93	0.00	9.05
29	di-isopropyl ether	1.899	1.751	7.8	90	0.00	9.29
30	1,1-dichloroethane	0.945	0.923	2.3	97	0.00	9.28
31	chloroprene	0.774	0.708	8.5	88	0.00	9.40
32	acrylonitrile	0.330	0.325	1.5	93	0.00	8.53
33	vinyl acetate	0.112	0.111	0.9	97	0.00	9.22
34	ethyl tert-butyl ether	1.668	1.644	1.4	93	0.00	9.79
35	2-butanone	0.099	0.102	-3.0	97	0.00	9.99
36	ethyl acetate	0.131	0.131	0.0	87	0.00	10.02
37	2,2-dichloropropane	0.719	0.742	-3.2	104	-0.01	10.09
38	cis-1,2-dichloroethene	0.589	0.579	1.7	99	0.00	10.06
39	propionitrile	0.138	0.141	-2.2	96	-0.01	10.07
40	bromochloromethane	0.303	0.317	-4.6	102	0.00	10.38
41	tetrahydrofuran	0.112	0.107	4.5	91	0.00	10.40

6.9.4



Initial Calibration Summary

Page 1 of 5

Job Number: JC98635

Sample: VL9325-ICC9325

Account: UTC United Technologies Corporation

Lab FileID: L317680.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Response Factor Report GCMSL

Method : C:\MSDCHEM\1\METHODS\ML9325.M (RTE Integrator)
 Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
 Last Update : Thu Nov 21 11:59:45 2019
 Response via : Initial Calibration

Calibration Files

8 =L317678.D 0.5 =L317674.D 4 =L317677.D 50 =L317680.D
 100 =L317681.D 1 =L317675.D 200 =L317682.D 20 =L317679.D
 2 =L317676.D 0.2 =L317673.D = =

Compound

	8	0.5	4	50	100	1	200	20	2	0.2	Avg	%RSD

1) I tert butyl alcohol-d9 -----ISTD-----												
2) 1,4-dioxane	0.106	0.104	0.097	0.093		0.098	0.105	0.098		0.100	4.79	
3) ethanol	0.113	0.114	0.114	0.115	0.105	0.114	0.103	0.120	0.113	0.112	4.62	
4) tertiary butyl alcohol	1.189	1.133	1.146	1.141	1.064	1.208	1.091	1.131	1.065	1.130	4.43	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane	0.476	0.407	0.421	0.512	0.506	0.432	0.511	0.492	0.466	0.522	0.474	8.73
7) dichlorodifluoromethane	0.626	0.587	0.668	0.679		0.666	0.666	0.529		0.632	8.77	
8) chloromethane	0.482	0.602	0.464	0.516	0.505	0.493	0.510	0.513	0.461	0.505	8.24	
9) vinyl chloride	0.538	0.567	0.536	0.590	0.573	0.548	0.568	0.595	0.539	0.561	0.562	3.75
10) bromomethane	0.125	0.133	0.123	0.141		0.141	0.123	0.127		0.131	6.18	
11) chloroethane	0.258	0.241	0.269	0.267	0.247	0.268	0.229	0.270	0.262	0.257	5.73	
12) vinyl bromide	0.303	0.331	0.292	0.322	0.308	0.265	0.305	0.337	0.294	0.306	7.14	
13) trichlorofluoromethane	0.608	0.597	0.616	0.601	0.455	0.568	0.641	0.553		0.580	9.89	
14) ethyl ether	0.235	0.222	0.225	0.246	0.232	0.203	0.228	0.244	0.215	0.228	5.97	
15) 2-chloropropane	0.647	0.722	0.610	0.642	0.605	0.620	0.569	0.647	0.651	0.635	6.66	
16) acrolein	0.098	0.106	0.107	0.101		0.099	0.101			0.102	3.64	
17) freon 113	0.272	0.261	0.295	0.281		0.270	0.298	0.246		0.275	6.65	
18) 1,1-dichloroethene	0.344	0.374	0.326	0.350	0.328	0.360	0.322	0.351	0.346	0.389	0.349	6.09
19) acetone	0.053	0.050	0.053	0.050	0.050	0.047	0.050	0.049		0.050	3.86	
20) acetonitrile	0.040	0.041	0.040	0.037		0.035	0.038	0.041		0.039	6.06	
21) iodomethane *This compound fails Initial Calibration criteria*	0.011	0.077	0.143		0.177	0.026				0.087	83.33	
22) iso-butyl alcohol	0.026	0.028	0.028	0.027	0.029	0.024	0.028	0.030		0.028	6.12	
23) carbon disulfide												

6.9.5



Initial Calibration Summary

Page 2 of 5

Job Number: JC98635

Sample:

VL9325-ICC9325

Account: UTC United Technologies Corporation

Lab FileID:

L317680.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

	0.902	0.883	0.895	0.847	1.052	0.832	0.895	0.957		0.908	7.63
24)	methylene chloride										
	0.353	0.365	0.345	0.361	0.343	0.330	0.342	0.369	0.339	0.350	3.70
25)	methyl acetate										
	0.097	0.090	0.099	0.093		0.093	0.092	0.072		0.091	9.95
26)	methyl tert butyl ether										
	1.178	1.103	1.170	1.183	1.106	1.079	1.074	1.185	1.182	1.338	1.160
27)	trans-1,2-dichloroethene										
	0.361	0.395	0.360	0.378	0.348	0.378	0.343	0.368	0.383	0.368	4.60
28)	hexane										
	0.516	0.474	0.538	0.536	0.416	0.515	0.540	0.432		0.496	9.93
29)	di-isopropyl ether										
	1.255	1.287	1.231	1.214	1.120	1.250	1.061	1.248	1.237	1.453	1.235
30)	ethyl tert-butyl ether										
	1.188	1.111	1.183	1.213	1.134	1.215	1.109	1.218	1.183	1.239	1.179
31)	2-butanone										
	0.070	0.058	0.064	0.073	0.069	0.064	0.067	0.068	0.067	0.067	6.61
32)	1,1-dichloroethane										
	0.678	0.649	0.676	0.662	0.610	0.649	0.589	0.681	0.667	0.620	0.648
33)	chloroprene										
	0.548	0.520	0.527	0.554	0.532	0.536	0.523	0.566	0.562	0.462	0.533
34)	acrylonitrile										
	0.192	0.197	0.209	0.198	0.188	0.194	0.197	0.168		0.193	6.13
35)	vinyl acetate										
	0.099	0.098	0.106	0.097		0.099	0.101	0.093		0.099	3.79
36)	ethyl acetate										
	0.088	0.079	0.087	0.088		0.087	0.087	0.082		0.085	4.06
37)	2,2-dichloropropane										
	0.528	0.552	0.538	0.534	0.491	0.593	0.480	0.544	0.611	0.541	0.541
38)	cis-1,2-dichloroethene										
	0.398	0.422	0.404	0.400	0.377	0.408	0.366	0.411	0.412	0.400	4.43
39)	propionitrile										
	0.081	0.087	0.078	0.081	0.072	0.084	0.068	0.079	0.081	0.079	7.38
40)	methyl acrylate										
	0.089	0.081	0.081	0.075		0.072	0.079	0.075		0.079	6.92
41)	bromochloromethane										
	0.204	0.204	0.202	0.198	0.181	0.207	0.175	0.204	0.199	0.197	5.73
42)	tetrahydrofuran										
	0.082	0.076	0.080	0.075		0.073	0.078	0.075		0.077	4.21
43)	chloroform										
	0.653	0.723	0.622	0.628	0.593	0.666	0.581	0.638	0.677	0.642	6.80
44)	dibromofluoromethane (s)										
	0.380	0.394	0.387	0.391	0.398	0.389	0.397	0.388	0.395	0.387	0.391
45)	methacrylonitrile										
	0.203	0.210	0.213	0.214	0.200	0.215	0.199	0.204	0.199	0.206	3.18
46)	1,1,1-trichloroethane										
	0.538	0.575	0.530	0.558	0.540	0.570	0.548	0.550	0.521	0.512	0.544
47)	cyclohexane										
	0.547	0.555	0.532	0.516		0.491	0.564	0.499		0.529	5.32
48)	1,1-dichloropropene										
	0.473	0.497	0.477	0.480	0.453	0.513	0.450	0.479	0.474	0.555	0.485
49)	carbon tetrachloride										
	0.441	0.418	0.451	0.468	0.445	0.455	0.443	0.466	0.462	0.478	0.453
50)	isopropyl acetate										
	0.109	0.109	0.119	0.112		0.110	0.116	0.116		0.113	3.49
51)	tert amyl alcohol										
	0.024	0.025	0.026	0.024	0.024	0.022	0.024	0.025		0.024	4.83

52) I 1,4-difluorobenzene -----ISTD-----

53) 1,2-dichloroethane-d4 (s)

6.9.5



Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC98635
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9330-BFB	Injection Date: 11/25/19
Lab File ID: L317777.D	Injection Time: 08:05
Instrument ID: GCMSL	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	8907	16.5	Pass
75	30.0 - 60.0% of mass 95	23544	43.7	Pass
95	Base peak, 100% relative abundance	53824	100.0	Pass
96	5.0 - 9.0% of mass 95	3379	6.28	Pass
173	Less than 2.0% of mass 174	90	0.17 (0.18) ^a	Pass
174	50.0 - 120.0% of mass 95	49248	91.5	Pass
175	5.0 - 9.0% of mass 174	3726	6.92 (7.57) ^a	Pass
176	95.0 - 101.0% of mass 174	46917	87.2 (95.3) ^a	Pass
177	5.0 - 9.0% of mass 176	2980	5.54 (6.35) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL9330-CC9325	L317777.D	11/25/19	08:05	00:00	Continuing cal 20
VL9330-BS	L317779.D	11/25/19	09:13	01:08	Blank Spike
VL9330-MB	L317781.D	11/25/19	10:07	02:02	Method Blank
ZZZZZZ	L317782.D	11/25/19	10:39	02:34	(unrelated sample)
ZZZZZZ	L317783.D	11/25/19	11:06	03:01	(unrelated sample)
ZZZZZZ	L317784.D	11/25/19	11:33	03:28	(unrelated sample)
ZZZZZZ	L317785.D	11/25/19	12:00	03:55	(unrelated sample)
ZZZZZZ	L317786.D	11/25/19	12:27	04:22	(unrelated sample)
ZZZZZZ	L317787.D	11/25/19	12:54	04:49	(unrelated sample)
JC98550-6	L317788.D	11/25/19	13:21	05:16	(used for QC only; not part of job JC98635)
JC98550-6MS	L317789.D	11/25/19	13:48	05:43	Matrix Spike
JC98550-6MSD	L317790.D	11/25/19	14:15	06:10	Matrix Spike Duplicate
JC98550-6	L317791.D	11/25/19	14:43	06:38	(used for QC only; not part of job JC98635)
JC98635-8	L317793.D	11/25/19	15:37	07:32	MW-76
JC98635-9	L317794.D	11/25/19	16:04	07:59	AR-MW-02
JC98635-10	L317795.D	11/25/19	16:31	08:26	AR-MW-06
ZZZZZZ	L317796.D	11/25/19	16:58	08:53	(unrelated sample)
ZZZZZZ	L317797.D	11/25/19	17:25	09:20	(unrelated sample)
ZZZZZZ	L317800.D	11/25/19	18:46	10:41	(unrelated sample)
ZZZZZZ	L317801.D	11/25/19	19:13	11:08	(unrelated sample)

6.6.5



Continuing Calibration Summary

Page 1 of 3

Job Number: JC98635
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9330-CC9325
Lab FileID: L317777.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...2619\vl9330\l317777.d Vial: 2
Acq On : 25 Nov 2019 8:05 am Operator: EddieH
Sample : cc9325-20 Inst : GCMSL
Misc : MS39340,VL9330,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML9325.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Thu Nov 21 11:59:45 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	109	0.00	3.05
2	1,4-dioxane	0.100	0.098	2.0	102	0.00	5.26
3	ethanol	0.112	0.114	-1.8	104	0.00	2.48
4 M	tertiary butyl alcohol	1.130	1.101	2.6	106	0.00	3.10
5 I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	4.27
6	chlorodifluoromethane	0.474	0.532	-12.2	109	0.00	1.65
7	dichlorodifluoromethane	0.632	0.599	5.2	91	0.00	1.63
8	chloromethane	0.505	0.479	5.1	94	0.00	1.80
9	vinyl chloride	0.562	0.541	3.7	92	0.00	1.88
10	bromomethane	0.131	0.084	35.9#	69	0.00	2.12
11	chloroethane	0.257	0.249	3.1	93	0.00	2.21
12	vinyl bromide	0.306	0.326	-6.5	98	0.00	2.35
13	trichlorofluoromethane	0.580	0.625	-7.8	99	0.00	2.39
14	ethyl ether	0.228	0.238	-4.4	98	0.00	2.57
15	2-chloropropane	0.635	0.666	-4.9	104	0.00	2.66
16	acrolein	0.102	0.097	4.9	97	0.00	2.67
17	freon 113	0.275	0.323	-17.5	110	0.00	2.74
18	1,1-dichloroethene	0.349	0.368	-5.4	106	0.00	2.75
19	acetone	0.050	0.051	-2.0	102	0.00	2.76
20	acetonitrile	0.039	0.039	0.0	104	0.00	2.95
21	iodomethane	0.087	0.035	59.8#	140	0.00	2.87
22	iso-butyl alcohol	0.028	0.027	3.6	100	0.00	4.41
23	carbon disulfide	0.908	0.929	-2.3	105	0.00	2.92
24	methylene chloride	0.350	0.361	-3.1	99	0.00	3.08
25	methyl acetate	0.091	0.102	-12.1	113	0.00	2.97
26	methyl tert butyl ether	1.160	1.175	-1.3	100	0.00	3.24
27	trans-1,2-dichloroethene	0.368	0.370	-0.5	102	0.00	3.26
28	hexane	0.496	0.602	-21.4#	113	0.00	3.44
29	di-isopropyl ether	1.235	1.229	0.5	100	0.00	3.55
30	ethyl tert-butyl ether	1.179	1.215	-3.1	101	0.00	3.79
31	2-butanone	0.067	0.070	-4.5	104	0.00	3.91
32 M	1,1-dichloroethane	0.648	0.666	-2.8	99	0.00	3.56
33	chloroprene	0.533	0.584	-9.6	104	0.00	3.61
34	acrylonitrile	0.193	0.197	-2.1	101	0.00	3.22
35	vinyl acetate	0.099	0.105	-6.1	105	0.00	3.53
36	ethyl acetate	0.085	0.091	-7.1	105	0.00	3.92
37	2,2-dichloropropane	0.541	0.562	-3.9	104	0.00	3.96
38	cis-1,2-dichloroethene	0.400	0.415	-3.7	102	0.00	3.94
39	propionitrile	0.079	0.081	-2.5	104	0.00	3.96
40	methyl acrylate	0.079	0.080	-1.3	102	0.00	3.97
41	bromochloromethane	0.197	0.198	-0.5	98	0.00	4.11



JC98713

GW 1W TB

JC 98713
 FedEx 1245 60275837
 B-446 L
 MB-1149-187

CHAIN OF CUSTODY RECORD										AECOM									
PROJECT NO. 60617378					SITE NAME UTC - Currie - Syracuse					LAB SGS									
SAMPLERS (PRINT/SIGNATURE) Tom Urban/Tom Urban //										COOLER 1 of 1									
DELIVERY SERVICE: FedEx AIRBILL NO.:										PAGE 1 of 1									
LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	40ml Vial HCl	1 L. HCl Amber	300ml Amber	300ml Amber	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (RIPUS ONLY)				
1 MW-44	11/15/19	0830	Grab	MW-44	WG	5	3		2			N _i	-	-	-				
1F MW-44-F	11/15/19	0730	Grab	MW-44-F	WG	2			2			N _i	-	-	-				
2F FD-1	11/15/19	-	Grab	FD-111519	WQ	7	3		2	2*	MW-44 *c. (1st)	FD	-	-	-				
3 MW-45	11/15/19	0838	Grab	MW-45	WG	3	3					N _i	-	-	-				
4 MW-21	11/15/19	1040	Grab	MW-21	WG	3	3					N _i	-	-	-				
5 MW-70	11/15/19	1055	Grab	MW-70	WG	5	3	2			ESD	N _i	-	-	-				
6 MW-14	11/15/19	1325	Grab	MW-14	WG	5	3	2			V379	N _i	-	-	-				
7 MW-14D	11/15/19	1353	Grab	MW-14D	WG	2		2			ES2	N _i	-	-	-				
8 MW-48	11/15/19	1450	Grab	MW-48	WG	3	3					N _i	-	-	-				
9 MW-50	11/15/19	1505	Grab	MW-50	WG	3	3					N _i	-	-	-				
10 TB-1	11/15/19	-	Grab	TB-111519	WQ	2	2				Initial Assessment <u>2AVE</u>	TB	-	-	-				
										Label Verification									

AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE	SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER	WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS	WL - LEACHATE GS - SOIL GAS WC - DRILLING WATER	WO - OCEAN WATER WS - SURFACE WATER WQ - WATER FIELD QC	LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE
TB# - TRIP BLANK SD# - MATRIX SPIKE DUPLICATE	RB# - RINSE BLANK FR# - FIELD REPLICATE	N# - NORMAL ENVIRONMENTAL SAMPLE MS# - MATRIX SPIKE		(*) - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY	

RELINQUISHED BY (SIGNATURE) Robert Murphy	DATE 11/15/19	TIME 1615	RECEIVED BY (SIGNATURE) FED EX	DATE 11/19/19	TIME 1615	SPECIAL INSTRUCTIONS Call Ann Marie Kropfitch @ 716-356-5636 w/ any questions. 2 80250 127
RELINQUISHED BY (SIGNATURE) Ken	DATE 11/15/19	TIME 10:15	RECEIVED FOR LAB BY (SIGNATURE)	DATE 11/16/19	TIME 1015	

Distribution: Original accompanies shipment, copy to coordinator field files

5.1
5

CASE NARRATIVE / CONFORMANCE SUMMARY



Client: United Technologies Corporation

Job No JC98713

Site: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Report Date 12/5/2019 9:08:34 AM

On 11/16/2019, 10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC98713 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V3B7068

- ▣ All samples were analyzed within the recommended method holding time.
- ▣ All method blanks for this batch meet method specific criteria.
- ▣ Sample(s) JC98713-1MS, JC98713-2DUP were used as the QC samples indicated.
- ▣ Blank Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,2-Dibromoethane, trans-1,3-Dichloropropene are outside control limits. High percent recoveries and no associated positive reported in the QC batch.
- ▣ JC98713-9 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- ▣ JC98713-9 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-9 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-5 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-1 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-1 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-4 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-8 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-1 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- ▣ JC98713-2 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-2 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-2 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-3 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- ▣ JC98713-3 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-3 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-3 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-1 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- ▣ JC98713-5 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- ▣ JC98713-6 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-9 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-4 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-10 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- ▣ JC98713-10 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- ▣ JC98713-8 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.

