AECOM
1600 Perimeter Park Drive Suite 400
Morrisville, NC 27560

919-461-1194 tel

February 19, 2019

Mr. Harry D. Warner, P.E.
Regional Hazardous Waste Remediation Engineer
NYSDEC Region 7
Division of Environmental Remediation
615 Erie Blvd. West
Syracuse, New York 13204-2400

Subject: **Carrier Corporation, Thompson Road Facility, Syracuse, New York**
Corrective Action Order — Index CO 7-20051118-4
Site Registry No.: 734043
2018 Annual Site-Wide Groundwater Monitoring Report

Dear Mr. Warner:

On behalf of United Technologies Corporation (UTC), AECOM Technical Services, Inc. (AECOM) is hereby submitting the attached 2018 Annual Site-Wide Groundwater Monitoring Report.

Please call if you have any questions (919.461.1194).

Sincerely,



Peter Hollatz
Project Manager

Peter.Hollatz@aecom.com

cc: Michael Belveg, NYSDEC
Julia M. Kenney, NYSDOH (hard copy)
Maureen Schuck, NYSDOH
John Wolski, UTC
Kathleen McFadden, UTC
Joe Basile, Carrier Corporation

ANNUAL SITE-WIDE GROUNDWATER MONITORING 2018

United Technologies Corporation/Carrier Site
Thompson Road, Syracuse, NY

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

Project Number: 60589143

February 2019

Prepared for:
United Technologies Corporation

9 Farm Springs Road
Farmington, Connecticut 06032

Prepared by:
AECOM Technical Services, Inc.
257 West Genesee Street
Buffalo, New York 14202aecom.com

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1. Introduction

United Technologies Corporation (UTC) is performing environmental remediation activities at the Carrier Thompson Road Facility (Site) in Syracuse, Onondaga County, New York (**Figure 1**). UTC 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 have been installed as part of additional investigation activities and interim remedial measures. 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 remedial 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 November 2017. The findings were reported in the Annual Site-wide Groundwater Monitoring 2017 Report (AECOM March 2018). Groundwater monitoring and sampling was performed in October 2018 in accordance with the Annual SWGMP. This report presents the procedures and findings of the October 2018 sampling event.

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 Corporation (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 to13 ft.

Lower Water-Bearing Zone

- Clayey silt to silt ranging in thickness from 6 ft to10 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 terminate in the lower water-bearing zone and the remainder are in the upper water-bearing zone. The piezometers all terminate 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 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 Area of Concern (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.

2.5 Emerging Contaminants

In a letter dated March 13, 2018, NYSDEC requested emerging contaminants (1,4-dioxane and per-and polyfluoroalkyl substances [PFAS]) groundwater sampling at the Site using NYSDEC guidance documents. AECOM prepared and submitted an Emerging Contaminants Groundwater Sampling Work Plan (Work Plan) and submitted it on September 25, 2018. The work plan provided rationale for the 10 wells selected to be sampled for emerging

contaminants (DP-MW-04, AR-MW-02, MW-10, MW-3S, MW-3D, MW-14, MW-14D, MW-17, MW-70, and MW-71). NYSDEC approved the Work Plan in a letter dated September 27, 2018.

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.

The following wells were identified as in need of maintenance in 2017 or 2018 and the maintenance was completed as noted:

Monitoring Well/Piezometer	Status
AR-SB-02	Converted to a flush-mount well and installed road box on November 9, 2018
B001-05	Road box sunken, creating trip hazard, replaced road box November 9, 2018
B001-06	Riser too high to fit j-plug inside box. Cut riser to facilitate j-plug installation on November 9, 2018
B001-13	Road box and casing are loose. Repaired November 9, 2018
MW-03D	Replaced lock November 9, 2018
MW-03S	Replaced lock November 9, 2018
MW-06	Missing J-plug and 4" Royer Cap. Repaired November 9, 2018

Monitoring Well/Piezometer	Status
MW-09	Replaced lock November 9, 2018
MW-14	Raised concrete pad. Repaired October 17, 2018
MW-14D	Raised concrete pad. Repaired October 17, 2018
MW-19	Missing bolts. Repaired October 23, 2018
MW-18	Bolts stripped. Repaired October 23, 2018
MW-41D	Two broken ears. Repaired November 19, 2018
MW-47	One bolt missing. Repaired October 23, 2018
MW-54D	Concrete cracked. Repaired November 9, 2018
MW-55	Road box and concrete dislodged, and riser bent due to proximity to sheet pile wall at TR-3 North Wall. Repaired November 9, 2018
MW-56	Road box loose, ground has settled in vicinity. Repaired November 9, 2018
MW-57	Concrete cracked, riser slightly leaning. Repaired November 9, 2018
MW-62	Bolts stripped. Repaired October 23, 2018
SSIPZ04	Replaced 1-inch j-plug November 9, 2018
TR3-GB-03	Lid missing, needs new road box. Repaired November 9, 2018

3.2 Water Level Monitoring

On October 11 and 12, 2018, water levels were measured from 90 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), and SSIPZ05 (unable to locate). 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 October 2018 was, on average, 0.97 ft lower than the previous monitoring event in November 2017.

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 2018 the height of the mound is lower than in 2017 as would be expected when overall water elevations are lower. 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 DCDZ02, 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 7 monitoring wells in this area. Overall, the water levels in this area reflect groundwater flow to the north although at MW-71 localized flow is to the southwest.

- 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 not observed in 2017 when fewer wells were used to characterize groundwater flow.

- 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 2018 as in 2017 with only minor changes in thickness (with the exception of a large decrease in thickness in SSIPZ04). LNAPL was not observed at any new locations indicating that the LNAPL has not migrated (SSIPZ02 has had historical detections of LNAPL).

Monitoring Point	2017 LNAPL Thickness (Ft)	2018 LNAPL Thickness (Ft)
DCDPZ01	0.62	0.75
DCDPZ04	0.22	0.18
MW-25	2.90	2.01
MW-31	0.01	0.24
MW-33	Sheen	0.07
MW-46	0.01	0.20
PLR001	0.27	.01
SSIPZ02	Not detected	Sheen
SSIPZ04	3.02	0.02

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 Eurofins Spectrum Analytical Inc. (Eurofins), a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory located in Agawam, MA. 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 emerging contaminants (1,4-dioxane and PFAS) . Samples scheduled for PCB analyses were filtered in the field. Copies of the Field Purge Logs are included in **Appendix A**.

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 32 locations were submitted to Eurofins for analysis of VOCs with five locations also analyzed for PCBs (filtered and unfiltered). Ten locations were analyzed for emerging contaminants (1,4-dioxane and PFAS). Three duplicate samples and one matrix spike/matrix spike duplicate (MS/MSD) pair 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. Additionally, two duplicates, one MS/MSD, one field blank, and one equipment blank were submitted for analysis of 1-4-dioxane and PFAS.

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 B**.

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, Figure 6, and Figure 7.** 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 19 of the 32 samples.
- Sixteen 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 16 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-dichlorethane (1,1-DCA) , 1,1-dichlorethene (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 5.6 micrograms per liter (µg/L) PCE to 94,500 µg/L TCE.
  - TCE concentrations were highest at locations MW-18, MW-69, and TR3-PW-01 where concentrations ranged from 2,480 to 94,500 µg/L. The highest concentration occurred at TR3-PW-01. Concentrations ranged from below detection limits to 168 µg/L at the other wells.
  - Cis-1,2-DCE concentrations were highest at locations MW-18, MW-23, and TR3-PW-01. Concentrations ranged from 3,250 to 14,000 µg/L. The highest concentration occurred at TR3-PW-01. Concentrations ranged from below detection limits to 863 µg/L at the other wells.
  - The highest concentrations of 1,1-DCE, trans-1,2-DCE, and VC occurred in MW-18 at detected concentrations of 62.2, 54.7, and 1,830 µg/L, respectively.
  - The highest concentrations of chloroethane, 1,1,1-TCA, and 1,1-DCA occurred in well MW-23 at detected concentrations of 11.8, 79.9, and 228 µg/L, respectively.

  - Water quality measurements recorded at the time of sample collection (see purge logs in **Appendix A**) 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 benzene, ethylbenzene, toluene, and xylene, which were only detected in well MW-23.
- Emerging Contaminants
  - The Environmental Protection Agency (EPA) health advisory drinking water level is 0.070 µg/L for the combined concentrations of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). There are no potable wells on the Site and based on a January 2019 EDR Radius Map™ Report (see **Appendix C**) search there are no potable wells within 1-mile of the Site.
  - One or more PFAS were detected in five of the ten wells sampled. Concentrations were below the EPA drinking water health advisory levels for PFOS and PFOA. AR-MW-02 had the highest concentrations detected at 33 nanograms per liter (ng/L) and 24 ng/L for PFOS and PFOA, respectively.
  - 1,4-dioxane was detected in four of the ten wells sampled at concentrations ranging from 1.63 µg/L to 9.53 µg/L. The highest concentration occurred at MW-71 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 (123 µg/L), cis-1,2-DCE (73.9 µg/L) and VC (8.9 µg/L). The groundwater criteria for cis-1,2,-DCE and VC are 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 2018. This is consistent with results from 2016 and 2017.
- AR-MW-06 is located upgradient of the groundwater mound near the former A&R building. This well has historically had concentrations of cis-1,2-DCE, toluene, TCE, and VC at concentrations exceeding groundwater criteria in 2016. However, in 2018 only cis-1,2-DCE and TCE was present at a concentration exceeding the groundwater criteria. In 2018, concentrations were very similar to those in 2017, although the concentration of TCE rose very slightly (from 4.75 to 6.5 µg/L), slightly exceeding the 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 MW-19, MW-23, MW-26, and MW-38 were analyzed for PCBs.

- PCBs have historically been detected in wells MW-23, MW-26, and MW-38. No PCBs were detected in these wells in October 2018.
- 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 October 2018 sampling event were consistent, albeit somewhat lower than the results from November 2017. The highest concentrations of benzene, chloroethane, 1,1,1-TCA, 1,1-DCA, ethylbenzene, toluene, and xylene detected during the October 2018 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 the only VOC detected in October 2018 at a concentration above the groundwater criteria (9 µg/L). This was consistent with the November 2017 event when TCE, at 8.17 µg/L, was the only VOC detected at a concentration above the criteria.
- Monitoring well MW-38 is located on the northwest, downgradient side of former Building TR-1. The October 2018 results show that cis-1,2-DCE and TCE were detected at concentrations slightly above their respective groundwater criteria. These results were consistent with the November 2017 sampling event.

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 October 2018 were higher than those measured in 2017, but were within the historical range of detections. See **Appendix D** for historic sampling results. The increase of VOC concentrations in MW-18 is likely attributable to the installation of the sheet pile wall and subsequent groundwater pumping in the area.

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 and to 94,500 µg/L in October 2018. While these concentrations are approximately 8 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 decreasing trend in 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 2018 results from these wells again showed limited impacts. MW-50 reported no detectable VOCs. MW-57 reported cis-1,2-DCE,(164 µg/L) and VC (115 µg/L) above the groundwater criteria and slightly higher than measured in 2017. 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, and 2017. However, in 2017, the first sampling event following the installation of the sheet pile wall and horizontal well, TCE decreased by an order of magnitude in MW-58 and decreased to below the groundwater criteria at MW-66. In October 2018 TCE decreased below the groundwater criteria in MW-58 and was present at 16.1 µg/L in well MW-66. The 2017 and 2018 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. These wells were previously sampled in 2013, 2014, 2015, and 2017. During those sampling events, both wells contained TCE at concentrations above the groundwater criteria with the exception of MW-44 where TCE was detected slightly below the criteria at 4.99 µg/L. In addition, MW-45 contained cis-1,2-DCE at concentrations above the criteria in three of the four events. In October 2018, TCE again exceeded the groundwater criteria in both wells and cis-1,2-DCE exceeded the groundwater criteria in MW-45. Overall, concentrations in both wells were generally consistent with the historical results. PCBs, which had been detected once in MW-44 (0.61 µg/L in 2014), were not detected in October 2018.

Monitoring well MW-48 is located on the south side of the SWTP in an area where elevated VOCs have historically been detected. VOCs were significantly lower during the November 2017 and October 2018 events when compared to the historical data. For example, TCE concentrations were 690-, 500-, 97-, 10.7-, and 16.1-µg/L in 2013, 2014, 2015, 2017, and 2018, respectively.

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 729 µg/L from 2014 to 2017. In 2018 the cis-1,2-DCE concentration was 863 µg/L. The October 2018 detections of 1,1-DCA and VC were generally consistent with the 2014, 2015, and 2017 results. The detection of cis-1,2-DCE, at 7 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 standards in samples collected in February and November 2017. The October 2018 results were slightly higher than November 2017 concentrations but lower than the February 2017 data (e.g., TCE was 3,170-, 1,060-, and 2,480-µg/L in February 2017, November 2017, and October 2018, respectively).
- 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 February 2017, November 2017, or October 2018 sampling events.
- Monitoring well MW-75 is located between buildings TR-5 and TR-19. No compounds were detected at concentrations exceeding groundwater criteria during the February 2017, November 2017, or October 2018 sampling events.
- Monitoring well MW-84 is located between buildings TR-4 and TR-5. Following well installation, TCE was detected at a concentration of 46.4 µg/L in February 2017. The TCE concentration then decreased 8.26 µg/L in November 2017 and was not detected in the well in October 2018.

5.7 Emerging Contaminants

Detections of the emerging contaminants were limited and below EPA drinking water health advisory level for PFOA and PFOS. PFOA and PFOS were detected at the upgradient property well (DP-MW-04) as well as the downgradient wells. Detections of 1,4-dioxane were consistent with historical data at MW-70 and MW-71.

6. Summary and Recommendations

Monitoring and sampling was performed in October 2018 in accordance with the Annual SWGMP. Necessary well repairs noted in 2017 and during this year's inspection were completed in October and November 2018. A location and elevation survey was conducted for any repaired wells and for the B-series piezometers located along and near Telergy Parkway.

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 second 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 October 2018 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 2017. 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 2018 sample purge log was reviewed and found to exhibit evidence of strongly reducing conditions (low DO and ORP) and very low permeability (over 6.5 feet of drawdown when purging at only 120 to 150 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 2018 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.

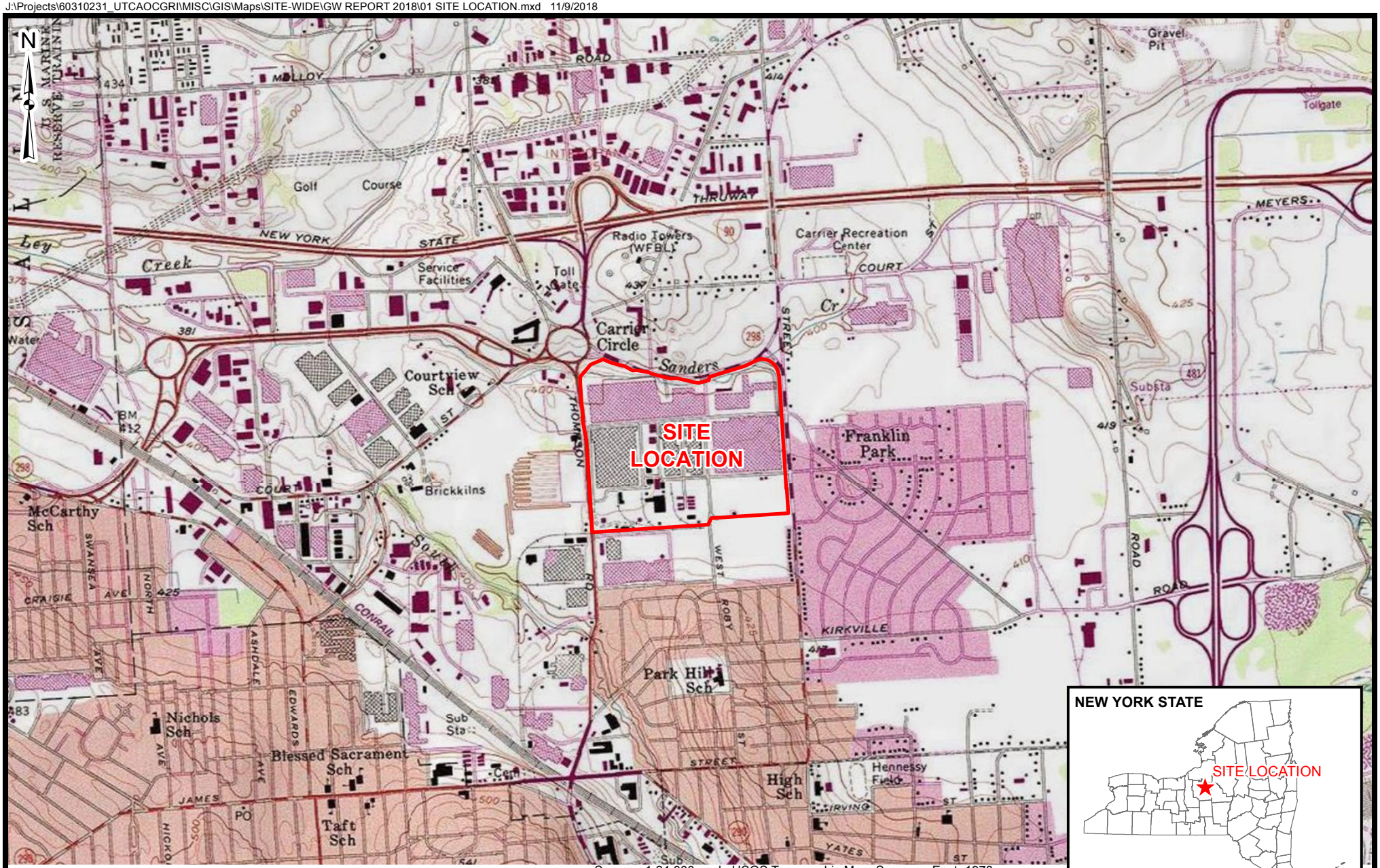
With the potential exception of well MW-71, the groundwater data demonstrate that contaminants are not migrating off-Site. However, installation of a new monitoring well downgradient of MW-71 will be installed consistent with methods/procedures used in the installation of MW-71. A brief letter work plan 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 emerging contaminants were detected in four of the 10 wells for 1,4-dioxane and five of the 10 wells for PFAS. It is noteworthy that PFAS was detected in one of the Site up-gradient wells (DP-MW-04). Given that all the detected PFOA and PFOS concentrations are well below the EPA drinking water health advisory level and no portable wells are on-Site or in the vicinity of the Site, no further sampling for PFAS is recommended. 1,4-dioxane has been sampled for at the Site historically and will continue at the selected 10 wells with the lower method detection limit.

The next Annual SWGMP event is tentatively scheduled for September 2019.

Figures

J:\Projects\60310231_UTCAOCGRI\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\01 SITE LOCATION.mxd 11/9/2018



Source: 1:24,000-scale USGS Topographic Map, Syracuse East, 1978

AECOM

SITE-WIDE GROUNDWATER MONITORING
UTC/CARRIER THOMPSON ROAD SITE
SITE LOCATION

FIGURE 1

N

SANDERS CREEK

CARRIER PKWY

FIRST ST

THOMPSON RD

KINNE ST

VERIZON SERVICE RD

MW-05R MW-80 MW-17 MW-21 MW-65 MW-42 MW-14D MW-14 MW-68 MW-67 MW-58 MW-66 MW-57 MW-43 MW-56 TR3-MW-01 MW-55 MW-54D MW-79 MW-53 PLR061 MW-59 TR3-MW-02 MW-18 MW-11 MW-60 SWTP TR3-PW-02 TR-3 PLR060 MW-52 MW-50 MW-62 MW-51 TR3-GB-03 TR3-PW-01 MW-48 B00107 MW-61 PLR056 MW-47 MW-46 MW-54 B00109 PLR058 B00108 PLR057 B00103 B00102 MW-45 B00101 B00104 MW-20 B00110 MW-41D PLR002 B00105 B00106 PLR001 MW-44 MW-70 MW-49 TR-2 A&R AR-SB-04 AR-SB-02 AR-MW-01 AR-MW-02 AR-MW-03 AR-MW-04 AR-MW-06 AR-MW-05

MW-10 MW-40D MW-38 MW-06 FDPZ02 FDPZ04 MW-37 FDPZ01 FDPZ03 MW-73 MW-19 MW-36 MW-39 MW-23 MW-24 MW-35D MW-31 DCDPZ04 DCDPZ02 MW-33 MW-34 DCDPZ01 DCDPZ03 MW-32 MW-30 MW-26 SSIPZ04 SSIPZ03 MW-28 MW-29 SSIPZ02 SSIPZ01 MW-25 MW-27 SSIPZ05 TR-1 MW-71

TR-18 TR-18S TR-4 TR-5 B00116 B00115 B00114 B00113 B00111 B00112 MW-03S MW-03D MW-13D2 MW-22D TR-6 MW-69 TR-7 TR-7A TR-6A MW-74 TR-21 TR-21A TR-11 MW-72 TR-10 TR-8 MW-09 TR-13 TR-23 TR-10A TR-12 TR-14 MW-16D

MW-81 MW-83 MW-82 MW-78 TR-19 TR-20 MW-77 MW-75 MW-84 MW-08 MW-76

DP-MW-01 DP-MW-02 FORMER DEBRIS PILE AREA DP-MW-04 DP-MW-05 DP-MW-03

Legend

- Monitoring Well
- Piezometer
- Pump Well
- Building

300 0 300 Feet

SITE-WIDE GROUNDWATER MONITORING
UTC/CARRIER THOMPSON ROAD SITE
SITE-WIDE GROUNDWATER NETWORK

AECOM

FIGURE 2

J:\Projects\60310231_UTCAOCGRI\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\02 SITE-WIDE GW NETWORK.mxd 11/9/2018

N

SEE FIGURE 4

SANDERS CREEK

CARRIER PKWY

THOMPSON RD

KINNE ST

MW-05R, 393.94
MW-17, 388.87
MW-21, 391.28
MW-42, 389.92
MW-66, 390.44
TR3-MW-02, 393.15
MW-58, 392.45
MW-57, 394.70
MW-43, 394.81
TR3-PW-01, 394.83
AR-SB-04, NM
AR-SB-02, 391.81
MW-68, 389.62
MW-79, 392.37
MW-14, 392.95
MW-18, 393.64
TR3-PW-02, 394.50
MW-50, 394.56
MW-47, 396.11
MW-48, 394.54
MW-62, 395.37
AR-MW-03, 396.03
AR-MW-01, 395.82
AR-MW-02, 396.08
B00107, 394.99
MW-46, 398.08, 0.20
B00109, 395.68
B00108, NM
B00103, 398.16
B00104, 394.39
MW-45, 397.83
MW-49, 396.47
MW-70, 395.24
B00110, 396.25
MW-44, 398.17
MW-20, NM
AR-MW-06, 395.27
AR-MW-04, 395.64
B00106, 401.03
PLR001, 399.64, 0.10
AR-MW-05, 396.05
B00105, 394.43
MW-82, 395.70
MW-78, 395.22
MW-10, 394.25
MW-81, 398.07
MW-83, 399.07
MW-73, 395.20
MW-38, 395.09
MW-06, 395.01
MW-37, 395.49
MW-36, 395.52
FDPZ01, 395.62
FDPZ03, 395.50
MW-39, 395.59
MW-19, 395.57
MW-23, 394.91
MW-24, 395.62
MW-77, 396.21
MW-31, 395.29, 0.24
DCDPZ02, 396.70
MW-30, 397.07
DCDPZ04, 397.04, 0.18
MW-33, 396.44, 0.07
MW-34, 396.88
DCDPZ01, 398.83, 0.75
DCDPZ03, 396.95
MW-26, 399.04
MW-32, 397.33
SSIPZ04, 398.00, 0.02
SSIPZ03, 398.14
MW-28, 397.96
MW-29, 399.51
SSIPZ02, 398.36, Sheen
SSIPZ01, 397.89
MW-25, 398.12, 2.01
MW-27, 397.25
SSIPZ05, NM
MW-03S, 397.54
MW-75, 398.15
MW-84, 396.68
MW-08, 398.79
MW-76, 398.67
MW-71, 395.41
MW-69, 398.22
MW-74, 398.58
MW-72, 399.10
MW-09, 399.78
DP-MW-04, 404.86

Legend

- Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour *(Dashed where inferred)*
- Sheet Pile Wall
- **Horizontal Well:**
- Slotted Pipe
- Solid Pipe

MW-25, 398.12, 2.01
Location ID | Groundwater Elevation (ft AMSL) | LNAPL Thickness (ft)

NOTES:
1. Elevation shown in feet above mean sea level (ft amsl); NAVD 88 Datum
2. NM = Not Measured
3. Groundwater elevations are corrected to account for LNAPL thickness. These elevations were considered, but not used to generate groundwater contours.
4. Groundwater elevations for MW-79, TR3-MW-02, and B00106 were not used to generate groundwater contours.

SOURCE: NYS Digital Ortho-imagery Program (NYSDOP), Onondaga County, 2015

250 0 250 Feet

SITE-WIDE GROUNDWATER MONITORING UTC/CARRIER THOMPSON ROAD SITE SHALLOW GROUNDWATER ELEVATIONS (OCTOBER 11 & 12, 2018)

AECOM

FIGURE 3

J:\Projects\60310231_UTCAOCGRI\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\03 SHALLOW GROUNDWATER ELEVATIONS (OCT 2018).mxd 2/4/2019

N

MW-79, 392.37

TR3-MW-02, 393.15

SANDERS CREEK

MW-14, 392.95

MW-68, 389.62

MW-66, 390.44

MW-58, 392.45

MW-18, 393.64

MW-57, 394.70

TR3-PW-01, 394.83

TR3-PW-02, 394.50

MW-50, 394.56

MW-43, 394.81

MW-62, 395.37

MW-47, 396.11

MW-48, 394.54

MW-46, 398.08, 0.20

B00103, 398.16

B00104, 394.39

MW-45, 397.83

Legend

- Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour *(Dashed where inferred)*
- Sheet Pile Wall

Horizontal Well:

- Slotted Pipe
- Solid Pipe

MW-46, 398.08, 0.20

Location ID | Groundwater Elevation (ft AMSL) | LNAPL Thickness (ft)

NOTES: 1. Elevation shown in feet above mean sea level (ft amsl); NAVD 88 Datum
2. NM = Not Measured
3. Groundwater elevations are corrected to account for LNAPL thickness. These elevations were considered, but not used to generate groundwater contours.
4. Groundwater elevations for MW-79, TR3-MW-02, and B00106 were not used to generate groundwater contours.
5. Horizontal Well System Pumps Approximately 3 gallons per minute from the Upper Water-Bearing Zone

SOURCE: NYS Digital Ortho-imagery Program (NYSDOP), Onondaga County, 2015

40 0 40 Feet

SITE-WIDE GROUNDWATER MONITORING UTC/CARRIER THOMPSON ROAD SITE SHALLOW GROUNDWATER ELEVATIONS (OCTOBER 11 & 12, 2018) TR 3 NORTH WALL AREA

AECOM

FIGURE 4

J:\Projects\60310231_UTCAOCGRI\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\04 SHALLOW GROUNDWATER ELEVATIONS (OCT 2018) (INSET).mxd 2/4/2019

N

SANDERS CREEK

CARRIER PKWY

THOMPSON RD

KINNE ST

MW-14D, 400.33

MW-41D, 401.01

MW-40D, 396.13

MW-35D, 396.07

MW-03D, 397.49

MW-13D2, 396.39

MW-22D, 397.49

TR-13D, 392.29

MW-16D, 400.58

400

399

398

397

396

395

394

393

401

Legend

- Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour *(Dashed where inferred)*

MW-16D, 400.58
Location ID
Groundwater Elevation (ft AMSL)

NOTES: 1. Elevation shown in feet above mean sea level (ft amsl); NAVD 88 Datum
2. Groundwater elevation for MW-13D2 was not used to generate groundwater contours

SOURCE: NYS Digital Ortho-imagery Program (NYSDOP), Onondaga County, 2015

250 0 250 Feet

SITE-WIDE GROUNDWATER MONITORING UTC/CARRIER THOMPSON ROAD SITE DEEP GROUNDWATER ELEVATIONS (OCTOBER 11 & 12, 2018)

AECOM

FIGURE 5

J:\Projects\60310231_UTCAOCGRI\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\05 DEEP GROUNDWATER ELEVATIONS (OCT 2018).mxd 1/8/2019

N

SANDERS CREEK

CARRIER PKWY

THOMPSON RD

KINNE ST

SWTP

A&R

TR-1 TR-2 TR-4 TR-5 TR-6 TR-7 TR-7A TR-6A TR-8 TR-10 TR-11 TR-13 TR-18 TR-18S TR-19 TR-20 TR-21 TR-21A TR-23

MW-10 MW-14 MW-14D MW-17 MW-19 MW-21 MW-50 MW-70 MW-75 MW-76 MW-77 MW-79 MW-84 MW-09 TR3-MW-02 AR-MW-02 DP-MW-04

MW-66	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	233
Trichloroethene	5	16.1
Vinyl chloride	2	6.3

MW-57	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	164
Vinyl chloride	2	115

MW-58	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	25.9

MW-18	CRIT	10/18
VOCs:		
1,1-Dichloroethene	5	62.2
1,2-Dichloroethene (cis)	5	13100
1,2-Dichloroethene (trans)	5	54.7
Trichloroethene	5	6980
Vinyl chloride	2	1830

MW-44	CRIT	10/18
VOCs:		
Trichloroethene	5	6.3

MW-48	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	10.5
Trichloroethene	5	16.1

AR-MW-06	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	7.4
Trichloroethene	5	6.5

MW-38	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	11.5
Trichloroethene	5	17

MW-45	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	12.5
Trichloroethene	5	119

TR3-PW-01	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	14000
Trichloroethene	5	94500
Vinyl chloride	2	220

MW-23	CRIT	10/18
VOCs:		
1,1,1-Trichloroethane	5	79.9
1,1-Dichloroethane	5	228
1,1-Dichloroethene	5	23.7
1,2-Dichloroethene (cis)	5	3250
1,2-Dichloroethene (trans)	5	19.2
Benzene	1	1.5
Chloroethane	5	11.8
Ethylbenzene	5	17.8
Toluene	5	48.3
Trichloroethene	5	168
Vinyl chloride	2	221
Xylene (total)	5	16.4

MW-03S	CRIT	10/18
VOCs:		
1,1-Dichloroethane	5	23.4
1,1-Dichloroethene	5	6.3
1,2-Dichloroethene (cis)	5	863
Vinyl chloride	2	47.6

MW-03D	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	7

MW-26	CRIT	10/18
VOCs:		
Trichloroethene	5	9

MW-69	CRIT	10/18
VOCs:		
1,1-Dichloroethane	5	49.2
1,1-Dichloroethene	5	9.6
1,2-Dichloroethene (cis)	5	358
1,2-Dichloroethene (trans)	5	13.8
Tetrachloroethene	5	5.6
Trichloroethene	5	2480
Vinyl chloride	2	37.6

MW-71	CRIT	10/18
VOCs:		
1,2-Dichloroethene (cis)	5	73.9
Trichloroethene	5	123
Vinyl chloride	2	8.9

Legend

- At least one compound exceeds criteria
- No compound detected or estimated that exceeds criteria
- Sheet Pile Wall
- Horizontal Well

Location ID — Sample Date

MW-44	CRIT	10/18
VOCs:		
Trichloroethene	5	6.3

Compound — Criteria — Result

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.
NOTES: Units shown in micrograms per liter (µg/L).
SOURCE: NYS Digital Ortho-imagery Program (NYSDOP), Onondaga County, 2015

250 0 250 Feet

SITE-WIDE GROUNDWATER MONITORING UTC/CARRIER THOMPSON ROAD SITE GROUNDWATER EXCEEDANCES (OCTOBER 2018)

AECOM

FIGURE 6

J:\Projects\60310231_UTCAOCGR\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\06 GROUNDWATER ANALYTICAL RESULTS (OCT 2018).mxd 2/4/2019

N

SANDERS CREEK

CARRIER PKWY

THOMPSON RD

KINNE ST

MW-14D	10/18
PFAS:	
Perfluorobutanesulfonic acid (PFBS)	2
Perfluoroheptanoic acid (PFHpA)	1.2
Perfluorohexanesulfonic acid (PFHxS)	3.5
Perfluorohexanoic acid (PFHxA)	2.6
Perfluorooctanoic acid (PFOA)	3.1

MW-14	10/18
SVOCs:	
1,4-Dioxane	1.63
PFAS:	
Perfluorooctanoic acid (PFOA)	1.9

AR-MW-02	10/18
PFAS:	
Perfluorobutanesulfonic acid (PFBS)	2.4
Perfluorobutanoic acid (PFBA)	10
Perfluoroheptanoic acid (PFHpA)	3.4
Perfluorohexanesulfonic acid (PFHxS)	6.3
Perfluorohexanoic acid (PFHxA)	2.7
Perfluorooctanesulfonic acid (PFOS)	33
Perfluorooctanoic acid (PFOA)	24

MW-70	10/18
SVOCs:	
1,4-Dioxane	8.67

MW-03S	10/18
SVOCs:	
1,4-Dioxane	2.58
PFAS:	
Perfluorobutanesulfonic acid (PFBS)	1.1
Perfluorooctanoic acid (PFOA)	2.1

MW-71	10/18
SVOCs:	
1,4-Dioxane	9.53

DP-MW-04	10/18
PFAS:	
Perfluorobutanesulfonic acid (PFBS)	1.8
Perfluorobutanoic acid (PFBA)	7.3
Perfluoroheptanoic acid (PFHpA)	1.4
Perfluorooctanesulfonic acid (PFOS)	13
Perfluorooctanoic acid (PFOA)	6.1

MW-17
MW-10
MW-03D
SWTP
A&R
TR-1
TR-2
TR-4
TR-5
TR-6
TR-7
TR-7A
TR-6A
TR-8
TR-10
TR-11
TR-13
TR-18
TR-18S
TR-19
TR-20
TR-21
TR-21A
TR-23

Legend

- No compound detected or estimated that exceeds EPA Drinking Water Advisory Level
- Sheet Pile Wall
- Horizontal Well

Location ID — Sample Date

MW-70	10/18
SVOCs:	
1,4-Dioxane	8.67

Compound — Result

SOURCE: NYS Digital Ortho-imagery Program (NYSDOP), Onondaga County, 2015

NOTES:
1. Units shown in micrograms per liter (µg/L) for 1,4-Dioxane and nanograms per liter (ng/L) for PFAS compounds.
2. EPA Drinking Water Advisory Level for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) of 70 ng/L.

