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AECOM
10 Patewood Drive
Bldg 6, Suite 500
Greenville, South Carolina 29615
www.aecom.com

864 234 3000 tel
864 234 3069 fax

51778

June 14, 2017

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SITE ASSESSMENT,
REMEDIATION &
REVITALIZATION

Ms. Addie Walker, Project Manager
SC Department of Health and Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

Re: Spring 2017 Semi-Annual Groundwater Monitoring Report
Delavan Spray Technologies Site
Bamberg, South Carolina
SCDHEC VCC Number 13-4762-RP
SCDHEC File Number 51778
AECOM Project Number 60314964

Dear Ms. Walker:

On behalf of United Technologies Corporation Aerospace Systems (UTAS), AECOM is providing you one (1) hard copy and one (1) electronic copy of the Spring 2017 Semi-Annual Groundwater Monitoring Report for the Delavan Spray Technologies Site. This report is being submitted to the Department in accordance with the Remedial Investigation Work Plan (Hart & Hickman, August 1, 2013) and voluntary clean-up contract (VCC) number 13-4762-RP, which was signed on July 3, 2013.

If you have any questions or require further information, please feel free to contact me.

Sincerely,

AECOM Technical Services, Inc.

Walter C. Gerald, P.G.
Project Manager
864-234-8925
walter.gerald@aecom.com

cc: Mr. Bill Penn – United Technologies Corporation
Ms. Leslee Alexander, PG – AECOM
Project File 60314964

Spring 2017 Semi-Annual Groundwater Monitoring Report

**United Technologies Corporation
Delavan Spray Technologies Site
4334 Main Highway
US Highway 301 South
Bamberg, South Carolina**

VCC 13-4762-RP

Prepared by:

AECOM Technical Services, Inc.
10 Patewood Drive
Building 6, Suite 500
Greenville, South Carolina

June 14, 2017

SPRING 2017 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

UNITED TECHNOLOGIES CORPORATION (UTC) DELAVAN SPRAY TECHNOLOGIES SITE BAMBERG, SOUTH CAROLINA

RESPONSIBILITY PARTY VOLUNTARY CLEANUP CONTRACT NUMBER 13-4762

The undersigned certify that they have reviewed the attached document and that the document is in material compliance with the guidelines and requirements of the State of South Carolina and the South Carolina Department of Health and Environmental Control (SCDHEC) and specifically, requirements under the SCDHEC Voluntary Cleanup Contract (VCC). The data presentations contained herein are consistent with generally accepted practices in the environmental profession.

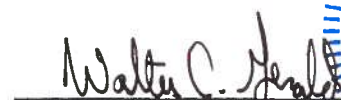
Prepared by:


Leslee J. Alexander, PG
South Carolina PG No. 2433
AECOM Project Hydrogeologist



June 14, 2017
Date

Reviewed by:


Walter C. Gerald, PG
South Carolina PG No. 146
AECOM Project Manager



June 14, 2017
Date

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1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) has prepared this *Spring 2017 Semi-Annual Groundwater Monitoring Report* on behalf of United Technologies Corporation (UTC) for the Delavan Spray Technologies Site (the Site). The Site is located at 4334 Main Highway (US Highway 301 South) in Bamberg, South Carolina (Figure 1). The spring 2017 semi-annual groundwater sampling was completed to meet the on-going monitoring requirements of Voluntary Cleanup Contract (VCC) (VCC 13-4762-RP) that was signed between South Carolina Department of Health and Environmental Control (SCDHEC) and Delavan Spray, LLC (SCDHEC, 2013) and in accordance with the *Remedial Investigation Work Plan* (Hart & Hickman, 2013) approved by SCDHEC October 22, 2013.

This report provides a brief overview of the Site (Section 2.0), describes the sampling activities (Section 3.0), and presents the results (Section 4.0). Conclusions and recommendations based on the results are discussed in Section 5.0. Cited references are provided in Section 6.0.

2.0 OVERVIEW OF THE SITE

The facility manufactures several types of metal spray nozzles for fuel oils. The Site is comprised of a main manufacturing building and smaller associated support buildings, which are located on approximately 20 acres. A Site layout map is provided as Figure 2.

2.1 Background

Assessment activities were initiated at the Site in 2003, after chlorinated volatile organic compounds (VOCs) were detected in groundwater beneath the Site. The primary compounds of concern were reported to be tetrachloroethene (PCE) and its degradation products trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE), and vinyl chloride (VC).

In 2005, Hart & Hickman, PC (H&H) injected Hydrogen Release Compound® (HRC) into shallow groundwater to stimulate natural biodegradation of chlorinated compounds in groundwater. Post-injection monitoring was conducted by H&H between 2005 and 2007. The results indicated that chlorinated compounds were reduced in Site groundwater. However, VOCs remained in the groundwater at these locations at concentrations exceeding the United States Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) for drinking water.

Between 2007 and 2011, H&H conducted multiple groundwater assessments at the Site and surrounding area to further delineate the horizontal and vertical extent of VOCs detected in groundwater. A semi-annual groundwater monitoring program was also instituted to evaluate any changes to groundwater conditions at the Site.

A source area investigation was completed at the Site in August 2012 to determine the nature and general extent of potential compounds of interest (PCOIs) at the Site. The results of the August 2012 assessment indicated that VOC impacts to soil and groundwater are present at the former PCE underground storage tank (UST), and soil VOC impacts are present at both of the former degreaser areas, former northern secondary containment area, and northeastern wooded area. No soil VOC impacts were identified in the northwestern wooded area, and no VOC groundwater impacts were identified at the former northern secondary containment area (H&H, 2012 and 2013).

On July 5, 2013, a VCC between Delavan Spray, LLC and SCDHEC was executed (VCC 13-4762-RP). In accordance with Section 3 of the VCC, a Remedial Investigation (RI) was conducted in February/March 2014 (AECOM, 2014). The RI results provided further delineation of VOCs in soil and groundwater beneath the Site. Furthermore, the RI sampling results were used in conjunction with existing data to complete a Human Health Risk Assessment (HHRA) and an Ecological Risk Assessment.

No additional VOC source areas were identified in soil as a result of the RI. However, following their review of the RI report, SCDHEC requested additional soil assessment to delineate VOC impacts in the vicinity of the northern former degreaser and additional monitoring wells to delineate VOC impacts in the shallow and deeper (limestone) aquifers. The additional assessment activities were incorporated into the *Post RI Work Plan* (AECOM, 2015), which was implemented in late November 2015. The analytical results were presented in the *Post RI Report* (AECOM, 2016) and provided further delineation of VOCs in soil and groundwater at the Site.

Following the *Post RI Report*, SCDHEC requested a “work plan for delineation of the shallow and deep groundwater plumes.” The *Groundwater Delineation Work Plan*, which included groundwater screening with temporary wells and permanent monitoring well installation, was submitted to SCDHEC on September 13, 2016. The work plan was approved by SCDHEC in correspondence dated October 31, 2016 and was implemented between March 27, 2017 and May 10, 2017. The field activities are documented under separate cover in the *Groundwater Delineation Report* (AECOM, June 2017a), which is being submitted concurrently with this report. The newly installed monitoring wells were sampled along with the existing monitoring wells during the spring 2017 semi-annual groundwater monitoring event and the results are presented herein.

2.2 Geology

The Site lies within the western portion of the South Carolina Coastal Plain Province, which is characterized as a seaward thickening wedge of sediments from the fall line to the coast. These sediments consist of sands, silts, clays and limestones; representing a variety of non-marine and marine depositional environments.

For the purposes of Site characterization, the Delavan Spray Technologies Site geology has been subdivided into three general geologic zones by previous investigators. The upper zone consists of undifferentiated sands, clayey sands, sandy clays, and silts. In the northern portion of the Site, these sediments tend to contain a higher percentage of clay and silty layers. The middle zone consists of fossiliferous limestone; with a layer of pale yellow, poorly cemented, coarse shell fragments overlying a layer of white, better cemented limestone containing finer-grained shell fragments. The lower geologic zone is a loose to moderately cemented, calcareous, fine- to medium-grained clayey sandstone. The relationship of these geologic zones was previously illustrated on generalized cross-sections Figures 4, 5 and 6 of the *RI Work Plan* (H&H, 2013).

2.3 Hydrogeology

Groundwater occurrence in the Coastal Plain is typically within the intergranular pore spaces of the sands, silts and limestones (primary porosity) and within solution cavities or fractures of indurated sediments (secondary porosity). Primary production of groundwater occurs from within the more

permeable units, while lower permeability clay layers typically retard groundwater movement. Recharge for significant aquifers in the Coastal Plain occurs both as transport from up-dip areas, toward the Fall Line, where the sediments are generally exposed at the land surface and as leakage from adjacent aquifer units through lower permeability aquitards.

3.0 GROUNDWATER MONITORING PROCEDURES

Spring 2017 semi-annual sampling activities were completed by AECOM personnel between April 10, 2017 and April 13, 2017. Monitoring activities were conducted in accordance with the procedures described in the *RI Work Plan* (H&H, 2013) and the sampling plan presented in the *Fall 2016 Semi-Annual Groundwater Monitoring Report* (AECOM, 2017).

Sampling activities included:

- Groundwater level measurements were collected from all 35 existing monitoring wells and six newly installed monitoring wells;
- Groundwater samples were collected from six new and 27 existing monitoring wells (33 wells in all; Figure 2) using low-flow sampling techniques. Groundwater indicator parameters were collected from each well and all 33 samples were submitted for analysis of VOCs;
- Groundwater samples from six new wells (MW-27 through MW-29 and MW-30D through MW-32D) were submitted for analysis of MNA parameters (ethane, ethene, methane, chloride, nitrate, nitrite, sulfate, and total organic carbon); and
- Collection of a composite sample from two drums of aqueous investigation-derived waste (IDW) for analysis of VOCs, semi-volatile organic compounds (SVOCs) and priority pollutant metals for IDW characterization purposes.

The depth to water in the monitoring wells was measured using an electronic water level meter on April 12 and 13, 2017, after the completion of sampling activities. (NOTE: The existing monitoring wells and newly installed shallow monitoring wells MW-27, MW-28, and MW-29 were measured on April 12, 2017. The newly installed deeper limestone monitoring wells were measured on April 13, 2017 along with other downgradient, deeper limestone monitoring wells. For wells where water levels were measured on both days, the water levels difference is 0.03 feet to 0.06 feet). The water levels were used to create potentiometric maps of the aquifer zones discussed in Section 4.1 below.

Monitoring wells were purged using a peristaltic pump and water levels were monitored during purging. Groundwater quality indicator parameters of pH, specific conductance, dissolved oxygen, oxidation-reduction potential (ORP), turbidity, and temperature were monitored during the groundwater purging process and recorded on the Field Data Logs for Groundwater Sampling, which are included in Appendix A. Samples were collected once the parameters had stabilized in accordance with the low-flow sampling procedure in the work plan.

Upon collection, all groundwater samples were labeled, preserved on ice and kept under chain-of-custody protocol until received at the subcontract analytical laboratory. The samples were received by the laboratory in good condition with no QA/QC issues. Chain-of-custody forms are included in Appendix A.

All groundwater samples were analyzed for VOCs by USEPA Method 8260B and select groundwater samples were also analyzed for methane, ethane, and ethene by USEPA Method RSK 147, chloride, nitrate, nitrite, and sulfate by USEPA Method 9056, and total organic carbon by USEPA Method 5310. The aqueous IDW sample was analyzed for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270D, and priority pollutant metals by USEPA Methods 6010C and 7470B. Water samples were analyzed by Accutest Laboratories, located in Orlando, Florida, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and state of South Carolina certified laboratory. Laboratory analytical data packages are provided in Appendix B.

4.0 RESULTS

4.1 Groundwater Flow

Water level measurements were collected on April 12 and 13, 2017 and are summarized on Table 1 along with their corresponding groundwater elevations. Groundwater elevations measured in wells completed in the shallow aquifer zone were used to create a water-table surface map (Figure 3). The spring 2017 water levels within the shallow aquifer zone occur between 132.78 and 139.00 feet in elevation. Shallow water levels were 0.3 feet to 2.8 feet lower than of those collected during the spring 2016 groundwater monitoring event (April 2016). Compared to water levels measured during the fall 2016 groundwater monitoring event (October 2016), April 2017 water levels are generally 0.1 feet to 2.6 feet lower, except for near Half Moon Branch where they are 0.2 feet to 0.8 feet higher (MW-15 and MW-16). Shallow flow patterns resulting from the spring 2017 water level measurements are similar to those observed previously at the Site. The equal potential lines indicate groundwater flow beneath the northern portion of the Facility varies between northward and southward flow directions, with local groundwater highs at MW-4, MW-5/MW-6, MW-10, and MW-17. Groundwater levels appear depressed at MW-3, MW-8 and MW-18. This phenomenon was previously recognized in the *RI Work Plan* (H&H, 2013) and characterized as a “groundwater trough”, a feature that has been observed to extend to MW-9 during previous field investigation efforts. The variances in groundwater elevation and flow directions in this portion of the Site could be the result of preferential flow pathways resulting from higher permeability zones due to local facies changes or induced drainage from the sanitary sewer line or incised drainage ditch, which forms the northern boundary of the Facility. However, the primary horizontal groundwater flow direction is inferred to be toward the west, toward Halfmoon Branch, which is consistent with findings from prior investigations conducted at the Site. The three newly installed wells on the Kinsey property to the west of the Site indicate the presence of an isolated groundwater high at MW-27. Future measurements will be needed to determine if this high is an anomaly or a persistent feature.

Based on the April 2017 water level elevations within the deeper limestone aquifer zone, the potentiometric surface occurs between 130.66 feet and 134.17 feet in elevation (Figure 4). Groundwater elevations in April 2017 were the same to 0.7 feet lower than those measured during the spring 2016 groundwater monitoring event (April 2016) and 0.4 feet to 0.7 feet lower than those collected during the fall 2016 groundwater monitoring event (October 2016). From the equal potential lines, the inferred horizontal groundwater flow direction is to the south-southwest and is consistent with regional topography, drainage and findings from prior investigations conducted at the Site.

4.2 Groundwater Quality

Groundwater quality indicator parameters, including pH, specific conductance, dissolved oxygen and ORP were measured in the field during the well purging and sampling process. A summary of the groundwater quality indicator parameters is presented in Table 2. The groundwater sampling logs are included in Appendix A and the analytical results are summarized in Table 3. Historic data trends for

VOCs detected since the RI (AECOM, 2014) are presented in Appendix C and trend plots of VOCs and groundwater elevation versus time for select monitoring wells are included in Appendix D.

Shallow Aquifer Zone

VOCs

In the 18 groundwater samples collected from shallow aquifer zone groundwater during the spring 2017 semi-annual monitoring, eight VOCs [1,1,1-trichloroethane (1,1,1-TCA), 1,1-DCE, cis-1,2-DCE, PCE, toluene, trans-1,2-DCE, TCE, and xylene(total)] were detected (Table 3). Three of these compounds, (PCE, TCE, and cis-1,2-DCE,) exceeded their respective MCLs in one or more samples of shallow groundwater.

PCE was the most frequently detected VOC in shallow aquifer zone groundwater samples (16 detections) and groundwater concentrations exceeded the MCL (5 µg/L) in ten shallow monitoring wells (MW-1, MW-3, MW-8, MW-9, MW-10, MW-19, MW-20, MW-21, MW-24, and MW-29; Figure 5). The highest concentration was detected near the northern-most Former PCE Degreaser (located in the Wickman Room) in MW-19 (24,600 micrograms per liter [µg/L]). Elevated but lower concentrations of PCE were detected in shallow aquifer groundwater downgradient of the Former PCE Degreasers in MW-21 (18,000 µg/L), in MW-24 (2,070 µg/L) along the western property boundary, in MW-1 (607 µg/L) adjacent to the Former PCE Secondary Containment Area, and in MW-20 (438 µg/L) adjacent to the southern-most Former PCE Degreaser (located in the Pack and Stamp Room). One down-gradient off-site monitoring well, MW-29, had a detected concentration (5.4 µg/L) that just exceeded the MCL (5 µg/L).

Detected TCE concentrations that exceeded the MCL occur across a smaller footprint than the PCE impacts and are coincident with the “hot-spots” of the PCE plume (Figure 6). TCE concentrations were detected in eight shallow monitoring wells and exceeded the MCL (5 µg/L) in five groundwater samples – MW-1 (8.4 µg/L), MW-9 (43.8 µg/L), MW-10 (44.3 µg/L), MW-21 (260 µg/L), and MW-24 (8.4 µg/L). Note – the detection limit for TCE in the sample from MW-19 was elevated due to the magnitude of the PCE concentration in the sample. The TCE concentration at this location may or may not exceed the MCL.

Cis-1,2-DCE was detected less frequently (seven detections) and exceeded the MCL (70 µg/L) in the sample from MW-21 (595 µg/L; Figure 7). The detections of cis-1,2-DCE in the shallow aquifer generally correspond to “hot-spots” of PCE and TCE.

1,1-DCE was detected in two shallow aquifer zone groundwater samples (Figure 8). Neither of the detections exceeded the MCL for 1,1-DCE (7 µg/L); however, the detection limit for 1,1-DCE in the sample from MW-19 was elevated due to the magnitude of the PCE concentration in the sample. The 1,1-DCE concentration at this location may or may not exceed the MCL.

With the exception of the detected PCE concentrations in monitoring well MW-29 (5.4 µg/L), there were no exceedances of VOC MCLs in groundwater samples collected from off-Site wells screened in the shallow aquifer zone.

Indicator Parameters

Groundwater quality indicator parameters were monitored for all shallow monitoring wells during the groundwater purging process and recorded on the Field Data Logs for Groundwater Sampling, which are included in Appendix A. Select indicator parameters are summarized in the inset table below, along with their observed ranges and their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, dissolved oxygen is in the favorable range for the reductive pathway in three shallow monitoring wells sampled in April 2017 (i.e., MW-10, MW-15, and MW-21). ORP is also favorable at MW-15. Nitrate and pH were within the favorable range at down-gradient off-site wells MW-28 and MW-29. However, the low pH and elevated ORP levels observed over much of the shallow aquifer zone may inhibit natural degradation of chlorinated VOCs. Ethene and ethane, the ultimate end-products of reductive dechlorination, were not detected in the three shallow wells analyzed in spring 2017 (i.e., MW-27, MW-28, and MW-29).

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	3.80	6.70	4.55	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.21	8.46	3.85	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
Ferrous Iron (mg/L)	0.00	0.07	0.03	>1 mg/L Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions
ORP (mV)	-33.1	389.0	274.2	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely
Chloride (µg/L)	1,900	8,400	5,300	>2X background - Daughter product of organic chlorine
Nitrate (µg/L)	650	1,700	1,100	<1,000 µg/L - At higher concentrations may compete with reductive pathway
Nitrite (µg/L)	ND	ND	ND	
Sulfate (µg/L)	1,800	12,000	6,900	<20,000 µg/L - At higher concentrations may compete with reductive pathway
TOC (µg/L)	360	720	540	>20,000 µg/L - Carbon and energy source; drives dechlorination; can be natural or anthropogenic
Methane (µg/L)	0.17	0.43	0.34	<500 µg/L - VC oxidizes >500 µg/L - Ultimate reductive daughter product, VC Accumulates
Ethane (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene
Ethene (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene

* - from the *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water* (USEPA, 1998).
ND - not detected

Data Trends

As shown in the table of historic VOC results (Appendix C) and the trend plots (Appendix D), the VOC concentrations in many wells have decreased with time from their highest values. For instance, the PCE

concentration in MW-9 has decreased from a maximum of 7,500 µg/L detected in December 2003, was relatively stable with concentrations between 500 µg/L and 1800 µg/L between May 2012 and October 2016, and is now at a historic low concentration of 326 µg/L. Similarly, PCE concentrations in MW-10 have decreased from a maximum of 5,800 µg/L detected in December 2003 to values less than 70 µg/L since April 2015, with a current concentration of 51.6 µg/L. The PCE concentration in MW-1, located adjacent to the Former PCE Secondary Containment Area, has decreased from a historic high of 15,000 µg/L in June 2003 and has been relatively stable with concentrations between 380 µg/L and 785 µg/L since October 2014, with a current concentration of 607 µg/L.

Other wells, such as MW-3, located immediately downgradient of the Former PCE UST and the Former PCE Secondary Containment Area, exhibit mixed trend results. The PCE concentration in MW-3 has decreased from a high of 391 µg/L in October 2010 to an estimated value of 0.92 µg/L in April 2015. However, the PCE concentration in MW-3 currently appears to be on an increasing trend, with a current value of 199 µg/L.

The VOC concentrations in groundwater from MW-21, located near the Former PCE UST, have been relatively stable with time since the well was installed (i.e., detected PCE concentrations of 13,200 µg/L to 16,300 µg/L between March 2014 and April 2016), but decreased to 181 µg/L during the October 2016 event. The current concentration for this well is similar to previous results, but represents a new high concentration at 18,000 µg/L.

Concentrations of PCE in groundwater from MW-19, located near the northern-most Former PCE Degreaser, exhibited an increasing trend between October 2014 (14,000 µg/L) and October 2016 (34,600 µg/L). The current concentration of MW-19 has decreased to 24,600 µg/L. The detected PCE concentration in down-gradient well MW-24, located on the western edge of the property, has increased from 344 µg/L in December 2015 to 2070 µg/L in April 2017. This may be due to migration of mass from the hot-spot near MW-19, but it is too early to tell for certain. Other wells, such as MW-20, located near the southern-most Former PCE Degreaser, exhibit detected PCE concentration trends that fluctuate with groundwater elevation changes (i.e. the concentrations decrease when water levels are low and increase when water levels are higher). This may indicate residual VOCs in the vadose zone near former source areas.

Deeper Aquifer Zone

VOCs

Fifteen groundwater samples were collected from deeper aquifer zone groundwater during the spring 2017 monitoring event, resulting in ten VOCs [1,1,1-TCA, 1,1-DCE, 4-methyl-2-pentanone, bromodichloromethane, chloroform, cis-1,2-DCE, ethylbenzene, PCE, TCE, and xylenes (total)] that were

detected (Table 3). Of these compounds, PCE, TCE, and 1,1-DCE exceeded their respective MCLs in one or more samples.

PCE was detected in 11 deeper aquifer zone groundwater samples (MW-3D, MW-12D, MW-13D, MW-14D, MW-21D, MW-22D, MW-25D, MW-26D, MW-30D, MW-31D, and MW-32D) and groundwater concentrations exceeded the MCL (5 µg/L) in all 11 of these samples (Figure 9). Detected PCE concentrations were highest in the deeper limestone aquifer down-gradient of the southeast corner of the main building, down-gradient of areas where PCE has been used historically on-Site (223 µg/L at MW-3D). PCE concentrations exceeded the MCL (5 µg/L) in off-Site down-gradient wells MW-14D (84.6 µg/L), MW-22D (96.6 µg/L), MW-25D (105 µg/L), MW-26D (75.2 µg/L), MW-30D (75.2 µg/L), MW-31D (89.2 µg/L), and MW-32D (25 µg/L).

TCE concentrations were detected in nine samples from the deeper aquifer zone in spring 2017, but only one of the detected concentrations, 8.1 µg/L in the sample from MW-3D, exceeded the MCL (5 µg/L; Figure 10). TCE was also detected in off-Site down-gradient wells MW-14D, MW-22D, MW-25D, MW-26D, MW-30D, MW-31D, and MW-32D but at low concentrations below the MCL.

Cis-1,2-DCE was detected in seven samples from deeper aquifer zone groundwater during the spring 2017 monitoring event (MW-3D, MW-14D, MW-21D, MW-22D, MW-25D, MW-26D, MW-30D), but none of the detected concentrations exceeded the MCL for cis-1,2-DCE (70 µg/L; Figure 11).

1,1-DCE was detected in 11 deeper aquifer monitoring wells (MW-3D, MW-12D, MW-13D, MW-14D, MW-21D, MW-22D, MW-25D, MW-26D, MW-30D, MW-31D, and MW-32D). The detected concentration in MW-3D (8 µg/L) exceeded the MCL for 1,1-DCE (7 µg/L; Figure 12).

Other than PCE, the groundwater contaminant plumes in the deeper aquifer are delineated off-Site by non-detects or concentrations below their respective MCLs.

There were no detections of VOCs in the two deep sandstone aquifer groundwater samples collected (MW-3D1 and MW-15D1).

Indicator Parameters

Groundwater quality indicator parameters were monitored for all shallow monitoring wells during the groundwater purging process and recorded on the Field Data Logs for Groundwater Sampling, which are included in Appendix A. Select indicator parameters are summarized in the inset table below, along with their observed ranges and their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, measured pH values were favorable in all deeper aquifer monitoring wells. ORP values are also favorable in down-gradient wells MW-14D, MW-15D, MW-15D1, MW-21D,

MW-30D, MW-31D, and MW-32D. However, limited areas with favorable dissolved oxygen concentrations (e.g., MW-15D1) may inhibit degradation.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	5.02	8.40	7.45	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.29	4.94	2.33	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
Ferrous Iron (mg/L)	0.04	0.20	0.11	>1 mg/L Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions
ORP (mV)	-286.4	294.1	32.6	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely
Chloride (µg/L)	8,400	9,800	9,270	>2X background - Daughter product of organic chlorine
Nitrate (µg/L)	850	1,100	960	<1,000 µg/L - At higher concentrations may compete with reductive pathway
Nitrite (µg/L)	90	90	90	
Sulfate (µg/L)	4,900	7,400	6,000	<20,000 µg/L - At higher concentrations may compete with reductive pathway
TOC (µg/L)	520	1,400	817	>20,000 µg/L - Carbon and energy source; drives dechlorination; can be natural or anthropogenic
Methane (µg/L)	0.68	1.4	0.93	<500 µg/L - VC oxidizes >500 µg/L - Ultimate reductive daughter product, VC Accumulates
Ethane (µg/L)	0.61	0.61	0.61	>10 µg/L - Daughter product of VC/ethene
Ethene (µg/L)	0.44	0.44	0.44	>10 µg/L - Daughter product of VC/ethene

* - from the *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water* (USEPA, 1998).

ND - not detected

Data Trends

As with the shallow aquifer zone, the historic VOC results (Appendix C) and trend plots (Appendix D) for deeper groundwater show that the VOC concentrations in many wells have decreased with time from their highest values. For instance, the PCE concentration in MW-3D has decreased from a maximum of 764 µg/L detected in April 2010, has been trending between approximately 200 µg/L and 380 µg/L since March 2014, and has a current concentration of 223 µg/L. Similarly, PCE concentrations in MW-21D have decreased from 283 µg/L in March 2014 to 74.6 µg/L in April 2017. In other wells, such as down-gradient wells MW-14D and MW-25D, PCE concentrations have remained fairly consistent since installation of the wells.

PCE concentrations in MW-12D have decreased from a maximum of 451 µg/L detected in April 2010 to values between 12 µg/L and 140 µg/L since May 2011, with a recent increase to the current concentration of 292 µg/L. PCE concentrations in MW-13D have decreased from a maximum of 292 µg/L in April 2010 and have been relatively steady at less than 100 µg/L since May 2011, until a recent increase to 151 µg/L in April 2016 and to 298 µg/L in October 2016. The current PCE concentration in MW-13D is 168 µg/L. The recent increases in PCE in the deeper, down-gradient monitoring wells may be a lagging response to increases observed in shallow monitoring wells near source areas in recent monitoring events.

VOC concentrations in some deeper aquifer wells, such as MW-13D, exhibit trends that correspond to water level fluctuations (Appendix D). Other wells, such as MW-14D and MW-21D, show no clear trend related to groundwater elevation or, in the case of off-Site down-gradient well MW-22D, trend opposite groundwater elevations (i.e., concentrations decrease when water levels increase) in some instances. It is unclear if the reduction in flow during periods of lower water levels simply leads to less dilution (i.e., higher concentrations in water) or if PCE trends are the result of lag-time in transport to the wells further down-gradient.

4.3 Investigation Derived Waste

Two drums of purge and decontamination water were generated as IDW during the semi-annual sampling activities and these are documented on the IDW management form in Appendix A. One composite IDW water sample was collected from the drum for analysis of VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270D, and metals by USEPA Methods 6010C and 7470B. IDW sample results were screened against maximum concentration for the Toxicity Characteristic listed in Code of Federal Regulations (40CFR§261.24). The results are summarized in Table 4. These results were used to generate waste profiles and identify appropriate disposal options for the IDW with a UTC-approved disposal facility. UTC Delavan Spray Technologies Site personnel are managing the disposal of IDW generated during the semi-annual monitoring event.

4.4 Quality Assurance / Quality Control

The analytical data (Appendix B) associated with the semi-annual sampling were validated in accordance with the procedures outlined in the *RI Work Plan* (H&H, 2013). Quality assurance / quality control (QA/QC) sample results are presented in Table 5 and data qualifiers added to the analytical data as a result of the validation process are defined in Table 6. The data assessment reports (DARs; Appendix B) explain data qualifiers added to the sample results as a result of the validation process.

The result for 2,4-dinitrophenol in sample IDW-1 was qualified “/M/m” due to low recovery in the associated matrix spike sample below the established criteria of 15-160% (13%). These qualifiers indicate the results should be considered biased low. The results for 2,4-dinitrophenol in sample IDW-1 was qualified “/M/D” due to the relative percent difference between the matrix spike and matrix spike duplicate samples exceeding the established criteria of 35% (37%). These qualifiers indicate imprecision with laboratory methodology, instrumentation, or matrix interference. For all other samples and analytes, results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

The QC excursions encountered during the validation of these data sets did not result in the rejection of any data. Therefore, the data associated with this event should be considered compliant and adequate for its intended use.

Per the work plan, QA/QC samples collected include field duplicate samples, trip blank samples, and matrix spike/matrix spike duplicate (MS/MSD) samples. The results of these samples are discussed in the following sections. All duplicate, MS/MSD, and trip blank samples were analyzed by Accutest Laboratories located in Orlando, Florida.

Field Duplicates

Duplicate samples, designated with an “-A” suffix, were collected at the frequency of one per ten primary samples for groundwater samples. The results of the primary and field duplicate groundwater samples are provided in Table 5. During the validation process, no qualifiers were added to the data as a result of the relative percent difference (RPD) between the primary and field duplicate samples.

Trip Blanks

Trip blank samples, designated with a “-C” suffix, were submitted daily for coolers containing an aqueous sample for the analysis of VOCs. The results of the trip blank samples are provided in Table 5. Methylene chloride was detected at low, estimated concentrations in both trip blank samples; however, it was not detected in any of the primary samples. Therefore, no flags were added to primary samples in Table 3 based on the trip blank analyses.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

MS/MSD samples were collected at a frequency of one per twenty primary samples and are included in the analytical data packages provided in Appendix B; however, these results were not tabulated as the information only pertains to the primary sample with which the MS/MSD is associated. As mentioned above, results 2,4-dinitrophenol in sample IDW-1 were qualified “/M/m” due to low recovery in the associated matrix spike sample and results from 2,4-dinitrophenol in sample IDW-1 were qualified “/M/D” due to the relative percent difference between the matrix spike and matrix spike duplicate samples exceeding the established criteria.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are submitted based on the evaluation of the spring 2017 semi-annual monitoring results and a limited comparison to previous sampling results:

- Shallow water levels were up to 2.8 feet lower than those collected during the spring 2016 groundwater monitoring event (April 2016) and, with the exception of the wells near Half Moon Branch, approximately 0.1 feet to 2.6 feet lower than those measured during the fall 2016 groundwater monitoring event (October 2016). The shape of the potentiometric surfaces and groundwater flow patterns in both the shallow and deeper aquifer zones are similar to those observed in the fall 2016 monitoring event and previous investigations. Newly installed wells have helped to define the flow directions in off-site areas down-gradient of the Site between the western Site boundary and Halfmoon Branch.
- Concentrations of VOCs in the main plume in the shallow aquifer appear to be delineated on-site and bounded by low detections of PCE in newly installed off-site wells MW-27 and MW-28. The detected concentration of PCE in newly installed, off-site monitoring well MW-29 appears to be disconnected from the main plume (Figure 5). Additional monitoring is needed to evaluate this isolated detection of PCE.
- With the exception of PCE, VOCs are delineated in deeper aquifer groundwater. PCE is the only VOC detected off-site in deeper aquifer groundwater. As illustrated on Figure 9, PCE occurs in groundwater at similar concentrations above the MCL to the south / southwest of the site at monitoring well locations MW-22D, MW-25D, MW-30D, and MW-31D, and at slightly lower concentrations at MW-32D. The occurrence of PCE at these well locations is consistent with the inferred groundwater flow direction. The recent investigation work and newly installed wells indicate that the PCE plume is migrating south / southwest of the existing well network and additional delineation will be required.
- Detected concentrations of PCE in groundwater samples from the following monitoring wells were higher than those detected in the fall 2016 monitoring event:
 - o MW-1 (in the vicinity of the Former PCE Secondary Containment);
 - o MW-3 (down-gradient of the Former PCE UST);
 - o MW-12D (located down-gradient of the Site to the west);
 - o MW-21 (located immediately downgradient from the Former PCE UST); and
 - o MW-24 (on the western Site boundary).