Thursday, December 05, 2019

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JC98713

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V3B7068

- JC98713-10 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- JC98713-8 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- JC98713-5 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- JC98713-5 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- JC98713-4 for 1,1,2,2-Tetrachloroethane: This compound in BS is outside in house QC limits bias high.
- JC98713-6 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC98713-4 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC98713-6 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.
- JC98713-6 for trans-1,3-Dichloropropene: This compound in BS is outside in house QC limits bias high.
- JC98713-8 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC98713-10 for 1,2-Dibromoethane: This compound in BS is outside in house QC limits bias high.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ

Batch ID: OP24122

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ

Batch ID: OP24129

- All samples were extracted within the recommended method holding time.
- Sample(s) JC98648-2MS, JC98648-2MSD, OP24129-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Initial Calibration Summary

Page 1 of 5

Job Number: JC98713

Sample: V3B7038-ICC7038

Account: UTC United Technologies Corporation

Lab FileID: 3B156533.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Response Factor Report MS3B

Method : C:\MSDCHEM\1\METHODS\M3B7038.M (RTE Integrator)
 Title : SW846 8260C / EPA 624, Rxi624Sil MS 60m x 0.25mm x 1.4um
 Last Update : Tue Oct 29 11:28:49 2019
 Response via : Initial Calibration

Calibration Files

1 =3B156528.D 4 =3B156530.D 100 =3B156534.D 50 =3B156533.D
 20 =3B156532.D 200 =3B156535.D 8 =3B156531.D 0.5 =3B156527.D
 2 =3B156529.D 0.2 =3B156526.D = =

Compound

	1	4	100	50	20	200	8	0.5	2	0.2	Avg	%RSD
1) I tert butyl alcohol-d9 -----ISTD-----												
2) ethanol										0.000	-1.00	
3) tertiary butyl alcohol												
1.026 1.156 1.189 1.177 1.208 1.198 1.169								1.116		1.155	5.15	
4) 1,4-dioxane												
0.072 0.092 0.090 0.085 0.094 0.087								0.066		0.084	12.80	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane												
1.146 1.149 1.282 1.216 1.261 1.134 1.227								1.141		1.194	4.96	
7) dichlorodifluoromethane												
1.239 1.334 1.365 1.344 1.328 1.244 1.299								1.296		1.306	3.51	
8) chloromethane												
1.312 1.186 1.172 1.140 1.177 1.169 1.165 1.279 1.214										1.202	4.77	
9) vinyl chloride												
1.066 1.161 1.126 1.112 1.123 1.130 1.134 0.882 1.157										1.099	7.81	
10) 1,3-butadiene												
0.602 0.589 0.624 0.593 0.584 0.580 0.579								0.630		0.598	3.31	
11) bromomethane												
0.677 0.647 0.627 0.631 0.645 0.666 0.645								0.677		0.652	2.98	
12) chloroethane												
0.471 0.444 0.364 0.363 0.378 0.381 0.395								0.357		0.394	10.49	
13) trichlorofluoromethane												
1.037 1.173 1.092 1.115 1.128 1.071 1.070 0.771 1.164										1.069	11.25	
14) vinyl bromide												
0.496 0.487 0.450 0.456 0.461 0.485 0.490								0.493		0.477	3.90	
15) ethyl ether												
0.192 0.222 0.219 0.206 0.209 0.208								0.172		0.204	8.28	
16) 2-chloropropane												
0.879 0.965 0.834 0.830 0.843 0.784 0.892								0.882		0.863	6.27	
17) acrolein												
0.091 0.104 0.101 0.100 0.105 0.109										0.102	6.12	
18) freon 113												
0.399 0.522 0.523 0.510 0.501 0.488 0.494								0.490		0.491	8.06	
19) 1,1-dichloroethene												
0.361 0.393 0.408 0.400 0.414 0.404 0.415 0.376 0.442										0.401	5.85	
20) acetone												
0.058 0.060 0.062 0.061 0.060 0.059								0.052		0.059	5.86	
21) acetonitrile												
0.103 0.101 0.104 0.105 0.101 0.107										0.104	2.28	
22) iodomethane												
0.690 0.737 0.754 0.741 0.722 0.745 0.753 0.621 0.763										0.725	6.18	
23) carbon disulfide												

6.8.1



Initial Calibration Summary

Page 2 of 5

Job Number: JC98713
 Account: UTC United Technologies Corporation
 Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V3B7038-ICC7038
 Lab FileID: 3B156533.D

	1.301	1.346	1.339	1.302	1.302	1.323	1.353	1.395	1.288	1.454	1.340	3.82
24)	methylene chloride											
	0.459	0.442	0.467	0.451	0.443	0.466	0.448	0.490	0.498		0.463	4.31
25)	methyl acetate											
	0.434	0.472	0.437	0.449	0.465	0.448		0.373		0.440		7.43
26)	methyl tert butyl ether											
	1.779	1.982	1.987	1.963	2.015	1.917	1.962	1.935	1.843	2.460	1.984	9.16
27)	trans-1,2-dichloroethene											
	0.313	0.447	0.425	0.409	0.403	0.412	0.431	0.380	0.436		0.406	9.94
28)	hexane											
	0.230	0.298	0.293	0.274	0.291	0.272	0.275		0.219		0.269	10.90
29)	di-isopropyl ether											
	1.583	1.667	1.710	1.682	1.697	1.692	1.743	1.724	1.618	2.041	1.716	7.23
30)	2-butanone											
	0.067	0.078	0.079	0.074	0.081	0.073		0.054		0.072		12.59
31)	1,1-dichloroethane											
	0.721	0.778	0.753	0.741	0.761	0.737	0.817	0.738	0.730		0.753	3.92
32)	chloroprene											
	0.653	0.731	0.728	0.707	0.708	0.694	0.706	0.570	0.681		0.686	7.24
33)	acrylonitrile											
	0.164	0.219	0.215	0.204	0.215	0.185					0.200	10.79
34)	vinyl acetate											
	0.081	0.074	0.070	0.079	0.046						0.070	20.29
	----- Linear regression ----- Coefficient = 0.9993											
	Response Ratio = -0.00532 + 0.08089 *A											
35)	ethyl tert-butyl ether											
	1.504	1.732	1.810	1.768	1.740	1.794	1.723	1.543	1.683	1.700	1.700	5.94
36)	ethyl acetate											
	0.067	0.096	0.100	0.085	0.094	0.095					0.089	13.53
37)	2,2-dichloropropane											
	0.911	0.986	0.963	0.968	0.979	0.912	0.999		1.055		0.972	4.78
38)	cis-1,2-dichloroethene											
	0.494	0.489	0.482	0.453	0.467	0.473	0.462	0.567	0.457		0.483	7.14
39)	propionitrile											
	0.092	0.096	0.097	0.096	0.097	0.094		0.074			0.092	8.88
40)	methyl acrylate											
	0.036	0.086	0.074	0.073	0.081	0.066					0.069	25.50
	----- Linear regression ----- Coefficient = 0.9978											
	Response Ratio = -0.00353 + 0.08289 *A											
41)	methacrylonitrile											
	0.157	0.216	0.203	0.191	0.215	0.183					0.194	11.63
42)	bromochloromethane											
	0.240	0.249	0.268	0.253	0.259	0.264	0.242		0.200		0.247	8.60
43)	tetrahydrofuran											
	0.263	0.234	0.218	0.202	0.222	0.211	0.232		0.217		0.225	8.28
44)	chloroform											
	0.819	0.878	0.876	0.835	0.846	0.843	0.855	0.932	0.786		0.852	4.82
45)	tert-Butyl Formate											
	0.582	0.652	0.640	0.607	0.614	0.595	0.630	0.667	0.649		0.626	4.56
46)	dibromofluoromethane (s)											
	0.457	0.457	0.474	0.462	0.449	0.478	0.454		0.449		0.460	2.35
47)	1,1,1-trichloroethane											
	1.020	1.077	1.147	1.090	1.082	1.086	1.108	0.832	1.057		1.055	8.58
48)	cyclohexane											
	0.786	0.734	0.736	0.745	0.737	0.731		0.765			0.748	2.71
49)	isobutyl alcohol											
											0.000	-1.00
50)	1,1-dichloropropene											

6.8.1



Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC98713

Account: UTC United Technologies Corporation

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample:	V3B7068-BFB	Injection Date:	11/22/19
Lab File ID:	3B157180.D	Injection Time:	15:13
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	10588	20.1	Pass
75	30.0 - 60.0% of mass 95	26491	50.4	Pass
95	Base peak, 100% relative abundance	52581	100.0	Pass
96	5.0 - 9.0% of mass 95	3286	6.25	Pass
173	Less than 2.0% of mass 174	328	0.62 (0.60) ^a	Pass
174	50.0 - 150.0% of mass 95	54333	103.3	Pass
175	5.0 - 9.0% of mass 174	4532	8.62 (8.34) ^a	Pass
176	95.0 - 101.0% of mass 174	53704	102.1 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	3161	6.01 (5.89) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B7068-CC7038	3B157181.D	11/22/19	15:51	00:38	Continuing cal 50
V3B7068-BS	3B157182.D	11/22/19	16:41	01:28	Blank Spike
V3B7068-MB	3B157184.D	11/22/19	17:38	02:25	Method Blank
JC98713-1	3B157185.D	11/22/19	18:13	03:00	MW-44
JC98713-2	3B157186.D	11/22/19	18:42	03:29	FD-111519
JC98713-3	3B157187.D	11/22/19	19:11	03:58	MW-45
JC98713-4	3B157188.D	11/22/19	19:40	04:27	MW-21
JC98713-1MS	3B157189.D	11/22/19	20:14	05:01	Matrix Spike
JC98713-2DUP	3B157191.D	11/22/19	21:11	05:58	Duplicate
JC98713-10	3B157192.D	11/22/19	21:40	06:27	TB-111519
ZZZZZZ	3B157193.D	11/22/19	22:08	06:55	(unrelated sample)
ZZZZZZ	3B157194.D	11/22/19	22:37	07:24	(unrelated sample)
ZZZZZZ	3B157195.D	11/22/19	23:06	07:53	(unrelated sample)
ZZZZZZ	3B157196.D	11/22/19	23:34	08:21	(unrelated sample)
ZZZZZZ	3B157197.D	11/23/19	00:03	08:50	(unrelated sample)
ZZZZZZ	3B157198.D	11/23/19	00:32	09:19	(unrelated sample)
ZZZZZZ	3B157199.D	11/23/19	01:00	09:47	(unrelated sample)
JC98713-5	3B157200.D	11/23/19	01:29	10:16	MW-70
JC98713-6	3B157201.D	11/23/19	01:58	10:45	MW-14
JC98713-8	3B157202.D	11/23/19	02:26	11:13	MW-48
JC98713-9	3B157203.D	11/23/19	02:55	11:42	MW-50

Continuing Calibration Summary

Page 1 of 3

Job Number: JC98713

Sample: V3B7068-CC7038

Account: UTC United Technologies Corporation

Lab FileID: 3B157181.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ad...19\v3b7068\3b157181.d Vial: 12
 Acq On : 22 Nov 2019 3:51 pm Operator: jessicap
 Sample : cc7038-50 Inst : MS3B
 Misc : MS39193,V3B7068,5,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B7038.M (RTE Integrator)
 Title : SW846 8260C / EPA 624, Rxi624Sil MS 60m x 0.25mm x 1.4um
 Last Update : Tue Oct 29 11:28:49 2019
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	57	-0.04	7.99
2	ethanol			NA			
3	tertiary butyl alcohol	1.155	1.274	-10.3	62	-0.03	8.12
4	1,4-dioxane	0.084	0.084	0.0	53	-0.02	12.19
5 I	pentafluorobenzene	1.000	1.000	0.0	67	0.00	10.52
6	chlorodifluoromethane	1.194	1.187	0.6	65	0.02	4.16
7	dichlorodifluoromethane	1.306	1.652	-26.5#	82	0.01	4.14
8	chloromethane	1.202	1.412	-17.5	83	0.01	4.56
9	vinyl chloride	1.099	1.308	-19.0	78	0.01	4.82
10	1,3-butadiene	0.598	0.568	5.0	64	0.01	4.86
11	bromomethane	0.652	0.730	-12.0	77	0.00	5.53
12	chloroethane	0.394	0.434	-10.2	80	0.01	5.74
13	trichlorofluoromethane	1.069	1.204	-12.6	72	0.01	6.28
14	vinyl bromide	0.477	0.562	-17.8	82	0.00	6.13
15	ethyl ether	0.204	0.204	0.0	62	0.00	6.74
16	2-chloropropane	0.863	0.877	-1.6	71	0.00	6.97
17	acrolein	0.102	0.115	-12.7	76	-0.02	6.98
18	freon 113	0.491	0.480	2.2	63	0.00	7.23
19	1,1-dichloroethene	0.401	0.414	-3.2	69	0.01	7.21
20	acetone	0.059	0.056	5.1	60	-0.01	7.21
21	acetonitrile	0.104	0.110	-5.8	71	0.00	7.68
22	iodomethane	0.725	0.746	-2.9	67	0.00	7.50
23	carbon disulfide	1.340	1.342	-0.1	69	0.00	7.67
24	methylene chloride	0.463	0.494	-6.7	73	0.00	8.04
25	methyl acetate	0.440	0.472	-7.3	72	0.00	7.76
26	methyl tert butyl ether	1.984	1.825	8.0	62	0.00	8.46
27	trans-1,2-dichloroethene	0.406	0.397	2.2	65	0.00	8.49
28	hexane	0.269	0.294	-9.3	71	0.00	8.90
29	di-isopropyl ether	1.716	1.776	-3.5	71	0.00	9.13
30	2-butanone	0.072	0.069	4.2	59	0.00	9.84
31	1,1-dichloroethane	0.753	0.761	-1.1	69	0.00	9.14
32	chloroprene	0.686	0.701	-2.2	66	0.00	9.25
33	acrylonitrile	0.200	0.219	-9.5	68	0.00	8.36
34	vinyl acetate	True 50.000	Calc. 55.214	% Drift -10.4	76	0.00	9.07
35	ethyl tert-butyl ether	AvgRF 1.700	CCRF 1.866	% Dev -9.8	70	0.00	9.65
36	ethyl acetate	0.089	0.105	-18.0	70	0.00	9.88
37	2,2-dichloropropane	0.972	1.002	-3.1	69	0.00	9.96

JC98767

GW WTH

JC98767 Bottle #

Folio # 1215 6027 6125 MB-1144-184

CHAIN OF CUSTODY RECORD										AECOM									
PROJECT NO. 60617328					SITE NAME UTC Carrier - Synovis					LAB SGS									
SAMPLERS (PRINT/SIGNATURE) Tom Urban/Tom Urban/Ros Murphy/Chris Miller										COOLER 1 of 1									
DELIVERY SERVICE: FedEx AIRBILL NO.:										PAGE 1 of 1									
LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	REMARKS				SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. (SPRINK ONLY)					
TB-1	11/19/19	-	Gwb	TB-111819-1	WG	2	2												
EB-1	11/18/19	1135	Gwb	EB-111819	WG	3	3												
MW-79	11/18/19	1010	Gwb	MW-79	WG	3	3												
TR3-MW-C2	11/18/19	1025	Gwb	TR3-MW-C2	WG	3	3												
MW-66	11/18/19	1048	Gwb	MW-66	WG	3	3												
MW-58	11/18/19	1139	Gwb	MW-58	WG	3	3												
MW-18	11/18/19	1335	Gwb	MW-18	WG	3	3												
MW-18	11/18/19	1335	Gwb	MW-18-MS	WG	3	3												
MW-18	11/18/19	1335	Gwb	MW-18-MSD	WG	3	3												
MW-57	11/18/19	1403	Gwb	MW-57	WG	3	3												
TR3-MW-C1	11/18/19	1530	Gwb	TR3-MW-C1	WG	3	3												
Initial Assessment: 25vc																			
Label Verification																			
AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE TB# - TRIP BLANK SD# - MATRIX SPIKE DUPLICATE										SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER RB# - RINSE BLANK FR# - FIELD REPLICATE					WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS N# - NORMAL ENVIRONMENTAL SAMPLE MS# - MATRIX SPIKE				
WL - LEACHATE GS - SOIL GAS WC - DRILLING WATER										WO - OCEAN WATER WS - SURFACE WATER WQ - WATER FIELD QC					LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE				
RELINQUISHED BY (SIGNATURE) Tom Urban										DATE 11/19/19					TIME 1700				
RELINQUISHED BY (SIGNATURE) FedEx										DATE 11/19/19					TIME 0915				
RECEIVED BY (SIGNATURE) FED EX										DATE 11/19/19					TIME 1700				
RECEIVED FOR LAB BY (SIGNATURE)										DATE					TIME				
SPECIAL INSTRUCTIONS Call Ann Marie Knapovich @ 716-556-5636 w/ any questions																			
Distribution: Original accompanies shipment, copy to coordinator field files																			

4.00 SP IR7

JC98767: Chain of Custody

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SGS

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JC98767

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: United Technologies Corporation

Job No JC98767

Site: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Report Date 12/5/2019 9:20:12 AM

On 11/19/2019, 8 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC98767 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V2E7012

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC98825-7MS, JC98825-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Cyclohexane, Dichlorodifluoromethane, Freon 113, Methylcyclohexane, Trichlorofluoromethane are outside control limits for sample JC98825-7MSD. Outside control limits due to matrix interference.
- JC98767-9: Diluted due to high concentration of target compound.

Matrix: AQ

Batch ID: VL9333

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC98767-7MS, JC98767-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for cis-1,2-Dichloroethene, Trichloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for Bromomethane are outside control limits for sample JC98767-7MSD. Outside control limits due to matrix interference.
- JC98767-7: Diluted due to high concentration of target compound.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Thursday, December 05, 2019

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SGS

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JC98767

Initial Calibration Summary

Page 2 of 5

Job Number: JC98767
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2E6949-ICC6949
Lab FileID: 2E156555.D

	1.309	1.332	1.396	1.377	1.428	1.452	1.367	1.297	1.353	1.468	1.378	4.23
24) methylene chloride	0.559	0.570		0.519	0.536	0.673	0.522	0.502	0.519		0.550	9.92
25) methyl acetate	0.380	0.371		0.370	0.366		0.361	0.360	0.368		0.368	1.89
26) methyl tert butyl ether	1.444	1.438	1.585	1.455	1.480	1.564	1.433	1.399	1.410	1.734	1.494	6.98
27) trans-1,2-dichloroethene	0.685	0.700	0.725	0.723	0.738	0.764	0.707	0.684	0.718		0.716	3.57
28) hexane	0.374	0.392	0.302	0.416	0.423	0.401	0.418	0.383	0.427		0.393	9.83
29) di-isopropyl ether	1.856	1.788	1.966	1.945	1.964	2.121	1.859	1.853	1.859	2.073	1.928	5.50
30) ethyl tert-butyl ether	1.633	1.639	1.706	1.708	1.727	1.801	1.653	1.632	1.660	1.609	1.677	3.47
31) 2-butanone	0.054	0.045		0.056	0.054	0.041	0.053	0.053	0.053		0.051	10.41
32) 1,1-dichloroethane	0.946	0.962	1.014	0.961	0.966	1.011	0.921	0.923	0.968	0.889	0.956	4.05
33) chloroprene	0.750	0.781	0.791	0.797	0.812	0.811	0.777	0.738	0.752	0.803	0.781	3.42
34) acrylonitrile	0.193	0.196	0.184	0.189	0.184	0.192	0.182	0.185	0.181		0.187	2.85
35) vinyl acetate	0.105	0.102		0.118	0.117	0.080	0.112	0.108	0.108		0.106	11.33
36) ethyl acetate	0.086	0.090		0.079	0.077	0.089	0.072	0.083	0.089		0.083	7.99
37) 2,2-dichloropropane	0.794	0.850	0.926	0.798	0.803	0.965	0.751	0.762	0.804		0.828	8.81
38) cis-1,2-dichloroethene	0.563	0.573	0.623	0.568	0.583	0.665	0.564	0.549	0.568		0.584	6.28
39) propionitrile	0.069	0.065	0.061	0.071	0.067	0.069	0.066	0.070	0.069		0.067	4.60
40) methyl acrylate	0.064		0.071	0.073		0.071	0.066	0.061			0.068	7.21
41) bromochloromethane	0.273	0.260	0.275	0.262	0.273	0.269	0.266	0.253	0.263		0.266	2.66
42) tetrahydrofuran	0.069	0.077		0.065	0.063		0.061	0.063	0.068		0.066	7.93
43) chloroform	0.888	0.886	0.987	0.865	0.888	0.954	0.853	0.829	0.881		0.892	5.49
44) t-butyl formate	0.510	0.488	0.515	0.525	0.526	0.574	0.501	0.512	0.505		0.518	4.67
45) 1,1-dichloropropene	0.695	0.697	0.761	0.724	0.736	0.737	0.710	0.679	0.698		0.715	3.64
46) carbon tetrachloride	0.654	0.659	0.679	0.684	0.708	0.701	0.683	0.643	0.672	0.690	0.677	3.04
47) isopropyl acetate	0.122	0.107		0.118	0.122		0.120	0.114	0.114		0.117	4.76
48) dibromofluoromethane (s)	0.443	0.447	0.429	0.445	0.450	0.445	0.449	0.444	0.442	0.431	0.442	1.59
49) methacrylonitrile	0.186	0.177		0.200	0.201	0.164	0.198	0.190	0.184		0.187	6.71
50) 1,1,1-trichloroethane	0.767	0.768	0.802	0.787	0.820	0.834	0.783	0.754	0.796	0.830	0.794	3.48
51) cyclohexane	0.767	0.833		0.849	0.851	0.749	0.827	0.768	0.847		0.811	5.24
52) iso-butyl alcohol	0.024		0.022	0.020		0.019	0.022	0.020			0.021	8.48
53) tert amyl alcohol												

6.7.1

6

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: **JC98767**

Account: **UTC United Technologies Corporation**

Project: **AECOMNYB: Carrier, Thompson Road, Syracuse, NY**

Sample: **V2E7012-BFB**

Injection Date: **11/27/19**

Lab File ID: **2E157855.D**

Injection Time: **10:49**

Instrument ID: **GCMS2E**

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	15649	16.8	Pass
75	30.0 - 60.0% of mass 95	42685	45.9	Pass
95	Base peak, 100% relative abundance	93024	100.0	Pass
96	5.0 - 9.0% of mass 95	6063	6.52	Pass
173	Less than 2.0% of mass 174	403	0.43 (0.55) ^a	Pass
174	50.0 - 120.0% of mass 95	73600	79.1	Pass
175	5.0 - 9.0% of mass 174	5399	5.80 (7.34) ^a	Pass
176	95.0 - 101.0% of mass 174	71584	77.0 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	4663	5.01 (6.51) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E7012-CC6949	2E157856.D	11/27/19	11:19	00:30	Continuing cal 20
V2E7012-BS	2E157857.D	11/27/19	11:51	01:02	Blank Spike
V2E7012-MB	2E157859.D	11/27/19	12:53	02:04	Method Blank
JC98767-9	2E157860.D	11/27/19	13:28	02:39	TR3-PW-01
JC98767-9	2E157861.D	11/27/19	14:00	03:11	TR3-PW-01
JC98767-9	2E157862.D	11/27/19	14:30	03:41	TR3-PW-01
ZZZZZZ	2E157864.D	11/27/19	16:02	05:13	(unrelated sample)
ZZZZZZ	2E157865.D	11/27/19	16:32	05:43	(unrelated sample)
JC98825-7	2E157866.D	11/27/19	17:02	06:13	(used for QC only; not part of job JC98767)
JC98825-7MS	2E157867.D	11/27/19	17:33	06:44	Matrix Spike
JC98825-7MSD	2E157868.D	11/27/19	18:04	07:15	Matrix Spike Duplicate
ZZZZZZ	2E157870.D	11/27/19	19:05	08:16	(unrelated sample)
JC98767-8	2E157871.D	11/27/19	19:35	08:46	MW-57
JC98767-8	2E157872.D	11/27/19	20:06	09:17	MW-57
ZZZZZZ	2E157873.D	11/27/19	20:37	09:48	(unrelated sample)
ZZZZZZ	2E157874.D	11/27/19	21:07	10:18	(unrelated sample)
ZZZZZZ	2E157875.D	11/27/19	21:37	10:48	(unrelated sample)
ZZZZZZ	2E157876.D	11/27/19	22:08	11:19	(unrelated sample)