250 0 250 Feet

SITE-WIDE GROUNDWATER MONITORING UTC/CARRIER THOMPSON ROAD SITE GROUNDWATER PFAS AND 1,4-DIOXANE DETECTIONS (OCTOBER 2018)

AECOM

FIGURE 7

J:\Projects\60310231_UTCAOCGRI\MISC\GIS\Maps\SITE-WIDE\GW REPORT 2018\07 GROUNDWATER ANALYTICAL PFAS RESULTS (OCT 2018).mxd 2/4/2019

Tables

TABLE 1
UTC/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 Contaminants
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	x			
Area Subtotal				8	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
UTC/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 Contaminants
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
Miscelllaneous Interior	MW-08	Upper	2	x			
Miscelllaneous Interior	MW-49	Upper	2	x			
Miscelllaneous Interior	MW-69	Upper	2	x	x		
Miscelllaneous Interior	MW-70	Upper	2	x	x		x
Miscelllaneous Interior	MW-72	Upper	2	x			
Miscelllaneous Interior	MW-74	Upper	2	x			
Miscelllaneous Interior	MW-75	Upper	2	x	x		
Miscelllaneous Interior	MW-78	Upper	2	x			
Miscelllaneous Interior	MW-81	Upper	2	x			
Miscelllaneous Interior	MW-82	Upper	2	x			
Miscelllaneous Interior	MW-83	Upper	2	x			
Miscelllaneous Interior	MW-84	Upper	2	x	x		
Area Subtotal				12	4	0	1
Total				94	32	5	10

Notes:
A&R - Administration and Research
PCB - Polychlorinated biphenyl
SWMU - Solid Waste Management Unit
VOC - Volatile Organic Compound
Emerging Contaminants - 1,4-Dioxane and 21 PFAS Compounds

TABLE 2
SITE-WIDE GROUNDWATER MONITORING PROGRAM
WATER LEVELS AND WELL INSPECTION SUMMARY
CARRIER CORPORATION THOMPSON ROAD FACILITY
OCTOBER 11 and 12, 2018

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
Perimeter Area														
DP-MW-04	Upper	2	1122974.74	954593.56	408.38	-	3.52	-	404.86	No lock	OK	OK	OK	
MW-05R	Upper	2	1125014.53	952292.73	396.81	-	2.87	-	393.94	Lock OK (#2537 key)	OK	OK	OK	
MW-09	Upper	2	1123038.00	952979.38	406.20	-	6.42	-	399.78	No lock	OK	OK	OK	Added Lock (#2537) on November 9, 2018.
MW-10	Upper	2	1124386.24	952118.57	402.79	-	8.54	-	394.25	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	-	10.65	-	392.95	Lock OK (#2537 key)	Pad raised above ground	OK	OK	Repaired October 17, 2018. Resurveyed November 21, 2018. New MP elevation 402.75'
MW-14D	Lower	2	1124855.10	953337.00	403.68	-	3.35	-	400.33	Lock OK (#2537 key)	Pad raised above ground	OK	OK	Repaired October 17, 2018. Resurveyed November 21, 2018. New MP elevation 402.44'
MW-16D	Lower	2	1122764.69	953409.36	406.13	-	5.55	-	400.58	No lock	OK	OK	OK	
MW-17	Upper	2	1124999.53	952462.72	397.02	-	8.15	-	388.87	No lock	OK	OK	OK	
MW-19	Upper	2	1124108.76	952143.57	404.72	-	9.15	-	395.57	No lock	OK	Missing 1 bolt	OK	Replaced missing bolt October 23, 2018.
MW-21	Upper	2	1124973.70	952730.22	402.52	-	11.24	-	391.28	No lock	OK	OK	OK	
MW-42	Upper	2	1124967.30	953212.96	396.57	-	6.65	-	389.92	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	UNKNOWN	External inspection only
MW-71	Upper	2	1123463.97	952230.85	404.95	-	9.54	-	395.41	No lock	OK	OK	OK	
MW-73	Upper	2	1124257.22	951987.57	403.40	-	8.20	-	395.20	No lock	OK	OK	OK	
MW-76	Upper	2	1123627.57	955141.81	406.07	-	7.40	-	398.67	No lock	OK	OK	OK	
MW-77	Upper	2	1124047.75	955105.46	404.81	-	8.60	-	396.21	No lock	OK	OK	OK	
MW-79	Upper	2	1124917.99	953785.24	395.69	-	3.32	-	392.37	No lock	OK	OK	OK	
MW-80	Upper	2	1124983.12	952943.49	392.31	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
TR3-MW-01	Upper	2	1124885.97	953692.42	392.86	NM	NM	NM	NM	No lock	OK	OK	UNKNOWN	External inspection only
TR3-MW-02	Upper	2	1124906.18	953546.57	395.46	-	2.31	-	393.15	No lock	OK	OK	OK	
A&R Area														
AR-MW-01	Upper	2	1124770.59	954418.68	403.76	-	7.94	-	395.82	No lock	OK	OK	OK	
AR-MW-02	Upper	2	1124764.40	954292.16	403.40	-	7.32	-	396.08	No lock	OK	OK	OK	
AR-MW-03	Upper	2	1124754.76	954149.74	403.41	-	7.38	-	396.03	No lock	OK	OK	OK	
AR-MW-04	Upper	2	1124515.46	954180.87	404.50	-	8.86	-	395.64	No lock	OK	OK	OK	
AR-MW-05	Upper	2	1124466.37	954310.19	404.87	-	8.82	-	396.05	No lock	OK	OK	OK	
AR-MW-06	Upper	2	1124531.93	954445.06	404.63	-	9.36	-	395.27	No lock	OK	OK	OK	
AR-SB-02	Upper	1	1124990.10	954142.60	396.19	-	4.38	-	391.81	No lock	NA	NA	Cracked at grade	Needs road box. Converted to flush-mount November 9, 2018. New MP elevation 393.10'
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	8.25	9.00	0.75	398.83	No lock	OK	OK	OK	
DCDPZ02	Upper	1	1123938.80	952468.92	407.00	-	10.30	-	396.70	No lock	OK	OK	OK	
DCDPZ03	Upper	1	1123882.13	952353.09	407.23	-	10.28	-	396.95	No lock	OK	OK	OK	
DCDPZ04	Upper	1	1123917.13	952351.42	407.36	10.27	10.45	0.18	397.04	No lock	OK	OK	OK	
FDPZ01	Upper	1	1124189.61	952343.92	407.23	NM	11.61	NM	395.62	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	11.28	NM	395.50	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	-	11.20	-	395.01	No lock	OK	No lid	No J-plug	Repaired November 9, 2018. Added J-plug, 4" Royer Cap and lock (#2537)
MW-23	Upper	2	1124068.77	952177.73	403.54	-	8.63	-	394.91	No lock	OK	OK	OK	
MW-24	Upper	2	1124038.77	952184.40	404.58	-	8.96	-	395.62	No lock	OK	OK	OK	
MW-25	Upper	4	1123764.64	952464.75	406.25	7.59	9.60	2.01	398.12	No lock	OK	OK	OK	
MW-26	Upper	2	1123802.12	952438.56	406.65	-	7.61	-	399.04	No lock	OK	OK	OK	
MW-27	Upper	2	1123753.79	952424.39	406.19	-	8.94	-	397.25	No lock	OK	OK	OK	
MW-28	Upper	2	1123769.62	952481.06	406.15	-	8.19	-	397.96	No lock	OK	OK	OK	
MW-29	Upper	4	1123774.62	952380.23	406.19	-	6.68	-	399.51	No lock	OK	OK	OK	
MW-30	Upper	4	1123895.44	952378.56	407.08	-	10.01	-	397.07	No lock	OK	OK	OK	
MW-31	Upper	2	1123932.11	952388.93	406.46	11.11	11.35	0.24	395.29	No lock	OK	OK	OK	
MW-32	Upper	2	1123867.11	952410.22	406.67	-	9.34	-	397.33	No lock	OK	OK	OK	
MW-33	Upper	2	1123903.80	952446.42	406.71	10.25	10.32	0.07	396.44	No lock	OK	OK	OK	
MW-34	Upper	2	1123899.61	952363.56	406.73	-	9.85	-	396.88	No lock	OK	OK	OK	
MW-35D	Lower	2	1123932.11	952377.73	407.33	-	11.26	-	396.07	No lock	OK	OK	OK	
MW-36	Upper	4	1124197.92	952411.89	407.66	-	12.14	-	395.52	No lock	OK	OK	OK	
MW-37	Upper	2	1124204.59	952396.06	406.74	-	11.25	-	395.49	No lock	OK	OK	OK	
MW-38	Upper	2	1124268.75	952406.06	404.45	-	9.36	-	395.09	No lock	OK	OK	OK	
MW-39	Upper	2	1124196.26	952447.72	406.87	-	11.28	-	395.59	No lock	OK	OK	OK	
MW-40D	Lower	2	1124267.92	952397.72	404.36	-	8.23	-	396.13	No lock	OK	OK	OK	
SSIPZ01	Upper	1	1123762.14	952385.59	406.45	-	8.56	-	397.89	No lock	OK	OK	OK	
SSIPZ02	Upper	1	1123752.14	952490.59	406.41	0.00	8.05	Sheen	398.36	No lock	OK	OK	OK	
SSIPZ03	Upper	1	1123778.81	952359.76	406.83	-	8.69	-	398.14	No lock	OK	OK	OK	
SSIPZ04	Upper	1	1123807.97	952478.09	406.48	8.48	8.50	0.02	397.99	No lock	OK	OK	No J-plug	Replaced J-plug November 9, 2018.
SSIPZ05	Upper	1	1123733.81	952464.75	405.98	NM	NM	NM	NM	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Could not locate

Specific Gravity of Free Phase Product = 0.73 based on historical reports
Groundwater Elevation = Measuring Point Elevation - Depth to Water (BTOR) + (0.73 x Free Phase Product Thickness)
NA - Not Available
NM - Not Measured

TABLE 2
SITE-WIDE GROUNDWATER MONITORING PROGRAM
WATER LEVELS AND WELL INSPECTION SUMMARY
CARRIER CORPORATION THOMPSON ROAD FACILITY
OCTOBER 11 and 12, 2018

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	External inspection only, dug out to expose, ~ 6" of soil over roadbox
B001-03	Upper	1	1124616.48	953830.95	405.33	-	7.17	-	398.16	No lock	OK	OK	OK	
B001-04	Upper	1	1124560.22	953706.30	404.14	-	9.75	-	394.39	No lock	OK	OK	OK	
B001-05	Upper	1	1124454.18	953638.67	404.31	-	9.88	-	394.43	No lock	Concrete sunken and degraded	OK	OK	Replaced road box November 9, 2018.
B001-06	Upper	1	1124486.48	953826.98	405.46	-	4.43	-	401.03	No lock	OK	OK	Riser too high to put j-plug on	Riser height adjusted November 9, 2018. Resurveyed November 21, 2018. New MP elevation 405.36
B001-07	Upper	1	1124723.54	953981.12	400.53	-	5.54	-	394.99	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	-	6.13	-	396.25	No lock	OK	OK	OK	
MW-18	Upper	2	1124855.40	953803.88	397.71	-	4.07	-	393.64	No lock	OK	Bolts stripped	OK	Replaced bolts October 23, 2018.
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	-	4.38	-	401.01	No lock	OK	2 broken ears	OK	Replaced road box November 19, 2018. Resurveyed Novemeber 21, 2018. New survey data shown.
MW-43	Upper	2	1124808.28	953664.88	405.11	-	10.30	-	394.81	No lock	OK	OK	OK	
MW-44	Upper	2	1124546.23	953378.53	404.45	-	6.28	-	398.17	No lock	OK	OK	OK	
MW-45	Upper	2	1124551.23	953593.53	404.13	-	6.30	-	397.83	No lock	OK	Broken ears. No lid	Broken J-plug	
MW-46	Upper	2	1124678.75	953574.72	404.13	6.00	6.20	0.20	398.08	No lock	OK	OK	OK	
MW-47	Upper	2	1124759.44	953732.29	405.01	-	8.90	-	396.11	No lock	OK	1-Bolt missing	OK	Replaced bolt October 23, 2018.
MW-48	Upper	2	1124741.00	953821.67	405.33	-	10.79	-	394.54	No lock	OK	OK	OK	
MW-50	Upper	2	1124808.71	953536.03	405.27	-	10.71	-	394.56	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-downhole J-plug	Cracked	Loose	OK	Need to reset roadbox. Repaired November 9, 2018 and resurveyed November 21, 2018
MW-55	Upper	2	1124844.49	953701.90	397.83	NM	NM	NM	NM	No lock	Cracked	Bent over 45 degrees	Riser bent but OK	Roadbox needs replacement. Repaired November 9, 2018 and resurveyed November 21, 2018
MW-56	Upper	2	1124841.61	953676.89	398.41	NM	NM	NM	NM	No lock	Loose - ground settled around	OK	OK	Need to reset roadbox. Repaired November 9, 2018 and resurveyed November 21, 2018
MW-57	Upper	2	1124839.71	953625.90	398.06	-	3.36	-	394.70	No lock	Cracked	OK	Riser slightly leaning	Need to reset roadbox. Repaired November 9, 2018 and resurveyed November 21, 2018
MW-58	Upper	2	1124853.70	953533.98	396.53	-	4.08	-	392.45	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	-	9.91	-	395.37	No lock	OK	Needs new bolts	OK	Replaced bolts October 23, 2018.
MW-66	Upper	2	1124854.94	953560.48	396.37	-	5.93	-	390.44	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	1.77	NM	396.81	No lock	OK	OK	OK	
MW-68	Upper	2	1124855.04	953476.28	397.40	-	7.78	-	389.62	No lock	OK	OK	OK	
PLR001	Upper	1	1124467.93	953858.05	405.10	5.46	5.47	0.01	399.64	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-downhole J-plug	OK	Lid missing, filled with gravel	OK	Needs new roadbox. Repaired November 9, 2018.
TR3-PW-01	Upper	4	1124815.67	953687.16	405.03	-	10.20	-	394.83	No lock	OK	OK	OK	
TR3-PW-02	Upper	4	1124805.52	953444.97	405.59	-	11.09	-	394.50	No lock	OK	OK	OK	
SWMU 1-4 Area														
MW-03D	Lower	2	1123862.95	953068.54	405.64	-	8.15	-	397.49	No lock	OK	OK	OK	Added Lock (#2537) on November 9, 2018.
MW-03S	Upper	2	1123862.95	953053.54	404.54	-	7.00	-	397.54	No lock	OK	OK	OK	Added Lock (#2537) on November 9, 2018.
MW-13D2	Lower	2	1123847.11	953071.04	402.71	-	6.32	-	396.39	No lock	OK	OK	OK	
MW-22D	Lower	2	1123728.61	952956.41	404.34	NM	6.85	NM	397.49	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	Loose	OK	OK	Loose casing . Repaired November 9, 2018.
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	NM	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	-	5.21	-	398.79	No lock	OK	OK	OK	
MW-49	Upper	2	1124635.39	953204.37	407.66	-	11.19	-	396.47	No lock	OK	OK	OK	
MW-69	Upper	2	1123575.09	953238.60	403.70	-	5.48	-	398.22	No lock	OK	OK	OK	
MW-70	Upper	2	1124609.37	952918.96	406.24	-	11.00	-	395.24	No lock	OK	OK	OK	
MW-72	Upper	2	1123133.97	952768.81	404.10	-	5.00	-	399.10	No lock	OK	OK	OK	
MW-74	Upper	2	1123318.97	953446.58	405.64	-	7.05	-	398.59	No lock	OK	OK	OK	
MW-75	Upper	2	1123849.47	954074.99	405.29	-	7.14	-	398.15	No lock	OK	OK	OK	
MW-78	Upper	2	1124424.80	954858.90	402.58	-	7.36	-	395.22	No lock	OK	OK	OK	
MW-81	Upper	2	1124341.64	954033.81	406.10	-	8.03	-	398.07	No lock	OK	OK	OK	
MW-82	Upper	2	1124398.72	954533.30	404.19	-	8.49	-	395.70	No lock	OK	OK	OK	
MW-83	Upper	2	1124336.76	954304.18	404.92	-	5.85	-	399.07	No lock	OK	OK	OK	
MW-84	Upper	2	1123704.67	953673.48	403.57	-	6.89	-	396.68	No lock	OK	OK	OK	

Specific Gravity of Free Phase Product = 0.73 based on historical reports
Groundwater Elevation = Measuring Point Elevation - Depth to Water (BTOR) + (0.73 x Free Phase Product Thickness)
NA - Not Available
NM - Not Measured

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.

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Only Detected Results Reported.

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Advanced Selection: AMK-TEMF
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[MATRIX] = 'WG' AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND ([PRCCODE] <> 'PCB' AND [PRCCODE] <> 'DPCI

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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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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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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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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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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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

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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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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

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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***					
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

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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

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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

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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

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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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#Error
Printed: 2/15/2019 10:33:53 AM
[MATRIX] = 'WG' AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND ([PRCCODE] <> 'PCB' AND [PRCCODE] <> 'DPCI

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

*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

Advanced Selection: AMK-TEMF
#Error
Printed: 2/15/2019 10:33:53 AM
[MATRIX] = 'WG' AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND ([PRCCODE] <> 'PCB' AND [PRCCODE] <> 'DPCI

TABLE 4
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
STATISICAL SUMMARY OF GROUNDWATER RESULTS - OCTOBER 2018

Parameter	Units	Criteria*	No. of Samp-les	No. of Detect-ions	Freq. of Detect-ions	Range of Detections			No. Exceed	Location of Max Value
						Min	Max	Avg		
Volatile Organic Compounds										
1,1,1-Trichloroethane	UG/L	5	32	3	9.4%	1.00	79.90	27.33	1	MW-23
1,1-Dichloroethane	UG/L	5	32	5	15.6%	1.10	228.0	60.54	3	MW-23
1,1-Dichloroethene	UG/L	5	32	5	15.6%	1.70	62.20	20.70	4	MW-18
1,2-Dichloroethene (cis)	UG/L	5	32	15	46.9%	1.40	1.40E+04	2,137	14	TR3-PW-01
1,2-Dichloroethene (trans)	UG/L	5	32	7	21.9%	1.30	54.70	14.06	3	MW-18
Benzene	UG/L	1	32	1	3.1%	1.50	1.50	1.50	1	MW-23
Chloroethane	UG/L	5	32	1	3.1%	11.80	11.80	11.80	1	MW-23
Ethylbenzene	UG/L	5	32	1	3.1%	17.80	17.80	17.80	1	MW-23
Isopropylbenzene (Cumene)	UG/L	5	32	1	3.1%	2.00	2.00	2.00	0	MW-23
Tetrachloroethene	UG/L	5	32	3	9.4%	1.20	5.60	3.43	1	MW-69
Toluene	UG/L	5	32	1	3.1%	48.30	48.30	48.30	1	MW-23
Trichloroethene	UG/L	5	32	17	53.1%	1.10	9.45E+04	6,144	12	TR3-PW-01
Trichlorofluoromethane	UG/L	5	32	1	3.1%	3.10	3.10	3.10	0	MW-38
Vinyl chloride	UG/L	2	32	9	28.1%	1.90	1,830	276.3	8	MW-18
Xylene (total)	UG/L	5	32	1	3.1%	16.40	16.40	16.40	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. Cl



Concentration Exceeds Criteria

Only Detected Results Reported.

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Printed: 12/27/2018 2:36:15 PM
WHERE [MATRIX] = 'WG' and LOGDATE BETWEEN #10/15/2018# AND #10/19/2018# AND LOCID <> 'FIELDQC';

TABLE 4
UTC/CARRIER THOMPSON ROAD SITE
ANNUAL SITE-WIDE GROUNDWATER MONITORING
STATISICAL SUMMARY OF GROUNDWATER RESULTS - OCTOBER 2018

Parameter	Units	Criteria*	No. of Samp-les	No. of Detect-ions	Freq. of Detect-ions	Range of Detections			No. Exceed	Location of Max Value
						Min	Max	Avg		
Semivolatile Organic Compounds										
1,4-Dioxane	MG/L	-	10	4	40.0%	0.002	0.010	0.006	0	MW-71
Per- and Polyfluoroalkyl Substances										
Perfluorobutanesulfonic acid (PFBS)	NG/L	-	10	4	40.0%	1.10	2.40	1.83	0	AR-MW-02
Perfluorobutanoic acid (PFBA)	NG/L	-	10	2	20.0%	7.30	10.00	8.65	0	AR-MW-02
Perfluoroheptanoic acid (PFHpA)	NG/L	-	10	3	30.0%	1.20	3.40	2.00	0	AR-MW-02
Perfluorohexanesulfonic acid (PFHxS)	NG/L	-	10	2	20.0%	3.50	6.30	4.90	0	AR-MW-02
Perfluorohexanoic acid (PFHxA)	NG/L	-	10	2	20.0%	2.60	2.70	2.65	0	AR-MW-02
Perfluorooctanesulfonic acid (PFOS)	NG/L	-	10	2	20.0%	13.00	33.00	23.00	0	AR-MW-02
Perfluorooctanoic acid (PFOA)	NG/L	-	10	5	50.0%	1.90	24.00	7.44	0	AR-MW-02

*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. Cl

Concentration Exceeds Criteria

Only Detected Results Reported.

J:\Projects\60310231_UTCAOCGR\Project Management\60480273-UTC.TR3PDI\MISC\PDI Data\Analytical\DB\Stat.mde
Printed: 12/27/2018 2:36:15 PM
WHERE [MATRIX] = 'WG' and LOGDATE BETWEEN #10/15/2018# AND #10/19/2018# AND LOCID <> 'FIELDQC';

APPENDIX A

LOW FLOW GROUNDWATER PURGING/SAMPLING LOGS

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC-CARRIER Site: UTC Well I.D.: AR-MW-02

Date: 10/16/18 Sampling Personnel: E MURPHY Company: AECOM

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE/silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 7.15 Depth to Well Bottom: 12.80 Well Diameter: 2" Screen Length:

5.65

Casing Type: PVC Volume in 1 Well Casing (liters): 3.5 x 3 = 10.5L Estimated Purge Volume (liters):

Sample ID: Sample Time: 1231 QA/QC: None

Sample Parameters: VOCs, PFAs, 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)
1146	7.50	15.45	1.12	6.17	54.2	124	240	7.15
1151	7.08	16.33	1.10	0.74	52.0	125	240	7.78
1156	7.05	16.78	1.15	0.00	14.2	129	240	8.25
1201	7.10	16.88	1.16	0.00	5.7	125	250	8.56
1206	7.18	16.95	1.15	0.00	3.3	114	250	8.78
1211	7.21	16.73	1.14	0.00	2.9	64	250	9.15
1216	7.20	16.57	1.15	0.00	2.6	41	250	9.40
1221	7.22	16.43	1.15	0.00	3.3	34	250	9.68
1226	7.22	16.34	1.16	0.00	4.9	40	250	10.00
1231	7.21	16.21	1.16	0.00	5.6	44	250	10.15
1236								
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 ($vol_H = \pi r^2 h$)

Remarks:

Purge 3 vols

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: AR-MW-06

Date: 10/18/18 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: 10.02 Depth to Well Bottom: 13.34 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 2.05 Estimated Purge Volume (liters):

Sample ID: AR-MW-06 Sample Time: 0926 QA/QC: None

Sample Parameters: VOCs

PURGE PARAMETERS

(200)

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0906	6.91	13.61	1.50	3.54	190	142	240	10.02
0911	6.50	14.90	1.46	1.96	136	141	175	11.00
0916	6.81	15.00	1.47	1.43	107	140	175	11.05
0921	6.82	15.13	1.46	0.75	46.8	138	175	11.12
0926	6.84	15.23	1.46	0.00	31.3	136	175	11.20
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 ($vol_H = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: DP-MW-04

Date: 10/16/18 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: 3.33 Depth to Well Bottom: 11.60 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 5.10 (x3 15.3) Estimated Purge Volume (liters):

Sample ID: DP-MW-04 Sample Time: 1230 QA/QC: none

Sample Parameters: VOCs, PFCs, 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)
1125	6.52	16.17	1.32	2.31	71000	15	200	3.33
1130	6.60	16.60	1.21	0.54	793	0	200	3.70
1135	6.55	17.02	1.15	0.00	150	6	250	3.95
1140	6.54	17.27	1.15	0.00	75.1	-1	250	4.15
1145	6.53	17.46	1.15	0.06	29.6	-6	250	4.33
1150	6.53	17.68	1.20	0.00	14.5	-9	250	4.70
1155	6.53	17.83	1.21	0.00	8.6	-12	250	5.00
1200	6.54	18.06	1.21	0.00	6.5	-13	250	5.29
1205	6.55	18.12	1.19	0.00	5.2	-15	250	5.63
1210	6.57	18.10	1.17	0.00	5.8	-13	250	6.02
1215	6.58	18.06	1.15	0.00	4.2	-12	250	6.26
1220	6.59	18.13	1.14	0.00	9.3	-10	250	6.51
1225	6.60	18.15	1.14	0.00	8.7	-11	250	6.68
1230	6.60	18.17	1.15	0.00	6.9	-11	250	6.82
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:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: VIC - Carrier Site: Syracuse, NY Well I.D.: MW-03D

Date: 10/16/18 Sampling Personnel: T. Urban / 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: 8.08 Depth to Well Bottom: 29.80 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 13.4 (x3 = 40.2) Estimated Purge Volume (liters):

Sample ID: MW-03D Sample Time: 0950 QA/QC: MS/MSD

Sample Parameters: PFCs, 1-4 dioxane; 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)
0930	7.09	16.26	2.50	3.49	28.5	-51	1000	8.08
0935	6.93	16.71	2.46	3.20	36.4	-57	1000	15.80
0940	6.92	16.90	2.47	1.85	40.3	-54	1000	19.70
0945	6.92	16.71	2.45	1.15	534	-44	950	22.71
0950	6.92	16.74	2.45	0.90	146	-38	580	24.45
0955	6.92	16.47	2.45	0.53	452	-36	580	26.15
0900	6.92	16.11	2.43	0.75	296	-41	850	26.38
0905	6.93	15.98	2.45	1.14	373	-25	800	26.67
0910	6.96	16.16	2.44	7.42	127	-7	600	26.67
0915	6.94	16.12	2.44	6.75	691	17	600	26.67
0920	6.92	16.21	2.43	7.72	51.0	25	600	26.67
0925	6.92	16.07	2.42	8.10	40.8	26	600	26.67
0930	6.91	15.95	2.43	7.23	108	24	380	26.60
0935	6.91	16.01	2.43	5.43	116	13	380	24.00
0940	6.91	16.09	2.41	4.36	59.0	9	380	22.80
0945	6.90	16.11	2.42	3.42	21.6	7	380	22.20
0950	6.89	16.17	2.45	0.00	24.5	1	380	21.70
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:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-03S

Date: 10/16/18 Sampling Personnel: T. Urban, 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: 8.40 / 7.04 actual Depth to Well Bottom: 15.65 / 13.97 actual Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 4.47 (13.4) x3 Estimated Purge Volume (liters):

Sample ID: MW-03S Sample Time: 0938 QA/QC: DUPLICATE (FD-101618)

Sample Parameters: PFCs, 1-4 dioxane, VOCs

PURGE PARAMETERS

+1.36

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0838	7.53	17.48	4.34	2.24	30.3	-93	245	8.70
0843	7.55	17.90	4.08	0.59	16.2	-91	245	8.97
0848	7.77	18.03	3.37	0.00	68.7	-102	240	9.13
0853	7.91	18.05	3.06	0.00	36.7	-111	240	9.27
0858	7.85	18.04	3.14	0.00	19.4	-116	240	9.40
0903	7.78	18.09	3.29	0.00	11.0	-116	240	9.49
0908	7.72	17.80	3.41	0.00	7.6	-114	240	9.58
0913	7.68	18.01	3.55	0.00	7.1	-112	240	9.66
0918	7.65	17.94	3.65	0.00	5.1	-110	240	9.71
0923	7.62	18.07	3.77	0.00	4.2	-109	240	9.77
0928	7.59	18.22	3.90	0.00	3.6	-106	240	9.81
0933	7.58	18.28	3.97	0.00	2.9	-105	240	9.90
0938	7.58	18.33	3.99	0.00	2.9	-105	240	9.90
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:

USED SOLINST IP PROBE (HAS PEAS POTENTIAL)

PURGE 3 WELL VOLUMES

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: _____ Site: UTC-Syracuse Well I.D.: MW-09

Date: 10/15/10 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: 6.39 Depth to Well Bottom: 17.46 Well Diameter: 2" Screen Length: _____

Casing Type: PVC Volume in 1 Well Casing (liters): 11.07 / 6.83 Estimated Purge Volume (liters): _____

Sample ID: MW-09 Sample Time: 17:19 QA/QC: —

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)
1628	7.36	19.30	0.950	1.64	10.3	11	175	6.39
1633	7.23	18.43	0.903	0.158	53.1	-6	175	7.03
1638	7.20	18.00	0.871	0.04	20.4	10	175	7.19
1643	7.20	17.85	0.842	0.00	22.1	18	175	7.32
1648	7.19	17.66	0.820	0.13	23.8	28	175	7.50
1653	7.20	17.62	0.800	0.16	20.0	28	175	7.60
1658	7.21	17.54	0.754	0.21	8.1	30	175	7.69
1703	7.22	17.32	0.752	0.49	8.0	36	175	7.72
1708	7.23	17.18	0.746	0.52	7.7	42	175	7.84
1713	7.23	17.08	0.791	0.68	2.6	56	175	8.02
1716	7.23	17.06	0.791	0.73	2.2	60	175	8.08
1719	7.23	17.05	0.784	0.76	2.3	61	175	8.12
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 ($vol_h = \pi r^2 h$)

Remarks: Iron Flow to start, bypassed flow cell ~ 3 minutes

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-10

Date: 10/16/18 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: 8.48 Depth to Well Bottom: 14.85 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 3.93 (x 3 = 11.8) Estimated Purge Volume (liters):

Sample ID: MW-10 Sample Time: 1800 QA/QC: none

Sample Parameters: VOCs, 1-4 Dioxane, PFCs

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)
1700	6.50	17.12	3.89	1.45	138	16	200	8.48
1705	6.78	17.19	3.55	0.51	129	15	200	9.07
1710	6.73	17.34	3.87	0.15	126	14	200	9.27
1715	6.65	17.44	3.86	0.23	124	20	200	9.55
1720	6.63	17.57	3.91	0.62	49.1	27	200	9.89
1725	6.63	17.65	3.99	0.60	20.1	36	200	10.20
1730	6.65	17.60	4.01	0.38	40.7	44	200	10.50
1735	6.67	17.60	4.17	0.36	18.6	47	200	10.74
1740	6.70	17.63	4.19	0.34	18.7	31	200	11.06
1745	6.70	17.60	4.01	0.42	14.8	8	200	11.47
1750	6.73	17.54	3.67	0.02	10.9	-4	200	11.74
1755	6.79	17.51	3.61	0.00	10.1	-2	200	12.02
1800	6.75	17.46	3.64	0.00	10.3	0	200	12.38
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 ($v_{ol} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-14

Date: 10/19/18 Sampling Personnel: TU/RM 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: 10.54 Depth to Well Bottom: 21.17 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 10.63 6.56 x 3 (19.7) Estimated Purge Volume (liters):

Sample ID: MW-14 Sample Time: 1244 QA/QC:

Sample Parameters: VOCs; PFCs, 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)
1124	7.69	16.77	2.19	4.79	39.3	-112	260	10.54
1129	7.14	16.53	2.16	0.00	30.5	-119	275	11.70
1134	7.17	16.52	2.15	0.00	31.3	-125	275	12.10
1139	7.18	16.60	2.12	0.00	26.2	-126	275	12.48
1144	7.20	16.71	2.12	0.00	24.2	-126	275	12.78
1149	7.21	16.81	2.13	0.00	23.1	-126	275	13.14
1154	7.21	16.88	2.14	0.00	22.5	-125	275	13.70
1159	7.20	16.91	2.13	0.00	23.2	-125	275	13.70
1204	7.25	16.73	2.14	0.00	23.0	-127	270	14.00
1209	7.24	16.83	2.14	0.00	24.0	-126	270	14.20
1214	7.23	16.92	2.14	0.00	24.3	-126	270	14.34
1219	7.21	16.98	2.16	0.00	24.3	-126	270	14.63
1224	7.20	17.05	2.16	0.00	23.7	-126	270	14.93
1229	7.19	17.11	2.15	0.00	14.9	-126	270	15.18
1234	7.19	17.00	2.10	0.00	10.3	-125	250	15.50
1239	7.18	16.85	2.08	0.00	8.3	-124	250	15.75
1244	7.18	17.06	2.03	0.00	9.2	-123	250	15.97
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 ($vol_{ft} = \pi r^2 h$)

Remarks:

* HDPE Tubing * Purge 3 volumes. PFAS

1310 - Collect FB-101918 (PFCs Only) - Direct Pour into Bottles

1330 - [illegible]

1335 - Collect FB-101918A through HDPE + Silicone

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-14D

Date: 10/19/18 Sampling Personnel: TU/RM 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: 2.50 Depth to Well Bottom: 49.68 Well Diameter: 2" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 29.1 (x3 = 87.3) Estimated Purge Volume (liters):

Sample ID: MW-14D Sample Time: 1337 QA/QC: —

Sample Parameters: PFCs ~~only~~ & 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)
1122	7.43	15.63	3.85	8.68	446	74	950	2.50
1127	6.99	14.89	3.85	0.21	117	73	920	8.60
1132	6.98	14.76	3.85	0.11	108	66	920	12.55
1137	6.98	14.73	3.84	0.00	645	39	920	16.65
1142	6.98	14.72	3.82	0.00	71000	35	920	19.22
1147	6.97	14.67	3.83	0.00	114	26	880	23.15
1152	6.97	14.65	3.84	0.00	71000	23	880	25.25
1157	6.95	14.63	3.83	0.00	684	17	780	28.33
1202	6.96	14.64	3.83	0.00	581	15	780	29.40
1207	6.96	14.72	3.82	0.00	494	11	600	29.96
1212	6.96	14.82	3.81	0.00	378	9	560	30.60
1217	6.96	14.86	3.81	0.00	293	5	540	30.70
1222	6.96	14.86	3.79	0.00	189	0	540	30.70
1227	6.96	14.80	3.79	0.00	90.2	-5	540	30.70
1242	6.95	14.86	3.80	0.00	64.4	-6	540	30.70
1252	6.95	14.91	3.79	0.00	49.4	-7	540	30.70
1302	6.95	14.90	3.79	0.00	35.6	-9	540	30.70
1312	6.94	14.87	3.78	0.00	27.0	-11	540	30.70
1322	6.94	14.87	3.77	0.00	24.5	-11	540	30.70
1332	6.94	15.01	3.76	0.00	31.0	-13	540	30.70
1337	6.94	15.02	3.79	0.00	17.2	-13	540	30.70
Tolerance:	0.1	—	3%	10%	10%	+ or - 10	—	

1ST = 48.35

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: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-17

Date: 10/16/18 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: 8.15 Depth to Well Bottom: 15.15 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 4.319 (x 3 = 12.96) Estimated Purge Volume (liters):

Sample ID: MW-17 Sample Time: 1605 QA/QC: none

Sample Parameters: VOCs, PFCs, 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)
1510	6.81	17.53	5.03	0.77	304	4	250	8.15
1515	6.77	17.29	5.08	0.34	214	3	250	8.60
1520	6.76	17.06	5.12	0.37	140	3	250	8.80
1525	6.77	16.76	5.17	0.53	55.5	21	250	9.22
1530	6.76	16.58	5.20	0.25	39.1	16	250	9.55
1535	6.75	16.41	5.21	0.12	35.3	8	250	9.91
1540	6.75	16.29	5.22	0.13	36.6	4	250	10.29
1545	6.75	16.17	5.23	0.00	29.0	1	250	10.80
1550	6.74	16.05	5.23	0.00	18.5	-7	250	11.18
1555	6.74	15.99	5.21	0.00	17.1	-11	250	11.52
1600	6.75	15.91	5.20	0.00	17.7	-15	250	11.88
1605	6.75	15.84	5.20	0.00	15.2	-18	250	12.21
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-18

Date: 10/19/18 Sampling Personnel: T-Urban 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: 4.04 Depth to Well Bottom: 9.28 Well Diameter: 2" Screen Length:

Casing Type: ~~PVC~~ S.S. Volume in 1 Well Casing (liters): 3.23 Estimated Purge Volume (liters):

Sample ID: MW-18 Sample Time: 1010 QA/QC: —

Sample Parameters: VOCs

PURGE PARAMETERS

2.00

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0940	7.27	13.80	2.88	2.74	50.3	-58	210	4.04
0945	6.90	16.21	2.81	0.03	49.7	-64	210	4.08
0950	6.88	16.41	2.91	0.00	18.6	-65	210	4.08
0955	6.86	16.58	3.26	0.00	11.8	-66	210	4.08
1000	6.86	16.64	3.62	0.00	9.0	-67	210	4.08
1005	6.85	16.68	3.68	0.00	7.7	-69	210	4.08
1010	6.86	16.73	3.72	0.00	6.7	-71	210	4.08
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 ($vol_H = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-19

Date: 10/17/18 Sampling Personnel: T. Urban Company: AECOM

Purging/Sampling Device: GeoPump Tubing Type: Teflon + silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 9.13 Depth to Well Bottom: 16.62 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 4.62 Estimated Purge Volume (liters):

Sample ID: MW-19 + MW-19-F Sample Time: 1545 QA/QC: MS/MSD

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)
1510	7.25	17.10	2.15	2.61	145	-52	220	9.13
1515	7.06	17.31	2.17	1.79	24.7	-52	220	9.40
1520	7.06	17.39	2.12	1.52	6.0	-57	220	9.52
1525	7.04	17.32	2.11	2.03	3.3	-34	220	9.60
1530	7.01	17.23	2.16	1.86	2.1	-9	220	9.66
1535	7.00	17.22	2.13	1.82	1.6	3	220	9.74
1540	7.00	17.23	2.17	1.82	1.4	7	220	9.80
1545	7.00	17.20	2.20	1.84	1.4	10	220	9.90
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 ($vol_{ft} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - carrier Site: Syracuse, NY Well I.D.: MW-21

Date: 10/17/18 Sampling Personnel: T. Urban Company: AECOM

Purging/Sampling Device: GEOPUMP Tubing Type: Teflon + Silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 11.32 Depth to Well Bottom: 14.30 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 1.84 Estimated Purge Volume (liters):

Sample ID: MW-21 Sample Time: 1100 QA/QC: —

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)
1025	6.93	16.48	1.38	1.63	20.1	-53	135	11.32
1030	6.73	16.62	1.38	0.29	17.5	-62	140	11.40
1035	6.72	16.85	1.38	0.05	4.1	-74	140	11.40
1040	6.72	17.02	1.38	0.00	3.4	-79	230	11.45
1045	6.72	17.10	1.37	0.00	2.3	-84	230	11.47
1050	6.73	17.20	1.37	0.00	1.7	-88	230	11.48
1055	6.73	17.20	1.36	0.00	1.2	-90	230	11.48
1100	6.74	17.19	1.36	0.00	0.9	-92	230	11.48
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Annual GW Monitoring Site: UTC-Syracuse Well I.D.: MW-23

Date: 10/17/18 Sampling Personnel: R. MURPHY Company: AECOM

Purging/Sampling Device: GeoPump 2 Tubing Type: LDPE/Silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 8.62 Depth to Well Bottom: 16.32 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 7.70 4.75 Estimated Purge Volume (liters):

Sample ID: MW-23 + MW-23-F Sample Time: 1552 QA/QC: None

Sample Parameters: VOCs, PCBs (total), PCBs (Filtered)

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)	
1517	7.70	16.16	1.50	0.80	6.8	-115	120	8.62	
1522	7.74	16.12	1.47	0.00	4.9	-128	180	9.86	← Pump would not maintain Lower rate
1527	7.68	15.98	1.46	0.00	4.0	-130	150	10.68	
1532	7.65	15.95	1.43	0.00	2.7	-131	150	11.50	
1537	7.63	15.94	1.40	0.00	4.1	-133	150	12.28	
1542	7.61	15.81	1.38	0.00	3.3	-135	150	13.15	
1547	7.60	15.80	1.37	0.09	4.4	-134	150	14.20	
1552	7.59	15.80	1.34	2.00	5.8	-127	150	15.20	
1557									
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 ($vol_{ft} = \pi r^2 h$)

Remarks: WL - Drops Below intake while filling PCBs Continue to purge for Sample Volume.