For example, in on-Site wells MW-1 and MW-3, the detected PCE concentrations increased from 410 µg/L to 607 µg/L and from 91.6 µg/L to 199 µg/L, respectively. The PCE concentration detected in MW-21 increased from 181 µg/L to 18,000 µg/L, which is a new maximum value for this well. The PCE concentration detected in MW-24 increased from 1,340 µg/L to 2,070 µg/L and

the PCE concentration in MW-12D increased from 69.2 µg/L to 98.6 µg/L. These increases may be a lagging response/migration of concentrations after recent increases at the hot spot at MW-19.

- PCE concentrations decreased compared to the fall 2016 monitoring event in groundwater samples from monitoring wells MW-3D (331 µg/L to 223 µg/L), MW-8 (35.8 µg/L to 18.8 µg/L), MW-9 (685 µg/L to 326 µg/L), MW-13D (298 µg/L to 168 µg/L), MW-19 (34,600 µg/L to 24,600 µg/L), MW-20 (503 µg/L to 438 µg/L), MW-21D (169 µg/L to 74.6 µg/L), MW-22D (122 µg/L to 96.6 µg/L), and MW-25D (125 µg/L to 105 µg/L). For some of these wells (i.e., MW-8, MW-21D, MW-22D, and MW-25D), this may be as a result of normal seasonal fluctuation that has been observed in the data. However, many of these, such as MW-3D, MW-8, and MW-21D, have decreased from historic high concentrations and appear to be on a stable or decreasing trend.
- The detected concentrations of PCE degradations products (i.e., TCE and cis-1,2-DCE) were similar to those detected during the fall 2016 semi-annual groundwater monitoring event, with some exceptions. In MW-10, TCE increased from 13.5 µg/L to 44.3 µg/L while cis-1,2-DCE decreased from 146 µg/L to 41 µg/L. Cis-1,2-DCE increased from 22.9 µg/L to 52.7 µg/L in MW-24 and TCE increase from below the detection limit to 8.4 µg/L. Minor decreases in TCE and cis-1,2-DCE were also observed in MW-1, MW-3, and MW-20.
- VC has not been detected in any Site monitoring wells since October 2015 and was not detected in any monitoring wells during the spring 2017 groundwater monitoring event.

Based on the data collected and reviewed since the RI, water levels and groundwater VOC concentrations fluctuate over time in some areas of the Site. Many wells, including MW-13D, and MW-20, exhibit trends in PCE concentration that track with water level fluctuations. Other wells, such as MW-3D, MW-9, and MW-22D, exhibit mixed behavior with regard to VOC and water level trends. The cause for the observed trends is not completely clear and is complicated by the residual mass that has been documented to be present beneath the hot-spots under the building footprint (i.e., in the vicinity of the Former PCE Degreasers). UTC and AECOM recently completed a *Focused Feasibility Study Report* (AECOM, June 2017b) to look at remedial alternatives to treat the residual source areas beneath the building. This document is being submitted to SCDHEC concurrently with this report.. While AECOM and UTC acknowledge that is premature to complete a feasibility study for the entire Site before the plume is completely delineated, the Focused Feasibility Study is designed to provide the framework to begin addressing residual source areas while the delineation is being completed.

Data generated from prior sampling events in 2015 and 2016 and the Post RI Assessment revealed gaps in the delineation of the shallow and deep groundwater plumes associated with the Site. The *Groundwater Delineation Work Plan* was submitted to SCDHEC in September 2016 and implemented in late March through early May 2017 to address these data gaps. Based on the results from groundwater sampling of the newly installed wells, delineation is incomplete and the PCE plume is migrating south/southwest of the monitoring well network in the deeper limestone aquifer. Additional delineation

activities are expected to be scheduled following SCDHEC's review of this report and the *Groundwater Delineation Report* (AECOM, June 2017a).

In accordance with the monitoring requirement of the VCC, the next semi-annual sampling event is scheduled to occur in October 2017. Monitoring will be conducted in accordance with the schedule presented in the *Fall 2016 Semi-Annual Groundwater Monitoring Report* (AECOM, January 2017) and approved by SCDHEC in their correspondence dated February 13, 2017.

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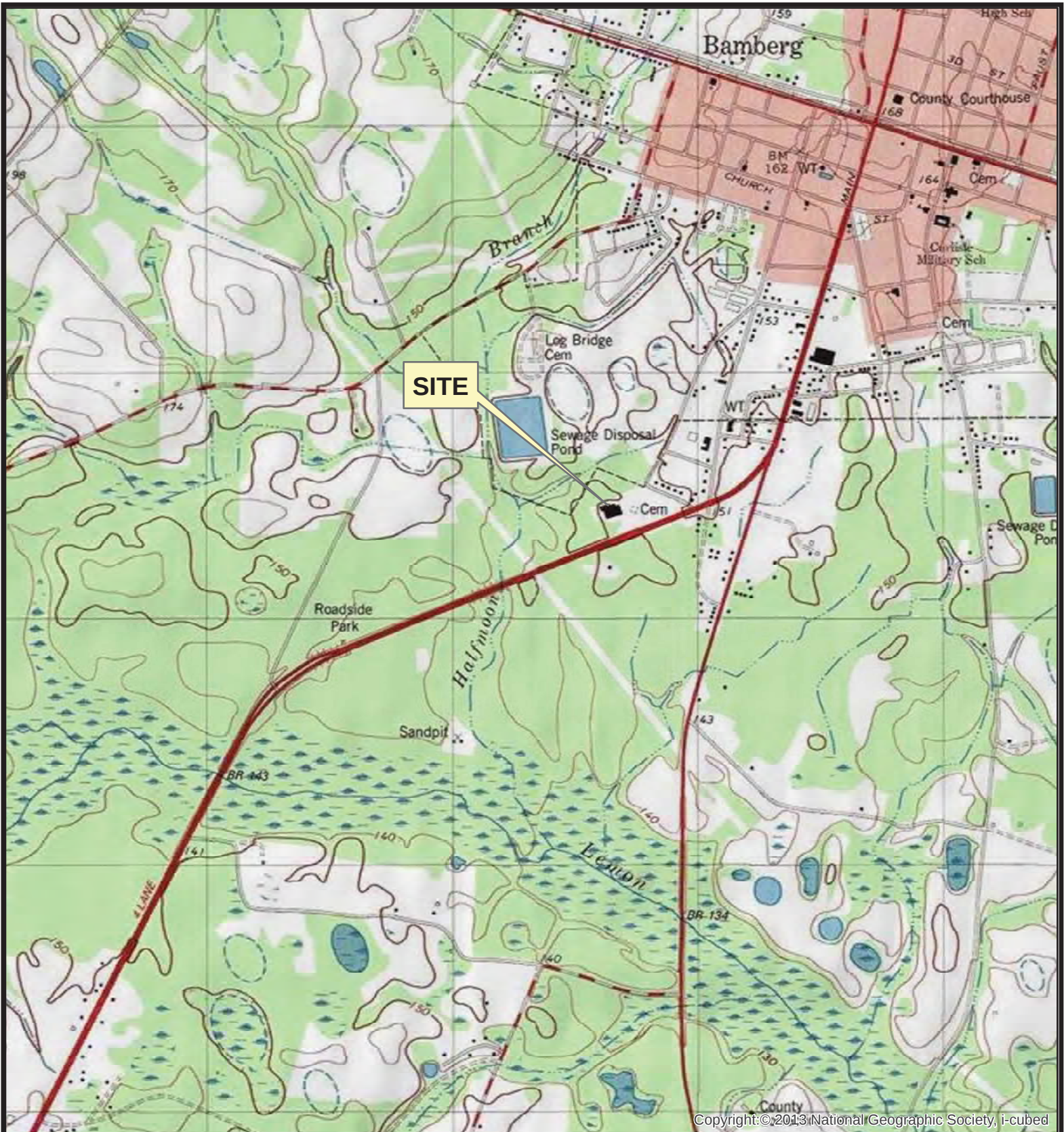
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FIGURES



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Feet

U.S.G.S. QUADRANGLE MAP
BAMBERG, SC 1979 (PHOTO REVISED 1987)

QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

AECOM

10 Patewood Drive, Building 6, Suite 500
Greenville, SC 29615
T: (864) 234-3000 F: (864) 234-3069

UTC Delavan Spray Technologies Site
Bamberg, South Carolina

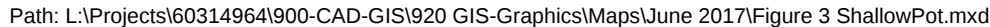
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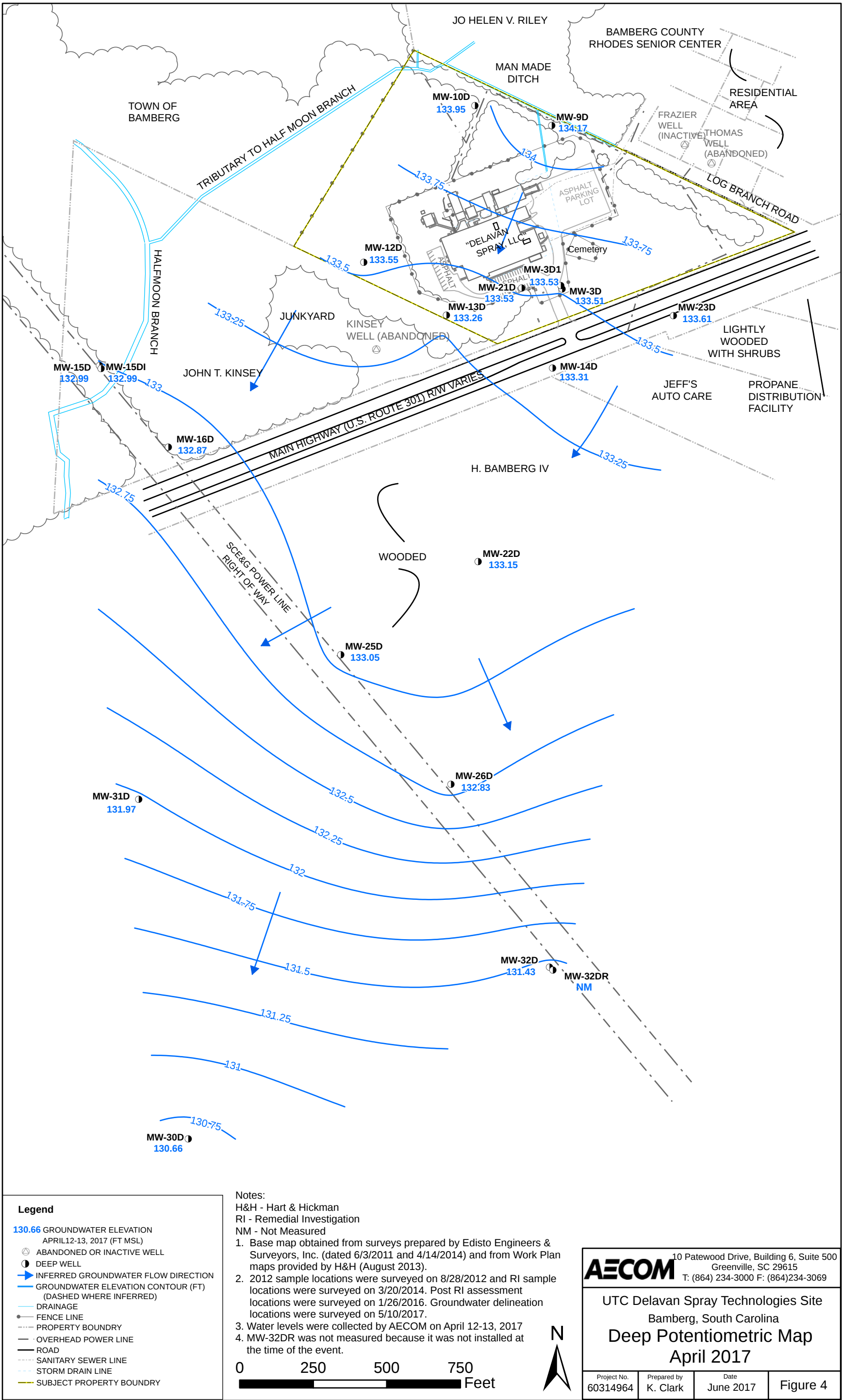
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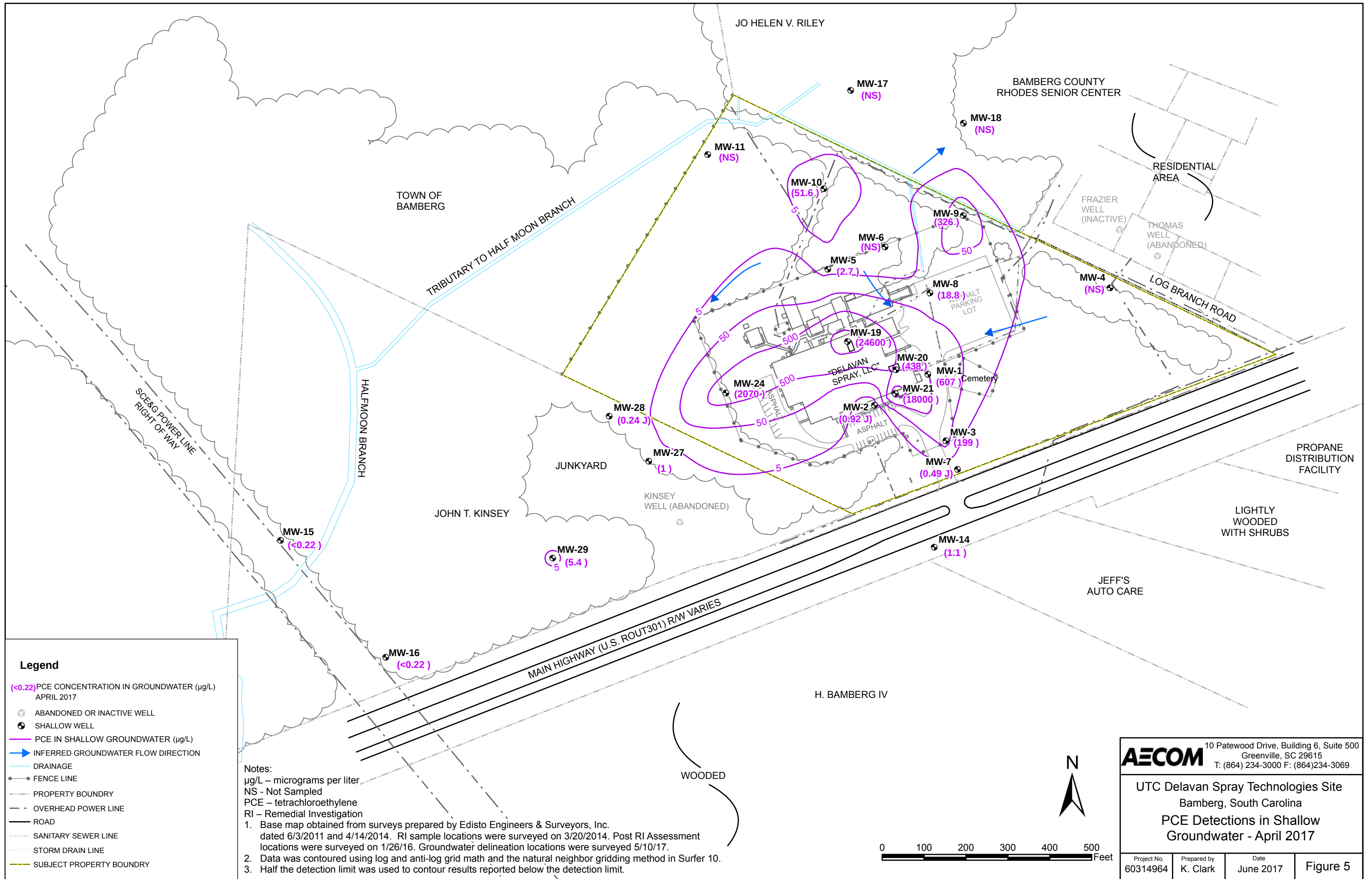
Prepared by
K. Clark

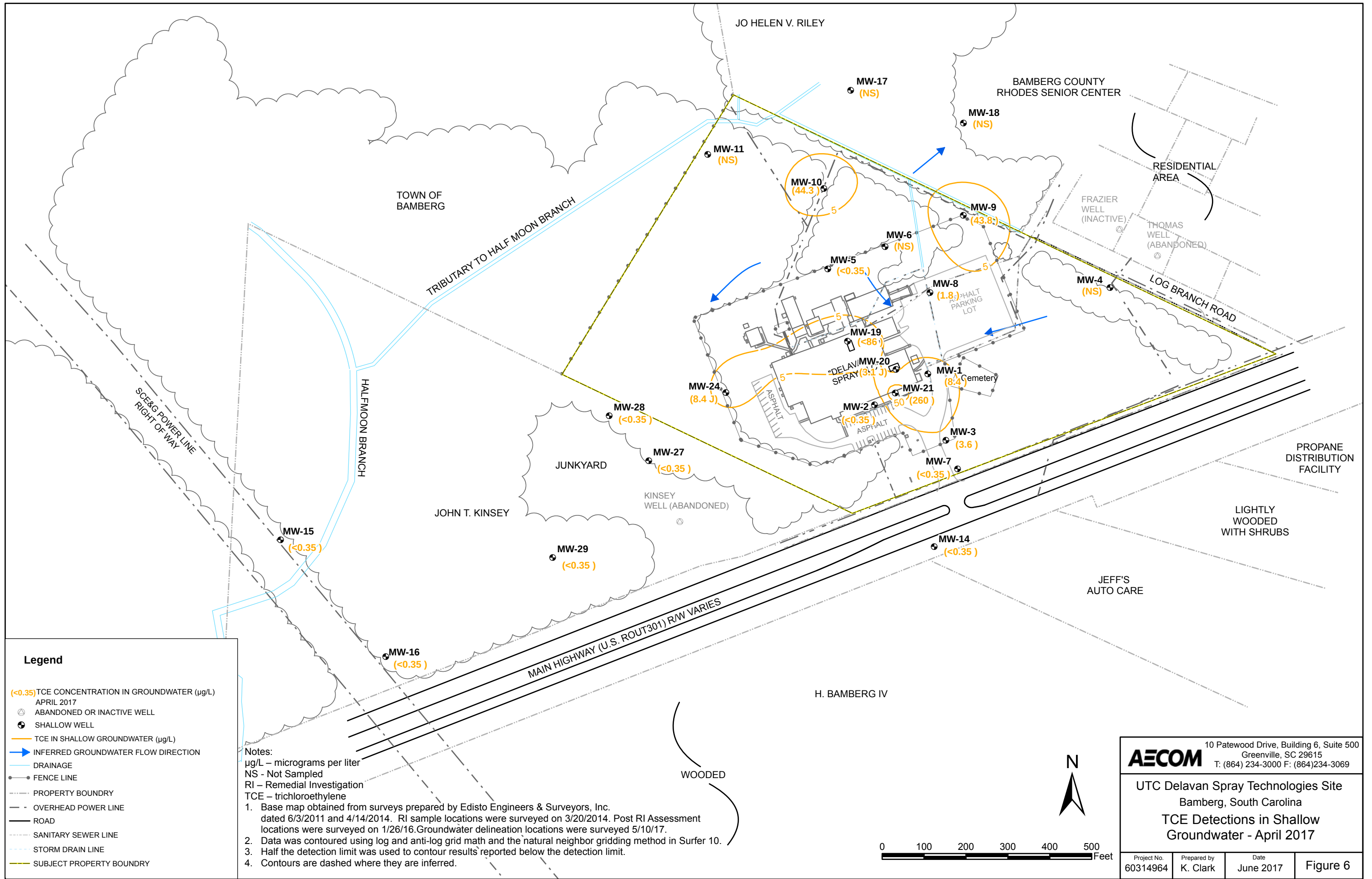
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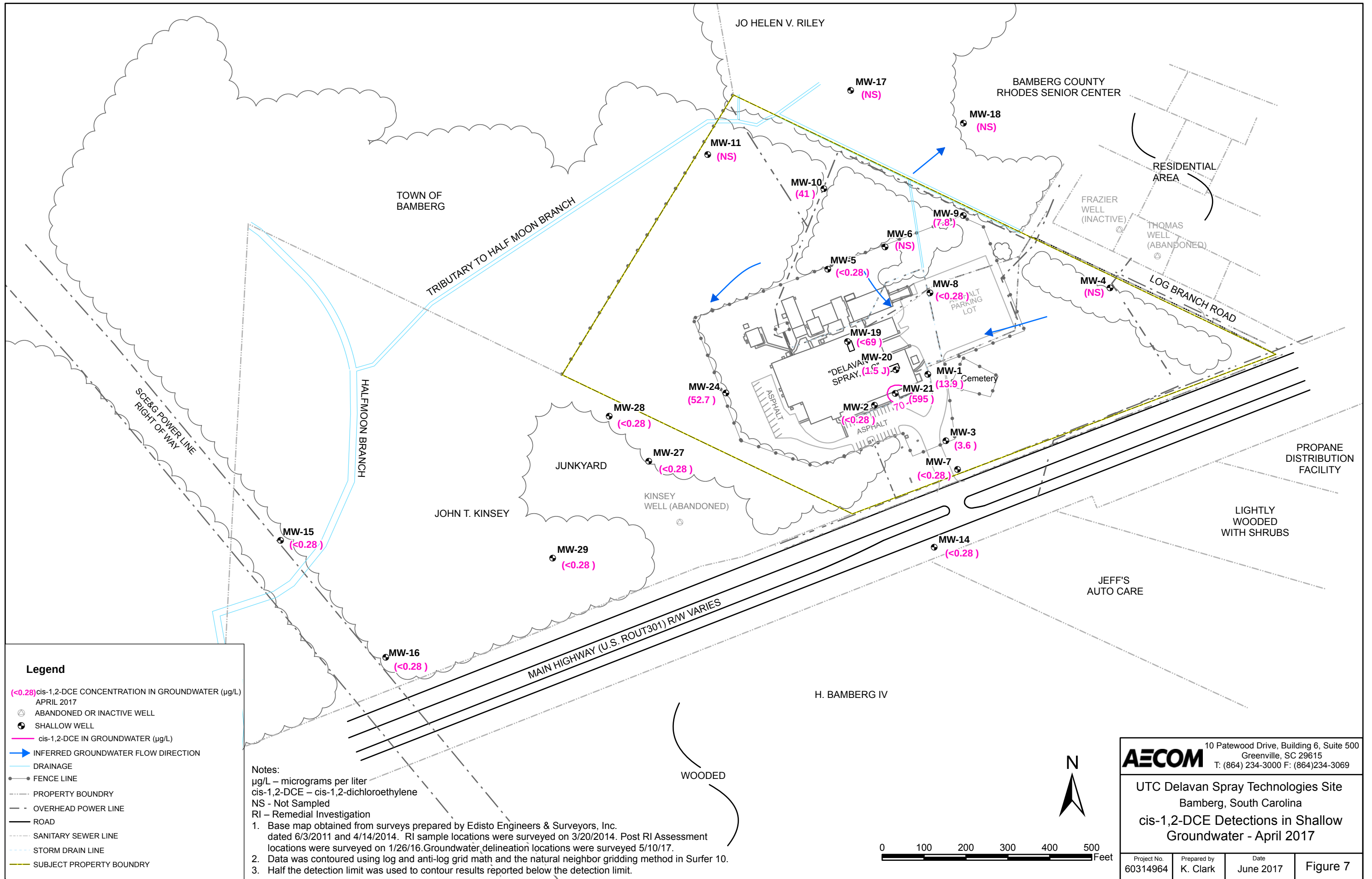
Figure 1