6.4.3



Continuing Calibration Summary

Page 1 of 3

Job Number: JC98767
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: V2E7012-CC6949
Lab FileID: 2E157856.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V2E7012\2E157856.D Vial: 5
Acq On : 27 Nov 2019 11:19 am Operator: CHELSEAS
Sample : cc6949-20 Inst : VOAMS2E
Misc : MS39371,V2E7012,5,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Thu Oct 10 15:09:10 2019
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	105	0.00	7.33
2	ethanol	0.136	0.104	23.5#	83	0.00	6.09
3 M	tertiary butyl alcohol	1.333	1.242	6.8	103	0.00	7.45
4	1,4-dioxane	0.111	0.096	13.5	91	-0.01	11.20
5 I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	9.56
6 M	chlorodifluoromethane	0.842	0.725	13.9	91	0.00	4.01
7 M	dichlorodifluoromethane	0.636	0.528	17.0	87	0.00	3.99
8 M	chloromethane	0.878	0.815	7.2	101	0.00	4.39
9 M	vinyl chloride	0.865	0.718	17.0	87	0.00	4.63
10 M	bromomethane	0.512	0.458	10.5	97	0.00	5.25
11 M	chloroethane	0.448	0.401	10.5	95	0.00	5.41
12 M	trichlorofluoromethane	0.724	0.684	5.5	98	0.01	5.86
13	1,3-butadiene	0.586	0.581	0.9	104	0.00	4.65
14	vinyl bromide	0.418	0.411	1.7	105	0.01	5.76
15 M	ethyl ether	0.313	0.306	2.2	105	0.00	6.24
16	2-chloropropane	0.984	0.859	12.7	97	0.00	6.43
17 M	acrolein	0.099	0.100	-1.0	99	0.01	6.51
18	freon 113	0.375	0.351	6.4	97	0.00	6.64
19 M	1,1-dichloroethene	0.769	0.727	5.5	99	0.00	6.67
20 M	acetone	0.145	0.123	15.2	92	0.00	6.71
21	acetonitrile	0.068	0.067	1.5	102	0.00	7.14
22 M	iodomethane	0.623	0.635	-1.9	108	0.00	6.95
23 M	carbon disulfide	1.378	1.370	0.6	106	0.00	7.07
24 M	methylene chloride	0.550	0.536	2.5	107	0.00	7.38
25 M	methyl acetate	0.368	0.358	2.7	100	0.00	7.17
26 M	methyl tert butyl ether	1.494	1.399	6.4	100	0.00	7.70
27 M	trans-1,2-dichloroethene	0.716	0.721	-0.7	106	0.00	7.75
28	hexane	0.393	0.381	3.1	100	0.00	8.04
29 M	di-isopropyl ether	1.928	1.757	8.9	95	0.00	8.29
30 M	ethyl tert-butyl ether	1.677	1.594	4.9	98	0.00	8.76
31 M	2-butanone	0.051	0.052	-2.0	97	0.00	9.01
32 M	1,1-dichloroethane	0.956	0.914	4.4	99	0.00	8.31
33 M	chloroprene	0.781	0.690	11.7	94	0.00	8.42
34 M	acrylonitrile	0.187	0.189	-1.1	103	0.00	7.70
35 M	vinyl acetate	0.106	0.112	-5.7	105	0.00	8.30
36 M	ethyl acetate	0.083	0.079	4.8	95	0.00	9.04
37 M	2,2-dichloropropane	0.828	0.732	11.6	96	0.00	9.05
38 M	cis-1,2-dichloroethene	0.584	0.550	5.8	100	0.00	9.05
39 M	propionitrile	0.067	0.069	-3.0	99	0.00	9.11
40	methyl acrylate	0.068	0.065	4.4	98	0.00	9.12
41 M	bromochloromethane	0.266	0.258	3.0	102	0.00	9.36

Initial Calibration Summary

Page 1 of 5

Job Number: JC98767

Sample:

VL9325-ICC9325

Account: UTC United Technologies Corporation

Lab FileID:

L317680.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Response Factor Report GCMSL

Method : C:\MSDCHEM\1\METHODS\ML9325.M (RTE Integrator)
 Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
 Last Update : Thu Nov 21 11:59:45 2019
 Response via : Initial Calibration

Calibration Files

8 =L317678.D 0.5 =L317674.D 4 =L317677.D 50 =L317680.D
 100 =L317681.D 1 =L317675.D 200 =L317682.D 20 =L317679.D
 2 =L317676.D 0.2 =L317673.D = =

Compound

	8	0.5	4	50	100	1	200	20	2	0.2	Avg	%RSD

1) I	text butyl alcohol-d9 -----ISTD-----											
2) 1,4-dioxane												
	0.106	0.104	0.097	0.093		0.098	0.105	0.098		0.100		4.79
3) ethanol												
	0.113	0.114	0.114	0.115	0.105	0.114	0.103	0.120	0.113		0.112	4.62
4) tertiary butyl alcohol												
	1.189	1.133	1.146	1.141	1.064	1.208	1.091	1.131	1.065		1.130	4.43
5) I	pentafluorobenzene -----ISTD-----											
6) chlorodifluoromethane												
	0.476	0.407	0.421	0.512	0.506	0.432	0.511	0.492	0.466	0.522	0.474	8.73
7) dichlorodifluoromethane												
	0.626		0.587	0.668	0.679		0.666	0.666	0.529		0.632	8.77
8) chloromethane												
	0.482	0.602	0.464	0.516	0.505	0.493	0.510	0.513	0.461		0.505	8.24
9) vinyl chloride												
	0.538	0.567	0.536	0.590	0.573	0.548	0.568	0.595	0.539	0.561	0.562	3.75
10) bromomethane												
	0.125		0.133	0.123	0.141		0.141	0.123	0.127		0.131	6.18
11) chloroethane												
	0.258	0.241	0.269	0.267	0.247	0.268	0.229	0.270	0.262		0.257	5.73
12) vinyl bromide												
	0.303	0.331	0.292	0.322	0.308	0.265	0.305	0.337	0.294		0.306	7.14
13) trichlorofluoromethane												
	0.608		0.597	0.616	0.601	0.455	0.568	0.641	0.553		0.580	9.89
14) ethyl ether												
	0.235	0.222	0.225	0.246	0.232	0.203	0.228	0.244	0.215		0.228	5.97
15) 2-chloropropane												
	0.647	0.722	0.610	0.642	0.605	0.620	0.569	0.647	0.651		0.635	6.66
16) acrolein												
	0.098		0.106	0.107	0.101		0.099	0.101			0.102	3.64
17) freon 113												
	0.272		0.261	0.295	0.281		0.270	0.298	0.246		0.275	6.65
18) 1,1-dichloroethene												
	0.344	0.374	0.326	0.350	0.328	0.360	0.322	0.351	0.346	0.389	0.349	6.09
19) acetone												
	0.053		0.050	0.053	0.050	0.050	0.047	0.050	0.049		0.050	3.86
20) acetonitrile												
	0.040		0.041	0.040	0.037		0.035	0.038	0.041		0.039	6.06
21) iodomethane	*This compound fails Initial Calibration criteria*											
	0.011		0.077	0.143		0.177	0.026				0.087	83.33
22) iso-butyl alcohol												
	0.026		0.028	0.028	0.027	0.029	0.024	0.028	0.030		0.028	6.12
23) carbon disulfide												

6.7.6



Initial Calibration Summary

Page 2 of 5

Job Number: JC98767

Sample:

VL9325-ICC9325

Account: UTC United Technologies Corporation

Lab FileID:

L317680.D

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

	0.902	0.883	0.895	0.847	1.052	0.832	0.895	0.957		0.908	7.63
24)	methylene chloride										
	0.353	0.365	0.345	0.361	0.343	0.330	0.342	0.369	0.339	0.350	3.70
25)	methyl acetate										
	0.097	0.090	0.099	0.093		0.093	0.092	0.072		0.091	9.95
26)	methyl tert butyl ether										
	1.178	1.103	1.170	1.183	1.106	1.079	1.074	1.185	1.182	1.338	1.160
27)	trans-1,2-dichloroethene										
	0.361	0.395	0.360	0.378	0.348	0.378	0.343	0.368	0.383	0.368	4.60
28)	hexane										
	0.516	0.474	0.538	0.536	0.416	0.515	0.540	0.432		0.496	9.93
29)	di-isopropyl ether										
	1.255	1.287	1.231	1.214	1.120	1.250	1.061	1.248	1.237	1.453	1.235
30)	ethyl tert-butyl ether										
	1.188	1.111	1.183	1.213	1.134	1.215	1.109	1.218	1.183	1.239	1.179
31)	2-butanone										
	0.070	0.058	0.064	0.073	0.069	0.064	0.067	0.068	0.067	0.067	6.61
32)	1,1-dichloroethane										
	0.678	0.649	0.676	0.662	0.610	0.649	0.589	0.681	0.667	0.620	0.648
33)	chloroprene										
	0.548	0.520	0.527	0.554	0.532	0.536	0.523	0.566	0.562	0.462	0.533
34)	acrylonitrile										
	0.192	0.197	0.209	0.198	0.188	0.194	0.197	0.168		0.193	6.13
35)	vinyl acetate										
	0.099	0.098	0.106	0.097		0.099	0.101	0.093		0.099	3.79
36)	ethyl acetate										
	0.088	0.079	0.087	0.088		0.087	0.087	0.082		0.085	4.06
37)	2,2-dichloropropane										
	0.528	0.552	0.538	0.534	0.491	0.593	0.480	0.544	0.611	0.541	0.541
38)	cis-1,2-dichloroethene										
	0.398	0.422	0.404	0.400	0.377	0.408	0.366	0.411	0.412	0.400	4.43
39)	propionitrile										
	0.081	0.087	0.078	0.081	0.072	0.084	0.068	0.079	0.081	0.079	7.38
40)	methyl acrylate										
	0.089	0.081	0.081	0.075		0.072	0.079	0.075		0.079	6.92
41)	bromochloromethane										
	0.204	0.204	0.202	0.198	0.181	0.207	0.175	0.204	0.199	0.197	5.73
42)	tetrahydrofuran										
	0.082	0.076	0.080	0.075		0.073	0.078	0.075		0.077	4.21
43)	chloroform										
	0.653	0.723	0.622	0.628	0.593	0.666	0.581	0.638	0.677	0.642	6.80
44)	dibromofluoromethane (s)										
	0.380	0.394	0.387	0.391	0.398	0.389	0.397	0.388	0.395	0.387	0.391
45)	methacrylonitrile										
	0.203	0.210	0.213	0.214	0.200	0.215	0.199	0.204	0.199	0.206	3.18
46)	1,1,1-trichloroethane										
	0.538	0.575	0.530	0.558	0.540	0.570	0.548	0.550	0.521	0.512	0.544
47)	cyclohexane										
	0.547	0.555	0.532	0.516		0.491	0.564	0.499		0.529	5.32
48)	1,1-dichloropropene										
	0.473	0.497	0.477	0.480	0.453	0.513	0.450	0.479	0.474	0.555	0.485
49)	carbon tetrachloride										
	0.441	0.418	0.451	0.468	0.445	0.455	0.443	0.466	0.462	0.478	0.453
50)	isopropyl acetate										
	0.109	0.109	0.119	0.112		0.110	0.116	0.116		0.113	3.49
51)	tert amyl alcohol										
	0.024	0.025	0.026	0.024	0.024	0.022	0.024	0.025		0.024	4.83
52) I	1,4-difluorobenzene -----ISTD-----										
53)	1,2-dichloroethane-d4 (s)										

6.7.6



Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC98767

Account: UTC United Technologies Corporation

Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9333-BFB

Injection Date: 11/27/19

Lab File ID: L317837.D

Injection Time: 07:57

Instrument ID: GCMSL

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	9349	16.0	Pass
75	30.0 - 60.0% of mass 95	25936	44.3	Pass
95	Base peak, 100% relative abundance	58501	100.0	Pass
96	5.0 - 9.0% of mass 95	3943	6.74	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	53347	91.2	Pass
175	5.0 - 9.0% of mass 174	4240	7.25 (7.95) ^a	Pass
176	95.0 - 101.0% of mass 174	51784	88.5 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	3570	6.10 (6.89) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL9333-CC9325	L317837.D	11/27/19	07:57	00:00	Continuing cal 20
VL9333-BS	L317838.D	11/27/19	08:30	00:33	Blank Spike
VL9333-MB	L317840.D	11/27/19	09:25	01:28	Method Blank
JC98767-7	L317841.D	11/27/19	10:05	02:08	MW-18
JC98767-7	L317842.D	11/27/19	10:32	02:35	MW-18
ZZZZZZ	L317844.D	11/27/19	11:36	03:39	(unrelated sample)
ZZZZZZ	L317845.D	11/27/19	12:03	04:06	(unrelated sample)
ZZZZZZ	L317846.D	11/27/19	12:30	04:33	(unrelated sample)
ZZZZZZ	L317847.D	11/27/19	12:59	05:02	(unrelated sample)
ZZZZZZ	L317849.D	11/27/19	13:54	05:57	(unrelated sample)
JC98767-7MS	L317850.D	11/27/19	14:21	06:24	Matrix Spike
JC98767-7MSD	L317851.D	11/27/19	14:48	06:51	Matrix Spike Duplicate
ZZZZZZ	L317853.D	11/27/19	15:42	07:45	(unrelated sample)
ZZZZZZ	L317854.D	11/27/19	16:09	08:12	(unrelated sample)
ZZZZZZ	L317855.D	11/27/19	16:36	08:39	(unrelated sample)
JC98767-1	L317856.D	11/27/19	17:03	09:06	TB-111819-1
JC98767-2	L317857.D	11/27/19	17:31	09:34	EB-111819
JC98767-3	L317858.D	11/27/19	17:58	10:01	MW-79
JC98767-4	L317859.D	11/27/19	18:25	10:28	TR3-MW0092
JC98767-5	L317860.D	11/27/19	18:52	10:55	MW-66
JC98767-6	L317861.D	11/27/19	19:19	11:22	MW-58

6.4.6



Continuing Calibration Summary

Page 1 of 3

Job Number: JC98767
Account: UTC United Technologies Corporation
Project: AECOMNYB: Carrier, Thompson Road, Syracuse, NY

Sample: VL9333-CC9325
Lab FileID: L317837.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\da...vl9333 rush\l317837.d Vial: 2
Acq On : 27 Nov 2019 7:57 am Operator: krizhkac
Sample : CC9325-20 Inst : GCMSL
Misc : MS39411,VL9333,5,,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML9325.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Thu Nov 21 11:59:45 2019
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	113	0.00	3.05
2	1,4-dioxane	0.100	0.101	-1.0	109	0.00	5.26
3	ethanol	0.112	0.117	-4.5	111	0.00	2.48
4 M	tertiary butyl alcohol	1.130	1.127	0.3	112	0.00	3.10
5 I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	4.26
6	chlorodifluoromethane	0.474	0.534	-12.7	113	0.00	1.65
7	dichlorodifluoromethane	0.632	0.621	1.7	98	0.00	1.63
8	chloromethane	0.505	0.509	-0.8	104	0.00	1.80
9	vinyl chloride	0.562	0.598	-6.4	105	0.00	1.88
10	bromomethane	0.131	0.124	5.3	105	0.00	2.13
11	chloroethane	0.257	0.276	-7.4	107	0.00	2.21
12	vinyl bromide	0.306	0.329	-7.5	102	0.00	2.34
13	trichlorofluoromethane	0.580	0.641	-10.5	105	0.00	2.39
14	ethyl ether	0.228	0.249	-9.2	107	0.00	2.57
15	2-chloropropane	0.635	0.673	-6.0	109	0.00	2.66
16	acrolein	0.102	0.103	-1.0	107	0.00	2.67
17	freon 113	0.275	0.326	-18.5	114	0.00	2.74
18	1,1-dichloroethene	0.349	0.369	-5.7	110	0.00	2.75
19	acetone	0.050	0.050	0.0	105	0.00	2.76
20	acetonitrile	0.039	0.041	-5.1	113	0.00	2.95
21	iodomethane	0.087	0.057	34.5#	234#	0.00	2.87
22	iso-butyl alcohol	0.028	0.028	0.0	107	0.00	4.41
23	carbon disulfide	0.908	0.917	-1.0	107	0.00	2.92
24	methylene chloride	0.350	0.380	-8.6	108	0.00	3.08
25	methyl acetate	0.091	0.100	-9.9	115	0.00	2.96
26	methyl tert butyl ether	1.160	1.196	-3.1	106	0.00	3.24
27	trans-1,2-dichloroethene	0.368	0.375	-1.9	107	0.00	3.26
28	hexane	0.496	0.600	-21.0#	116	0.00	3.44
29	di-isopropyl ether	1.235	1.272	-3.0	107	0.00	3.55
30	ethyl tert-butyl ether	1.179	1.226	-4.0	105	0.00	3.79
31	2-butanone	0.067	0.074	-10.4	115	0.00	3.91
32 M	1,1-dichloroethane	0.648	0.679	-4.8	104	0.00	3.55
33	chloroprene	0.533	0.588	-10.3	109	0.00	3.61
34	acrylonitrile	0.193	0.209	-8.3	111	0.00	3.22
35	vinyl acetate	0.099	0.106	-7.1	110	0.00	3.53
36	ethyl acetate	0.085	0.088	-3.5	106	0.00	3.92
37	2,2-dichloropropane	0.541	0.566	-4.6	109	0.00	3.95
38	cis-1,2-dichloroethene	0.400	0.419	-4.7	107	0.00	3.94
39	propionitrile	0.079	0.085	-7.6	112	0.00	3.96
40	methyl acrylate	0.079	0.081	-2.5	107	0.00	3.97
41	bromochloromethane	0.197	0.200	-1.5	103	0.00	4.11

6.7.10



APPENDIX D

HISTORICAL GROUNDWATER ANALYTICAL DATA

**(Appendix D and Appendix F of the EnSafe Corrective Measures
Update Site-wide Groundwater Monitoring Report - June 2015 and
AECOM Data from April 2016 to October 2018)**

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro- form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE
			µg /L 50 G	µg /L 1	µg /L 50 G	µg /L 7	µg /L 5	µg /L 0.6	µg /L 0.7 G	µg /L N/A	µg /L 5	µg /L 5	µg /L 5	µg /L 1	µg /L N/A	µg /L 5	µg /L 5 G	µg /L 2	µg /L N/A
NYSDEC Standard																			
MW-01	MW-01	12/31/1985	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND
	MW-1	2/8/1990	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	6/5/1990	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	11/16/1990	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND
	MW-1 (DUP)	11/16/1990	NA	NA	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND
	MW-1	5/22/1991	NA	ND	NA	NA	3	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-1	2/6/1992	NA	ND	NA	NA	3	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	6	NA
	MW-1	8/10/1992	NA	ND	NA	NA	3	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	6	NA
	MW-1	2/22/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-1	8/23/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-1	5/2/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	8/25/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-1	2/15/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	8/21/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	2/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	8/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	2/6/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	8/22/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	2/17/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	8/31/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
MW-1	3/4/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
MW-1	8/27/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
MW-1	3/2/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
CARGMW0103	4/18/2000	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-1	8/15/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	ND	NA	ND	NA
CARGMW0104	7/12/2001	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-1	7/12/2001	NA	ND	NA	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
MW-1	12/18/2001	NA	ND	NA	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
CARGMW0105	6/24/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARGMW0105	6/23/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARGMW0106	6/21/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARGMW0106	7/11/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARGMW0107	11/7/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CARGMW0108	2/12/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CARGMW0109	5/8/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CARGMW0110	8/21/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CARGMW0111	6/28/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CARGMW0112	6/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CARGMW0112	6/28/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Appendix D
Groundwater Analytical Results Historical Summary
Carrier Thompson Rd. Facility
Page 2 of 11

Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE	
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A	
NYSDEC Standard																				
MW-03D	MW-3D	12/31/1985	NA	NA	ND	ND	ND	ND	ND	NA	39	NA	ND	ND	ND	ND	ND	ND	ND	
	MW-3D	2/8/1990	NA	ND	NA	NA	ND	ND	ND	NA	ND	21	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	6/5/1990	NA	ND	NA	NA	ND	ND	ND	NA	240	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	5/22/1991	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	2/5/1992	NA	ND	NA	NA	22	ND	3	NA	ND	NA	NA	ND	NA	ND	NA	44	NA	
	MW-3D	8/10/1992	NA	ND	NA	NA	100	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	450	NA	
	MW-3D	2/22/1993	NA	ND	NA	NA	14	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	29	NA	
	MW-3D	8/23/1993	NA	ND	NA	NA	76	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	97	NA	
	MW-3D	5/2/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	26	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	8/25/1994	NA	ND	NA	NA	5	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	12	NA	
	MW-3D	2/15/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	11	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	8/21/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	21	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	2/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	25	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	8/9/1996	NA	ND	NA	NA	4	ND	ND	NA	ND	140	NA	ND	NA	ND	NA	5	NA	
	MW-3D	2/6/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	17	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	8/22/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	8	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	2/17/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	13	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	8/31/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	10	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	3/4/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	13	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	8/27/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	14	NA	ND	NA	ND	NA	ND	NA	
	MW-3D	3/2/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	11	NA	ND	NA	ND	NA	ND	NA	
	(Duplicate)	CARGW03D03	5/2/2000	ND	ND	ND	ND	ND	ND	ND	7	NA	NA	ND	ND	ND	ND	ND	1.1 J	ND
		MW-3D	8/15/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	19	NA	ND	NA	ND	NA	ND	NA
		CARGMW3D04	7/12/2001	ND	ND	ND	ND	0.72 J	ND	ND	NA	1.2 J	23.2	ND	ND	ND	ND	ND	ND	ND
MW-3D		7/12/2001	NA	ND	NA	NA	0.72	ND	ND	NA	1.2	23.2	NA	ND	NA	ND	NA	ND	NA	
MW-3D		12/18/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	12	NA	ND	NA	ND	NA	ND	NA	
CARGMW3D05		6/25/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	6.2	ND	ND	ND	ND	ND	ND	ND	
CARGMW3D05		6/25/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	4.8	ND	ND	ND	ND	ND	ND	ND	
CARHMW3D05		6/25/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	4.7	ND	ND	ND	ND	ND	ND	ND	
CARHMW3D06		6/21/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	14.4	ND	ND	ND	ND	ND	ND	ND	
CARGMW3D06		7/12/2005	ND	ND	ND	ND	0.38 J	ND	ND	NA	ND	12.7	ND	ND	ND	ND	ND	0.70 J	ND	
CARGMW3D07		11/7/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	8.7	ND	ND	ND	ND	ND	ND	ND	
CARGMW3D08		2/12/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	9.4	ND	ND	ND	ND	ND	ND	ND	
CARGMW3D09		5/8/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	5.5	ND	ND	ND	ND	ND	ND	ND	
CARGMW3010		8/21/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	5	ND	ND	ND	ND	ND	0.77 J	ND	
ENSTHMPMW3D0609		6/29/2009	ND	ND	ND	ND	0.49 J	ND	ND	NA	ND	14.7	ND	ND	ND	ND	ND	2.0	ND	
CARGMW3D0610		6/30/2010	ND	ND	ND	ND	0.43 J	ND	ND	NA	ND	15.2	ND	ND	ND	ND	ND	1.6	ND	
CARHMW3D0610		6/30/2010	ND	ND	ND	ND	0.75 J	ND	ND	NA	0.40 J	24.2	ND	ND	ND	ND	ND	2.8	ND	
CARGMW3D0611		6/28/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	6.8	ND	ND	ND	ND	ND	ND	ND	
CARGMW3D0812		8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	13.7	ND	ND	ND	ND	ND	ND	ND	
CARHMW3D0812		8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	10.4	ND	ND	ND	ND	ND	ND	ND	
CARGMW03D0613		6/11/2013	ND	ND	ND	ND	1.5 J	ND	ND	NA	3.9	38	ND	ND	ND	ND	ND	2.3 J	ND	
MW03DWG063014		06/30/2014	ND	ND	ND	ND	1.3	ND	ND	NA	ND	41	ND	ND	ND	ND	ND	0.48 J	ND	
MW3DWG061915		06/19/2015	0.97 JB	ND	ND	ND	1.1	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	ND	

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2
NYSDEC Standard																			
MW-03S	MW-3S	12/31/1985	NA	NA	ND	ND	78	ND	15	NA	982	NA	ND	ND	ND	ND	ND	ND	ND
	MW-3S	2/8/1990	NA	ND	NA	NA	ND	ND	ND	NA	ND	32,000	NA	ND	NA	ND	NA	ND	NA
	MW-3S	6/5/1990	NA	ND	NA	NA	400	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	1,000	NA
	MW-3S	11/16/1990	NA	NA	ND	NA	490	7.6	100	NA	6.4	NA	17	9.5	ND	11	ND	1,600	ND
	MW-3S (DUP)	11/16/1990	NA	NA	ND	NA	1,100	12	250	NA	12	NA	ND	10	ND	15	ND	1,200	ND
	MW-3S	5/22/1991	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	2,500	NA
	MW-3S	2/5/1992	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-3S	8/10/1992	NA	ND	NA	NA	370	ND	90	NA	ND	NA	NA	ND	NA	ND	NA	1,100	NA
	MW-3S	2/22/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	2,000	NA
	MW-3S	8/23/1993	NA	ND	NA	NA	660	ND	ND	NA	ND	NR	NA	ND	NA	ND	NA	1,000	NA
	MW-3S	5/2/1994	NA	ND	NA	NA	630	ND	ND	NA	ND	14,000	NA	ND	NA	ND	NA	1,700	NA
	MW-3S	8/25/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	800	NA
	MW-3S	2/15/1995	NA	ND	NA	NA	380	ND	ND	NA	ND	1,400	NA	ND	NA	ND	NA	790	NA
	MW-3S	8/21/1995	NA		NA	NA	ND	ND	ND	NA	ND	11,000	NA	ND	NA	ND	NA	370	NA
	MW-3S	2/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	11,000	NA	ND	NA	ND	NA	650	NA
	MW-3S	8/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	11,000	NA	ND	NA	ND	NA	ND	NA
	MW-3S	2/6/1997	NA	ND	NA	NA	ND	ND	70	NA	7	9,300	NA	5	NA	7	NA	750	NA
	MW-3S	8/22/1997	NA	ND	NA	NA	200	ND	60	NA	6	8,500	NA	4	NA	6	NA	660	NA
	MW-3S	2/17/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	9,200	NA	ND	NA	ND	NA	1,400	NA
	MW-3S	8/31/1998	NA	ND	NA	NA	270	ND	68	NA	8	11,000	NA	5	NA	8	NA	1,300	NA
(Duplicate)	MW-3S	3/4/1999	NA	ND	NA	NA	200	ND	ND	NA	ND	8,000	NA	ND	NA	ND	NA	550	NA
	MW-3S	8/27/1999	NA	ND	NA	NA	180	ND	ND	NA	ND	6,500	NA	ND	NA	ND	NA	440	NA
	MW-3S	3/2/2000	NA	ND	NA	NA	200	ND	ND	NA	ND	6,400	NA	ND	NA	ND	NA	940	NA
	CARGMW3S03	4/20/2000	ND	ND	ND	ND	240	1.8 J	60	8,100	NA	NA	ND	3.7 J	ND	4.6 J	ND	1,100	ND
	MW-3S	8/15/2000	NA	ND	NA	NA	190	ND	ND	NA	ND	6,500	NA	ND	NA	ND	NA	490	NA
	CARGMW3S04	7/12/2001	ND	ND	ND	ND	164	ND	38.3 J	NA	13.9 J	5,780	ND	ND	ND	ND	ND	567	ND
	MW-3S	7/12/2001	NA	ND	NA	NA	164	ND	38.3	NA	13.9	5,780	NA	ND	NA	ND	NA	567	NA
	MW-3S	12/18/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	3,700	NA	ND	NA	ND	NA	ND	NA
	CARGMW3S05	6/25/2002	ND	ND	ND	ND	163	ND	34	NA	ND	5,410 E	ND	ND	ND	2.6 J	ND	746	ND
	CARHMW3S05	6/25/2002	ND	ND	ND	ND	159	ND	34	NA	ND	5,320 E	ND	ND	ND	2.2 J	ND	739	ND
	CARGMW3S05	6/23/2003	ND	ND	ND	ND	144	ND	29	NA	9.7 J	6,450 D	ND	ND	ND	ND	ND	621	18.4 J
	CARGMW3S06	6/21/2004	ND	ND	ND	ND	136	ND	25.9	NA	ND	5,260 D	ND	ND	ND	ND	ND	808	ND
	CARGMW3S	7/12/2005	ND	ND	ND	ND	77.4	ND	17.7	NA	5.0 J	2,940	ND	ND	ND	3.7 J	ND	330	ND
	CARGDUP1	7/12/2005	ND	ND	ND	ND	74.9	ND	15.5	NA	4.9 J	2,930	ND	ND	ND	ND	ND	311	ND
	CARGMW3S07	11/7/2006	ND	ND	ND	ND	65.5	ND	13.7	NA	4.3 J	1,900 ^a	ND	ND	ND	ND	ND	244	ND
	CARGMW3S08	2/12/2007	ND	ND	ND	ND	47.8	ND	11.7	NA	11.3	1,420 ^a	ND	ND	ND	1.9 J	ND	154	ND
	CARGMW3509	5/8/2007	ND	ND	ND	ND	59.6	ND	15.0	NA	9.0	2,130 ^a	ND	ND	ND	2.4 J	ND	221	ND
	CARGMW3510	8/21/2007	ND	ND	ND	ND	45.1	ND	ND	NA	ND	1,940	ND	ND	ND	ND	ND	188	ND
	ENSTHMPMW3S0609	6/29/2009	ND	ND	ND	ND	35.2	ND	9.4 J	NA	ND	1,450	ND	ND	ND	ND	ND	154	ND
	CARGMW3S0610	6/30/2010	ND	ND	ND	ND	57.4	ND	17.1	NA	26.8	2,040	ND	ND	ND	2.0	ND	197	ND
CARGMW3S0611	6/28/2011	ND	ND	ND	ND	59.3	ND	14.3	NA	26.5	1,970 ^a	ND	ND	ND	2.1	ND	168	ND	
CARGMW3S0612	6/13/2012	ND	ND	ND	ND	27.1	ND	6.7	NA	3.3	965 ^a	ND	ND	ND	1.0	ND	83.5	ND	
CARGMW350812	8/14/2012	ND	ND	ND	ND	26.3	ND	6.5	NA	ND	833 ^a	ND	ND	ND	ND	ND	104	ND	
CARGMW03S0613	6/11/2013	ND	ND	ND	ND	27	ND	5.4 J	NA	ND	1000 ^B	ND	ND	ND	ND	ND	96	ND	
MW03SWG063014	06/30/2014	650	ND	ND	ND	11	ND	2.4 J	NA	ND	390	ND	ND	ND	ND	ND	29	ND	
MW03SWG061915	06/19/2015	57 JB	ND	ND	ND	14 J	ND	ND	ND	ND	580	ND	ND	ND	ND	ND	48	ND	

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE	
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A	
NYSDEC Standard																				
MW-05	MW-5	2/8/1990	NA	ND	NA	NA	ND	ND	ND	NA	ND	18	NA	ND	NA	ND	NA	ND	NA	
	MW-5	6/5/1990	NA	ND	NA	NA	ND	ND	ND	NA	25	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	11/16/1990	NA	NA	ND	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	MW-5	5/22/1991	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	2/5/1992	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/10/1992	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	2/22/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/23/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	5/2/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/25/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA	
	MW-5	2/15/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/21/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	2/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	5	NA	
	MW-5	2/6/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	12	NA	5	NA	7	NA	ND	NA	
	MW-5	8/22/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	8	NA	ND	NA	ND	NA	ND	NA	
	MW-5	2/17/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/31/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	3/4/1999	NA	5	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	8/27/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	MW-5	3/2/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	
	CARGMW0503	5/2/2000	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND
	MW-5	8/15/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA	NA
	CARGMW0504	7/12/2001	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(Duplicate)	MW-5	7/12/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
		MW-5	12/18/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
		CARGMW0505	6/24/2002	117	ND	1.4 J	ND	ND	ND	ND	NA	ND	0.24 J	ND	ND	ND	ND	ND	ND	ND
		CARGMW0505	6/25/2003	ND	ND	1.0 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
		CARGMW0506	6/23/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
		CARGMW0506	7/12/2005	12.9	ND	ND	ND	ND	ND	ND	NA	ND	0.27 J	ND	ND	ND	ND	ND	ND	ND
		CARGMW0507	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
		CARGMW0508	2/13/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARGMW0509		5/8/2007	ND	ND	0.66 J	ND	ND	ND	ND	NA	ND	0.24 J	ND	ND	ND	ND	ND	ND	ND	
CARGMW0510		8/21/2007	ND	ND	0.66 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ENSTHMPMW050609		6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CARGMW050610		6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Not Sampled		6/13/2012	Could Not Be Located																	
MW-05R		CARGMW05R0812	8/15/2012	9.9	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
		CARGMW05R0613	6/12/2013	2.9 J	ND	ND	ND	ND	ND	ND	NA	ND	ND	0.24 J	ND	ND	ND	ND	ND	ND
		MW5RWG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW05RWG061615	06/16/2015	1.3 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A
NYSDEC Standard																			
MW-09 (Duplicate)	MW-9	11/16/1990	NA	NA	ND	NA	2.4	1.6	ND	NA	ND	NA	8.8	ND	ND	2.8	ND	ND	ND
	CARGMW0903	4/18/2000	ND	ND	ND	ND	1.9 J	ND	ND	2.9 J	ND	ND	3.7 J	ND	ND	4.4 J	ND	ND	ND
	CARGMW0904	7/10/2001	ND	ND	ND	ND	2.4 J	ND	ND	4.51 J	0.61 J	3.9 J	6.6	ND	ND	6.2	ND	ND	ND
	CARGMW0905	6/25/2002	ND	ND	ND	ND	1.9 J	ND	ND	NA	ND	3.3 J	5.9	ND	ND	6.6	ND	ND	ND
	CARGMW0905	6/25/2003	ND	ND	ND	ND	2	ND	ND	NA	ND	3.7	7.1	ND	ND	7.1	ND	ND	ND
	CARGMW0906	6/21/2004	ND	ND	ND	ND	1.5	ND	ND	NA	ND	2.8	5.8	ND	ND	8.3	0.57 J	ND	ND
	CARHMW0906	6/21/2004	ND	ND	ND	ND	1.5	ND	ND	NA	ND	2.7	5.6	ND	ND	8	0.55 J	ND	ND
	CARGMW0906	7/11/2005	ND	ND	ND	0.25 J	1.8	ND	ND	NA	ND	3.2	7.1	ND	ND	9.1	0.67 J	ND	ND
	CARGMW0907	11/7/2006	ND	ND	ND	ND	2	ND	ND	NA	ND	2.9	8.1	ND	ND	8.5	0.39 J	ND	ND
	CARGMW0908	2/12/2007	ND	ND	ND	ND	0.91	ND	ND	NA	ND	1.2	2.9	ND	ND	3.8	ND	ND	ND
	CARGMW0909	5/8/2007	ND	ND	ND	ND	1.1	ND	ND	NA	ND	1.3	2.8	ND	ND	4.6	0.32 J	ND	ND
	CARGMW0910	8/21/2007	ND	ND	ND	ND	2.1	ND	ND	NA	ND	2.3	6.4	ND	ND	7.9	ND	ND	ND
	ENSTHMPMW090609	6/28/2009	ND	ND	ND	ND	0.89 J	ND	ND	NA	ND	0.79 J	2.5	ND	ND	4.2	ND	ND	ND
	CARGMW090610	6/30/2010	ND	ND	ND	ND	1.3	ND	ND	NA	ND	1.1	2.5	ND	ND	4.9	ND	ND	ND
	CARGMW090611	6/28/2011	ND	ND	ND	ND	0.80 J	ND	ND	NA	ND	0.47 J	1.6	ND	ND	3.6	ND	ND	ND
	CARGMW090612	6/13/2012	ND	ND	ND	ND	0.94	ND	ND	NA	ND	0.67	1.4	ND	ND	3.4	ND	ND	ND
	CARGMW090812	8/15/2012	ND	ND	ND	ND	1.5	ND	ND	NA	ND	1.6	3.3	ND	ND	5.1	ND	ND	ND
	CARGMW090613	6/11/2013	ND	ND	ND	ND	0.63 J	ND	0.20 J	NA	ND	0.58 J	1.7	ND	ND	3.1	0.60 J	ND	ND
	MW9WVG063014	06/30/2014	ND	ND	ND	ND	0.82 J	ND	ND	NA	ND	0.43 J	0.65 J	ND	ND	2.7	ND	ND	ND
	MW09WVG	06/17/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND	ND	2.8	ND	ND	ND
MW-10 (Duplicate)	CARG990101	4/25/1999	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGW99103	4/19/2000	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
	CARG990104	7/11/2001	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1005	6/24/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1005	6/26/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1006	6/21/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1006	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1007	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1008	2/12/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARHMW1008	2/12/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1009	5/8/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1010	8/21/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ENSTHMPMW100609	6/28/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW100610	6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW100612	6/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.71
	CARGMW100812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	4.4
	CARGMW100613	6/12/2013	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	0.37 J	ND	ND	0.17 J	ND	ND	0.88 J
	MW10WVG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	4.5
	MW10WVG061615	06/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-12*	CARG990301	4/25/1999	6.1	ND	ND	ND	ND	ND	ND	NA	14.1	5.2	ND	ND	ND	2.9	ND	ND	ND
	CARGW99303	4/18/2000	ND	ND	ND	ND	ND	ND	ND	6.5	NA	NA	ND	ND	ND	1.4	ND	ND	ND
	CARG9903-04	7/11/2001	26.5	ND	ND	ND	ND	ND	ND	NA	1.9 J	3.9 J	ND	ND	ND	1.1	ND	ND	ND
	CARGMW1205	6/25/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1205	6/26/2003	ND	ND	ND	ND	ND	ND	ND	NA	4.9	2.7	ND	ND	ND	4.4	ND	ND	ND
	CARGMW1206	6/23/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1206	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.35 J	ND	ND	ND	0.42 J	ND	ND	ND
	CARGMW1207	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1208	2/13/2007	ND	ND	ND	ND	ND	ND	ND	NA	0.89 J	0.49 J	ND	ND	ND	ND	ND	ND	ND
	CARGMW1209	5/8/2007	ND	ND	0.29 J	ND	ND	ND	ND	NA	0.99 J	0.50 J	ND	ND	ND	0.50 J	ND	ND	ND
	CARGHW1209	5/8/2007	ND	ND	0.29 J	ND	ND	ND	ND	NA	0.84 J	0.50 J	ND	ND	ND	0.43 J	ND	ND	ND
	CARGMW1210	8/21/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ENSTHMPMW120609	6/28/2009	ND	ND	ND	ND	ND	ND	ND	NA	5.5	2.5	0.45 J	ND	ND	9.0	ND	ND	ND
	CARGMW120610	6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	9.7	4.5	0.58 J	ND	ND	12.1	ND	ND	ND