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-26

Date: 10/17/18 Sampling Personnel: T. Urban Company: AECOM

Purging/Sampling Device: Geopump Tubing Type: ~~HDPE~~ teflon + silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 8.00 Depth to Well Bottom: 21.57 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 8.4 Estimated Purge Volume (liters):

Sample ID: MW-26 + MW-26-F Sample Time: 0950 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)
0905	7.20	12.97	0.757	4.99	56.4	167	200	8.00
0910	6.97	15.33	0.719	1.66	16.2	166	200	9.13
0915	6.96	15.92	0.712	1.38	11.1	161	200	9.88
0920	6.96	16.26	0.710	1.27	8.5	158	200	10.70
0925	6.96	16.32	0.711	1.20	8.2	156	200	11.36
0930	6.96	16.42	0.713	1.09	5.3	153	200	11.92
0935	6.95	17.08	0.707	1.01	9.9	150	200	12.50
0940	6.94	17.16	0.706	0.76	4.6	144	200	13.08
0945	6.93	17.04	0.702	0.56	4.4	139	200	13.60
0950	6.93	17.05	0.701	0.62	5.1	137	200	14.35
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: NTC - CARRIER Site: CARRIER Well I.D.: MW-38

Date: 10/17/18 Sampling Personnel: R. MURPHY Company: AECOM

Purging/Sampling Device: Geopump Tubing Type: ~~Teflon~~/Silicone LDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 9.33 Depth to Well Bottom: 14.78 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 3.36 5.45 Estimated Purge Volume (liters):

Sample ID: MW-38 Sample Time: 1147 QA/QC: None

Sample Parameters: PCB (filtered + unfiltered), 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)
1112	7.47	16.63	2.40	1.56	18.6	189	175	9.33
1117	7.57	16.46	1.83	2.39	16.0	181	175	11.15
1122	7.56	16.59	1.60	3.25	10.7	186	175	11.72
1127	7.47	16.98	1.46	3.71	13.6	186	140	12.58
1132	7.45	16.77	1.59	3.34	12.8	186	140	12.89
1137	7.45	16.64	1.71	1.75	11.9	187	140	13.35
1142	7.46	16.69	1.69	1.53	24.4	183	140	13.75
1147	7.45	16.40	1.76	0.79	32.8	183	140	14.02
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:

Bubble on DO sensor.

DO Not 10% Sample due to low Recharge

Turbidity increased while sampling due to dropping WL.

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-44

Date: 10/16/18 Sampling Personnel: T Urban Company: AECOM

Purging/Sampling Device: Geo pump Tubing Type: LDPE + Silicone + teflon Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 6.58 Depth to Well Bottom: 15.70 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 5.63 Estimated Purge Volume (liters):

Sample ID: MW-44 + MW-44-F Sample Time: 1042 QA/QC: Field Dup (FD-101818) (FD-101815-F)

Sample Parameters: VOCs + PCBs (filtered + non filtered

PURGE PARAMETERS

(200)

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1000	7.14	15.94	6.18	3.45	130	98	230	6.58
1005	6.97	16.72	6.22	0.24	76.3	47	230	7.93
1010	6.94	16.85	6.17	0.04	50.5	51	200	8.42
1015	6.93	17.16	6.05	0.00	44.7	58	200	8.83
1020	6.92	17.34	6.03	0.00	53	48	200	9.20
1025	6.95	17.36	4.16	0.00	253	7	200	9.55
1030	6.97	17.50	3.43	2.84	226	20	200	9.91
1033	6.97	17.44	3.06	3.56	221	36	200	10.05
1036	6.97	17.52	2.93	4.34	268	44	200	10.22
1039	6.97	17.52	2.98	4.49	346	51	200	10.30
1042	6.97	17.37	2.96	4.55	367	54	200	10.42
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:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: ANNUAL GW SAMPLING Site: UTC - SYRACUSE Well I.D.: MW-45

Date: 10/18/18 Sampling Personnel: R. MURPHY Company: AECOM

Purging/ Sampling Device: Geopump 2 Tubing Type: LDPE / silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 5.99 Depth to Well Bottom: 13.20 SOFT Well Diameter: 2" Screen Length:

7.21

Casing Type: PVC Volume in 1 Well Casing (liters): 4.5 Estimated Purge Volume (liters):

Sample ID: MW-45 Sample Time: 911 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)
0830	7.89	10.92	2.18	2.91	483	147	140	5.99
0835	7.86	13.75	1.83	1.23	173	139	140	7.38
0840	7.92	14.69	1.79	0.78	302	133	140	7.82
0845	7.92	15.05	1.86	0.51	485	133	140	8.18
0850	7.89	14.05	2.17	0.02	626	139	140	8.45
0855	7.87	14.23	2.30	0.00	567	140	140	8.65
0900	7.83	14.72	2.40	0.00	>1000	140	140	8.75
0905	7.77	15.25	2.66	0.00	>1000	139	140	8.85
0908	7.75	15.20	2.70	0.00	>1000	139	140	8.90
0911	7.73	15.20	2.74	0.00	>1000	137	140	8.93
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 ($vol_{/ft} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC-Carrier Site: Syracuse, NY Well I.D.: MW-48

Date: 10/16/18 Sampling Personnel: T. Urban Company: AECOM

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

Measuring Point: Below Top of Riser Initial Depth to Water: 10.90 Depth to Well Bottom: 18.30 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 4.6 Estimated Purge Volume (liters):

Sample ID: MW-48 Sample Time: ~~1140~~ 1210 QA/QC: —

Sample Parameters: VOCs

PURGE PARAMETERS

(100)

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1035	7.25	15.80	2.80	2.96	59.0	114	125	10.90
1040	6.87	16.19	2.81	0.29	28.4	117	125	12.30
1045	6.81	16.19	2.46	0.16	40.6	113	120	12.55
1050	6.74	16.27	1.89	0.23	51.8	111	120	13.55
1055	6.73	16.34	1.80	0.30	84.3	112	120	14.15
1100	6.72	16.46	1.73	0.24	93.9	112	120	15.20
1105	6.72	16.46	1.75	0.31	101	113	120	15.60
1110	6.72	16.61	1.77	0.32	103	114	120	16.30
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:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: ANNUAL GW SAMPLING Site: UTC SYRACUSE Well I.D.: MW-50

Date: 10/18/13 Sampling Personnel: R MURRAY Company: AECOM

Purging/ Sampling Device: GeoPump 2 Tubing Type: LDPE / Silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 10.85 Depth to Well Bottom: 20.95 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 10.10 Estimated Purge Volume (liters):

Sample ID: MW-50 Sample Time: 905 QA/QC: NONE

Sample Parameters: TCL 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)
0830	8.01	8.48	5.28	13.46	343	-61	320	10.85
0835	7.64	12.37	5.18	0.94	171	-72	320	10.87
0840	7.56	13.24	5.01	0.00	57.3	-32	320	10.87
0845	7.52	13.87	4.87	0.00	32.1	-7	320	10.87
0850	7.50	14.32	4.76	0.00	12.2	-3	320	10.87
0855	7.48	15.52	4.50	0.00	8.8	5	320	10.87
0900	7.60	15.70	4.45	0.00	6.9	-1	320	10.87
0905	7.58	15.86	4.41	0.00	6.1	-3	320	10.87
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 ($vol_f = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC-Carrier Site: Syracuse, NY Well I.D.: MW-57

Date: 10/19/18 Sampling Personnel: T. Urban Company: AECOM

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

Measuring Point: Below Top of Riser Initial Depth to Water: 3.50 Depth to Well Bottom: 22.25 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 11.6 Estimated Purge Volume (liters):

Sample ID: MW-57 Sample Time: 0917 QA/QC: —

Sample Parameters: VOCs

PURGE PARAMETERS

200 ish

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0822	7.40	10.39	1.61	2.97	8.2	3	300	3.50
0827	7.15	13.50	1.50	0.42	17.0	-59	230	4.90
0832	7.14	14.69	1.41	0.19	14.5	-65	230	5.13
0837	7.19	15.55	0.773	0.24	13.9	-58	230	5.95
0842	7.21	15.76	0.647	0.11	13.7	-51	230	6.49
0847	7.23	16.01	0.583	0.00	12.7	-34	230	7.24
0852	7.20	16.10	0.601	0.00	11.3	-26	230	7.78
0857	7.19	16.20	0.637	0.00	10.1	-19	230	8.30
0902	7.19	16.28	0.666	0.00	8.7	-20	230	8.57
0907	7.20	16.34	0.732	0.00	7.3	-20	230	8.99
0912	7.20	16.35	0.738	0.00	6.0	-20	230	9.17
0917	7.20	16.33	0.749	0.00	5.2	-19	230	9.43
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: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-58

Date: 10/18/18 Sampling Personnel: R. Murphy 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: 4.08 Depth to Well Bottom: 23.50 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 19.42 11.98 Estimated Purge Volume (liters):

Sample ID: MW-58 Sample Time: 1631 QA/QC:

Sample Parameters: VOCs

PURGE PARAMETERS

(240)

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1535	7.51	9.70	3.88	4.53	20.3	-35	300	4.08
1540	7.51	10.93	3.88	0.20	11.8	-87	260	4.80
1545	7.53	11.90	3.79	0.00	9.2	-94	260	5.05
1550	7.56	12.35	3.64	0.00	5.1	-99	240	5.33
1555	7.58	12.82	3.42	0.00	6.4	-103	240	5.68
1600	7.60	13.19	3.34	0.00	6.1	-104	240	6.08
1605	7.59	13.32	3.33	0.00	7.8	-102	240	6.42
1610	7.56	13.46	3.32	0.00	10.6	-89	240	6.65
1615	7.53	13.51	3.32	0.00	9.4	-77	240	6.98
1620	7.49	13.56	3.33	0.00	12.6	-60	240	7.38
1625	7.47	13.57	3.32	0.00	5.6	-47	240	7.62
1628	7.47	13.51	3.33	0.00	5.4	-46	240	7.74
1631	7.47	13.48	3.33	0.00	5.1	-46	240	7.90
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC-Carrier Site: Syracuse, NY Well I.D.: MW-66

Date: 10/18/18 Sampling Personnel: T. Urban Company: AECOM

Purging/Sampling Device: Geo pump Tubing Type: LDPE + Teflon + silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 6.08 Depth to Well Bottom: 22.60 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 10.2 Estimated Purge Volume (liters):

Sample ID: MW-66 Sample Time: 1620 QA/QC: —

Sample Parameters: VOCs

PURGE PARAMETERS

(240)

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1535	7.08	14.53	3.07	5.81	90.2	-48	240	6.08
1540	7.06	14.75	3.06	0.60	69.2	-62	240	6.32
1545	7.07	15.14	3.01	0.02	46.2	-72	240	6.32
1550	7.08	15.46	2.98	0.00	39.6	-75	240	6.36
1555	7.01	15.68	2.94	0.00	39.5	-69	240	6.36
1600	6.88	15.79	2.93	0.00	45.4	-48	240	6.36
1605	6.77	15.93	2.93	0.00	36.8	-26	240	6.36
1610	6.75	15.98	2.92	0.00	26.4	-19	240	6.36
1615	6.74	16.06	2.90	0.00	16.0	-18	240	6.36
1620	6.74	16.05	2.89	0.00	8.3	-20	240	6.36
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 ($v_{\text{well}} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-69

Date: 10/15/18 Sampling Personnel: T. Urban 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: 5.38 Depth to Well Bottom: 13.50 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 5.0 Estimated Purge Volume (liters):

Sample ID: MW-69 Sample Time: 1640 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)
1600	7.55	17.88	6.11	0.43	137	-57	180	5.35
1605	7.53	17.77	6.08	0.00	161	-61	150	6.00
1610	7.56	17.19	6.04	0.00	215	-64	150	6.30
1615	7.55	17.06	5.97	0.00	241	-63	150	6.50
1620	7.53	17.04	5.84	0.00	192	-57	150	6.68
1625	7.50	17.01	5.70	0.00	133	-47	150	6.84
1630	7.56	16.97	5.59	0.00	95.7	-43	150	7.00
1635	7.51	16.94	5.54	0.00	81.1	-44	150	7.17
1640	7.52	16.91	5.53	0.00	82.3	-46	150	7.30
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 ($v_{Q_l} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Annual GW Sampling Site: UTC-Carrier Well I.D.: MW-70

Date: 10/16/18 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: 10.91 Depth to Well Bottom: 19.70 Well Diameter: 2" Screen Length: _____

Casing Type: PVC Volume in 1 Well Casing (liters): 8.79 5.42 x 3 = 16.3 Estimated Purge Volume (liters): _____

Sample ID: MW-70 Sample Time: ~~1620~~ 1615 QA/QC: None

Sample Parameters: VOCs, PFAs, 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)
1510	7.28	15.05	1.97	3.61	14.7	21	250	10.91
1515	7.08	15.27	1.73	0.48	7.4	67	250	11.66
1520	7.07	15.39	1.73	0.24	5.3	73	250	11.92
1525	7.06	15.64	1.74	0.00	2.1	79	250	12.25
1530	7.10	15.85	1.74	0.00	3.5	61	250	12.28
1535	7.13	15.90	1.75	0.00	3.3	51	250	12.98
1540	7.18	15.95	1.76	0.00	2.8	34	250	13.30
1545	7.24	15.85	1.79	0.00	3.2	10	250	13.65
1550	7.26	15.82	1.82	0.00	4.2	3	250	13.95
1555	7.28	15.79	1.84	0.00	4.5	-3	250	14.25
1600	7.30	15.76	1.86	0.00	4.4	-5	250	14.55
1605	7.31	15.79	1.87	0.00	4.2	-8	250	14.89
1610	7.31	15.64	1.91	0.00	4.6	-11	250	15.12
1615	7.31	15.64	1.92	0.00	5.5	-12	250	15.35
1616	—	SAMPLE						
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 ($vol_H = \pi r^2 h$)

Remarks:

PFAs - Purge 3x

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: ANNUAL GW MONITORING Site: UTC-CARRIER Well I.D.: MW-71

Date: 10/16/18 Sampling Personnel: R. MURRAY 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: 9.36 Depth to Well Bottom: 15.00 Well Diameter: 2" Screen Length:

5.64

Casing Type: PVC Volume in 1 Well Casing (liters): 3.48 x 3 = 10.44 Estimated Purge Volume (liters):

Sample ID: MW-71 Sample Time: 1810 QA/QC: NONE

Sample Parameters: VOCs, PFASs, 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)	
1720	7.69	15.60	0.982	2.17	11.2	-93	210	9.36	
1725	7.65	15.52	0.998	0.63	17.2	-98	210	9.85	2.1
1730	7.64	15.53	1.01	0.00	26.2	-98	250	9.71	
1735	7.63	15.51	1.05	0.00	10.6	-98	250	9.77	2.5
1740	7.61	15.44	1.09	0.00	4.0	-95	250	9.81	
1745	7.60	15.40	1.10	0.00	3.4	-93	240	9.84	2.45
1750	7.59	15.29	1.13	0.00	2.6	-92	240	9.83	
1755	7.60	15.25	1.13	0.00	2.1	-91	240	9.84	2.45
1800	7.57	15.18	1.15	0.00	1.8	-89	240	9.95	1.05 - 10.35
1805	7.57	15.08	1.15	0.00	1.8	-88	240	9.85	
1810	7.57	15.01	1.15	0.00	1.8	-87	210	9.84	
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: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-75

Date: 10/5/18 Sampling Personnel: T. Urban 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: 7.10 Depth to Well Bottom: 9.90 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 1.73 Estimated Purge Volume (liters):

Sample ID: MW-75 Sample Time: 1530 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)	
1445	7.43	18.73	1.20	3.80	134	62	150	7.10	
1450	7.31	18.93	1.16	3.05	20.9	42	135	7.46	
1455	7.29	19.00	1.15	2.80	10.8	47	115	7.65	- pump as low as can go
1500	7.29	18.96	1.15	1.98	4.9	72	115	7.80	
1505	7.30	18.96	1.15	1.30	4.2	84	115	7.98	
1510	7.31	18.96	1.15	0.85	3.1	87	115	8.10	
1515	7.34	18.99	1.16	0.60	3.7	87	115	8.22	
1520	7.34	18.99	1.16	0.22	3.5	66	115	8.36	
1525	7.35	19.01	1.17	0.02	3.8	67	115	8.48	
1530	7.36	19.01	1.17	0.00	4.2	65	115	8.63	
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:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-76

Date: 10/15/18 Sampling Personnel: T. Urban 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: 7.33 Depth to Well Bottom: 14.30 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 4.3 Estimated Purge Volume (liters):

Sample ID: MW-76 Sample Time: 1410 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)
1340	7.34	17.01	11.2	3.88	18.1	-97	350	7.33
1345	7.37	17.31	9.75	1.07	11.6	-100	210	8.00
1350	7.44	17.46	6.78	0.36	10.5	-86	210	8.15
1355	7.41	17.57	5.89	0.24	7.6	-58	210	8.33
1400	7.38	17.62	6.00	0.01	5.7	-54	200	8.48
1405	7.39	17.60	5.97	0.00	4.4	-56	200	8.56
1410	7.40	17.60	5.96	0.00	3.4	-61	200	8.66
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: _____ Site: UTC-SYRACUSE Well I.D.: MW-77

Date: 10/15/18 Sampling Personnel: R. MURPHY Company: AECOM

Purging/Sampling Device: Geopump II Tubing Type: LDPE/Silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 8.53 Depth to Well Bottom: 14.15 Well Diameter: 2" Screen Length: _____

5.62

Casing Type: PVC Volume in 1 Well Casing (liters): 3.5 Estimated Purge Volume (liters): _____

Sample ID: MW-77 Sample Time: 1410 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)	
1340	6.53	18.74	0.856	0.49	11.2	103	160	8.53	500
1345	6.45	18.45	0.859	0.18	10.7	90	160	9.10	500
1350	6.44	18.47	0.860	0.11	10.1	84	150	9.28	750
1355	6.45	18.60	0.866	0.08	6.5	75	150	9.47	750
1400	6.45	18.66	0.868	0.03	4.5	76	150	9.65	750
1405	6.45	18.68	0.865	0.00	2.3	77	150	10.35	
1410	6.46	18.71	0.864	0.00	2.1	76	150	10.73	
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: MW-79

Date: 10/18/16 Sampling Personnel: T. Urban 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: 3.43 Depth to Well Bottom: 10.00 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 4.1 Estimated Purge Volume (liters):

Sample ID: MW-79 Sample Time: 1400 QA/QC: —

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)
1340	7.17	12.67	2.75	3.53	422	3	250	3.93
1345	6.71	16.34	2.65	0.07	60.0	-44	220	4.00
1350	6.64	16.65	2.65	0.04	30.6	-28	200	4.20
1355	6.63	16.78	2.68	0.00	18.0	-29	206	4.44
1400	6.65	16.72	2.69	0.00	13.9	-31	200	4.62
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 ($vol_l = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: _____ Site: NTC-Syracuse Well I.D.: MW-84

Date: 10/15/18 Sampling Personnel: L MURPHY Company: AECOM

Purging/Sampling Device: Geopump 2 Tubing Type: LDPE/Silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 6.89 Depth to Well Bottom: 10.95 Well Diameter: 2" Screen Length: _____

Casing Type: PVC Volume in 1 Well Casing (liters): 4.06 2.5 Estimated Purge Volume (liters): _____

Sample ID: MW-84 Sample Time: 1555 QA/QC: Duplicate (FD-101518)

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)
1500	6.84	19.74	3.22	4.41	32.3	156	235	6.89
1505	7.06	21.16	3.24	2.84	59.1	153	170	7.40
1510	7.09	21.59	3.40	1.25	25.5	151	170	7.58
1515	7.10	21.73	3.39	4.38	29.7	148	170	7.99
1520	7.09	21.79	3.32	4.32	20.4	137	170	8.12
1525	7.07	21.73	3.18	4.27	20.2	110	170	8.24
1530	7.06	21.66	3.07	4.15	16.5	64	170	8.38
1535	7.04	21.62	2.90	3.85	14.3	49	170	8.54
1540	7.03	21.62	2.73	3.65	37.3	30	170	8.75
1545	7.02	21.59	2.66	3.37	12.3	18	170	8.90
1550	7.03	21.46	2.67	3.23	11.8	12	170	9.02
1555	7.02	21.47	2.69	3.07	2.14	11	170	9.15
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: Turbidity suspect, appears less than 50 NTUs

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: UTC - Carrier Site: Syracuse, NY Well I.D.: TR3-MW-02

Date: 10/18/18 Sampling Personnel: T. Urban 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: 2.50 Depth to Well Bottom: 11.65 Well Diameter: 2" Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 5.65 Estimated Purge Volume (liters):

Sample ID: TR3-MW-02 Sample Time: 1500 QA/QC: —

Sample Parameters: VOCs

PURGE PARAMETERS

(200)

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	ORP (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1430	6.95	14.40	2.33	3.75	22.6	-50	220	2.50
1435	6.63	14.70	2.38	0.13	4.8	-75	200	3.15
1440	6.62	15.19	2.34	0.02	21.1	-78	200	3.43
1445	6.62	15.46	2.30	0.00	15.2	-80	200	3.65
1450	6.61	15.55	2.28	0.00	12.1	-81	200	3.93
1455	6.61	15.60	2.26	0.00	10.3	-81	200	4.18
1500	6.60	15.60	2.27	0.00	9.7	-81	200	4.45
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:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: ANNUAL GW SAMPLING Site: UTC-SYRACUSE Well I.D.: TR3-PW-01

Date: 10/19/18 Sampling Personnel: R. MURPHY Company: AECOM

Purging/ Sampling Device: Geopump 2 Tubing Type: LDPE/Silicone Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 10.45 Depth to Well Bottom: 28.28 Well Diameter: 4" Screen Length:

17.83

Casing Type: PVC Volume in 1 Well Casing (liters): 44.04 Estimated Purge Volume (liters):

Sample ID: TR3-PW-01 Sample Time: 1028 QA/QC: NONE

Sample Parameters: TCL 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)
0928	7.46	14.67	1.59	1.41	31.6	-42	330	10.45
0933	7.39	14.34	1.53	1.53	22.2	-8	330	11.23
0938	7.36	14.23	1.48	0.00	14.1	-6	330	11.60
0943	7.34	14.36	1.49	0.00	11.8	-6	330	11.85
0948	7.34	14.54	1.48	0.00	9.1	-7	300	12.05
0953	7.41	14.72	1.49	0.00	4.7	-12	300	12.18
0958	7.41	14.92	1.48	0.00	3.8	-13	300	12.33
1003	7.40	15.00	1.48	0.00	3.8	-14	300	12.50
1008	7.38	15.23	1.48	0.00	4.1	-13	300	12.70
1013	7.38	15.25	1.48	0.00	4.3	-13	300	12.82
1018	7.37	15.21	1.48	0.00	4.0	-13	300	12.97
1023	7.36	15.21	1.47	0.00	4.3	-13	300	13.13
1028	7.35	15.31	1.47	0.00	4.0	-12	300	13.27
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 ($vol_{fl} = \pi r^2 h$)

Remarks:

APPENDIX B

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

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

Analyses Performed by:

EUROFINS SPECTRUM ANALYTICAL, LLC and
LANCASTER LABORATORIES
AGAWAM, MA 01001 and LANCASTER, PA 17601

Prepared for:

UNITED TECHNOLOGIES CORP.
UTC SHARED REMEDIATION SERVICES
FARMINGTON, CT 06032

Prepared by:

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

FEBRUARY 2019

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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.

II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION PROCEDURES

The data being evaluated is from the October 15-19, 2018 sampling of 33 groundwater (GW) samples, 3 field duplicate (FD), 2 matrix spike/matrix spike duplicates (MS/MSDs), 2 equipment/field rinse blanks (EB/FB), and 2 trip blanks. The analytical laboratory that performed the analyses is Eurofins Spectrum Analytical Laboratories, LLC located in Agawam, MA and Lancaster Laboratories located in Lancaster, PA. Volatile Organic Compound (VOCs) analysis were subcontracted to SGS-Accutest located in Dayton, NJ. The analysis for 1,4-dioxane by 8270D SIM was subcontracted to Pace Laboratories located in Mount Juliet, TN. The samples were analyzed for the following parameters. Not all samples were analyzed for all parameters.

Matrix	Parameter	Method
Groundwater	Volatile Organic Compounds (VOC)	SW8260C
	Polychlorinated Biphenyls (PCBs) (Total and Dissolved)	SW8082A
	1,4-Dioxane	SW8270D SIM
	Per- and Polyfluoroalkyl Substances (PFAS)	Method 537-Modified

A limited data validation was performed following the guidelines in the following USEPA Region II document (where applicable) along with the method and laboratory SOPs for PFAS:

- *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 – 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

- **Surrogates**

  The percent recoveries (%R) of PFAS surrogates 13C3-perfluorobutanesulfonate (PFBS) and/or 13C5-perfluoropentanoic acid (PFPA) were greater than the upper QC limit in GW samples DP-MW-04 and MW-14. These samples were re-extracted and showed similar QC outliers. The detected results for PFBS and PFPA in these samples have been qualified 'J'.

  Support documentation (i.e., surrogate recovery summary form) is presented in Appendix B.

- **Instrument Calibration**

  The relative response factors (RRF) for acetone in the VOC initial calibration (ICAL) and continuing calibration standards (CCAL) were less than the QC limit of 0.100. The non-detect

results for this compound 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: bromomethane, dichlorodifluoromethane, and/or trichlorofluoromethane. 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.

- **Internal Standards**

The %Rs of PFAS internal standard (IS) 13C3-perfluorobutanoic acid (PFBA) was less than the QC limit in the analysis of GW samples AR-MW-02, DP-MW-04, MW-03S, FD-101618 (MW-03S), and MW-14. The samples were re-analyzed with similar QC outliers. The results for PFBA in these sample have been qualified 'J'.

Support documentation (i.e., IS 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-44	FD-101818	---
MW-84	FD-101518	---
MW-03S	FD-101618	---

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. All quantitation limits were reported in accordance with method requirements and were adjusted for dilution factors.

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.

The VOC analysis for the GW and field QC samples (all aqueous matrices) were subcontracted to SGS-Accutest due to a temporary loss of NYSDOH ELAP certification by Eurofins. The list of VOCs reported by SGS differs slightly than those reported by Eurofins.

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:** 2/11/19

Reviewed By: Peter R. Fairbanks, Senior Chemist **Date:** 2/11/19

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
UTC/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-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					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	1.1 U
1,1,2,2-Tetrachloroethane	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	1.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	3.9 U
1,1,2-Trichloroethane	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U
1,1-Dichloroethane	UG/L	0.57 U	0.57 U	0.57 U	0.57 U	23.4
1,1-Dichloroethene	UG/L	0.59 U	0.59 U	0.59 U	0.59 U	6.0
1,2,3-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
1,2,4-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U
1,2-Dichlorobenzene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U
1,2-Dichloroethane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U
1,2-Dichloroethene (cis)	UG/L	0.51 U	7.4	0.51 U	7.0	863 D
1,2-Dichloroethene (trans)	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	1.5 J
1,2-Dichloropropane	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	1.0 U
1,3-Dichlorobenzene	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	1.1 U
1,3-Dichloropropene (cis)	UG/L	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U
1,3-Dichloropropene (trans)	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.86 U
1,4-Dichlorobenzene	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	1.0 U
2-Hexanone	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	4.1 U
4-Methyl-2-pentanone	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	3.7 U
Acetone	UG/L	R	6.0 U	R	R	R
Benzene	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.85 U
Bromochloromethane	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U
Bromodichloromethane	UG/L	0.58 U	0.58 U	0.58 U	0.58 U	1.2 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

Advanced Selection: Annual GW
#Error
Printed: 2/11/2019 11:00:44 AM
[LOGDATE] > #10/1/2016# AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND [LOCID] <> 'FIELDQC'

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/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-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					Field Duplicate (1-1)
Volatile Organic Compounds						
Bromoform	UG/L	0.63 U	0.63 U	0.63 U	0.63 U	1.3 U
Bromomethane	UG/L	1.6 U	1.6 U	1.6 U	1.6 U	3.3 U
Carbon disulfide	UG/L	0.95 U	0.95 U	0.95 U	0.95 U	1.9 U
Carbon tetrachloride	UG/L	0.55 U	0.55 U	0.55 U	0.55 U	1.1 U
Chlorobenzene	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	1.1 U
Chloroethane	UG/L	0.73 U	0.73 U	0.73 U	0.73 U	1.5 U
Chloroform	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Chloromethane	UG/L	0.76 U	0.76 U	0.76 U	0.76 U	1.5 U
Cyclohexane	UG/L	0.78 U	0.78 U	0.78 U	0.78 U	1.6 U
Dibromochloromethane	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	1.1 U
Dichlorodifluoromethane	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	2.7 UJ
Ethylbenzene	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U
Isopropylbenzene (Cumene)	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	1.3 U
Methyl acetate	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	1.6 U
Methyl ethyl ketone (2-Butanone)	UG/L	6.9 U	6.9 U	6.9 U	6.9 U	14 U
Methyl tert-butyl ether	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	1.0 U
Methylcyclohexane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Styrene	UG/L	0.70 U	0.70 U	0.70 U	0.70 U	1.4 U
Tetrachloroethene	UG/L	0.90 U	0.90 U	0.90 U	0.90 U	1.8 U
Toluene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U
Trichloroethene	UG/L	0.53 U	6.5	0.53 U	0.53 U	2.9
Trichlorofluoromethane	UG/L	0.84 UJ	0.84 U	0.84 UJ	0.84 UJ	1.7 U
Vinyl chloride	UG/L	0.79 U	0.79 U	0.79 U	0.79 U	47.6
Xylene (total)	UG/L	0.59 U	0.59 U	0.59 U	0.59 U	1.2 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/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-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					Field Duplicate (1-1)
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	0.0447 U	NA	0.0447 U	0.0447 U	2.48
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
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
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	0.88 U	NA	0.90 U	0.90 U	0.91 U
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

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/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-101818
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					Field Duplicate (1-1)
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	0.53 U	NA	0.54 U	0.54 U	0.55 U
Perfluorodecanoic acid (PFDA)	NG/L	0.79 U	NA	0.81 U	0.81 U	0.82 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	0.88 U	NA	0.90 U	0.90 U	0.91 U
Perfluorododecanoic acid (PFDoA)	NG/L	0.44 U	NA	0.45 U	0.45 U	0.46 U
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
Perfluorooctane sulfonamide (FOSA)	NG/L	0.44 U	NA	0.45 U	0.45 U	0.46 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
Perfluorotetradecanoic acid (PFTeA)	NG/L	0.26 U	NA	0.27 U	0.27 U	0.27 U
Perfluorotridecanoic acid (PFTriA)	NG/L	0.35 U	NA	0.36 U	0.36 U	0.37 U
Perfluoroundecanoic acid (PFUnA)	NG/L	0.35 U	NA	0.36 U	0.36 U	0.37 U
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	0.88 U	NA	0.90 U	0.90 U	0.91 U
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.8 U	NA	1.8 U	1.8 U	1.8 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
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Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.1 U	1.0	0.54 U	0.54 U	NA
1,1,2,2-Tetrachloroethane	UG/L	1.3 U	0.65 U	0.65 U	0.65 U	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	3.9 U	1.9 U	1.9 U	1.9 U	NA
1,1,2-Trichloroethane	UG/L	1.1 U	0.53 U	0.53 U	0.53 U	NA
1,1-Dichloroethane	UG/L	23.2	0.62 J	0.57 U	0.57 U	NA
1,1-Dichloroethene	UG/L	6.3	0.59 U	0.59 U	0.59 U	NA
1,2,3-Trichlorobenzene	UG/L	1.0 U	0.50 U	0.50 U	0.50 U	NA
1,2,4-Trichlorobenzene	UG/L	1.0 U	0.50 U	0.50 U	0.50 U	NA
1,2-Dibromo-3-chloropropane	UG/L	2.4 U	1.2 U	1.2 U	1.2 U	NA
1,2-Dibromoethane (Ethylene dibromide)	UG/L	0.95 U	0.48 U	0.48 U	0.48 U	NA
1,2-Dichlorobenzene	UG/L	1.1 U	0.53 U	0.53 U	0.53 U	NA
1,2-Dichloroethane	UG/L	1.2 U	0.60 U	0.60 U	0.60 U	NA
1,2-Dichloroethene (cis)	UG/L	805 D	0.51 U	0.51 U	0.51 U	NA
1,2-Dichloroethene (trans)	UG/L	1.5 J	0.54 U	0.54 U	0.54 U	NA
1,2-Dichloropropane	UG/L	1.0 U	0.51 U	0.51 U	0.51 U	NA
1,3-Dichlorobenzene	UG/L	1.1 U	0.54 U	0.54 U	0.54 U	NA
1,3-Dichloropropene (cis)	UG/L	0.94 U	0.47 U	0.47 U	0.47 U	NA
1,3-Dichloropropene (trans)	UG/L	0.86 U	0.43 U	0.43 U	0.43 U	NA
1,4-Dichlorobenzene	UG/L	1.0 U	0.51 U	0.51 U	0.51 U	NA
2-Hexanone	UG/L	4.1 U	2.0 U	2.0 U	2.0 U	NA
4-Methyl-2-pentanone	UG/L	3.7 U	1.9 U	1.9 U	1.9 U	NA
Acetone	UG/L	R	R	R	6.0 U	NA
Benzene	UG/L	0.85 U	0.43 U	0.43 U	0.43 U	NA
Bromochloromethane	UG/L	0.96 U	0.48 U	0.48 U	0.48 U	NA
Bromodichloromethane	UG/L	1.2 U	0.58 U	0.58 U	0.58 U	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
Bromoform	UG/L	1.3 U	0.63 U	0.63 U	0.63 U	NA
Bromomethane	UG/L	3.3 U	1.6 U	1.6 U	1.6 UJ	NA
Carbon disulfide	UG/L	1.9 U	0.95 U	0.95 U	0.95 U	NA
Carbon tetrachloride	UG/L	1.1 U	0.55 U	0.55 U	0.55 U	NA
Chlorobenzene	UG/L	1.1 U	0.56 U	0.56 U	0.56 U	NA
Chloroethane	UG/L	1.5 U	0.73 U	0.73 U	0.73 U	NA
Chloroform	UG/L	1.0 U	0.50 U	0.50 U	0.50 U	NA
Chloromethane	UG/L	1.5 U	0.76 U	0.76 U	0.76 U	NA
Cyclohexane	UG/L	1.6 U	0.78 U	0.78 U	0.78 U	NA
Dibromochloromethane	UG/L	1.1 U	0.56 U	0.56 U	0.56 U	NA
Dichlorodifluoromethane	UG/L	2.7 UJ	1.4 U	1.4 U	1.4 U	NA
Ethylbenzene	UG/L	1.2 U	0.60 U	0.60 U	0.60 U	NA
Isopropylbenzene (Cumene)	UG/L	1.3 U	0.65 U	0.65 U	0.65 U	NA
Methyl acetate	UG/L	1.6 U	0.80 U	0.80 U	0.80 U	NA
Methyl ethyl ketone (2-Butanone)	UG/L	14 U	6.9 U	6.9 U	6.9 U	NA
Methyl tert-butyl ether	UG/L	1.0 U	0.51 U	0.51 U	0.51 U	NA
Methylcyclohexane	UG/L	1.2 U	0.60 U	0.60 U	0.60 U	NA
Methylene chloride	UG/L	2.0 U	1.0 U	1.0 U	1.0 U	NA
Styrene	UG/L	1.4 U	0.70 U	0.70 U	0.70 U	NA
Tetrachloroethene	UG/L	1.8 U	0.90 U	0.90 U	0.90 U	NA
Toluene	UG/L	1.1 U	0.53 U	0.53 U	0.53 U	NA
Trichloroethene	UG/L	2.7	2.9	0.53 U	0.53 U	NA
Trichlorofluoromethane	UG/L	1.7 U	0.84 UJ	0.84 UJ	0.84 U	NA
Vinyl chloride	UG/L	46.1	0.79 U	0.79 U	0.79 U	NA
Xylene (total)	UG/L	1.2 U	0.59 U	0.59 U	0.59 U	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	2.58	NA	0.0447 U	1.63	0.171 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
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
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	0.92 U	NA	0.91 U	0.95 U	0.91 U
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

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MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	0.55 U	NA	0.55 U	0.57 U	0.55 U
Perfluorodecanoic acid (PFDA)	NG/L	0.83 U	NA	0.82 U	0.86 U	0.82 U
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	0.92 U	NA	0.91 U	0.95 U	0.91 U
Perfluorododecanoic acid (PFDoA)	NG/L	0.46 U	NA	0.46 U	0.48 U	0.46 U
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
Perfluorooctane sulfonamide (FOSA)	NG/L	0.46 U	NA	0.46 U	0.48 U	0.46 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
Perfluorotetradecanoic acid (PFTeA)	NG/L	0.28 U	NA	0.27 U	0.29 U	0.27 U
Perfluorotridecanoic acid (PFTriA)	NG/L	0.37 U	NA	0.36 U	0.38 U	0.36 U
Perfluoroundecanoic acid (PFUnA)	NG/L	0.37 U	NA	0.36 U	0.38 U	0.36 U
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	0.92 U	NA	0.91 U	0.95 U	0.91 U
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.8 U	NA	1.8 U	1.9 U	1.8 U

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Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	0.54 U	27 U	0.54 U	0.54 U	79.9
1,1,2,2-Tetrachloroethane	UG/L	0.65 U	33 U	0.65 U	0.65 U	0.65 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.9 U	97 U	1.9 U	1.9 U	1.9 U
1,1,2-Trichloroethane	UG/L	0.53 U	27 U	0.53 U	0.53 U	0.72 J
1,1-Dichloroethane	UG/L	0.57 U	39.4 J	0.57 U	0.57 U	228 D
1,1-Dichloroethene	UG/L	0.59 U	62.2	0.59 U	0.59 U	23.7
1,2,3-Trichlorobenzene	UG/L	0.50 U	25 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	UG/L	0.50 U	25 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	UG/L	1.2 U	60 U	1.2 U	1.2 U	1.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	0.48 U	24 U	0.48 U	0.48 U	0.48 U
1,2-Dichlorobenzene	UG/L	0.53 U	27 U	0.53 U	0.53 U	0.53 U
1,2-Dichloroethane	UG/L	0.60 U	30 U	0.60 U	0.60 U	0.72 J
1,2-Dichloroethene (cis)	UG/L	0.51 U	13,100 D	0.51 U	0.54 J	3,250 D
1,2-Dichloroethene (trans)	UG/L	0.54 U	54.7	0.54 U	0.54 U	19.2
1,2-Dichloropropane	UG/L	0.51 U	25 U	0.51 U	0.51 U	0.51 U
1,3-Dichlorobenzene	UG/L	0.54 U	27 U	0.54 U	0.54 U	0.54 U
1,3-Dichloropropene (cis)	UG/L	0.47 U	24 U	0.47 U	0.47 U	0.47 U
1,3-Dichloropropene (trans)	UG/L	0.43 U	22 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	UG/L	0.51 U	25 U	0.51 U	0.51 U	0.51 U
2-Hexanone	UG/L	2.0 U	100 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	UG/L	1.9 U	93 U	1.9 U	1.9 U	1.9 U
Acetone	UG/L	R	300 U	6.0 U	6.0 U	R
Benzene	UG/L	0.43 U	21 U	0.43 U	0.43 U	1.5
Bromochloromethane	UG/L	0.48 U	24 U	0.48 U	0.48 U	0.48 U
Bromodichloromethane	UG/L	0.58 U	29 U	0.58 U	0.58 U	0.58 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
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Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
Bromoform	UG/L	0.63 U	32 U	0.63 U	0.63 U	0.63 U
Bromomethane	UG/L	1.6 U	82 UJ	1.6 U	1.6 U	1.6 UJ
Carbon disulfide	UG/L	0.95 U	48 U	0.95 U	0.95 U	0.95 U
Carbon tetrachloride	UG/L	0.55 U	28 U	0.55 U	0.55 U	0.55 U
Chlorobenzene	UG/L	0.56 U	28 U	0.56 U	0.56 U	0.56 U
Chloroethane	UG/L	0.73 U	36 U	0.73 U	0.73 U	11.8
Chloroform	UG/L	0.50 U	25 U	0.50 U	0.50 U	0.50 U
Chloromethane	UG/L	0.76 U	38 U	0.76 U	0.76 U	0.76 U
Cyclohexane	UG/L	0.78 U	39 U	0.78 U	0.78 U	0.78 U
Dibromochloromethane	UG/L	0.56 U	28 U	0.56 U	0.56 U	0.56 U
Dichlorodifluoromethane	UG/L	1.4 U	68 U	1.4 U	1.4 U	1.4 UJ
Ethylbenzene	UG/L	0.60 U	30 U	0.60 U	0.60 U	17.8
Isopropylbenzene (Cumene)	UG/L	0.65 U	32 U	0.65 U	0.65 U	2.0
Methyl acetate	UG/L	0.80 U	40 U	0.80 U	0.80 U	0.80 U
Methyl ethyl ketone (2-Butanone)	UG/L	6.9 U	340 U	6.9 U	6.9 U	6.9 U
Methyl tert-butyl ether	UG/L	0.51 U	25 U	0.51 U	0.51 U	0.51 U
Methylcyclohexane	UG/L	0.60 U	30 U	0.60 U	0.60 U	0.60 U
Methylene chloride	UG/L	1.0 U	50 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	0.70 U	35 U	0.70 U	0.70 U	0.70 U
Tetrachloroethene	UG/L	0.90 U	45 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	0.53 U	27 U	0.53 U	0.53 U	48.3
Trichloroethene	UG/L	0.53 U	6,980	1.1	0.57 J	168 D
Trichlorofluoromethane	UG/L	0.84 UJ	42 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	0.79 U	1,830	0.79 U	0.79 U	221 D
Xylene (total)	UG/L	0.59 U	30 U	0.59 U	0.59 U	16.4

Flags assigned during chemistry validation are shown.