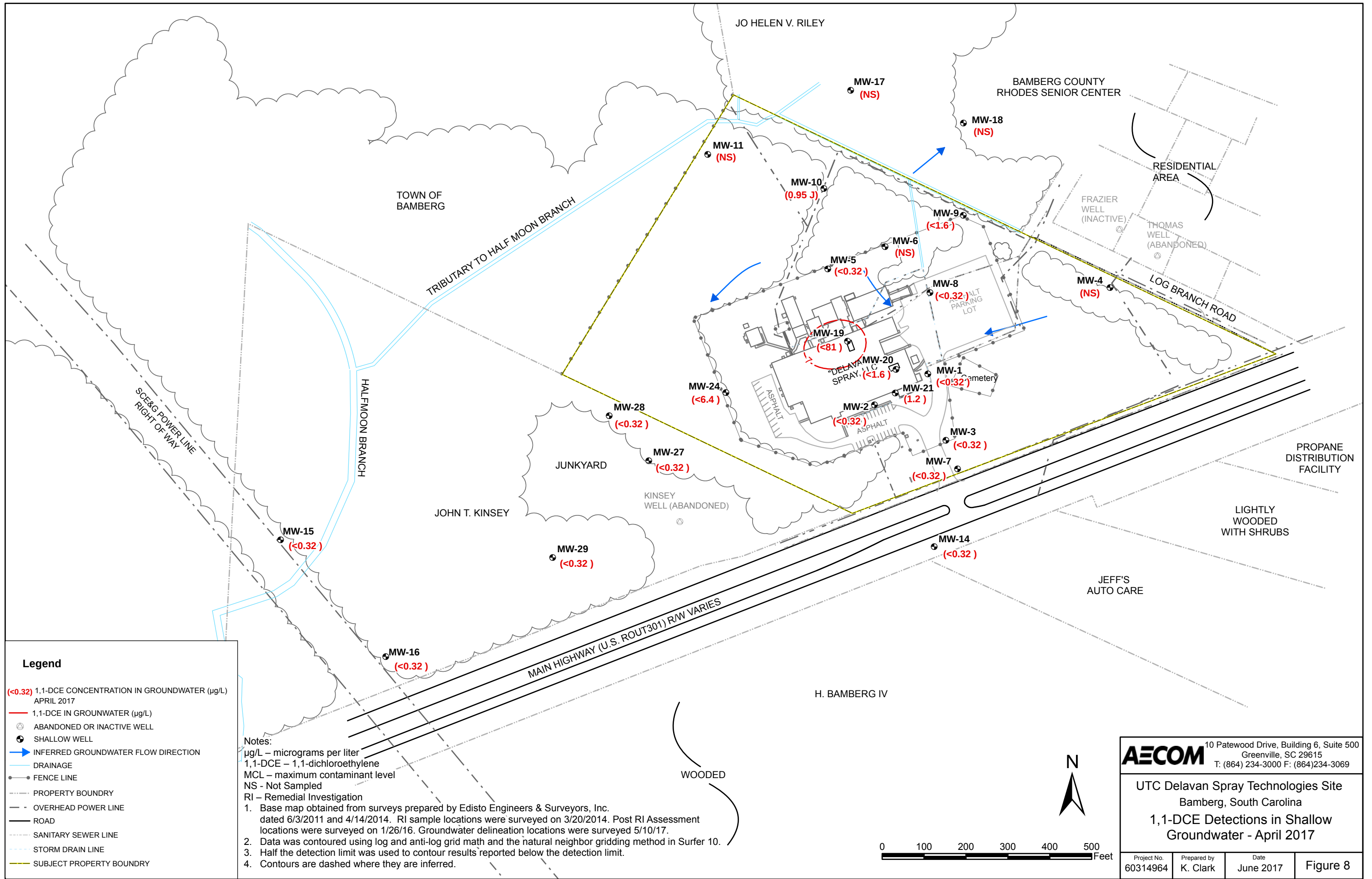


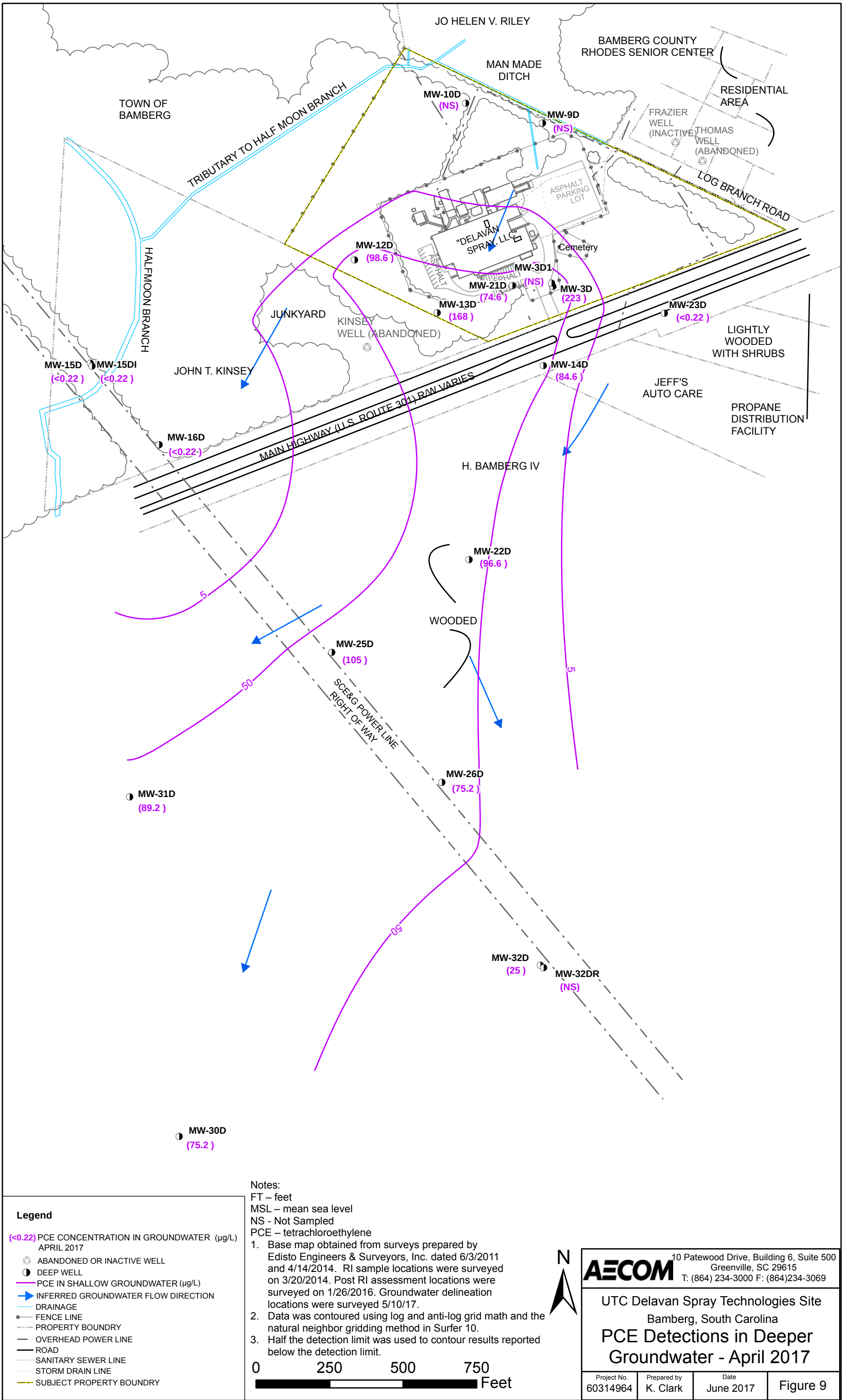


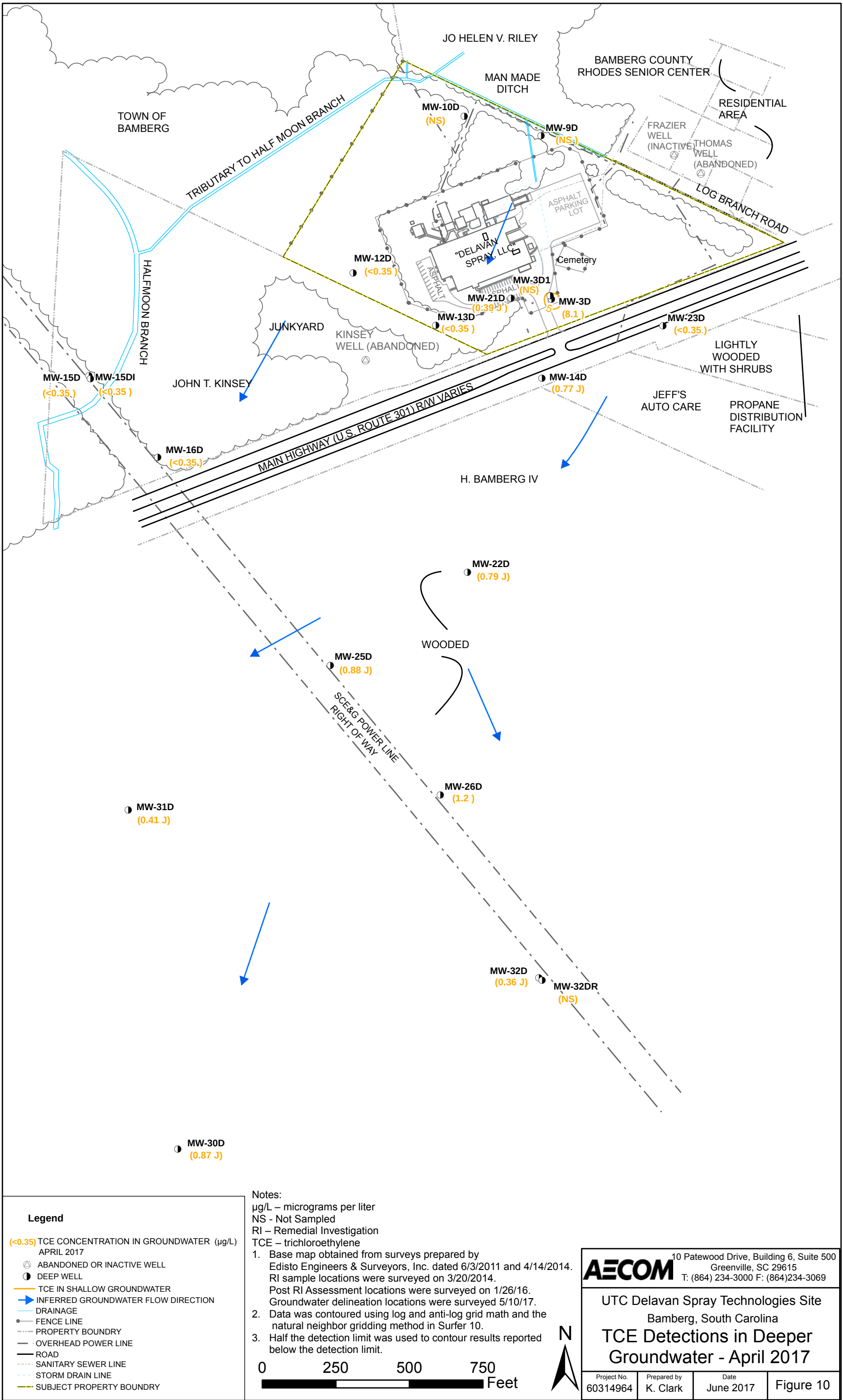


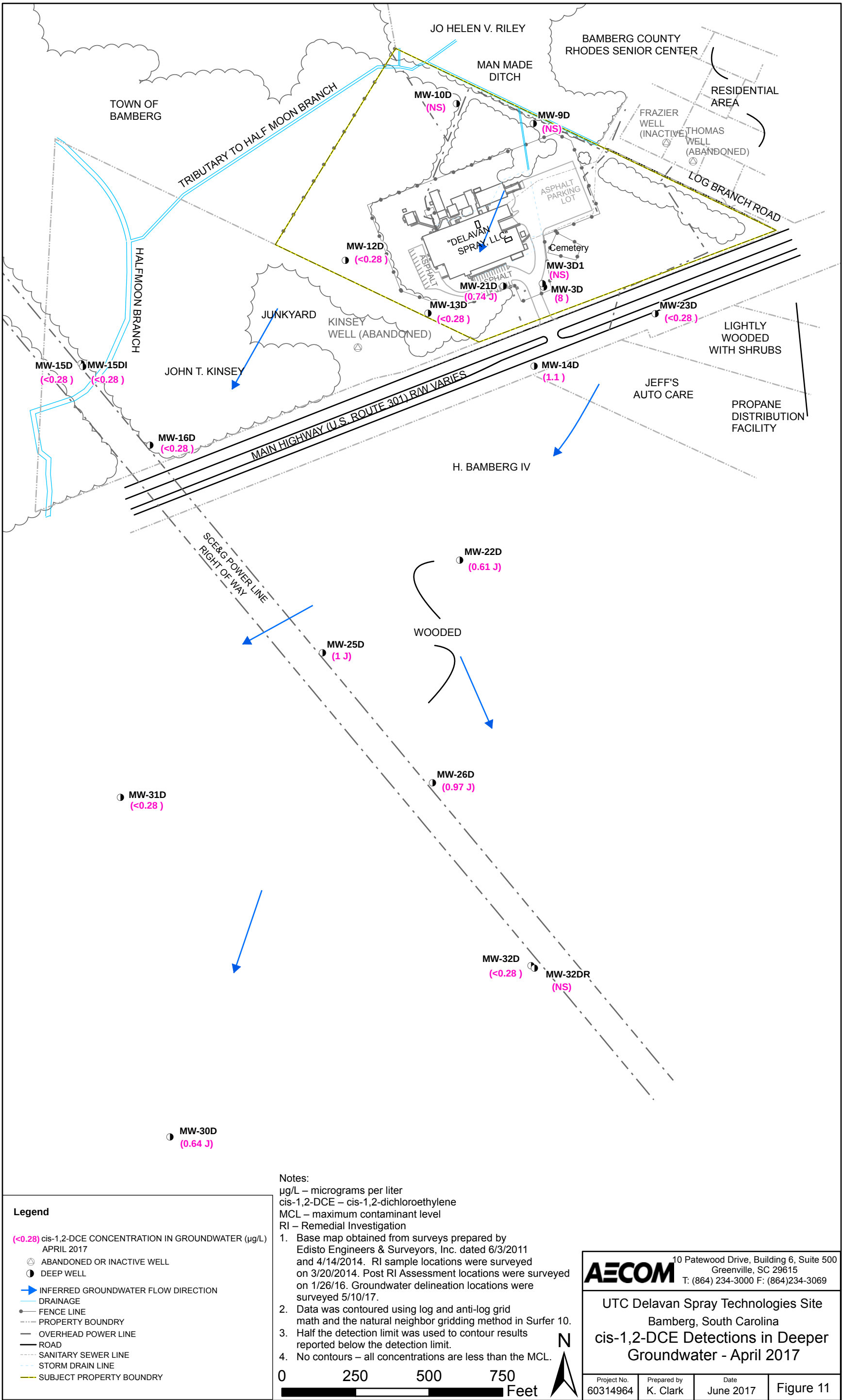


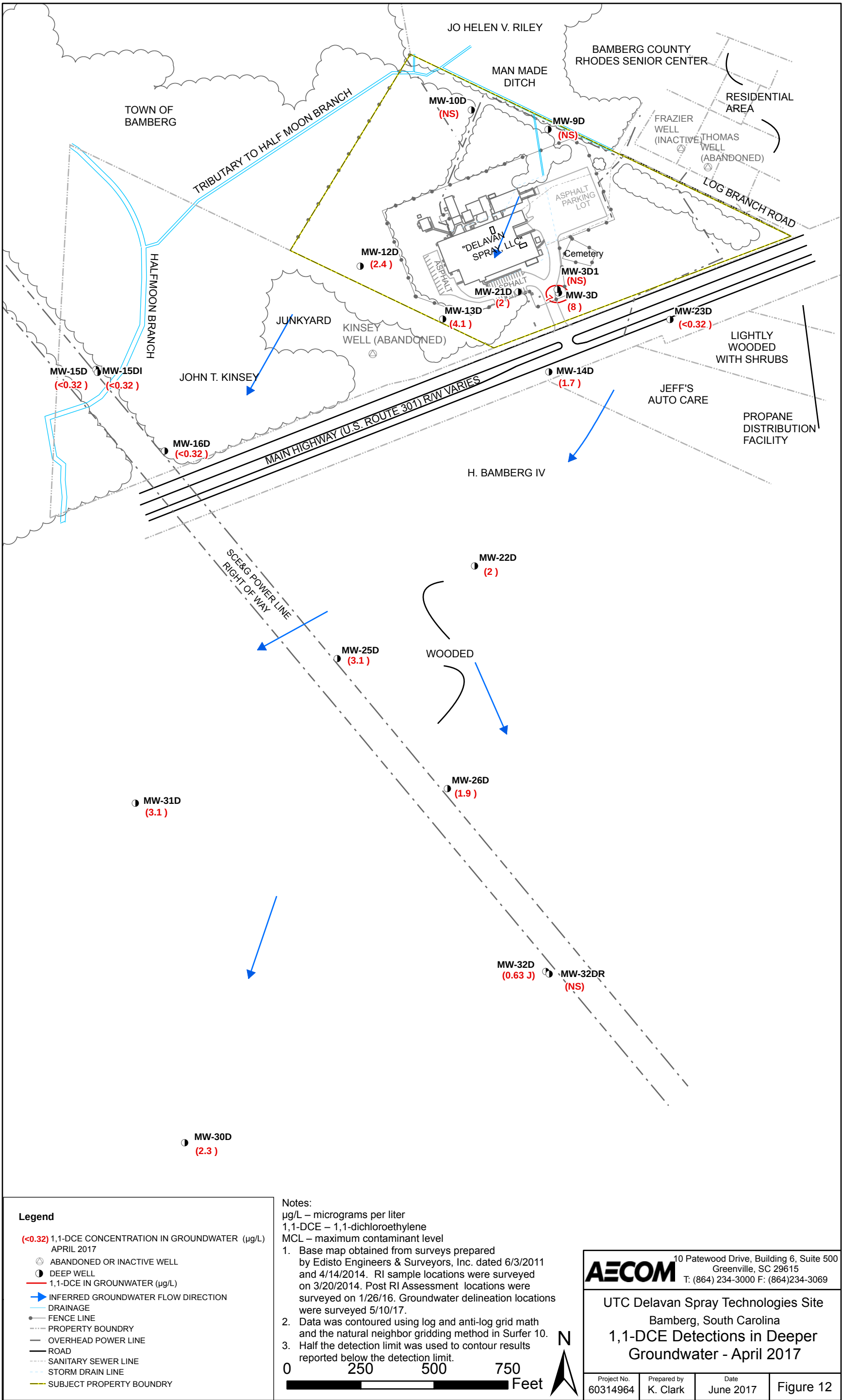












TABLES

Table 1
Groundwater Levels and Elevations
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Total Depth	Surface Casing Depth (ft bgs)	Screen Interval (ft bgs)	Aquifer Designation	Ground Surface Elevation	Top of Casing Elevation	6/5/2003		7/9/2003		12/31/2003		1/16/2004		3/14/2005		6/1/2005		9/20/2005	
							Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation
MW-1	18	--	3-18	Shallow	147.56	147.19	9.70	137.49	8.42	138.77	12.88	134.31	13.02	134.17	12.54	134.65	12.31	134.88	12.66	134.53
MW-2	18	--	3-18	Shallow	147.81	147.63	5.81	141.82	4.76	142.87	12.52	135.11	12.73	134.90	11.95	135.68	10.56	137.07	12.37	135.26
MW-3	18	--	3-18	Shallow	148.34	148.11	11.41	136.70	9.20	138.91	14.11	134.00	14.11	134.00	13.54	134.57	13.86	134.25	13.94	134.17
MW-3D	49	24	44-49	Deeper Limestone	148.28	148.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-3D1	85	65	75-85	Deep Sandstone	148.12	147.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-4	14	--	4-14	Shallow	147.30	147.03	4.11	142.92	3.59	143.44	10.38	136.65	10.63	136.40	9.24	137.79	10.23	136.80	11.44	135.59
MW-5	14	--	4-14	Shallow	145.34	145.46	4.72	140.74	3.68	141.78	10.87	134.59	10.81	134.65	8.74	136.72	9.77	135.69	10.51	134.95
MW-6	14	--	4-14	Shallow	143.45	143.22	2.40	140.82	2.30	140.92	8.09	135.13	7.29	135.93	6.44	136.78	6.38	136.84	8.24	134.98
MW-7	20	--	5-20	Shallow	149.25	149.03	NI	NI	NI	NI	14.88	134.15	14.93	134.10	13.97	135.06	14.45	134.58	14.52	134.51
MW-8	20	--	5-20	Shallow	145.95	145.66	NI	NI	NI	NI	12.06	133.60	12.17	133.49	11.97	133.69	12.14	133.52	13.07	132.59
MW-9	20	--	5-20	Shallow	144.11	143.89	NI	NI	NI	NI	9.82	134.07	9.55	134.34	8.45	135.44	7.61	136.28	10.57	133.32
MW-9D	49	24	44-49	Deeper Limestone	144.80	144.20	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-10	18	--	3-18	Shallow	142.56	142.19	NI	NI	NI	NI	7.48	134.71	7.52	134.67	5.19	137.00	6.02	136.17	7.51	134.68
MW-10D	48	30	43-48	Deeper Limestone	142.08	141.79	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-11	18	--	3-18	Shallow	143.77	143.16	NI	NI	NI	NI	8.00	135.16	8.12	135.04	7.48	135.68	7.87	135.29	8.90	134.26
MW-12D	50	30	40-50	Deeper Limestone	147.86	147.65	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-13D	50	30	40-50	Deeper Limestone	146.41	146.23	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-14	20	--	5-20	Shallow	147.05	146.90	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-14D	50	29	40-50	Deeper Limestone	147.11	146.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15	19	--	4-19	Shallow	136.13	135.73	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D	45	30	35-45	Deeper Limestone	135.93	135.59	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D1	85	65	75-85	Deep Sandstone	135.94	135.69	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16	19	--	4-19	Shallow	138.74	138.30	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16D	45	29	35-45	Deeper Limestone	138.70	138.38	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-17	28.4	--	13-28	Shallow	142.07	141.66	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-18	26.4	--	11-26	Shallow	145.68	145.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-19	20.15	--	5-20	Shallow	148.47	148.22	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-20	15.15	--	5-15	Shallow	148.50	148.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21	34.4	--	19-34	Shallow	148.43	147.97	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21D	53.4	31.5	43-53	Deeper Limestone	147.28	146.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-22D	48.4	36	38-48	Deeper Limestone	146.42	145.96	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-23D	50.4	34	40-50	Deeper Limestone	148.48	148.26	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-24	21	--	6-21	Shallow	148.52	147.85	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-25D	62	--	52-62	Deeper Limestone	139.30	139.21	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-26D	48	--	38-48	Deeper Limestone	143.83	143.64	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-27	29	--	19 - 29	Shallow	145.93	145.78	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-28	29	--	19 - 29	Shallow	146.35	146.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-29	29	--	19 - 29	Shallow	141.03	140.55	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-30D	60	--	50 - 60	Deeper Limestone	135.90	136.01	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-31D	60	--	50 - 60	Deeper Limestone	141.39	141.39	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-32D	60	--	50 - 60	Deeper Limestone	139.14	138.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-32DR	60	--	50 - 60	Deeper Limestone	139.20	138.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

Table 1
Groundwater Levels and Elevations
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Total Depth	Surface Casing Depth (ft bgs)	Screen Interval (ft bgs)	Aquifer Designation	Ground Surface Elevation	Top of Casing Elevation	12/12/2005		3/28/2006		6/26/2006		10/6/2006		1/12/2007		1/8/2008		11/4/2009	
							Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation
MW-1	18	--	3-18	Shallow	147.56	147.19	13.41	133.78	11.97	135.22	12.16	135.03	13.67	133.52	12.06	135.13	13.50	133.69	14.70	132.49
MW-2	18	--	3-18	Shallow	147.81	147.63	12.99	134.64	10.59	137.04	10.44	137.19	13.13	134.50	10.63	137.00	11.63	136.00	14.15	133.48
MW-3	18	--	3-18	Shallow	148.34	148.11	14.58	133.53	13.49	134.62	13.67	134.44	14.15	133.96	13.24	134.87	13.62	134.49	15.84	132.27
MW-3D	49	24	44-49	Deeper Limestone	148.28	148.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	16.10	132.02	17.30	130.82
MW-3D1	85	65	75-85	Deep Sandstone	148.12	147.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	17.11	130.82
MW-4	14	--	4-14	Shallow	147.30	147.03	11.81	135.22	7.53	139.50	9.26	137.77	11.82	135.21	7.79	139.24	9.53	137.50	13.52	133.51
MW-5	14	--	4-14	Shallow	145.34	145.46	11.30	134.16	6.74	138.72	8.74	136.72	11.57	133.89	7.33	138.13	9.09	136.37	12.70	132.76
MW-6	14	--	4-14	Shallow	143.45	143.22	8.29	134.93	4.17	139.05	6.30	136.92	9.46	133.76	4.90	138.32	6.10	137.12	10.09	133.13
MW-7	20	--	5-20	Shallow	149.25	149.03	15.11	133.92	13.91	135.12	14.22	134.81	14.99	134.04	13.23	135.80	14.20	134.83	15.93	133.10
MW-8	20	--	5-20	Shallow	145.95	145.66	12.81	132.85	11.17	134.49	12.32	133.34	13.67	131.99	11.62	134.04	12.85	132.81	14.35	131.31
MW-9	20	--	5-20	Shallow	144.11	143.89	9.33	134.56	6.91	136.98	8.98	134.91	11.60	132.29	7.41	136.48	8.17	135.72	11.54	132.35
MW-9D	49	24	44-49	Deeper Limestone	144.48	144.20	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	11.82	132.38	12.89	131.31
MW-10	18	--	3-18	Shallow	142.56	142.19	7.45	134.74	3.49	138.70	5.82	136.37	8.65	133.54	4.12	138.07	5.66	136.53	9.74	132.45
MW-10D	48	30	43-48	Deeper Limestone	142.08	141.79	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	9.45	132.34	10.68	131.11
MW-11	18	--	3-18	Shallow	143.77	143.16	8.63	134.53	6.84	136.32	8.01	135.15	9.26	133.90	7.30	135.86	7.89	135.27	10.01	133.15
MW-12D	50	30	40-50	Deeper Limestone	147.86	147.65	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	16.69	130.96
MW-13D	50	30	40-50	Deeper Limestone	146.41	146.23	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	15.55	130.68
MW-14	20	--	5-20	Shallow	147.05	146.90	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	15.03	131.87
MW-14D	50	29	40-50	Deeper Limestone	147.11	146.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	16.20	130.68
MW-15	18	--	4-19	Shallow	136.13	135.73	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D	45	30	35-45	Deeper Limestone	135.93	135.59	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D1	85	65	75-85	Deep Sandstone	135.94	135.69	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16	19	--	4-19	Shallow	138.74	138.30	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16D	45	29	35-45	Deeper Limestone	138.70	138.38	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-17	28.4	--	13-28	Shallow	142.07	141.66	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-18	26.4	--	11-26	Shallow	145.68	145.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-19	20.15	--	5-20	Shallow	148.47	148.22	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-20	15.15	--	5-15	Shallow	148.50	148.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21	34.4	--	19-34	Shallow	148.43	147.97	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21D	53.4	31.5	43-53	Deeper Limestone	147.28	146.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-22D	48.4	36	38-48	Deeper Limestone	146.42	145.96	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-23D	50.4	34	40-50	Deeper Limestone	148.48	148.26	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-24	21	--	6-21	Shallow	148.52	147.85	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-25D	62	--	52-62	Deeper Limestone	139.30	139.21	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-26D	48	--	38-48	Deeper Limestone	143.83	143.64	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-27	29	--	19 - 29	Shallow	145.93	145.78	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-28	29	--	19 - 29	Shallow	146.35	146.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-29	29	--	19 - 29	Shallow	141.03	140.55	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-30D	60	--	50 - 60	Deeper Limestone	135.90	136.01	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-31D	60	--	50 - 60	Deeper Limestone	141.39	141.39	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-32D	60	--	50 - 60	Deeper Limestone	139.14	138.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-32DR	60	--	50 - 60	Deeper Limestone	139.20	138.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

Table 1
Groundwater Levels and Elevations
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Total Depth	Surface Casing Depth (ft bgs)	Screen Interval (ft bgs)	Aquifer Designation	Ground Surface Elevation	Top of Casing Elevation	4/29/2010		10/25/2010		12/15/2010		5/23/2011		11/8/2011		5/8/2012		3/20/2014	
							Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation
MW-1	18	--	3-18	Shallow	147.56	147.19	12.20	134.99	14.38	132.81	15.17	132.02	13.29	133.90	14.88	132.31	13.05	134.14	11.02	136.17
MW-2	18	--	3-18	Shallow	147.81	147.63	11.50	136.13	13.70	133.93	14.84	132.79	12.88	134.75	14.51	133.12	12.94	134.69	10.25	137.38
MW-3	18	--	3-18	Shallow	148.34	148.11	13.81	134.30	14.56	133.55	15.84	132.27	14.01	134.10	15.65	132.46	13.93	134.18	12.15	135.96
MW-3D	49	24	44-49	Deeper Limestone	148.28	148.12	15.03	133.09	17.39	130.73	17.36	130.76	16.75	131.37	17.45	130.67	16.22	131.90	13.74	134.38
MW-3D1	85	65	75-85	Deep Sandstone	148.12	147.93	14.86	133.07	17.32	130.61	17.19	130.74	16.55	131.38	17.29	130.64	16.05	131.88	13.52	134.41
MW-4	14	--	4-14	Shallow	147.30	147.03	8.95	138.08	12.73	134.30	13.49	133.54	11.37	135.66	Dry	NA	9.44	137.59	4.7	142.33
MW-5	14	--	4-14	Shallow	145.34	145.46	9.50	135.96	12.31	133.15	13.51	131.95	11.05	134.41	13.45	132.01	8.97	136.49	4.76	140.70
MW-6	14	--	4-14	Shallow	143.45	143.22	6.50	136.72	10.00	133.22	11.32	131.90	8.40	134.82	11.15	132.07	6.20	137.02	3.04	140.18
MW-7	20	--	5-20	Shallow	149.25	149.03	14.30	134.73	15.33	133.70	15.89	133.14	14.65	134.38	15.73	133.30	14.39	134.64	11.87	137.16
MW-8	20	--	5-20	Shallow	145.95	145.66	11.79	133.87	14.35	131.31	14.52	131.14	13.50	132.16	14.60	131.06	12.88	132.78	10.27	135.39
MW-9	20	--	5-20	Shallow	144.11	143.89	6.81	137.08	11.65	132.24	12.55	131.34	9.20	134.69	12.60	131.29	6.25	137.64	4.87	139.02
MW-9D	49	24	44-49	Deeper Limestone	144.48	144.20	10.58	133.62	12.99	131.21	12.98	131.22	12.26	131.94	13.12	131.08	11.78	132.42	9.15	135.05
MW-10	18	--	3-18	Shallow	142.56	142.19	6.14	136.05	9.73	132.46	10.66	131.53	7.98	134.21	10.57	131.62	5.88	136.31	2.63	139.56
MW-10D	48	30	43-48	Deeper Limestone	142.08	141.79	8.38	133.41	10.76	131.03	10.76	131.03	10.02	131.77	10.89	130.90	9.59	132.20	6.99	134.80
MW-11	18	--	3-18	Shallow	143.77	143.16	8.15	135.01	9.98	133.18	10.92	132.24	9.11	134.05	10.82	132.34	8.39	134.77	6.39	136.77
MW-12D	50	30	40-50	Deeper Limestone	147.86	147.65	14.62	133.03	16.92	130.73	16.87	130.78	16.18	131.47	16.99	130.66	15.69	131.96	13.28	134.37
MW-13D	50	30	40-50	Deeper Limestone	146.41	146.23	13.33	132.90	15.65	130.58	15.61	130.62	14.99	131.24	15.71	130.52	14.44	131.79	12.02	134.21
MW-14	20	--	5-20	Shallow	147.05	146.90	12.69	134.21	13.99	132.91	14.67	132.23	13.38	133.52	14.52	132.38	12.97	133.93	10.49	136.41
MW-14D	50	29	40-50	Deeper Limestone	147.11	146.88	14.01	132.87	16.34	130.54	16.26	130.62	15.69	131.19	16.37	130.51	15.09	131.79	12.71	134.17
MW-15	18	--	4-19	Shallow	136.13	135.73	NI	NI	NI	NI	NI	NI	5.44	130.29	6.68	129.05	3.77	131.96	1.71	134.02
MW-15D	45	30	35-45	Deeper Limestone	135.93	135.59	NI	NI	NI	NI	NI	NI	4.55	131.04	5.23	130.36	4.15	131.44	1.92	133.67
MW-15D1	85	65	75-85	Deep Sandstone	135.94	135.69	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	4.25	131.44	2.04	133.65
MW-16	19	--	4-19	Shallow	138.74	138.30	NI	NI	NI	NI	NI	NI	6.40	131.90	8.15	130.15	5.26	133.04	2.54	135.76
MW-16D	45	29	35-45	Deeper Limestone	138.70	138.38	NI	NI	NI	NI	NI	NI	7.49	130.89	8.30	130.08	7.05	131.33	4.79	133.59
MW-17	28.4	--	13-28	Shallow	142.07	141.66	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	1.90	139.76
MW-18	26.4	--	11-26	Shallow	145.68	145.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	9.07	136.34
MW-19	20.15	--	5-20	Shallow	148.47	148.22	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	11.35	136.87
MW-20	15.15	--	5-15	Shallow	148.50	148.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	11.11	137.08
MW-21	34.4	--	19-34	Shallow	148.43	147.97	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	11.42	136.55
MW-21D	53.4	31.5	43-53	Deeper Limestone	147.28	146.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	12.51	134.41
MW-22D	48.4	36	38-48	Deeper Limestone	146.42	145.96	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	11.96	134.00
MW-23D	50.4	34	40-50	Deeper Limestone	148.48	148.26	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	13.73	134.53
MW-24	21	--	6-21	Shallow	148.52	147.85	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-25D	62	--	52-62	Deeper Limestone	139.30	139.21	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-26D	48	--	38-48	Deeper Limestone	143.83	143.64	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-27	29	--	19 - 29	Shallow	145.93	145.78	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-28	29	--	19 - 29	Shallow	146.35	146.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-29	29	--	19 - 29	Shallow	141.03	140.55	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-30D	60	--	50 - 60	Deeper Limestone	135.90	136.01	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-31D	60	--	50 - 60	Deeper Limestone	141.39	141.39	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-32D	60	--	50 - 60	Deeper Limestone	139.14	138.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-32DR	60	--	50 - 60	Deeper Limestone	139.20	138.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

Table 1
Groundwater Levels and Elevations
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Total Depth	Surface Casing Depth (ft bgs)	Screen Interval (ft bgs)	Aquifer Designation	Ground Surface Elevation	Top of Casing Elevation	10/27/2014		4/20/2015		10/26/2015		4/11/2016		10/24/2016		4/12/2017		4/13/2017	
							Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation
MW-1	18	--	3-18	Shallow	147.56	147.19	13.53	133.66	10.81	136.38	10.51	136.68	11.40	135.79	11.05	136.14	12.38	134.81	NM	NM
MW-2	18	--	3-18	Shallow	147.81	147.63	13.63	134.00	9.64	137.99	8.61	139.02	10.43	137.20	10.11	137.52	12.04	135.59	NM	NM
MW-3	18	--	3-18	Shallow	148.34	148.11	14.16	133.95	12.62	135.49	12.73	135.38	13.19	134.92	13.08	135.03	13.94	134.17	NM	NM
MW-3D	49	24	44-49	Deeper Limestone	148.28	148.12	16.07	132.05	13.48	134.64	13.89	134.23	14.04	134.08	13.96	134.16	14.61	133.51	14.67	133.45
MW-3D1	85	65	75-85	Deep Sandstone	148.12	147.93	15.89	132.04	13.25	134.68	13.69	134.24	13.83	134.10	13.75	134.18	14.40	133.53	NM	NM
MW-4	14	--	4-14	Shallow	147.30	147.03	11.70	135.33	4.79	142.24	4.47	142.56	5.22	141.81	5.48	141.55	8.03	139.00	NM	NM
MW-5	14	--	4-14	Shallow	145.34	145.46	11.43	134.03	4.60	140.86	4.35	141.11	6.31	139.15	6.97	138.49	8.37	137.09	NM	NM
MW-6	14	--	4-14	Shallow	143.45	143.22	5.96	137.26	2.20	141.02	2.98	140.24	4.14	139.08	4.93	138.29	6.02	137.20	NM	NM
MW-7	20	--	5-20	Shallow	149.25	149.03	14.73	134.30	12.88	136.15	12.71	136.32	13.19	135.84	13.12	135.91	14.33	134.70	NM	NM
MW-8	20	--	5-20	Shallow	145.95	145.66	13.02	132.64	10.06	135.60	10.22	135.44	10.62	135.04	10.58	135.08	11.34	134.32	NM	NM
MW-9	20	--	5-20	Shallow	144.11	143.89	9.78	134.11	4.54	139.35	5.07	138.82	5.14	138.75	5.60	138.29	6.04	137.85	NM	NM
MW-9D	49	24	44-49	Deeper Limestone	144.48	144.20	11.64	132.56	8.93	135.27	9.34	134.86	9.99	134.21	9.43	134.77	10.03	134.17	NM	NM
MW-10	18	--	3-18	Shallow	142.56	142.19	8.50	133.69	2.47	139.72	2.61	139.58	3.52	138.67	4.06	138.13	5.15	137.04	NM	NM
MW-10D	48	30	43-48	Deeper Limestone	142.08	141.79	9.40	132.39	6.75	135.04	7.17	134.62	7.27	134.52	7.27	134.52	7.84	133.95	NM	NM
MW-11	18	--	3-18	Shallow	143.77	143.16	8.96	134.20	6.40	136.76	6.45	136.71	6.64	136.52	6.95	136.21	7.24	135.92	NM	NM
MW-12D	50	30	40-50	Deeper Limestone	147.86	147.65	15.55	132.10	13.02	134.63	13.42	134.23	13.58	134.07	13.54	134.11	14.10	133.55	14.15	133.50
MW-13D	50	30	40-50	Deeper Limestone	146.41	146.23	14.29	131.94	11.75	134.48	12.18	134.05	12.32	133.91	12.25	133.98	12.97	133.26	12.92	133.31
MW-14	20	--	5-20	Shallow	147.05	146.90	13.02	133.88	10.54	136.36	10.69	136.21	11.18	135.72	11.22	135.68	12.46	134.44	NM	NM
MW-14D	50	29	40-50	Deeper Limestone	147.11	146.88	14.99	131.89	12.43	134.45	12.87	134.01	13.04	133.84	12.93	133.95	13.57	133.31	13.63	133.25
MW-15	18	--	4-19	Shallow	136.13	135.73	4.49	131.24	2.09	133.64	3.00	132.73	2.69	133.04	3.14	132.59	2.95	132.78	NM	NM
MW-15D	45	30	35-45	Deeper Limestone	135.93	135.59	3.79	131.80	1.80	133.79	2.07	133.52	2.20	133.39	2.19	133.40	2.60	132.99	NM	NM
MW-15D1	85	65	75-85	Deep Sandstone	135.94	135.69	3.91	131.78	1.91	133.78	2.18	133.51	2.32	133.37	2.30	133.39	2.70	132.99	NM	NM
MW-16	19	--	4-19	Shallow	138.74	138.30	6.68	131.62	2.35	135.95	3.38	134.92	2.73	135.57	3.80	134.50	3.01	135.29	NM	NM
MW-16D	45	29	35-45	Deeper Limestone	138.70	138.38	6.76	131.62	4.54	133.84	4.95	133.43	5.08	133.30	5.04	133.34	5.51	132.87	5.54	132.84
MW-17	28.4	--	13-28	Shallow	142.07	141.66	6.93	134.73	1.91	139.75	2.65	139.01	2.79	138.87	2.96	138.70	3.06	138.60	NM	NM
MW-18	26.4	--	11-26	Shallow	145.68	145.41	12.48	132.93	9.23	136.18	9.75	135.66	9.86	135.55	9.96	135.45	10.57	134.84	NM	NM
MW-19	20.15	--	5-20	Shallow	148.47	148.22	14.42	133.80	10.90	137.32	10.02	138.20	11.42	136.80	11.30	136.92	12.98	135.24	NM	NM
MW-20	15.15	--	5-15	Shallow	148.50	148.19	14.30	133.89	10.55	137.64	9.59	138.60	11.25	136.94	10.57	137.62	12.81	135.38	NM	NM
MW-21	34.4	--	19-34	Shallow	148.43	147.97	14.59	133.38	11.23	136.74	11.38	136.59	12.68	135.29	12.48	135.49	13.45	134.52	NM	NM
MW-21D	53.4	31.5	43-53	Deeper Limestone	147.28	146.92	14.84	132.08	12.25	134.67	12.67	134.25	12.83	134.09	12.75	134.17	13.39	133.53	13.44	133.48
MW-22D	48.4	36	38-48	Deeper Limestone	146.42	145.96	14.19	131.77	11.68	134.28	12.11	133.85	12.27	133.69	12.18	133.78	12.81	133.15	12.87	133.09
MW-23D	50.4	34	40-50	Deeper Limestone	148.48	148.26	16.18	132.08	13.48	134.78	13.95	134.31	14.09	134.17	13.98	134.28	14.65	133.61	14.71	133.55
MW-24	21	--	6-21	Shallow	148.52	147.85	NI	NI	NI	NI	NI	NI	13.39	134.46	13.42	134.43	14.10	133.75	NM	NM
MW-25D	62	--	52-62	Deeper Limestone	139.30	139.21	NI	NI	NI	NI	NI	NI	5.66	133.55	5.58	133.63	6.16	133.05	6.21	133.00
MW-26D	48	--	38-48	Deeper Limestone	143.83	143.64	NI	NI	NI	NI	NI	NI	10.32	133.32	10.20	133.44	10.81	132.83	10.87	132.77
MW-27	29	--	19 - 29	Shallow	145.93	145.78	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	9.91	135.87	NM	NM
MW-28	29	--	19 - 29	Shallow	146.35	146.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	12.60	133.52	NM	NM
MW-29	29	--	19 - 29	Shallow	141.03	140.55	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	7.17	133.38	NM	NM
MW-30D	60	--	50 - 60	Deeper Limestone	135.90	136.01	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	5.35	130.66
MW-31D	60	--	50 - 60	Deeper Limestone	141.39	141.39	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	9.42	131.97
MW-32D	60	--	50 - 60	Deeper Limestone	139.14	138.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	7.49	131.43
MW-32DR	60	--	50 - 60	Deeper Limestone	139.20	138.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

Notes:

bgs = below ground surface; btoc - below top of casing; H&H - Hart & Hickman; NI = Not Installed; NA = Not Applicable

NI - Not installed on the date of the measurement.