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A
NYSDEC Standard																			
MW - 13D* 904 (Diffusion	Interval 1 : (8.7-11.8)	10/11/1999	ND	ND	NA	NA	128	NA	17.7 J	NA	ND	2,440	NA	ND	NA	21.8	NA	568	NA
	Interval 2 : (13.7-16.8)	10/11/1999	ND	ND	NA	NA	247 J	NA	57.9 J	NA	ND	6,940	NA	ND	NA	ND	NA	1,850	NA
	Interval 3 : (18.7-22)	10/11/1999	NA	NA	NA	NA	230 J	NA	55.9 J	NA	ND	6,520	NA	ND	NA	ND	NA	1,720	NA
	Interval 4 : (23.6-26.9)	10/11/1999	ND	NA	NA	NA	225 J	ND	51.8 J	NA	ND	6,310	NA	ND	NA	ND	NA	1,580	NA
	Interval 5 : (28.7-31.8)	10/11/1999	ND	NA	NA	NA	225 J	NA	56 J	NA	ND	6,310	NA	ND	NA	ND	NA	1,670	NA
	Interval 6 : NS	10/11/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 7 : No Sample	10/11/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 8 : (44.1-47.2)	10/11/1999	NA	NA	NA	NA	138 J	NA	30.2 J	NA	ND	4,290	NA	NA	NA	ND	NA	1,080	NA
	Interval 9 : (48.7-51.7)	10/11/1999	NA	NA	NA	NA	110 J	NA	24.7 J	NA	ND	3,230	NA	NA	NA	ND	NA	822	NA
	Interval 10 : (54.2-57)	10/11/1999	NA	NA	NA	NA	82.8 J	NA	18.8 J	NA	ND	2,360	NA	NA	NA	ND	NA	601	NA
MW - 13D* Diffusion Sample	Interval 1 : (9-12)	5/2/2000	ND	30 J	NA	NA	160	NA	26	3,900	ND	3,900	NA	1.1 J	NA	36	NA	610	NA
	Interval 2 : (14-17)	5/2/2000	ND	1.1 J	NA	NA	180	NA	45	6,000	ND	6,000	NA	2.5 J	NA	12	NA	970	NA
	Interval 3 : (19-22.5)	5/2/2000	NA	NA	NA	NA	160	NA	34	5,200	ND	5,200	NA	2.6 J	NA	7.3	NA	830	NA
	Interval 4 : (24.1-27)	5/2/2000	4.6 J	NA	NA	NA	160	1.1 J	40	NA	ND	5,500	NA	2.3 J	NA	8.2	NA	690	NA
	Interval 5 : (29.5-32)	5/2/2000	ND	NA	NA	NA	170	NA	44	5,600	ND	5,600	NA	2.3 J	NA	8.7	NA	880	NA
	Interval 6 : (34.1-37.1)	5/2/2000	NA	NA	NA	NA	120	NA	29	4,800	ND	4,800	NA	2.0 J	NA	5.7	NA	560	NA
	Interval 7 : (38.8-42)	5/2/2000	NA	NA	NA	NA	89	NA	20	2,900	ND	2,900	NA	ND	NA	3.9 J	NA	390	NA
	Interval 8 : (43.2-47)	5/2/2000	NA	NA	NA	NA	61	NA	14	1,900	ND	1,900	NA	NA	NA	2.6 J	NA	280	NA
	Interval 9 : (48-52.2)	5/2/2000	NA	NA	NA	NA	41	NA	9.6	NA	ND	1,500	NA	NA	NA	2.0 J	NA	190	NA
	Interval 10 : (54-57)	5/2/2000	NA	NA	NA	NA	13	NA	3.1 J	NA	ND	390	NA	NA	NA	ND	NA	66	NA
MW - 13D* Diffusion Sample	Interval 1 : (9-12)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 2 : (14-17)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 3 : (19-22.5)	7/13/2001	NA	NA	NA	NA	137	NA	ND	NA	ND	4,080	NA	ND	NA	ND	NA	500	NA
	Interval 4 : (24.1-27)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 5 : (29.5-32)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 6 : (34.1-37.1)	7/13/2001	NA	NA	NA	NA	182	NA	ND	NA	ND	6,720	NA	ND	NA	ND	NA	1,090	NA
	Interval 7 : (38.8-42)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 8 : (43.2-47)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 9 : (48-52.2)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Interval 10 : (54-57)	7/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW - 13D* Low-Flow Sample	Interval 1 : (9-11)	7/13/2001	ND	NA	NA	NA	34.4 J	NA	9.7 J	NA	ND	1,210	NA	NA	NA	NA	NA	199	NA
	Interval 2 : (14-16)	7/13/2001	ND	ND	NA	NA	32 J	NA	ND	NA	ND	1,160	NA	ND	NA	ND	NA	190	NA
	Interval 3 : (19-21)	7/13/2001	NA	NA	NA	NA	45.1 J	NA	10.3 J	NA	ND	1,600	NA	ND	NA	ND	NA	230	NA
	Interval 4 : (24-26)	7/13/2001	ND	NA	NA	NA	69.9 J	ND	ND	NA	ND	2,390	NA	ND	NA	ND	NA	338	NA
	Interval 5 : (29-31)	7/13/2001	ND	NA	NA	NA	52	NA	112 J	NA	ND	1,730	NA	ND	NA	ND	NA	259	NA
	Interval 6 : (34-36)	7/13/2001	NA	NA	NA	NA	52.7	NA	11.2 J	NA	ND	1,810	NA	ND	NA	ND	NA	256	NA
	Interval 7 : (39-40)	7/13/2001	NA	NA	NA	NA	61.1 J	NA	ND	NA	ND	2,070	NA	ND	NA	ND	NA	332	NA
	Interval 8 : (44-46)	7/13/2001	NA	NA	NA	NA	54.4	NA	11.6 J	NA	ND	1,850	NA	NA	NA	ND	NA	281	NA
	Interval 9 : (49-50)	7/13/2001	NA	NA	NA	NA	60.4 J	NA	ND	NA	ND	1,950	NA	NA	NA	ND	NA	268	NA
	Interval 10 : (54-56)	7/13/2001	NA	NA	NA	NA	43.4 J	NA	ND	NA	ND	1,480	NA	NA	NA	ND	NA	219	NA
MW - 13D* Diffusion Sample	Interval 1 : (7-10)	8/13/2002	ND	1.4 J	NA	NA	32.6	NA	1.7 J	NA	ND	530	NA	ND	NA	2.4 J	NA	26.9	NA
	Interval 2 : (12-15)	8/13/2002	66.8	ND	NA	NA	163 J	NA	41.1 J	NA	ND	5,570	NA	ND	NA	ND	NA	680	NA
	Interval 3 : (17-20)	8/13/2002	NA	NA	NA	NA	174 J	NA	41.8 J	NA	ND	6,170	NA	ND	NA	ND	NA	730	NA
	Interval 4 : (22-25)	8/13/2002	ND	NA	NA	NA	135 J	ND	ND	NA	ND	5,140	NA	ND	NA	ND	NA	573	NA
	Interval 5 : (27-30)	8/13/2002	ND	NA	NA	NA	147 J	NA	34.4 J	NA	ND	5,360	NA	ND	NA	ND	NA	607	NA
	Interval 6 : (32-35)	8/13/2002	NA	NA	NA	NA	149 J	NA	36.2 J	NA	ND	5,350	NA	ND	NA	ND	NA	692	NA
	Interval 7 : (37-40)	8/13/2002	NA	NA	NA	NA	76.4 J	NA	17.8 J	NA	ND	2,780	NA	ND	NA	ND	NA	337	NA
	Interval 8 : (42-45)	8/13/2002	NA	NA	NA	NA	69.8 J	NA	16.0 J	NA	ND	2,660	NA	NA	NA	ND	NA	310	NA
	Interval 9 : (47-50)	8/13/2002	NA	NA	NA	NA	61.4 J	NA	14.3 J	NA	ND	2,340	NA	NA	NA	ND	NA	273	NA
	Interval 10 : (54-57)	8/13/2002	NA	NA	NA	NA	50.1	NA	10.7 J	NA	ND	1,720	NA	NA	NA	ND	NA	231	NA

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2
NYSDEC Standard																			
MW - 13D* Diffusion Sample	Interval 1 : (7-10)	6/25/2003	11.7	3.8	NA	NA	1.3	NA	ND	NA	ND	60.2	NA	0.46 J	NA	ND	NA	ND	NA
	Interval 2 : (12-15)	6/25/2003	ND	ND	NA	NA	145	NA	15.4 J	NA	ND	4,610	NA	ND	NA	ND	NA	1,070	NA
	Interval 3 : (17-20)	6/25/2003	NA	NA	NA	NA	150	NA	ND	NA	ND	5,040	NA	ND	NA	ND	NA	1,090	NA
	Interval 4 : (22-25)	6/25/2003	ND	NA	NA	NA	140	ND	ND	NA	ND	4,560	NA	ND	NA	ND	NA	1,020	NA
	Interval 5 : (27-30)	6/25/2003	ND	NA	NA	NA	143	NA	ND	NA	ND	4,870	NA	ND	NA	ND	NA	1,070	NA
	Interval 6 : (32-35)	6/25/2003	NA	NA	NA	NA	139	NA	22.7 J	NA	ND	4,570	NA	ND	NA	ND	NA	1,050	NA
	Interval 7 : (37-40)	6/25/2003	NA	NA	NA	NA	70.8	NA	10.5 J	NA	ND	2,320	NA	ND	NA	ND	NA	580	NA
	Interval 8 : (42-45)	6/25/2003	NA	NA	NA	NA	72 / 72.7	NA	17.4 / 15.7	NA	ND / ND	1,950 / 2,250	NA	NA	NA	ND / ND	NA	631 / 644	NA
	Interval 9 : (47-50)	6/25/2003	NA	NA	NA	NA	70.3	NA	16.6	NA	4.7 J	2,040	NA	NA	NA	ND	NA	649	NA
Interval 10 : (54-57)	6/25/2003	NA	NA	NA	NA	34.6	NA	6.9	NA	ND	1,030	NA	NA	NA	ND	NA	315	NA	
MW - 13D* Diffusion Sample	Interval 1 : (7-10)	6/23/2004	36.9	2.2	NA	NA	.88 J	NA	ND	NA	ND	47.9	NA	ND	NA	ND	NA	ND	NA
	Interval 2 : (12-15)	6/23/2004	ND	ND	NA	NA	115	NA	31	NA	ND	3,820	NA	ND	NA	ND	NA	579	NA
	Interval 3 : (17-20)	6/23/2004	NA	NA	NA	NA	127	NA	34.4	NA	ND	4,210	NA	ND	NA	ND	NA	607	NA
	Interval 4 : (22-25)	6/23/2004	ND	NA	NA	NA	127	ND	34.3	NA	ND	3,860	NA	ND	NA	ND	NA	625	NA
	Interval 5 : (27-30)	6/23/2004	ND	NA	NA	NA	122	NA	35.9	NA	ND	3,870	NA	ND	NA	ND	NA	657	NA
	Interval 6 : (32-35)	6/23/2004	NA	NA	NA	NA	127	NA	32.9	NA	ND	3,730	NA	ND	NA	ND	NA	663	NA
	Interval 7 : (37-40)	6/23/2004	NA	NA	NA	NA	43.7	NA	12.3	NA	ND	1,420	NA	ND	NA	ND	NA	230	NA
	Interval 8 : (42-45)	6/23/2004	NA	NA	NA	NA	38.3	NA	10.8	NA	ND	1,290	NA	NA	NA	ND	NA	200	NA
	Interval 9 : (47-50)	6/23/2004	NA	NA	NA	NA	32.1 / 32.3	NA	9 J / 8.5 J	NA	ND / ND	1,100 / 1,100	NA	NA	NA	ND / ND	NA	177 / 179	NA
Interval 10 : (54-57)	6/23/2004	NA	NA	NA	NA	20.9	NA	5.5	NA	ND	706	NA	NA	NA	ND	NA	108	NA	
MW - 13D* Diffusion Sample	Interval 1 : (7-10)	7/13/2005	7.5 J	0.9 J	NA	NA	37.9	NA	3.9	NA	1.5	719	NA	ND	NA	2.4	NA	13.8	NA
	Interval 2 : (12-15)	7/13/2005	ND	ND	NA	NA	102	NA	21.2	NA	27.8	3,560	NA	ND	NA	3.2 J	NA	400	NA
	Interval 3 : (17-20)	7/13/2005	NA	NA	NA	NA	89.3	NA	18.9	NA	19.3	3,280	NA	ND	NA	3 J	NA	345	NA
	Interval 4 : (22-25)	7/13/2005	ND	NA	NA	NA	95.7	ND	56 J	NA	22.3	3,420	NA	ND	NA	3.1 J	NA	342	NA
	Interval 5 : (27-30)	7/13/2005	91.3	NA	NA	NA	ND	NA	18.5	NA	15.9	3,190	NA	ND	NA	2.9 J	NA	330	NA
	Interval 6 : (32-35)	7/13/2005	NA	NA	NA	NA	49.2	NA	7.2	NA	47	1,580	NA	ND	NA	1.5 J	NA	170	NA
	Interval 7 : (37-40)	7/13/2005	NA	NA	NA	NA	39.7	NA	5	NA	51.3	1,290	NA	ND	NA	1.2 J	NA	139	NA
	Interval 8 : (42-45)	7/13/2005	NA	NA	NA	NA	36.2 / 38.2	NA	4.3 / 6.6	NA	59.6 / 18.4	1,140 / 1,230	NA	NA	NA	1.2 J / 1.1 J	NA	130 / 154	NA
	Interval 9 : (47-50)	7/13/2005	NA	NA	NA	NA	25	NA	99	NA	26.2	923	NA	NA	NA	1.1 J	NA	77.3	NA
Interval 10 : (54-57)	7/13/2005	NA	NA	NA	NA	29.6	NA	7	NA	.92 J	728	NA	NA	NA	.93 J	NA	152	NA	
MW-13D* (Diffusion Sample)	Interval 6 : (32-35)	11/9/2006	ND	ND	ND	ND	23.5	ND	5.1	NA	1.6	577 ^a	ND	ND	ND	.75 J	ND	121	ND
	Interval 7 : (37-40)	11/9/2006	ND	ND	ND	ND	19.4	ND	4.2	NA	1.1	542 ^a	ND	ND	ND	.67 J	ND	106	ND
	Interval 8 : (42-45)	11/9/2006	ND	ND	ND	ND	17.7	ND	3.9	NA	0.98 J	459 ^a	ND	ND	ND	.59 J	ND	101	ND
	Interval 9 : (47-50)	11/9/2006	ND	ND	ND	ND	13.5	ND	2.6	NA	1.6 J	390	ND	ND	ND	ND	ND	80.3	ND
	Interval 10 : (54-57)	11/9/2006	ND	ND	ND	ND	7.9	ND	1.4 J	NA	ND	219	ND	ND	ND	ND	ND	48	ND
MW-13D* (Diffusion Sample)	Interval 6 : (32-35)	2/12/2007	ND	ND	ND	ND	13.1	ND	3.7	NA	ND	412 ^a	ND	ND	ND	ND	ND	87.2	ND
	Interval 7 : (37-40)	2/12/2007	ND	ND	ND	ND	10.1	ND	3.1	NA	0.84 J	286 ^a	ND	ND	ND	0.39 J	ND	71	ND
	Interval 8 : (42-45)	2/12/2007	ND	ND	ND	ND	10.1	ND	3	NA	0.75 J	290 ^a	ND	ND	ND	0.39 J	ND	71	ND
	Interval 9 : (47-50)	2/12/2007	ND	ND	ND	ND	7.7	ND	2.2	NA	0.50 J	221 ^a	ND	ND	ND	0.31 J	ND	54.9	ND
	Interval 10 : (54-57)	2/12/2007	ND	ND	ND	ND	4.4	ND	1	NA	0.44 J	146	ND	ND	ND	ND	ND	26.4	ND
MW-13D* (Diffusion Sample)	Interval 6 : (32-35)	5/9/2007	3.9 J	ND	ND	ND	10.7	ND	3.1	NA	1.0	342 ^a	ND	ND	ND	0.43 J	ND	105	ND
	Interval 7 : (37-40)	5/9/2007	ND	ND	ND	ND	7.5	ND	2.1	NA	1.3	227 ^a	ND	ND	ND	ND	ND	73.6	ND
	Interval 8 : (42-45)	5/9/2007	ND	ND	ND	ND	7.0	ND	2.0	NA	0.82 J	210 ^a	ND	ND	ND	ND	ND	72.9	ND
	Interval 9 : (47-50)	5/9/2007	4.6 J	ND	ND	ND	5.6	ND	1.5	NA	0.56 J	185	ND	ND	ND	ND	ND	57.5	ND
	Interval 10 : (54-57)	5/9/2007	ND	ND	ND	ND	3.1	ND	0.96 J	NA	ND	107	ND	ND	ND	ND	ND	36.2	ND
MW-13D* (Diffusion Sample)	Interval 6 : (32-35)	8/21/2007	ND	ND	ND	ND	33.8	ND	ND	NA	ND	1250	ND	ND	ND	ND	ND	132	ND
	Interval 7 : (37-40)	8/21/2007	ND	ND	ND	ND	25.7	ND	ND	NA	8.8	992	ND	ND	ND	ND	ND	103	ND
	Interval 8 : (42-45)	8/21/2007	ND	ND	ND	ND	22.8	ND	ND	NA	3.7 J	917	ND	ND	ND	ND	ND	92.9	ND
	Interval 9 : (47-50)	8/21/2007	ND	ND	ND	ND	18.8	ND	ND	NA	8.1	724	ND	ND	ND	ND	ND	72.2	ND
	Interval 10 : (54-57)	8/21/2007	ND	ND	ND	ND	15.5	ND	ND	NA	5.9	590	ND	ND	ND	ND	ND	68.9	ND

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Groundwater Analytical Results Historical Summary
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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE	
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A	
NYSDEC Standard																				
MW-13D2 Duplicate	ENSTHMPMW13D20609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.61 J	ND	ND	ND	ND	ND	ND	ND	
	ENSTHMPDUP10609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.54 J	ND	ND	ND	ND	ND	ND	ND	
	MW-13D2	9/9/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	1.6	ND	ND	ND	ND	ND	ND	ND	
	CARGMW13D20210	2/17/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	2.4	ND	ND	ND	ND	ND	ND	ND	
	CARGMW13D20310	3/24/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW13D20610	6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW13D20612	6/13/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.92	ND	ND	ND	ND	ND	ND	ND	
	CARGMW13D0812	8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CARGMW13D20613	6/13/2013	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.31 J	ND	ND	ND	ND	ND	0.24 J	ND		
MW13D2WG	6/17/2015	1.8 JB	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	0.74 J	ND	
MW-14	CARGMW5S04	7/11/2001	ND	ND	ND	ND	1.2 J	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
	CARGMW5S05	6/24/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1405	6/26/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1406	6/22/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.80 J	ND
	CARGMW1406	7/13/2005	ND	ND	ND	ND	ND	0.57 J	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
	CARGMW1407	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1408	2/13/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1409	5/8/2007	ND	ND	ND	ND	ND	0.27 J	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1410	8/22/2007	ND	ND	ND	ND	0.32 J	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND
	ENSTHMPMW140609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW140611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW140612	6/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW140812	8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW140613	6/12/2013	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND
	MW14WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW14WG061615	06/16/2015	2.7 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-14D	CARGMW005D	4/28/2000	8.1 J	ND	ND	3.0 J	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW5D04	7/11/2001	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW1405	6/25/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARHMW1405	6/25/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D05	6/26/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D06	6/22/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D06	7/13/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D07	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D08	2/14/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D08	2/14/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D09	5/9/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14010	8/22/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D0610	6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D0611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D0612	6/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D0812	8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW14D0613	6/12/2013	1.8 J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW14DWG070114	7/1/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW14DWG061615	6/16/2015	4 JB	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-15D*	CARGMW006	4/28/2000	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARG000604	7/11/2001	7.2	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARH000604	7/11/2001	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15D05	6/25/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15D05	6/24/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15D06	6/23/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15D	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGDUP2	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15D07	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARHMW15D07	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARHMW15D08	2/14/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15D09	5/9/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW15010	8/22/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ENSTHMPMW15D0609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARGMW15D0610	6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE	
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A
NYSDEC Standard																				
MW-16D	CARGMW00BG	4/27/2000	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D04	7/10/2001	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D05	6/24/2002	76.8	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D05	6/23/2003	19.8	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D06	6/23/2004	1,870 D	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D07	11/9/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARHMW16D07	11/9/2006	648 J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D08	2/14/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	CARGMW16D09	5/9/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARHMW16D09	5/9/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	ENSTHMPMW16D0609	6/28/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D0610	6/29/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D0611	6/28/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D0612	6/13/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D0812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW16D0613	6/12/2013	1.2 J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	MW16DWG063014	06/30/2014	1.4 J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	MW16DWG061615	06/16/2015	2.2 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
MW-17	CARG010704	7/13/2001	6	ND	ND	ND	ND	ND	ND	NA	2.5 J	249	ND	ND	ND	42.6	ND	11	ND	
	CARGMW1705	6/26/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW1705	6/24/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW1706	6/23/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW1706	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW1707	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW1708	2/13/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW1709	5/8/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	ENSTHMPMW170609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW170610	7/1/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW170611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW170612	6/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW170812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	CARGMW170613	6/12/2013	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	MW17WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	MW17WG061615	06/16/2015	0.97 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	MW-18	CARG010804	7/13/2001	ND	ND	ND	ND	ND	ND	ND	NA	29.2 J	7,020	ND	ND	ND	8,760	ND	505	ND
		CARGMW1805	6/26/2002	ND	ND	ND	ND	10.6 J	ND	15.4 J	NA	35.7 J	2,770	ND	ND	ND	5,580	ND	233	ND
		CARGMW1805	6/24/2003	ND	ND	ND	ND	7.4 J	ND	8.5 J	NA	19.3	2,740	ND	ND	ND	1,840 D	ND	134	ND
CARGMW1806		6/22/2004	24.7	ND	ND	ND	2	ND	ND	NA	ND	4.8	ND	ND	ND	0.42 J	ND	14.9	ND	
CARGMW1806		6/22/2004	26.1	ND	ND	ND	2.1	ND	ND	NA	ND	4.9	ND	ND	ND	0.42 J	ND	15.8	ND	
CARGMW1806		7/12/2005	ND	ND	ND	ND	ND	ND	11.0 J	NA	14.5 J	4,530	ND	ND	ND	ND	ND	1,680	ND	
CARGMW1807		11/8/2006	ND	ND	ND	ND	ND	ND	21.8	NA	22.3	7,140 ^a	ND	ND	ND	786	ND	1,420	ND	
CARGMW1808		2/13/2007	ND	ND	ND	ND	5.0 J	ND	9.9 J	NA	9.1 J	2,280 ^a	ND	ND	ND	211	ND	456	ND	
CARGMW1809		5/8/2007	ND	ND	ND	ND	3.6 J	ND	7.0	NA	7.4	1,790 ^a	ND	ND	ND	57.1	ND	776	ND	
CARGMW1810		8/22/2007	ND	ND	ND	ND	ND	ND	ND	NA	25.0 J	8,770	ND	ND	ND	ND	ND	2,530	ND	
CARHMW1810		8/22/2007	ND	ND	ND	ND	ND	ND	ND	NA	25.0 J	8,970	ND	ND	ND	ND	ND	2,610	ND	
ENSTHMPMW180609		6/29/2009	ND	ND	ND	ND	ND	ND	0.96 J	NA	1.3	221 ^a	ND	ND	ND	36.4	ND	4.8	ND	
CARGMW180610		6/30/2010	ND	ND	ND	ND	ND	ND	4.2	NA	7.5	789 ^a	ND	ND	ND	93.1	ND	71.4	ND	
CARGMW180611		6/28/2011	ND	ND	ND	ND	0.62 J	ND	4.9	NA	8.2	1,020 ^a	ND	ND	ND	73.4	ND	89.5	ND	
CARGMW180612		6/13/2012	ND	ND	ND	ND	3.4	ND	6.2	NA	10.2	1540 ^a	ND	ND	ND	194	ND	111.0	ND	
CARGMW180812		8/15/2012	ND	ND	ND	ND	3.3	ND	7.5	NA	6.2	1,560 ^a	ND	ND	ND	241	ND	368	ND	
CARGMW180613		6/12/2013	ND	ND	ND	ND	5.5 J	ND	4.8 J	NA	ND	770	7.3 J	ND	ND	250	ND	27	ND	
MW18WG062714		06/27/2014	ND	ND	ND	ND	9.8 J	ND	4.5 J	NA	2.9 J	300	6.5 J	ND	ND	370	ND	12	ND	
MW18WG061815		06/18/2015	33 JB	ND	ND	ND	14 J	ND	ND	ND	ND	180	ND	ND	ND	630	ND	ND	ND	