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Detection Limits shown are MDL

Advanced Selection: Annual GW
#Error
Printed: 2/11/2019 11:00:47 AM
[LOGDATE] > #10/1/2018# AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND [LOCID] <> 'FIELDQC'

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	0.0447 U	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	0.108 U	NA	0.132 U
Aroclor 1221	UG/L	NA	NA	0.120 U	NA	0.196 U
Aroclor 1232	UG/L	NA	NA	0.116 U	NA	0.0922 U
Aroclor 1242	UG/L	NA	NA	0.112 U	NA	0.114 U
Aroclor 1248	UG/L	NA	NA	0.142 U	NA	0.136 U
Aroclor 1254	UG/L	NA	NA	0.121 U	NA	0.123 U
Aroclor 1260	UG/L	NA	NA	0.0886 U	NA	0.125 U
Aroclor 1262	UG/L	NA	NA	0.0933 U	NA	0.138 U
Aroclor 1268	UG/L	NA	NA	0.0953 U	NA	0.129 U
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	NA	NA	0.104 U	NA	0.128 U
Aroclor 1221	UG/L	NA	NA	0.115 U	NA	0.189 U
Aroclor 1232	UG/L	NA	NA	0.111 U	NA	0.0893 U
Aroclor 1242	UG/L	NA	NA	0.107 U	NA	0.111 U
Aroclor 1248	UG/L	NA	NA	0.136 U	NA	0.132 U
Aroclor 1254	UG/L	NA	NA	0.116 U	NA	0.119 U
Aroclor 1260	UG/L	NA	NA	0.0851 U	NA	0.121 U
Aroclor 1262	UG/L	NA	NA	0.0896 U	NA	0.134 U
Aroclor 1268	UG/L	NA	NA	0.0915 U	NA	0.125 U
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	0.91 U	NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	0.27 U	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	2.9 J	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	0.55 U	NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	NG/L	0.82 U	NA	NA	NA	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	0.91 U	NA	NA	NA	NA
Perfluorododecanoic acid (PFDoA)	NG/L	0.46 U	NA	NA	NA	NA
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
Perfluorooctane sulfonamide (FOSA)	NG/L	0.46 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
Perfluorotetradecanoic acid (PFTeA)	NG/L	0.27 U	NA	NA	NA	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	0.36 U	NA	NA	NA	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	0.36 U	NA	NA	NA	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	0.91 U	NA	NA	NA	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	1.8 U	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.1	0.54 U	1.0	0.99 J	0.54 U
1,1,2,2-Tetrachloroethane	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,1,2-Trichloroethane	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	0.57 U	0.57 U	1.1	1.1	0.57 U
1,1-Dichloroethene	UG/L	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
1,2,3-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	UG/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,2-Dichlorobenzene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,2-Dichloroethane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	0.51 U	11.5	1.3	1.4	12.5
1,2-Dichloroethene (trans)	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	3.0
1,2-Dichloropropane	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,3-Dichlorobenzene	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,3-Dichloropropene (cis)	UG/L	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,3-Dichloropropene (trans)	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
2-Hexanone	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetone	UG/L	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Benzene	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromochloromethane	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Bromodichloromethane	UG/L	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Volatile Organic Compounds						
Bromoform	UG/L	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Bromomethane	UG/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Carbon disulfide	UG/L	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
Carbon tetrachloride	UG/L	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Chlorobenzene	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Chloroethane	UG/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Chloroform	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	UG/L	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
Cyclohexane	UG/L	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Dibromochloromethane	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Dichlorodifluoromethane	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Ethylbenzene	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Methyl acetate	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
Methyl ethyl ketone (2-Butanone)	UG/L	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
Methyl tert-butyl ether	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Methylcyclohexane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Tetrachloroethene	UG/L	1.2	0.90 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	9.0	17.0	6.3	6.3	119
Trichlorofluoromethane	UG/L	0.84 U	3.1	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Xylene (total)	UG/L	0.59 U	0.59 U	0.90 J	0.94 J	0.59 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	NA	NA	NA	NA	NA
Polychlorinated Biphenyls						
Aroclor 1016	UG/L	0.105 U	0.112 U	0.104 U	0.103 U	NA
Aroclor 1221	UG/L	0.116 U	0.124 U	0.115 U	0.114 U	NA
Aroclor 1232	UG/L	0.112 U	0.119 U	0.111 U	0.110 U	NA
Aroclor 1242	UG/L	0.108 U	0.115 U	0.107 U	0.106 U	NA
Aroclor 1248	UG/L	0.137 U	0.146 U	0.136 U	0.135 U	NA
Aroclor 1254	UG/L	0.117 U	0.125 U	0.116 U	0.115 U	NA
Aroclor 1260	UG/L	0.0860 U	0.0915 U	0.0851 U	0.0843 U	NA
Aroclor 1262	UG/L	0.0905 U	0.0963 U	0.0896 U	0.0887 U	NA
Aroclor 1268	UG/L	0.0924 U	0.0984 U	0.0915 U	0.0906 U	NA
Dissolved Polychlorinated Biphenyls						
Aroclor 1016	UG/L	0.102 U	0.108 U	0.100 U	0.101 U	NA
Aroclor 1221	UG/L	0.113 U	0.120 U	0.111 U	0.112 U	NA
Aroclor 1232	UG/L	0.109 U	0.116 U	0.107 U	0.108 U	NA
Aroclor 1242	UG/L	0.105 U	0.112 U	0.103 U	0.104 U	NA
Aroclor 1248	UG/L	0.133 U	0.142 U	0.131 U	0.132 U	NA
Aroclor 1254	UG/L	0.114 U	0.121 U	0.112 U	0.113 U	NA
Aroclor 1260	UG/L	0.0834 U	0.0886 U	0.0818 U	0.0826 U	NA
Aroclor 1262	UG/L	0.0878 U	0.0933 U	0.0862 U	0.0870 U	NA
Aroclor 1268	UG/L	0.0897 U	0.0953 U	0.0880 U	0.0888 U	NA
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	NA	NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	NA	NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	NG/L	NA	NA	NA	NA	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	NA	NA	NA	NA	NA
Perfluorododecanoic acid (PFDoA)	NG/L	NA	NA	NA	NA	NA
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
Perfluorooctane sulfonamide (FOSA)	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
Perfluorotetradecanoic acid (PFTeA)	NG/L	NA	NA	NA	NA	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	NA	NA	NA	NA	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	NA	NA	NA	NA	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	NA	NA	NA	NA	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2,2-Tetrachloroethane	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,1,2-Trichloroethane	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	1.2	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	0.59 U	0.59 U	1.7	0.59 U	0.70 J
1,2,3-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	UG/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,2-Dichlorobenzene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,2-Dichloroethane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	10.5	0.56 J	164 D	25.9	233 D
1,2-Dichloroethene (trans)	UG/L	0.79 J	0.54 U	1.6	0.54 U	1.3
1,2-Dichloropropane	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,3-Dichlorobenzene	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,3-Dichloropropene (cis)	UG/L	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,3-Dichloropropene (trans)	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
2-Hexanone	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetone	UG/L	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Benzene	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromochloromethane	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Bromodichloromethane	UG/L	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

[LOGDATE] > #10/1/2018# AND ([SDG] = 'SC51255' OR [SDG] = 'SC51194' OR [SDG] = 'SC51286' OR [SDG] = 'SC51330') AND [LOCID] <> 'FIELDQC'

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
Bromoform	UG/L	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Bromomethane	UG/L	1.6 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ
Carbon disulfide	UG/L	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
Carbon tetrachloride	UG/L	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Chlorobenzene	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Chloroethane	UG/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Chloroform	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	UG/L	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
Cyclohexane	UG/L	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Dibromochloromethane	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Dichlorodifluoromethane	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Ethylbenzene	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Methyl acetate	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
Methyl ethyl ketone (2-Butanone)	UG/L	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
Methyl tert-butyl ether	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Methylcyclohexane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Tetrachloroethene	UG/L	0.90 U	0.90 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	16.1	0.70 J	2.2	3.3	16.1
Trichlorofluoromethane	UG/L	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Vinyl chloride	UG/L	0.79 U	0.79 U	115	1.9	6.3
Xylene (total)	UG/L	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
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
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
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	NA	NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	NA	NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	NG/L	NA	NA	NA	NA	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	NA	NA	NA	NA	NA
Perfluorododecanoic acid (PFDoA)	NG/L	NA	NA	NA	NA	NA
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
Perfluorooctane sulfonamide (FOSA)	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
Perfluorotetradecanoic acid (PFTeA)	NG/L	NA	NA	NA	NA	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	NA	NA	NA	NA	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	NA	NA	NA	NA	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	NA	NA	NA	NA	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
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Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	2.7 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2,2-Tetrachloroethane	UG/L	3.3 U	0.65 U	0.65 U	0.65 U	0.65 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	9.7 U	1.9 U	1.9 U	1.9 U	1.9 U
1,1,2-Trichloroethane	UG/L	2.7 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	49.2	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	9.6	0.59 U	0.73 J	0.59 U	0.59 U
1,2,3-Trichlorobenzene	UG/L	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	UG/L	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	UG/L	6.0 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	2.4 U	0.48 U	0.48 U	0.48 U	0.48 U
1,2-Dichlorobenzene	UG/L	2.7 U	0.53 U	0.53 U	0.53 U	0.53 U
1,2-Dichloroethane	UG/L	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	358	0.51 U	73.9	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	13.8	0.54 U	4.8	0.54 U	0.54 U
1,2-Dichloropropane	UG/L	2.5 U	0.51 U	0.51 U	0.51 U	0.51 U
1,3-Dichlorobenzene	UG/L	2.7 U	0.54 U	0.54 U	0.54 U	0.54 U
1,3-Dichloropropene (cis)	UG/L	2.4 U	0.47 U	0.47 U	0.47 U	0.47 U
1,3-Dichloropropene (trans)	UG/L	2.2 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	UG/L	2.5 U	0.51 U	0.51 U	0.51 U	0.51 U
2-Hexanone	UG/L	10 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	UG/L	9.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetone	UG/L	R	R	R	R	R
Benzene	UG/L	2.1 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromochloromethane	UG/L	2.4 U	0.48 U	0.48 U	0.48 U	0.48 U
Bromodichloromethane	UG/L	2.9 U	0.58 U	0.58 U	0.58 U	0.58 U

Flags assigned during chemistry validation are shown.

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CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Volatile Organic Compounds						
Bromoform	UG/L	3.2 U	0.63 U	0.63 U	0.63 U	0.63 U
Bromomethane	UG/L	8.2 U	1.6 U	1.6 UJ	1.6 U	1.6 U
Carbon disulfide	UG/L	4.8 U	0.95 U	0.95 U	0.95 U	0.95 U
Carbon tetrachloride	UG/L	2.8 U	0.55 U	0.55 U	0.55 U	0.55 U
Chlorobenzene	UG/L	2.8 U	0.56 U	0.56 U	0.56 U	0.56 U
Chloroethane	UG/L	3.6 U	0.73 U	0.73 U	0.73 U	0.73 U
Chloroform	UG/L	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	UG/L	3.8 U	0.76 U	0.76 U	0.76 U	0.76 U
Cyclohexane	UG/L	3.9 U	0.78 U	0.78 U	0.78 U	0.78 U
Dibromochloromethane	UG/L	2.8 U	0.56 U	0.56 U	0.56 U	0.56 U
Dichlorodifluoromethane	UG/L	6.8 UJ	1.4 U	1.4 UJ	1.4 U	1.4 U
Ethylbenzene	UG/L	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	3.2 U	0.65 U	0.65 U	0.65 U	0.65 U
Methyl acetate	UG/L	4.0 U	0.80 U	0.80 U	0.80 U	0.80 U
Methyl ethyl ketone (2-Butanone)	UG/L	34 U	6.9 U	6.9 U	6.9 U	6.9 U
Methyl tert-butyl ether	UG/L	2.5 U	0.51 U	0.51 U	0.51 U	0.51 U
Methylcyclohexane	UG/L	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U
Methylene chloride	UG/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	3.5 U	0.70 U	0.70 U	0.70 U	0.70 U
Tetrachloroethene	UG/L	5.6	0.90 U	0.90 U	0.90 U	0.90 U
Toluene	UG/L	2.7 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	2,480 D	0.53 U	123	0.72 J	0.53 U
Trichlorofluoromethane	UG/L	4.2 U	0.84 UJ	1.6 J	0.84 UJ	0.84 UJ
Vinyl chloride	UG/L	37.6	0.79 U	8.9	0.79 U	0.79 U
Xylene (total)	UG/L	3.0 U	0.59 U	0.59 U	0.59 U	0.59 U

Flags assigned during chemistry validation are shown.

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Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Semivolatile Organic Compounds						
1,4-Dioxane	UG/L	NA	8.67	9.53	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
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
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	NA	0.92 U	0.91 U	NA	NA
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

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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					
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	NA	0.55 U	0.55 U	NA	NA
Perfluorodecanoic acid (PFDA)	NG/L	NA	0.83 U	0.82 U	NA	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	NA	0.92 U	0.91 U	NA	NA
Perfluorododecanoic acid (PFDoA)	NG/L	NA	0.46 U	0.46 U	NA	NA
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
Perfluorooctane sulfonamide (FOSA)	NG/L	NA	0.46 U	0.46 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
Perfluorotetradecanoic acid (PFTeA)	NG/L	NA	0.28 U	0.27 U	NA	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	NA	0.37 U	0.37 U	NA	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	NA	0.37 U	0.37 U	NA	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	NA	0.92 U	0.91 U	NA	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	NA	1.8 U	1.8 U	NA	NA

Flags assigned during chemistry validation are shown.

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Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,1,2,2-Tetrachloroethane	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,1,2-Trichloroethane	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,1-Dichloroethane	UG/L	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
1,1-Dichloroethene	UG/L	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
1,2,3-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2,4-Trichlorobenzene	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	UG/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,2-Dichlorobenzene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
1,2-Dichloroethane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2-Dichloroethene (cis)	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,2-Dichloroethene (trans)	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,2-Dichloropropane	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,3-Dichlorobenzene	UG/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,3-Dichloropropene (cis)	UG/L	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,3-Dichloropropene (trans)	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,4-Dichlorobenzene	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
2-Hexanone	UG/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone	UG/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetone	UG/L	R	6.0 U	R	R	6.0 U
Benzene	UG/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromochloromethane	UG/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Bromodichloromethane	UG/L	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Volatile Organic Compounds						
Bromoform	UG/L	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Bromomethane	UG/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Carbon disulfide	UG/L	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
Carbon tetrachloride	UG/L	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Chlorobenzene	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Chloroethane	UG/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Chloroform	UG/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloromethane	UG/L	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
Cyclohexane	UG/L	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Dibromochloromethane	UG/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Dichlorodifluoromethane	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Ethylbenzene	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Isopropylbenzene (Cumene)	UG/L	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Methyl acetate	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
Methyl ethyl ketone (2-Butanone)	UG/L	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
Methyl tert-butyl ether	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Methylcyclohexane	UG/L	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Methylene chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	UG/L	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Tetrachloroethene	UG/L	0.90 U	0.90 U	3.7	3.5	0.90 U
Toluene	UG/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Trichloroethene	UG/L	0.53 U	0.53 U	0.84 J	0.81 J	0.53 U
Trichlorofluoromethane	UG/L	0.84 UJ	0.84 U	0.84 UJ	0.84 UJ	0.84 U
Vinyl chloride	UG/L	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Xylene (total)	UG/L	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
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
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
Per- and Polyfluoroalkyl Substances						
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	NA	NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	NA	NA	NA	NA	NA
Perfluorobutanoic acid (PFBA)	NG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

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			Field Duplicate (1-1)		
Per- and Polyfluoroalkyl Substances						
Perfluorodecane sulfonate (PFDS)	NG/L	NA	NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	NG/L	NA	NA	NA	NA	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	NA	NA	NA	NA	NA
Perfluorododecanoic acid (PFDoA)	NG/L	NA	NA	NA	NA	NA
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
Perfluorooctane sulfonamide (FOSA)	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
Perfluorotetradecanoic acid (PFTeA)	NG/L	NA	NA	NA	NA	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	NA	NA	NA	NA	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	NA	NA	NA	NA	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	NA	NA	NA	NA	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		10/19/18
Parameter	Units	
Volatile Organic Compounds		
1,1,1-Trichloroethane	UG/L	110 U
1,1,2,2-Tetrachloroethane	UG/L	130 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	390 U
1,1,2-Trichloroethane	UG/L	110 U
1,1-Dichloroethane	UG/L	110 U
1,1-Dichloroethene	UG/L	120 U
1,2,3-Trichlorobenzene	UG/L	100 U
1,2,4-Trichlorobenzene	UG/L	100 U
1,2-Dibromo-3-chloropropane	UG/L	240 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	95 U
1,2-Dichlorobenzene	UG/L	110 U
1,2-Dichloroethane	UG/L	120 U
1,2-Dichloroethene (cis)	UG/L	14,000
1,2-Dichloroethene (trans)	UG/L	110 U
1,2-Dichloropropane	UG/L	100 U
1,3-Dichlorobenzene	UG/L	110 U
1,3-Dichloropropene (cis)	UG/L	94 U
1,3-Dichloropropene (trans)	UG/L	86 U
1,4-Dichlorobenzene	UG/L	100 U
2-Hexanone	UG/L	410 U
4-Methyl-2-pentanone	UG/L	370 U
Acetone	UG/L	1,200 U
Benzene	UG/L	85 U
Bromochloromethane	UG/L	96 U
Bromodichloromethane	UG/L	120 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		10/19/18
Parameter	**Units**	
Volatile Organic Compounds		
Bromoform	UG/L	130 U
Bromomethane	UG/L	330 UJ
Carbon disulfide	UG/L	190 U
Carbon tetrachloride	UG/L	110 U
Chlorobenzene	UG/L	110 U
Chloroethane	UG/L	150 U
Chloroform	UG/L	100 U
Chloromethane	UG/L	150 U
Cyclohexane	UG/L	160 U
Dibromochloromethane	UG/L	110 U
Dichlorodifluoromethane	UG/L	270 U
Ethylbenzene	UG/L	120 U
Isopropylbenzene (Cumene)	UG/L	130 U
Methyl acetate	UG/L	160 U
Methyl ethyl ketone (2-Butanone)	UG/L	1,400 U
Methyl tert-butyl ether	UG/L	100 U
Methylcyclohexane	UG/L	120 U
Methylene chloride	UG/L	200 U
Styrene	UG/L	140 U
Tetrachloroethene	UG/L	180 U
Toluene	UG/L	110 U
Trichloroethene	UG/L	94,500 D
Trichlorofluoromethane	UG/L	170 U
Vinyl chloride	UG/L	220
Xylene (total)	UG/L	120 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		10/19/18
Parameter	**Units**	
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
Aroclor 1260	UG/L	NA
Aroclor 1262	UG/L	NA
Aroclor 1268	UG/L	NA
Per- and Polyfluoroalkyl Substances		
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	NA
Perfluorobutanoic acid (PFBA)	NG/L	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		TR3-PW-01
Sample ID		TR3-PW-01
Matrix		Groundwater
Depth Interval (ft)		-
Date Sampled		10/19/18
Parameter	**Units**	
Per- and Polyfluoroalkyl Substances		
Perfluorodecane sulfonate (PFDS)	NG/L	NA
Perfluorodecanoic acid (PFDA)	NG/L	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	NA
Perfluorododecanoic acid (PFDoA)	NG/L	NA
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
Perfluorooctane sulfonamide (FOSA)	NG/L	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	NA
Perfluorooctanoic acid (PFOA)	NG/L	NA
Perfluoropentanoic acid (PFPA)	NG/L	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are MDL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB-1015-1718	EB-101918	FB-101918	TB-101818-101918
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		10/17/18	10/19/18	10/19/18	10/19/18
Parameter	Units	Trip Blank (1-1)	Equipment Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds					
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	NA	1.0 U
1,1,2,2-Tetrachloroethane	UG/L	1.0 U	1.0 U	NA	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
1,1,2-Trichloroethane	UG/L	1.0 U	1.0 U	NA	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	NA	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2,3-Trichlorobenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2,4-Trichlorobenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2-Dibromo-3-chloropropane	UG/L	2.0 U	2.0 U	NA	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2-Dichlorobenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2-Dichloroethane	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	NA	1.0 U
1,2-Dichloropropane	UG/L	1.0 U	1.0 U	NA	1.0 U
1,3-Dichlorobenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
1,3-Dichloropropene (cis)	UG/L	1.0 U	1.0 U	NA	1.0 U
1,3-Dichloropropene (trans)	UG/L	1.0 U	1.0 U	NA	1.0 U
1,4-Dichlorobenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	NA	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	NA	5.0 U
Acetone	UG/L	R	10 U	NA	10 U
Benzene	UG/L	0.50 U	0.50 U	NA	0.50 U
Bromochloromethane	UG/L	1.0 U	1.0 U	NA	1.0 U
Bromodichloromethane	UG/L	1.0 U	1.0 U	NA	1.0 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB-1015-1718	EB-101918	FB-101918	TB-101818-101918
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		10/17/18	10/19/18	10/19/18	10/19/18
Parameter	Units	Trip Blank (1-1)	Equipment Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds					
Bromoform	UG/L	1.0 U	1.0 U	NA	1.0 U
Bromomethane	UG/L	2.0 UJ	2.0 U	NA	2.0 U
Carbon disulfide	UG/L	2.0 U	2.0 U	NA	2.0 U
Carbon tetrachloride	UG/L	1.0 U	1.0 U	NA	1.0 U
Chlorobenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	NA	1.0 U
Chloroform	UG/L	1.0 U	1.0 U	NA	1.0 U
Chloromethane	UG/L	1.0 U	1.0 U	NA	1.0 U
Cyclohexane	UG/L	5.0 U	2.1 J	NA	5.0 U
Dibromochloromethane	UG/L	1.0 U	1.0 U	NA	1.0 U
Dichlorodifluoromethane	UG/L	2.0 UJ	2.0 U	NA	2.0 U
Ethylbenzene	UG/L	1.0 U	1.0 U	NA	1.0 U
Isopropylbenzene (Cumene)	UG/L	1.0 U	1.0 U	NA	1.0 U
Methyl acetate	UG/L	5.0 U	5.0 U	NA	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	10 U	10 U	NA	10 U
Methyl tert-butyl ether	UG/L	1.0 U	1.0 U	NA	1.0 U
Methylcyclohexane	UG/L	5.0 U	5.0 U	NA	5.0 U
Methylene chloride	UG/L	2.0 U	2.1	NA	2.0 U
Styrene	UG/L	1.0 U	1.0 U	NA	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	NA	1.0 U
Toluene	UG/L	1.0 U	1.0 U	NA	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	NA	1.0 U
Trichlorofluoromethane	UG/L	2.0 U	2.0 U	NA	2.0 U
Vinyl chloride	UG/L	1.0 U	1.0 U	NA	1.0 U
Xylene (total)	UG/L	1.0 U	1.0 U	NA	1.0 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB-1015-1718	EB-101918	FB-101918	TB-101818-101918
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		10/17/18	10/19/18	10/19/18	10/19/18
Parameter	Units	Trip Blank (1-1)	Equipment Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)
Semivolatile Organic Compounds					
1,4-Dioxane	UG/L	NA	0.40 U	NA	NA
Polychlorinated Biphenyls					
Aroclor 1016	UG/L	NA	0.196 U	NA	NA
Aroclor 1221	UG/L	NA	0.196 U	NA	NA
Aroclor 1232	UG/L	NA	0.196 U	NA	NA
Aroclor 1242	UG/L	NA	0.196 U	NA	NA
Aroclor 1248	UG/L	NA	0.196 U	NA	NA
Aroclor 1254	UG/L	NA	0.196 U	NA	NA
Aroclor 1260	UG/L	NA	0.196 U	NA	NA
Aroclor 1262	UG/L	NA	0.196 U	NA	NA
Aroclor 1268	UG/L	NA	0.196 U	NA	NA
Dissolved Polychlorinated Biphenyls					
Aroclor 1016	UG/L	NA	0.217 U	NA	NA
Aroclor 1221	UG/L	NA	0.217 U	NA	NA
Aroclor 1232	UG/L	NA	0.217 U	NA	NA
Aroclor 1242	UG/L	NA	0.217 U	NA	NA
Aroclor 1248	UG/L	NA	0.217 U	NA	NA
Aroclor 1254	UG/L	NA	0.217 U	NA	NA
Aroclor 1260	UG/L	NA	0.217 U	NA	NA
Aroclor 1262	UG/L	NA	0.217 U	NA	NA
Aroclor 1268	UG/L	NA	0.217 U	NA	NA
Per- and Polyfluoroalkyl Substances					
N-Methyl perfluorooctanesulfonamidoacetic acid (NMEFOSAA)	NG/L	NA	2.9 U	2.7 U	NA
Perfluorobutanesulfonic acid (PFBS)	NG/L	NA	0.95 U	0.90 U	NA
Perfluorobutanoic acid (PFBA)	NG/L	NA	5.7 U	5.4 U	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
UTC/CARRIER SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB-1015-1718	EB-101918	FB-101918	TB-101618-101918
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		10/17/18	10/19/18	10/19/18	10/19/18
Parameter	Units	Trip Blank (1-1)	Equipment Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)
Per- and Polyfluoroalkyl Substances					
Perfluorodecane sulfonate (PFDS)	NG/L	NA	1.9 U	1.8 U	NA
Perfluorodecanoic acid (PFDA)	NG/L	NA	1.9 U	1.8 U	NA
N-Ethyl perfluorooctanesulfonamidoacetic acid (NETFOSAA)	NG/L	NA	2.9 U	2.7 U	NA
Perfluorododecanoic acid (PFDoA)	NG/L	NA	1.9 U	1.8 U	NA
Perfluoro-1-heptanesulfonate (PFHPS)	NG/L	NA	1.9 U	1.8 U	NA
Perfluoroheptanoic acid (PFHpA)	NG/L	NA	0.95 U	0.90 U	NA
Perfluorohexanesulfonic acid (PFHxS)	NG/L	NA	1.9 U	1.8 U	NA
Perfluorohexanoic acid (PFHxA)	NG/L	NA	1.9 U	1.8 U	NA
Perfluorononanoic acid (PFNA)	NG/L	NA	1.9 U	1.8 U	NA
Perfluorooctane sulfonamide (FOSA)	NG/L	NA	2.9 U	2.7 U	NA
Perfluorooctanesulfonic acid (PFOS)	NG/L	NA	1.9 U	1.8 U	NA
Perfluorooctanoic acid (PFOA)	NG/L	NA	0.95 U	0.90 U	NA
Perfluoropentanoic acid (PFPA)	NG/L	NA	5.7 U	5.4 U	NA
Perfluorotetradecanoic acid (PFTeA)	NG/L	NA	0.95 U	0.90 U	NA
Perfluorotridecanoic acid (PFTriA)	NG/L	NA	0.95 U	0.90 U	NA
Perfluoroundecanoic acid (PFUnA)	NG/L	NA	1.9 U	1.8 U	NA
6:2 Fluorotelomer sulfonate (62FTS)	NG/L	NA	1.9 U	1.8 U	NA
8:2 Fluorotelomer sulfonate (82FTS)	NG/L	NA	5.7 U	5.4 U	NA

Flags assigned during chemistry validation are shown.

MADE BY: AMK 2/8/19
CHECKED BY: PRF 2/8/19

Detection Limits shown are PQL

ATTACHMENT A

FORM 1s

SC51194

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

AR-mw-02

Sample Description: SC51194-05 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 12:31
SDG#: SAJ23-05

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860654
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.88 U	0.88	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 UZ	1.8	5.3	1
14473	NEtFOSAA	2991-50-6	0.88 U	0.88	2.6	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.88 U	0.88	2.6	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	2.4	0.26	0.88	1
14473	Perfluorobutanoic acid	375-22-4	10 J	1.8	5.3	1
14473	Perfluorodecanesulfonate	335-77-3	0.53 U	0.53	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.79 U	0.79	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.44 U	0.44	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	1.4 J	0.35	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	3.4	0.35	0.88	1
14473	Perfluorohexanesulfonate	355-46-4	6.3	0.35	1.8	1
14473	Perfluorohexanoic acid	307-24-4	2.7	0.35	1.8	1
14473	Perfluorononanoic acid	375-95-1	1.5 J	0.35	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.44 U	0.44	2.6	1
14473	Perfluoro-octanesulfonate	1763-23-1	33	0.35	1.8	1
14473	Perfluorooctanoic acid	335-67-1	24	0.26	0.88	1
14473	Perfluoropentanoic acid	2706-90-3	2.3 J	1.8	5.3	1
14473	Perfluorotetradecanoic acid	376-06-7	0.26 U	0.26	0.88	1
14473	Perfluorotridecanoic acid	72629-94-8	0.35 U	0.35	0.88	1
14473	Perfluoroundecanoic acid	2058-94-8	0.35 U	0.35	1.8	1

Z=The response for a target analyte(s) in the opening continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The recovery for labeled compound used as extraction standards is outside of QC acceptance limits as noted on the QC Summary.

The sample injection internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

2/5/19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 15:36	Isaac Phillips-Cary	1

*=This limit was used in the evaluation of the final result

Sample Description: **SC51194-05 Groundwater**
SC51194

Project Name: **SC51194**

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 12:31
SDG#: SAJ23-05

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860654
ELLE Group #: 2000540
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

DP-mw-04

Sample Description: SC51194-04 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 12:30
SDG#: SAJ23-04

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860653
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.90 U	0.90	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 UZ	1.8	5.4	1
14473	NEtFOSAA	2991-50-6	0.90 U	0.90	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.90 U	0.90	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	1.8	0.27	0.90	1
14473	Perfluorobutanoic acid	375-22-4	7.3	1.8	5.4	1
14473	Perfluorodecanesulfonate	335-77-3	0.54 U	0.54	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.81 U	0.81	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.45 U	0.45	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.36 U	0.36	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	1.4	0.36	0.90	1
14473	Perfluorohexanesulfonate	355-46-4	1.1 J	0.36	1.8	1
14473	Perfluorohexanoic acid	307-24-4	1.4 J	0.36	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.70 J	0.36	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.45 U	0.45	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	13	0.36	1.8	1
14473	Perfluorooctanoic acid	335-67-1	6.1	0.27	0.90	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.4	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.90	1
14473	Perfluorotridecanoic acid	72629-94-8	0.36 U	0.36	0.90	1
14473	Perfluoroundecanoic acid	2058-94-8	0.36 U	0.36	1.8	1

Z=The response for a target analyte(s) in the opening continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The recovery for the sample injection standard and the labeled compound used as extraction standards is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was reextracted within holding time and internal standard(s) and extraction standards were again outside the QC acceptance limits. The data is reported from the original extraction. Both sets of data are included in the data package.

2/5/19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

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Sample Description: **SC51194-04 Groundwater**
SC51194

Project Name: **SC51194**

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 12:30
SDG#: SAJ23-04

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860653
ELLE Group #: 2000540
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 15:27	Devon M Whooley	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

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Analysis Report

MW-03D

Sample Description: SC51194-03 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 09:50
SDG#: SAJ23-03BKG

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860650
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.90 U	0.90	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 UZ	1.8	5.4	1
14473	NEtFOSAA	2991-50-6	0.90 U	0.90	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.90 U	0.90	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.27 U	0.27	0.90	1
14473	Perfluorobutanoic acid	375-22-4	1.8 U	1.8	5.4	1
14473	Perfluorodecanesulfonate	335-77-3	0.54 U	0.54	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.81 U	0.81	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.45 U	0.45	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.36 U	0.36	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.36 U	0.36	0.90	1
14473	Perfluorohexanesulfonate	355-46-4	0.36 U	0.36	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.36 U	0.36	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.45 U	0.45	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanoic acid	335-67-1	0.27 U	0.27	0.90	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.4	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.90	1
14473	Perfluorotridecanoic acid	72629-94-8	0.36 U	0.36	0.90	1
14473	Perfluoroundecanoic acid	2058-94-8	0.36 U	0.36	1.8	1

Z=The response for a target analyte(s) in the opening continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

DMK 2/5/19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 14:59	Isaac Phillips-Cary	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

MW-03S

Sample Description: SC51194-01 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 09:38
SDG#: SAJ23-01

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860648
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.92 U	0.92	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 UZ	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.92 U	0.92	2.8	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.92 U	0.92	2.8	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	1.1	0.28	0.92	1
14473	Perfluorobutanoic acid	375-22-4	3.2 J	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.83 U	0.83	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.37 U	0.37	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.64 J	0.37	0.92	1
14473	Perfluorohexanesulfonate	355-46-4	0.37 U	0.37	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.37 U	0.37	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.37 U	0.37	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.8	1
14473	Perfluoro-ootanesulfonate	1763-23-1	1.0 J	0.37	1.8	1
14473	Perfluorooctanoic acid	335-67-1	2.1	0.28	0.92	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.28 U	0.28	0.92	1
14473	Perfluorotridecanoic acid	72629-94-8	0.37 U	0.37	0.92	1
14473	Perfluoroundecanoic acid	2058-94-8	0.37 U	0.37	1.8	1

Z=The response for a target analyte(s) in the opening continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The recovery for labeled compound used as extraction standards is outside of QC acceptance limits as noted on the QC Summary due to the matrix of the sample.

DWK 2/5/19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 14:41	Devon M Whooley	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

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Analysis Report

(MW-035)
FD-101618

Sample Description: SC51194-02 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018
SDG#: SAJ23-02

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860649
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.91 U	0.91	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 UZ	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.91 U	0.91	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.91 U	0.91	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.99	0.27	0.91	1
14473	Perfluorobutanoic acid	375-22-4	3.4 J	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.82 U	0.82	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.37 U	0.37	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.63 J	0.37	0.91	1
14473	Perfluorohexanesulfonate	355-46-4	0.40 J	0.37	1.8	1
14473	Perfluorohexanoic acid	307-24-4	1.4 J	0.37	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.37 U	0.37	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	1.1 J	0.37	1.8	1
14473	Perfluorooctanoic acid	335-67-1	2.0	0.27	0.91	1
14473	Perfluoropentanoic acid	2706-90-3	2.3 J	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.91	1
14473	Perfluorotridecanoic acid	72629-94-8	0.37 U	0.37	0.91	1
14473	Perfluoroundecanoic acid	2058-94-8	0.37 U	0.37	1.8	1

Z=The response for a target analyte(s) in the opening continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The recovery for labeled compound used as extraction standards is outside of QC acceptance limits as noted on the QC Summary due to the matrix of the sample.