NM - No measurement collected.

1. Depth to water measured in feet btoc.

2. Top of casing and ground surface elevations for most wells surveyed by Edisto Engineers and Surveyors, Inc. on May 23, 2011 and March 20, 2014. MW-15D1 TOC elevation tied into existing site wells by H&H on April 30, 2012. Monitoring wells MW-24, MW-25D, and MW-26D were surveyed by AECOM on January 26, 2016. Monitoring wells MW-27 through MW-29 and MW-30D through MW32DR were surveyed by AECOM on May 10, 2017.

3. Vertical positions are referenced to the North American Vertical Datum of 1988 (NAVD88).

4. Information for historic monitoring wells from Table 1 of the RI Workplan (H&H, 2013).

Table 2
Groundwater Quality Indicator Parameters
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well	pH (S.U.)	Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Ferrous Iron (mg/L)
MW-1	4.26	0.033	20.45	5.94	2.96	378.5	NS
MW-2	4.35	0.026	19.81	1.63	5.05	383.0	NS
MW-3	4.19	0.023	21.91	10.13	5.15	308.9	NS
MW-3D	7.60	0.241	22.20	3.95	2.62	113.8	NS
MW-3D1	NS	NS	NS	NS	NS	NS	NS
MW-4	NS	NS	NS	NS	NS	NS	NS
MW-5	4.15	0.019	19.28	3.74	8.09	381.7	NS
MW-6	NS	NS	NS	NS	NS	NS	NS
MW-7	4.25	0.017	21.23	7.01	7.87	370.4	NS
MW-8	4.45	0.057	22.73	3.12	3.24	325.7	NS
MW-9	3.80	0.028	18.15	4.60	3.79	371.5	NS
MW-9D	NS	NS	NS	NS	NS	NS	NS
MW-10	4.89	0.025	17.70	2.91	0.34	137.3	NS
MW-10D	NS	NS	NS	NS	NS	NS	NS
MW-11	NS	NS	NS	NS	NS	NS	NS
MW-12D	8.40	0.228	18.71	3.86	4.94	151.3	NS
MW-13D	5.02	0.229	19.57	5.76	4.53	294.1	NS
MW-14	4.33	0.025	22.60	5.13	5.71	275.4	NS
MW-14D	7.66	0.240	22.43	3.80	0.60	31.3	NS
MW-15	4.49	0.229	16.70	4.33	0.36	-33.1	NS
MW-15D	7.19	0.439	18.04	5.93	2.32	32.8	NS
MW-15D1	7.74	0.211	18.18	1.60	0.29	-222.4	NS
MW-16	4.03	0.028	17.87	27.13	0.55	92.7	NS
MW-16D	7.41	0.286	19.19	6.54	3.91	85.6	NS
MW-17	NS	NS	NS	NS	NS	NS	NS
MW-18	NS	NS	NS	NS	NS	NS	NS
MW-19	4.49	0.096	20.91	2.83	1.40	297.8	NS
MW-20	4.27	0.036	20.93	2.11	4.47	352.6	NS
MW-21	4.08	0.022	20.09	0.00	0.21	389.0	NS
MW-21D	7.40	0.232	19.40	0.00	1.32	-8.6	NS
MW-22D	7.93	0.255	19.20	2.21	2.53	108.8	NS
MW-23D	7.43	0.308	20.90	1.26	1.55	120.9	NS
MW-24	3.97	0.015	19.96	5.50	6.35	377.2	NS
MW-25D	7.58	0.268	20.30	1.76	2.64	90.1	NS
MW-26D	7.42	0.271	19.42	2.21	2.31	142.4	NS
MW-27	4.67	0.030	22.56	3.90	8.46	254.5	0.07
MW-28	6.70	0.580	21.20	7.81	3.49	136.0	0.00
MW-29	6.46	0.433	22.16	11.71	1.75	135.7	0.02
MW-30D	7.68	0.259	20.32	22.06	0.71	-286.4	0.20
MW-31D	7.72	0.249	19.96	121.3	3.10	-89.3	0.08
MW-32D	7.54	0.290	20.95	17.51	1.63	-75.5	0.04
MW-32DR	NS	NS	NS	NS	NS	NS	NS

Notes:

°C - degrees Celsius

mS/cm - milliSiemens per centimeter

ORP - oxidation-reduction potential

NTUs - Nephelometric Turbidity Units

mg/L - milligrams per liter

mV - millivolts

NS - not sampled

S.U. - standard units

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-1 FA42997-29 4/12/2017	MW-2 FA42997-26 4/12/2017	MW-3 FA42997-22 4/11/2017	MW-3D FA42997-23 4/11/2017	MW-5 FA42997-31 4/12/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25	0.27 J/I	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	< 0.32	< 0.32	< 0.32	8	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2	< 2	< 2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	13.9	< 0.28	3.6	8	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	607	0.92 J/I	199	223	2.7
Toluene	1000	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	8.4	< 0.35	3.6	8.1	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
Water Quality Parameters by USEPA Method 9056 (mg/L)						
Chloride	250 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	NA	NA	NA	NA	NA
Sulfate	250 ²	NA	NA	NA	NA	NA
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (mg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-7 FA42997-28 4/12/2017	MW-8 FA42997-24 4/11/2017	MW-9 FA42997-11 4/10/2017	MW-10 FA42997-12 4/10/2017	MW-12D FA42997-3 4/10/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 1.2	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 1.5	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 2.3	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 1.7	< 0.34	< 0.34
1,1-Dichloroethylene	7	< 0.32	< 0.32	< 1.6	0.95 J/I	2.4
1,2-Dichloroethane	5	< 0.31	< 0.31	< 1.6	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 2.1	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 10	< 2	< 2
2-Hexanone	—	< 2	< 2	< 10	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 5	< 1	< 1
Acetone	—	< 10	< 10	< 50	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 1.6	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 1.2	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 2	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 2.7	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 1.8	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 1	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 3.3	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 1.5	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.28	< 0.28	7.8	41	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 1.5	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 1.4	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 1.8	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 2.9	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 10	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 1.1	< 0.22	< 0.22
Tetrachloroethylene	5	0.49 J/I	18.8	326	51.6	98.6
Toluene	1000	< 0.3	< 0.3	< 1.5	1.2	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 1.1	0.32 J/I	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 1.1	< 0.21	< 0.21
Trichloroethylene	5	< 0.35	1.8	43.8	44.3	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 2	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 3.6	< 0.72	< 0.72
Water Quality Parameters by USEPA Method 9056 (mg/L)						
Chloride	250 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	NA	NA	NA	NA	NA
Sulfate	250 ²	NA	NA	NA	NA	NA
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (mg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-13D FA42997-5 4/10/2017	MW-14 FA42997-18 4/11/2017	MW-14D FA42997-20 4/11/2017	MW-15 FA42997-14 4/11/2017	MW-15D FA42997-16 4/11/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	1.6	< 0.25	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	4.1	< 0.32	1.7	< 0.32	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2	< 2	< 2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.28	< 0.28	1.1	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	168	1.1	84.6	< 0.22	< 0.22
Toluene	1000	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	< 0.35	< 0.35	0.77 J/I	< 0.35	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
Water Quality Parameters by USEPA Method 9056 (mg/L)						
Chloride	250 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	NA	NA	NA	NA	NA
Sulfate	250 ²	NA	NA	NA	NA	NA
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (mg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-15D1 FA42997-17 4/11/2017	MW-16 FA42997-8 4/10/2017	MW-16D FA42997-10 4/10/2017	MW-19 FA42997-13 4/11/2017	MW-20 FA42997-15 4/11/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25	180 J//	< 1.2
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.3	< 75	< 1.5
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.47	< 120	< 2.3
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 85	< 1.7
1,1-Dichloroethylene	7	< 0.32	< 0.32	< 0.32	< 81	< 1.6
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 78	< 1.6
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 110	< 2.1
2-Butanone (MEK)	—	< 2	< 2	< 2	< 500	< 10
2-Hexanone	—	< 2	< 2	< 2	< 500	< 10
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 250	< 5
Acetone	—	< 10	< 10	< 10	< 2,500	< 50
Benzene	5	< 0.31	< 0.31	< 0.31	< 78	< 1.6
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 61	< 1.2
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 100	< 2
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 130	< 2.7
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 89	< 1.8
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 50	< 1
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 170	< 3.3
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 75	< 1.5
cis-1,2-Dichloroethylene	70	< 0.28	< 0.28	< 0.28	< 69	1.5 J//
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 73	< 1.5
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 69	< 1.4
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 89	< 1.8
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 150	< 2.9
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 130	< 2.5
Methylene Chloride	5	< 2	< 2	< 2	< 500	< 10
Styrene	100	< 0.22	< 0.22	< 0.22	< 56	< 1.1
Tetrachloroethylene	5	< 0.22	< 0.22	< 0.22	24,600	438
Toluene	1000	< 0.3	< 0.3	< 0.3	< 75	< 1.5
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22	< 55	< 1.1
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 54	< 1.1
Trichloroethylene	5	< 0.35	< 0.35	< 0.35	< 86	3.1 J//
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 100	< 2
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 180	< 3.6
Water Quality Parameters by USEPA Method 9056 (mg/L)						
Chloride	250 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	NA	NA	NA	NA	NA
Sulfate	250 ²	NA	NA	NA	NA	NA
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (mg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-21 FA42997-27 4/12/2017	MW-21D FA42997-25 4/12/2017	MW-22D FA42997-6 4/10/2017	MW-23D FA42997-9 4/10/2017	MW-24 FA42997-33 4/12/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.5	< 0.25	< 5
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.6	< 0.3	< 6
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.93	< 0.47	< 9.3
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.68	< 0.34	< 6.8
1,1-Dichloroethylene	7	1.2	2	2	< 0.32	< 6.4
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.62	< 0.31	< 6.2
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.85	< 0.43	< 8.5
2-Butanone (MEK)	—	< 2	< 2	< 4	< 2	< 40
2-Hexanone	—	< 2	< 2	< 4	< 2	< 40
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 2	< 1	< 20
Acetone	—	< 10	< 10	< 20	< 10	< 200
Benzene	5	< 0.31	< 0.31	< 0.62	< 0.31	< 6.2
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.48	< 0.24	< 4.8
Bromoform	80 ¹	< 0.41	< 0.41	< 0.81	< 0.41	< 8.1
Carbon Disulfide	—	< 0.53	< 0.53	< 1.1	< 0.53	< 11
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.71	< 0.36	< 7.1
Chlorobenzene	100	< 0.2	< 0.2	< 0.4	< 0.2	< 4
Chloroethane	—	< 0.67	< 0.67	< 1.3	< 0.67	< 13
Chloroform	80 ¹	< 0.3	< 0.3	< 0.6	< 0.3	< 6
cis-1,2-Dichloroethylene	70	595	0.74 J//	0.61 J//	< 0.28	52.7
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.58	< 0.29	< 5.8
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.55	< 0.28	< 5.5
Ethylbenzene	700	< 0.36	< 0.36	< 0.71	< 0.36	< 7.1
Methyl Bromide	—	< 0.59	< 0.59	< 1.2	< 0.59	< 12
Methyl Chloride	—	< 0.5	< 0.5	< 1	< 0.5	< 10
Methylene Chloride	5	< 2	< 2	< 4	< 2	< 40
Styrene	100	< 0.22	< 0.22	< 0.44	< 0.22	< 4.4
Tetrachloroethylene	5	18,000	74.6	96.6	< 0.22	2,070
Toluene	1000	< 0.3	< 0.3	< 0.6	< 0.3	< 6
trans-1,2-Dichloroethylene	100	0.38 J//	< 0.22	< 0.44	< 0.22	< 4.4
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.43	< 0.21	< 4.3
Trichloroethylene	5	260	0.39 J//	0.79 J//	< 0.35	8.4 J//
Vinyl Chloride	2	< 0.41	< 0.41	< 0.82	< 0.41	< 8.2
Xylene (total)	10000	1.7 J//	< 0.72	< 1.4	< 0.72	< 14
Water Quality Parameters by USEPA Method 9056 (mg/L)						
Chloride	250 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	NA	NA	NA	NA	NA
Sulfate	250 ²	NA	NA	NA	NA	NA
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (mg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-25D FA42997-2 4/10/2017	MW-26D FA42997-4 4/10/2017	MW-27 FA42997-30 4/12/2017	MW-28 FA42997-32 4/12/2017	MW-29 FA42997-34 4/12/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.5	< 0.25	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.6	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.93	< 0.47	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.68	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	3.1	1.9	< 0.32	< 0.32	< 0.32
1,2-Dichloroethane	5	< 0.62	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.85	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 4	< 2	< 2	< 2	< 2
2-Hexanone	—	< 4	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 2	< 1	< 1	< 1	< 1
Acetone	—	< 20	< 10	< 10	< 10	< 10
Benzene	5	< 0.62	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.48	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.81	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 1.1	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.71	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.4	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 1.3	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	< 0.6	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	1 J//	0.97 J//	< 0.28	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.58	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.55	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.71	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	—	< 1.2	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 1	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 4	< 2	< 2	< 2	< 2
Styrene	100	< 0.44	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	105	75.2	1	0.24 J//	5.4
Toluene	1000	< 0.6	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.44	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.43	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	0.88 J//	1.2	< 0.35	< 0.35	< 0.35
Vinyl Chloride	2	< 0.82	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 1.4	< 0.72	< 0.72	< 0.72	< 0.72
Water Quality Parameters by USEPA Method 9056 (mg/L)						
Chloride	250 ²	NA	NA	1.9 J//	8.4	5.7
Nitrogen, Nitrate	10	NA	NA	1.7	1	0.65
Nitrogen, Nitrite	1	NA	NA	< 0.05	< 0.05	< 0.05
Sulfate	250 ²	NA	NA	< 0.6	12	1.8 J//
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	< 0.32	< 0.32	< 0.32
Ethene	—	NA	NA	< 0.43	< 0.43	< 0.43
Methane	—	NA	NA	0.43 J//	0.42 J//	0.17 J//
Total Organic Carbon by USEPA Method 5310 (mg/L)						
Total Organic Carbon	—	NA	NA	< 0.23	0.72 J//	0.36 J//

Table 3
Analytical Results for Groundwater Samples
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-30D FA43039-1 4/13/2017	MW-31D FA43039-2 4/13/2017	MW-32D FA43039-3 4/13/2017
Volatile Organic Compounds by USEPA Method 8260 (µg/L)				
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	2.3	3.1	0.63 J/I
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2
2-Hexanone	—	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	8.5	3.5 J/I
Acetone	—	< 10	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	0.82 J/I	0.27 J/I
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	0.41 J/I	1.8	0.79 J/I
cis-1,2-Dichloroethylene	70	0.64 J/I	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	0.55 J/I	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	75.2	89.2	25
Toluene	1000	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	0.87 J/I	0.41 J/I	0.36 J/I
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	2.6 J/I	1.2 J/I
Water Quality Parameters by USEPA Method 9056 (mg/L)				
Chloride	250 ²	9.6	8.4	9.8
Nitrogen, Nitrate	10	0.85	1.1	0.93
Nitrogen, Nitrite	1	0.09 J/I	< 0.05	< 0.05
Sulfate	250 ²	4.9	5.7	7.4
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)				
Ethane	—	0.61 J/I	< 0.32	< 0.32
Ethene	—	0.44 J/I	< 0.43	< 0.43
Methane	—	1.4	0.7	0.68
Total Organic Carbon by USEPA Method 5310 (mg/L)				
Total Organic Carbon	—	0.52 J/I	0.53 J/I	1.4

Notes:

NA - Not Analyzed

µg/L - micrograms per liter (parts per billion)

USEPA MCL - United States Environmental Protection Agency Maximum Contaminant Level (April, 2012).

¹ 1998 Final Rule for Disinfectants and Disinfection By-products. The total for trihalomethanes (THM) is 80 ug/L.

² Secondary Standard.

— - Indicates No Standard (for screening criteria).

Bold font and shading indicate the concentration is detected.

Bold outline indicates the concentration exceeds the MCL.

South Carolina Department of Health and Environmental Control (SCDHEC) R.61-68 Water Classifications and Standards (June 27, 2014) were also identified for the list of detected chemicals in groundwater. In each case, however, they were the same values as the USEPA MCLs.

See Table 6 for explanation of data qualifiers.

Table 4
Analytical Results for Investigation-Derived Waste Sample
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA42997-35 4/12/2017
Volatile Organic Compounds by Method 8260B (µg/L)		
1,1,1-Trichloroethane	—	0.81 J//
1,1,2,2-Tetrachloroethane	—	< 0.3
1,1,2-Trichloroethane	—	< 0.47
1,1-Dichloroethane	—	< 0.34
1,1-Dichloroethylene	700	0.36 J//
1,2-Dichloroethane	500	< 0.31
1,2-Dichloropropane	—	< 0.43
2-Butanone (MEK)	200,000	< 2
2-Hexanone	—	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1
Acetone	—	< 10
Benzene	500	< 0.31
Bromodichloromethane	—	< 0.24
Bromoform	—	< 0.41
Carbon Disulfide	—	< 0.53
Carbon Tetrachloride	500	< 0.36
Chlorobenzene	100,000	< 0.2
Chloroethane	—	< 0.67
Chloroform	6,000	< 0.3
cis-1,2-Dichloroethylene	—	7.2
cis-1,3-Dichloropropene	—	< 0.29
Dibromochloromethane	—	< 0.28
Ethylbenzene	—	< 0.36
Methyl Bromide	—	< 0.59
Methyl Chloride	—	< 0.5
Methylene Chloride	—	< 2
Styrene	—	< 0.22
Tetrachloroethylene	700	211
Toluene	—	< 0.3
trans-1,2-Dichloroethylene	—	< 0.22
trans-1,3-Dichloropropene	—	< 0.21
Trichloroethylene	500	3.8
Vinyl Chloride	200	< 0.41
Xylene (total)	—	< 0.72
Semivolatile Organic Compounds by Method 8270D (µg/L)		
1,2,4-Trichlorobenzene	—	< 1
1,2-Dichlorobenzene	—	< 0.48
1,3-Dichlorobenzene	—	< 0.48
1,4-Dichlorobenzene	7,500	< 0.48
2,4,5-Trichlorophenol	400,000	< 0.71
2,4,6-Trichlorophenol	2,000	< 0.72
2,4-Dichlorophenol	—	< 0.8
2,4-Dimethylphenol	—	< 0.71
2,4-Dinitrophenol	—	< 4.8 /M/mD
2,4-Dinitrotoluene	130	< 0.78
2,6-Dinitrotoluene	—	< 0.69
2-Chloronaphthalene	—	< 0.48
2-Chlorophenol	—	< 0.61
2-Methylnaphthalene	—	< 0.58
2-Methylphenol	200,000	< 0.54
2-Nitroaniline	—	< 1.7
2-Nitrophenol	—	< 0.82

Table 4
Analytical Results for Investigation-Derived Waste Sample
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Laboratory ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA42997-35 4/12/2017
Semivolatile Organic Compounds by Method 8270D (µg/L)		
3&4-Methylphenol	200,000	< 0.94
3,3'-Dichlorobenzidine	—	< 0.62
3-Nitroaniline	—	< 0.85
4,6-Dinitro-o-cresol	—	< 1.9
4-Bromophenyl Phenyl Ether	—	< 0.81
4-Chloro-3-methyl Phenol	—	< 0.57
4-Chloroaniline	—	< 0.61
4-Chlorophenyl Phenyl Ether	—	< 0.52
4-Nitroaniline	—	< 1.1
4-Nitrophenol	—	< 4.8
Acenaphthene	—	< 0.6
Acenaphthylene	—	< 0.61
Anthracene	—	< 0.77
Benzo(a)anthracene	—	< 0.73
Benzo(a)pyrene	—	< 0.75
Benzo(b)fluoranthene	—	< 0.75
Benzo(g,h,i)perylene	—	< 0.79
Benzo(k)fluoranthene	—	< 0.82
Benzoic Acid	—	< 9.6
Benzyl Alcohol	—	< 0.59
bis(2-Chloroethoxy)methane	—	< 0.78
bis(2-Chloroethyl)ether	—	< 0.7
bis(2-Chloroisopropyl)ether	—	< 0.73
bis(2-Ethylhexyl)phthalate	—	< 0.96
Butyl Benzyl Phthalate	—	< 0.96
Carbazole	—	< 0.58
Chrysene	—	< 0.82
Dibenzo(a,h)anthracene	—	< 0.77
Dibenzofuran	—	< 0.58
Diethyl Phthalate	—	< 0.96
Dimethyl Phthalate	—	< 0.96
Di-n-butyl Phthalate	—	< 0.96
Di-n-octyl Phthalate	—	< 0.96
Fluoranthene	—	< 0.53
Fluorene	—	< 0.67
Hexachlorobenzene	130	< 0.67
Hexachlorobutadiene	500	< 0.48
Hexachlorocyclopentadiene	—	< 1.7
Hexachloroethane	3,000	< 1.6
Indeno(1,2,3-cd)pyrene	—	< 0.69
Isophorone	—	< 0.75
Naphthalene	—	< 0.48
Nitrobenzene	2,000	< 0.9
N-Nitrosodi-n-propylamine	—	< 0.64
N-Nitrosodiphenylamine	—	< 0.78
Pentachlorophenol	100,000	< 4.8
Phenanthrene	—	< 0.83
Phenol	—	< 0.48
Pyrene	—	< 0.66
Sample ID Laboratory ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA42997-35 4/12/2017

Table 4
Analytical Results for Investigation-Derived Waste Sample
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Metals by Method 6010C/7470B (µg/L)			
Antimony	—	<	1
Arsenic	5,000	<	1.3
Beryllium	—	<	0.2
Cadmium	1,000	0.52	J//
Chromium	5,000	4.9	J//
Copper	—	5.1	J//
Lead	5,000	2.7	J//
Mercury	200	<	0.03
Nickel	—	0.9	J//
Selenium	1,000	<	2.9
Silver	5,000	<	0.7
Thallium	—	<	1.4
Zinc	—	95.4	

Notes:

— - No Standard

IDW - Investigation Derived Waste

µg/L - micrograms per liter (parts per billion)

USEPA Toxicity Characteristic - United States Environmental Protection

Agency Maximum Concentration of Contaminants for the Toxicity

Characteristic (40CFR§261.24 Toxicity Characteristic, July 1, 2007).

Bold font and shading indicates the analyte was detected.

See Table 6 for explanation of data qualifiers.

Table 5
QA/QC Sample Results
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Summary of Calculated Relative Percent Differences in Groundwater Field Duplicate Samples

Sample ID Laboratory ID Date Collected	MW-14 FA42997-18 4/11/2017	MW-14-A FA42997-19 4/11/2017	Relative Percent Difference	MW-14D FA42997-20 4/11/2017	MW-14D-A FA42997-21 4/11/2017	Relative Percent Difference	MW-22D FA42997-6 4/10/2017	MW-22D-A FA42997-7 4/10/2017	Relative Percent Difference
Volatile Organic Compounds by USEPA Method 8260 (µg/L)									
1,1,1-Trichloroethane	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.5	< 0.25	NC
1,1,2,2-Tetrachloroethane	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.6	< 0.3	NC
1,1,2-Trichloroethane	< 0.47	< 0.47	NC	< 0.47	< 0.47	NC	< 0.93	< 0.47	NC
1,1-Dichloroethane	< 0.34	< 0.34	NC	< 0.34	< 0.34	NC	< 0.68	< 0.34	NC
1,1-Dichloroethylene	< 0.32	< 0.32	NC	1.7	1.6	6.1	2	2.1	4.9
1,2-Dichloroethane	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.62	< 0.31	NC
1,2-Dichloropropane	< 0.43	< 0.43	NC	< 0.43	< 0.43	NC	< 0.85	< 0.43	NC
2-Butanone (MEK)	< 2	< 2	NC	< 2	< 2	NC	< 4	< 2	NC
2-Hexanone	< 2	< 2	NC	< 2	< 2	NC	< 4	< 2	NC
4-Methyl-2-pentanone (MIBK)	< 1	< 1	NC	< 1	< 1	NC	< 2	< 1	NC
Acetone	< 10	< 10	NC	< 10	< 10	NC	< 20	< 10	NC
Benzene	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.62	< 0.31	NC
Bromodichloromethane	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 0.48	< 0.24	NC
Bromoform	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC	< 0.81	< 0.41	NC
Carbon Disulfide	< 0.53	< 0.53	NC	< 0.53	< 0.53	NC	< 1.1	< 0.53	NC
Carbon Tetrachloride	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC	< 0.71	< 0.36	NC
Chlorobenzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.4	< 0.2	NC
Chloroethane	< 0.67	< 0.67	NC	< 0.67	< 0.67	NC	< 1.3	< 0.67	NC
Chloroform	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.6	< 0.3	NC
cis-1,2-Dichloroethylene	< 0.28	< 0.28	NC	1.1	1.2	8.7	0.61 J//	0.86 J//	NC
cis-1,3-Dichloropropene	< 0.29	< 0.29	NC	< 0.29	< 0.29	NC	< 0.58	< 0.29	NC
Dibromochloromethane	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 0.55	< 0.28	NC
Ethylbenzene	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC	< 0.71	< 0.36	NC
Methyl Bromide	< 0.59	< 0.59	NC	< 0.59	< 0.59	NC	< 1.2	< 0.59	NC
Methyl Chloride	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 1	< 0.5	NC
Methylene Chloride	< 2	< 2	NC	< 2	< 2	NC	< 4	< 2	NC
Styrene	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.44	< 0.22	NC
Tetrachloroethylene	1.1	1.1	0	84.6	97.1	13.8	96.6	75	25.2
Toluene	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.6	< 0.3	NC
trans-1,2-Dichloroethylene	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.44	< 0.22	NC
trans-1,3-Dichloropropene	< 0.21	< 0.21	NC	< 0.21	< 0.21	NC	< 0.43	< 0.21	NC
Trichloroethylene	< 0.35	< 0.35	NC	0.77 J//	0.76 J//	NC	0.79 J//	0.73 J//	NC
Vinyl Chloride	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC	< 0.82	< 0.41	NC
Xylene (total)	< 0.72	< 0.72	NC	< 0.72	< 0.72	NC	< 1.4	< 0.72	NC

Notes:

-A - Indicates a field duplicate sample.

NC - Not Calculated

RPD - Relative Percent Difference

µg/L - micrograms per liter (parts per billion)

Bold font and shading indicate the concentration is detected.

See Table 6 for explanation of data qualifiers.

Table 5
QA/QC Sample Results
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Summary of Results in Trip Blank Samples

Sample ID Laboratory ID Date Collected	TRIP BLANK FA42997-1 4/10/2017	TRIP BLANK FA43039-4 4/13/2017
<i>Volatile Organic Compounds by USEPA Method 8260 (µg/L)</i>		
1,1,1-Trichloroethane	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	< 0.3	< 0.3
1,1,2-Trichloroethane	< 0.47	< 0.47
1,1-Dichloroethane	< 0.34	< 0.34
1,1-Dichloroethylene	< 0.32	< 0.32
1,2-Dichloroethane	< 0.31	< 0.31
1,2-Dichloropropane	< 0.43	< 0.43
2-Butanone (MEK)	< 2	< 2
2-Hexanone	< 2	< 2
4-Methyl-2-pentanone (MIBK)	< 1	< 1
Acetone	< 10	< 10
Benzene	< 0.31	< 0.31
Bromodichloromethane	< 0.24	< 0.24
Bromoform	< 0.41	< 0.41
Carbon Disulfide	< 0.53	< 0.53
Carbon Tetrachloride	< 0.36	< 0.36
Chlorobenzene	< 0.2	< 0.2
Chloroethane	< 0.67	< 0.67
Chloroform	< 0.3	< 0.3
cis-1,2-Dichloroethylene	< 0.28	< 0.28
cis-1,3-Dichloropropene	< 0.29	< 0.29
Dibromochloromethane	< 0.28	< 0.28
Ethylbenzene	< 0.36	< 0.36
Methyl Bromide	< 0.59	< 0.59
Methyl Chloride	< 0.5	< 0.5
Methylene Chloride	2.6 J//	2.7 J//
Styrene	< 0.22	< 0.22
Tetrachloroethylene	< 0.22	< 0.22
Toluene	< 0.3	< 0.3
trans-1,2-Dichloroethylene	< 0.22	< 0.22
trans-1,3-Dichloropropene	< 0.21	< 0.21
Trichloroethylene	< 0.35	< 0.35
Vinyl Chloride	< 0.41	< 0.41
Xylene (total)	< 0.72	< 0.72

Notes:

Bold font and shading indicates the analyte was detected.