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Well Number	Sample Identification	Sample Date	Acetone	Benzene	Carbon disulfide	Chloro-form	1,1-DCA	1,2-DCA	1,1-DCE	Total 1,2-DCE	trans-1,2-DCE	cis-1,2-DCE	1,1,1-TCA	1,1,2-TCA	2-Hexanone	TCE	PCE	Vinyl Chloride	MTBE
			µg/L 50 G	µg/L 1	µg/L 50 G	µg/L 7	µg/L 5	µg/L 0.6	µg/L 0.7 G	µg/L N/A	µg/L 5	µg/L 5	µg/L 5	µg/L 1	µg/L N/A	µg/L 5	µg/L 5 G	µg/L 2	µg/L N/A
NYSDEC Standard																			
MW-19 <																			

G — New York State Guidance Value
ND — Not detected above method detection limits
NA — Not Analyzed
NS — Not Sampled as part of the Site-Wide Monitoring Plan
mg/L — milligrams per liter
µg/L — micrograms per liter
Detections highlighted in **BOLD**
J value indicates concentration is estimated and is below method detection limits.
a indicates diluted sample results.
E indicates concentration exceeds calibration range of the instrument.
* denotes that well has been abandoned



Groundwater Analytical Results - Detections Only (October 2013 to June 2015)
at Select Non-CO Locations
Carrier Corporation Thompson Road Facility
Syracuse, New York

Appendix F

NYSDEC Groundwater Screening Limit				Analyte Units	Acetone 50 ug/l	cis-1,2-Dichloroethene 5 ug/l	1,1,1-Trichloroethane 5 ug/l	1,1-Dichloroethane 5 ug/l	Trichloroethene 5 ug/l	TPH DRO (C10-C28) NE ug/l	TPH ORO (C28-C40) NE ug/l	Total PCBs 0.09* ug/l
Sample Location:	Sample ID:	Sample Date:	Sample Type:									
Former Building TR-1 Investigation												
MW23	MW23WG061915	6/19/2015	Normal		470 JB a	8500 a	190 J a	260 a	660 a	NA	NA	0.28 J a
MW23	MW23WG062614	6/26/2014	Normal		<220 U	8000 a	190 J a	270 a	660 a	NA	NA	0.091 a
MW23	TR1VMW23G20131023	10/23/2013	Normal		<220 U*	9600 a	110 J a	280 a	600 a	NA	NA	NA
MW24	MW24WG061915	6/19/2015	Normal		3.3 JB	55 a	<0.73 U	2.1	2.6	NA	NA	<0.11 U
MW24	MW24WG062614	6/26/2014	Normal		<220 U	6000 a	<44 U	140 J a	100 J a	NA	NA	<0.036 U
MW24	TR1VMW24G20131023	10/23/2013	Normal		<110 U*	4600 a	<22 U	130 a	81 J a	NA	NA	NA
MW26	MW26WG061815	6/18/2015	Normal		<0.94 U	0.81 J	1.5	1.4	5.9 a	NA	NA	<0.098 U
MW26	MW26WG062514	6/25/2014	Normal		<1.1 U	5	<0.22 U	2.5	7 a	NA	NA	0.039 J
MW26	CARMW26G20131024	10/24/2013	Normal		3.5 J	8.1 a	<0.22 U	4.2	22 a	NA	NA	NA
MW27	MW27WG061815	6/18/2015	Normal		8.4 JB	22 a	<1.5 U	13 a	58 a	NA	NA	<0.098 U
MW27	MW27WG062514	6/25/2014	Normal		<1.1 U	15 a	2	23 a	74 a	NA	NA	<0.039 U
MW27	CARMW27G20131024	10/24/2013	Normal		<1.8 U*	14 a	3.3	23 a	59 a	NA	NA	NA
MW28	MW28WG061815	6/18/2015	Normal		2.7 JB	29 a	<0.44 U	6.6 a	21 a	NA	NA	<0.1 U
MW28	MW28WG062514	6/25/2014	Normal		<2.2 U	59 a	1.6 J	15 a	78 a	NA	NA	0.061 B
MW28	CARMW28G20131023	10/23/2013	Normal		1.1 J	20 a	5.3 a	9.8 a	41 a	NA	NA	NA
MW29	MW29WG061915	6/19/2015	Normal		9.7 JB	19 a	<2.9 U	8.7 a	200 a	NA	NA	<0.095 U
MW29	MW29WG062514	6/25/2014	Normal		<5.5 U	27 a	1.8 J	12 a	390 a	NA	NA	<0.036 U
MW29	CARMW29G20131107	11/7/2013	Normal		<4.4 U	29 a	6 a	18 a	360 a	NA	NA	NA
MW30	MW30WG061815	6/18/2015	Normal		<16 U	83 a	<7.3 U	480 a	7.6 J a	NA	NA	<0.1 U
MW30	MW30WG062614	6/26/2014	Normal		2.4 J	7.8 a	<0.22 U	8.7 a	9.6 a	NA	NA	<0.036 U
MW30	CARMW30G20131107	11/7/2013	Normal		4 J	16 a	<0.22 U	15 a	12 a	NA	NA	NA
MW32	MW32WG061915	6/19/2015	Normal		11 JB	120 a	7.8 a	210 a	48 a	NA	NA	<0.11 U
MW32	MW32WG062514	6/25/2014	Normal		<5.5 U	110 a	13 a	190 a	42 a	NA	NA	<0.036 U
MW32	CARMW32G20131025	10/25/2013	Normal		8.2 J	150 a	33 a	220 a	40 a	NA	NA	NA
MW34	MW34WG061815	6/18/2015	Normal		23 JB	110 a	<7.3 U	590 a	14 J a	NA	NA	<0.095 U
MW34	MW34WG062614	6/26/2014	Normal		<1.1 U	3.3	<0.22 U	11 a	2.1	NA	NA	<0.036 U
MW34	CARMW34G20131024	10/24/2013	Normal		3.3 J	2.9	<0.22 U	17 a	1.7	NA	NA	NA
MW35D	MW35DWG061615	6/16/2015	Normal		<0.94 U	<0.26 U	<0.44 U	<0.3 U	<0.22 U	NA	NA	<0.095 U
MW35D	MW35DWG062614	6/26/2014	Normal		<1.1 U	<0.17 U	<0.22 U	<0.15 U	<0.17 U	NA	NA	<0.036 U
MW35D	CARMW35DG20131028	10/28/2013	Normal		2.5 J	<0.17 U*	<0.22 U*	<0.15 U*	<0.17 U*	NA	NA	NA
MW36	MW36WG062215	6/22/2015	Normal		1600 JB a	2400 a	<440 U	<300 U	35000 a	NA	NA	<0.096 U
MW36	MW36090314	9/4/2014	Normal		<6800 U	2400 a	<440 U	<520 U	40000 a	NA	NA	<0.042 U
MW36	CARMW36G20131108	11/8/2013	Normal		<550 U	980 a	<110 U	<75 U	47000 a	NA	NA	NA
MW36	CARMW36H20131108	11/8/2013	Field Duplicate		<550 U	900 a	<110 U	<75 U	45000 a	NA	NA	NA
MW37	MW37WG062215	6/22/2015	Normal		2500 JB a	1800 a	<730 U	<500 U	52000 a	NA	NA	<0.097 U
MW37	MW37WGDUPE062215	6/22/2015	Field Duplicate		2000 JB a	1700 a	<730 U	<500 U	51000 a	NA	NA	<0.096 U
MW37	MW37WG062614	6/26/2014	Normal		<2800 U	870 J a	<550 U	<380 U	68000 a	NA	NA	<0.036 U
MW37	CARMW37G20131024	10/24/2013	Normal		<920 U*	880 a	<180 U	<120 U	41000 a	NA	NA	NA
MW38	MW38WG061815	6/18/2015	Normal		2.7 JB	7.1 a	<0.44 U	<0.3 U	18 a	NA	NA	<0.095 U
MW38	MW38WG062614	6/26/2014	Normal		<1.1 U	1.1	<0.22 U	<0.15 U	7.6 a	NA	NA	0.2 a
MW38	CARMW38G20131030	10/30/2013	Normal		<1.1 U	10 a	<0.22 U	<0.15 U	29 a	NA	NA	NA
MW39	MW39WG061915	6/19/2015	Normal		3.7 JB	30 a	<1.1 U	1.1 J	83 a	NA	NA	<0.095 U
MW39	MW39WG062614	6/26/2014	Normal		<4.4 U	37 a	<0.88 U	<0.6 U	100 a	NA	NA	<0.036 U
MW39	CARMW39G20131024	10/24/2013	Normal		10 J	63 a	<1.1 U	<0.75 U	230 a	NA	NA	NA
MW40D	MW40DWG061615	6/16/2015	Normal		<0.94 U	<0.26 U	<0.44 U	<0.3 U	<0.22 U	NA	NA	<0.097 U
MW40D	MW40DWG062614	6/26/2014	Normal		<1.1 U	<0.17 U	<0.22 U	<0.15 U	<0.17 U	NA	NA	<0.036 U
MW40D	CARMW40DG20131030	10/30/2013	Normal		<1.1 U	<0.17 U	<0.22 U	<0.15 U	<0.17 U	NA	NA	NA

Groundwater Analytical Results - Detections Only (October 2013 to June 2015)
at Select Non-CO Locations
Carrier Corporation Thompson Road Facility
Syracuse, New York

Appendix F

Sample Location:	Sample ID:	Sample Date:	Sample Type:	NYSDEC Groundwater Screening Limit Units	Analyte	Acetone 50 ug/l	cis-1,2-Dichloroethene 5 ug/l	1,1,1-Trichloroethane 5 ug/l	1,1-Dichloroethane 5 ug/l	Trichloroethene 5 ug/l	TPH DRO (C10-C28) NE ug/l	TPH ORO (C28-C40) NE ug/l	Total PCBs 0.09* ug/l
Parking Lot R Investigation													
MW41D	MW41DWG	6/17/2015	Normal			<0.94 U	<0.26 U	<0.44 U	<0.3 U	<0.22 U	<190 U	<190 U	<0.095 U
MW41D	MW41DWG062414	6/24/2014	Normal			<1.1 U	<0.17 U	<0.22 U	<0.15 U	<0.17 U	NA	NA	<0.036 U
MW41D	CARMW41DG20131111	11/11/2013	Normal			<1.1 U	<0.17 U	<0.22 U	<0.15 U	<0.17 U	NA	NA	NA
MW42	MW42WVG	6/17/2015	Normal			<0.94 U	6.4 a	<0.44 U	1.4	7.5 a	<200 U	<200 U	<0.095 U
MW42	MW42WG062414	6/24/2014	Normal			1.1 J	0.7 J	<0.22 U	<0.15 U	0.59 J	NA	NA	<0.04 U
MW42	CARMW42G20131112	11/12/2013	Normal			<1.1 U	10 a	<0.22 U	1.2	9 a	NA	NA	NA
MW43	MW43WG062315	6/23/2015	Normal			0.96 JB	0.66 J	<0.44 U	<0.3 U	4.6	1500	700	<0.095 U
MW43	MW43WG062414	6/24/2014	Normal			<5.5 U	21 a	<1.1 U	<0.75 U	400 a	570	220 J	<0.036 U
MW43	CARMW43G20131112	11/12/2013	Normal			3.2 J	<0.17 U	<0.22 U	<0.15 U	5.7 a	NA	NA	NA
MW44	MW44WG062215	6/22/2015	Normal			1.1 JB	0.34 J	2.1	1.1	9.9 a	<190 U	<190 U	<0.096 U
MW44	MW44WG062414	6/24/2014	Normal			1.5 J	1.6	3.1	4	15 a	NA	NA	0.061
MW44	CARMW44G20131108	11/8/2013	Normal			4.6 J	1.1	2.7	2	11 a	NA	NA	NA
MW45	MW45WG062315	6/23/2015	Normal			5.6 JB	12 a	<1.5 U	<1 U	78 a	460 J	290 J	<0.096 U
MW45	MW45WG062414	6/24/2014	Normal			2.1 J	2.1	<0.22 U	<0.15 U	33 a	670 H	400 JH	<0.036 U
MW45	CARMW45G20131108	11/8/2013	Normal			3.4 J	20 a	<0.55 U	<0.38 U	190 a	NA	NA	NA
MW47	MW47WVG	6/17/2015	Normal			2.2 JB	<0.26 U	<0.44 U	<0.3 U	<0.22 U	2800	410 J	<0.11 U
MW47	MW47WG062314	6/23/2014	Normal			<1.1 U	<0.17 U	<0.22 U	<0.15 U	<0.17 U	1900	360 J	<0.036 U
MW47	CARMW47G20131112	11/12/2013	Normal			1.9 J	<0.17 U	<0.22 U	<0.15 U	<0.17 U	NA	NA	NA
MW48	MW48WG062315	6/23/2015	Normal			<9.4 U	230 a	<4.4 U	<3 U	97 a	720	460 J	<0.11 U
MW48	MW48WG062414	6/24/2014	Normal			<44 U	900 a	<8.8 U	<6 U	500 a	NA	NA	<0.036 U
MW48	CARMW48G20131113	11/13/2013	Normal			<11 U	290 a	<2.2 U	<1.5 U	690 a	NA	NA	NA
MW49	MW49WG062215	6/22/2015	Normal			1.4 JB	1.7	<0.44 U	3.6	2	1000	<190 U	<0.096 U
MW49	MW49WG062414	6/24/2014	Normal			<1.1 U	1.5	0.73 J	3.6	2.3	NA	NA	<0.072 U
MW49	CARMW49G20131112	11/12/2013	Normal			1.3 J	2.6	0.68 J	2.5	0.95 J	NA	NA	NA
MW50	MW50WVG	6/17/2015	Normal			1.5 JB	<0.26 U	<0.44 U	<0.3 U	<0.22 U	1200	350 J	<0.098 U
MW50	MW50WG062314	6/23/2014	Normal			<1.1 U	<0.17 U	<0.22 U	<0.15 U	0.18 J	NA	NA	<0.036 U
MW50	CARMW50G20131111	11/11/2013	Normal			1.6 J	<0.17 U	<0.22 U	0.49 J	0.38 J	NA	NA	NA

Groundwater Analytical Results - Detections Only (October 2013 to June 2015)
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Carrier Corporation Thompson Road Facility
Syracuse, New York

Appendix F

NYSDEC Groundwater Screening Limit				Analyte Units	Acetone 50 ug/l	cis-1,2-Dichloroethene 5 ug/l	1,1,1-Trichloroethane 5 ug/l	1,1-Dichloroethane 5 ug/l	Trichloroethene 5 ug/l	TPH DRO (C10-C28) NE ug/l	TPH ORO (C28-C40) NE ug/l	Total PCBs 0.09* ug/l
Sample Location:	Sample ID:	Sample Date:	Sample Type:									
MH3 Oil Source Investigation												
MW51	MW51WG062315	6/23/2015	Normal		5.3 JB	56 a	5.9 a	9.1 a	83 a	250 J	220 J	<0.095 U
MW51	MW51WG120814	12/8/2014	Normal		<5.7 U	33 a	4.8	5.7 a	38 a	140 J	<100 U	<0.095 U
MW51	MW51WG062014	6/20/2014	Normal		<1.4 U	50 a	5.9 a	8.9 a	77 a	<100 U	<100 U	<0.038 U
MW51	CARMW51G0514	5/30/2014	Normal		<2.8 U	52 a	5.6 a	9.1 a	85 a	NA	NA	<0.095 U
MW52	MW52WG062315	6/23/2015	Normal		19 JB	130 a	<4.9 U	<3.3 U	18 a	3200	830	<0.099 U
MW52	MW52WG120814	12/8/2014	Normal		<98 U	670 a	<6.3 U	<7.4 U	14 J a	3700	360 J	<0.096 U
MW52	MW52WG062014	6/20/2014	Normal		<37 U	1300 a	<7.3 U	<5 U	<5.7 U	3100	730	<0.038 U
MW52	CARMW52G0514	5/30/2014	Normal		<22 U	280 a	<4.4 U	<3 U	670 a	NA	NA	<0.095 U
MW53	MW53WG061915	6/19/2015	Normal		<190 U	3900 a	<88 U	<60 U	200 a	590	260 J	<0.095 U
MW53	MW53WG120514	12/5/2014	Normal		<68 U	1400 a	<4.4 U	<5.2 U	10 J a	2100	430 J	<0.096 U
MW53	MW53WG062014	6/20/2014	Normal		<460 U	7100 a	<92 U	<63 U	<71 U	1100	520	<0.038 U
MW54	MW54WG063015	6/30/2015	Normal		<0.94 U	<0.26 U	<0.44 U	0.31 J	<0.22 U	NA	NA	NA
PLR002	PLR002WG062315	6/23/2015	Normal		39 JB	120 a	<15 U	25 J a	760 a	<230 U	<230 U	<0.099 U
PLR002	PLR002WG062414	6/24/2014	Normal		<44 U	100 a	<8.8 U	23 J a	2000 a	NA	NA	<0.037 U
PLR002	CARPLR00220131113	11/13/2013	Normal		65 J a	81 a	<11 U	37 J a	2600 a	NA	NA	NA
PLR056	PLR056WG062315	6/23/2015	Normal		4.4 JB	77 a	<0.88 U	0.88 J	89 a	NA	NA	NA
PLR056	PLR056WG111214	11/12/2014	Normal		<140 U	800 a	<8.8 U	<10 U	1200 a	490 J	240 J	<0.044 U
PLR056	PLR056WG062014	6/20/2014	Normal		<4.4 U	150 a	<0.88 U	1.1 J	310 a	NA	NA	NA
PLR057	PLR057WG	6/17/2015	Normal		3.2 JB	<0.26 U	<0.44 U	0.38 J	<0.22 U	NA	NA	NA
PLR057	PLR057WG111114	11/11/2014	Normal		<3.4 U	0.66 J	<0.22 U	<0.26 U	1.4	660	150 J	<0.1 U
PLR057	PLR057WG062014	6/20/2014	Normal		1.7 J	0.26 J	<0.22 U	0.19 J	0.59 J	450 J	190 J	<0.038 U
PLR057	PLR057G0514	5/30/2014	Normal		7.4 J	0.24 J	<0.22 U	0.18 J	0.49 J	NA	NA	<0.095 U
PLR058	PLR058WG111214	11/12/2014	Normal		20	0.98 J	<0.22 U	1.5	2	22000	2700 J	0.11 a
PLR058	PLR058WG061914	6/19/2014	Normal		23	<0.17 U	0.25 J	2.9	<0.17 U	31000	12000	<0.1 U
PLR058	PLR058G0514	5/30/2014	Normal		12 J	<1.7 U	<2.2 U	3.4 J	<1.7 U	NA	NA	<0.095 U
PLR058	PLR058WG062215	6/22/2015	Normal		9.1 JB	0.44 J	<0.44 U	2.3	<0.22 U	NA	NA	NA
PLR058	PLR058WGDUPE062215	6/22/2015	Field Duplicate		7.2 JB	0.98 J	<0.44 U	1.7	0.27 J	NA	NA	NA
PLR060	PLR060WG062215	6/22/2015	Normal		1.9 JB	4.4	<0.44 U	<0.3 U	30 a	NA	NA	NA
PLR060	PLR060WGDUPE062215	6/22/2015	Field Duplicate		<4.7 U	59 a	<2.2 U	<1.5 U	280 E a	NA	NA	NA
PLR060	PLR060WG120914	12/9/2014	Normal		<3.4 U	1.3	<0.22 U	<0.26 U	6.7 a	650	280 J	<0.096 U
PLR060	PLR060WG062014	6/20/2014	Normal		3.2 J	0.59 J	<0.22 U	<0.15 U	16 a	280 J	240 J	<0.038 U
PLR060	PLR060G0514	5/30/2014	Normal		16	1.7	<0.22 U	<0.15 U	17 a	NA	NA	<0.095 U
PLR061	PLR061WG062315	6/23/2015	Normal		<0.94 U	34 a	<0.44 U	<0.3 U	38 a	NA	NA	NA
PLR061	PLR061WG120914	12/9/2014	Normal		<170 U	500 a	<11 U	<13 U	1200 a	850	270 J	<0.095 U
PLR061	PLR061WG062014	6/20/2014	Normal		<1400 U	17000 a	<280 U	<190 U	64000 a	570	210 J	<0.044 U
PLR061	PLR061G0514	5/29/2014	Normal		<2800 U	13000 a	<550 U	<380 U	56000 a	NA	NA	<0.099 U

**Groundwater Analytical Results - Detections Only (October 2013 to June 2015)
at Select Non-CO Locations
Carrier Corporation Thompson Road Facility
Syracuse, New York**