The sample injection internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

2/5/19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 14:50	Devon M Whooley	1

*=This limit was used in the evaluation of the final result

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Sample Description: SC51194-02 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018
SDG#: SAJ23-02

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860649
ELLE Group #: 2000540
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

mw-10

Sample Description: SC51194-08 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 18:00
SDG#: SAJ23-08

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860657
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.91 U	0.91	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 U	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.91 U	0.91	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.91 U	0.91	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.27 U	0.27	0.91	1
14473	Perfluorobutanoic acid	375-22-4	1.8 U	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.82 U	0.82	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.36 U	0.36	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.36 U	0.36	0.91	1
14473	Perfluorohexanesulfonate	355-46-4	0.36 U	0.36	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.36 U	0.36	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanoic acid	335-67-1	0.27 U	0.27	0.91	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.91	1
14473	Perfluorotridecanoic acid	72629-94-8	0.36 U	0.36	0.91	1
14473	Perfluoroundecanoic acid	2058-94-8	0.36 U	0.36	1.8	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 16:12	Isaac Phillips-Cary	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

MW-17

Sample Description: SC51194-06 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 16:05
SDG#: SAJ23-06

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860655
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.91 U	0.91	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 U	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.91 U	0.91	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.91 U	0.91	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.27 U	0.27	0.91	1
14473	Perfluorobutanoic acid	375-22-4	2.9 J	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.82 U	0.82	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.36 U	0.36	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.36 U	0.36	0.91	1
14473	Perfluorohexanesulfonate	355-46-4	0.36 U	0.36	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.36 U	0.36	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanoic acid	335-67-1	0.27 U	0.27	0.91	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.91	1
14473	Perfluorotridecanoic acid	72629-94-8	0.36 U	0.36	0.91	1
14473	Perfluoroundecanoic acid	2058-94-8	0.36 U	0.36	1.8	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 15:54	Isaac Phillips-Cary	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

mw-10

Sample Description: SC51194-07 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 16:16
SDG#: SAJ23-07

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860656
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.92 U	0.92	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 U	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.92 U	0.92	2.8	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.92 U	0.92	2.8	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.28 U	0.28	0.92	1
14473	Perfluorobutanoic acid	375-22-4	1.8 U	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.83 U	0.83	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.37 U	0.37	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.37 U	0.37	0.92	1
14473	Perfluorohexanesulfonate	355-46-4	0.37 U	0.37	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.43 J	0.37	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.37 U	0.37	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.8	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.37 U	0.37	1.8	1
14473	Perfluorooctanoic acid	335-67-1	0.28 U	0.28	0.92	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.28 U	0.28	0.92	1
14473	Perfluorotridecanoic acid	72629-94-8	0.37 U	0.37	0.92	1
14473	Perfluoroundecanoic acid	2058-94-8	0.37 U	0.37	1.8	1

The recovery for labeled compound used as extraction standards is outside of QC acceptance limits as noted on the QC Summary.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18295007	10/23/2018 16:03	Isaac Phillips-Cary	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18295007	10/22/2018 08:45	Courtney J Fatta	1

*=This limit was used in the evaluation of the final result

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Analysis Report

MW-71

Sample Description: SC51194-09 Groundwater
SC51194

Project Name: SC51194

Submittal Date/Time: 10/19/2018 10:20
Collection Date/Time: 10/16/2018 18:00
SDG#: SAJ23-09

Eurofins Spectrum Analytical
ELLE Sample #: WW 9860658
ELLE Group #: 2000540
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.91 U	0.91	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 U	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.91 U	0.91	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.91 U	0.91	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.28 J	0.27	0.91	1
14473	Perfluorobutanoic acid	375-22-4	2.5 J	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.82 U	0.82	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.37 U	0.37	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.37 U	0.37	0.91	1
14473	Perfluorohexanesulfonate	355-46-4	0.37 U	0.37	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.39 J	0.37	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.37 U	0.37	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.37 U	0.37	1.8	1
14473	Perfluorooctanoic acid	335-67-1	0.71 J	0.27	0.91	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.91	1
14473	Perfluorotridecanoic acid	72629-94-8	0.37 U	0.37	0.91	1
14473	Perfluoroundecanoic acid	2058-94-8	0.37 U	0.37	1.8	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18297010	10/25/2018 13:52	Devon M Whooley	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	2	18297010	10/24/2018 12:45	Danielle D McCully	1

*=This limit was used in the evaluation of the final result

SC51255

AR-mw-02

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-12		
Lab Sample ID:	JC76441-12	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147770.D	1	10/26/18 04:53	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

DLP 24/19

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

AR-mw-02

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-12		
Lab Sample ID:	JC76441-12	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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 [a]	~~ND~~ U5	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	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	112%		81-124%
2037-26-5	Toluene-D8	97%		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) Associated CCV outside of control limits high, sample was ND.

24/19

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

DP-mw-04

SGS North America Inc.

Report of Analysis

4.11
4

Client Sample ID:	SC51255-11		
Lab Sample ID:	JC76441-11	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147769.D	1	10/26/18 04:23	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

BMP 24/19

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

DP-MW-04

Report of Analysis

Client Sample ID:	SC51255-11		
Lab Sample ID:	JC76441-11	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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 [a]	~~ND~~ U5	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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	115%		81-124%
2037-26-5	Toluene-D8	98%		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) Associated CCV outside of control limits high, sample was ND.

2/4/19

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

MW-030

SGS North America Inc.

Report of Analysis

4.10 4

Client Sample ID:	SC51255-10		
Lab Sample ID:	JC76441-10	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147756.D	1	10/25/18 22:02	GA	n/a	n/a	V2E6496
Run #2							

	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	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	7.0	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	

2/4/19

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

MW-03D

SGS North America Inc.

Report of Analysis

4.10 4

Client Sample ID:	SC51255-10		
Lab Sample ID:	JC76441-10	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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 [a]	~~ND~~ U5	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	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	113%		81-124%
2037-26-5	Toluene-D8	99%		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 high, sample was ND.

dlyk 2/4/19

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

MW-03S

SGS North America Inc.

Report of Analysis

4.8 4

Client Sample ID:	SC51255-08		
Lab Sample ID:	JC76441-8	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	A245141.D	2	10/26/18 22:49	BK	n/a	n/a	VA9390
Run #2	2E147764.D	20	10/26/18 01:56	GA	n/a	n/a	V2E6496

	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	20	12	ug/l	
71-43-2	Benzene	ND	1.0	0.85	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.96	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	1.2	ug/l	
75-25-2	Bromoform	ND	2.0	1.3	ug/l	
74-83-9	Bromomethane	ND	4.0	3.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	20	14	ug/l	
75-15-0	Carbon disulfide	ND	4.0	1.9	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	1.1	ug/l	
108-90-7	Chlorobenzene	ND	2.0	1.1	ug/l	
75-00-3	Chloroethane	ND	2.0	1.5	ug/l	
67-66-3	Chloroform	ND	2.0	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	1.5	ug/l	
110-82-7	Cyclohexane	ND	10	1.6	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	2.4	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	1.1	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.95	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane [b]	~~ND~~ J5	4.0	2.7	ug/l	
75-34-3	1,1-Dichloroethane	23.2	2.0	1.1	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	1.2	ug/l	
75-35-4	1,1-Dichloroethene	6.3	2.0	1.2	ug/l	
156-59-2	cis-1,2-Dichloroethene	805 D	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.5	2.0	1.1	ug/l	J
78-87-5	1,2-Dichloropropane	ND	2.0	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.94	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.86	ug/l	
100-41-4	Ethylbenzene	ND	2.0	1.2	ug/l	
76-13-1	Freon 113	ND	10	3.9	ug/l	
591-78-6	2-Hexanone	ND	10	4.1	ug/l	

DLK 2/4/19

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

Client Sample ID:	SC51255-08		
Lab Sample ID:	JC76441-8	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.8

4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.3	ug/l	
79-20-9	Methyl Acetate	ND	10	1.6	ug/l	
108-87-2	Methylcyclohexane	ND	10	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	10	3.7	ug/l	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/l	
100-42-5	Styrene	ND	2.0	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	1.3	ug/l	
127-18-4	Tetrachloroethene	ND	2.0	1.8	ug/l	
108-88-3	Toluene	ND	2.0	1.1	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	1.1	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.1	ug/l	
79-01-6	Trichloroethene	2.7	2.0	1.1	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	1.7	ug/l	
75-01-4	Vinyl chloride	46.1	2.0	1.6	ug/l	
	m,p-Xylene	ND	2.0	1.6	ug/l	
95-47-6	o-Xylene	ND	2.0	1.2	ug/l	
1330-20-7	Xylene (total)	ND	2.0	1.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	116%	81-124%
2037-26-5	Toluene-D8	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	97%	97%	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) Associated CCV outside of control limits high, sample was ND.
(c) 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

FD-101618
MW-03S

SGS North America Inc.

Report of Analysis

4.9.4

Client Sample ID:	SC51255-09		
Lab Sample ID:	JC76441-9	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	A245142.D	2	10/26/18 23:18	BK	n/a	n/a	VA9390
Run #2	2E147765.D	20	10/26/18 02:26	GA	n/a	n/a	V2E6496

	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	20	12	ug/l	
71-43-2	Benzene	ND	1.0	0.85	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.96	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	1.2	ug/l	
75-25-2	Bromoform	ND	2.0	1.3	ug/l	
74-83-9	Bromomethane	ND	4.0	3.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	20	14	ug/l	
75-15-0	Carbon disulfide	ND	4.0	1.9	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	1.1	ug/l	
108-90-7	Chlorobenzene	ND	2.0	1.1	ug/l	
75-00-3	Chloroethane	ND	2.0	1.5	ug/l	
67-66-3	Chloroform	ND	2.0	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	1.5	ug/l	
110-82-7	Cyclohexane	ND	10	1.6	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	2.4	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	1.1	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.95	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane [b]	~~ND~~ ck	4.0	2.7	ug/l	
75-34-3	1,1-Dichloroethane	23.4	2.0	1.1	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	1.2	ug/l	
75-35-4	1,1-Dichloroethene	6.0	2.0	1.2	ug/l	
156-59-2	cis-1,2-Dichloroethene	863 D	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.5	2.0	1.1	ug/l	J
78-87-5	1,2-Dichloropropane	ND	2.0	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.94	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.86	ug/l	
100-41-4	Ethylbenzene	ND	2.0	1.2	ug/l	
76-13-1	Freon 113	ND	10	3.9	ug/l	
591-78-6	2-Hexanone	ND	10	4.1	ug/l	

2/4/19

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

FD-101618

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-09		
Lab Sample ID:	JC76441-9	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.9.4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.3	ug/l	
79-20-9	Methyl Acetate	ND	10	1.6	ug/l	
108-87-2	Methylcyclohexane	ND	10	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	10	3.7	ug/l	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/l	
100-42-5	Styrene	ND	2.0	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	1.3	ug/l	
127-18-4	Tetrachloroethene	ND	2.0	1.8	ug/l	
108-88-3	Toluene	ND	2.0	1.1	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	1.1	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.1	ug/l	
79-01-6	Trichloroethene	2.9	2.0	1.1	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	1.7	ug/l	
75-01-4	Vinyl chloride	47.6	2.0	1.6	ug/l	
	m,p-Xylene	ND	2.0	1.6	ug/l	
95-47-6	o-Xylene	ND	2.0	1.2	ug/l	
1330-20-7	Xylene (total)	ND	2.0	1.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	119%	81-124%
2037-26-5	Toluene-D8	99%	98%	80-120%
460-00-4	4-Bromofluorobenzene	96%	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) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

2/4/19

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

SGS North America Inc.

mw-09

Report of Analysis

4.7
4

Client Sample ID:	SC51255-07		
Lab Sample ID:	JC76441-7	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147762.D	1	10/26/18 00:57	GA	n/a	n/a	V2E6496
Run #2							

	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	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	0.62	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	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	

DLK 2/4/19

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

mw-09

SGS North America Inc.

Report of Analysis

4.7
4

Client Sample ID:	SC51255-07		
Lab Sample ID:	JC76441-7	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	1.0	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	2.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane [a]	~~ND~~ U5	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	118%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	96%		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 high, sample was ND.

2/4/19

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

MW-10

SGS North America Inc.

Report of Analysis

4.15 4

Client Sample ID:	SC51255-15		
Lab Sample ID:	JC76441-15	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147773.D	1	10/26/18 06:21	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

dwsk 24/19

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

MW-10

SGS North America Inc.

Report of Analysis

4.15 4

Client Sample ID:	SC51255-15		
Lab Sample ID:	JC76441-15	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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 [a]	~~ND~~ U5	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	117%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	98%		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 high, sample was ND.

24/19

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

SGS North America Inc.

MW-17

Report of Analysis

4.13 4

Client Sample ID:	SC51255-13		
Lab Sample ID:	JC76441-13	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147771.D	1	10/26/18 05:22	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

2/4/19

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

MW-17

Report of Analysis

4.13 4

Client Sample ID:	SC51255-13		
Lab Sample ID:	JC76441-13	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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 [a]	~~ND~~ U5	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	120%		81-124%
2037-26-5	Toluene-D8	100%		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 high, sample was ND.

2/4/19

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

SGS North America Inc.

mw-19

Report of Analysis

Client Sample ID:	SC51255-24		
Lab Sample ID:	JC76441-21	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90974.D	1	10/25/18 14:55	BK	n/a	n/a	V4D3973
Run #2							

	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	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

mw-19

SGS North America Inc.

Report of Analysis

4.21 4

Client Sample ID:	SC51255-24		
Lab Sample ID:	JC76441-21	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	1.1	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	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		81-124%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.16	26	ug/l	J
	Total TIC, Volatile		0	ug/l	

2/4/19

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

MW-21

SGS North America Inc.

Report of Analysis

4.18 4

Client Sample ID:	SC51255-19		
Lab Sample ID:	JC76441-18	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90979.D	1	10/25/18 17:18	BK	n/a	n/a	V4D3973
Run #2							

	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	0.54	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	5.0	2.0	ug/l	

2/4/19

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

Client Sample ID:	SC51255-19		
Lab Sample ID:	JC76441-18	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.18 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	0.57	1.0	0.53	ug/l	J
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	98%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	34	ug/l	J
	Total TIC, Volatile		0	ug/l	

2/4/19

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

MW-23

SGS North America Inc.

Report of Analysis

4.20 4

Client Sample ID:	SC51255-22		
Lab Sample ID:	JC76441-20	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D142211.D	1	10/27/18 12:32	MD	n/a	n/a	V3D6064
Run #2	4D90982.D	50	10/25/18 18:43	BK	n/a	n/a	V4D3973

	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	10	6.0	ug/l	
71-43-2	Benzene	1.5	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~~ UJ	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	11.8	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 [b]	~~ND~~ UJ	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	228 D	50	28	ug/l	
107-06-2	1,2-Dichloroethane	0.72	1.0	0.60	ug/l	J
75-35-4	1,1-Dichloroethene	23.7	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	3250 D	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	19.2	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	17.8	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	

SRSK 2/4/19

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

mw-23

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-22		
Lab Sample ID:	JC76441-20	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.20 4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	2.0	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	48.3	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	79.9	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.72	1.0	0.53	ug/l	J
79-01-6	Trichloroethene	168 D	50	26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	221 D	50	39	ug/l	
	m,p-Xylene	4.9	1.0	0.78	ug/l	
95-47-6	o-Xylene	11.5	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	16.4	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	93%	81-124%
2037-26-5	Toluene-D8	98%	97%	80-120%
460-00-4	4-Bromofluorobenzene	101%	98%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.86	5.3	ug/l	J
95-63-6	Benzene, 1,2,4-trimethyl-	9.04	10	ug/l	JN
496-11-7	Indane	9.64	6.2	ug/l	JN
	Total TIC, Volatile		21.5	ug/l	J

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

2/4/19

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

mw-26

SGS North America Inc.

Report of Analysis

4.17 4

Client Sample ID:	SC51255-17		
Lab Sample ID:	JC76441-17	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90978.D	1	10/25/18 16:49	BK	n/a	n/a	V4D3973
Run #2							

	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	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	

DHF 2/4/19

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

mw-26

SGS North America Inc.

Report of Analysis

4.17 4

Client Sample ID:	SC51255-17		
Lab Sample ID:	JC76441-17	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	1.2	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	1.1	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	9.0	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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	26	ug/l	J
	Total TIC, Volatile		0	ug/l	

2/4/19

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

4.19 4

Client Sample ID:	SC51255-20		
Lab Sample ID:	JC76441-19	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90980.D	1	10/25/18 17:46	BK	n/a	n/a	V4D3973
Run #2							

	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	11.5	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	

2/4/19

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

Client Sample ID:	SC51255-20		
Lab Sample ID:	JC76441-19	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.19 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	17.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	3.1	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	96%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	24	ug/l	J
	Total TIC, Volatile		0	ug/l	

2/4/19

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

MW-69

SGS North America Inc.

Report of Analysis

4.6 4

Client Sample ID:	SC51255-06		
Lab Sample ID:	JC76441-6	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A245143.D	5	10/26/18 23:47	BK	n/a	n/a	VA9390
Run #2	2E147763.D	20	10/26/18 01:26	GA	n/a	n/a	V2E6496

	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	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	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	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	ND	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 [a]	~~ND~~ U5	10	6.8	ug/l	
75-34-3	1,1-Dichloroethane	49.2	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	9.6	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	358	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	13.8	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	ND	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	

DMF 2/4/19

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

MW-69

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-06		
Lab Sample ID:	JC76441-6	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.6
4

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	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	5.6	5.0	4.5	ug/l	
108-88-3	Toluene	ND	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	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	2480 b D	20	11	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	4.2	ug/l	
75-01-4	Vinyl chloride	37.6	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	96%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	117%	81-124%
2037-26-5	Toluene-D8	98%	98%	80-120%
460-00-4	4-Bromofluorobenzene	98%	95%	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 high, sample was ND.
(b) Result is from Run# 2

dmsk 2/4/19

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

SGS North America Inc.

MW-70

Report of Analysis

4.14 4

Client Sample ID:	SC51255-14		
Lab Sample ID:	JC76441-14	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147772.D	1	10/26/18 05:51	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

DAK 11/4/19

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

Client Sample ID:	SC51255-14		
Lab Sample ID:	JC76441-14	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.14 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	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane [a]	~~ND~~ U5	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	119%		81-124%
2037-26-5	Toluene-D8	98%		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) Associated CCV outside of control limits high, sample was ND.

2/4/19

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

SGS North America Inc.

MW-71

Report of Analysis

Client Sample ID:	SC51255-16		
Lab Sample ID:	JC76441-16	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D142210.D	1	10/27/18 12:07	MD	n/a	n/a	V3D6064
Run #2							

	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 [a]	~~ND~~ UJ	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 [b]	~~ND~~ UJ	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	0.73	1.0	0.59	ug/l	J
156-59-2	cis-1,2-Dichloroethene	73.9	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	4.8	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	

2/4/19

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

Client Sample ID:	SC51255-16		
Lab Sample ID:	JC76441-16	Date Sampled:	10/16/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.16

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	123	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.6	2.0	0.84	ug/l	J
75-01-4	Vinyl chloride	8.9	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	105%		81-124%
2037-26-5	Toluene-D8	98%		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.
(b) Associated CCV outside of control limits high, sample was ND.

2/4/19

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

MW-75

SGS North America Inc.

Report of Analysis

4.3 4

Client Sample ID:	SC51255-03		
Lab Sample ID:	JC76441-3	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147759.D	1	10/25/18 23:29	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

DRF 2/4/19

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

MW-75

SGS North America Inc.

Report of Analysis

4.3
4

Client Sample ID:	SC51255-03		
Lab Sample ID:	JC76441-3	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	0.72	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane [a]	~~ND~~ UJ	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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	116%		81-124%
2037-26-5	Toluene-D8	98%		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) Associated CCV outside of control limits high, sample was ND.

DWK 2/4/19

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

MW-76

SGS North America Inc.

Report of Analysis

4.1
4

Client Sample ID:	SC51255-01		
Lab Sample ID:	JC76441-1	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147757.D	1	10/25/18 22:31	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

DLB 2/4/19

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

MW-76

SGS North America Inc.

Report of Analysis

4.1.4

Client Sample ID:	SC51255-01		
Lab Sample ID:	JC76441-1	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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 [a]	~~ND~~ 35	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	113%		81-124%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	96%		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 high, sample was ND.

2/4/19

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

MW-77

SGS North America Inc.

Report of Analysis

4.2
4

Client Sample ID:	SC51255-02		
Lab Sample ID:	JC76441-2	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147758.D	1	10/25/18 23:00	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

dwk 2/4/19

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

Client Sample ID:	SC51255-02		
Lab Sample ID:	JC76441-2	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.2.4

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	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane [a]	~~ND~~ U5	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	114%		81-124%
2037-26-5	Toluene-D8	98%		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) Associated CCV outside of control limits high, sample was ND.

DRS 2/4/19

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

MW-84

SGS North America Inc.

Report of Analysis

4.4.4

Client Sample ID:	SC51255-04		
Lab Sample ID:	JC76441-4	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147760.D	1	10/25/18 23:59	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

DWK 2/4/19

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

mw-84

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-04		
Lab Sample ID:	JC76441-4	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	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	3.5	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	0.81	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane [a]	~~ND~~ J5	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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	116%		81-124%
2037-26-5	Toluene-D8	99%		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) Associated CCV outside of control limits high, sample was ND.

2/4/19

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

SGS North America Inc.

FD-101518 (mw-84)

Report of Analysis

Client Sample ID:	SC51255-05		
Lab Sample ID:	JC76441-5	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E147761.D	1	10/26/18 00:28	GA	n/a	n/a	V2E6496
Run #2							

	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	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	

2/4/19

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

Client Sample ID:	SC51255-05		
Lab Sample ID:	JC76441-5	Date Sampled:	10/15/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	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	3.7	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	0.84	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane [a]	~~ND~~ U5	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	98%		80-120%
17060-07-0	1,2-Dichloroethane-D4	117%		81-124%
2037-26-5	Toluene-D8	99%		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) Associated CCV outside of control limits high, sample was ND.

2/4/19

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

TB-1015-1718

SGS North America Inc.

Report of Analysis

4.22 4

Client Sample ID:	SC51255-26		
Lab Sample ID:	JC76441-22	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D142212.D	1	10/27/18 12:57	MD	n/a	n/a	V3D6064
Run #2 [a]	3D142221.D	1	10/27/18 16:56	MD	n/a	n/a	V3D6064

	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	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 [b]	~~ND~~ UJ	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 [c]	~~ND~~ UJ	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 [d]	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	

2/4/19

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

TB-1015-1718

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51255-26		
Lab Sample ID:	JC76441-22	Date Sampled:	10/17/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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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	96%	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	108%	81-124%
2037-26-5	Toluene-D8	100%	100%	80-120%
460-00-4	4-Bromofluorobenzene	102%	102%	80-120%

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

(a) Sample analyzed with head-space vial due to one vial was provided
(b) Associated CCV outside of control limits low.
(c) Associated CCV outside of control limits high, sample was ND.
(d) Result is from Run# 2

2/4/19

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

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-19

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51255		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/18/18 10:45		
Matrix:	Ground Water	Laboratory ID:	SC51255-24	File ID:	5125524.D		
Sampled:	10/17/18 15:45	Prepared:	10/22/18 07:13	Analyzed:	10/24/18 14:24		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	960 ml / 10 ml		
Batch:	1813950	Sequence:	S822835	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.208	0.108	0.208	U
11104-28-2	Aroclor-1221	0.208	0.120	0.208	U
11141-16-5	Aroclor-1232	0.208	0.116	0.208	U
53469-21-9	Aroclor-1242	0.208	0.112	0.208	U
12672-29-6	Aroclor-1248	0.208	0.142	0.208	U
11097-69-1	Aroclor-1254	0.208	0.121	0.208	U
11096-82-5	Aroclor-1260	0.208	0.0886	0.208	U
37324-23-5	Aroclor-1262	0.208	0.0933	0.208	U
11100-14-4	Aroclor-1268	0.208	0.0953	0.208	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-19-F

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51255		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/18/18 10:45		
Matrix:	Ground Water	Laboratory ID:	SC51255-25	File ID:	5125525.D		
Sampled:	10/17/18 15:45	Prepared:	10/22/18 07:13	Analyzed:	10/24/18 14:40		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	1000 ml / 10 ml		
Batch:	1813950	Sequence:	S822835	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.200	0.104	0.200	U
11104-28-2	Aroclor-1221	0.200	0.115	0.200	U
11141-16-5	Aroclor-1232	0.200	0.111	0.200	U
53469-21-9	Aroclor-1242	0.200	0.107	0.200	U
12672-29-6	Aroclor-1248	0.200	0.136	0.200	U
11097-69-1	Aroclor-1254	0.200	0.116	0.200	U
11096-82-5	Aroclor-1260	0.200	0.0851	0.200	U
37324-23-5	Aroclor-1262	0.200	0.0896	0.200	U
11100-14-4	Aroclor-1268	0.200	0.0915	0.200	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-23

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51255		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/18/18 10:45		
Matrix:	Ground Water	Laboratory ID:	SC51255-22	File ID:	5125522.D		
Sampled:	10/17/18 15:52	Prepared:	10/22/18 07:13	Analyzed:	10/24/18 13:53		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	920 ml / 10 ml		
Batch:	1813950	Sequence:	S822835	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.217	0.132	0.217	U
11104-28-2	Aroclor-1221	0.217	0.196	0.217	U
11141-16-5	Aroclor-1232	0.217	0.0922	0.217	U
53469-21-9	Aroclor-1242	0.217	0.114	0.217	U
12672-29-6	Aroclor-1248	0.217	0.136	0.217	U
11097-69-1	Aroclor-1254	0.217	0.123	0.217	U
11096-82-5	Aroclor-1260	0.217	0.125	0.217	U
37324-23-5	Aroclor-1262	0.217	0.138	0.217	U
11100-14-4	Aroclor-1268	0.217	0.129	0.217	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-23-F

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51255		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/18/18 10:45		
Matrix:	Ground Water	Laboratory ID:	SC51255-23	File ID:	5125523.D		
Sampled:	10/17/18 15:52	Prepared:	10/22/18 07:13	Analyzed:	10/24/18 14:09		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	950 ml / 10 ml		
Batch:	1813950	Sequence:	S822835	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.211	0.128	0.211	U
11104-28-2	Aroclor-1221	0.211	0.189	0.211	U
11141-16-5	Aroclor-1232	0.211	0.0893	0.211	U
53469-21-9	Aroclor-1242	0.211	0.111	0.211	U
12672-29-6	Aroclor-1248	0.211	0.132	0.211	U
11097-69-1	Aroclor-1254	0.211	0.119	0.211	U
11096-82-5	Aroclor-1260	0.211	0.121	0.211	U
37324-23-5	Aroclor-1262	0.211	0.134	0.211	U
11100-14-4	Aroclor-1268	0.211	0.125	0.211	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-26

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51255		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/18/18 10:45		
Matrix:	Ground Water	Laboratory ID:	SC51255-17	File ID:	5125517.D		
Sampled:	10/17/18 09:50	Prepared:	10/22/18 07:13	Analyzed:	10/24/18 12:21		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	990 ml / 10 ml		
Batch:	1813950	Sequence:	S822835	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.202	0.105	0.202	U
11104-28-2	Aroclor-1221	0.202	0.116	0.202	U
11141-16-5	Aroclor-1232	0.202	0.112	0.202	U
53469-21-9	Aroclor-1242	0.202	0.108	0.202	U
12672-29-6	Aroclor-1248	0.202	0.137	0.202	U
11097-69-1	Aroclor-1254	0.202	0.117	0.202	U
11096-82-5	Aroclor-1260	0.202	0.0860	0.202	U
37324-23-5	Aroclor-1262	0.202	0.0905	0.202	U
11100-14-4	Aroclor-1268	0.202	0.0924	0.202	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-38-F

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51255		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/18/18 10:45		
Matrix:	Ground Water	Laboratory ID:	SC51255-21	File ID:	5125521.D		
Sampled:	10/17/18 11:47	Prepared:	10/22/18 07:13	Analyzed:	10/24/18 13:38		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	960 ml / 10 ml		
Batch:	1813950	Sequence:	S822835	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.208	0.108	0.208	U
11104-28-2	Aroclor-1221	0.208	0.120	0.208	U
11141-16-5	Aroclor-1232	0.208	0.116	0.208	U
53469-21-9	Aroclor-1242	0.208	0.112	0.208	U
12672-29-6	Aroclor-1248	0.208	0.142	0.208	U
11097-69-1	Aroclor-1254	0.208	0.121	0.208	U
11096-82-5	Aroclor-1260	0.208	0.0886	0.208	U
37324-23-5	Aroclor-1262	0.208	0.0933	0.208	U
11100-14-4	Aroclor-1268	0.208	0.0953	0.208	U

SC51286

Report of Analysis

Client Sample ID:	SC51286-02		
Lab Sample ID:	JC76439-2	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90996.D	1	10/26/18 12:33	BK	n/a	n/a	V4D3974
Run #2							

	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	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	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

AR-MW-06

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-02		
Lab Sample ID:	JC76439-2	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.2 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	6.5	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	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	88%		81-124%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	32	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

MW-14

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-16		
Lab Sample ID:	JC76439-14	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91039.D	1	10/29/18 09:42	PR	n/a	n/a	V4D3977
Run #2							

	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 [a]	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	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	

JS

dlw 2/5/19

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

MW-14

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-16		
Lab Sample ID:	JC76439-14	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	94%		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
	system artifact	4.17	39	ug/l	J
	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

mw-18

SGS North America Inc.

Report of Analysis

4.12 4

Client Sample ID:	SC51286-14		
Lab Sample ID:	JC76439-12	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D91041.D	50	10/29/18 10:40	PR	n/a	n/a	V4D3977
Run #2	4D91006.D	200	10/26/18 17:20	BK	n/a	n/a	V4D3974

	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	500	300	ug/l	
71-43-2	Benzene	ND	25	21	ug/l	
74-97-5	Bromochloromethane	ND	50	24	ug/l	
75-27-4	Bromodichloromethane	ND	50	29	ug/l	
75-25-2	Bromoform	ND	50	32	ug/l	
74-83-9	Bromomethane [b]	ND CS	100	82	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	340	ug/l	
75-15-0	Carbon disulfide	ND	100	48	ug/l	
56-23-5	Carbon tetrachloride	ND	50	28	ug/l	
108-90-7	Chlorobenzene	ND	50	28	ug/l	
75-00-3	Chloroethane	ND	50	36	ug/l	
67-66-3	Chloroform	ND	50	25	ug/l	
74-87-3	Chloromethane	ND	50	38	ug/l	
110-82-7	Cyclohexane	ND	250	39	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	60	ug/l	
124-48-1	Dibromochloromethane	ND	50	28	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	24	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	50	27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	50	27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	68	ug/l	
75-34-3	1,1-Dichloroethane	39.4	50	28	ug/l	J
107-06-2	1,2-Dichloroethane	ND	50	30	ug/l	
75-35-4	1,1-Dichloroethene	62.2	50	30	ug/l	
156-59-2	cis-1,2-Dichloroethene	13100 D	200	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	54.7	50	27	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	24	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	22	ug/l	
100-41-4	Ethylbenzene	ND	50	30	ug/l	
76-13-1	Freon 113	ND	250	97	ug/l	
591-78-6	2-Hexanone	ND	250	100	ug/l	

25/19

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

mw-18

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-14		
Lab Sample ID:	JC76439-12	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.12
4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	50	32	ug/l	
79-20-9	Methyl Acetate	ND	250	40	ug/l	
108-87-2	Methylcyclohexane	ND	250	30	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	93	ug/l	
75-09-2	Methylene chloride	ND	100	50	ug/l	
100-42-5	Styrene	ND	50	35	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	33	ug/l	
127-18-4	Tetrachloroethene	ND	50	45	ug/l	
108-88-3	Toluene	ND	50	27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	25	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	27	ug/l	
79-01-6	Trichloroethene	6980	50	26	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	42	ug/l	
75-01-4	Vinyl chloride	1830	50	39	ug/l	
	m,p-Xylene	ND	50	39	ug/l	
95-47-6	o-Xylene	ND	50	30	ug/l	
1330-20-7	Xylene (total)	ND	50	30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	91%	81-124%
2037-26-5	Toluene-D8	101%	95%	80-120%
460-00-4	4-Bromofluorobenzene	97%	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) Associated CCV outside of control limits low.
(c) 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

mw-44

SGS North America Inc.

Report of Analysis

4.3 4

Client Sample ID:	SC51286-03		
Lab Sample ID:	JC76439-3	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90997.D	1	10/26/18 13:02	BK	n/a	n/a	V4D3974
Run #2							

	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	1.1	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	1.4	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	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

mw-44

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-03		
Lab Sample ID:	JC76439-3	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	0.99	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	6.3	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	0.94	1.0	0.78	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	0.94	1.0	0.59	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	87%		81-124%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	40	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

FD-101818
(MW-44)

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-05		
Lab Sample ID:	JC76439-4	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90998.D	1	10/26/18 13:31	BK	n/a	n/a	V4D3974
Run #2							

	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	1.1	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	1.3	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

FD-101818
(MW-44)

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-05		
Lab Sample ID:	JC76439-4	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	1.0	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	6.3	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	0.90	1.0	0.78	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	0.90	1.0	0.59	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	41	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

MW-45

SGS North America Inc.

Report of Analysis

4.1
4

Client Sample ID:	SC51286-01		
Lab Sample ID:	JC76439-1	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90995.D	1	10/26/18 12:05	BK	n/a	n/a	V4D3974
Run #2							

	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	12.5	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	3.0	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

Client Sample ID:	SC51286-01		
Lab Sample ID:	JC76439-1	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.1
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	119	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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	79	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

MW-48

Report of Analysis

Client Sample ID:	SC51286-07		
Lab Sample ID:	JC76439-5	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91038.D	1	10/29/18 09:14	PR	n/a	n/a	V4D3977
Run #2							

	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 [a]	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	1.2	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	10.5	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.79	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	

CS

dwf 2/5/19

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

Client Sample ID:	SC51286-07		
Lab Sample ID:	JC76439-5	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	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	16.1	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	28	ug/l	J
	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

mw-50

SGS North America Inc.

Report of Analysis

4.10 4

Client Sample ID:	SC51286-12		
Lab Sample ID:	JC76439-10	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91002.D	1	10/26/18 15:25	BK	n/a	n/a	V4D3974
Run #2							

	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	0.56	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	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

Client Sample ID:	SC51286-12		
Lab Sample ID:	JC76439-10	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.10.4

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	0.70	1.0	0.53	ug/l	J
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	98%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	36	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

4.11

4

Client Sample ID:	SC51286-13		
Lab Sample ID:	JC76439-11	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91003.D	1	10/26/18 15:54	BK	n/a	n/a	V4D3974
Run #2	4D91043.D	10	10/29/18 11:37	PR	n/a	n/a	V4D3977

	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	1.7	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	164/D	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.6	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

Client Sample ID:	SC51286-13		
Lab Sample ID:	JC76439-11	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.11

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	2.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	115	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%	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	90%	92%	81-124%
2037-26-5	Toluene-D8	95%	102%	80-120%
460-00-4	4-Bromofluorobenzene	96%	97%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.16	21	ug/l	J
	Total TIC, Volatile		0	ug/l	

(a) 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

4.9

Client Sample ID:	SC51286-11		
Lab Sample ID:	JC76439-9	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91001.D	1	10/26/18 14:56	BK	n/a	n/a	V4D3974
Run #2							

	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	25.9	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

mw-58

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-11		
Lab Sample ID:	JC76439-9	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.9
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	3.3	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	1.9	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	92%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.16	21	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

MW-66

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-10		
Lab Sample ID:	JC76439-8	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91040.D	1	10/29/18 10:11	PR	n/a	n/a	V4D3977
Run #2	4D90989.D	5	10/26/18 09:14	BK	n/a	n/a	V4D3974

	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 [a]	ND UJ	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	0.70	1.0	0.59	ug/l	J
156-59-2	cis-1,2-Dichloroethene	233 [b] D	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.3	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	

DHK 2/5/19

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

MW-66

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-10		
Lab Sample ID:	JC76439-8	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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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	16.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	6.3	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%	95%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	90%	81-124%
2037-26-5	Toluene-D8	101%	97%	80-120%
460-00-4	4-Bromofluorobenzene	97%	95%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	23	ug/l	J
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low.
(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

MW-79

SGS North America Inc.

Report of Analysis

4.6 4

Client Sample ID:	SC51286-08		
Lab Sample ID:	JC76439-6	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90999.D	1	10/26/18 13:59	BK	n/a	n/a	V4D3974
Run #2							

	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	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

MW-79

SGS North America Inc.

Report of Analysis

Client Sample ID:	SC51286-08		
Lab Sample ID:	JC76439-6	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	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	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.16	31	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

TR3-MW-02

Report of Analysis

Client Sample ID:	SC51286-09		
Lab Sample ID:	JC76439-7	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D91000.D	1	10/26/18 14:28	BK	n/a	n/a	V4D3974
Run #2							

	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	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

Client Sample ID:	SC51286-09		
Lab Sample ID:	JC76439-7	Date Sampled:	10/18/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.7

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	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	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	89%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.17	38	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

TR3-PW-01

SGS North America Inc.