µg/L - micrograms per liter (parts per billion)

See Table 6 for explanation of data qualifiers.

Table 6
Definitions of Data Qualifiers
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

<u>Modifier</u>	<u>Description</u>
<	Indicates not detected at the reporting limit indicated.
"/"	Separates the laboratory added data qualifiers from the validation data qualifiers. The laboratory added data qualifiers precede the first "/". The result qualifiers follow the first "/", and the analysis qualifiers follow the second "/". The result qualifiers are a product of the data validation process, and the analysis qualifiers define the type of QC excursion.

Laboratory Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
J	Estimated concentration above the method detection limit and below the reporting limit.

Result Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
M	A matrix effect was present.

Analysis Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
D	Relative percent difference between the matrix spike and matrix spike duplicate sample exceeded the established criteria.
m	Matrix spike recovery below the established criteria.

APPENDIX A

FIELD DOCUMENTATION

Daily Tailgate Safety Meeting Logs
Water Level Data Summary
Equipment Calibration Logs
Chain of Custody Forms
Field Data Information Logs for Groundwater Sampling
IDW Management Form
Log Books

S3AM-209-FM6

Customer	United Technologies Corporation	Permit No.	
Location	Damberg SC	Job No.	60314964
Description of Task	Groundwater sampling / development	Date	4-10-2017

Basic Task Steps (explain how the task will be carried out)	Hazards (identify all hazards and potential hazards)	Risk (initial)	Precautions (describe how that hazard will be controlled)	Risk (final)	Initials
Highway/Roadwork	Traffic, Pedestrians	8	S3NA-306-PRI (SOP)	4	
Manual Lifting	Strain, crushing, property damage	4	S3NA-014-PRI (SOP)	2	
Housekeeping worksite	Slips, trips, falls, clutter	3	S3NA-013-PRI (SOP)	1	
Heat Stress Prevention	Dehydration, heat stress/stroke	9	S3NA-113-PRI (SOP)	2	
Spill Response	Fuel/Hydraulic leaks, purge water	4	S3NA-520-PRI (SOP)	2	
			Highest Risk Index		

Review and attach to Tailgate Meeting as required. Number and attach additional pages if necessary.

Worker/Visitor acknowledgement and review of this content on back of this document.

Risk Matrix on Reverse

Originator

Justin Butler
Print Name

Supervisor

Justin Butler

Signature

THIS FORM IS TO BE KEPT ON JOB SITE.

WORKER SIGN ON		VISITOR SIGN ON		
NAME (Please Print)	SIGNATURE	NAME (Please Print)	SIGNATURE	TIME

Randy Meryan Randy Meryan

Blank lined paper with horizontal ruling lines.

Risk Rating (Probability x Severity)	Risk Acceptance Authority
1 to 4 (Low)	Risk is tolerable, manage at local level
5 to 9 (Medium)	Risk requires approval by Operations Lead/Supervisor & Safety Manager
10 to 25 (High)	Risk requires the approval of the Operations Manager & Safety Director

Probability		
Frequent	Expected to occur during task/activity	9/10
Probable	Likely to occur during task/activity	1/10
Occasional	May occur during the task/activity	1/100
Remote	Unlikely to occur during task/activity	1/1,000
Improbable	Highly unlikely to occur, but possible during task/activity	1/10,000

25

Supervisor (print name) _____

Signature _____

NAME (Please Print)	SIGNATURE	TIME
---------------------	-----------	------

[illegible]**First Break**

Initial	

Initial	

Initial	

Americas

Task Hazard Assessment

S3AM-209-FM6

Customer	United Technologies Corporation	Permit No.	
Location	Bamberg SC	Job No.	60314964
Description of Task	Groundwater Sampling / development	Date	7-11-2017

Basic Task Steps (explain how the task will be carried out)	Hazards (identify all hazards and potential hazards)	Risk (initial)	Precautions (describe how that hazard will be controlled)	Risk (final)	Initials
Highway/Roadwork	Traffic, pedestrians	8	S3WA-306-PRI (SOP)	4	
Manual Lifting	Strain, crushing, property damage	4	S3WA-014-PRI (SOP)	2	
Housekeeping worksite	Slips, trips, falls, clutter	3	S3WA-013-PRI (SOP)	1	
Heat Stress Prevention	Dehydration, heat stress/stroke	9	S3WA-113-PRI (SOP)	2	
Spill Response	Fuel/Hydraulic leaks, purge water	4	S3WA-520-PRI (SOP)	2	
			Highest Risk Index		

Review and attach to Tailgate Meeting as required. Number and attach additional pages if necessary.

Worker/Visitor acknowledgement and review of this content on back of this document.

Risk Matrix on Reverse

Originator

Justin Butler
Print Name

Supervisor

Print Name
Justin Butler
Print Name

Signature

Signature _____

THIS FORM IS TO BE KEPT ON JOB SITE.

WORKER SIGN ON

NAME (Please Print)

SIGNATURE

I participated in the development and understand the content of this Task Hazard Assessment.

Risk Rating Matrix

Probability	Severity				
	5 - Catastrophic	4 - Critical	3 - Major	2 - Moderate	1 - Minor
5 - Frequent	25	20	16	10	5
4 - Probable	20	16	12	8	4
3 - Occasional	15	12	9	6	3
2 - Remote	10	8	6	4	2
1 - Improbable	6	4	3	2	1

Risk Rating (Probability x Severity)	Risk Acceptance Authority
1 to 4 (Low)	Risk is tolerable, manage at local level
5 to 9 (Medium)	Risk requires approval by Operations Lead/Supervisor & Safety Manager
10 to 25 (High)	Risk requires the approval of the Operations Manager & Safety Director

Severity - Potential Consequences				
	People	Property Damage	Environmental Impact	Public Image/Reputation
Catastrophic	Fatality, Multiple Major Incidents	>\$1M USD, Structural collapse	Offsite impact requiring remediation	Government intervention
Critical	Permanent impairment, Long term injury/illness	>\$250K to \$1M USD	Onsite impact requiring remediation	Media intervention
Major	Lost/Restricted Work	> \$10K to \$250K USD	Release at/above reportable limit	Owner intervention
Moderate	Medical Treatment	> \$1K to \$10K USD	Release below reportable limit	Community or local attention
Minor	First Aid	<=\$1K USD	Small chemical release contained onsite	Individual complaint

Probability		
Frequent	Expected to occur during task/activity	9/10
Probable	Likely to occur during task/activity	1/10
Occasional	May occur during the task/activity	1/100
Remote	Unlikely to occur during task/activity	1/1,000
Improbable	Highly unlikely to occur, but possible during task/activity	1/10,000

Emergency Meeting / Assembly Area

Emergency Contact #

Emergency Radio Channel

Area is safe and housekeeping completed at the end of task/shift.

Supervisor (print name)

Signature

VISITOR SIGN ON

NAME (Please Print)

SIGNATURE

TIME

Task Hazard Assessment Follow-Up/Review.

First Break

Initial

Lunch Break

Initial

Second Break

Initial

Americas

Task Hazard Assessment

S3AM-209-FM6

Customer <i>United Technologies Corporation</i>	Permit No.
Location <i>Bamberg SC</i>	Job No. <i>60314964</i>
Description of Task <i>Groundwater Sampling / development</i>	Date <i>4-12-2017</i>

Basic Task Steps (explain how the task will be carried out)	Hazards (identify all hazards and potential hazards)	Risk (initial)	Precautions (describe how that hazard will be controlled)	Risk (final)	Initials
Highway/Road work	Traffic, pedestrians	8	S3NA-306-PRI (SOP)	4	
Manual Lifting	Strain, crushing, property damage	4	S3NA-014-PRI (SOP)	2	
Housekeeping worksite	Slips, trips, falls, clutter	3	S3NA-013-PRI (SOP)	1	
Heat Stress Prevention	Dehydration, heat stress/stroke	9	S3NA-113-PRI (SOP)	2	
Spill Response	Fuel/Hydraulic leaks, purge water	4	S3NA-520-PRI (SOP)	2	
Highest Risk Index					

Review and attach to Tailgate Meeting as required. Number and attach additional pages if necessary.

Worker/Visitor acknowledgement and review of this content on back of this document.

Originator

Justin Butler
Print Name

Signature

Supervisor

Print Name

Signature

Risk Matrix on Reverse

THIS FORM IS TO BE KEPT ON JOB SITE.

WORKER SIGN ON

NAME (Please Print)

SIGNATURE

I participated in the development and understand the content of this Task Hazard Assessment.

Randy Morgan *Randy Morgan*

Risk Rating Matrix

Probability	Severity				
	5 - Catastrophic	4 - Critical	3 - Major	2 - Moderate	1 - Minor
5 - Frequent	25	20	15	10	5
4 - Probable	20	16	12	8	4
3 - Occasional	15	12	9	6	3
2 - Remote	10	8	6	4	2
1 - Improbable	5	4	3	2	1

Risk Rating (Probability x Severity)	Risk Acceptance Authority
1 to 4 (Low)	Risk is tolerable, manage at local level
5 to 9 (Medium)	Risk requires approval by Operations Lead/Supervisor & Safety Manager
10 to 25 (High)	Risk requires the approval of the Operations Manager & Safety Director

Severity - Potential Consequences				
	People	Property Damage	Environmental Impact	Public Image/Reputation
Catastrophic	Fatality, Multiple Major Incidents	>\$1M USD, Structural collapse	Offsite impact requiring remediation	Government intervention
Critical	Permanent impairment, Long term injury/illness	>\$250K to \$1M USD	Onsite impact requiring remediation	Media intervention
Major	Lost/Restricted Work	> \$10K to \$250K USD	Release at/above reportable limit	Owner intervention
Moderate	Medical Treatment	> \$1K to \$10K USD	Release below reportable limit	Community or local attention
Minor	First Aid	<=\$1K USD	Small chemical release contained onsite	Individual complaint

Probability		
Frequent	Expected to occur during task/activity	9/10
Probable	Likely to occur during task/activity	1/10
Occasional	May occur during the task/activity	1/100
Remote	Unlikely to occur during task/activity	1/1,000
Improbable	Highly unlikely to occur, but possible during task/activity	1/10,000

Emergency Meeting / Assembly Area

Emergency Contact #

Emergency Radio Channel

Area is safe and housekeeping completed at the end of task/shift.

Supervisor (print name)

Signature

VISITOR SIGN ON

NAME (Please Print)

SIGNATURE

TIME

Task Hazard Assessment Follow-Up/Review.

First Break

Initial

Lunch Break

Initial

Second Break

Initial

WATER LEVEL DATA SUMMARY

PROJECT: UTC Delavan Spray Technologies Site

JOB NUMBER: 60314964

LOCATION: Bamberg, South Carolina

DATE: April 12, 2017

CLIENT: UTC

MEASURED BY: Randy Morgan

SURVEY DATUM:

MEASURING DEVICE: electronic water level tape

MEASUREMENT POINT IDENTIFICATION	TOC ELEVATION (FT MSL)	DEPTH TO BOTTOM OF WELL (FT BTOC)	POINT OF MEASURE	DEPTH TO WATER (FT BTOC)	COMMENTS
MW-1				12.38	
MW-2				12.04	
MW-3				13.94	
MW-3D				14.61	
MW-3DI				14.40	
MW-4				8.03	
MW-5				8.37	
MW-6				6.02	
MW-7				14.33	
MW-8				11.34	
MW-9				6.04	
MW-9D				10.03	
MW-10				5.15	
MW-10D				7.84	
MW-11				7.24	
MW-12D				14.10	
MW-13D				12.97	
MW-14				12.46	
MW-14D				13.57	(13.57)
MW-15				2.95	
MW-15D				2.60	
MW-15DI				2.70	
MW-16				3.01	
MW-16D				5.51	
MW-17				3.06	
MW-18				10.57	

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

WATER LEVEL DATA SUMMARY

PROJECT: UTC Delavan Spray Technologies Site

JOB NUMBER: 60314964

LOCATION: Bamberg, South Carolina

DATE: 4/13/17

CLIENT: UTC

MEASURED BY: Justin Butler

SURVEY DATUM:

MEASURING DEVICE: electronic water level/tape

MEASUREMENT POINT IDENTIFICATION	TOC ELEVATION (FT MSL)	DEPTH TO BOTTOM OF WELL (FT BTOC)	POINT OF MEASURE	DEPTH TO WATER (FT BTOC)	COMMENTS
MW-1				N/A	
MW-2				N/A	
MW-3				N/A	
MW-3D				14.67	1733
MW-3DI				N/A	
MW-4				N/A	
MW-5				N/A	
MW-6				N/A	
MW-7				N/A	
MW-8				N/A	
MW-9				N/A	
MW-9D				N/A	
MW-10				N/A	
MW-10D				N/A	
MW-11				N/A	
MW-12D				14.15	1735
MW-13D				12.92	1741
MW-14				N/A	
MW-14D				13.63	1722
MW-15				N/A	
MW-15D				N/A	
MW-15DI				N/A	
MW-16				N/A	
MW-16D				5.54	1746
MW-17				N/A	
MW-18				N/A	

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

MEASURING DEVICE: electronic water level tape

LLMH - Lower Lip of Man Hole

YSI 556 MPS / Water Quality Calibration Certificate



Cal Standard

Temp, LAB, C : 20-73 Temp, FIELD, C :

Conductivity

1413 UMHO/CM

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7507209	7/16	<u>1-278</u>		(+/- .5%)

PH 4.00

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
4662304	2/18	<u>4.00</u>		(+/- 0.2 units)

PH 7.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
760163	2/15	<u>7.01</u>		(+/- 0.2 units)

PH 10.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7603017	3/18	<u>10.04</u>		(+/- 0.2 units)

ORP

ZOBELLS

231.0 MV @ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7603533	7/16	<u>237.5</u>		(+/- 20 MV)

Dissolved Oxygen

(Saturated Air)

Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range
	<u>21.56</u>	<u>96.5</u>	<u>8.52</u>	(+/- 2%) / (+/- 2%)
Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane

☐ Yes
 ☒ No

Do Cap Color

☐ Black
 ☒ Blue
 ☐ Yellow

Model

556 ▼

S/N

08L101000 ▼

Cable

14L11 ▼

Calibration referenced to the temperature of the calibration standards.

Turbidity

.02 NTU

10 NTU

1000 NTU

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
<u>60601</u>	<u>JUN-18</u>	<u>0.02</u>		(.0196 to .0204)
<u>61243</u>	<u>DEC-18</u>	<u>10.04</u>		(9.8 to 10.2)
<u>60663</u>	<u>JUN-18</u>	<u>988.1</u>		(970 to 1031)

Model

Micro TPW ▼

S/N

200704141 ▼

Calibrated By

Eric Olson ▼

Date of Calibration

4-7-17

Project Name

LTC

Project number

60314964

Signed :

YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard Temp, LAB, C : 21.57 Temp, FIELD, C :

Conductivity	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
1413 UMHO/CM @ 25°C	7507209	7/16	<u>1.278</u>		(+/- .5%)

PH 4.00	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
@ 25°C	4662304	2/18	<u>4.00</u>		(+/- 0.2 units)

PH 7.01	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
@ 25°C	760163	2/15	<u>7.01</u>		(+/- 0.2 units)

PH 10.01	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
@ 25°C	7603017	3/18	<u>10.05</u>		(+/- 0.2 units)

ORP ZOBELLS	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
231.0 MV @ 25°C	7603533	7/16	<u>237.5</u>		(+/- 20 MV)

Dissolved Oxygen (Saturated Air)	Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) / (+/- 2%)
		<u>22.55</u>	<u>97.4</u>	<u>8.43</u>	
	Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane ☐ Yes ☒ No

Do Cap Color ☐ Black ☒ Blue ☐ Yellow

Model 556 S/N 085101255 Cable 16K05

Calibration referenced to the temperature of the calibration standards.

Turbidity	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
.02 NTU	<u>60601</u>	<u>JUN-18</u>	<u>0.02</u>		(.0196 to .0204)
10 NTU	<u>61243</u>	<u>DEC-18</u>	<u>9.95</u>		(9.8 to 10.2)
1000 NTU	<u>60603</u>	<u>JUN-18</u>	<u>998.7</u>		(970 to 1031)

Model Micro TPW S/N 200711199

Calibrated By Eric Olson Date of Calibration 4-7-17

Project Name UTC Project number 60314964

Signed : [Signature]



FIELD INSTRUMENT CALIBRATION LOG

Project Name: UTC Bomberg SC
Project Number: 60314964.17
Calibrated By: Randy Morgan
Signature: Randy Morgan

YSI 556 SN: 085101255
Turbidity Meter Model/SN: 200211199
Additional Equipment SN: _____
Date: 4-10-17

Operation Notes:

- 1) Turn meter on in Run mode and allow to warm up 10 to 15 minutes prior to calibration.
- 2) Observe DO % for 2-3 minutes when meter is initially turned on. The unit should display decreasing values until it is stabilized near 100%.
- 3) If the meter does not stabilize at/near 100%, indicates the DO sensor requires maintenance.

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards, not ambient temperature; and be sure the temperature sensor is submerged in the solution.

Temp. C	pH 4	pH 7	pH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = millimeters of mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating.

Altitude feet (asl)	Pressure (mmHg)	Altitude feet (asl)	Pressure (mmHg)	Altitude feet (asl)	Pressure (mmHg)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.467	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	772.4		1050	mmHg
Temperature (Saturated Air)	21.13	21.25	1050	C
Temperature (Calibration Solution)	20.47	21.90	1110	C
DO	9.89	9.01	1050	mg/L
pH 7	6.62	7.02	1058	SU
pH 4	3.99	4.00	1102	SU
pH 10	10.00	10.04	1106	SU
Specific Conductance	1.249	1.278	1054	mS/cm
ORP	264.2	237.5	1110	mV

Calibrations performed 0.02, 10, and 1,000 NTU	Calibrations accepted: <u>Yes</u> No (circle one)
--	--



FIELD INSTRUMENT CALIBRATION LOG

Project Name: UTC Bamberg
Project Number: 60314964.17
Calibrated By: Randy Murga
Signature: Randy Murga

YSI 556 SN: 085101255
Turbidity Meter Model/SN: 200711199
Additional Equipment SN: _____
Date: 4-11-2017

Operation Notes:

- 1) Turn meter on in Run mode and allow to warm up 10 to 15 minutes prior to calibration.
- 2) Observe DO % for 2-3 minutes when meter is initially turned on. The unit should display decreasing values until it is stabilized near 100%.
- 3) If the meter does not stabilize at/near 100%, indicates the DO sensor requires maintenance.

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards, not ambient temperature; and be sure the temperature sensor is submerged in the solution.

Temp. C	pH 4	pH 7	pH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = millimeters of mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating.

Altitude feet (asl)	Pressure (mmHg)	Altitude feet (asl)	Pressure (mmHg)	Altitude feet (asl)	Pressure (mmHg)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.467	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	<u>771.4</u>		<u>0735</u>	mmHg
Temperature (Saturated Air)	<u>15.08</u>	<u>15.68</u>	<u>0735</u>	C
Temperature (Calibration Solution)	<u>17.95</u>	<u>18.12</u>	<u>0753</u>	C
DO	<u>9.59</u>	<u>10.09</u>	<u>0735</u>	mg/L
pH 7	<u>7.17</u>	<u>7.02</u>	<u>0743</u>	SU
pH 4	<u>4.02</u>	<u>4.00</u>	<u>0747</u>	SU
pH 10	<u>10.08</u>	<u>10.05</u>	<u>0751</u>	SU
Specific Conductance	<u>1.277</u>	<u>1.278</u>	<u>0739</u>	mS/cm
ORP	<u>237.6</u>	<u>237.5</u>	<u>0753</u>	mV

Calibrations performed 0.02, 10, and 1,000 NTU	Calibrations accepted: <u>Yes</u> (circle one) No
--	---

FIELD INSTRUMENT CALIBRATION LOG

Project Name: UTC Bamber
 Project Number: 61314968-17
 Calibrated By: Randy Morgan
 Signature: Randy Morgan

YSI 556 SN: 08T101255
 Turbidity Meter Model/SN: 200211199
 Additional Equipment SN:
 Date: 4-12-17

Operation Notes:

- 1) Turn meter on in Run mode and allow to warm up 10 to 15 minutes prior to calibration.
- 2) Observe DO % for 2-3 minutes when meter is initially turned on. The unit should display decreasing values until it is stabilized near 100%.
- 3) If the meter does not stabilize at/near 100%, indicates the DO sensor requires maintenance.

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards, not ambient temperature; and be sure the temperature sensor is submerged in the solution.

Temp. C	pH 4	pH 7	pH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = millimeters of mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating.

Altitude feet (asi)	Pressure (mmHg)	Altitude feet (asi)	Pressure (mmHg)	Altitude feet (asi)	Pressure (mmHg)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.467	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

Parameter	Before Calibration	After Calibration	Time	Units
Barametric Pressure	769.9		0715	mmHg
Temperature (Saturated Air)	16.55	16.28	0715	C
Temperature (Calibration Solution)	17.69	17.23	0740	C
DO	9.65	9.95	0715	mg/L
pH 7	7.18	7.02	0725	SU
pH 4	3.95	4.00	0730	SU
pH 10	10.03	10.05	0735	SU
Specific Conductance	1.297	1.278	0720	mS/cm
ORP	227.2	237.5	0740	mV

Calibrations performed 0.02, 10, and 1,000 NTU	Calibrations accepted: <u>Yes</u> (circle one)	No
--	--	----



FIELD INSTRUMENT CALIBRATION LOG

Project Name: UTC Delavan Spray Technologies site
Project Number: 66314961
Calibrated By: Justin Butler
Signature: Justin Butler

YSI 556 SN: 08101000
Turbidity Meter Model/SN: 200704141
Additional Equipment SN: _____
Date: 4/10/2017

Operation Notes:

- 1) Turn meter on in Run mode and allow to warm up 10 to 15 minutes prior to calibration.
- 2) Observe DO % for 2-3 minutes when meter is initially turned on. The unit should display decreasing values until it is stabilized near 100%.
- 3) If the meter does not stabilize at/near 100%, indicates the DO sensor requires maintenance.

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards, not ambient temperature; and be sure the temperature sensor is submerged in the solution.

Temp. C	pH 4	pH 7	pH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = millimeters of mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating.

Altitude feet (asl)	Pressure (mmHg)	Altitude feet (asl)	Pressure (mmHg)	Altitude feet (asl)	Pressure (mmHg)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO	Temp C.	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.467	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	766.9		1031	mmHg
Temperature (Saturated Air)	21.12	21.03	1043	C
Temperature (Calibration Solution)	20.33	20.70	1041	C
DO	9.61	8.92	1031	mg/L
pH 7	7.10	7.02	1035	SU
pH 4	3.96	4.00	1037	SU
pH 10	10.07	10.05	1039	SU
Specific Conductance	1.271	1.278	1033	mS/cm
ORP	238.4	237.5	1041	mV

Calibrations performed 0.02, 10, and 1,000 NTU	Calibrations accepted: <u>Yes</u> (circle one) No
--	---

Project Name: USC Delmar Spray Technologies site
 Project Number: 60314964
 Calibrated By: Justin Butler
 Signature: [Signature]

YSI 556 SN: 086101000
 Turbidimeter Model/SN: MicroTPW 200704141
 Additional Equipment/SN: _____
 Date: 4/11/17

Operation Notes:

1) Turn meter on in Run mode and allow to warm up 10-15 minutes prior to calibration. 2) Observe DO% for 2-3 minutes when meter is initially turned on 3) The unit should display decreasing values until it is stabilized near 100% 4) If the meter does not stabilize at/near 100%, indicates the D.O. sensor requires maintenance

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards not ambient temperature and the temperature sensor is submerged in solution.

Table 1: Calibration Values At Various Temperatures					
Temp., C	PH 4	PH 7	PH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = Millimeters of Mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating

Table 2: Atmospheric Pressure / Altitude Table					
Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Table 3: DO% Saturation VS. Temperature									
Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.457	23	8.578	28	7.827	33	7.183	38	6.520
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	766.2	[Image]	0735	mmHg
Temperature (Saturated Air)	15.87	16.01	0749	c
Temperature (Calibration Solution)	18.93	18.72	0747	c
D.O.	9.38	9.87	0735	mg/L
PH 7	7.08	7.02	0741	SU
PH 4	4.03	4.00	0743	SU
PH 10	10.05	10.05	0745	SU
Specific Conductance	1.269	1.278	0737	mS/cm
ORP	242.2	232.5	0747	mV

MicroTPW Calibration	
Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: ☒ YES ☐ NO Circa One

Project Name: UTL Delavan Spray Technologies Site
 Project Number: 60314964
 Calibrated By: Justin Betler
 Signature: [Signature]

YSI 556 SN: 08C101000
 Turbidimeter Model/SN: MicroTPW 200704141
 Additional Equipment/SN: _____
 Date: 4/12/17

Operation Notes:

1) Turn meter on in Run mode and allow to warm up 10-15 minutes prior to calibration. 2) Observe DO% for 2-3 minutes when meter is initially turned on 3) The unit should display decreasing values until it is stabilized near-100% 4) If the meter does not stabilize at/near 100%, indicates the D.O. sensor requires maintenance

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards not ambient temperature and the temperature sensor is submerged in solution.

Table 1: Calibration Values At Various Temperatures					
Temp., C	PH 4	PH 7	PH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = Millimeters of Mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating

Table 2: Atmospheric Pressure / Altitude Table					
Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Table 3: DO% Saturation VS. Temperature									
Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.685	22	8.743	27	7.968	32	7.305	37	6.727
18	9.457	23	8.578	28	7.827	33	7.183	38	6.520
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	764.6		0727	mmHg
Temperature (Saturated Air)	19.31	19.13	0739	c
Temperature (Calibration Solution)	20.22	19.92	0737	c
D.O.	8.86	9.28	0727	mg/L
PH 7	7.02	7.02	0731	SU
PH 4	3.95	4.06	0733	SU
PH 10	9.98	10.04	0735	SU
Specific Conductance	1.288	1.278	0729	mS/cm
ORP	234.0	237.5	0737	mV

MicroTPW Calibration	
Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: ☒ YES ☐ NO Circle One

Project Name: JC Bohann Spring Technologies Site
 Project Number: 60314964
 Calibrated By: Justin Butler
 Signature: [Signature]

YSI 556 SN: 081101000
 Turbidimeter Model/SN: MicroTPW 200704141
 Additional Equipment/SN: _____
 Date: 4/13/17

Operation Notes:

1) Turn meter on in Run mode and allow to warm up 10-15 minutes prior to calibration. 2) Observe DO% for 2-3 minutes when meter is initially turned on 3) The unit should display decreasing values until it is stabilized near-100% 4) If the meter does not stabilize at/near 100%, indicates the D.O. sensor requires maintenance

These values should be keyed in when calibrating a water quality meter. Be sure to use the temperature of the standards not ambient temperature and the temperature sensor is submerged in solution.

Table 1: Calibration Values At Various Temperatures					
Temp., C	PH 4	PH 7	PH 10	Conductivity	ORP
5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

mm Hg = Millimeters of Mercury. Note that the YSI 556 uses this information ONLY when the DO calibration is being done. After calibration is complete it no longer corrects for pressure change. Verify the meter is correct for your altitude when calibrating

Table 2: Atmospheric Pressure / Altitude Table					
Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)
0	760	1126	730	2290	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Table 3: DO% Saturation VS. Temperature									
Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.685	22	8.743	27	7.968	32	7.305	37	6.727
18	9.487	23	8.578	28	7.827	33	7.183	38	6.520
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	765.5		0805	mmHg
Temperature (Saturated Air)	19.21	19.32	0817	c
Temperature (Calibration Solution)	21.06	20.72	0815	c
D.O.	9.46	9.28	0805	mg/L
PH 7	7.03	7.02	0809	SU
PH 4	3.98	4.01	0811	SU
PH 10	9.98	10.05	0813	SU
Specific Conductance	1.287	1.278	0807	mS/cm
ORP	236.8	237.5	0815	mV

MicroTPW Calibration	
Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: ☒ YES ☐ NO Circle One

Site Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC

it Name: UTC

ted by: Randy Morgan / Justin Butler

Project Manager: Walter Gerald 864-234-8925

Sample Analysis Requested

Quality Assurance Samples

COMMENTS

Cooler ID

[illegible]

Custody Transfers Prior to Receipt by Laboratory

Received by (signed)	Date	Time
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Requested By (Signature) _____ Date _____ Time _____

1. _____
2. _____
3. _____

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:

Method of Shipment:

Analytical Lab:

Lab Recipient:

Shipped!

Argbll #:

Location

Date: _____

R113 1397 3133

Orlando FLA

Time

specimen Number - date collected + custody number (B/G, 01-19-2004-01)

2.8 BY 8269B -unpreserved vials - 7day holding time

AECOM CHEMIST - Dori Cullom 8 864-234-8928 doria.cullom@aecom.com

Chain of Custody and Analytical Request

Page 2 of 3
 Project Number: 60314964
 Chain of Custody Number (1):
 LIMS Number:

Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC

Name: UTC

Requested by: Randy Morgan / Justin Butler

Project Manager: Walter Gerald 864-234-8925

Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	VOC,s 8260B	SVOC,s (8270D)	P/P Metals (6010C)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Custody Transfers Prior to Receipt by Laboratory

Prepared By (Signed) [Signature] Date 4-12-17 Time 1800

Received by (signed) _____ Date _____ Time _____
 1. _____
 2. _____
 3. _____

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____ Shipped: XXXX
 Method of Shipment: Red Ex Airbill #: 8113 1397 3130
 Analytical Lab: Accutest Location: Orlando FLA
 Lab Recipient: _____ Date: _____ Time: _____



Project Number: 60314964

Chain of Custody Number⁽ⁿ⁾.