Appendix F

Sample Location:	Sample ID:	Sample Date:	Sample Type:	Analyte NYSDEC Groundwater Screening Limit Units	Acetone 50 ug/l	cis-1,2-Dichloroethene 5 ug/l	1,1,1-Trichloroethane 5 ug/l	1,1-Dichloroethane 5 ug/l	Trichloroethene 5 ug/l	TPH DRO (C10-C28) NE ug/l	TPH ORO (C28-C40) NE ug/l	Total PCBs 0.09* ug/l
Former Building TR-3 North Wall Investigation												
MW54D	MW54DWG063015	6/30/2015	Normal	<0.94 U	<0.26 U	<0.44 U	<0.3 U	<0.22 U	NA	NA	NA	NA
MW54D	MW54DWG062615	6/26/2015	Normal	NA	NA	NA	NA	NA	<200 U	<200 U	<200 U	<0.1 U
MW54D	MW54DWG111414	11/14/2014	Normal	<3.4 U	<0.2 U	<0.22 U	<0.26 U	<0.15 U	<100 U	<100 U	<100 U	<0.1 U
MW55	MW55WG061815	6/18/2015	Normal	1.8 JB	6.3 a	<0.44 U	<0.3 U	0.31 J	610	190 J	190 J	<0.095 U
MW55	MW55WG120514	12/5/2014	Normal	<14 U	260 a	<0.88 U	<1 U	3.2 J	1100	330 J	330 J	<0.096 U
MW56	MW56WG061915	6/19/2015	Normal	160 JB a	2900 a	<44 U	<30 U	<22 U	560	300 J	300 J	<0.095 U
MW56	MW56WG120514	12/5/2014	Normal	<340 U	7800 a	<22 U	<26 U	110 a	1000	180 J	180 J	<0.095 U
MW57	MW57WG061815	6/18/2015	Normal	<0.94 U	6.4 a	<0.44 U	<0.3 U	0.55 J	860	270 J	270 J	<0.095 U
MW57	MW57WG120514	12/5/2014	Normal	<3.4 U	23 a	<0.22 U	<0.26 U	0.74 J	2000	570	570	<0.095 U
MW58	MW58WG061915	6/19/2015	Normal	<24 U	740 a	<11 U	<7.5 U	98 a	<200 U	<200 U	<200 U	<0.095 U
MW58	MW58WGDUPE061915	6/19/2015	Field Duplicate	30 JB	920 a	<11 U	<7.5 U	150 a	<190 U	<190 U	<190 U	<0.095 U
MW58	MW58WG120414	12/4/2014	Normal	<98 U	570 a	<6.3 U	<7.4 U	300 a	220 J	100 J	100 J	<0.095 U
MW59	MW59WG	6/17/2015	Normal	<0.94 U	0.27 J	<0.44 U	<0.3 U	<0.22 U	<190 U	<190 U	<190 U	<0.095 U
MW59	MW59WG120214	12/2/2014	Normal	11	<0.2 U	<0.22 U	<0.26 U	<0.15 U	<110 U	<110 U	<110 U	<0.095 U
MW60	MW60WG061815	6/18/2015	Normal	<24 U	630 a	<11 U	<7.5 U	210 a	<190 U	<190 U	<190 U	<0.097 U
MW60	MW60WGDUPE	6/18/2015	Field Duplicate	<24 U	630 a	<11 U	<7.5 U	220 a	<190 U	<190 U	<190 U	<0.096 U
MW60	MW60WG120914	12/9/2014	Normal	<170 U	910 a	<11 U	<13 U	590 a	<100 U	<100 U	<100 U	<0.096 U
MW61	MW61WG061815	6/18/2015	Normal	<0.94 U	4.1	<0.44 U	<0.3 U	12 a	NA	NA	NA	NA
MW61	MW61WG120914	12/9/2014	Normal	<34 U	76 a	<2.2 U	<2.6 U	210 a	1200	220 J	220 J	<0.095 U
MW62	MW62WG061915	6/19/2015	Normal	<0.94 U	2.8	<0.44 U	<0.3 U	0.28 J	NA	NA	NA	NA
MW62	MW62WG120914	12/9/2014	Normal	<3.4 U	1.7	<0.22 U	<0.26 U	3.8	2500	270 J	270 J	<0.096 U
MW65	MW65WG061815	6/18/2015	Normal	<0.94 U	15 a	<0.44 U	<0.3 U	11 a	<200 U	<200 U	<200 U	<0.097 U
MW65	MW65WG120414	12/4/2014	Normal	<3.4 U	11 a	<0.22 U	<0.26 U	10 a	400 J	210 J	210 J	<0.099 U
MW66	MW66WG061815	6/18/2015	Normal	<3.8 U	140 a	<1.8 U	<1.2 U	20 a	<200 U	<200 U	<200 U	<0.098 U
MW66	MW66WG120414	12/4/2014	Normal	<11 U	77 a	<0.73 U	<0.87 U	69 a	<100 U	<100 U	<100 U	<0.095 U
MW67	MW67WG	6/17/2015	Normal	1.2 JB	<0.26 U	<0.44 U	<0.3 U	<0.22 U	<190 U	<190 U	<190 U	<0.095 U
MW67	MW67WG120214	12/2/2014	Normal	<3.4 U	<0.2 U	<0.22 U	<0.26 U	0.2 J	360 J	<100 U	<100 U	<0.095 U
MW68	MW68WG	6/17/2015	Normal	6.1 JB	<0.26 U	<0.44 U	<0.3 U	<0.22 U	<200 U	<200 U	<200 U	<0.099 U
MW68	MW68WG120214	12/2/2014	Normal	<3.4 U	<0.2 U	<0.22 U	<0.26 U	<0.15 U	160 J	<100 U	<100 U	<0.095 U

µg/L = micrograms per liter.

U = Non-detect. If highlighted, detection limit exceeds screening limit.

NA = Sample not analyzed for analyte.

Bold = Concentration is greater than method detection limit.

a = Concentration exceeds December 2006 NYSDEC 6 NYCRR Part 703 Surface Water and Groundwater Quality

Standards and Groundwater Effluent Limitations.

Highlighted cell indicates exceedance of standard.

J = Result is less than the method reporting limit but greater than method detection limit.

B = Analyte was detected in both the sample and the blank sample.

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		AR-MW-01	AR-MW-02	AR-MW-02	AR-MW-03	AR-MW-04
Sample ID		AR-MW01	AR-MW02	AR-MW-02	AR-MW03	AR-MW04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/18/16	04/18/16	11/13/17	04/18/16	04/18/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,1-Dichloroethene	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,4-Dioxane	UG/L	NA	NA	20.0 U	NA	NA
Acetone	UG/L	10 UR	10 UR	1.88 J	10 UR	10 UR
Benzene	UG/L	0.5 U	0.5 U	1.00 U	0.5 U	0.5 U
Chloroform	UG/L	1 U	1 U	1.00 U	1 U	1 U
Ethylbenzene	UG/L	1 U	1 U	1.00 U	1 U	1 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 UR	10 UR	2.00 U	10 UR	10 UR
Methyl tert-butyl ether	UG/L	NA	NA	1.00 U	NA	NA
Tetrachloroethene	UG/L	1 U	1 U	1.00 U	1 U	1 U
Toluene	UG/L	1 U	1 U	1.00 U	1 U	1 U
Trichloroethene	UG/L	1 U	1 U	1.00 U	1 U	1 U
Vinyl chloride	UG/L	1 U	1 U	1.00 U	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	3.00 U	1 U	1 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.16 U	0.16 U	NA	0.16 U	0.16 U

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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[MATRIX] = 'WG' and [LOGDATE] >= #1/12/2016# AND [LOCID] <> 'DRUM COMPOSITE' AND [LOCID] <> 'TR3-HZW' AND ([PRCODE] = 'VOA' OR [PRCODE] = 'PCB' OR [PRCODE] = 'DPCB')

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		AR-MW-05	AR-MW-06	AR-MW-06	AR-SB-02	AR-SB-04
Sample ID		AR-MW05	AR-MW06	AR-MW-06	AR-SB02	AR-SB04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/18/16	04/18/16	11/13/17	04/18/16	04/18/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,1-Dichloroethane	UG/L	1 U	0.98 J	1.00 U	1 U	1 U
1,1-Dichloroethene	UG/L	1 U	1.6	1.00 U	1 U	1 U
1,2-Dichloroethene (cis)	UG/L	1 U	393	6.78	1 U	0.52 J
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1.00 U	1 U	1 U
1,4-Dioxane	UG/L	NA	NA	20.0 U	NA	NA
Acetone	UG/L	10 UR	10 UR	1.65 J	10 UR	10 UR
Benzene	UG/L	0.5 U	0.5 U	1.00 U	0.5 U	0.5 U
Chloroform	UG/L	1 U	1 U	1.00 U	1 U	1 U
Ethylbenzene	UG/L	1 U	1 U	1.00 U	1 U	1 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 UR	10 UR	2.00 U	10 UR	10 UR
Methyl tert-butyl ether	UG/L	NA	NA	1.00 U	NA	NA
Tetrachloroethene	UG/L	1 U	0.61 J	1.00 U	1 U	1 U
Toluene	UG/L	1 U	6.4	1.00 U	1 U	1 U
Trichloroethene	UG/L	1 U	91.0	4.75	1 U	1 U
Vinyl chloride	UG/L	1 U	16.0	0.50 J	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	3.00 U	1 U	1 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	NA	0.16 U	NA	0.16 U	0.063 J

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Only Detected Results Reported.

Detection Limits shown are PQL

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[MATRIX] = 'WG' and [LOGDATE] >= #1/12/2016# AND [LOCID] <> 'DRUM COMPOSITE' AND [LOCID] <> 'TR3-HZW' AND ([PRCODE] = 'VOA' OR [PRCODE] = 'PCB' OR [PRCODE] = 'DPCB')

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		DP-MW-01	DP-MW-02	DP-MW-03	DP-MW-04	DP-MW-04
Sample ID		DP-MW01	DP-MW02	DP-MW03	DP-MW04	DP-MW-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/18/16	04/18/16	04/18/16	04/18/16	11/14/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 UJ	1 UJ	1 UJ	1 UJ	1.00 U
1,1-Dichloroethane	UG/L	1 U	1 U	1 U	1 U	1.00 U
1,1-Dichloroethene	UG/L	1 U	1 U	1 U	1 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	0.34 J	1 U	1 U	1 U	1.00 U
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1 U	1 U	1.00 U
1,4-Dioxane	UG/L	NA	NA	NA	NA	20.0 U
Acetone	UG/L	10 U	10 U	10 U	3.2 J	10.0 U
Benzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	1.00 U
Chloroform	UG/L	1 U	1 U	1 U	1 U	1.00 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U	10 U	10 U	10 U	2.00 U
Methyl tert-butyl ether	UG/L	NA	NA	NA	NA	1.00 U
Tetrachloroethene	UG/L	1 U	1 U	1 U	1 U	1.00 U
Toluene	UG/L	1 U	1 U	1 U	1 U	1.00 U
Trichloroethene	UG/L	1 U	1 U	1 U	1 U	1.00 U
Vinyl chloride	UG/L	1 UJ	1 UJ	1 UJ	1 UJ	1.00 U
Xylene (total)	UG/L	1 U	1 U	1 U	1 U	3.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.16 U	0.14 U	0.25 U	0.28 U	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		DP-MW-05	DP-MW-05	MW-03D	MW-03S	MW-08
Sample ID		DP-FD-041816	DP-MW05	MW-03D	MW-03S	MW-08
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/18/16	04/18/16	11/09/17	11/09/17	02/08/17
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 U
1,1-Dichloroethane	UG/L	1 U	1 U	0.34 J	20.4	1.00 U
1,1-Dichloroethene	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	1 U	1 U	9.78	729	1.00 U
1,2-Dichloroethene (trans)	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 U
1,4-Dioxane	UG/L	NA	NA	20.0 U	200 U	20.0 U
Acetone	UG/L	10 UR	10 UR	10.0 U	100 U	10.0 UJ
Benzene	UG/L	0.5 U	0.5 U	1.00 U	10.0 U	1.00 U
Chloroform	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 U
Ethylbenzene	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U	10 U	2.00 U	20.0 U	2.00 U
Methyl tert-butyl ether	UG/L	NA	NA	1.00 U	10.0 U	1.00 U
Tetrachloroethene	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 UJ
Toluene	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 U
Trichloroethene	UG/L	1 U	1 U	1.00 U	10.0 U	1.00 UJ
Vinyl chloride	UG/L	1 UJ	1 UJ	1.00 U	55.3	1.00 U
Xylene (total)	UG/L	1 U	1 U	3.00 U	30.0 U	1.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.26 U	0.25 U	NA	NA	0.256 U

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-09	MW-10	MW-14	MW-17	MW-18
Sample ID		MW-09	MW-10	MW-14	MW-17	MW-18
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/10/17	11/09/17	11/13/17	11/10/17	11/13/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.05	1.00 U	1.00 U	1.00 U	100 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	51.0 J
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	100 U
1,2-Dichloroethene (cis)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	6,640
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	38.0 J
1,4-Dioxane	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	2,000 U
Acetone	UG/L	10.0 UR	10.0 UR	1.43 J	10.0 UR	1,000 U
Benzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	100 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	100 U
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	100 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 UR	2.00 UR	2.00 U	2.00 UR	200 U
Methyl tert-butyl ether	UG/L	1.00 U	0.31 J	1.00 U	0.33 J	100 U
Tetrachloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	100 U
Toluene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	100 U
Trichloroethene	UG/L	2.84	1.00 U	1.00 U	1.00 U	3,950
Vinyl chloride	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1,840
Xylene (total)	UG/L	3.00 U	3.00 U	3.00 U	3.00 U	300 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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[MATRIX] = 'WG' and [LOGDATE] >= #1/12/2016# AND [LOCID] <> 'DRUM COMPOSITE' AND [LOCID] <> 'TR3-HZW' AND ([PRCODE] = 'VOA' OR [PRCODE] = 'PCB' OR [PRCODE] = 'DPCB')

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-19	MW-21	MW-23	MW-23	MW-26
Sample ID		MW-19	MW-21	FD-110917	MW-23	MW-26
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/09/17	11/10/17	11/09/17	11/09/17	11/09/17
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	79.0 J	97.0 J	1.17
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	271	261	0.52 J
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	100 U	100 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	1.00 U	1.04	5,970	4,020	1.00 U
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	100 U	100 U	1.00 U
1,4-Dioxane	UG/L	20.0 U	20.0 U	2,000 U	2,000 U	20.0 U
Acetone	UG/L	10.0 UR	10.0 UR	1,000 UR	1,000 UR	10.0 U
Benzene	UG/L	1.00 U	1.00 U	100 U	100 U	1.00 U
Chloroform	UG/L	1.00 U	1.00 U	100 U	100 U	1.00 U
Ethylbenzene	UG/L	1.00 U	1.00 U	100 U	50.0 J	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 UR	2.00 UR	200 UR	200 UR	2.00 U
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	100 U	100 U	1.00 U
Tetrachloroethene	UG/L	1.00 U	1.00 U	100 U	100 U	1.13
Toluene	UG/L	1.00 U	1.00 U	81.0 J	87.0 J	1.00 U
Trichloroethene	UG/L	1.25	5.23	491	318	8.17
Vinyl chloride	UG/L	1.00 U	1.00 U	233	227	1.00 U
Xylene (total)	UG/L	3.00 U	3.00 U	300 U	300 U	3.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.208 U	NA	0.220 U	0.220 U	0.206 U

Flags assigned during chemistry validation are shown.

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[MATRIX] = 'WG' and [LOGDATE] >= #1/12/2016# AND [LOCID] <> 'DRUM COMPOSITE' AND [LOCID] <> 'TR3-HZW' AND ([PRCCODE] = 'VOA' OR [PRCCODE] = 'PCB' OR [PRCCODE] = 'DPCB')

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-38	MW-44	MW-45	MW-48	MW-50
Sample ID		MW-38	MW-44	MW-45	MW-48	MW-50
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/09/17	11/10/17	11/14/17	11/13/17	11/13/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.41	5.00 U	1.00 U	1.00 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	5.00 U	0.96 J	1.00 U
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	8.12	1.00 U	26.2	5.12	1.00 U
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	6.05	0.45 J	1.00 U
1,4-Dioxane	UG/L	20.0 U	20.0 U	100 U	20.0 U	20.0 U
Acetone	UG/L	10.0 UR	10.0 UR	5.00 U	0.88 J	10.0 U
Benzene	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Chloroform	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Ethylbenzene	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 UR	2.00 UR	10.0 U	2.00 U	2.00 U
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Tetrachloroethene	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Toluene	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Trichloroethene	UG/L	21.0	4.99	226	10.7	1.00 U
Vinyl chloride	UG/L	1.00 U	1.00 U	5.00 U	1.00 U	1.00 U
Xylene (total)	UG/L	3.00 U	3.00 U	15.0 U	3.00 U	3.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.217 U	0.200 U	NA	NA	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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[MATRIX] = 'WG' and [LOGDATE] >= #1/12/2016# AND [LOCID] <> 'DRUM COMPOSITE' AND [LOCID] <> 'TR3-HZW' AND ([PRCODE] = 'VOA' OR [PRCODE] = 'PCB' OR [PRCODE] = 'DPCB')

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-57	MW-58	MW-66	MW-69	MW-69
Sample ID		MW-57	MW-58	MW-66	MW-69	MW-69
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/13/17	11/13/17	11/13/17	02/01/17	11/10/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	1.00 U	26.5 J,D,GS	26.6
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
1,2-Dichloroethene (cis)	UG/L	88.3	26.5	185 D	287 D,GS1	86.6
1,2-Dichloroethene (trans)	UG/L	0.45 J	0.44 J	1.65	18.5 D,J,GS	11.0
1,4-Dioxane	UG/L	20.0 U	20.0 U	20.0 U	1,000 U	400 U
Acetone	UG/L	10.0 U	10.0 U	10.0 U	500 U	200 UR
Benzene	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 U	2.00 U	2.00 U	100 U	40.0 UR
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
Tetrachloroethene	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
Toluene	UG/L	1.00 U	1.00 U	1.00 U	50.0 U	20.0 U
Trichloroethene	UG/L	1.77	5.03	1.00 U	3,170 D,GS1	1,060
Vinyl chloride	UG/L	37.5	8.20	21.4	99.0 D,GS1	42.6
Xylene (total)	UG/L	3.00 U	3.00 U	3.00 U	50.0 U	60.0 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	NA	NA	NA	0.476 U	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-70	MW-70	MW-71	MW-71	MW-71
Sample ID		MW-70	MW-70	Dup-1	MW-71	MW-71
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/08/17	11/10/17	02/02/17	02/02/17	11/09/17
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	1.00 U	1.00 U	29.0	31.4	67.7
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	1.91	1.85	4.05
1,4-Dioxane	UG/L	20.0 U	16.2 J	13.3 J	20.0 U	20.0 U
Acetone	UG/L	10.0 UJ	10.0 UR	10.0 UJ	10.0 UJ	1.60 J
Benzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 U	2.00 UR	2.00 U	2.00 U	2.00 U
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	UG/L	1.00 UJ	1.00 U	1.00 UJ	1.00 UJ	1.00 U
Toluene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	UG/L	1.00 UJ	1.00 U	37.2	40.1	89.3 D
Vinyl chloride	UG/L	1.00 U	1.00 U	3.01	3.54	8.79
Xylene (total)	UG/L	1.00 U	3.00 U	1.00 U	1.00 U	3.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.253 U	NA	0.476 U	0.444 U	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-72	MW-73	MW-74	MW-75	MW-75
Sample ID		MW-72	MW-73	MW-74	MW-75	MW-75
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/01/17	02/01/17	02/01/17	02/02/17	11/10/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	1.12	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dioxane	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Acetone	UG/L	10.0 U	10.0 U	10.0 U	10.0 UJ	10.0 UR
Benzene	UG/L	0.29 J	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	0.51 J
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 U	2.00 U	2.00 U	2.00 U	2.00 UR
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 UJ	1.00 U
Toluene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	UG/L	1.93	1.00 U	1.00 U	1.15	0.96 J
Vinyl chloride	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Xylene (total)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	3.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.444 U	0.476 U	0.541 U	0.500 U	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-76	MW-76	MW-77	MW-77	MW-78
Sample ID		MW-76	MW-76	MW-77	MW-77	MW-78
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/02/17	11/10/17	02/07/17	11/10/17	02/07/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dioxane	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Acetone	UG/L	10.0 UJ	1.97 J	10.0 UJ	10.0 UR	10.0 UJ
Benzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 U	2.00 U	2.00 U	2.00 UR	2.00 U
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	UG/L	1.00 UJ	1.00 U	1.00 UJ	1.00 U	1.00 UJ
Toluene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	UG/L	1.00 U	1.00 U	1.00 UJ	1.00 U	1.00 UJ
Vinyl chloride	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Xylene (total)	UG/L	1.00 U	3.00 U	1.00 U	3.00 U	1.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.476 U	NA	0.253 U	NA	0.263 U

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-79	MW-79	MW-80	MW-81	MW-82
Sample ID		MW-79	MW-79	MW-80	MW-81	MW-82
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/15/17	11/13/17	02/15/17	02/08/17	02/07/17
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (cis)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethene (trans)	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dioxane	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Acetone	UG/L	10.0 UJ	10.0 U	10.0 UJ	10.0 UJ	10.0 UJ
Benzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	UG/L	1.00 UJ	1.00 U	1.00 UJ	1.00 UJ	1.00 UJ
Toluene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 UJ	1.00 UJ
Vinyl chloride	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Xylene (total)	UG/L	1.00 U	3.00 U	1.00 U	1.00 U	1.00 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.206 U	NA	0.233 U	0.211 U	0.286 U