Report of Analysis

4.13 4

Client Sample ID:	SC51286-15		
Lab Sample ID:	JC76439-13	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D91042.D	200	10/29/18 11:08	PR	n/a	n/a	V4D3977
Run #2	4D91007.D	500	10/26/18 17:48	BK	n/a	n/a	V4D3974

	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	2000	1200	ug/l	
71-43-2	Benzene	ND	100	85	ug/l	
74-97-5	Bromochloromethane	ND	200	96	ug/l	
75-27-4	Bromodichloromethane	ND	200	120	ug/l	
75-25-2	Bromoform	ND	200	130	ug/l	
74-83-9	Bromomethane [b]	ND	400	330	ug/l	
78-93-3	2-Butanone (MEK)	ND	2000	1400	ug/l	
75-15-0	Carbon disulfide	ND	400	190	ug/l	
56-23-5	Carbon tetrachloride	ND	200	110	ug/l	
108-90-7	Chlorobenzene	ND	200	110	ug/l	
75-00-3	Chloroethane	ND	200	150	ug/l	
67-66-3	Chloroform	ND	200	100	ug/l	
74-87-3	Chloromethane	ND	200	150	ug/l	
110-82-7	Cyclohexane	ND	1000	160	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	400	240	ug/l	
124-48-1	Dibromochloromethane	ND	200	110	ug/l	
106-93-4	1,2-Dibromoethane	ND	200	95	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	200	110	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	200	110	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	200	100	ug/l	
75-71-8	Dichlorodifluoromethane	ND	400	270	ug/l	
75-34-3	1,1-Dichloroethane	ND	200	110	ug/l	
107-06-2	1,2-Dichloroethane	ND	200	120	ug/l	
75-35-4	1,1-Dichloroethene	ND	200	120	ug/l	
156-59-2	cis-1,2-Dichloroethene	14000	200	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	200	110	ug/l	
78-87-5	1,2-Dichloropropane	ND	200	100	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	200	94	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	200	86	ug/l	
100-41-4	Ethylbenzene	ND	200	120	ug/l	
76-13-1	Freon 113	ND	1000	390	ug/l	
591-78-6	2-Hexanone	ND	1000	410	ug/l	

JS

2/5/19

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

Client Sample ID:	SC51286-15		
Lab Sample ID:	JC76439-13	Date Sampled:	10/19/18
Matrix:	AQ - Ground Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

4.13
4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	200	130	ug/l	
79-20-9	Methyl Acetate	ND	1000	160	ug/l	
108-87-2	Methylcyclohexane	ND	1000	120	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	200	100	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	1000	370	ug/l	
75-09-2	Methylene chloride	ND	400	200	ug/l	
100-42-5	Styrene	ND	200	140	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	130	ug/l	
127-18-4	Tetrachloroethene	ND	200	180	ug/l	
108-88-3	Toluene	ND	200	110	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	200	100	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	200	100	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	110	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	200	110	ug/l	
79-01-6	Trichloroethene	94500 D	500	260	ug/l	
75-69-4	Trichlorofluoromethane	ND	400	170	ug/l	
75-01-4	Vinyl chloride	220	200	160	ug/l	
	m,p-Xylene	ND	200	160	ug/l	
95-47-6	o-Xylene	ND	200	120	ug/l	
1330-20-7	Xylene (total)	ND	200	120	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	92%	81-124%
2037-26-5	Toluene-D8	100%	95%	80-120%
460-00-4	4-Bromofluorobenzene	97%	97%	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) Associated CCV outside of control limits low.
(c) Result is from Run# 2

dwyk 2/5/19

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

Client Sample ID:	SC51286-18		
Lab Sample ID:	JC76439-15	Date Sampled:	10/19/18
Matrix:	AQ - Equipment Blank	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90993.D	1	10/26/18 11:08	BK	n/a	n/a	V4D3974
Run #2							

	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	2.1	5.0	0.78	ug/l	J
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

EB-101918

SGS North America Inc.

Report of Analysis

4.15 4

Client Sample ID:	SC51286-18		
Lab Sample ID:	JC76439-15	Date Sampled:	10/19/18
Matrix:	AQ - Equipment Blank	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	2.1	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	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	90%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	96%		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

SGS North America Inc.

TB-101818

Report of Analysis

Client Sample ID:	SC51286-20		
Lab Sample ID:	JC76439-16	Date Sampled:	10/19/18
Matrix:	AQ - Trip Blank Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D90994.D	1	10/26/18 11:36	BK	n/a	n/a	V4D3974
Run #2							

	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	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

TB-101818

SGS North America Inc.

Report of Analysis

4.16 4

Client Sample ID:	SC51286-20		
Lab Sample ID:	JC76439-16	Date Sampled:	10/19/18
Matrix:	AQ - Trip Blank Water	Date Received:	10/23/18
Method:	SW846 8260C	Percent Solids:	n/a
Project:	UTC Carrier AOC G SRI		

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	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	88%		81-124%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	96%		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

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
SC51286-16

MW-14

ESC Sample ID:	L1037316-01	**SDG:**	L1037316
Client Sample ID:	SC51286-16	**Collected Date/Time:**	10/19/18 12:44
Lab File ID:	1026_19	**Received Date/Time:**	10/23/18 08:45
Instrument ID:	BNAMS24	**Preparation Date/Time:**	10/25/18 14:31
Analytical Batch:	WG1186143	**Analysis Date/Time:**	10/26/18 13:48
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	8270D-SIM	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	0.5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			mg/l		*mg/l*	*mg/l*
1,4-Dioxane	123-91-1	3.20	0.00163		0.0000447	0.000400

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
SC51286-17

MW-140

ESC Sample ID:	L1037316-02	**SDG:**	L1037316
Client Sample ID:	SC51286-17	**Collected Date/Time:**	10/19/18 13:37
Lab File ID:	1026_20	**Received Date/Time:**	10/23/18 08:45
Instrument ID:	BNAMS24	**Preparation Date/Time:**	10/25/18 14:31
Analytical Batch:	WG1186143	**Analysis Date/Time:**	10/26/18 14:11
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	8270D-SIM	**Sample Vol Used:**	_____
Matrix:	GW	**Initial Wt/Vol:**	100 mL
Total Solids (%):	_____	**Final Wt/Vol:**	0.5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			mg/l		*mg/l*	*mg/l*
1,4-Dioxane	123-91-1	3.20	0.000171	J	0.0000447	0.000400

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
SC51286-18

EB-101918

ESC Sample ID:	L1037316-03	**SDG:**	L1037316
Client Sample ID:	SC51286-18	**Collected Date/Time:**	10/19/18 13:35
Lab File ID:	1026_21	**Received Date/Time:**	10/23/18 08:45
Instrument ID:	BNAMS24	**Preparation Date/Time:**	10/25/18 14:31
Analytical Batch:	WG1186143	**Analysis Date/Time:**	10/26/18 14:35
Dilution Factor:	1	**Prep Method:**	3510C
Analytical Method:	8270D-SIM	**Sample Vol Used:**	
Matrix:	GW	**Initial Wt/Vol:**	100 mL
Total Solids (%):		**Final Wt/Vol:**	0.5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			mg/l		*mg/l*	*mg/l*
1,4-Dioxane	123-91-1	0	U		0.0000447	0.000400

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-44

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51286		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/20/18 10:55		
Matrix:	Ground Water	Laboratory ID:	SC51286-03	File ID:	5128603.D		
Sampled:	10/18/18 10:42	Prepared:	10/23/18 15:03	Analyzed:	10/25/18 14:27		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	1010 ml / 10 ml		
Batch:	1814052	Sequence:	S822854	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.198	0.103	0.198	U
11104-28-2	Aroclor-1221	0.198	0.114	0.198	U
11141-16-5	Aroclor-1232	0.198	0.110	0.198	U
53469-21-9	Aroclor-1242	0.198	0.106	0.198	U
12672-29-6	Aroclor-1248	0.198	0.135	0.198	U
11097-69-1	Aroclor-1254	0.198	0.115	0.198	U
11096-82-5	Aroclor-1260	0.198	0.0843	0.198	U
37324-23-5	Aroclor-1262	0.198	0.0887	0.198	U
11100-14-4	Aroclor-1268	0.198	0.0906	0.198	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

MW-44 F

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51286		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/20/18 10:55		
Matrix:	Ground Water	Laboratory ID:	SC51286-04	File ID:	5128604.D		
Sampled:	10/18/18 10:42	Prepared:	10/23/18 15:03	Analyzed:	10/25/18 14:42		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	1030 ml / 10 ml		
Batch:	1814052	Sequence:	S822854	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.194	0.101	0.194	U
11104-28-2	Aroclor-1221	0.194	0.112	0.194	U
11141-16-5	Aroclor-1232	0.194	0.108	0.194	U
53469-21-9	Aroclor-1242	0.194	0.104	0.194	U
12672-29-6	Aroclor-1248	0.194	0.132	0.194	U
11097-69-1	Aroclor-1254	0.194	0.113	0.194	U
11096-82-5	Aroclor-1260	0.194	0.0826	0.194	U
37324-23-5	Aroclor-1262	0.194	0.0870	0.194	U
11100-14-4	Aroclor-1268	0.194	0.0888	0.194	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

FD-101818

MW-44

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51286		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/20/18 10:55		
Matrix:	Ground Water	Laboratory ID:	SC51286-05	File ID:	5128605.D		
Sampled:	10/18/18 00:00	Prepared:	10/23/18 15:03	Analyzed:	10/25/18 14:57		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	1000 ml / 10 ml		
Batch:	1814052	Sequence:	S822854	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.200	0.104	0.200	U
11104-28-2	Aroclor-1221	0.200	0.115	0.200	U
11141-16-5	Aroclor-1232	0.200	0.111	0.200	U
53469-21-9	Aroclor-1242	0.200	0.107	0.200	U
12672-29-6	Aroclor-1248	0.200	0.136	0.200	U
11097-69-1	Aroclor-1254	0.200	0.116	0.200	U
11096-82-5	Aroclor-1260	0.200	0.0851	0.200	U
37324-23-5	Aroclor-1262	0.200	0.0896	0.200	U
11100-14-4	Aroclor-1268	0.200	0.0915	0.200	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

FD-101818-F

MW-44F

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51286		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/20/18 10:55		
Matrix:	Ground Water	Laboratory ID:	SC51286-06	File ID:	5128606.D		
Sampled:	10/18/18 00:00	Prepared:	10/23/18 15:03	Analyzed:	10/25/18 15:13		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	1040 ml / 10 ml		
Batch:	1814052	Sequence:	S822854	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.192	0.100	0.192	U
11104-28-2	Aroclor-1221	0.192	0.111	0.192	U
11141-16-5	Aroclor-1232	0.192	0.107	0.192	U
53469-21-9	Aroclor-1242	0.192	0.103	0.192	U
12672-29-6	Aroclor-1248	0.192	0.131	0.192	U
11097-69-1	Aroclor-1254	0.192	0.112	0.192	U
11096-82-5	Aroclor-1260	0.192	0.0818	0.192	U
37324-23-5	Aroclor-1262	0.192	0.0862	0.192	U
11100-14-4	Aroclor-1268	0.192	0.0880	0.192	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

EB-101918

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51286		
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event		
Project Number:	60589143			Received:	10/20/18 10:55		
Matrix:	Water Field QC	Laboratory ID:	SC51286-18	File ID:	5128618.D		
Sampled:	10/19/18 13:35	Prepared:	10/23/18 15:03	Analyzed:	10/25/18 15:28		
% Solids:		Preparation:	SW846 3510C	Initial/Final:	1020 ml / 10 ml		
Batch:	1814052	Sequence:	S822854	Calibration:	1810035	Instrument:	HPS11
Injection Volume (uL):	2.00						
Reported to:	MRL	Dilution:	1				

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.196	0.102	0.196	U
11104-28-2	Aroclor-1221	0.196	0.113	0.196	U
11141-16-5	Aroclor-1232	0.196	0.109	0.196	U
53469-21-9	Aroclor-1242	0.196	0.105	0.196	U
12672-29-6	Aroclor-1248	0.196	0.133	0.196	U
11097-69-1	Aroclor-1254	0.196	0.114	0.196	U
11096-82-5	Aroclor-1260	0.196	0.0834	0.196	U
37324-23-5	Aroclor-1262	0.196	0.0878	0.196	U
11100-14-4	Aroclor-1268	0.196	0.0897	0.196	U

FORM I - ANALYSIS DATA SHEET

SW846 8082A

EB-101918-F

Laboratory:	Eurofins Spectrum Analytical, Inc. - MA			SDG:	SC51286
Client:	AECOM Environment - Buffalo, NY			Project:	UTC/Carrier 2018 GW Event
Project Number:	60589143			Received:	10/20/18 10:55
Matrix:	Water Field QC	Laboratory ID:	SC51286-19	File ID:	5128619.D
Sampled:	10/19/18 13:35	Prepared:	10/23/18 15:03	Analyzed:	10/25/18 15:44
% Solids:		Preparation:	SW846 3510C	Initial/Final:	920 ml / 10 ml
Batch:	1814052	Sequence:	S822854	Calibration:	1810035
Instrument:	HPS11				
Injection Volume (uL):	2.00				
Reported to:	MRL	Dilution:	1		

CAS NO.	COMPOUND	RESULT (µg/l)	MDL	MRL	Q
12674-11-2	Aroclor-1016	0.217	0.113	0.217	U
11104-28-2	Aroclor-1221	0.217	0.125	0.217	U
11141-16-5	Aroclor-1232	0.217	0.121	0.217	U
53469-21-9	Aroclor-1242	0.217	0.117	0.217	U
12672-29-6	Aroclor-1248	0.217	0.148	0.217	U
11097-69-1	Aroclor-1254	0.217	0.126	0.217	U
11096-82-5	Aroclor-1260	0.217	0.0925	0.217	U
37324-23-5	Aroclor-1262	0.217	0.0974	0.217	U
11100-14-4	Aroclor-1268	0.217	0.0995	0.217	U

SC51330

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Analysis Report

MW-14

Sample Description: SC51330-01 Groundwater
SC51330

Project Name: SC51330

Submittal Date/Time: 10/24/2018 11:10
Collection Date/Time: 10/19/2018 12:44

Eurofins Spectrum Analytical
ELLE Sample #: WW 9866029
ELLE Group #: 2001832
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.95 U	0.95	1.9	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.9 U	1.9	5.7	1
14473	NEtFOSAA	2991-50-6	0.95 U	0.95	2.9	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.95 U	0.95	2.9	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.31 J	0.29	0.95	1
14473	Perfluorobutanoic acid	375-22-4	3.5 J	1.9	5.7	1
14473	Perfluorodecanesulfonate	335-77-3	0.57 U	0.57	1.9	1
14473	Perfluorodecanoic acid	335-76-2	0.86 U	0.86	1.9	1
14473	Perfluorododecanoic acid	307-55-1	0.48 U	0.48	1.9	1
14473	Perfluoroheptanesulfonate	375-92-8	0.38 U	0.38	1.9	1
14473	Perfluoroheptanoic acid	375-85-9	0.38 U	0.38	0.95	1
14473	Perfluorohexanesulfonate	355-46-4	0.38 U	0.38	1.9	1
14473	Perfluorohexanoic acid	307-24-4	0.59 J	0.38	1.9	1
14473	Perfluorononanoic acid	375-95-1	0.38 U	0.38	1.9	1
14473	Perfluorooctanesulfonamide	754-91-6	0.48 U	0.48	2.9	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.38 U	0.38	1.9	1
14473	Perfluorooctanoic acid	335-67-1	1.9	0.29	0.95	1
14473	Perfluoropentanoic acid	2706-90-3	2.2 J	1.9	5.7	1
14473	Perfluorotetradecanoic acid	376-06-7	0.29 U	0.29	0.95	1
14473	Perfluorotridecanoic acid	72629-94-8	0.38 U	0.38	0.95	1
14473	Perfluoroundecanoic acid	2058-94-8	0.38 U	0.38	1.9	1

The injection standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18298005	10/27/2018 05:47	Christine E Dolman	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18298005	10/25/2018 14:15	Danielle D McCully	1

*=This limit was used in the evaluation of the final result

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Analysis Report

MW-14D

Sample Description: SC51330-02 Groundwater
SC51330

Project Name: SC51330

Submittal Date/Time: 10/24/2018 11:10
Collection Date/Time: 10/19/2018 13:37

Eurofins Spectrum Analytical
ELLE Sample #: WW 9866030
ELLE Group #: 2001832
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		ng/l	ng/l	ng/l	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.91 U	0.91	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 U	1.8	5.5	1
14473	NEtFOSAA	2991-50-6	0.91 U	0.91	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.91 U	0.91	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	2.0	0.27	0.91	1
14473	Perfluorobutanoic acid	375-22-4	4.8 J	1.8	5.5	1
14473	Perfluorodecanesulfonate	335-77-3	0.55 U	0.55	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.82 U	0.82	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.46 U	0.46	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.36 U	0.36	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	1.2	0.36	0.91	1
14473	Perfluorohexanesulfonate	355-46-4	3.5	0.36	1.8	1
14473	Perfluorohexanoic acid	307-24-4	2.6	0.36	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.46 U	0.46	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	1.3 J	0.36	1.8	1
14473	Perfluorooctanoic acid	335-67-1	3.1	0.27	0.91	1
14473	Perfluoropentanoic acid	2706-90-3	3.7 J	1.8	5.5	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.91	1
14473	Perfluorotridecanoic acid	72629-94-8	0.36 U	0.36	0.91	1
14473	Perfluoroundecanoic acid	2058-94-8	0.36 U	0.36	1.8	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18298005	10/27/2018 05:56	Christine E Dolman	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18298005	10/25/2018 14:15	Danielle D McCully	1

*=This limit was used in the evaluation of the final result

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EB-101918

Sample Description: SC51330-04 Water
SC51330

Project Name: SC51330

Submittal Date/Time: 10/24/2018 11:10
Collection Date/Time: 10/19/2018 13:35

Eurofins Spectrum Analytical
ELLE Sample #: WW 9866032
ELLE Group #: 2001832
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		**ng/l**	**ng/l**	**ng/l**	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.95 U	0.95	1.9	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.9 U	1.9	5.7	1
14473	NEtFOSAA	2991-50-6	0.95 U	0.95	2.9	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.95 U	0.95	2.9	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.29 U	0.29	0.95	1
14473	Perfluorobutanoic acid	375-22-4	1.9 U	1.9	5.7	1
14473	Perfluorodecanesulfonate	335-77-3	0.57 U	0.57	1.9	1
14473	Perfluorodecanoic acid	335-76-2	0.86 U	0.86	1.9	1
14473	Perfluorododecanoic acid	307-55-1	0.48 U	0.48	1.9	1
14473	Perfluoroheptanesulfonate	375-92-8	0.38 U	0.38	1.9	1
14473	Perfluoroheptanoic acid	375-85-9	0.38 U	0.38	0.95	1
14473	Perfluorohexanesulfonate	355-46-4	0.38 U	0.38	1.9	1
14473	Perfluorohexanoic acid	307-24-4	0.38 U	0.38	1.9	1
14473	Perfluorononanoic acid	375-95-1	0.38 U	0.38	1.9	1
14473	Perfluorooctanesulfonamide	754-91-6	0.48 U	0.48	2.9	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.38 U	0.38	1.9	1
14473	Perfluorooctanoic acid	335-67-1	0.29 U	0.29	0.95	1
14473	Perfluoropentanoic acid	2706-90-3	1.9 U	1.9	5.7	1
14473	Perfluorotetradecanoic acid	376-06-7	0.29 U	0.29	0.95	1
14473	Perfluorotridecanoic acid	72629-94-8	0.38 U	0.38	0.95	1
14473	Perfluoroundecanoic acid	2058-94-8	0.38 U	0.38	1.9	1

The recovery for several labeled compounds used as extraction standards are outside of QC acceptance limits as noted on the QC Summary.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18298005	10/28/2018 23:01	Isaac Phillips-Cary	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18298005	10/25/2018 14:15	Danielle D McCully	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Analysis Report

FB-101918

Sample Description: SC51330-03 Water
SC51330

Project Name: SC51330

Submittal Date/Time: 10/24/2018 11:10
Collection Date/Time: 10/19/2018 13:10

Eurofins Spectrum Analytical
ELLE Sample #: WW 9866031
ELLE Group #: 2001832
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous	**EPA 537 Version 1.1 Modified**		**ng/l**	**ng/l**	**ng/l**	
14473	6:2 fluorotelomersulfonate	27619-97-2	0.90 U	0.90	1.8	1
14473	8:2 fluorotelomersulfonate	39108-34-4	1.8 U	1.8	5.4	1
14473	NEtFOSAA	2991-50-6	0.90 U	0.90	2.7	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMeFOSAA	2355-31-9	0.90 U	0.90	2.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	Perfluorobutanesulfonate	375-73-5	0.27 U	0.27	0.90	1
14473	Perfluorobutanoic acid	375-22-4	1.8 U	1.8	5.4	1
14473	Perfluorodecanesulfonate	335-77-3	0.54 U	0.54	1.8	1
14473	Perfluorodecanoic acid	335-76-2	0.81 U	0.81	1.8	1
14473	Perfluorododecanoic acid	307-55-1	0.45 U	0.45	1.8	1
14473	Perfluoroheptanesulfonate	375-92-8	0.36 U	0.36	1.8	1
14473	Perfluoroheptanoic acid	375-85-9	0.36 U	0.36	0.90	1
14473	Perfluorohexanesulfonate	355-46-4	0.36 U	0.36	1.8	1
14473	Perfluorohexanoic acid	307-24-4	0.36 U	0.36	1.8	1
14473	Perfluorononanoic acid	375-95-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanesulfonamide	754-91-6	0.45 U	0.45	2.7	1
14473	Perfluoro-octanesulfonate	1763-23-1	0.36 U	0.36	1.8	1
14473	Perfluorooctanoic acid	335-67-1	0.27 U	0.27	0.90	1
14473	Perfluoropentanoic acid	2706-90-3	1.8 U	1.8	5.4	1
14473	Perfluorotetradecanoic acid	376-06-7	0.27 U	0.27	0.90	1
14473	Perfluorotridecanoic acid	72629-94-8	0.36 U	0.36	0.90	1
14473	Perfluoroundecanoic acid	2058-94-8	0.36 U	0.36	1.8	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14473	21 PFAS in NPW	EPA 537 Version 1.1 Modified	1	18298005	10/27/2018 06:14	Christine E Dolman	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	18298005	10/25/2018 14:15	Danielle D McCully	1

*=This limit was used in the evaluation of the final result

ATTACHMENT B

SUPPORT DOCUMENTATION

SC51194

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO. 60[illegible]3

SITE NAME [illegible]

SAMPLERS (PRINT/SIGNATURE) [illegible]

LAB Eurofins

COOLER 1 of 1

PAGE 1 of 1

DELIVERY SERVICE: FedEx AIRBILL NO.:

TESTS

BOTTLE TYPE AND PRESERVATIVE

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 # (IRPIMS ONLY)
MW-035	10/16/15	0735	G	MW-035	WG	2	2		N	-	-	-
FD-1	10/16/15	-	G	FD-101615	WG	2	2	MW-035	FD	-	-	-
MW-03D	10/16/15	0950	G	MW-03D	WG	2	2		N	-	-	-
MW-03D	10/16/15	0950	G	MW-03D-MS	WG	2	2		MS	-	-	-
MW-03D	10/16/15	0950	G	MW-03D-MSD	WG	2	2		SD	-	-	-
DP MW-01	10/16/15	1230	G	DP MW-01	WG	2	2		N	-	-	-
AR-MW-02	10/16/15	1231	G	AR-MW-02	WG	2	2		N	-	-	-
MW-17	10/16/15	1605	G	MW-17	WG	2	2		N	-	-	-
MW-70	10/16/15	1616	G	MW-70	WG	2	2		N	-	-	-
MW-10	10/16/15	1500	G	MW-10	WG	2	2		N	-	-	-
MW-71	10/16/15	1510	G	MW-71	WG	2	2		N	-	-	-

MATRIX CODES

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

SAMPLE TYPE CODES

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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[illegible]	10/17/15	1500	FedEx	10/17/15	1200
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
[illegible]			[illegible]	10/19/15	0825

SPECIAL INSTRUCTIONS

[illegible]

Distribution: Original accompanies shipment, copy to coordinator field files

2.1 Not all [illegible] analyzed

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Lancaster Laboratories
Environmental

Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical
SDG: SAJ23

PFAS Group

Fraction: PFAS by LC/MS/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9860648	SC51194-01	X		1	
9860649	SC51194-02	X		1	
9860650	SC51194-03	X		1	Unspiked
9860651	SC51194-03 MS	X		1	Matrix Spike
9860652	SC51194-03 MSD	X		1	Matrix Spike Duplicate
9860653	SC51194-04	X		1	
9860654	SC51194-05	X		1	
9860655	SC51194-06	X		1	
9860656	SC51194-07	X		1	
9860657	SC51194-08	X		1	
9860658	SC51194-09	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

(Sample number(s): 9860648-9860654: Analysis: 14473)
The response for a target analyte(s) in the opening continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

A.30090 G.2000540 S.9800648-58

eurofins | Spectrum Analytical

SUBCONTRACT ORDER

SC51194

SENDING LABORATORY:

Eurofins Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
Phone: (413) 789-9018
Fax: (413) 789-4076
PM: SpectrumLabResults@EurofinsUS.com

RECEIVING LABORATORY:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17605-2425
Phone: (717) 656-2300
Fax: -

BILL TO:

Eurofins Spectrum Analytical, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Attention: Accounts Payable
accountspayable@eurofinsus.com
PO Number: SC51194

Project: UTC/Carrier AOC G SRI

Project #: 60589143
PO Number: SC51194

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
	SC51194-01	16-Oct-18 09:38	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A), 250 mL Poly Unpres (B)						
	SC51194-02	16-Oct-18 00:00	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A), 250 mL Poly Unpres (B)						
	SC51194-03	16-Oct-18 09:50	Ground Water	PFC Sub	05-Nov-18 16:00	run MS/MSD/UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A), 250 mL Poly Unpres (B), 250 mL Poly Trizma (C), 250 mL Poly Trizma (D), 250 mL Poly Trizma (E), 250 mL Poly Trizma (F)						
	SC51194-04	16-Oct-18 12:30	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A), 250 mL Poly Unpres (B)						
	SC51194-05	16-Oct-18 12:31	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A), 250 mL Poly Unpres (B)						

Released By	10/18/18 16:00 Date	Received By	Date	Temp °C
Released By	Date	Received By	10/19/18 1020 Date	1.2

A-30890 G.2000540 S.9060648-58

eurofins | Spectrum Analytical

SUBCONTRACT ORDER

SC51194

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
	SC51194-06	16-Oct-18 16:05	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						
	SC51194-07	16-Oct-18 16:16	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						
	SC51194-08	16-Oct-18 18:00	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						
	SC51194-09	16-Oct-18 18:00	Ground Water	PFC Sub	05-Nov-18 16:00	UTC/ASP B
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						

Please send notice within 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration. Notice should be emailed to SpectrumLabResults@EurofinsUS.com.

Please notify SpectrumLabResults@EurofinsUS.com immediately and prior to conducting analysis if certification is not held for the analyses requested.

Please e-mail results in electronic format to SpectrumLabResults@EurofinsUS.com.

Released By	Date	Received By	Date	Temp °C
[signature]	10/18/18 16:00			
[signature]		[signature]	10/19/18 1020	1.2
Released By	Date	Received By	Date	

Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical
SDG: SAJ23

PFAS Group

Fraction: PFAS by LC/MS/MS

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Surrogate

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

(Sample number(s): 9860648, 9860649: Analysis: 14473)
The recovery for labeled compound used as extraction standards is outside of QC acceptance limits as noted on the QC Summary due to the matrix of the sample.

(Sample number(s): 9860654, 9860656: Analysis: 14473)
The recovery for labeled compound used as extraction standards is outside of QC acceptance limits as noted on the QC Summary.

Batch#: 18295007 (Sample number(s): 9860648-9860657, UNSPK: 9860650)
The recovery(ies) for the following surrogate(s) exceeded the acceptance window: 13C2-6:2-FTS (9860653), 13C2-8:2-FTS (9860653), 13C3-PFBS (9860648, 9860649, 9860653, 9860654, 9860656), 13C5-PFPeA (9860653)

Batch#: 18297010 (Sample number(s): 9860658)
The recovery(ies) for the following surrogate(s) exceeded the acceptance window: d3-NMeFOSAA (LCS297010Q, LCSDAY)

SAMPLE ANALYSIS:

(Sample number(s): 9860649, 9860654: Analysis: 14473): Analysis: 14473)
The sample injection internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

(Sample number(s): 9860653: Analysis: 14473)
The recovery for the sample injection standard and the labeled compound used as extraction standards is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was reextracted within holding time and internal standard(s) and extraction standards were again outside the QC acceptance limits. The data is reported from the original extraction. Both sets of data are included in the data package.

FORM 02A
SURROGATES
LC/MS/MS

SDG No.: SAJ23
Matrix: WATER

18295007		13C2-6:2-FTS	13C2-8:2-FTS	13C2-PFDODA	13C2-PFTEDA	13C3-PFBS
	Limits	32-170	27-164	39-130	26-119	26-148
LAB SAMPLE ID	**DATE/TIME**	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
BLK295007	10/23/18 12:44	66	69	53	50	52
LCS295007	10/23/18 12:53	126	153	101	99	110
9860648	10/23/18 14:41	162	142	85	81	159 *
9860649	10/23/18 14:50	161	142	80	69	158 *
9860650	10/23/18 14:59	120	108	80	84	103
9860651MS	10/23/18 15:08	140	152	111	105	118
9860652MSD	10/23/18 15:18	115	145	107	100	110
9860653	10/23/18 15:27	194 *	179 *	97	96	285 *
9860654	10/23/18 15:36	162	146	89	78	161 *
9860655	10/23/18 15:54	130	136	98	100	123
9860656	10/23/18 16:03	128	144	93	100	154 *
9860657	10/23/18 16:12	117	121	86	89	100

* Outside QC Limits

FORM 02A
SURROGATES
LC/MS/MS

SDG No.: SAJ23
Matrix: WATER

18297010		13C2-6:2-FTS	13C2-8:2-FTS	13C2-PFDODA	13C2-PFTEDA	13C3-PFBS
	Limits	32-170	27-164	39-130	26-119	26-148
LAB SAMPLE ID	**DATE/TIME**	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
BLK297010	10/25/18 12:58	97	92	80	76	79
LCS297010	10/25/18 13:07	107	107	89	88	90
LCSDA	10/25/18 13:16	105	105	87	86	96
9860653RE	10/25/18 13:34	394 *	273 *	72	62	217 *
9860658	10/25/18 13:52	170	112	82	73	145

* Outside QC Limits

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FORM 08A
INTERNAL STANDARDS
LC/MS/MS

SDG No.: SAJ23
Matrix: WATER

18295007		13C2-PFDA	13C2-PFOA	13C3-PFBA	13C4-PFOS
		Area	Area	Area	Area
Average ICAL Response		809181	771443	1558520	418413
UPPER LIMIT		1213772	1157165	2337780	627620
LOWER LIMIT		404591	385722	779260	209207
LAB SAMPLE ID	**DATE ANALYZED**				
BLK295007	10/23/18 12:44	913473	853356	1716019	456063
LCS295007	10/23/18 12:53	889397	859172	1633221	490247
9860648	10/23/18 14:41	887826	711890	773455 *	359451
9860649	10/23/18 14:50	863419	710344	748809 *	363156
9860650	10/23/18 14:59	870609	761441	1469678	425783
9860651MS	10/23/18 15:08	791724	781596	1485415	455310
9860652MSD	10/23/18 15:18	807294	804948	1530246	483583
9860653	10/23/18 15:27	731216	542837	291253 *	328548
9860654	10/23/18 15:36	833508	726230	742462 *	382169
9860655	10/23/18 15:54	878895	751892	1368430	431848
9860656	10/23/18 16:03	828088	775080	1026338	407493
9860657	10/23/18 16:12	800894	788712	1433783	430325

AREA: Upper limit: 150% of the internal standard area.
Lower Limit: 50% of the internal standard area.

* Outside QC Limits

eurofins | Lancaster Laboratories Environmental

FORM 08A
INTERNAL STANDARDS
LC/MS/MS

SDG No.: SAJ23
Matrix: WATER

18295007		13C2-PFDA	13C2-PFOA	13C3-PFBA	13C4-PFOS
		Area	Area	Area	Area
Average ICAL Response		576181	706855	1430862	411930
UPPER LIMIT		864272	1060283	2146293	617895
LOWER LIMIT		288091	353428	715431	205965
LAB SAMPLE ID	**DATE ANALYZED**				
9860649RE	10/23/18 23:33	674449	539086	598746 *	351086
9860654RE	10/23/18 23:42	686847	629682	594434 *	390624

AREA: Upper limit: 150% of the internal standard area.
Lower Limit: 50% of the internal standard area.

* Outside QC Limits

eurofins | Lancaster Laboratories Environmental

FORM 08A
INTERNAL STANDARDS
LC/MS/MS

SDG No.: SAJ23
Matrix: WATER

18297010		13C2-PFDA	13C2-PFOA	13C3-PFBA	13C4-PFOS
		Area	Area	Area	Area
Average ICAL Response		738548	1148792	1086772	336948
UPPER LIMIT		1107822	1723188	1630158	505422
LOWER LIMIT		369274	574396	543386	168474
LAB SAMPLE ID	**DATE ANALYZED**				
BLK297010	10/25/18 12:58	865708	1283389	1227749	413889
LCS297010	10/25/18 13:07	858851	1362022	1238321	458416
LCSDA	10/25/18 13:16	862577	1331845	1189306	445485
9860653RE	10/25/18 13:34	903839	927219	282998 *	353960
9860658	10/25/18 13:52	865509	1281343	745795	383554

AREA: Upper limit: 150% of the internal standard area.
Lower Limit: 50% of the internal standard area.