LIMS Number:

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC

Sample Analysis Requested

Quality Assurance Samples

Client Name: UTC

Collected by: Randy Morgan / Justin Butler

Project Manager: Walter Gerald 864-234-8925

[illegible]

Custody Transfers Prior to Receipt by Laboratory

Sample Delivery Details / Laboratory Receipt

Received by (signed) _____ Date _____ Time _____

Delivered Directly to Lab:

Shipped: XXXX

Airbill #: 813 1397 312

Method of Shipment: Fed Ex

Analytical Lab: Accutest

Location: Orlando FLA

Lab Recipient: _____

Date: _____ Time: _____

Chain of Custody Number = date collected + custody number (E.G. 01-19-2004-01)

ICL VOCs BY 8260B -unpreserved vials - 7day holding time

AECOM CHEMIST - Dori Cullom 8 864-234-8928 doria.cullom@aecom.com

52745 admin project control project forms Blank C00



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-1		
Upgradient	Downgradient	Sidegradient	☒ Source
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>76.5</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.36</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>5.64</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>0.92</u> gal
3 Casing Volumes =	<u>2.76</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>1.50</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	PVC		
Measuring Point Elevation	<u>147.56</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.37</u>	1/100 ft	
Land Surface Elevation	<u>147.19</u>	1/100 ft	
Screened Interval	<u>3 - 18</u>	1/100 ft	
Dedicated Pump or Bailer	YES ☐ NO ☒	Type	
Steel Guard Pipe Around Casing	YES ☒ NO ☐		
Locking Cap	YES ☒ NO ☐		
Protective Post/Abutment	YES ☐ NO ☒		
Well Integrity Satisfactory	YES ☒ NO ☐		
Yield	LOW ☒ MODERATE ☐ HIGH ☐		
Comments/Observations			
Sample Time:	<u>1140</u>		
Sample Analytes:	<u>VOC'S</u>		
Hack Fe Kit:	<u>NA</u> mg/L		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.25</u>	<u>0.50</u>	<u>0.75</u>	<u>1.00</u>	<u>1.25</u>	<u>1.50</u>				
	<u>1108</u>	<u>1113</u>	<u>1118</u>	<u>1123</u>	<u>1128</u>	<u>1133</u>	<u>1138</u>			
	<u>12.61</u>	<u>12.87</u>	<u>13.12</u>	<u>13.38</u>	<u>13.58</u>	<u>13.77</u>	<u>13.98</u>			
	<u>4.32</u>	<u>4.27</u>	<u>4.27</u>	<u>4.25</u>	<u>4.27</u>	<u>4.25</u>	<u>4.26</u>			
	<u>0.033</u>	<u>0.033</u>	<u>0.033</u>	<u>0.034</u>	<u>0.034</u>	<u>0.034</u>	<u>0.033</u>			
	<u>20.79</u>	<u>20.52</u>	<u>20.39</u>	<u>20.27</u>	<u>20.35</u>	<u>20.45</u>	<u>20.45</u>			
	<u>14.62</u>	<u>5.49</u>	<u>8.30</u>	<u>2.43</u>	<u>2.69</u>	<u>2.69</u>	<u>5.94</u>			
	<u>4.00</u>	<u>3.93</u>	<u>3.90</u>	<u>3.53</u>	<u>3.07</u>	<u>3.01</u>	<u>2.96</u>			
	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>			
	<u>376.9</u>	<u>380.7</u>	<u>381.0</u>	<u>381.6</u>	<u>379.2</u>	<u>378.9</u>	<u>378.5</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 7

Date (mo/day/yr)	4/12/17
Field Personnel	Justin Butler
Site Name	UTC Delavan Spray Technologies Site
AECOM Job #	60314964
Sample ID*	MW-2
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐	
Weather Conditions	clear
Air Temperature	60.5 ° F
Total Well Depth (TWD) =	18.00 1/100 ft
Depth to Ground Water (DGW) =	11.99 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	6.01 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	0.98 gal
3 Casing Volumes =	2.94 gal = Standard Evacuation Volume
Method of Sample Evacuation	Purge with Peristaltic Pump
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S
Total Volume of Water Removed	1.50 gal

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation	147.63	1/100 ft
Height of Riser (above land surface)	-0.18	1/100 ft
Land Surface Elevation	147.81	1/100 ft
Screened Interval	3 - 18	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type ☐
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☒ NO ☐	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☒ HIGH ☐	
Comments/Observations		
Sample Time:	0900	
Sample Analytes:	VOC'S	
Hack Fe Kit:	ND mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)	Initial	0.30	0.60	0.90	1.20	1.50					
TIME (Military)	0831	0836	0841	0846	0851	0856					
Water Level (ft BTOC)	12.07	12.10	12.11	12.12	12.12	12.12					
pH (S.U.)	4.79	4.49	4.38	4.34	4.33	4.35					
Sp. Cond. (mS/cm)	0.026	0.026	0.026	0.026	0.026	0.026					
Water Temp. (°C)	19.58	19.66	19.73	19.76	19.80	19.81					
Turbidity (NTUs)	72.69	15.18	4.45	3.42	2.07	1.63					
DO - (mg/L)	5.00	5.06	5.01	5.02	5.08	5.05					
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01					
ORP (mV)	918.7	345.8	362.3	372.8	379.8	383.0					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	April 4, 2017		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-3		
Upgradient	X	Downgradient	Sidegradient
Weather Conditions	Clear Sunny		
Air Temperature	78	° F	
Total Well Depth (TWD) =	18.00	1/100 ft	
Depth to Ground Water (DGW) =	13.90	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	4.10	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	= 0.66	gal	
3 Casing Volumes =	2.00	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.80	gal	

Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation	148.11	1/100 ft	
Height of Riser (above land surface)	-0.23	1/100 ft	
Land Surface Elevation	148.34	1/100 ft	
Screened Interval	3 - 18	1/100 ft	
Dedicated Pump or Bailor	YES	NO	
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	MODERATE	HIGH
Comments/Observations	Sample Time: 1423 Sample Analytes: VOC'S Hack Fe Kit: N/A mg/L		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOW)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	.40	.80	1.20	1.60	2.0	2.40	2.80			
1345	1350	1355	1400	1405	1410	1415	1420			
14.15	14.40	14.47	14.78	14.92	15.10	15.25	15.41			
4.96	4.44	4.34	4.30	4.19	4.05	4.13	4.19			
0.023	0.023	0.022	0.022	0.022	0.022	0.022	0.023			
22.84	22.12	22.17	21.82	21.85	21.82	21.77	21.91			
5.81	7.62	5.55	6.87	8.94	7.88	8.16	10.13			
4.70	4.77	4.25	4.54	4.46	4.69	4.77	5.15			
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
209.9	261.4	268.1	305.1	303.4	314.7	306.3	308.9			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	April 14, 2017		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-3D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	clear Sunny		
Air Temperature	81	° F	
Total Well Depth (TWD) =	49.00	1/100 ft	
Depth to Ground Water (DGW) =	14.53	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	34.46	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	5.61 gal
3 Casing Volumes =	16.84	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.0	gal	

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation	148.12	1/100 ft
Height of Riser (above land surface)	-0.16	1/100 ft
Land Surface Elevation	148.28	1/100 ft
Screened Interval	44 - 49	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations	Sample Time: 1515	
Sample Analytes:	VOC'S also ms/msd	
Hack Fe Kit:	NA mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

	FIELD ANALYSES					
	Initial	1.40	.80	1.20	1.60	2.0
VOLUME PURGED (gallons)	1448	1453	1458	1503	1508	1513
TIME (Military)	14.57	14.58	14.57	14.57	14.57	14.57
Water Level (ft BTOC)	7.20	7.49	7.51	7.61	7.56	7.60
pH (S.U.)	0.242	0.241	0.240	0.241	0.241	0.241
Sp. Cond. (mS/cm)	23.28	22.69	22.43	22.48	22.40	22.20
Water Temp. (°C)	8.69	6.41	5.88	5.10	3.93	3.95
Turbidity (NTUs)	2.70	2.51	2.53	2.57	2.57	2.62
DO - (mg/L)	0.11	0.11	0.11	0.11	0.11	0.11
Salinity (ppt)	165.9	146.5	135.0	124.5	122.9	113.8
ORP (mV)						

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-5		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>Clear</u>			
Air Temperature	<u>70.5</u> ° F		
Total Well Depth (TWD) =	<u>14.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>8.39</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>5.61</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>0.91</u> gal
3 Casing Volumes =	<u>2.73</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>1.50</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	PVC	
Measuring Point Elevation	<u>145.46</u>	1/100 ft
Height of Riser (above land surface)	<u>0.12</u>	1/100 ft
Land Surface Elevation	<u>145.34</u>	1/100 ft
Screened Interval	<u>4</u> - <u>14</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☒ MODERATE ☐ HIGH ☐	
Comments/Observations		
Sample Time: <u>1255</u>		
Sample Analytes: <u>VOC'S</u>		
Hack Fe Kit: <u>NA</u> mg/L		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.25	0.50	0.75	1.00	1.25	1.50				
<u>1223</u>	<u>1228</u>	<u>1233</u>	<u>1238</u>	<u>1243</u>	<u>1248</u>	<u>1253</u>				
<u>8.39</u>	<u>8.87</u>	<u>8.99</u>	<u>9.10</u>	<u>9.20</u>	<u>9.29</u>	<u>9.39</u>				
<u>8.26</u>	<u>3.92</u>	<u>3.89</u>	<u>4.11</u>	<u>4.17</u>	<u>4.15</u>	<u>4.15</u>				
<u>0.020</u>	<u>0.020</u>	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>				
<u>19.39</u>	<u>19.39</u>	<u>19.27</u>	<u>19.32</u>	<u>19.25</u>	<u>19.23</u>	<u>19.28</u>				
<u>10.19</u>	<u>5.68</u>	<u>4.19</u>	<u>3.39</u>	<u>3.23</u>	<u>3.57</u>	<u>3.74</u>				
<u>8.35</u>	<u>8.23</u>	<u>8.25</u>	<u>8.23</u>	<u>8.13</u>	<u>8.14</u>	<u>8.09</u>				
<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>				
<u>391.0</u>	<u>410.6</u>	<u>402.0</u>	<u>390.1</u>	<u>381.0</u>	<u>382.4</u>	<u>381.7</u>				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/2/17</u>	Casing Diameter	<u>2.0</u>	inches
Field Personnel	<u>Justin Butler</u>	Casing Material	<u>PVC</u>	
Site Name	<u>UTC Delavan Spray Technologies Site</u>	Measuring Point Elevation	<u>149.03</u>	1/100 ft
AECOM Job #	<u>60314964</u>	Height of Riser (above land surface)	<u>-0.22</u>	1/100 ft
Sample ID*	<u>MW-7</u>	Land Surface Elevation	<u>149.25</u>	1/100 ft
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source		Screened Interval	<u>5</u> - <u>20</u>	1/100 ft
Weather Conditions	<u>clear</u>	Dedicated Pump or Bailor	YES ☐ NO ☒	Type <u> </u>
Air Temperature	<u>60's</u> ° F	Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Total Well Depth (TWD) =	<u>20.00</u>	Locking Cap	YES ☒ NO ☐	
Depth to Ground Water (DGW) =	<u>14.33</u>	Protective Post/Abutment	YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW =	<u>5.67</u>	Well Integrity Satisfactory	YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x <u>0.163</u>	= <u>0.92</u>	Yield	LOW ☒ MODERATE ☐ HIGH ☐	
3 Casing Volumes = <u>2.76</u>	gal = Standard Evacuation Volume	Comments/Observations		
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>	Sample Time: <u>1035</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>	Sample Analytes: <u>VOC'S</u>		
Total Volume of Water Removed	<u>1.4</u> gal	Hack Fe Kit: <u>NA</u> mg/L		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.2	0.4	0.6	0.8	1.0	1.2	1.4			
0956	1001	1006	1011	1016	1021	1026	1031			
14.76	15.14	15.41	15.68	16.10	16.32	16.54	16.75			
4.21	4.14	4.12	4.13	4.15	4.24	4.24	4.25			
0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.017			
20.35	20.16	20.20	20.39	20.83	21.07	21.18	21.23			
21.61	9.76	7.13	6.99	8.11	7.37	7.27	7.01			
8.37	8.30	8.10	8.15	7.95	7.92	7.90	7.87			
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
396.8	408.6	402.0	397.8	390.3	382.5	376.0	370.4			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 11, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-8</u>		
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source			
Weather Conditions	<u>clear / sunny</u>		
Air Temperature	<u>81</u>	° F	
Total Well Depth (TWD) =	<u>20.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.33</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>8.67</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>1.41</u>	gal	
3 Casing Volumes =	<u>4.23</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.8</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>145.66</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.29</u>	1/100 ft
Land Surface Elevation	<u>145.95</u>	1/100 ft
Screened Interval	<u>5 - 20</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☒ HIGH ☐	
Comments/Observations		
Sample Time:	<u>1718</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>N/A</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

	FIELD ANALYSES										
	Initial	<u>.40</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.4</u>	<u>2.8</u>			
VOLUME PURGED (gallons)	<u>1640</u>	<u>1645</u>	<u>1650</u>	<u>1655</u>	<u>1700</u>	<u>1705</u>	<u>1710</u>	<u>1715</u>			
TIME (Military)	<u>11.59</u>	<u>11.73</u>	<u>11.87</u>	<u>11.97</u>	<u>12.05</u>	<u>12.15</u>	<u>12.16</u>	<u>12.19</u>			
Water Level (ft BTOC)	<u>4.86</u>	<u>4.47</u>	<u>4.12</u>	<u>4.19</u>	<u>4.39</u>	<u>4.43</u>	<u>4.48</u>	<u>4.45</u>			
pH (S.U.)	<u>0.059</u>	<u>0.057</u>	<u>0.063</u>	<u>0.062</u>	<u>0.060</u>	<u>0.058</u>	<u>0.058</u>	<u>0.057</u>			
Sp. Cond. (mS/cm)	<u>22.71</u>	<u>22.66</u>	<u>22.79</u>	<u>22.87</u>	<u>22.80</u>	<u>22.75</u>	<u>22.82</u>	<u>22.73</u>			
Water Temp. (°C)	<u>10.74</u>	<u>7.77</u>	<u>9.79</u>	<u>7.77</u>	<u>6.69</u>	<u>3.78</u>	<u>3.94</u>	<u>3.12</u>			
Turbidity (NTUs)	<u>3.42</u>	<u>3.32</u>	<u>3.67</u>	<u>3.62</u>	<u>3.49</u>	<u>3.78</u>	<u>3.33</u>	<u>3.24</u>			
DO - (mg/L)	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>			
Salinity (ppt)	<u>237.9</u>	<u>282.0</u>	<u>313.1</u>	<u>337.6</u>	<u>356.9</u>	<u>324.9</u>	<u>325.1</u>	<u>325.7</u>			
ORP (mV)											

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 19 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-9		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>clear/sunny</u>		
Air Temperature	° F		
Total Well Depth (TWD) =	<u>20.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>5.77</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>14.23</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	<u>= 2.31</u>	gal	
3 Casing Volumes =	<u>6.93</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>3.20</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>143.89</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.22</u>	1/100 ft
Land Surface Elevation	<u>144.11</u>	1/100 ft
Screened Interval	<u>5</u> - <u>20</u>	1/100 ft
Dedicated Pump or Bailor	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☒ MODERATE ☒ HIGH ☐	
Comments/Observations		
Sample Time:	<u>1705</u>	
Sample Analytes:	<u>VOC'S MIST/MCO</u>	
Hack Fe Kit:	<u>N/A</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>.40</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.40</u>	<u>2.80</u>	<u>3.20</u>		
	<u>16.23</u>	<u>16.28</u>	<u>16.33</u>	<u>16.38</u>	<u>16.43</u>	<u>16.48</u>	<u>16.53</u>	<u>16.58</u>	<u>17.03</u>	
	<u>6.22</u>	<u>6.55</u>	<u>6.75</u>	<u>6.98</u>	<u>7.13</u>	<u>7.22</u>	<u>7.37</u>	<u>7.41</u>	<u>7.47</u>	
	<u>5.26</u>	<u>4.35</u>	<u>4.17</u>	<u>4.00</u>	<u>3.83</u>	<u>3.88</u>	<u>3.82</u>	<u>3.85</u>	<u>3.80</u>	
	<u>0.029</u>	<u>0.028</u>	<u>0.029</u>	<u>0.029</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	
	<u>22.60</u>	<u>19.33</u>	<u>19.29</u>	<u>19.00</u>	<u>18.53</u>	<u>18.57</u>	<u>18.55</u>	<u>18.27</u>	<u>18.15</u>	
	<u>20.25</u>	<u>9.31</u>	<u>8.36</u>	<u>8.44</u>	<u>6.61</u>	<u>5.13</u>	<u>6.21</u>	<u>6.36</u>	<u>4.60</u>	
	<u>4.47</u>	<u>4.57</u>	<u>4.58</u>	<u>4.47</u>	<u>4.21</u>	<u>3.68</u>	<u>3.91</u>	<u>3.75</u>	<u>3.79</u>	
	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	
	<u>205.1</u>	<u>292.7</u>	<u>311.7</u>	<u>331.1</u>	<u>345.4</u>	<u>342.4</u>	<u>360.2</u>	<u>369.1</u>	<u>371.5</u>	

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/10/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-10</u>		
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source			
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>76.5</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>4.93</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>13.07</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>2.13</u> gal
3 Casing Volumes =	<u>6.39</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>32</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>142.19</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.37</u>	1/100 ft
Land Surface Elevation	<u>142.56</u>	1/100 ft
Screened Interval	<u>3 - 18</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1710</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2		
	1626	1631	1636	1641	1646	1651	1656	1701	1706	
	5.07	5.10	5.12	5.13	5.03	5.13	5.14	5.14	5.14	
	6.34	5.33	5.18	5.00	5.03	4.92	4.90	4.88	4.89	
	0.034	0.027	0.025	0.025	0.025	0.025	0.025	0.025	0.025	
	19.27	18.06	17.74	17.64	17.67	17.68	17.70	17.60	17.70	
	52.45	8.33	11.12	17.24	9.71	4.66	3.81	3.89	2.91	
	0.55	0.29	0.22	0.26	0.32	0.29	0.31	0.32	0.34	
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
	54.4	72.4	84.4	119.1	143.9	148.8	141.0	138.1	137.3	

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 10, 2017</u>		
Field Personnel	<u>Randy Murgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-12D</u>		
Upgradient ☐ Downgradient ☒ Sidegradient ☐ Source ☐			
Weather Conditions	<u>clear / sunny</u>		
Air Temperature	<u>73</u>	° F	
Total Well Depth (TWD) =	<u>50.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>17.88</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>36.12</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>5.88</u>	gal	
3 Casing Volumes =	<u>17.64</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>5.20</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	<u>PVC</u>		
Measuring Point Elevation	<u>147.65</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.21</u>	1/100 ft	
Land Surface Elevation	<u>147.86</u>	1/100 ft	
Screened Interval	<u>40</u> - <u>50</u>	1/100 ft	
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>	
Steel Guard Pipe Around Casing	YES ☒ NO ☐		
Locking Cap	YES ☒ NO ☐		
Protective Post/Abutment	YES ☐ NO ☒		
Well Integrity Satisfactory	YES ☒ NO ☐		
Yield	LOW ☐ MODERATE ☐ HIGH ☒		
Comments/Observations	<u>Sample Time: 1238</u> <u>Sample Analytes: VOC'S</u> <u>Hack Fe Kit: N/A mg/L</u>		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.80	1.60	2.40	3.20	4.0	4.40	4.80	5.20		
1130	1140	1150	1200	1210	1220	1225	1230	1235		
15.65	17.33	18.19	19.70	17.19	17.02	17.10	17.23	17.29		
11.69	1132	9.64	9.56	9.11	8.94	8.48	8.43	8.40		
0.923	0.705	0.258	0.243	0.230	0.228	0.227	0.228	0.228		
18.69	18.65	18.68	18.78	18.82	18.89	18.74	18.73	18.71		
12.94	7.62	8.01	6.88	6.64	5.91	6.23	4.99	3.86		
6.41	5.95	5.45	5.12	4.99	4.96	4.96	4.92	4.94		
0.46	0.34	0.12	0.11	0.11	0.11	0.11	0.11	0.11		
176.4	108.2	121.5	120.5	152.2	157.0	155.5	153.0	151.3		

COMMENTS/OBSERVATIONS

Ph and Conductivity are high stabilize after 5 gals



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 10, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-13D</u>		
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐			
Weather Conditions	<u>Clear Sunny</u>		
Air Temperature	<u>75</u>	° F	
Total Well Depth (TWD) =	<u>50.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.63</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>37.37</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>6.09</u>	gal	
3 Casing Volumes =	<u>18.27</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>3.60</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>146.23</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.18</u>	1/100 ft
Land Surface Elevation	<u>146.41</u>	1/100 ft
Screened Interval	<u>40 - 50</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations	<u>1348</u>	
Sample Time:	<u>VOC'S</u>	
Sample Analytes:	<u>N/A</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>.80</u>	<u>1.60</u>	<u>2.40</u>	<u>2.80</u>	<u>3.20</u>	<u>3.60</u>				
	<u>1300</u>	<u>1310</u>	<u>1320</u>	<u>1330</u>	<u>1335</u>	<u>1340</u>	<u>1345</u>			
	<u>12.65</u>	<u>12.65</u>	<u>12.65</u>	<u>12.65</u>	<u>12.65</u>	<u>12.65</u>	<u>12.65</u>			
	<u>7.62</u>	<u>5.20</u>	<u>5.02</u>	<u>5.24</u>	<u>5.07</u>	<u>5.03</u>	<u>5.02</u>			
	<u>0.227</u>	<u>0.228</u>	<u>0.229</u>	<u>0.229</u>	<u>0.229</u>	<u>0.229</u>	<u>0.229</u>			
	<u>19.46</u>	<u>19.50</u>	<u>19.48</u>	<u>19.52</u>	<u>19.52</u>	<u>19.57</u>	<u>19.57</u>			
	<u>14.72</u>	<u>7.14</u>	<u>6.15</u>	<u>5.86</u>	<u>6.72</u>	<u>4.87</u>	<u>5.76</u>			
	<u>4.80</u>	<u>4.87</u>	<u>4.76</u>	<u>4.76</u>	<u>4.66</u>	<u>4.56</u>	<u>4.53</u>			
	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>			
	<u>154.4</u>	<u>289.0</u>	<u>295.2</u>	<u>289.3</u>	<u>295.4</u>	<u>289.7</u>	<u>294.1</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	April 14, 2017		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-14		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	Clear / Sunny		
Air Temperature	75	° F	
Total Well Depth (TWD) =	20.00	1/100 ft	
Depth to Ground Water (DGW) =	12.40	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	7.60	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	1.23 gal
3 Casing Volumes =	3.71	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	3.60	gal	
Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation	146.90	1/100 ft	
Height of Riser (above land surface)	-0.15	1/100 ft	
Land Surface Elevation	147.05	1/100 ft	
Screened Interval	5 - 20	1/100 ft	
Dedicated Pump or Bailer	YES ☐ NO ☒	Type	
Steel Guard Pipe Around Casing	YES ☒ NO ☐		
Locking Cap	YES ☒ NO ☐		
Protective Post/Abutment	YES ☐ NO ☒		
Well Integrity Satisfactory	YES ☒ NO ☐		
Yield	LOW ☒ MODERATE ☐ HIGH ☐		
Comments/Observations	Sample Time: 1248 Sample Analytes: VOC'S Also dup MW-14-a Hack Fe Kit: N/A mg/L		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

	Initial	.40	.80	1.20	1.60	2.0	2.4	2.8	3.20	3.60	
VOLUME PURGED (gallons)	1200	1205	1210	1215	1220	1225	1230	1235	1240	1245	
TIME (Military)	12.65	13.07	13.63	14.02	14.56	14.93	15.31	15.82	16.12	16.40	
Water Level (ft BTOC)	4.44	3.86	4.16	4.21	4.17	4.18	4.21	4.30	4.38	4.33	
pH (S.U.)	0.025	0.024	0.024	0.024	0.024	0.024	0.025	0.025	0.025	0.025	
Sp. Cond. (mS/cm)	21.02	20.78	20.78	20.87	21.11	21.12	21.09	21.48	21.38	22.60	
Water Temp. (°C)	6.33	2.44	3.59	4.85	3.72	5.26	6.81	6.48	5.48	5.13	
Turbidity (NTUs)	5.91	6.04	6.16	6.11	6.02	6.08	5.91	5.91	5.80	5.71	
DO - (mg/L)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Salinity (ppt)	198.4	272.3	380.3	251.8	267.4	275.9	277.8	274.6	271.9	275.4	
ORP (mV)											

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 14, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-14D</u>		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Clear Sunny</u>		
Air Temperature	<u>78</u>	° F	
Total Well Depth (TWD) =	<u>50.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>13.54</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>36.46</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	<u>= 5.94</u>	gal
3 Casing Volumes =	<u>17.82</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.40</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>146.88</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.23</u>	1/100 ft
Land Surface Elevation	<u>147.11</u>	1/100 ft
Screened Interval	<u>40 - 50</u>	1/100 ft
Dedicated Pump or Bailor	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☒	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1333</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>N/A</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOW)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>.40</u>	<u>1.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.40</u>				
	<u>1300</u>	<u>1305</u>	<u>1310</u>	<u>1315</u>	<u>1320</u>	<u>1325</u>	<u>1330</u>			
	<u>13.54</u>	<u>13.52</u>	<u>13.52</u>	<u>13.52</u>	<u>13.52</u>	<u>13.52</u>	<u>13.52</u>			
	<u>8.20</u>	<u>7.75</u>	<u>7.66</u>	<u>7.60</u>	<u>7.62</u>	<u>7.63</u>	<u>7.66</u>			
	<u>0.222</u>	<u>0.240</u>	<u>0.241</u>	<u>0.240</u>	<u>0.240</u>	<u>0.241</u>	<u>0.240</u>			
	<u>22.31</u>	<u>22.34</u>	<u>22.37</u>	<u>22.37</u>	<u>22.36</u>	<u>22.43</u>	<u>22.43</u>			
	<u>8.22</u>	<u>7.08</u>	<u>4.89</u>	<u>5.03</u>	<u>5.84</u>	<u>4.01</u>	<u>3.80</u>			
	<u>1.44</u>	<u>0.83</u>	<u>0.74</u>	<u>0.71</u>	<u>0.69</u>	<u>0.66</u>	<u>0.60</u>			
	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>			
	<u>9.31</u>	<u>73.0</u>	<u>57.5</u>	<u>45.5</u>	<u>37.0</u>	<u>34.2</u>	<u>31.3</u>			

COMMENTS/OBSERVATIONS

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 11, 2017</u>		Casing Diameter <u>2.0</u> inches	
Field Personnel <u>Randy Morgan</u>		Casing Material <u>PVC</u>	
Site Name <u>UTC Delavan Spray Technologies Site</u>		Measuring Point Elevation <u>135.73</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.40</u> 1/100 ft	
Sample ID* <u>MW-15</u>		Land Surface Elevation <u>136.13</u> 1/100 ft	
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source		Screened Interval <u>4</u> - <u>19</u> 1/100 ft	
Weather Conditions <u>clear/sunny</u>		Dedicated Pump or Bailor YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>50</u> °F		Steel Guard Pipe Around Casing YES ☒ NO ☐	
Total Well Depth (TWD) = <u>19.00</u> 1/100 ft		Locking Cap YES ☒ NO ☐	
Depth to Ground Water (DGW) = <u>2.83</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>16.17</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x 0.163 = <u>2.63</u> gal		Yield LOW ☐ MODERATE ☐ HIGH ☒	
3 Casing Volumes = <u>7.90</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>0900</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC'S</u>	
Total Volume of Water Removed <u>3.60</u> gal		Hack Fe Kit: <u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

	Initial	.40	.80	1.20	1.60	2.0	2.4	2.8	3.20	3.60
VOLUME PURGED (gallons)	0813	0818	0823	0828	0833	0838	0843	0848	0853	0858
TIME (Military)	3.00	3.11	3.15	3.18	3.20	3.22	3.24	3.25	3.26	3.27
Water Level (ft BTOC)	3.91	4.59	4.59	4.61	4.58	4.53	4.51	4.51	4.48	4.49
pH (S.U.)	0.452	0.444	0.434	0.370	0.286	0.256	0.246	0.238	0.231	0.229
Sp. Cond. (mS/cm)	15.87	16.24	16.33	25.72	16.55	16.58	16.55	16.61	16.65	16.70
Water Temp. (°C)	31.96	16.79	18.13	25.17	52.12	24.19	17.10	8.62	5.39	4.33
Turbidity (NTUs)	0.85	0.59	0.53	0.50	0.48	0.46	0.44	0.42	0.38	0.36
DO - (mg/L)	0.22	0.21	0.21	0.17	0.14	0.12	0.12	0.11	0.11	0.11
Salinity (ppt)	56.2	12.4	8.8	4.5	1.1	-5.4	-13.0	-21.8	-28.5	-33.1
ORP (mV)										

(16.49)
Temp

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 11 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-15D</u>		
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source			
Weather Conditions	<u>clear / sunny</u>		
Air Temperature	<u>66°</u> °F		
Total Well Depth (TWD) =	<u>45.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>2.53</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>42.47</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	= <u>6.92</u>	gal
3 Casing Volumes =	<u>20.76</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.0</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>135.59</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.34</u>	1/100 ft
Land Surface Elevation	<u>135.93</u>	1/100 ft
Screened Interval	<u>35</u> - <u>45</u>	1/100 ft
Dedicated Pump or Bailor	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1033</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>N/A</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>.40</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>					
	<u>1005</u>	<u>1010</u>	<u>1015</u>	<u>1020</u>	<u>1025</u>	<u>1030</u>				
	<u>2.63</u>	<u>2.53</u>	<u>2.55</u>	<u>2.53</u>	<u>2.53</u>	<u>2.53</u>				
	<u>7.06</u>	<u>6.95</u>	<u>7.04</u>	<u>7.10</u>	<u>7.14</u>	<u>7.19</u>				
	<u>0.431</u>	<u>0.438</u>	<u>0.439</u>	<u>0.439</u>	<u>0.439</u>	<u>0.439</u>				
	<u>18.09</u>	<u>18.02</u>	<u>18.01</u>	<u>18.02</u>	<u>18.03</u>	<u>18.04</u>				
	<u>30.12</u>	<u>6.04</u>	<u>6.15</u>	<u>4.66</u>	<u>5.85</u>	<u>5.93</u>				
	<u>2.31</u>	<u>2.38</u>	<u>2.36</u>	<u>2.35</u>	<u>2.32</u>	<u>2.32</u>				
	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>				
	<u>-84.8</u>	<u>-33.9</u>	<u>-0.3</u>	<u>+16.6</u>	<u>26.0</u>	<u>32.8</u>				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 11, 2017</u>	Casing Diameter <u>2.0</u> inches
Field Personnel <u>Kendy Morgan</u>	Casing Material <u>PVC</u>
Site Name <u>UTC Delavan Spray Technologies Site</u>	Measuring Point Elevation <u>135.69</u> 1/100 ft
AECOM Job # <u>60314964</u>	Height of Riser (above land surface) <u>-0.25</u> 1/100 ft
Sample ID* <u>MW-15D1</u>	Land Surface Elevation <u>135.94</u> 1/100 ft
<u> </u> Upgradient <u>X</u> Downgradient <u> </u> Sidegradient <u> </u> Source <u> </u>	Screened Interval <u>75</u> - <u>85</u> 1/100 ft
Weather Conditions <u>clear sunny</u>	Dedicated Pump or Bailer YES <u> </u> NO <u>X</u> Type <u> </u>
Air Temperature <u>70</u> °F	Steel Guard Pipe Around Casing YES <u>X</u> NO <u> </u>
Total Well Depth (TWD) = <u>85.00</u> 1/100 ft	Locking Cap YES <u>X</u> NO <u> </u>
Depth to Ground Water (DGW) = <u>2.65</u> 1/100 ft	Protective Post/Abutment YES <u> </u> NO <u>X</u>
Length of Water Column (LWC) = TWD - DGW = <u>82.35</u> 1/100 ft	Well Integrity Satisfactory YES <u>X</u> NO <u> </u>
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>13.42</u> gal	Yield LOW <u> </u> MODERATE <u> </u> HIGH <u>X</u>
3 Casing Volumes = <u>40.26</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>1108</u>
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>	Sample Analytes: <u>VOC'S</u>
Total Volume of Water Removed <u>2.0</u> gal	Hack Fe Kit: <u>N/A</u> mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	.40	.80	1.20	1.60	2.0					
1040	1045	1050	1055	1100	1105					
2.73	2.73	2.73	2.73	2.73	2.73					
7.63	7.62	7.65	7.72	7.73	7.74					
0.209	0.208	0.209	0.209	0.210	0.211					
18.15	18.11	18.10	18.17	18.19	18.18					
14.77	8.07	7.89	1.85	2.66	1.60					
0.46	0.32	0.29	0.29	0.28	0.29					
0.10	0.10	0.10	0.10	0.10	0.10					
-211.9	-226.0	-230.1	-228.3	-224.5	-222.4					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 10, 2017</u>	Casing Diameter <u>2.0</u> inches
Field Personnel <u>Randy Morgan</u>	Casing Material <u>PVC</u>
Site Name <u>UTC Delavan Spray Technologies Site</u>	Measuring Point Elevation <u>138.30</u> 1/100 ft
AECOM Job # <u>60314964</u>	Height of Riser (above land surface) <u>-0.44</u> 1/100 ft
Sample ID* <u>MW-16</u>	Land Surface Elevation <u>138.74</u> 1/100 ft
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source	Screened Interval <u>4</u> - <u>19</u> 1/100 ft
Weather Conditions <u>clear / Sunny</u>	Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>
Air Temperature <u> </u> °F	Steel Guard Pipe Around Casing YES ☒ NO ☐
Total Well Depth (TWD) = <u>19.00</u> 1/100 ft	Locking Cap YES ☒ NO ☐
Depth to Ground Water (DGW) = <u>2.85</u> 1/100 ft	Protective Post/Abutment YES ☐ NO ☒
Length of Water Column (LWC) = TWD - DGW = <u>16.15</u> 1/100 ft	Well Integrity Satisfactory YES ☒ NO ☐
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.63</u> gal	Yield LOW ☐ MODERATE ☐ HIGH ☒
3 Casing Volumes = <u>7.89</u> gal = Standard Evacuation Volume	Comments/Observations <u> </u>
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>1508</u>
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>	Sample Analytes: <u>VOC'S</u>
Total Volume of Water Removed <u>4.0</u> gal	Hack Fe Kit: <u>N/A</u> mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	.40	.80	1.20	1.60	2.0	2.40	2.80	3.20	3.60	4.00
1415	1420	1425	1430	1435	1440	1445	1450	1455	1500	1505
3.05	3.05	3.07	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08
4.72	4.56	4.30	4.31	4.12	4.11	4.07	4.02	4.05	4.00	4.03
0.028	0.028	0.027	0.027	0.028	0.028	0.028	0.028	0.028	0.027	0.028
18.64	18.55	18.35	18.28	18.07	17.93	17.93	17.89	17.93	17.85	17.89
87.10	63.82	59.37	45.81	34.03	28.33	27.42	27.50	27.52	26.53	27.13
0.62	0.53	0.49	0.60	0.62	0.64	0.59	0.58	0.53	0.57	0.55
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
191.3	213.5	230.3	169.0	144.0	129.9	109.0	101.1	98.9	95.3	92.7