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		MW-83	MW-84	MW-84	MW-84	TR3-GB-03
Sample ID		MW-83	MW-84	FD-111017	MW-84	TR3-GB-03
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/07/17	02/01/17	11/10/17	11/10/17	04/19/16
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U
1,1-Dichloroethane	UG/L	0.51 J	1.00 U	1.00 U	1.00 U	1.0 U
1,1-Dichloroethene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.00 U	1.99	0.57 J	0.78 J	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.00 U	4.22	1.11	1.41	1.0 U
1,4-Dioxane	UG/L	20.0 U	20.0 U	20.0 U	20.0 U	NA
Acetone	UG/L	10.0 UJ	10.0 U	10.0 UR	10.0 UR	10 UR
Benzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	0.5 U
Chloroform	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U
Ethylbenzene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	2.00 U	2.00 U	2.00 UR	2.00 UR	10 UR
Methyl tert-butyl ether	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	NA
Tetrachloroethene	UG/L	1.00 UJ	2.99	2.43	3.30	1.0 U
Toluene	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.0 U
Trichloroethene	UG/L	1.00 UJ	46.4	6.41	8.26	0.71 J
Vinyl chloride	UG/L	1.00 U	1.00 U	1.00 U	1.00 U	1.0 UJ
Xylene (total)	UG/L	1.00 U	1.00 U	3.00 U	3.00 U	1.0 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.250 U	0.426 U	NA	NA	0.16 U

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		TR3-MW-01	TR3-MW-02	TR3-MW-02	TR3-PW-01	TR3-PW-01
Sample ID		TR3-MW01	TR3-MW02	TR3-MW-02	TR3-PW1	FD-111317
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		04/18/16	04/18/16	11/13/17	04/18/16	11/13/17
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	1.00 U	1.0 U	2,000 U
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	1.00 U	1.9	2,000 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.00 U	136	2,000 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.00 U	12,500 DJ	24,700
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.00 U	47.6	2,000 U
1,4-Dioxane	UG/L	NA	NA	20.0 U	NA	40,000 U
Acetone	UG/L	10 UR	10 UJ	8.58 J	18.8 J	20,000 U
Benzene	UG/L	0.5 U	0.5 U	1.00 U	0.5 U	2,000 U
Chloroform	UG/L	1.0 U	1.0 U	1.00 U	1.0 U	2,000 U
Ethylbenzene	UG/L	1.0 U	1.0 U	1.00 U	1.0 U	2,000 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 UR	10 UR	1.25 J	10 UR	4,000 U
Methyl tert-butyl ether	UG/L	NA	NA	1.00 U	NA	2,000 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.00 U	77.6	2,000 U
Toluene	UG/L	1.0 U	1.0 U	1.00 U	2.1	2,000 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.00 U	195,000 DJ	134,000
Vinyl chloride	UG/L	1.0 UJ	1.3 J	1.00 U	107 J	2,000 U
Xylene (total)	UG/L	1.0 U	1.0 U	3.00 U	1.0	6,000 U
Polychlorinated Biphenyls						
Aroclor 1254	UG/L	0.16 U	0.16 U	NA	0.16 U	NA

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

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GROUNDWATER ANALYTICAL RESULTS - DETECTIONS ONLY
APRIL 2016 TO NOVEMBER 2017
UTC/CARRIER THOMPSON ROAD SITE
SYRACUSE, NEW YORK

Location ID		TR3-PW-01	TR3-PW-02
Sample ID		TR3-PW-01	TR3-PW-02
Matrix		Groundwater	Groundwater
Depth Interval (ft)		-	-
Date Sampled		11/13/17	04/19/16
Parameter	Units		
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/L	2,000 U	1.0 U
1,1-Dichloroethane	UG/L	2,000 U	1.0 U
1,1-Dichloroethene	UG/L	2,000 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	24,300 D	1.0 U
1,2-Dichloroethene (trans)	UG/L	2,000 U	1.0 U
1,4-Dioxane	UG/L	40,000 U	NA
Acetone	UG/L	20,000 U	10 UJ
Benzene	UG/L	2,000 U	0.5 U
Chloroform	UG/L	2,000 U	1.0 U
Ethylbenzene	UG/L	2,000 U	1.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	4,000 U	10 UR
Methyl tert-butyl ether	UG/L	2,000 U	NA
Tetrachloroethene	UG/L	2,000 U	1.0 U
Toluene	UG/L	2,000 U	1.0 U
Trichloroethene	UG/L	137,000 D	2.0
Vinyl chloride	UG/L	2,000 U	1.0 UJ
Xylene (total)	UG/L	6,000 U	1.0 U
Polychlorinated Biphenyls			
Aroclor 1254	UG/L	NA	0.16 U

Flags assigned during chemistry validation are shown.

Only Detected Results Reported.

Detection Limits shown are PQL

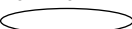
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID			AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-101618
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/18	10/18/18	10/16/18	10/16/18	10/16/18
Parameter	Units	Criteria*					Field Duplicate (1-1)
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	1.1 U
1,1,2-Trichloroethane	UG/L	1	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U
1,1-Dichloroethane	UG/L	5	0.57 U	0.57 U	0.57 U	0.57 U	23.4
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	6.0
1,2-Dichloroethane	UG/L	0.6	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U
1,2-Dichloroethene (cis)	UG/L	5	0.51 U	7.4	0.51 U	7.0	863 D
1,2-Dichloroethene (trans)	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	1.5 J
Benzene	UG/L	1	0.43 U	0.43 U	0.43 U	0.43 U	0.85 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	1.5 U
Ethylbenzene	UG/L	5	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U
Isopropylbenzene (Cumene)	UG/L	5	0.65 U	0.65 U	0.65 U	0.65 U	1.3 U
Tetrachloroethene	UG/L	5	0.90 U	0.90 U	0.90 U	0.90 U	1.8 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U
Trichloroethene	UG/L	5	0.53 U	6.5	0.53 U	0.53 U	2.9
Trichlorofluoromethane	UG/L	5	0.84 UJ	0.84 U	0.84 UJ	0.84 UJ	1.7 U
Vinyl chloride	UG/L	2	0.79 U	0.79 U	0.79 U	0.79 U	47.6
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	1.2 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	0.0447 U	NA	0.0447 U	0.0447 U	2.48
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	2.4	NA	1.8 J	0.27 U	0.99
Perfluorobutanoic acid (PFBA)	NG/L	-	10 J	NA	7.3 J	1.8 U	3.4 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are MDL

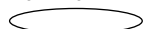
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	MW-03S
Sample ID			AR-MW-02	AR-MW-06	DP-MW-04	MW-03D	FD-101618
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/18	10/18/18	10/16/18	10/16/18	10/16/18
Parameter	Units	Criteria*					Field Duplicate (1-1)
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	1.4 J	NA	0.36 U	0.36 U	0.37 U
Perfluoroheptanoic acid (PFHpA)	NG/L	-	3.4	NA	1.4	0.36 U	0.63 J
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	6.3	NA	1.1 J	0.36 U	0.40 J
Perfluorohexanoic acid (PFHxA)	NG/L	-	2.7	NA	1.4 J	0.36 U	1.4 J
Perfluorononanoic acid (PFNA)	NG/L	-	1.5 J	NA	0.70 J	0.36 U	0.37 U
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	33	NA	13	0.36 U	1.1 J
Perfluorooctanoic acid (PFOA)	NG/L	-	24	NA	6.1	0.27 U	2.0
Perfluoropentanoic acid (PFPA)	NG/L	-	2.3 J	NA	1.8 U	1.8 U	2.3 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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Advanced Selection: AMK-TEMP

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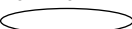
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-03S	MW-09	MW-10	MW-14	MW-14D
Sample ID			MW-03S	MW-09	MW-10	MW-14	MW-14D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/18	10/15/18	10/16/18	10/19/18	10/19/18
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.1 U	1.0	0.54 U	0.54 U	NA
1,1,2-Trichloroethane	UG/L	1	1.1 U	0.53 U	0.53 U	0.53 U	NA
1,1-Dichloroethane	UG/L	5	23.2	0.62 J	0.57 U	0.57 U	NA
1,1-Dichloroethene	UG/L	5	6.3	0.59 U	0.59 U	0.59 U	NA
1,2-Dichloroethane	UG/L	0.6	1.2 U	0.60 U	0.60 U	0.60 U	NA
1,2-Dichloroethene (cis)	UG/L	5	805 D	0.51 U	0.51 U	0.51 U	NA
1,2-Dichloroethene (trans)	UG/L	5	1.5 J	0.54 U	0.54 U	0.54 U	NA
Benzene	UG/L	1	0.85 U	0.43 U	0.43 U	0.43 U	NA
Chloroethane	UG/L	5	1.5 U	0.73 U	0.73 U	0.73 U	NA
Ethylbenzene	UG/L	5	1.2 U	0.60 U	0.60 U	0.60 U	NA
Isopropylbenzene (Cumene)	UG/L	5	1.3 U	0.65 U	0.65 U	0.65 U	NA
Tetrachloroethene	UG/L	5	1.8 U	0.90 U	0.90 U	0.90 U	NA
Toluene	UG/L	5	1.1 U	0.53 U	0.53 U	0.53 U	NA
Trichloroethene	UG/L	5	2.7	2.9	0.53 U	0.53 U	NA
Trichlorofluoromethane	UG/L	5	1.7 U	0.84 UJ	0.84 UJ	0.84 U	NA
Vinyl chloride	UG/L	2	46.1	0.79 U	0.79 U	0.79 U	NA
Xylene (total)	UG/L	5	1.2 U	0.59 U	0.59 U	0.59 U	NA
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	2.58	NA	0.0447 U	1.63	0.171 J
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	1.1	NA	0.27 U	0.31 J	2.0
Perfluorobutanoic acid (PFBA)	NG/L	-	3.2 J	NA	1.8 U	3.5 J	4.8 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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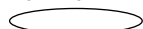
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-03S	MW-09	MW-10	MW-14	MW-14D
Sample ID			MW-03S	MW-09	MW-10	MW-14	MW-14D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/18	10/15/18	10/16/18	10/19/18	10/19/18
Parameter	Units	Criteria*					
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	0.37 U	NA	0.36 U	0.38 U	0.36 U
Perfluoroheptanoic acid (PFHpA)	NG/L	-	0.64 J	NA	0.36 U	0.38 U	1.2
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	0.37 U	NA	0.36 U	0.38 U	3.5
Perfluorohexanoic acid (PFHxA)	NG/L	-	0.37 U	NA	0.36 U	0.59 J	2.6
Perfluorononanoic acid (PFNA)	NG/L	-	0.37 U	NA	0.36 U	0.38 U	0.36 U
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	1.0 J	NA	0.36 U	0.38 U	1.3 J
Perfluorooctanoic acid (PFOA)	NG/L	-	2.1	NA	0.27 U	1.9	3.1
Perfluoropentanoic acid (PFPA)	NG/L	-	1.8 U	NA	1.8 U	2.2 J	3.7 J

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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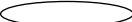
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-17	MW-18	MW-19	MW-21	MW-23
Sample ID			MW-17	MW-18	MW-19	MW-21	MW-23
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/18	10/19/18	10/17/18	10/17/18	10/17/18
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	27 U	0.54 U	0.54 U	79.9
1,1,2-Trichloroethane	UG/L	1	0.53 U	27 U	0.53 U	0.53 U	0.72 J
1,1-Dichloroethane	UG/L	5	0.57 U	39.4 J	0.57 U	0.57 U	228 D
1,1-Dichloroethene	UG/L	5	0.59 U	62.2	0.59 U	0.59 U	23.7
1,2-Dichloroethane	UG/L	0.6	0.60 U	30 U	0.60 U	0.60 U	0.72 J
1,2-Dichloroethene (cis)	UG/L	5	0.51 U	13,100 D	0.51 U	0.54 J	3,250 D
1,2-Dichloroethene (trans)	UG/L	5	0.54 U	54.7	0.54 U	0.54 U	19.2
Benzene	UG/L	1	0.43 U	21 U	0.43 U	0.43 U	1.5
Chloroethane	UG/L	5	0.73 U	36 U	0.73 U	0.73 U	11.8
Ethylbenzene	UG/L	5	0.60 U	30 U	0.60 U	0.60 U	17.8
Isopropylbenzene (Cumene)	UG/L	5	0.65 U	32 U	0.65 U	0.65 U	2.0
Tetrachloroethene	UG/L	5	0.90 U	45 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	5	0.53 U	27 U	0.53 U	0.53 U	48.3
Trichloroethene	UG/L	5	0.53 U	6,980	1.1	0.57 J	168 D
Trichlorofluoromethane	UG/L	5	0.84 UJ	42 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	0.79 U	1,830	0.79 U	0.79 U	221 D
Xylene (total)	UG/L	5	0.59 U	30 U	0.59 U	0.59 U	16.4
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	0.0447 U	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	0.27 U	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	2.9 J	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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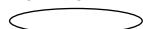
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-17	MW-18	MW-19	MW-21	MW-23
Sample ID			MW-17	MW-18	MW-19	MW-21	MW-23
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/16/18	10/19/18	10/17/18	10/17/18	10/17/18
Parameter	Units	Criteria*					
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	0.36 U	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	0.36 U	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	0.36 U	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	0.36 U	NA	NA	NA	NA
Perfluorononanoic acid (PFNA)	NG/L	-	0.36 U	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	0.36 U	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	0.27 U	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	1.8 U	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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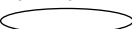
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-26	MW-38	MW-44	MW-44	MW-45
Sample ID			MW-26	MW-38	FD-101818	MW-44	MW-45
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/18	10/17/18	10/18/18	10/18/18	10/18/18
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.1	0.54 U	1.0	0.99 J	0.54 U
1,1,2-Trichloroethane	UG/L	1	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	5	0.57 U	0.57 U	1.1	1.1	0.57 U
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
1,2-Dichloroethane	UG/L	0.6	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	5	0.51 U	11.5	1.3	1.4	12.5
1,2-Dichloroethene (trans)	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	3.0
Benzene	UG/L	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Ethylbenzene	UG/L	5	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	5	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tetrachloroethene	UG/L	5	1.2	0.90 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	9.0	17.0	6.3	6.3	119
Trichlorofluoromethane	UG/L	5	0.84 U	3.1	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.90 J	0.94 J	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-26	MW-38	MW-44	MW-44	MW-45
Sample ID			MW-26	MW-38	FD-101818	MW-44	MW-45
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/17/18	10/17/18	10/18/18	10/18/18	10/18/18
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorononanoic acid (PFNA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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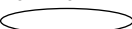
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-48	MW-50	MW-57	MW-58	MW-66
Sample ID			MW-48	MW-50	MW-57	MW-58	MW-66
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/18/18	10/19/18	10/19/18	10/18/18	10/18/18
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2-Trichloroethane	UG/L	1	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	5	1.2	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	1.7	0.59 U	0.70 J
1,2-Dichloroethane	UG/L	0.6	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	5	10.5	0.56 J	164 D	25.9	233 D
1,2-Dichloroethene (trans)	UG/L	5	0.79 J	0.54 U	1.6	0.54 U	1.3
Benzene	UG/L	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Ethylbenzene	UG/L	5	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	5	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tetrachloroethene	UG/L	5	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	16.1	0.70 J	2.2	3.3	16.1
Trichlorofluoromethane	UG/L	5	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	2	0.79 U	0.79 U	115	1.9	6.3
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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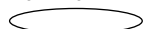
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-48	MW-50	MW-57	MW-58	MW-66
Sample ID			MW-48	MW-50	MW-57	MW-58	MW-66
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/18/18	10/19/18	10/19/18	10/18/18	10/18/18
Parameter	Units	Criteria*					
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorononanoic acid (PFNA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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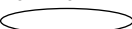
[MATRIX] = 'WG' AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND ([PRCODE] <> 'PCB' AND [PRCODE] <> 'DPCI'

TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-69	MW-70	MW-71	MW-75	MW-76
Sample ID			MW-69	MW-70	MW-71	MW-75	MW-76
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/18	10/16/18	10/16/18	10/15/18	10/15/18
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	2.7 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2-Trichloroethane	UG/L	1	2.7 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	5	49.2	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	9.6	0.59 U	0.73 J	0.59 U	0.59 U
1,2-Dichloroethane	UG/L	0.6	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	5	358	0.51 U	73.9	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	13.8	0.54 U	4.8	0.54 U	0.54 U
Benzene	UG/L	1	2.1 U	0.43 U	0.43 U	0.43 U	0.43 U
Chloroethane	UG/L	5	3.6 U	0.73 U	0.73 U	0.73 U	0.73 U
Ethylbenzene	UG/L	5	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	5	3.2 U	0.65 U	0.65 U	0.65 U	0.65 U
Tetrachloroethene	UG/L	5	5.6	0.90 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	5	2.7 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	2,480 D	0.53 U	123	0.72 J	0.53 U
Trichlorofluoromethane	UG/L	5	4.2 U	0.84 UJ	1.6 J	0.84 UJ	0.84 UJ
Vinyl chloride	UG/L	2	37.6	0.79 U	8.9	0.79 U	0.79 U
Xylene (total)	UG/L	5	3.0 U	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	8.67	9.53	NA	NA
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	NA	0.28 U	0.28 J	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	NA	1.8 U	2.5 J	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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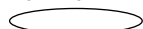
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-69	MW-70	MW-71	MW-75	MW-76
Sample ID			MW-69	MW-70	MW-71	MW-75	MW-76
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/18	10/16/18	10/16/18	10/15/18	10/15/18
Parameter	Units	Criteria*					
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	NA	0.37 U	0.37 U	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	NA	0.37 U	0.37 U	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	NA	0.37 U	0.37 U	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	NA	0.43 J	0.39 J	NA	NA
Perfluorononanoic acid (PFNA)	NG/L	-	NA	0.37 U	0.37 U	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	NA	0.37 U	0.37 U	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	NA	0.28 U	0.71 J	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	NA	1.8 U	1.8 U	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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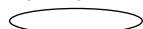
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-77	MW-79	MW-84	MW-84	TR3-MW-02
Sample ID			MW-77	MW-79	FD-101518	MW-84	TR3-MW-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/18	10/18/18	10/15/18	10/15/18	10/18/18
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2-Trichloroethane	UG/L	1	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	5	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
1,2-Dichloroethane	UG/L	0.6	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	5	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	5	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Benzene	UG/L	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Chloroethane	UG/L	5	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Ethylbenzene	UG/L	5	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	5	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tetrachloroethene	UG/L	5	0.90 U	0.90 U	3.7	3.5	0.90 U
Toluene	UG/L	5	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	5	0.53 U	0.53 U	0.84 J	0.81 J	0.53 U
Trichlorofluoromethane	UG/L	5	0.84 UJ	0.84 U	0.84 UJ	0.84 UJ	0.84 U
Vinyl chloride	UG/L	2	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Xylene (total)	UG/L	5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Semivolatile Organic Compounds							
1,4-Dioxane	UG/L	-	NA	NA	NA	NA	NA
Per- and Polyfluoroalkyl Substances							
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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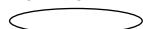
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			MW-77	MW-79	MW-84	MW-84	TR3-MW-02
Sample ID			MW-77	MW-79	FD-101518	MW-84	TR3-MW-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/15/18	10/18/18	10/15/18	10/15/18	10/18/18
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Per- and Polyfluoroalkyl Substances							
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorononanoic acid (PFNA)	NG/L	-	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	NA	NA	NA	NA	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	NA	NA	NA	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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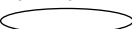
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			TR3-PW-01
Sample ID			TR3-PW-01
Matrix			Groundwater
Depth Interval (ft)			-
Date Sampled			10/19/18
Parameter	Units	Criteria*	
Volatile Organic Compounds			
1,1,1-Trichloroethane	UG/L	5	110 U
1,1,2-Trichloroethane	UG/L	1	110 U
1,1-Dichloroethane	UG/L	5	110 U
1,1-Dichloroethene	UG/L	5	120 U
1,2-Dichloroethane	UG/L	0.6	120 U
1,2-Dichloroethene (cis)	UG/L	5	14,000
1,2-Dichloroethene (trans)	UG/L	5	110 U
Benzene	UG/L	1	85 U
Chloroethane	UG/L	5	150 U
Ethylbenzene	UG/L	5	120 U
Isopropylbenzene (Cumene)	UG/L	5	130 U
Tetrachloroethene	UG/L	5	180 U
Toluene	UG/L	5	110 U
Trichloroethene	UG/L	5	94,500 D
Trichlorofluoromethane	UG/L	5	170 U
Vinyl chloride	UG/L	2	220
Xylene (total)	UG/L	5	120 U
Semivolatile Organic Compounds			
1,4-Dioxane	UG/L	-	NA
Per- and Polyfluoroalkyl Substances			
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	NA
Perfluorobutanoic acid (PFBA)	NG/L	-	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda. Class GA.

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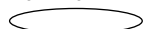
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TABLE 3
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
GROUNDWATER ANALYTICAL RESULTS-OCTOBER 2018

Location ID			TR3-PW-01
Sample ID			TR3-PW-01
Matrix			Groundwater
Depth Interval (ft)			-
Date Sampled			10/19/18
Parameter	Units	Criteria*	
Per- and Polyfluoroalkyl Substances			
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	-	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	-	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	NA
Perfluorohexanoic acid (PFHxA)	NG/L	-	NA
Perfluorononanoic acid (PFNA)	NG/L	-	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	NA
Perfluorooctanoic acid (PFOA)	NG/L	-	NA
Perfluoropentanoic acid (PFPA)	NG/L	-	NA

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