* Outside QC Limits

SC51255

SC51255 By

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO.: 60589143 | SITE NAME: UFC-Sumner

SAMPLERS (PRINT/SIGNATURE): Tom Uhlig/Tom Uhlig / Rob Murphy/Rob Murphy

LAB: Eurofins

COOLER: — of —

PAGE: 1 of 3

DELIVERY SERVICE: FedEx AIRBILL NO.: _____

TESTS: VOCs | Lead 6010B

BOTTLE TYPE AND PRESERVATIVE: 3 x 40 mL VOA HCl | 2 x 4 oz Amber Glass Unpreserved

	LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	3 x 40 mL VOA HCl	2 x 4 oz Amber Glass Unpreserved	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRP/MS ONLY)
1	MW-76	10/15/18	1410	G	MW-76	WG	3	3			N	—	—	—
2	MW-77	10/15/18	1410	G	MW-77	WG	3	3			N	—	—	—
3	MW-75	10/15/18	1530	G	MW-75	WG	3	3			N	—	—	—
4	MW-84	10/15/18	1535	G	MW-84	WG	3	3			N	—	—	—
5	FD-1	10/15/18	—	G	FD-101518	WQ	3	3		MW-84	FD	—	—	—
6	MW-69	10/15/18	1610	G	MW-69	WG	3	3			N	—	—	—
7	MW-09	10/16/18	1719	G	MW-09	WG	3	3			N	—	—	—
8	MW-03S	10/16/18	0934	G	MW-03S	WG	3	3	2		N	—	—	—
9	FD-1	10/16/18	—	G	FD-101618	WQ	3	3	2	MW-03S	FD	—	—	—
10	MW-03D	10/16/18	0950	G	MW-03D	WG	3	3	2		N	—	—	—
	MW-03D	10/16/18	0950	G	MW-03D MS	WG	3	3	2		MS	—	—	—
↓	MW-03D	10/16/18	0950	G	MW-03D MSD	WG	3	3	2		SD	—	—	—
11	DP-MW-04	10/16/18	1230	G	DP-MW-04	WG	3	3	2		N	—	—	—

MATRIX CODES: 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

SAMPLE TYPE CODES: 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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[signature]	10/17/18	1200	FedEx	10/17/18	1200
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
[signature]			[signature]	10/17/18	1215

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to coordinator field files

SDG 500-125255 Page 6 of 56

SC51255 Boy

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO.: 60539143

SITE NAME: OTC - Cuyahoga

SAMPLERS (PRINT/SIGNATURE): Tom Cahn / Tom Cahn // Rob Murphy / Rob Murphy

LAB: Eurofins

COOLER: — of —

PAGE: 2 of 3

DELIVERY SERVICE: Fed Ex AIRBILL NO.:

TESTS

BOTTLE TYPE AND PRESERVATIVE

	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 # (IRPIMS ONLY)
12	AR-MW-02	10/16/15	1231	G	AR-MW-02	WG	5	3	2							N	—	—	—
13	MW-17	10/16/15	1605	G	MW-17	WG	5	3	2							N	—	—	—
14	MW-70	10/16/15	1616	G	MW-70	WG	5	3	2							N	—	—	—
15	MW-10	10/16/15	1500	G	MW-10	WG	5	3	2							N	—	—	—
16	MW-71	10/16/15	1610	G	MW-71	WG	5	3	2							N	—	—	—
17	MW-26	10/17/15	0950	G	MW-26	WG	4	3		1						N	—	—	—
18	MW-26	10/17/15	0950	G	MW-26-F	WG	1				1					N	—	—	—
19	MW-21	10/17/15	1100	G	MW-21	WG	3	3								N	—	—	—
20	~~MW-21~~	~~10/17/15~~	~~1100~~	G	~~MW-21~~														
20	MW-35	10/17/15	1147	G	MW-35	WG	4	3		1						N	—	—	—
21	MW-35	10/17/15	1147	G	MW-35-F	WG	1				1					N	—	—	—
22	MW-23	10/17/15	1552	G	MW-23	WG	4	3		1						N	—	—	—
23	MW-23	10/17/15	1552	G	MW-23-F	WG	1				1					N	—	—	—

MATRIX CODES: 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

SAMPLE TYPE CODES: 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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
	10/18/15	1200	FedEx	10/19/15	1200
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to coordinator field files

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SC51255 Bay

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO. 60559143

SITE NAME [illegible]

SAMPLERS (PRINT/SIGNATURE) Tom Chu/Tom Hall // Rob Murphy/[illegible]

LAB Eurofins

COOLER — of —

PAGE 3 of 3

DELIVERY SERVICE: Fed Ex AIRBILL NO.:

TESTS

BOTTLE TYPE AND PRESERVATIVE

	LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	VOCs	TCLP Total	TCLP 6 Metal							REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO # (IRPIMS ONLY)
24	MW-19	10/17/18	1545	G	MW-19	WG	4	3	1									N	—	—	—
25	MW-19	10/17/18	1545	G	MW-19-F	WG	1			1								N	—	—	—
24	MW-19	10/17/18	1545	G	MW-19-MS	WQ	4	3	1									MS	—	—	—
25	MW-19	10/17/18	1545	G	MW-19-F-MS	WQ	1			1								MS	—	—	—
24	MW-19	10/17/18	1545	G	MW-19-MSD	WQ	4	3	1									SD	—	—	—
25	MW-19	10/17/18	1545	G	MW-19-F-MSD	WQ	1			1								SD	—	—	—
26	TB-1	10/15/18	—	G	TB-10/15-1718	WQ	1	1										TB	—	—	—

MATRIX CODES
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

SAMPLE TYPE CODES
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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[signature]	10/17/18	1800	Fed Ex	10/17/18	1800
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
[signature]			[signature]	10/18	

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to coordinator field files

[illegible]

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GW FB WTB

JC76441

SUBCONTRACT ORDER

SC51255

SENDING LABORATORY:

Eurofins Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
Phone: (413) 789-9018
Fax: (413) 789-4076
PM: SpectrumLabResults@EurofinsUS.com

RECEIVING LABORATORY:

SGS North America, Inc. - Dayton, NJ
2235 US Highway 130
Dayton, NJ 08810
Phone: (732) 329-0200
Fax: (732) 329-3499

BILL TO:

Eurofins Spectrum Analytical, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Attention: Accounts Payable
accountspayable@eurofinsus.com
PO Number: SC51255

Project: UTC/Carrier AOC G SRI (NY Site)
Project #: 60589143
PO Number: SC51255

Fx: 4663881 7952

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
1	SC51255-01	15-Oct-18 14:10	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
2	SC51255-02	15-Oct-18 14:10	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
3	SC51255-03	15-Oct-18 15:30	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
4	SC51255-04	15-Oct-18 15:55	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						

INITIAL ASESSMENT JC 24

LABEL VERIFICATION____

V722
V721

Released By	Date	Received By	Date	Temp °C
FX	10/22/18 15:00	FX		3.8
FX	10/23/18 N.W		10/24/18	1020

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GW
FB
WTB

JC76441

SUBCONTRACT ORDER

SC51255

SENDING LABORATORY:
Eurofins Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
Phone: (413) 789-9018
Fax: (413) 789-4076
PM: SpectrumLabResults@EurofinsUS.com

RECEIVING LABORATORY:
SGS North America, Inc. - Dayton, NJ
2235 US Highway 130
Dayton, NJ 08810
Phone: (732) 329-0200
Fax: (732) 329-3499

BILL TO:
Eurofins Spectrum Analytical, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Attention: Accounts Payable
accountspayable@eurofinsus.com
PO Number: SC51255

Project: UTC/Carrier AOC G SRI (NY Site)
Project #: 60589143
PO Number: SC51255

Fx: 4663881 72952

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
1	SC51255-01	15-Oct-18 14:10	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
2	SC51255-02	15-Oct-18 14:10	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
3	SC51255-03	15-Oct-18 15:30	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
4	SC51255-04	15-Oct-18 15:55	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						

INITIAL ASSESSMENT JL 24

LABEL VERIFICATION_____

V722
V721

Released By	Date	Received By	Date	Temp °C
	10/22/18 15:00	FX		3.8
FX	10/23/18 N.W.		10/24/18	1080

Released By — Date — Received By — Date

JC76441: Chain of Custody
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SC51255

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
5	SC51255-05	15-Oct-18 00:00	Water Field QC	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
6	SC51255-06	15-Oct-18 16:40	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
7	SC51255-07	15-Oct-18 17:19	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
8	SC51255-08	16-Oct-18 09:38	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
9	SC51255-09	16-Oct-18 00:00	Water Field QC	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						

Released By	Date	Received By	Date	Temp °C
	10/22/18 15:00	FEDF		
FEDF	10/23/18 0943		10/23/18	

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JC76441

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SUBCONTRACT ORDER

SC51255

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
10	SC51255-10	16-Oct-18 09:50	Ground Water	8260 Full List	01-Nov-18 16:00	Run MS/MSD/UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C) Voa Vial - HCl (D) Voa Vial - HCl (E) Voa Vial - HCl (F) Voa Vial - HCl (G) Voa Vial - HCl (H) Voa Vial - HCl (I)						
11	SC51255-11	16-Oct-18 12:30	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
12	SC51255-12	16-Oct-18 12:31	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
13	SC51255-13	16-Oct-18 16:05	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
14	SC51255-14	16-Oct-18 16:16	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						

Released By	Date	Received By	Date	Temp °C
[signature]	10/22/18 15:00	FEDX		
FEDX	10/23/18 1043	[signature]	10/23/18	1.0

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SUBCONTRACT ORDER

SC51255

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
15	SC51255-15	16-Oct-18 18:00	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
16	SC51255-16	16-Oct-18 18:10	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
17	SC51255-17	17-Oct-18 09:50	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
18	SC51255-19	17-Oct-18 11:00	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
19	SC51255-20	17-Oct-18 11:47	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
20	SC51255-22	17-Oct-18 15:52	Ground Water	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B)						

Released By	Date	Received By	Date	Temp °C
[signature]	10/22/18 15:00	FEDF		
FEDX	10/23/18 1040	[signature]	10/23/18	1040

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JC76441: Chain of Custody
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SUBCONTRACT ORDER

SC51255

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
21	SC51255-24	17-Oct-18 15:45	Ground Water	8260 Full List	01-Nov-18 16:00	Run MS/MSD/UTC site/ASP B
Containers Supplied:						
Voa Vial - HCl (A)						
Voa Vial - HCl (B)						
Voa Vial - HCl (C)						
Voa Vial - HCl (D)						
Voa Vial - HCl (E)						
Voa Vial - HCl (F)						
Voa Vial - HCl (G)						
Voa Vial - HCl (H)						
Voa Vial - HCl (I)						
22	SC51255-26	17-Oct-18 00:00	Water Field QC	8260 Full List	01-Nov-18 16:00	UTC site/ASP B
Containers Supplied:						
Voa Vial - HCl (A)						

Please send notice within 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration. Notice should be emailed to SpectrumLabResults@EurofinsUS.com.

Please notify SpectrumLabResults@EurofinsUS.com immediately and prior to conducting analysis if certification is not held for the analyses requested.

Please e-mail results in electronic format to SpectrumLabResults@EurofinsUS.com.

Released By	Date	Received By	Date	Temp °C
[signature]	10/22/18 15:00	FEDEX		
FEDEX	10/23/18 1040	[signature]	10/23/18	1040

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JC76441: Chain of Custody

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SDGSC51255

SC51255 General Narrative

Eurofins Spectrum Analytical, Inc. submits the enclosed data package for the site characterization of UTC/Carrier 2018 GW Event. Samples submitted for analysis by AECOM Environment - Buffalo, NY. Under this deliverable, analysis results are presented for three Water Field QC samples and twenty three Ground Water samples submitted on October 18th, 2018. Data has been reported to the MRL. The report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The analyses were performed according to USEPA SW846 method analytical guidelines and other methods. In addition the analyses were performed according to criteria dictated by National Environmental Laboratory Accreditation Conference (NELAC) and in accordance with project contract requirements and chain of custody forms.

Observations and/or deviations observed for specific analyses can be found in the analysis narrative:

1. Overall Observations:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual Integrations are coded to provide the data reviewer justification for such action. The codes are labeled on corresponding raw data for GC/MS and GC analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or failing baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Scanned copies of logbook pages are included, with the originals are archived within the laboratory.

The pages in this report have been numbered consecutively, starting with the general narrative and ending with the page labeled as "Last Page of data Report".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this electronic data package, has been authorized by the laboratory director as verified by the following signature.

Dawn E Wojcik

Dawn E. Wojcik Date: 12/31/2018

Laboratory Director

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client:	Eurofins Spectrum Analytical, Inc.	**Job No**	JC76441
Site:	UTC Carrier AOC G SRI	**Report Date**	11/1/2018 2:53:54 PM

On 10/23/2018, 22 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC76441 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:** V2E6496

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC76441-10MS, JC76441-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Bromomethane, Chloroethane, Chloromethane, Vinyl chloride are outside control limits for sample JC76441-10MSD. Outside control limits due to matrix interference.
- JC76441-14 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-1 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-13 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-12 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-10 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-11 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-7 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-5 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-4 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-3 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-2 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-15 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** V3D6064

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC76624-2MS, JC76624-2MSD were used as the QC samples indicated.
- JC76441-22: Sample analyzed with head-space vial due to one vial was provided
- JC76441-20 for Bromomethane: Associated CCV outside of control limits low.
- JC76441-20 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-16 for Bromomethane: Associated CCV outside of control limits low.
- JC76441-16 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-22 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-22 for Bromomethane: Associated CCV outside of control limits low.

Matrix: AQ **Batch ID:** V4D3973

- All samples were analyzed within the recommended method holding time.

MS Volatiles By Method SW846 8260C

Matrix: AQ	Batch ID: V4D3973

- Sample(s) JC76441-21MS, JC76441-21MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ	Batch ID: VA9390

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC76274-9MS, JC76274-9MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC76441-9: Diluted due to high concentration of target compound.
- JC76441-8: Diluted due to high concentration of target compound.
- JC76441-8 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-9 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC76441-6 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.

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)

Job Number: JC76441
Account: EFMAA Eurofins Spectrum Analytical, Inc.
Project: UTC Carrier AOC G SRI

Sample:	V2E6496-BFB	Injection Date:	10/25/18
Lab File ID:	2E147751.D	Injection Time:	18:43
Instrument ID:	GCMS2E		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19219	20.1		Pass
75	30.0 - 60.0% of mass 95	47053	49.1		Pass
95	Base peak, 100% relative abundance	95749	100.0		Pass
96	5.0 - 9.0% of mass 95	6305	6.58		Pass
173	Less than 2.0% of mass 174	598	0.62	(0.79) [a]	Pass
174	50.0 - 120.0% of mass 95	75323	78.7		Pass
175	5.0 - 9.0% of mass 174	5751	6.01	(7.64) [a]	Pass
176	95.0 - 101.0% of mass 174	73544	76.8	(97.6) [a]	Pass
177	5.0 - 9.0% of mass 176	4888	5.11	(6.65) [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
V2E6496-CC6450	2E147751.D	10/25/18	18:43	00:00	Continuing cal 50
V2E6496-BS	2E147753.D	10/25/18	20:32	01:49	Blank Spike
V2E6496-MB	2E147755.D	10/25/18	21:32	02:49	Method Blank
JC76441-10	2E147756.D	10/25/18	22:02	03:19	SC51255-10
JC76441-1	2E147757.D	10/25/18	22:31	03:48	SC51255-01
JC76441-2	2E147758.D	10/25/18	23:00	04:17	SC51255-02
JC76441-3	2E147759.D	10/25/18	23:29	04:46	SC51255-03
JC76441-4	2E147760.D	10/25/18	23:59	05:16	SC51255-04
JC76441-5	2E147761.D	10/26/18	00:28	05:45	SC51255-05
JC76441-7	2E147762.D	10/26/18	00:57	06:14	SC51255-07
JC76441-6	2E147763.D	10/26/18	01:26	06:43	SC51255-06
JC76441-8	2E147764.D	10/26/18	01:56	07:13	SC51255-08
JC76441-9	2E147765.D	10/26/18	02:26	07:43	SC51255-09
JC76441-10MS	2E147766.D	10/26/18	02:55	08:12	Matrix Spike
JC76441-10MSD	2E147767.D	10/26/18	03:25	08:42	Matrix Spike Duplicate
JC76441-11	2E147769.D	10/26/18	04:23	09:40	SC51255-11
JC76441-12	2E147770.D	10/26/18	04:53	10:10	SC51255-12
JC76441-13	2E147771.D	10/26/18	05:22	10:39	SC51255-13
JC76441-14	2E147772.D	10/26/18	05:51	11:08	SC51255-14
JC76441-15	2E147773.D	10/26/18	06:21	11:38	SC51255-15

Continuing Calibration Summary

Job Number: JC76441
Account: EFMAA Eurofins Spectrum Analytical, Inc.
Project: UTC Carrier AOC G SRI

Sample: V2E6496-CC6450
Lab FileID: 2E147751.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ja...18\v2e6496\2e147751.d Vial: 25
Acq On : 25 Oct 2018 6:43 pm Operator: jessicap
Sample : CC6450-50 Inst : VOAMS2E
Misc : MS30213,V2E6496,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6450.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Tue Sep 25 13:22:01 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	87	0.00	7.37
2		ethanol	0.111	0.135	-21.6#	109	0.00	6.11
3	M	tertiary butyl alcohol	1.448	1.450	-0.1	88	0.00	7.49
4		1,4-dioxane	0.107	0.123	-15.0	100	0.00	11.24
5	I	pentafluorobenzene	1.000	1.000	0.0	83	0.00	9.60
6	M	chlorodifluoromethane	0.949	0.947	0.2	81	0.00	4.03
7	M	dichlorodifluoromethane	0.921	1.091	-18.5	90	0.00	4.00
8	M	chloromethane	1.027	0.961	6.4	74	0.00	4.42
9	M	vinyl chloride	0.933	0.935	-0.2	78	0.00	4.65
10	M	bromomethane	0.564	0.567	-0.5	84	0.00	5.30
11	M	chloroethane	0.529	0.531	-0.4	83	0.01	5.44
12	M	trichlorofluoromethane	0.886	1.112	-25.5#	100	0.00	5.90
13		1,3-butadiene	0.835	0.949	-13.7	92	0.00	4.67
14		vinyl bromide	0.530	0.543	-2.5	82	0.00	5.79
15	M	ethyl ether	0.377	0.351	6.9	79	0.00	6.27
16		2-chloropropane	1.292	1.220	5.6	85	0.00	6.48
17	M	acrolein	0.143	0.101	29.4#	66	0.00	6.53
18		freon 113	0.423	0.458	-8.3	88	0.00	6.67
19	M	1,1-dichloroethene	0.930	0.994	-6.9	89	0.00	6.70
20	M	acetone	0.049	0.046#	6.1	79	0.00	6.75
21		acetonitrile	0.079	0.075	5.1	78	0.00	7.19
22	M	iodomethane	0.724	0.833	-15.1	95	0.00	6.99
23	M	carbon disulfide	1.690	1.759	-4.1	87	0.00	7.11
24	M	methylene chloride	0.644	0.617	4.2	82	0.00	7.42
25	M	methyl acetate	0.491	0.431	12.2	75	0.00	7.21
26	M	methyl tert butyl ether	1.733	1.705	1.6	79	0.00	7.75
27	M	trans-1,2-dichloroethene	0.894	0.900	-0.7	84	0.00	7.79
28		hexane	0.574	0.534	7.0	80	0.00	8.08
29	M	di-isopropyl ether	2.518	2.227	11.6	72	0.00	8.33
30	M	ethyl tert-butyl ether	2.209	2.104	4.8	78	0.00	8.79
31	M	2-butanone	0.062	0.058	6.5	73	0.00	9.06
32	M	1,1-dichloroethane	1.159	1.075	7.2	80	0.00	8.35
33	M	chloroprene	1.024	1.017	0.7	82	0.00	8.46
34	M	acrylonitrile	0.237	0.213	10.1	72	0.00	7.75
35	M	vinyl acetate	0.112	0.126	-12.5	94	0.00	8.34
36	M	ethyl acetate	0.107	0.082	23.4#	66	0.00	9.08
37	M	2,2-dichloropropane	0.873	0.945	-8.2	93	0.00	9.09
38	M	cis-1,2-dichloroethene	0.690	0.631	8.6	77	0.00	9.09
39	M	propionitrile	0.086	0.081	5.8	74	0.00	9.16
40		methyl acrylate	0.079	0.079	0.0	78	-0.01	9.15
41	M	bromochloromethane	0.297	0.292	1.7	81	0.00	9.41

6.7.4

Instrument Performance Check (BFB)

Job Number: JC76441
Account: EFMAA Eurofins Spectrum Analytical, Inc.
Project: UTC Carrier AOC G SRI

Sample:	VA9390-BFB	Injection Date:	10/26/18
Lab File ID:	A245130.D	Injection Time:	17:02
Instrument ID:	GCMSA		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	12976	18.1		Pass
75	30.0 - 60.0% of mass 95	34379	48.0		Pass
95	Base peak, 100% relative abundance	71611	100.0		Pass
96	5.0 - 9.0% of mass 95	4772	6.66		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	58293	81.4		Pass
175	5.0 - 9.0% of mass 174	4632	6.47	(7.95) [a]	Pass
176	95.0 - 101.0% of mass 174	56960	79.5	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	3727	5.20	(6.54) [b]	Pass

6.4.9

(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
VA9390-CC9383	A245130.D	10/26/18	17:02	00:00	Continuing cal 50
VA9390-BS	A245131.D	10/26/18	17:49	00:47	Blank Spike
VA9390-MB	A245133.D	10/26/18	18:46	01:44	Method Blank
ZZZZZZ	A245134.D	10/26/18	19:27	02:25	(unrelated sample)
ZZZZZZ	A245135.D	10/26/18	19:56	02:54	(unrelated sample)
JC76274-9	A245136.D	10/26/18	20:25	03:23	(used for QC only; not part of job JC76441)
ZZZZZZ	A245137.D	10/26/18	20:54	03:52	(unrelated sample)
JC76274-9MS	A245138.D	10/26/18	21:23	04:21	Matrix Spike
JC76274-9MSD	A245139.D	10/26/18	21:52	04:50	Matrix Spike Duplicate
JC76441-8	A245141.D	10/26/18	22:49	05:47	SC51255-08
JC76441-9	A245142.D	10/26/18	23:18	06:16	SC51255-09
JC76441-6	A245143.D	10/26/18	23:47	06:45	SC51255-06
ZZZZZZ	A245145.D	10/27/18	00:45	07:43	(unrelated sample)
ZZZZZZ	A245146.D	10/27/18	01:14	08:12	(unrelated sample)
ZZZZZZ	A245147.D	10/27/18	01:43	08:41	(unrelated sample)
ZZZZZZ	A245148.D	10/27/18	02:12	09:10	(unrelated sample)
ZZZZZZ	A245149.D	10/27/18	02:41	09:39	(unrelated sample)
ZZZZZZ	A245150.D	10/27/18	03:10	10:08	(unrelated sample)
ZZZZZZ	A245152.D	10/27/18	04:08	11:06	(unrelated sample)
ZZZZZZ	A245153.D	10/27/18	04:37	11:35	(unrelated sample)

Continuing Calibration Summary

Job Number: JC76441
Account: EFMAA Eurofins Spectrum Analytical, Inc.
Project: UTC Carrier AOC G SRI

Sample: VA9390-CC9383
Lab FileID: A245130.D

6.7.17 6

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kenrickb\va9390\a245130.d Vial: 12
Acq On : 26 Oct 2018 5:02 pm Operator: brittank
Sample : CC9383-50 Inst : MSA
Misc : MS30189,VA9390,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA9383.M (RTE Integrator)
Title : SW 846 8260C / EPA 624 DB624 60m x 0.25mm x 1.4uTue Oct 23 15:05:42 2018
Last Update : Tue Oct 23 15:05:42 2018
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	98	0.00	8.20
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	0.957	0.988	-3.2	99	0.00	8.32
4		1,4-dioxane	0.060	0.068	-13.3	110	0.00	12.22
5	I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	10.57
6	M	chlorodifluoromethane	1.395	1.268	9.1	90	-0.01	4.57
7	M	dichlorodifluoromethane	1.293	1.553	-20.1#	115	0.00	4.55
8	M	chloromethane	1.456	1.411	3.1	102	0.00	4.98
9	M	vinyl chloride	1.307	1.325	-1.4	99	0.00	5.25
10		1,3-butadiene	1.134	0.810	28.6#	77	0.00	5.26
11	M	bromomethane	0.864	0.833	3.6	99	-0.01	5.92
12	M	chloroethane	0.644	0.610	5.3	98	-0.02	6.10
13		vinyl bromide	0.906	0.768	15.2	85	-0.01	6.49
14	M	trichlorofluoromethane	1.218	1.318	-8.2	106	0.00	6.63
15	M	ethyl ether	0.297	0.284	4.4	94	0.00	7.03
16	M	acrolein	0.164	0.157	4.3	95	0.00	7.28
17		freon 113	0.517	0.520	-0.6	100	0.00	7.51
18	M	1,1-dichloroethene	0.630	0.583	7.5	99	0.00	7.49
19	M	acetone	0.088	0.087	1.1	96	0.00	7.51
20	M	acetonitrile	0.158	0.151	4.4	100	0.00	7.95
21	M	iodomethane	1.047	1.002	4.3	98	0.00	7.77
22	M	carbon disulfide	2.293	1.954	14.8	94	0.00	7.92
23	M	methylene chloride	0.695	0.654	5.9	97	0.00	8.25
24	M	methyl acetate	0.663	0.590	11.0	94	0.00	7.99
25	M	methyl tert butyl ether	2.043	1.931	5.5	93	0.00	8.62
26	M	trans-1,2-dichloroethene	0.551	0.492	10.7	95	0.00	8.66
27		hexane	0.750	0.753	-0.4	100	0.00	9.03
28	M	di-isopropyl ether	2.170	1.960	9.7	93	0.00	9.25
29	M	ethyl tert-butyl ether	2.101	1.992	5.2	93	0.00	9.73
30	M	2-butanone	0.097	0.097	0.0	97	0.00	9.95
31	M	1,1-dichloroethane	1.021	0.937	8.2	95	0.00	9.27
32	M	chloroprene	0.802	0.774	3.5	97	0.00	9.37
33	M	acrylonitrile	0.316	0.313	0.9	95	0.00	8.57
34	M	vinyl acetate	0.108	0.112	-3.7	101	0.00	9.20
35	M	ethyl acetate	0.114	0.109	4.4	100	0.00	9.96
36	M	2,2-dichloropropane	1.036	1.012	2.3	100	0.00	10.06
37	M	cis-1,2-dichloroethene	0.617	0.568	7.9	96	0.00	10.02
38		methyl acrylate	0.103	0.100	2.9	93	0.00	10.04
39	M	propionitrile	0.148	0.141	4.7	97	0.00	10.04
40	M	bromochloromethane	0.290	0.277	4.5	95	0.00	10.33
41	M	tetrahydrofuran	0.279	0.263	5.7	93	0.00	10.35

Instrument Performance Check (BFB)

Job Number: **JC76441**
Account: **EFMAA Eurofins Spectrum Analytical, Inc.**
Project: **UTC Carrier AOC G SRI**

Sample:	**V3D6064-BFB**	Injection Date:	**10/27/18**
Lab File ID:	**3D142205.D**	Injection Time:	**09:34**
Instrument ID:	**GCMS3D**		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	24221	20.9		Pass
75	30.0 - 60.0% of mass 95	57008	49.3		Pass
95	Base peak, 100% relative abundance	115741	100.0		Pass
96	5.0 - 9.0% of mass 95	7627	6.59		Pass
173	Less than 2.0% of mass 174	478	0.41	(0.47) [a]	Pass
174	50.0 - 120.0% of mass 95	102477	88.5		Pass
175	5.0 - 9.0% of mass 174	7892	6.82	(7.70) [a]	Pass
176	95.0 - 101.0% of mass 174	101507	87.7	(99.1) [a]	Pass
177	5.0 - 9.0% of mass 176	6431	5.56	(6.34) [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
V3D6064-CC6056	3D142205.D	10/27/18	09:34	00:00	Continuing cal 20
V3D6064-BS	3D142207.D	10/27/18	10:26	00:52	Blank Spike
V3D6064-MB	3D142209.D	10/27/18	11:16	01:42	Method Blank
JC76441-16	3D142210.D	10/27/18	12:07	02:33	SC51255-16
JC76441-20	3D142211.D	10/27/18	12:32	02:58	SC51255-22
JC76441-22	3D142212.D	10/27/18	12:57	03:23	SC51255-26
JC76624-2MS	3D142217.D	10/27/18	15:15	05:41	Matrix Spike
JC76624-2MSD	3D142218.D	10/27/18	15:41	06:07	Matrix Spike Duplicate
JC76624-2	3D142220.D	10/27/18	16:31	06:57	(used for QC only; not part of job JC76441)
JC76441-22	3D142221.D	10/27/18	16:56	07:22	SC51255-26
ZZZZZZ	3D142222.D	10/27/18	17:21	07:47	(unrelated sample)
ZZZZZZ	3D142226.D	10/27/18	19:02	09:28	(unrelated sample)
ZZZZZZ	3D142227.D	10/27/18	19:27	09:53	(unrelated sample)

Continuing Calibration Summary

Job Number: JC76441
Account: EFMAA Eurofins Spectrum Analytical, Inc.
Project: UTC Carrier AOC G SRI

Sample: V3D6064-CC6056
Lab FileID: 3D142205.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...kb\v3d6064\3d142205.d Vial: 2
Acq On : 27 Oct 2018 9:34 am Operator: mariceld
Sample : CC6056-20 Inst : MS3D
Misc : MS30329,V3D6064,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D6056.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 Wed Oct 24 07:43:48 2018
Last Update : Wed Oct 24 07:43:48 2018
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		tert butyl alcohol-d9	1.000	1.000	0.0	110	0.00	3.03
2	M	tertiary butyl alcohol	1.202	0.990	17.6	94	0.00	3.08
3		ethanol	0.111	0.109	1.8	109	0.00	2.46
4	M	1,4-dioxane	0.089	0.087	2.2	106	0.00	5.23
5	I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	4.24
6	M	chlorodifluoromethane	0.489	0.489	0.0	110	0.00	1.64
7	M	dichlorodifluoromethane	0.447	0.557	-24.6#	132	0.00	1.62
8	M	chloromethane	0.542	0.508	6.3	108	0.00	1.78
9	M	vinyl chloride	0.487	0.530	-8.8	122	0.00	1.86
10		1,3-butadiene	0.375	0.473	-26.1#	137	0.00	1.89
11	M	bromomethane	0.208	0.135	35.1#	78	0.00	2.11
12	M	chloroethane	0.281	0.297	-5.7	118	0.00	2.19
13	M	trichlorofluoromethane	0.541	0.599	-10.7	120	0.00	2.37
14		vinyl bromide	0.330	0.276	16.4	94	0.00	2.33
15	M	ethyl ether	0.209	0.204	2.4	109	0.00	2.55
16	M	acrolein	0.070	0.083	-18.6	138	0.00	2.65
17		freon 113	0.234	0.238	-1.7	113	0.00	2.72
18	M	1,1-dichloroethene	0.313	0.306	2.2	110	0.00	2.73
19	M	acetone	0.048	0.047	2.1	109	0.00	2.74
20	M	acetonitrile	0.081	0.081	0.0	109	0.00	2.92
21	M	iodomethane	0.350	0.127	63.7#	41#	0.00	2.84
22	M	carbon disulfide	0.771	0.841	-9.1	128	0.00	2.90
23	M	methylene chloride	0.351	0.335	4.6	108	0.00	3.05
24	M	methyl acetate	0.443	0.436	1.6	108	0.00	2.94
25	M	methyl tert butyl ether	1.061	1.051	0.9	109	0.00	3.22
26	M	trans-1,2-dichloroethene	0.337	0.329	2.4	109	0.00	3.24
27	M	di-isopropyl ether	1.325	1.365	-3.0	113	0.00	3.53
28	M	2-butanone	0.058	0.061	-5.2	109	0.00	3.89
29	M	1,1-dichloroethane	0.647	0.633	2.2	111	0.00	3.53
30	M	chloroprene	0.568	0.592	-4.2	116	0.00	3.58
31	M	acrylonitrile	0.193	0.194	-0.5	106	0.00	3.20
32		hexane	0.252	0.278	-10.3	123	0.00	3.42
33	M	vinyl acetate	0.073	0.074	-1.4	111	0.00	3.50
34	M	ethyl tert-butyl ether	1.175	1.183	-0.7	110	0.00	3.77
35	M	ethyl acetate	0.093	0.087	6.5	99	0.00	3.90
36	M	2,2-dichloropropane	0.517	0.511	1.2	110	0.00	3.93
37	M	cis-1,2-dichloroethene	0.368	0.363	1.4	110	0.00	3.92
38		methyl acrylate	0.071	0.072	-1.4	111	0.00	3.94
39	M	propionitrile	0.085	0.086	-1.2	108	0.00	3.93
40	M	bromochloromethane	0.168	0.161	4.2	103	0.00	4.08
41	M	tetrahydrofuran	0.069	0.073	-5.8	113	0.00	4.09

6.7.8

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC51255

Client: AECOM Environment - Buffalo, NY

Project: UTC/Carrier 2018 GW Event / 60589143

SDG #: SC51255

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SW846 8082A.

IV. PREPARATION

Aqueous samples were prepared according to SW846 3510C.

V. INSTRUMENTATION

The following equipment was used to analyze SW846 8082A:

HPS11 details: Agilent 6890 series dual column ECD GC with RTX-CLPesticides (30m, 0.53mmID, 0.5um df) and DB-5MS column ((30m, 0.53mmID 1.50 df)

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Surrogates:

All method criteria were met with the following exceptions:

4,4-DB-Octafluorobiphenyl (Sr) in batch 1813950, samples MW-23 (SC51255-22), MW-23-F (SC51255-23): Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

D. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

A matrix spike and a matrix spike duplicate were analyzed:

In batch 1813950 from source sample MW-19-F (SC51255-25).

In batch 1813950 from source sample MW-19 (SC51255-24).

All method criteria were met.

E. Duplicates:

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

F. Internal Standards:

Internal standards were within the acceptance criteria.

G. Samples:

All method criteria were met.

SC51286

SCS1286 Boy

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO.	SITE NAME	LAB
60599113	DTC - Chandler	Eurofins

SAMPLERS (PRINT/SIGNATURE): Tom Uhlig/Tom Uhlig // Ken Murphy/Ken Murphy

COOLER — of —

PAGE 1 of 2

DELIVERY SERVICE: FedEx AIRBILL NO.:

TESTS: VOCs | TCL+TAL Total | TCL+TAL Dissolved

BOTTLE TYPE AND PRESERVATIVE: 4oz NaO | 1L NaO | 1L HNO3

	LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. # OF CONTAINERS	4oz NaO	1L NaO	1L HNO3	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
1	MW-45	10/15/15	0911	G	MW-45	WG	3	3				N	—	—	—
2	AR MW-06	10/15/15	0926	G	AR-MW-06	WG	3	3				N	—	—	—
3	MW-44	10/15/15	1012	G	MW-44	WG	4	3	1			N	—	—	—
4	MW-44	10/15/15	1012	G	MW-44-F	WG	1			1		N	—	—	—
5	FD 1	10/15/15	—	G	FD 10151S	WG	4	3	1		MW-44	FD	—	—	—
6	FD 1	10/15/15	—	G	FD-10151S-F	WG	1			1		FD	—	—	—
7	MW-45	10/15/15	1210	G	MW-45	WG	3	3				N	—	—	—
8	MW-79	10/15/15	1400	G	MW-79	WG	3	3				N	—	—	—
9	TR3 MW-02	10/15/15	1500	G	TR3 MW-02	WG	3	3				N	—	—	—
10	MW-66	10/15/15	1620	G	MW-66	WG	3	3				N	—	—	—
11	MW-55	10/15/15	1631	G	MW-55	WG	3	3				N	—	—	—
12	MW-50	10/14/15	0705	G	MW-50	WG	3	3				N	—	—	—
13	MW-57	10/15/15	0917	G	MW-57	WG	3	3				N	—	—	—

MATRIX CODES: 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; SG - SOIL GAS; WL - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WQ - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES: TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FB# - 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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
	10/15/15	1601	FEDEX	10/17/15	1600
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
Fedex				10/20	10:55

SPECIAL INSTRUCTIONS: * Please report VOC/Chlorinated Alkenes (8260) (panel #1)

Distribution: Original accompanies shipment, copy to coordinator field files

Seal present + 1 2/6/16 #1 SLED

SDG SCS1286 Page 2 of 566

SC51286

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO. 60559143 | SITE NAME UFC - Garner

SAMPLERS (PRINT/SIGNATURE) Jon Wood / Tom Hall / Rob Murphy / Rob Murphy

LAB Eurofins | COOLER — of — | PAGE 2 of 2

DELIVERY SERVICE: Fedex AIRBILL NO.:

TESTS

BOTTLE TYPE AND PRESERVATIVE

	LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	VOCs 1 Unpres 40 mL Vial	1 Unpres 250 mL Amber	1 L Unpres Amber	1 L Amber				REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
14	MW-15	10/9/18	1010	G	MW-15	WG	3	3								N	—	—	—
15	TA3 Perch	10/9/18	1025	G	TA3-PW-01	WG	3	3								N	—	—	—
16	MW-14	10/9/18	1244	G	MW-14	WG	5	3	2							N	—	—	—
17	MW-14D	10/9/18	1337	G	MW-14D	WG	2		2							N	—	—	—
18	EB-1	10/9/18	1335	G	EB-101918	WQ	6	3	2	1					Equipment Blank	EB	—	—	—
19	EB-1	10/9/18	1335	G	EB-101918 F	WQ	1				1				Equipment Blank	EB	—	—	—
20	TB-1	10/9/18 10/10/18	—	G	TB-101818-101918	WQ	1	1							Trip Blank	TB	—	—	—

MATRIX CODES: 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

SAMPLE TYPE CODES: 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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[signature]	10/19/18	1100	FEDEX	10/19/18	1100
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
Fedex			[signature]	10/20	11:53

SPECIAL INSTRUCTIONS

* Project Number: UFC/General Account 2018 (emailed 4/5) KC

Distribution: Original accompanies shipment, copy to coordinator field files

Seal present + intact 1-2/6/1-2 #1

FILED

SDGSC51286

SC51286 General Narrative

Eurofins Spectrum Analytical, Inc. submits the enclosed data package for the site characterization of UTC/Carrier 2018 GW Event. Samples submitted for analysis by AECOM Environment - Buffalo, NY. Under this deliverable, analysis results are presented for three Water Field QC samples and seventeen Ground Water samples submitted on October 20th, 2018. Data has been reported to the MRL. The report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The analyses were performed according to USEPA SW846 method analytical guidelines and other methods. In addition the analyses were performed according to criteria dictated by National Environmental Laboratory Accreditation Conference (NELAC) and in accordance with project contract requirements and chain of custody forms.

Observations and/or deviations observed for specific analyses can be found in the analysis narrative:

1. Overall Observations:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual Integrations are coded to provide the data reviewer justification for such action. The codes are labeled on corresponding raw data for GC/MS and GC analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or failing baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Scanned copies of logbook pages are included, with the originals are archived within the laboratory.

The pages in this report have been numbered consecutively, starting with the general narrative and ending with the page labeled as "Last Page of data Report".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this electronic data package, has been authorized by the laboratory director as verified by the following signature.

Dawn E. Wojcik

Dawn E. Wojcik

Laboratory Director

Date: 12/31/2018

GW
FB
TB

JC76439

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SUBCONTRACT ORDER

SC51286

SENDING LABORATORY:
Eurofins Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
Phone: (413) 789-9018
Fax: (413) 789-4076
PM: SpectrumLabResults@EurofinsUS.com

RECEIVING LABORATORY:
SGS North America, Inc. - Dayton, NJ
2235 US Highway 130
Dayton, NJ 08810
Phone: (732) 329-0200
Fax: (732) 329-3499

BILL TO:
Eurofins Spectrum Analytical, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Attention: Accounts Payable
accountspayable@eurofinsus.com
PO Number: SC51286

Project: UTC/Carrier AOC G SRI (NY Site)
Project #: 60589143
PO Number: SC51286

Fx: 4463 4477 4952

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
1	SC51286-01	18-Oct-18 09:11	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
2	SC51286-02	18-Oct-18 09:26	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
3	SC51286-03	18-Oct-18 10:42	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						
4	SC51286-05	18-Oct-18 00:00	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A); Voa Vial - HCl (B); Voa Vial - HCl (C)						

VTSR

INITIAL ASESSMENT AL ZA

LABEL VERIFICATION_____

Released By	Date	Received By	Date	Temp °C
	10/22/18 15:00 Fx			3.8
Fx	10/23/18 10:40		10/23/18	

Released By Date Received By Date

JC76439: Chain of Custody
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SC51286

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
5	SC51286-07	18-Oct-18 12:10	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) [redacted]						
6	SC51286-08	18-Oct-18 14:00	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
7	SC51286-09	18-Oct-18 15:00	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
8	SC51286-10	18-Oct-18 16:20	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
9	SC51286-11	18-Oct-18 16:31	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
10	SC51286-12	19-Oct-18 09:05	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						

Released By	Date	Received By	Date	Temp °C
[signature]	10/22/18 15:00	FEDX		
FEDX	10/23/18 1040	[signature]	10/23/18 1040	

JC76439: Chain of Custody
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JC76439

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SC51286

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
11	SC51286-13	19-Oct-18 09:17	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
12	SC51286-14	19-Oct-18 10:10	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
13	SC51286-15	19-Oct-18 10:28	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
14	SC51286-16	19-Oct-18 12:44	Ground Water	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
15	SC51286-18	19-Oct-18 13:35	Water Field QC	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A) Voa Vial - HCl (B) Voa Vial - HCl (C)						
16	SC51286-20	19-Oct-18 00:00	Water Field QC (Trip Blank)	8260 Full List	02-Nov-18 16:00	UTC site/ASP B
Containers Supplied: Voa Vial - HCl (A)						

Released By	Date	Received By	Date	Temp °C
[signature]	10/22/18 15:00	FEDX		
FEDX	10/23/18 1040	[signature]	10/23/18	1040

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JC76439: Chain of Custody
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SC51286

Please send notice within 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration. Notice should be emailed to SpectrumLabResults@EurofinsUS.com.

Please notify SpectrumLabResults@EurofinsUS.com immediately and prior to conducting analysis if certification is not held for the analyses requested.

Please e-mail results in electronic format to SpectrumLabResults@EurofinsUS.com.

Released By	Date	Received By	Date	Temp °C
	10/22/18 1500	FEDX		
FEDX	10/23/18 1040		10/23/18	1040

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Eurofins Spectrum Analytical, Inc.	**Job No**	JC76439
Site:	UTC Carrier AOC G SRI	**Report Date**	11/2/2018 2:47:46 PM

On 10/23/2018, 15 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC76439 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:** V4D3974

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC76439-8MS, JC76439-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V4D3977

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC76467-2MS, JC76467-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC76439-12: Diluted due to high concentration of target compound.
- JC76439-13: Diluted due to high concentration of target compound.
- JC76439-12 for Bromomethane: Associated CCV outside of control limits low.
- JC76439-13 for Bromomethane: Associated CCV outside of control limits low.
- JC76439-5 for Bromomethane: Associated CCV outside of control limits low.
- JC76439-14 for Bromomethane: Associated CCV outside of control limits low.
- JC76439-8 for Bromomethane: Associated CCV outside of control limits low.

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)

Job Number: **JC76439**
Account: **EFMAA Eurofins Spectrum Analytical, Inc.**
Project: **UTC Carrier AOC G SRI**

Sample:	**V4D3977-BFB**	Injection Date:	**10/29/18**
Lab File ID:	**4D91033.D**	Injection Time:	**06:32**
Instrument ID:	**GCMS4D**		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	15908	15.4		Pass
75	30.0 - 60.0% of mass 95	44944	43.4		Pass
95	Base peak, 100% relative abundance	103565	100.0		Pass
96	5.0 - 9.0% of mass 95	7083	6.84		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	91291	88.1		Pass
175	5.0 - 9.0% of mass 174	6885	6.65	(7.54) [a]	Pass
176	95.0 - 101.0% of mass 174	88421	85.4	(96.9) [a]	Pass
177	5.0 - 9.0% of mass 176	5922	5.72	(6.70) [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
V4D3977-CC3913	4D91033.D	10/29/18	06:32	00:00	Continuing cal 20
V4D3977-BS	4D91035.D	10/29/18	07:45	01:13	Blank Spike
V4D3977-MB	4D91037.D	10/29/18	08:42	02:10	Method Blank
JC76439-5	4D91038.D	10/29/18	09:14	02:42	SC51286-07
JC76439-14	4D91039.D	10/29/18	09:42	03:10	SC51286-16
JC76439-8	4D91040.D	10/29/18	10:11	03:39	SC51286-10
JC76439-12	4D91041.D	10/29/18	10:40	04:08	SC51286-14
JC76439-13	4D91042.D	10/29/18	11:08	04:36	SC51286-15
JC76439-11	4D91043.D	10/29/18	11:37	05:05	SC51286-13
JC76467-2	4D91044.D	10/29/18	12:06	05:34	(used for QC only; not part of job JC76439)
JC76467-2MS	4D91045.D	10/29/18	12:34	06:02	Matrix Spike
JC76467-2MSD	4D91046.D	10/29/18	13:03	06:31	Matrix Spike Duplicate
ZZZZZZ	4D91048.D	10/29/18	14:00	07:28	(unrelated sample)
ZZZZZZ	4D91049.D	10/29/18	14:29	07:57	(unrelated sample)
ZZZZZZ	4D91050.D	10/29/18	14:58	08:26	(unrelated sample)
ZZZZZZ	4D91051.D	10/29/18	15:26	08:54	(unrelated sample)
ZZZZZZ	4D91052.D	10/29/18	15:55	09:23	(unrelated sample)
ZZZZZZ	4D91053.D	10/29/18	16:24	09:52	(unrelated sample)

Continuing Calibration Summary

Job Number: JC76439
Account: EFMAA Eurofins Spectrum Analytical, Inc.
Project: UTC Carrier AOC G SRI

Sample: V4D3977-CC3913
Lab FileID: 4D91033.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...-18\v4d3977\4d91033.d Vial: 2
Acq On : 29 Oct 2018 6:32 am Operator: payalr
Sample : cc3913-20 Inst : MS4D
Misc : MS30264,V4D3977,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3913.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Oct 16 12:53:51 2018
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		tert butyl alcohol-d9	1.000	1.000	0.0	110	-0.01	8.66
2	M	tertiary butyl alcohol	1.196	1.215	-1.6	111	-0.01	8.79
3		ethanol	0.122	0.137	-12.3	121	-0.01	7.19
4	M	1,4-dioxane	0.111	0.123	-10.8	119	0.00	12.69
5	I	pentafluorobenzene	1.000	1.000	0.0	120	0.00	11.15
6	M	chlorodifluoromethane	0.513	0.488	4.9	114	0.00	4.65
7	M	dichlorodifluoromethane	0.649	0.550	15.3	99	0.00	4.62
8	M	chloromethane	0.530	0.471	11.1	110	0.00	5.10
9	M	vinyl chloride	0.517	0.472	8.7	107	0.00	5.38
10	M	bromomethane	0.251	0.194	22.7#	89	0.02	6.18
11	M	chloroethane	0.297	0.294	1.0	116	0.02	6.41
12	M	trichlorofluoromethane	0.684	0.625	8.6	106	0.00	6.97
13		vinyl bromide	0.360	0.334	7.2	109	0.00	6.83
14	M	ethyl ether	0.218	0.227	-4.1	121	0.00	7.50
15	M	acrolein	0.077	0.093	-20.8#	139	0.00	7.71
16		freon 113	0.275	0.272	1.1	114	0.00	7.96
17	M	1,1-dichloroethene	0.376	0.367	2.4	116	0.00	7.96
18	M	acetone	0.171	0.161	5.8	113	0.00	7.96
19	M	acetonitrile	0.079	0.078	1.3	119	0.00	8.41
			True	Calc.	% Drift			
20	M	iodomethane	20.000	14.404	28.0#	99	0.00	8.25
			AvgRF	CCRF	% Dev			
21	M	carbon disulfide	0.928	0.963	-3.8	125	0.00	8.41
22	M	methylene chloride	0.407	0.410	-0.7	121	0.00	8.73
23	M	methyl acetate	0.455	0.431	5.3	117	0.00	8.53
24	M	methyl tert butyl ether	1.195	1.173	1.8	116	0.00	9.16
25	M	trans-1,2-dichloroethene	0.397	0.396	0.3	120	0.00	9.20
26	M	di-isopropyl ether	1.257	1.233	1.9	116	0.00	9.85
27	M	2-butanone	0.068	0.074	-8.8	121	0.00	10.53
28	M	1,1-dichloroethane	0.712	0.698	2.0	116	0.00	9.80
29	M	chloroprene	0.578	0.546	5.5	110	0.00	9.95
30	M	acrylonitrile	0.176	0.187	-6.3	127	0.00	9.07
31		hexane	0.272	0.256	5.9	112	0.00	9.61
32	M	vinyl acetate	0.071	0.097	-36.6#	153	0.00	9.80
33	M	ethyl tert-butyl ether	1.255	1.239	1.3	118	0.00	10.35
34	M	ethyl acetate	0.067	0.070	-4.5	119	0.00	10.59
35	M	2,2-dichloropropane	0.580	0.589	-1.6	121	0.00	10.61
36	M	cis-1,2-dichloroethene	0.443	0.442	0.2	119	0.00	10.58
37		methyl acrylate	0.082	0.088	-7.3	124	0.00	10.66

6.7.5 6

eurofins

Spectrum Analytical

SUBCONTRACT ORDER

SC51286 H062

SENDING LABORATORY:

Eurofins Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
Phone: (413) 789-9018
Fax: (413) 789-4076
PM: SpectrumLabResults@EurofinsUS.com

RECEIVING LABORATORY:

Pace Analytical Energy Services, LLC. - TN
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: -
Fax: -

BILL TO:

Eurofins Spectrum Analytical, Inc
2425 New Holland Pike
Lancaster, PA 17601
Attention: Accounts Payable
accountspayable@eurofinsus.com
PO Number: SC51286

Project: UTC/Carrier AOC G SRI (NY-Site)

Project #: 60589143

PO Number: SC51286

L1037316

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
	SC51286-16	19-Oct-18 12:44	Ground Water	8270 1,4-Dioxane by SIM	02-Nov-18 16:00	UTC/ASP B -01
Containers Supplied 1L Amber - Unpres. (D) 1L Amber - Unpres. (E)						
	SC51286-17	19-Oct-18 13:37	Ground Water	8270 1,4-Dioxane by SIM	02-Nov-18 16:00	UTC ASP B 02
Containers Supplied 1L Amber - Unpres. (A) 1L Amber - Unpres. (B)						
	SC51286-18	19-Oct-18 13:35	Water Field QC	8270 1,4-Dioxane by SIM	02-Nov-18 16:00	UTC/ASP B 03
Containers Supplied 1L Amber - Unpres. (D) 1L Amber - Unpres. (E)						

Please send notice within 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration. Notice should be emailed to SpectrumLabResults@EurofinsUS.com.

Please notify SpectrumLabResults@EurofinsUS.com immediately and prior to conducting analysis if certification is not held for the analyses requested.

Please e-mail results in electronic format to SpectrumLabResults@EurofinsUS.com.

10-.3: 0.7 A2 COOLE

Released By	Date	Received By	Date	Temp °C
	10/22/18 15:00			
Released By	Date	Received By	Date	
	10/23/18 8:45a			

Page 1 of 1

6 containers

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Project Manager

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC51286

Client: AECOM Environment - Buffalo, NY

Project: UTC/Carrier 2018 GW Event / 60589143

SDG #: SC51286

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SW846 8082A.

IV. PREPARATION

Aqueous samples were prepared according to SW846 3510C.

V. INSTRUMENTATION

The following equipment was used to analyze SW846 8082A:

HPS11 details: Agilent 6890 series dual column ECD GC with RTX-CLPesticides (30m, 0.53mmID, 0.5um df) and DB-5MS column ((30m, 0.53mmID 1.50 df)

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Surrogates:

All method criteria were met.

D. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

E. Duplicates:

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

F. Internal Standards:

Internal standards were within the acceptance criteria.

G. Samples:

All method criteria were met with the following exceptions:

November 9, 2018 Report Revision Case Narrative:

This report has been revised to correct project name per client request.

SC51330

SC51330

CHAIN OF CUSTODY RECORD

AECOM

PROJECT NO. 60569143

SITE NAME GE-Canada

SAMPLERS (PRINT/SIGNATURE) Tom Urban / Tom Uhler / Rob Murphy

LAB Eurofins

COOLER 1 of 1

PAGE 1 of 1

DELIVERY SERVICE: FedEx AIRBILL NO.:

TESTS: PFCs

BOTTLE TYPE AND PRESERVATIVE: 3 x 250mL HDPE

	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. (IRPIW'S ONLY)
01	MW-14	10/19/18	1244	C	MW-14	WG	2		N	-	-	-
02	MW-14D	10/19/18	1337	C	MW-14D	WG	2		N	-	-	-
03	FB-1	10/19/18	1310	G	FB-101918	WQ	2	field blank	FB	-	-	-
04	EB-1	10/19/18	1335	G	EB-101918	WQ	2	equipment blank	EB	-	-	-

500mL trizma #15 #17 #18 #19

MATRIX CODES							
	AA - AMBIENT AIR	SL - SLUDGE	WG - GROUND WATER	WL - LEACHATE	WO - OCEAN WATER	LH - HAZARDOUS LIQUID WASTE	
	SE - SEDIMENT	WP - DRINKING WATER	SO - SOIL	GS - SOIL GAS	WS - SURFACE WATER	LF - FLOATING FREE PRODUCT ON GW TABLE	
	SH - HAZARDOUS SOLID WASTE	WW - WASTE WATER	DC - DRILL CUTTINGS	WC - DRILLING WATER	WQ - WATER FIELD QC		

SAMPLE TYPE CODES				
	TB# - TRIP BLANK	RB# - RINSE BLANK	N# - NORMAL ENVIRONMENTAL SAMPLE	
	SD# - MATRIX SPIKE DUPLICATE	FR# - FIELD REPLICATE	MS# - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
	10/19/18	1600	FEDEX	10/19/18	1600
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
Fedex				10/20/18	11:52

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to coordinator field files

Custody Seal Present & intact 3.0.3 #1

eurofins | Lancaster Laboratories Environmental

Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical
SDG: SAJ38

PFAS Group

Fraction: PFAS by LC/MS/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9866029	SC51330-01	X		1	
9866030	SC51330-02	X		1	
9866031	SC51330-03	X		1	Field Blank
9866032	SC51330-04	X		1	Equipment Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Surrogate

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

Batch#: 18298005 (Sample number(s): 9866029-9866032)
The recovery(ies) for the following surrogate(s) exceeded the acceptance window: 13C3-PFBS (9866032), 13C5-PFPeA (9866032)

Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical
SDG: SAJ38

PFAS Group

Fraction: PFAS by LC/MS/MS

(Sample number(s): 9866029: Analysis: 14473)
The injection standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

(Sample number(s): 9866032: Analysis: 14473)
The recovery for several labeled compounds used as extraction standards are outside of QC acceptance limits as noted on the QC Summary.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

A.30890 A.2001032 S. 9066029-32

eurofins | Spectrum Analytical

SUBCONTRACT ORDER

SC51330

SENDING LABORATORY:

Eurofins Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
Phone: (413) 789-9018
Fax: (413) 789-4076
PM: SpectrumLabResults@EurofinsUS.com

Project: UTC/Carrier AOC G SRI

RECEIVING LABORATORY:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17605-2425
Phone: (717) 656-2300
Fax: -

Project #: 60589143
PO Number: SC51330

BILL TO:

Eurofins Spectrum Analytical, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Attention: Accounts Payable
accountspayable@eurofinsus.com
PO Number: SC51330

Laboratory ID	Sample ID	Sampled	Matrix	Analysis	Due	Comments
	SC51330-01	19-Oct-18 12:44	Ground Water	PFC Sub	07-Nov-18 16:00	UTC/ASP B/NY 21 Compounds
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						
	SC51330-02	19-Oct-18 13:37	Ground Water	PFC Sub	07-Nov-18 16:00	UTC/ASP B/NY 21 Compounds
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						
	SC51330-03	19-Oct-18 13:10	Water Field QC	PFC Sub	07-Nov-18 16:00	UTC/ASP B/NY 21 Compounds
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						
	SC51330-04	19-Oct-18 13:35	Water Field QC	PFC Sub	07-Nov-18 16:00	UTC/ASP B/NY 21 Compounds
Containers Supplied: 250 mL Poly Trizma (A) 250 mL Poly Unpres (B)						

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Please notify SpectrumLabResults@EurofinsUS.com immediately and prior to conducting analysis if certification is not held for the analyses requested.

Please e-mail results in electronic format to SpectrumLabResults@EurofinsUS.com.

Released By	Date	Received By	Date	Temp °C
	10/23/18 15:00			
			10/24/18 11:10	3.0

Page 1 of 1

eurofins

Lancaster Laboratories
Environmental

Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical
SDG: SAJ38

PFAS Group
Fraction: PFAS by LC/MS/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9866029	SC51330-01	X		1	
9866030	SC51330-02	X		1	
9866031	SC51330-03	X		1	Field Blank
9866032	SC51330-04	X		1	Equipment Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Surrogate

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

Batch#: 18298005 (Sample number(s): 9866029-9866032)
The recovery(ies) for the following surrogate(s) exceeded the acceptance window: 13C3-PFBS (9866032), 13C5-PFPeA (9866032)

Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical
SDG: SAJ38

PFAS Group

Fraction: PFAS by LC/MS/MS

(Sample number(s): 9866029: Analysis: 14473)
The injection standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

(Sample number(s): 9866032: Analysis: 14473)
The recovery for several labeled compounds used as extraction standards are outside of QC acceptance limits as noted on the QC Summary.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

FORM 02A
SURROGATES
LC/MS/MS

SDG No.: SAJ38
Matrix: WATER

18298005		13C3-PFHXS	13C4-PFBA	13C4-PFHPA	13C5-PFHXA	13C5-PFPEA
	Limits	34-126	33-123	35-126	35-138	31-157
LAB SAMPLE ID	**DATE/TIME**	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
BLK298005	10/27/18 04:35	82	89	85	90	87
LCS298005	10/27/18 04:44	73	80	79	79	77
LCSDA	10/27/18 04:53	72	86	82	81	84
9866029	10/27/18 05:47	72	83	69	67	110
9866030	10/27/18 05:56	70	87	58	81	102
9866031	10/27/18 06:14	70	86	61	86	85
9866029RE	10/28/18 22:52	74	84	69	68	104
9866032	10/28/18 23:01	67	84	56	86	161 *

* Outside QC Limits

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FORM 02A
SURROGATES
LC/MS/MS

SDG No.: SAJ38
Matrix: WATER

18298005		13C2-6:2-FTS	13C2-8:2-FTS	13C2-PFDODA	13C2-PFTEDA	13C3-PFBS
	Limits	32-170	27-164	39-130	26-119	26-148
LAB SAMPLE ID	DATE/TIME	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
BLK298005	10/27/18 04:35	102	97	69	73	84
LCS298005	10/27/18 04:44	92	96	71	68	77
LCSDA	10/27/18 04:53	97	96	70	72	80
9866029	10/27/18 05:47	128	86	71	70	133
9866030	10/27/18 05:56	97	91	69	68	110
9866031	10/27/18 06:14	101	94	77	76	83
9866029RE	10/28/18 22:52	116	88	65	71	138
9866032	10/28/18 23:01	89	85	70	72	175 *

* Outside QC Limits

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FORM 08A
INTERNAL STANDARDS
LC/MS/MS

SDG No.: SAJ38
Matrix: WATER

18298005		13C2-PFDA	13C2-PFOA	13C3-PFBA	13C4-PFOS
		Area	Area	Area	Area
Average ICAL Response		508444	968305	840469	321247
UPPER LIMIT		762666	1452458	1260704	481871
LOWER LIMIT		254222	484153	420235	160624
LAB SAMPLE ID	**DATE ANALYZED**				
BLK298005	10/27/18 04:35	582640	1087261	914979	330000
LCS298005	10/27/18 04:44	586214	1156451	957999	383001
LCSDA	10/27/18 04:53	579533	1153881	918273	388638
9866029	10/27/18 05:47	522816	839350	335418 *	289028
9866030	10/27/18 05:56	571406	1025822	645557	335281
9866031	10/27/18 06:14	558849	992383	906690	331507
9866029RE	10/28/18 22:52	558582	899679	381529 *	293125
9866032	10/28/18 23:01	624868	1118077	475260	361065

AREA: Upper limit: 150% of the internal standard area.
Lower Limit: 50% of the internal standard area.

* Outside QC Limits

APPENDIX C

EDR Radius Map™ Water Well Search

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	38 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
3	38 inches	59 inches	stratified silt loam to loamy very fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000870955	1/4 - 1/2 Mile WNW
2	USGS40000871158	1/2 - 1 Mile NNW
3	USGS40000870871	1/2 - 1 Mile West
4	USGS40000871216	1/2 - 1 Mile NNE
5	USGS40000871276	1/2 - 1 Mile NNE
6	USGS40000871217	1/2 - 1 Mile NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No PWS System Found

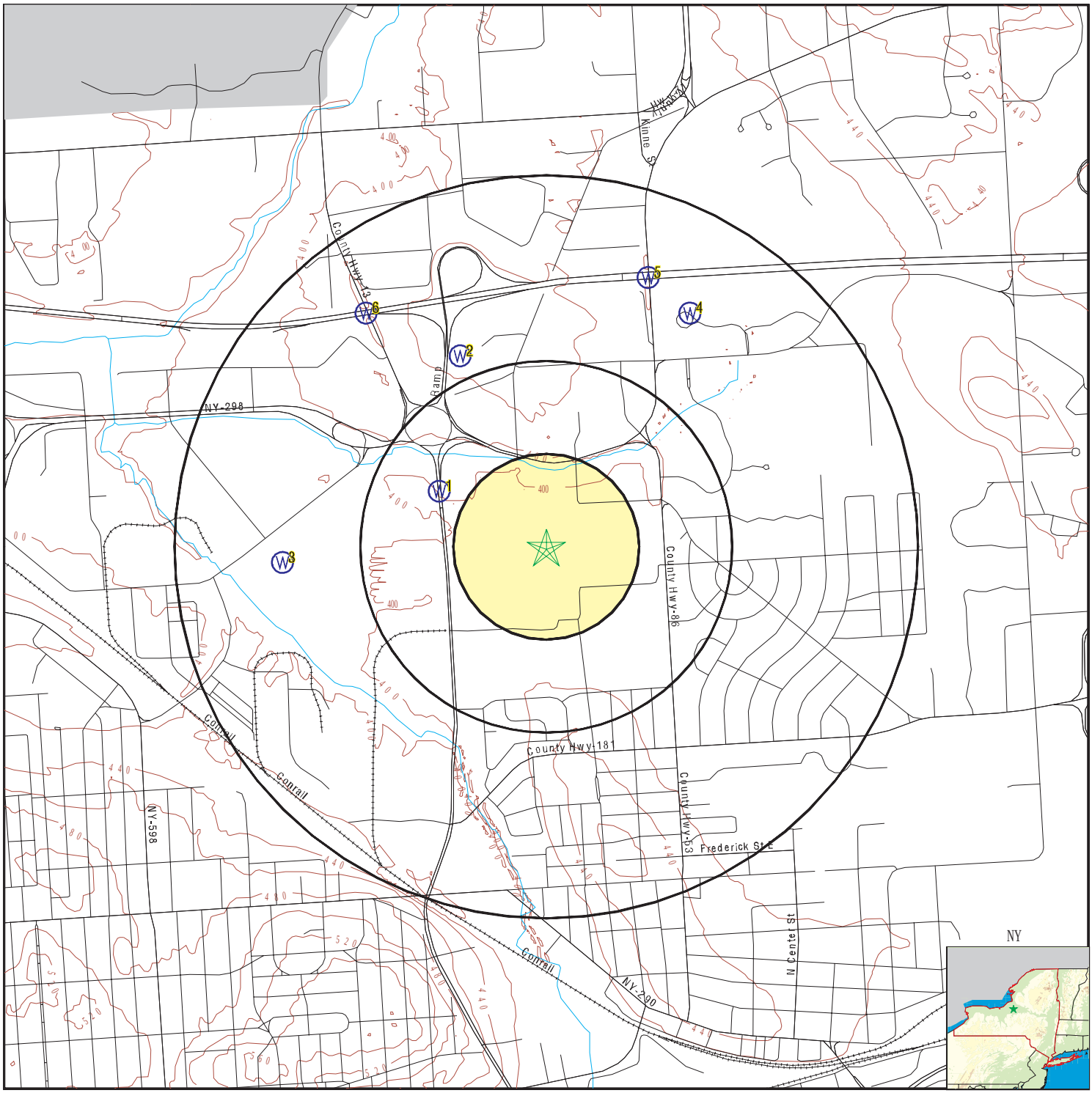
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 5546153.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	UTC Carrier Site	CLIENT:	AECOM
ADDRESS:	6304 Carrier Pkwy East Syracuse NY 13057	CONTACT:	Kevin J Mcgovern
		INQUIRY #:	5546153.2s
LAT/LONG:	43.083178 / 76.084233	DATE:	January 28, 2019 3:53 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
WNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000870955**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	OD 282	Type:	Well
Description:	Not Reported	HUC:	04140201
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Bedrock
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	57	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1949-01-01
Feet below surface:	7.00	Feet to sea level:	Not Reported
Note:	Not Reported		

2
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000871158**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	OD1066		
Type:	Well: Test hole not completed as a well		
Description:	Not Reported	HUC:	04140201
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19900628
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	40	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1990-06-28
Feet below surface:	9.9	Feet to sea level:	Not Reported
Note:	Not Reported		

3
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000870871**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	OD1065		
Type:	Well: Test hole not completed as a well		
Description:	Not Reported	HUC:	04140201
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19900328
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	25.1	Well Hole Depth Units:	ft

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

4
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40000871216**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	OD1064		
Type:	Well: Test hole not completed as a well		
Description:	Not Reported	HUC:	04140201
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19900913
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	50.4	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1990-09-13
Feet below surface:	6.9	Feet to sea level:	Not Reported
Note:	Not Reported		

5
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40000871276**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	OD1001		
Type:	Well: Test hole not completed as a well		
Description:	Not Reported	HUC:	04140201
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19520430
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	55	Well Hole Depth Units:	ft

6
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000871217**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	OD1003		
Type:	Well: Test hole not completed as a well		
Description:	Not Reported	HUC:	04140201
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19500802
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	34	Well Hole Depth Units:	ft

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 November 2017)

Appendix D
Groundwater Analytical Results Historical Summary
Carrier Thompson Rd. Facility

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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
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
	MW-1	8/15/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	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
(Duplicate)	MW-1	7/12/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-1	12/18/2001	NA	ND	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
	CARGMW0105	6/23/2003	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW0106	7/11/2005	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW0108	2/12/2007	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
	CARGMW0110	8/21/2007	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
	CARGMW0112	6/29/2010	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

Appendix D
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Carrier Thompson Rd. Facility

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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
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
	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
(Duplicate)	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
(Duplicate)	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
(Duplicate)	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
(Duplicate)	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

Appendix D
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Carrier Thompson Rd. Facility

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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
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
(Duplicate)	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
	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
(Duplicate)	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
(Duplicate)	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
(Duplicate)	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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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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
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	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
	CARGMW0504	7/12/2001	ND	ND	ND	ND	ND	ND	ND	NA	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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
MW-06	MW-6	2/8/1990	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	6/5/1990	NA	ND	NA	NA	ND	ND	ND	NA	13	NA	NA	ND	NA	ND	NA	ND	NA
	MW-6	11/16/1990	NA	NA	ND	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW0603	4/18/2000	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
	MW-6	5/22/1991	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-6	2/5/1992	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	**4**	NA	ND	NA
	MW-6	8/10/1992	NA	ND	NA	NA	**7**	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	**13**	NA
	MW-6	2/22/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/23/1993	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	**6**	NA	ND	NA
	MW-6	5/2/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/25/1994	NA	ND	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	NA	ND	NA	ND	NA
	MW-6	2/15/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/21/1995	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	2/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/9/1996	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	**5**	NA
	MW-6	2/6/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/22/1997	NA	ND	NA	NA	ND	ND	ND	NA	ND	**8**	NA	ND	NA	ND	NA	ND	NA
	MW-6	2/17/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/31/1998	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	3/4/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/27/1999	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	3/2/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	8/15/2000	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	CARGMW0604	7/12/2001	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
(Duplicate)	MW-6	7/12/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	MW-6	12/18/2001	NA	ND	NA	NA	ND	ND	ND	NA	ND	ND	NA	ND	NA	ND	NA	ND	NA
	CARGMW0605	6/24/2002	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW0605	6/23/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW0606	6/21/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW0606	7/11/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	**42.3**	**1.3**	ND	ND	ND
	CARGMW0607	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**0.91**	ND	ND	ND
	CARGMW0608	2/12/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**0.48**	ND	ND	ND
	CARGMW0609	5/8/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW0610	8/21/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.5**	ND	ND	ND
	ENSTHMPMW060609	6/28/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	0.52 J	ND	ND	ND
	CARGMW060610	6/30/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**2.2**	ND	ND	ND
	CARGMW060612	6/13/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**0.36**	ND	ND	ND
	CARGMW060812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW060613	6/12/2013	2.6 J	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW6WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW06WG061615	06/16/2015	0.98 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
MW-09	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
(Duplicate)	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
	MW9WG063014	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
	MW09WG	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	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
(Duplicate)	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
	MW10WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	**4.5**
	MW10WG061615	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
(Duplicate)	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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
MW - 13D*	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
904 (Diffusion	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*	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
iffusion Sampl	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*	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
iffusion Sampl	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*	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
ow-Flow Sampl	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*	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
iffusion Sampl	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

Appendix D
Groundwater Analytical Results Historical Summary
Carrier Thompson Rd. Facility

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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
MW - 13D*	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
)iffusion Sampl	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*	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
)iffusion Sampl	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*	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
)iffusion Sampl	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*	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
(Diffusion	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
Sample)	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*	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
(Diffusion	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
Sample)	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*	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
(Diffusion	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
Sample)	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*	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
(Diffusion	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
Sample)	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

Appendix D
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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
MW-13D2	ENSTHMPMW13D20609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.61 J	ND	ND	ND	ND	ND	ND	ND
Duplicate	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	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	**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
	CARGMW1405	6/26/2003	ND	ND	ND	ND	ND	ND	ND	NA	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	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	**1.8**	ND
	CARGMW1407	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW1409	5/8/2007	ND	ND	ND	ND	ND	0.27 J	ND	NA	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	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
	CARGMW140611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW140812	8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	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
	MW14WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	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
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
	CARGMW5D04	7/11/2001	ND	ND	ND	ND	ND	ND	ND	NA	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
(Duplicate)	CARHMW1405	6/25/2002	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW14D06	6/22/2004	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW14D07	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	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
(Duplicate)	CARGMW14D08	2/14/2007	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW14010	8/22/2007	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW14D0611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW14D0812	8/15/2012	ND	ND	ND	ND	ND	ND	ND	NA	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
	MW14DWG070114	7/1/2014	ND	ND	ND	ND	ND	ND	ND	NA	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
MW-15D*	CARGMW006	4/28/2000	ND	ND	ND	ND	ND	ND	ND	NA	NA	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
	CARH000604	7/11/2001	ND	ND	ND	ND	ND	ND	ND	NA	NA	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
	CARGMW15D05	6/24/2003	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW15D	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
(Duplicate)	CARGDUP2	7/12/2005	ND	ND	ND	ND	ND	ND	ND	NA	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
(Duplicate)	CARHMW15D07	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	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
	CARGMW15D09	5/9/2007	ND	ND	ND	ND	ND	ND	ND	NA	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
	ENSTHMPMW15D0609	6/29/2009	ND	ND	ND	ND	ND	ND	ND	NA	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

Appendix D
Groundwater Analytical Results Historical Summary
Carrier Thompson Rd. Facility
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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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
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
(Duplicate)	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
(Duplicate)	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
(Duplicate)	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
(Duplicate)	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	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NYSDEC Standard			50 G	1	50 G	7	5	0.6	0.7 G	N/A	5	5	5	1	N/A	5	5 G	2	N/A
MW-19	CARGMW1901	6/28/2002	ND	ND	ND	0.32 J	ND	ND	ND	NA	ND	1.2 J	ND	ND	ND	0.71 J	ND	ND	ND
	CARGMW1905	6/25/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARHMW1905	6/25/2003	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.4**	ND	ND	ND
	CARGMW1906	6/21/2004	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.5**	ND	ND	ND
	CARGMW1906	7/11/2005	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**2.4**	ND	ND	ND
	CARGMW1907	11/8/2006	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
	CARGMW1908	2/12/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
	CARGMW1909	5/8/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
	CARGMW1910	8/21/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND
(Duplicate)	CARHMW1910	8/21/2007	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.8**	ND	ND	ND
	CARGMW190610	6/30/2010	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND
	CARGMW190611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
	CARHMW190611	6/29/2011	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
	CARGMW190612	6/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	**0.87**	ND	ND	ND
	CARGMW190812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW190613	6/12/2013	ND	ND	ND	0.19 J	ND	ND	ND	NA	ND	ND	0.27 J	ND	ND	0.81 J	ND	ND	ND
	MW19WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	0.87 J	ND	ND	ND
	MW19WG061815	06/18/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.3**	ND	ND	ND
MW-20	CARGMW200610	7/1/2010	ND	ND	ND	ND	**6,610**	ND	**1,540**	NA	**103**	**5,530**	**49.1 J**	**20.5 J**	ND	**8,710**	ND	**1,010**	ND
	CARGMW200910	9/29/2010	ND	ND	ND	ND	**3,290**	5.7 J	**450**	NA	**58.8**	**3,380**	**34.6**	**17.5**	ND	**4,900**	7.1 J	**467**	ND
	CARGMW201210	1/10/2011	ND	ND	ND	ND	**5,140**	ND	**541**	NA	**99**	**6,840**	**53.5**	**24.8 J**	ND	**3,870**	ND	**759**	ND
	CARGMW200311	3/31/2011	ND	ND	ND	ND	**6,110**	12.9 J	**589**	NA	**135**	**7,490**	**60.3**	**37.8**	ND	**3,010**	10.5 J	**1,130**	ND
	CARGMW200610	6/29/2011	ND	ND	ND	1.1 J	**1,880 a**	**3.6**	**170**	NA	**42.4**	**1,640 a**	**16.2**	**11.2**	ND	**694 a**	**2.6**	**349**	ND
	CARGMW200612	6/14/2012	ND	ND	ND	**1.5**	**2920 b**	**4.7**	**250 a**	NA	**82.5**	**1110 a**	**17.4**	**15.1**	ND	**347 a**	**3.4**	**418 a**	ND
(Duplicate)	CARHMW200612	6/14/2012	ND	ND	ND	ND	**2890 a**	**4.4**	**253**	NA	**75.1**	**1120**	**17.2**	**14**	ND	**374**	**3**	**407**	ND
	CARGMW200812	8/15/2012	ND	ND	ND	**1.5**	**893 a**	ND	**153**	NA	**32.4**	**487 a**	**9.2**	**5.1**	ND	**243**	**2.0**	**285**	ND
(Duplicate)	CARGMW200613	6/13/2013	ND	ND	ND	ND	**180**	ND	**18**	NA	4.8 J	**66**	ND	ND	ND	**33**	ND	**30**	ND
	CARGMW200613	6/13/2013	ND	ND	ND	ND	**180**	ND	**17**	NA	5.1 J	**65**	2.0 J	ND	ND	**35**	ND	**26**	ND
	MW20WG063014	06/30/2014	ND	ND	ND	0.56 J	**86**	ND	**4.1**	**NA**	0.87 J	**13**	ND	ND	ND	**20**	ND	ND	ND
MW-21	CARGMW210612	6/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW210812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW210613	6/12/2013	ND	ND	ND	ND	ND	ND	0.35 J	NA	ND	0.53 J	ND	ND	ND	0.8 J	ND	ND	ND
	MW21WG062714	06/27/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	0.56 J	ND	ND	ND	0.26 J	ND	0.41 J	ND
	MW21WG061615	06/16/2015	0.98 JB	ND	ND	ND	ND	ND	ND	ND	ND	**12**	ND	ND	ND	**4**	ND	ND	ND
MW-22D	CARGMW22D0612	6/13/2012	ND	ND	**0.31**	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW22D0812	8/14/2012	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CARGMW22D0613	6/13/2013	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW22DWG063014	06/30/2014	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW22DWG061615	06/16/2015	1.7 JB	ND	ND	ND	ND	ND	ND	ND	**3.2**	ND	ND	ND	ND	ND	ND	ND	ND

G — New York State Guidance Value
ND — Not detected above method detection limits
NA — Not Analyzed
NS — Not Samplesd 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

ENSAFE

Groundwater Analytical Results - Detections Only (October 2013 to June 2015)
at Select Non-CO Locations
Carrier Corporation Thompson Road Facility
Syracuse, New York

			Analyte	Acetone	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1-Dichloroethane	Trichloroethene	TPH DRO (C10-C28)	TPH ORO (C28-C40)	Total PCBs
			NYSDEC Groundwater Screening Limit	50	5	5	5	5	NE	NE	0.09*
			Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	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

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			Analyte	Acetone	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1-Dichloroethane	Trichloroethene	TPH DRO (C10-C28)	TPH ORO (C28-C40)	Total PCBs
			NYSDEC Groundwater Screening Limit	50	5	5	5	5	NE	NE	0.09*
			Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Sample Location:	Sample ID:	Sample Date:	Sample Type:								
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	MW42WG	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	MW47WG	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	CARMW48620131113	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	MW50WG	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

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			Analyte	Acetone	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1-Dichloroethane	Trichloroethene	TPH DRO (C10-C28)	TPH ORO (C28-C40)	Total PCBs
			NYSDEC Groundwater Screening Limit	50	5	5	5	5	NE	NE	0.09*
			Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	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
PLR05B	PLR05BWG062215	6/22/2015	Normal	**9.1 JB**	**0.44 J**	<0.44 U	**2.3**	<0.22 U	NA	NA	NA
PLR05B	PLR05BWGDUPE062215	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

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			Analyte	Acetone	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1-Dichloroethane	Trichloroethene	TPH DRO (C10-C28)	TPH ORO (C28-C40)	Total PCBs
			NYSDEC Groundwater Screening Limit	50	5	5	5	5	NE	NE	0.09*
			Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Sample Location:	Sample ID:	Sample Date:	Sample Type:								
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
MW54D	MW54DWG062615	6/26/2015	Normal	NA	NA	NA	NA	NA	<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	<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**	<0.095 U
MW55	MW55WG120514	12/5/2014	Normal	<14 U	**260 a**	<0.88 U	<1 U	**3.2 J**	**1100**	**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**	<0.095 U
MW56	MW56WG120514	12/5/2014	Normal	<340 U	**7800 a**	<22 U	<26 U	**110 a**	**1000**	**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**	<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**	<0.095 U
MW58	MW58WG061915	6/19/2015	Normal	<24 U	**740 a**	<11 U	<7.5 U	**98 a**	<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	<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**	<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	<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	<0.095 U
MW60	MW60WG061815	6/18/2015	Normal	<24 U	**630 a**	<11 U	<7.5 U	**210 a**	<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	<0.096 U
MW60	MW60WG120914	12/9/2014	Normal	<170 U	**910 a**	<11 U	<13 U	**590 a**	<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
MW61	MW61WG120914	12/9/2014	Normal	<34 U	**76 a**	<2.2 U	<2.6 U	**210 a**	**1200**	**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
MW62	MW62WG120914	12/9/2014	Normal	<3.4 U	**1.7**	<0.22 U	<0.26 U	**3.8**	**2500**	**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	<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**	<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	<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	<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	<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	<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	<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	<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.

ENSAFE

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

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

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-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

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.

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-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

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

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

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

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

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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		TR3-PW-01	TR3-PW-02
Sample ID		TR3-PW-01	TR3-PW-2
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

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AECOM Technical Services, Inc.
257 West Genesee Street
Buffalo, New York 14202