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 10, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-16D</u>		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>clear Sunny</u>		
Air Temperature	° F		
Total Well Depth (TWD) =	<u>45.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>5.35</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>39.65</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	<u>= 6.46</u>	gal	
3 Casing Volumes =	<u>19.38</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.40</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	<u>PVC</u>		
Measuring Point Elevation	<u>138.38</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.32</u>	1/100 ft	
Land Surface Elevation	<u>138.70</u>	1/100 ft	
Screened Interval	<u>35</u> - <u>45</u>	1/100 ft	
Dedicated Pump or Bailer	YES ☐ NO ☒	Type	<u></u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐		
Locking Cap	YES ☒ NO ☐		
Protective Post/Abutment	YES ☐ NO ☒		
Well Integrity Satisfactory	YES ☒ NO ☐		
Yield	LOW ☐ MODERATE ☐ HIGH ☒		
Comments/Observations	<u>Sample Time: 1543</u>		
Sample Analytes:	<u>VOC'S</u>		
Hack Fe Kit:	<u>N/A</u>	mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOW)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	1.40	1.80	1.70	1.60	2.0	2.40				
1510	1515	1520	1525	1530	1535	1540				
5.35	5.36	5.36	5.36	5.36	5.36	5.36				
7.27	7.39	7.41	7.41	7.42	7.40	7.41				
0.287	0.286	0.286	0.286	0.286	0.286	0.286				
19.00	19.18	19.31	19.26	19.12	19.15	19.19				
168.2	57.11	26.23	12.12	9.29	9.01	6.54				
4.13	3.95	3.94	3.90	3.97	3.90	3.91				
0.14	0.14	0.14	0.14	0.14	0.14	0.14				
24.6	39.2	54.6	62.4	70.8	80.0	85.6				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/11/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-19</u>		
☐ Upgradient	☐ Downgradient	☐ Sidegradient	☒ Source
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>50'S</u>	° F	
Total Well Depth (TWD) =	<u>20.15</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.93</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>7.22</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.041</u>	=	<u>0.30</u> gal
3 Casing Volumes =	<u>0.90</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>6.50</u> gal		

Casing Diameter	<u>1.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>148.22</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.25</u>	1/100 ft
Land Surface Elevation	<u>148.47</u>	1/100 ft
Screened Interval	<u>5</u> - <u>20</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☒ MODERATE ☐ HIGH ☐	
Comments/Observations		
Sample Time:	<u>0845</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.25</u>	<u>0.50</u>	<u>0.75</u>	<u>1.00</u>	<u>1.25</u>	<u>1.50</u>				
	<u>0812</u>	<u>0817</u>	<u>0822</u>	<u>0827</u>	<u>0832</u>	<u>0837</u>	<u>0842</u>			
	<u>13.59</u>	<u>13.74</u>	<u>13.84</u>	<u>13.92</u>	<u>13.96</u>	<u>13.97</u>	<u>13.99</u>			
	<u>5.22</u>	<u>4.83</u>	<u>4.63</u>	<u>4.59</u>	<u>4.51</u>	<u>4.50</u>	<u>4.49</u>			
	<u>0.104</u>	<u>0.105</u>	<u>0.106</u>	<u>0.101</u>	<u>0.098</u>	<u>0.097</u>	<u>0.096</u>			
	<u>20.28</u>	<u>20.57</u>	<u>20.77</u>	<u>20.84</u>	<u>20.88</u>	<u>20.89</u>	<u>20.91</u>			
	<u>14.68</u>	<u>9.33</u>	<u>13.16</u>	<u>6.85</u>	<u>2.94</u>	<u>2.03</u>	<u>2.83</u>			
	<u>2.53</u>	<u>2.05</u>	<u>1.65</u>	<u>1.53</u>	<u>1.51</u>	<u>1.43</u>	<u>1.40</u>			
	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.04</u>	<u>0.04</u>			
	<u>278.3</u>	<u>261.8</u>	<u>276.7</u>	<u>285.1</u>	<u>291.0</u>	<u>294.9</u>	<u>297.8</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/11/17			
Field Personnel	Justin Butler			
Site Name	UTC Delavan Spray Technologies Site			
AECOM Job #	60314964			
Sample ID*	MW-20			
Upgradient	Downgradient	Sidegradient	X	Source
Weather Conditions	Clear			
Air Temperature	50.5	° F		
Total Well Depth (TWD) =	15.15	1/100 ft		
Depth to Ground Water (DGW) =	12.75	1/100 ft		
Length of Water Column (LWC) = TWD - DGW =	2.4	1/100 ft		
1 Casing Volume (OCV)* = LWC x	0.041	=	0.10	gal
3 Casing Volumes =	0.30	gal = Standard Evacuation Volume		
Method of Sample Evacuation	Purge with Peristaltic Pump			
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S			
Total Volume of Water Removed	1.4	gal		
Casing Diameter	1.0	inches		
Casing Material	PVC			
Measuring Point Elevation	148.19	1/100 ft		
Height of Riser (above land surface)	-0.31	1/100 ft		
Land Surface Elevation	148.50	1/100 ft		
Screened Interval	5 - 15	1/100 ft		
Dedicated Pump or Bailor	YES	NO	✓	Type
Steel Guard Pipe Around Casing	YES	✓	NO	
Locking Cap	YES	✓	NO	
Protective Post/Abutment	YES	NO	✓	
Well Integrity Satisfactory	YES	✓	NO	
Yield	LOW	✓	MODERATE	HIGH
Comments/Observations	Sample Time: 0945 Sample Analytes: VOC'S Hack Fe Kit: NA mg/L			

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.2	0.4	0.6	0.8	1.0	1.2	1.4			
0905	0910	0915	0920	0925	0930	0935	0940			
13.65	13.94	14.25	14.43	14.66	14.70	14.72	14.73			
4.60	4.42	4.38	4.34	4.34	4.29	4.26	4.27			
0.039	0.038	0.037	0.037	0.037	0.037	0.037	0.036			
21.07	20.95	20.92	20.91	20.90	20.92	20.92	20.93			
10.59	5.02	9.79	8.65	7.91	7.13	2.48	2.11			
5.21	3.98	3.64	3.57	3.84	4.40	4.45	4.47			
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02			
329.2	337.5	339.4	341.1	343.5	347.4	350.6	352.6			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-21		
Upgradient	Downgradient	Sidegradient	☒ Source
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>60's</u>	° F	
Total Well Depth (TWD) =	<u>34.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>13.46</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>20.94</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>3.41</u> gal
3 Casing Volumes =	<u>10.23</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>1.75</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	PVC	
Measuring Point Elevation	<u>147.97</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.20</u>	1/100 ft
Land Surface Elevation	<u>148.17</u>	1/100 ft
Screened Interval	<u>19</u> - <u>34</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☐ NO ☒	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>0935</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.35</u>	<u>0.70</u>	<u>1.05</u>	<u>1.40</u>	<u>1.75</u>					
	<u>0908</u>	<u>0913</u>	<u>0918</u>	<u>0923</u>	<u>0928</u>	<u>0933</u>				
	<u>14.85</u>	<u>15.10</u>	<u>15.32</u>	<u>15.38</u>	<u>15.43</u>	<u>15.47</u>				
	<u>4.13</u>	<u>4.11</u>	<u>4.04</u>	<u>4.10</u>	<u>4.06</u>	<u>4.08</u>				
	<u>0.022</u>	<u>0.022</u>	<u>0.022</u>	<u>0.022</u>	<u>0.022</u>	<u>0.022</u>				
	<u>19.76</u>	<u>19.81</u>	<u>19.91</u>	<u>19.97</u>	<u>20.06</u>	<u>20.09</u>				
	<u>0.94</u>	<u>0.56</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>				
	<u>0.94</u>	<u>0.31</u>	<u>0.33</u>	<u>0.25</u>	<u>0.22</u>	<u>0.21</u>				
	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>				
	<u>385.3</u>	<u>386.3</u>	<u>388.8</u>	<u>386.8</u>	<u>396.1</u>	<u>389.0</u>				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-21D		
Upgradient	Downgradient	Sidegradient	☒ Source
Weather Conditions	<u>clear</u>		
Air Temperature	<u>50's</u> ° F		
Total Well Depth (TWD) =	<u>53.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>13.35</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>40.05</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>6.41</u> gal
3 Casing Volumes =	<u>19.23</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>1.80</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	PVC	
Measuring Point Elevation	<u>146.92</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.31</u>	1/100 ft
Land Surface Elevation	<u>147.23</u>	1/100 ft
Screened Interval	<u>43</u> - <u>53</u>	1/100 ft
Dedicated Pump or Bailor	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>0820</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.30</u>	<u>0.60</u>	<u>0.90</u>	<u>1.20</u>	<u>1.50</u>	<u>1.80</u>				
	<u>0745</u>	<u>0750</u>	<u>0755</u>	<u>0800</u>	<u>0805</u>	<u>0810</u>	<u>0815</u>			
	<u>13.35</u>	<u>13.37</u>	<u>13.38</u>	<u>13.38</u>	<u>13.38</u>	<u>13.38</u>	<u>13.38</u>			
	<u>9.73</u>	<u>9.79</u>	<u>8.22</u>	<u>7.55</u>	<u>7.44</u>	<u>7.41</u>	<u>7.40</u>			
	<u>0.247</u>	<u>0.245</u>	<u>0.231</u>	<u>0.233</u>	<u>0.232</u>	<u>0.232</u>	<u>0.232</u>			
	<u>19.88</u>	<u>19.30</u>	<u>19.41</u>	<u>19.48</u>	<u>19.43</u>	<u>19.44</u>	<u>19.40</u>			
	<u>7.07</u>	<u>5.42</u>	<u>3.12</u>	<u>2.78</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>			
	<u>6.22</u>	<u>6.16</u>	<u>1.97</u>	<u>1.38</u>	<u>1.27</u>	<u>1.26</u>	<u>1.32</u>			
	<u>0.12</u>	<u>0.12</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>			
	<u>158.4</u>	<u>146.6</u>	<u>91.3</u>	<u>-2.1</u>	<u>-7.0</u>	<u>-6.7</u>	<u>-8.6</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/10/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-22D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>70.5</u>	° F	
Total Well Depth (TWD) =	<u>48.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.55</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>35.85</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>5.84</u> gal
3 Casing Volumes =	<u>17.52</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>2.8</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>145.96</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.10</u>	1/100 ft
Land Surface Elevation	<u>146.06</u>	1/100 ft
Screened Interval	<u>38</u> - <u>48</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1435</u>	<u>Dup</u>
Sample Analytes:	<u>VOC</u>	
Hack Fe Kit:	<u>NA</u>	mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.4</u>	<u>0.8</u>	<u>1.2</u>	<u>1.6</u>	<u>2.0</u>	<u>2.4</u>	<u>2.8</u>			
	<u>1355</u>	<u>1400</u>	<u>1405</u>	<u>1410</u>	<u>1415</u>	<u>1420</u>	<u>1425</u>	<u>1430</u>		
	<u>12.57</u>	<u>12.57</u>	<u>12.57</u>	<u>12.57</u>	<u>12.57</u>	<u>12.57</u>	<u>12.57</u>	<u>12.57</u>		
	<u>8.39</u>	<u>8.10</u>	<u>8.00</u>	<u>8.01</u>	<u>7.93</u>	<u>7.97</u>	<u>7.96</u>	<u>7.93</u>		
	<u>0.205</u>	<u>0.230</u>	<u>0.252</u>	<u>0.252</u>	<u>0.255</u>	<u>0.255</u>	<u>0.255</u>	<u>0.255</u>		
	<u>19.59</u>	<u>19.31</u>	<u>19.28</u>	<u>19.13</u>	<u>19.07</u>	<u>19.17</u>	<u>19.12</u>	<u>19.20</u>		
	<u>28.61</u>	<u>21.98</u>	<u>16.02</u>	<u>9.18</u>	<u>3.03</u>	<u>2.31</u>	<u>2.37</u>	<u>2.21</u>		
	<u>2.45</u>	<u>2.37</u>	<u>2.33</u>	<u>2.32</u>	<u>2.37</u>	<u>2.44</u>	<u>2.49</u>	<u>2.53</u>		
	<u>0.10</u>	<u>0.10</u>	<u>0.12</u>	<u>0.12</u>	<u>0.12</u>	<u>0.12</u>	<u>0.12</u>	<u>0.12</u>		
	<u>138.5</u>	<u>131.7</u>	<u>117.5</u>	<u>112.0</u>	<u>110.9</u>	<u>108.5</u>	<u>108.8</u>	<u>108.8</u>		

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 7

Date (mo/day/yr)	<u>4/10/17</u>
Field Personnel	<u>Justin Butler</u>
Site Name	<u>UTC Delavan Spray Technologies Site</u>
AECOM Job #	<u>60314964</u>
Sample ID*	<u>MW-23D</u>
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source	
Weather Conditions	<u>clear</u>
Air Temperature	<u>70.5</u> ° F
Total Well Depth (TWD) =	<u>50.40</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>14.43</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>35.97</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x <u>0.163</u> =	<u>5.86</u> gal
3 Casing Volumes =	<u>17.58</u> gal = Standard Evacuation Volume
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>
Total Volume of Water Removed	<u>2.0</u> gal

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>148.26</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.09</u>	1/100 ft
Land Surface Elevation	<u>148.35</u>	1/100 ft
Screened Interval	<u>40</u> - <u>50</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1525</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.4</u>	<u>0.8</u>	<u>1.2</u>	<u>1.6</u>	<u>2.0</u>					
<u>1456</u>	<u>1501</u>	<u>1506</u>	<u>1511</u>	<u>1516</u>	<u>1521</u>					
<u>14.46</u>	<u>14.46</u>	<u>14.46</u>	<u>14.46</u>	<u>14.46</u>	<u>14.46</u>					
<u>7.57</u>	<u>7.48</u>	<u>7.47</u>	<u>7.46</u>	<u>7.44</u>	<u>7.43</u>					
<u>0.295</u>	<u>0.303</u>	<u>0.305</u>	<u>0.306</u>	<u>0.308</u>	<u>0.308</u>					
<u>20.93</u>	<u>20.74</u>	<u>20.79</u>	<u>20.78</u>	<u>20.79</u>	<u>20.90</u>					
<u>23.64</u>	<u>10.71</u>	<u>3.48</u>	<u>2.34</u>	<u>1.78</u>	<u>1.26</u>					
<u>2.10</u>	<u>1.58</u>	<u>1.52</u>	<u>1.51</u>	<u>1.54</u>	<u>1.55</u>					
<u>0.14</u>	<u>0.14</u>	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>	<u>0.16</u>					
<u>152.7</u>	<u>140.0</u>	<u>131.9</u>	<u>126.2</u>	<u>122.9</u>	<u>120.9</u>					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/17</u>
Field Personnel	<u>Justin Butler</u>
Site Name	<u>UTC Delavan Spray Technologies Site</u>
AECOM Job #	<u>60314964</u>
Sample ID*	<u>MW-24</u>
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐	
Weather Conditions	<u>Clear</u>
Air Temperature	<u>70.5</u> ° F
Total Well Depth (TWD) =	<u>21.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>14.86</u> <u>14.10</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>7.90</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>1.29</u> gal
3 Casing Volumes =	<u>3.87</u> gal = Standard Evacuation Volume
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>
Total Volume of Water Removed	<u>1.5</u> gal
Casing Diameter	<u>2.0</u> inches
Casing Material	<u>PVC</u>
Measuring Point Elevation	<u>147.85</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.67</u> 1/100 ft
Land Surface Elevation	<u>148.52</u> 1/100 ft
Screened Interval	<u>6</u> - <u>21</u> 1/100 ft
Dedicated Pump or Bailer	YES ☒ NO ☐ Type <u>tubing</u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☐ MODERATE ☐ HIGH ☒
Comments/Observations	
Sample Time:	<u>1340</u>
Sample Analytes:	<u>VOC'S</u>
Hack Fe Kit:	<u>NA</u> mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)	Initial	0.3	0.6	0.9	1.2	1.5					
TIME (Military)	1314	1319	1324	1329	1334	1339					
Water Level (ft BTOC)	14.30	14.30	14.30	14.30	14.30	14.30					
pH (S.U.)	3.98	3.98	3.94	3.95	3.93	3.97					
Sp. Cond. (mS/cm)	0.015	0.015	0.015	0.015	0.015	0.015					
Water Temp. (°C)	19.88	19.92	19.95	19.96	20.01	19.96					
Turbidity (NTUs)	101.12	62.89	22.07	12.58	8.00	5.50					
DO - (mg/L)	6.50	6.34	6.33	6.33	6.32	6.35					
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01					
ORP (mV)	391.6	384.8	381.8	380.5	381.4	377.2					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/10/17</u>		
Field Personnel	<u>Justin Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-25D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>70.5</u>	° F	
Total Well Depth (TWD) =	<u>62.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>5.91</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>56.09</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>9.14</u> gal
3 Casing Volumes =	<u>27.42</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>3.2</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	PVC	
Measuring Point Elevation	<u>139.21</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.09</u>	1/100 ft
Land Surface Elevation	<u>139.30</u>	1/100 ft
Screened Interval	<u>52</u> - <u>62</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1225</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.4</u>	<u>0.8</u>	<u>1.2</u>	<u>1.6</u>	<u>2.0</u>	<u>2.4</u>	<u>2.8</u>	<u>3.2</u>		
	<u>1144</u>	<u>1149</u>	<u>1154</u>	<u>1159</u>	<u>1204</u>	<u>1209</u>	<u>1214</u>	<u>1219</u>	<u>1224</u>	
	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	<u>5.94</u>	
	<u>7.58</u>	<u>7.60</u>	<u>7.56</u>	<u>7.55</u>	<u>7.55</u>	<u>7.89</u>	<u>7.56</u>	<u>7.57</u>	<u>7.58</u>	
	<u>0.275</u>	<u>0.273</u>	<u>0.272</u>	<u>0.270</u>	<u>0.270</u>	<u>0.270</u>	<u>0.269</u>	<u>0.268</u>	<u>0.268</u>	
	<u>20.72</u>	<u>20.39</u>	<u>20.31</u>	<u>20.43</u>	<u>20.45</u>	<u>20.19</u>	<u>20.34</u>	<u>20.25</u>	<u>20.30</u>	
	<u>1.19</u>	<u>1.10</u>	<u>1.19</u>	<u>2.88</u>	<u>2.95</u>	<u>2.92</u>	<u>2.21</u>	<u>1.98</u>	<u>1.76</u>	
	<u>3.35</u>	<u>2.85</u>	<u>2.74</u>	<u>2.68</u>	<u>2.64</u>	<u>2.42</u>	<u>2.59</u>	<u>2.64</u>	<u>2.64</u>	
	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	
	<u>159.2</u>	<u>157.9</u>	<u>155.2</u>	<u>154.1</u>	<u>152.9</u>	<u>84.0</u>	<u>82.7</u>	<u>87.2</u>	<u>90.1</u>	

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/10/17		
Field Personnel	Justin Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-26D		
Upgradient	X	Downgradient	Sidegradient
Weather Conditions	Clear		
Air Temperature	76.3	° F	
Total Well Depth (TWD) =	48.00	1/100 ft	
Depth to Ground Water (DGW) =	10.52	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	37.48	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	6.11 gal
3 Casing Volumes =	18.33	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.0 gal		

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation	143.64	1/100 ft
Height of Riser (above land surface)	-0.19	1/100 ft
Land Surface Elevation	143.83	1/100 ft
Screened Interval	38 - 48	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	1315	
Sample Analytes:	VOC'S	
Hack Fe Kit:	NA mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.4	0.8	1.2	1.6	2.0					
1299	1254	1259	1304	1309	1314					
10.54	10.54	10.54	10.54	10.54	10.54					
7.58	7.47	7.43	7.43	7.43	7.42					
0.273	0.272	0.272	0.272	0.272	0.271					
20.26	19.57	19.37	19.37	19.37	19.42					
29.54	8.46	3.78	3.39	2.97	2.21					
3.70	2.61	2.39	2.35	2.32	2.31					
0.13	0.13	0.13	0.13	0.13	0.13					
151.7	147.6	143.9	142.3	142.4	142.4					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 12, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-27</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	<u>Clear/Sunny</u>		
Air Temperature	<u>75</u>	° F	
Total Well Depth (TWD) =	<u>29.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>9.91</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>19.09</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	<u>= 3.11</u>	gal	
3 Casing Volumes =	<u>9.33</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.10</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation		1/100 ft
Height of Riser (above land surface)		1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	<u>19</u> - <u>29</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations	<u>Sample Time: 1208</u>	
Sample Analytes:	<u>VOC'S + MVA parameters</u>	
Hack Fe Kit:	<u>0.07 mg/L</u>	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>.35</u>	<u>.70</u>	<u>1.05</u>	<u>1.40</u>	<u>1.75</u>	<u>2.10</u>
	<u>1135</u>	<u>1140</u>	<u>1145</u>	<u>1150</u>	<u>1200</u>	<u>1205</u>
	<u>10.48</u>	<u>10.81</u>	<u>11.00</u>	<u>11.08</u>	<u>11.18</u>	<u>11.18</u>
	<u>4.55</u>	<u>4.56</u>	<u>4.50</u>	<u>4.53</u>	<u>4.61</u>	<u>4.67</u>
	<u>0.032</u>	<u>0.030</u>	<u>0.030</u>	<u>0.029</u>	<u>0.030</u>	<u>0.030</u>
	<u>23.94</u>	<u>22.75</u>	<u>22.26</u>	<u>22.52</u>	<u>22.77</u>	<u>22.53</u>
	<u>10.72</u>	<u>9.30</u>	<u>8.60</u>	<u>7.58</u>	<u>6.93</u>	<u>3.90</u>
	<u>8.79</u>	<u>8.65</u>	<u>8.62</u>	<u>8.49</u>	<u>8.41</u>	<u>8.53</u>
	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>
	<u>217.7</u>	<u>228.4</u>	<u>241.4</u>	<u>245.1</u>	<u>242.8</u>	<u>248.6</u>

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) April 12, 2017
Field Personnel Randy Morrison
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-28
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions Clear Sunny
Air Temperature 79 ° F
Total Well Depth (TWD) = 29.00 1/100 ft
Depth to Ground Water (DGW) = 12.00 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 16.40 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 2.67 gal
3 Casing Volumes = 8.01 gal = Standard Evacuation Volume
Method of Sample Evacuation Purge with Peristaltic Pump
Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
Total Volume of Water Removed 2.45 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation _____ 1/100 ft
Height of Riser (above land surface) _____ 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval 19 - 29 1/100 ft
Dedicated Pump or Bailer YES ____ NO X Type ____
Steel Guard Pipe Around Casing YES X NO ____
Locking Cap YES X NO ____
Protective Post/Abutment YES ____ NO X
Well Integrity Satisfactory YES X NO ____
Yield LOW ____ MODERATE ____ HIGH X
Comments/Observations 1318
Sample Time: 1318
Sample Analytes: VOC'S & MMA parameters
Hack Fe Kit: 0.00 mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOW)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>.35</u>	<u>.70</u>	<u>1.05</u>	<u>1.40</u>	<u>1.75</u>	<u>2.10</u>	<u>2.45</u>			
	<u>1240</u>	<u>1245</u>	<u>1250</u>	<u>1255</u>	<u>1300</u>	<u>1305</u>	<u>1310</u>	<u>1315</u>		
	<u>13.45</u>	<u>13.88</u>	<u>13.95</u>	<u>13.93</u>	<u>13.93</u>	<u>13.93</u>	<u>13.93</u>	<u>13.93</u>		
	<u>6.77</u>	<u>6.75</u>	<u>6.71</u>	<u>6.69</u>	<u>6.68</u>	<u>6.70</u>	<u>6.68</u>	<u>6.70</u>		
	<u>0.573</u>	<u>0.589</u>	<u>0.602</u>	<u>0.601</u>	<u>0.596</u>	<u>0.594</u>	<u>0.588</u>	<u>0.580</u>		
	<u>22.17</u>	<u>21.19</u>	<u>21.27</u>	<u>21.06</u>	<u>21.25</u>	<u>21.13</u>	<u>21.12</u>	<u>21.20</u>		
	<u>31.25</u>	<u>31.18</u>	<u>20.87</u>	<u>17.22</u>	<u>14.11</u>	<u>9.95</u>	<u>8.66</u>	<u>7.81</u>		
	<u>3.99</u>	<u>3.67</u>	<u>3.64</u>	<u>3.59</u>	<u>3.65</u>	<u>3.58</u>	<u>3.57</u>	<u>3.49</u>		
	<u>0.28</u>	<u>0.29</u>	<u>0.29</u>	<u>0.29</u>	<u>0.29</u>	<u>0.29</u>	<u>0.29</u>	<u>0.29</u>		
	<u>139.7</u>	<u>138.9</u>	<u>138.8</u>	<u>138.9</u>	<u>138.4</u>	<u>136.5</u>	<u>136.3</u>	<u>136.0</u>		

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 2

Date (mo/day/yr)	<u>April 12, 2017</u>		
Field Personnel	<u>Randy Moberg</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-29</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>Clear Sunny</u>			
Air Temperature	<u>78</u> ° F		
Total Well Depth (TWD) =	<u>29.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>7.17</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>21.83</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	= <u>3.55</u>	gal
3 Casing Volumes =	<u>10.67</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>4.55</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	<u>PVC</u>		
Measuring Point Elevation		1/100 ft	
Height of Riser (above land surface)		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	<u>19</u>	- <u>29</u>	1/100 ft
Dedicated Pump or Bailer	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	MODERATE	HIGH
Comments/Observations	<u>Sample Time: 1448</u>		
Sample Analytes:	<u>VOC'S & MNA parameters</u>		
Hack Fe Kit:	<u>0.02</u>	mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	1.35	1.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15	3.50
TIME (Military)	1340	1345	1350	1355	1400	1405	1410	1415	1420	1425	1430
Water Level (ft BTOW)	7.48	7.58	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60
pH (S.U.)	6.54	6.51	6.53	6.56	6.56	6.56	6.56	6.54	6.52	6.53	6.52
Sp. Cond. (mS/cm)	0.375	0.406	0.434	0.456	0.457	0.463	0.462	0.461	0.458	0.453	0.449
Water Temp. (°C)	23.22	22.62	22.25	22.39	22.30	22.72	22.37	22.65	22.64	22.64	22.33
Turbidity (NTUs)	57.55	56.25	45.17	38.31	33.51	29.80	24.69	21.67	19.60	19.76	16.71
DO - (mg/L)	2.30	1.93	1.79	1.75	1.71	1.67	1.64	1.62	1.67	1.64	1.67
Salinity (ppt)	0.18	0.19	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
ORP (mV)	135.1	142.0	142.6	140.2	138.6	137.3	135.9	135.8	135.8	134.6	134.4

COMMENTS/OBSERVATIONS

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 2 of 2

Site Name <u>UTC Delavan</u> AECOM Job # <u>60314964</u> Sample ID* <u>MW-29</u>	Date (mo/day/yr) <u>April 12 2017</u> Field Personnel <u>Randy Morgan</u> Comments/Observations:
---	---

	FIELD ANALYSES									
VOLUME PURGED (gallons)	<u>3.85</u>	<u>4.20</u>	<u>4.55</u>							
TIME (Military)	<u>1435</u>	<u>1440</u>	<u>1445</u>							
Water Level (ft BTOC)	<u>7.60</u>	<u>7.60</u>	<u>7.60</u>							
pH (S.U.)	<u>6.50</u>	<u>6.47</u>	<u>6.46</u>							
Sp. Cond. (mS/cm)	<u>0.443</u>	<u>0.438</u>	<u>0.433</u>							
Water Temp. (°C)	<u>22.12</u>	<u>22.34</u>	<u>22.16</u>							
Turbidity (NTUs)	<u>13.79</u>	<u>11.88</u>	<u>11.71</u>							
DO - (mg/L)	<u>1.68</u>	<u>1.68</u>	<u>1.75</u>							
Salinity (ppt)	<u>0.21</u>	<u>0.22</u>	<u>0.21</u>							
ORP (mV)	<u>134.7</u>	<u>135.2</u>	<u>135.7</u>							

	FIELD ANALYSES									
VOLUME PURGED (gallons)										
TIME (Military)										
Water Level (ft BTOC)										
pH (S.U.)										
Sp. Cond. (mS/cm)										
Water Temp. (°C)										
Turbidity (NTUs)										
DO - (mg/L)										
Salinity (ppt)										
ORP (mV)										

COMMENTS/OBSERVATIONS _____



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/13/17		
Field Personnel	Justin Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-30D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	Clear		
Air Temperature	80.5	° F	
Total Well Depth (TWD) =	59.78	1/100 ft	
Depth to Ground Water (DGW) =	5.27	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	54.51	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	8.89	gal	
3 Casing Volumes =	26.67	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	4.0 gal		

Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Height of Riser (above land surface)		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval		1/100 ft	
Dedicated Pump or Bailer	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	MODERATE	HIGH
Comments/Observations	Sample Time: 1405		
Sample Analytes:	VOC's, MNA		
Hack Fe Kit:	0.20 mg/L		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0
1312	1317	1322	1327	1332	1337	1342	1347	1352	1357	1402
5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27
7.89	7.74	7.72	7.70	7.69	7.69	7.69	7.69	7.68	7.68	7.62
0.237	0.245	0.249	0.252	0.253	0.253	0.254	0.257	0.259	0.259	0.259
20.81	20.22	20.00	20.06	20.07	20.21	20.33	20.46	20.33	20.37	20.32
74.21	61.20	53.53	42.34	36.78	34.13	33.12	27.18	23.50	20.78	22.06
1.48	0.91	0.82	0.80	0.80	0.74	0.73	0.74	0.78	0.73	0.71
0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
-291.6	-339.1	-340.6	-333.1	-335.6	-329.2	-330.6	-302.3	-292.0	-289.9	-286.4

COMMENTS/OBSERVATIONS

Began purging at 1310 Purging rate: 303 ml/min

Breathing Zone: NA ppm

Well Head: NA ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) 4/13/17
Field Personnel Justin Butler
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-31D
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions Clear
Air Temperature 80's ° F
Total Well Depth (TWD) = 60.35 1/100 ft
Depth to Ground Water (DGW) = 9.37 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 50.98 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 8.31 gal
3 Casing Volumes = 24.93 gal = Standard Evacuation Volume
Method of Sample Evacuation Purge with Peristaltic Pump
Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
Total Volume of Water Removed 3.2 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation _____ 1/100 ft
Height of Riser (above land surface) _____ 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval _____ 1/100 ft
Dedicated Pump or Bailer YES ____ NO ☒ Type ____
Steel Guard Pipe Around Casing YES ☒ NO ____
Locking Cap YES ☒ NO ____
Protective Post/Abutment YES ____ NO ☒
Well Integrity Satisfactory YES ☒ NO ____
Yield LOW ____ MODERATE ____ HIGH ☒
Comments/Observations
Sample Time: 1530
Sample Analytes: VOL, MNA
Hack Fe Kit: 0.08 mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOW)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2		
1446	1451	1456	1501	1506	1511	1516	1521	1526		
9.39	9.39	9.39	9.39	9.39	9.39	9.39	9.39	9.39		
7.78	7.75	7.75	7.73	7.71	7.71	7.72	7.72	7.72		
0.244	0.249	0.250	0.250	0.250	0.250	0.249	0.249	0.249		
20.34	20.07	20.01	20.85	19.96	19.85	19.95	19.96	19.96		
770.8	601.3	385.8	271.5	190.3	163.8	131.9	119.2	107.231213		
3.62	3.57	3.26	3.16	3.13	3.11	3.13	3.14	3.10		
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12		
-57.0	-54.1	-66.8	-75.0	-79.1	-86.0	-84.4	-87.9	-89.3		

COMMENTS/OBSERVATIONS

Began purging at 1444 Purging rate: 303 ml/minBreathing Zone: NA ppmWell Head: NA ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/15/17</u>	Casing Diameter	<u>2.0</u>	inches
Field Personnel	<u>Justin Butler</u>	Casing Material	<u>PVC</u>	
Site Name	<u>UTC Delavan Spray Technologies Site</u>	Measuring Point Elevation		1/100 ft
AECOM Job #	<u>60314964</u>	Height of Riser (above land surface)		1/100 ft
Sample ID*	<u>MW-32D</u>	Land Surface Elevation		1/100 ft
Upgradient		Screened Interval		1/100 ft
Downgradient		Dedicated Pump or Bailor	YES ☐ NO ☒	Type <u> </u>
Sidegradient		Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Source		Locking Cap	YES ☒ NO ☐	
Weather Conditions	<u>Partly Cloudy</u>	Protective Post/Abutment	YES ☐ NO ☒	
Air Temperature	<u>70.5</u> ° F	Well Integrity Satisfactory	YES ☒ NO ☐	
Total Well Depth (TWD) =	<u>53.65</u>	Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Depth to Ground Water (DGW) =	<u>7.39</u>	Comments/Observations		
Length of Water Column (LWC) = TWD - DGW =	<u>46.26</u>	Sample Time: <u>1650</u>		
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>7.54</u> gal	Sample Analytes: <u>VOC, MNA</u>		
3 Casing Volumes =	<u>22.62</u> gal = Standard Evacuation Volume	Hack Fe Kit: <u>0.04</u> mg/L		
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>			
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>			
Total Volume of Water Removed	<u>2.8</u> gal			

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.

Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8			
1612	1617	1622	1627	1632	1637	1642	1647			
7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41			
7.60	7.63	7.60	7.54	7.53	7.55	7.53	7.54			
0.296	0.294	0.292	0.291	0.290	0.290	0.290	0.290			
21.02	21.13	21.06	21.24	20.98	20.88	20.85	20.95			
387.1	179.7	60.34	32.69	21.21	12.78	12.62	12.51			
2.38	2.12	1.92	1.87	1.68	1.67	1.66	1.63			
0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14			
-45.2	-56.3	-67.9	-72.9	-74.5	-77.3	-78.2	-75.5			

COMMENTS/OBSERVATIONS

Began purging at 1610 Purging rate: 303 ml/minBreathing Zone: NA ppmWell Head: NA ppm

IDW MANAGEMENT FORM

PROJECT: UTC Delavan Spray Technologies Site RI

SITE NAME: Delavan Spray Technologies Site

LOCATION: Bamberg, South Carolina

PROJECT #: 60314964

[illegible]

3/31/17

- 1415 C. Suddeth meets with D. Goode to go over work for next week.
1500 C. Suddeth departs site. Then pull over for conversation with W. Gerald
1530 Depart Bamberg
1700 Arrive home

UTC Bamberg SC 4-10-17
DeLoan Randy Morgan

- 0630 leave to pick up equipment
0700 leave for UTC Bamberg
0930 arrive in Orangeburg SC check in Fairfield Inn & stay overnight
0954 purchase ice in Bamberg
1000 on site - deice up equipment w/ Justin - calibrate PSI 556 & 7.5" diaphragm
1105 sign it at office - Wesley is not on site today. We will need to empty purge water by 1600 or they have to call Wesley back on site to escort us in secured area at additional cost to UTC
1120 put 2-IDW drums into storage bldg - will need to notify office when we are ready to empty IDW
1130 R Morgan at MW-12D will take 10 minute readings due to pH stabilization starts out high 11's ends high 8's pH
1238 Sampled MW-12D Reverse flow
1300 at MW-13D begin to micro purge start out every ten minutes due to pH readings end every 5 minutes readings
1346 Sampled MW-13D reverse flow
1415 at MW-16 begin to micro purge

4-10-17 UTC Delavan
Randy Morgan Bamberg SC

1508 sampled MW-16 reverse flow
1510 at MW-16D begin to micro purge
1543 sampled MW-16D
1555 empty purge water before Wesley
leaves for the day

Wesley said we can leave one
door unlocked until we leave for the day

1623 at MW-9 begin to micro purge
1705 sampled MW-9 also ms/msB

We did not receive any trip blank
we have a liter of DI water sealed
from another Lab we will use it to
make trip blanks 1- Randy & Justin &
1- for Daniel Goode

1745 empty purge water into IDW#1
drum - put cones on parking lot wells

1800 off site to motel

1830 at motel.

Randy Morgan

UTC Delavan
Bamberg SC

4-11-17

Randy Morgan

0700 leave Motel for site

0725 purchase ice for samples

0730 arrive on site

0738 at powerline rightaway too wet
to drive in park at MW-16 cluster and
carry equipment in and across creek

0813 at MW-15 begin to micro purge
w/ peristaltic pump.

0900 sampled MW-15 - peristaltic
pump quit working will need to get
Justin's since all equipment is already
across creek.

0950 Justin arrives with his peristaltic
pump - Justin off site to Charleston Office for pump

1005 at MW-15D begin to micro purge

1033 sampled MW-15D

1040 at MW-15D1 begin to micro purge

1108 sampled MW-15D1

1115 carry all IDW & equipment back
to the van

1130 off site for lunch

1200 at MW-14 begin to micro purge

1248 sampled MW-14 also dup

1300 at MW-14D begin to micro purge

1333 sampled MW-14D also dup

4-11-17

UTC Delavan
Bamberg SC

Randy Moya

1345 at MW-3 begin to micro purge

1423 sampled MW-3

1448 at MW-3D begin to micro purge

1515 sampled MW-3D

* 1535 at MW-30M begin to micro purge

1603 sampled MW-0301

* This sample MW-0301 was not supposed
to be collected will throw it out

* No sample for MW 0301

1620 empty purge water

1640 at MW-8 begin to micro purge

1718 sampled MW-8

1730 empty purge water

1745 off site end of day

Randy Moya
4-11-17UTC Delavan
Bamberg SC

4-12-17

Randy Moya

0700 arrive on site - begin to open
wells to equilibrate for water levels0715 calibrate YSI 556 & turbidity
meter0755 continue to open wells and
collect water levels1115 complete comprehensive round
of water levels1135 at MW-27 begin to micro
purge1208 sampled MW-27 VOC's & MNA
parameters & Fe

1240 at MW-28 begin to micro purge

1318 Sampled MW-28 VOC's and
MNA parameters also Fe

1340 at MW-29 begin to micro purge

1448 sampled MW-29 VOC's & MNA
parameters also Fe

1500 empty purge water into IDW drum

1520 collect a composite sample of IDW 1

and IDW 2 collect IDW 1 sample

1600 purchase ice to ship samples. Off
site to pack samples & ship in Columbia

1800 ship samples Fed Ex Columbia

1930 Return to Greenville Return equipment

Randy Moya

Projects (continued)

4/18/17

Justin Butler

0700 Leave office in Greenville, SC

1000 Arrive on site

1030 Begin calibrating YSI (08L101000) + Turbidity meter
(200704141)

1100 split equipment

1140 mob to MW-25D, begin purge

1225 sample time MW-25D

1245 mob to MW-26D, begin purge

1315 sample time MW-26D

1345 mob to MW-22D, begin purge

1435 sample time MW-22D, Duplicate

1450 mob to MW-23D, begin purge

1525 sample time MW-23D

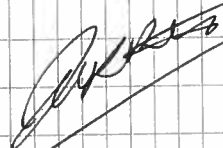
1600 Empty purge water

1620 mob to MW-10, begin purge

1710 sample time MW-10

1730 Empty Purge water

1800 Leave site, End of day



4/11/17

Justin Butler

- 0645 Leave Hotel
- 0720 Arrive @ site, check in and get badge
- 0730 cal, brake YSI (08L101000) & Turbidity (2002 04141)
- 800 mob to MW-19 & MW-20
- 845 sample time MW-19
- 0945 sample time MW-20
- 1030 Leave site, mob to Charleston to pick up additional pump.
- 1345 Back on site
- 1400 mob to new well MW-27 for development
- 1520 complete development of MW-27
- 1535 setup to develop MW-29
- 1655 complete development of MW-29
- 1710 Empty purge water
- 1745 Leave site, End of day

Justin Butler

4/12/17

Justin Butler

- 0645 Leave Hotel
- 0720 Arrive on site
- 0730 Begin calibrating YSI (08L101000) & TM (200704141)
- 0745 Begin purging MW-210
- 0820 sample time MW-210
- 0830 Begin purging MW-2
- 0900 sample time MW-2
- 0905 Begin purging MW-21
- 0935 sample time MW-21
- 0950 Begin purging MW-7
- 1035 sample time MW-7
- 1105 Begin purging MW-1
- 1140 sample time MW-1
- 1215 Begin purging MW-5
- 1255 sample time MW-5
- 1300 Begin purging MW-24
- 1340 sample time MW-24
- 1400 Empty purge water
- 1415 Help R. Morgan complete MW-29
- 1500 mob to sample IDW
- 1600 Leave site.

4/13/17

Justin Butler

0715	Leave Hotel
0745	Arrive on site
0800	Calibrate YSE (0.84101000) + TM (00709141)
0825	mob to MW-30D, begin development
0855	Finish development
0925	mob to MW-31D, begin development
0955	Finish Development
1030	mob to hotel to gather things and check out.
1200	mob to back on site
1205	mob to MW-32D, begin development
1235	Finish development
1300	mob to MW-30D
1310	begin purging for sample
1405	sample time MW-30D
1440	mob to MW-31D, begin purge
1530	sample time MW-31D
1605	mob to MW-32D, begin purge
1656	sample time MW-32D
1710	Begin water levels on deep wells
1805	Finish water levels
1815	Pack samples
1930	Leave site
2000	Relinquish samples @ Feder

APPENDIX B

ANALYTICAL DATA

Laboratory Reports – Accutest Southeast
Data Assessment Reports

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

SGS Accutest Job Number: FA42997

Sampling Dates: 04/10/17 - 04/12/17

Report to:

AECOM Environment
10 Patewood Dr Bldg VI, Suite 500
Greenville, SC 29615
doria.cullom@aecom.com

ATTN: Doria Cullom

Total number of pages in report: **154**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
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Test results relate only to samples analyzed.

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Sample Summary

United Technologies Corporation

Job No: FA42997

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA42997-1	04/10/17	00:00	RMJB	04/13/17	AQ Trip Blank Water	TRIP BLANK
FA42997-2	04/10/17	12:25	RMJB	04/13/17	AQ Ground Water	MW-25D
FA42997-3	04/10/17	12:38	RMJB	04/13/17	AQ Ground Water	MW-12D
FA42997-4	04/10/17	13:15	RMJB	04/13/17	AQ Ground Water	MW-26D
FA42997-5	04/10/17	13:48	RMJB	04/13/17	AQ Ground Water	MW-13D
FA42997-6	04/10/17	14:35	RMJB	04/13/17	AQ Ground Water	MW-22D
FA42997-7	04/10/17	14:35	RMJB	04/13/17	AQ Ground Water	MW-22D-A
FA42997-8	04/10/17	15:08	RMJB	04/13/17	AQ Ground Water	MW-16
FA42997-9	04/10/17	15:25	RMJB	04/13/17	AQ Ground Water	MW-23D
FA42997-10	04/10/17	15:43	RMJB	04/13/17	AQ Ground Water	MW-16D
FA42997-11	04/10/17	17:05	RMJB	04/13/17	AQ Ground Water	MW-9
FA42997-11D	04/10/17	17:05	RMJB	04/13/17	AQ Water Dup/MSD	MW-9
FA42997-11S	04/10/17	17:05	RMJB	04/13/17	AQ Water Matrix Spike	MW-9

Sample Summary

(continued)

United Technologies Corporation

Job No: FA42997AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA42997-12	04/10/17	17:10 RMJB	04/13/17	AQ	Ground Water	MW-10
FA42997-13	04/11/17	08:45 RMJB	04/13/17	AQ	Ground Water	MW-19
FA42997-14	04/11/17	09:00 RMJB	04/13/17	AQ	Ground Water	MW-15
FA42997-15	04/11/17	09:45 RMJB	04/13/17	AQ	Ground Water	MW-20
FA42997-16	04/11/17	10:33 RMJB	04/13/17	AQ	Ground Water	MW-15D
FA42997-17	04/11/17	11:08 RMJB	04/13/17	AQ	Ground Water	MW-15D1
FA42997-18	04/11/17	12:48 RMJB	04/13/17	AQ	Ground Water	MW-14
FA42997-19	04/11/17	12:48 RMJB	04/13/17	AQ	Ground Water	MW-14-A
FA42997-20	04/11/17	13:33 RMJB	04/13/17	AQ	Ground Water	MW-14D
FA42997-21	04/11/17	13:33 RMJB	04/13/17	AQ	Ground Water	MW-14D-A
FA42997-22	04/11/17	14:23 RMJB	04/13/17	AQ	Ground Water	MW-3
FA42997-23	04/11/17	15:15 RMJB	04/13/17	AQ	Ground Water	MW-3D
FA42997-23D	04/11/17	15:15 RMJB	04/13/17	AQ	Water Dup/MSD	MW-3D

Sample Summary

(continued)

United Technologies Corporation

Job No: FA42997

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA42997-23S	04/11/17	15:15 RMJB	04/13/17	AQ	Water Matrix Spike	MW-3D
FA42997-24	04/11/17	17:18 RMJB	04/13/17	AQ	Ground Water	MW-8
FA42997-25	04/12/17	08:20 RMJB	04/13/17	AQ	Ground Water	MW-21D
FA42997-26	04/12/17	09:00 RMJB	04/13/17	AQ	Ground Water	MW-2
FA42997-27	04/12/17	09:35 RMJB	04/13/17	AQ	Ground Water	MW-21
FA42997-28	04/12/17	10:35 RMJB	04/13/17	AQ	Ground Water	MW-7
FA42997-29	04/12/17	10:40 RMJB	04/13/17	AQ	Ground Water	MW-1
FA42997-30	04/12/17	12:08 RMJB	04/13/17	AQ	Ground Water	MW-27
FA42997-31	04/12/17	12:55 RMJB	04/13/17	AQ	Ground Water	MW-5
FA42997-32	04/12/17	13:18 RMJB	04/13/17	AQ	Ground Water	MW-28
FA42997-33	04/12/17	13:40 RMJB	04/13/17	AQ	Ground Water	MW-24
FA42997-34	04/12/17	14:48 RMJB	04/13/17	AQ	Ground Water	MW-29
FA42997-35	04/12/17	15:20 RMJB	04/13/17	AQ	Ground Water	IDW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

2

Client: United Technologies Corporation

Job No: FA42997

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date: 4/25/2017 10:03:07

34 Sample(s), 1 Trip Blank(s) were collected on/between 04/10/2017 and 04/12/2017 and were received at SGS Accutest Southeast (SASE) on 04/13/2017 properly preserved, at 3.4 Deg. C and intact. These Samples received an SASE job number of FA42997. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VB4879

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA42997-23MS, FA42997-23MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Tetrachloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Matrix: AQ

Batch ID: VB4881

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA42765-2MS, FA42765-2MSD were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Trichloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Matrix: AQ

Batch ID: VB4882

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA42937-1MS, FA42937-1MSD were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Toluene are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

Matrix: AQ

Batch ID: VP1875

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA42997-11MS, FA42997-11MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for trans-1,3-Dichloropropene are outside control limits. % Recovery was above upper control limit, but the samples were ND for this compound.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD.

For Sample(s) FA42997-1, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19, FA42997-2, FA42997-3, FA42997-4, FA42997-6, FA42997-8, FA42997-9 are associated with an ICV that has a recovery for Chloroethane outside control limits.

FA42997-1 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-2 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-3 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-4 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-6 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-8 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-9 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-10 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-11 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-13 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA42997-14 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

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Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VP1875

FA42997-16 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.
FA42997-17 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.
FA42997-18 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.
FA42997-19 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ

Batch ID: OP64672

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.
Sample(s) FA42997-35MS, FA42997-35MSD were used as the QC samples indicated.
Blank Spike Recovery(s) for 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Chloroaniline, Isophorone are outside control limits. % Recoveries were above upper control limits, but samples were ND for these compounds.
Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 3-Nitroaniline, 4-Nitrophenol, Isophorone, Pentachlorophenol are outside control limits. Probable cause is due to matrix interference.
Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 4-Chloroaniline, Isophorone, Pentachlorophenol are outside control limits. Probable cause is due to matrix interference.
RPD(s) for MSD for 2,4-Dinitrophenol are outside control limits for sample OP64672-MSD. Probable cause is due to sample non-homogeneity.
FA42997-35 for 2,4-Dinitrophenol: Associated MS/MSD recovery or RPD outside control limits.
FA42997-35 for Benzoic Acid: Associated CCV outside control limits.
FA42997-35 for Isophorone: Associated BS recovery outside control limits.
FA42997-35 for 4-Chloroaniline: Associated BS recovery outside control limits.
FA42997-35 for 3-Nitroaniline: Associated BS recovery outside control limits.
FA42997-35 for 3,3'-Dichlorobenzidine: Associated BS recovery outside control limits.

Volatiles by GC By Method RSKSOP-147/175

Matrix: AQ

Batch ID: GFF1489

All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.
Sample(s) FA42997-30MS, FA43021-2DUP were used as the QC samples indicated.

Metals By Method SW846 6010D

Matrix: AQ

Batch ID: MP31992

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.
Sample(s) FA43042-1DUP, FA43042-1MS, FA43042-1MSD, FA43042-1PS, FA43042-1SDL were used as the QC samples.
RPD(s) for Duplicate for Antimony, Lead are outside control limits for sample MP31992-D1. RPD acceptable due to low duplicate and sample concentrations.
RPD(s) for Serial Dilution for Antimony, Lead, Zinc are outside control limits for sample MP31992-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP31973

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.
Sample(s) FA42813-21MS, FA42813-21MSD, FA42813-21SDL, FA42813-21DUP were used as the QC samples.
RPD(s) for Duplicate for Mercury are outside control limits for sample MP31973-D1. RPD acceptable due to low duplicate and sample concentrations.
RPD(s) for Serial Dilution for Mercury are outside control limits for sample MP31973-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

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Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ

Batch ID: GP29636

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA42993-8MS, FA42993-8MSD were used as the QC samples for Chloride, Nitrogen, Nitrate, Sulfate, Nitrogen, Nitrite.

Matrix Spike Recovery(s) for Nitrogen, Nitrite are outside control limits. Spike recovery indicates possible matrix interference. % RPD was within control limits in MS/MSD.

Wet Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ

Batch ID: GP29646

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA42961-8MS, FA42961-8MSD were used as the QC samples for Total Organic Carbon.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Kim Benham, Client Services (signature on file)

Date April 25, 2017

Tuesday, April 25, 2017

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Summary of Hits

Job Number: FA42997
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/10/17 thru 04/12/17



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA42997-1 TRIP BLANK						
Methylene Chloride		2.6 J	5.0	2.0	ug/l	SW846 8260B
FA42997-2 MW-25D						
1,1-Dichloroethylene		3.1	2.0	0.64	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		1.0 J	2.0	0.55	ug/l	SW846 8260B
Tetrachloroethylene		105	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene		0.88 J	2.0	0.69	ug/l	SW846 8260B
FA42997-3 MW-12D						
1,1-Dichloroethylene		2.4	1.0	0.32	ug/l	SW846 8260B
Tetrachloroethylene		98.6	5.0	1.1	ug/l	SW846 8260B
FA42997-4 MW-26D						
1,1-Dichloroethylene		1.9	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		0.97 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene		75.2	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene		1.2	1.0	0.35	ug/l	SW846 8260B
FA42997-5 MW-13D						
1,1-Dichloroethylene		4.1	1.0	0.32	ug/l	SW846 8260B
Tetrachloroethylene		168	5.0	1.1	ug/l	SW846 8260B
1,1,1-Trichloroethane		1.6	1.0	0.25	ug/l	SW846 8260B
FA42997-6 MW-22D						
1,1-Dichloroethylene		2.0	2.0	0.64	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		0.61 J	2.0	0.55	ug/l	SW846 8260B
Tetrachloroethylene		96.6	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene		0.79 J	2.0	0.69	ug/l	SW846 8260B
FA42997-7 MW-22D-A						
1,1-Dichloroethylene		2.1	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		0.86 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene		75.0	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene		0.73 J	1.0	0.35	ug/l	SW846 8260B

Summary of Hits

Job Number: FA42997
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/10/17 thru 04/12/17



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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FA42997-8 MW-16

No hits reported in this sample.

FA42997-9 MW-23D

No hits reported in this sample.

FA42997-10 MW-16D

No hits reported in this sample.

FA42997-11 MW-9

cis-1,2-Dichloroethylene	7.8	5.0	1.4	ug/l	SW846 8260B
Tetrachloroethylene	326	5.0	1.1	ug/l	SW846 8260B
Trichloroethylene	43.8	5.0	1.7	ug/l	SW846 8260B

FA42997-12 MW-10

1,1-Dichloroethylene	0.95 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	41.0	1.0	0.28	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	0.32 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	51.6	1.0	0.22	ug/l	SW846 8260B
Toluene	1.2	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	44.3	1.0	0.35	ug/l	SW846 8260B

FA42997-13 MW-19

Tetrachloroethylene	24600	250	54	ug/l	SW846 8260B
1,1,1-Trichloroethane	180 J	250	62	ug/l	SW846 8260B

FA42997-14 MW-15

No hits reported in this sample.

FA42997-15 MW-20

cis-1,2-Dichloroethylene	1.5 J	5.0	1.4	ug/l	SW846 8260B
Tetrachloroethylene	438	5.0	1.1	ug/l	SW846 8260B
Trichloroethylene	3.1 J	5.0	1.7	ug/l	SW846 8260B

FA42997-16 MW-15D

No hits reported in this sample.

Summary of Hits

Job Number: FA42997
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/10/17 thru 04/12/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA42997-17 MW-15D1

No hits reported in this sample.

FA42997-18 MW-14

Tetrachloroethylene	1.1	1.0	0.22	ug/l	SW846 8260B
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FA42997-19 MW-14-A

Tetrachloroethylene	1.1	1.0	0.22	ug/l	SW846 8260B
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FA42997-20 MW-14D

1,1-Dichloroethylene	1.7	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	1.1	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	84.6	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene	0.77 J	1.0	0.35	ug/l	SW846 8260B

FA42997-21 MW-14D-A

1,1-Dichloroethylene	1.6	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	1.2	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	97.1	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene	0.76 J	1.0	0.35	ug/l	SW846 8260B

FA42997-22 MW-3

cis-1,2-Dichloroethylene	3.6	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	199	5.0	1.1	ug/l	SW846 8260B
Trichloroethylene	3.6	1.0	0.35	ug/l	SW846 8260B

FA42997-23 MW-3D

1,1-Dichloroethylene	8.0	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	8.0	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	223	5.0	1.1	ug/l	SW846 8260B
1,1,1-Trichloroethane	0.27 J	1.0	0.25	ug/l	SW846 8260B
Trichloroethylene	8.1	1.0	0.35	ug/l	SW846 8260B

FA42997-24 MW-8

Tetrachloroethylene	18.8	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene	1.8	1.0	0.35	ug/l	SW846 8260B

Summary of Hits

Job Number: FA42997
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/10/17 thru 04/12/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA42997-25 MW-21D

1,1-Dichloroethylene	2.0	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.74 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	74.6	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene	0.39 J	1.0	0.35	ug/l	SW846 8260B

FA42997-26 MW-2

Tetrachloroethylene	0.92 J	1.0	0.22	ug/l	SW846 8260B
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FA42997-27 MW-21

1,1-Dichloroethylene	1.2	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	595	100	28	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	0.38 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	18000	250	54	ug/l	SW846 8260B
Trichloroethylene	260	100	35	ug/l	SW846 8260B
Xylene (total)	1.7 J	3.0	0.72	ug/l	SW846 8260B

FA42997-28 MW-7

Tetrachloroethylene	0.49 J	1.0	0.22	ug/l	SW846 8260B
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FA42997-29 MW-1

cis-1,2-Dichloroethylene	13.9	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	607	10	2.2	ug/l	SW846 8260B
Trichloroethylene	8.4	1.0	0.35	ug/l	SW846 8260B

FA42997-30 MW-27

Tetrachloroethylene	1.0	1.0	0.22	ug/l	SW846 8260B
Methane	0.43 J	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	1.9 J	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.7	0.10	0.050	mg/l	EPA 300/SW846 9056A

FA42997-31 MW-5

Tetrachloroethylene	2.7	1.0	0.22	ug/l	SW846 8260B
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FA42997-32 MW-28

Tetrachloroethylene	0.24 J	1.0	0.22	ug/l	SW846 8260B
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Summary of Hits

Job Number: FA42997
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/10/17 thru 04/12/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Methane		0.42 J	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		8.4	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		1.0	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate		12.0	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.72 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA42997-33 MW-24

cis-1,2-Dichloroethylene		52.7	20	5.5	ug/l	SW846 8260B
Tetrachloroethylene		2070	50	11	ug/l	SW846 8260B
Trichloroethylene		8.4 J	20	6.9	ug/l	SW846 8260B

FA42997-34 MW-29

Tetrachloroethylene		5.4	1.0	0.22	ug/l	SW846 8260B
Methane		0.17 J	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		5.7	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		0.65	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate		1.8 J	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.36 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA42997-35 IDW-1

1,1-Dichloroethylene		0.36 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		7.2	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene		211	5.0	1.1	ug/l	SW846 8260B
1,1,1-Trichloroethane		0.81 J	1.0	0.25	ug/l	SW846 8260B
Trichloroethylene		3.8	1.0	0.35	ug/l	SW846 8260B
Cadmium		0.52 J	5.0	0.20	ug/l	SW846 6010D
Chromium		4.9 J	10	1.0	ug/l	SW846 6010D
Copper		5.1 J	25	1.0	ug/l	SW846 6010D
Lead		2.7 J	5.0	1.1	ug/l	SW846 6010D
Nickel		0.90 J	40	0.40	ug/l	SW846 6010D
Zinc		95.4	20	4.4	ug/l	SW846 6010D

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-1	Date Received:	04/13/17
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49611.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	2.6	5.0	2.0	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-1	Date Received:	04/13/17
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-25D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-2	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49613.D	2	04/14/17	SP	n/a	n/a	VP1875
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	50	20	ug/l	
71-43-2	Benzene	ND	2.0	0.62	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.48	ug/l	
75-25-2	Bromoform	ND	2.0	0.81	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.0	ug/l	
75-15-0	Carbon Disulfide	ND	4.0	1.1	ug/l	
56-23-5	Carbon Tetrachloride	ND	2.0	0.71	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.40	ug/l	
75-00-3	Chloroethane ^a	ND	4.0	1.3	ug/l	
67-66-3	Chloroform	ND	2.0	0.60	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.62	ug/l	
75-35-4	1,1-Dichloroethylene	3.1	2.0	0.64	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	2.0	0.55	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.44	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.85	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.58	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	2.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.71	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
74-83-9	Methyl Bromide	ND	4.0	1.2	ug/l	
74-87-3	Methyl Chloride	ND	4.0	1.0	ug/l	
75-09-2	Methylene Chloride	ND	10	4.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	10	2.0	ug/l	
100-42-5	Styrene	ND	2.0	0.44	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/l	
127-18-4	Tetrachloroethylene	105	2.0	0.43	ug/l	
108-88-3	Toluene	ND	2.0	0.60	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.93	ug/l	
79-01-6	Trichloroethylene	0.88	2.0	0.69	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-25D	Date Sampled: 04/10/17
Lab Sample ID: FA42997-2	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	2.0	0.82	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-3	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49612.D	1	04/14/17	SP	n/a	n/a	VP1875
Run #2	B121365.D	5	04/17/17	WV	n/a	n/a	VB4882

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	2.4	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	98.6 ^c	5.0	1.1	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-12D	Date Sampled: 04/10/17
Lab Sample ID: FA42997-3	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	100%	79-125%
2037-26-5	Toluene-D8	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	102%	104%	83-118%

- (a) Associated ICV outside control limits.
 (b) Associated BS recovery outside control limits.
 (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

Report of Analysis

Client Sample ID:	MW-26D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-4	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49614.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	1.9	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.97	1.0	0.28	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	75.2	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	1.2	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-26D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-4	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-5	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121366.D	1	04/17/17	WV	n/a	n/a	VB4882
Run #2	P49615.D	5	04/14/17	SP	n/a	n/a	VP1875

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	4.1	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	168 ^a	5.0	1.1	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	1.6	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-5	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	79-125%
2037-26-5	Toluene-D8	97%	102%	85-112%
460-00-4	4-Bromofluorobenzene	106%	102%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-6	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49616.D	2	04/14/17	SP	n/a	n/a	VP1875
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	50	20	ug/l	
71-43-2	Benzene	ND	2.0	0.62	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.48	ug/l	
75-25-2	Bromoform	ND	2.0	0.81	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.0	ug/l	
75-15-0	Carbon Disulfide	ND	4.0	1.1	ug/l	
56-23-5	Carbon Tetrachloride	ND	2.0	0.71	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.40	ug/l	
75-00-3	Chloroethane ^a	ND	4.0	1.3	ug/l	
67-66-3	Chloroform	ND	2.0	0.60	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.62	ug/l	
75-35-4	1,1-Dichloroethylene	2.0	2.0	0.64	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.61	2.0	0.55	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.44	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.85	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.58	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	2.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.71	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
74-83-9	Methyl Bromide	ND	4.0	1.2	ug/l	
74-87-3	Methyl Chloride	ND	4.0	1.0	ug/l	
75-09-2	Methylene Chloride	ND	10	4.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	10	2.0	ug/l	
100-42-5	Styrene	ND	2.0	0.44	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/l	
127-18-4	Tetrachloroethylene	96.6	2.0	0.43	ug/l	
108-88-3	Toluene	ND	2.0	0.60	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.93	ug/l	
79-01-6	Trichloroethylene	0.79	2.0	0.69	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22D	Date Sampled: 04/10/17
Lab Sample ID: FA42997-6	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	2.0	0.82	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-7	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121367.D	1	04/17/17	WV	n/a	n/a	VB4882
Run #2	P49617.D	2	04/14/17	SP	n/a	n/a	VP1875

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	2.1	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.86	1.0	0.28	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	75.0 ^a	2.0	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.73	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-7	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	105%	79-125%
2037-26-5	Toluene-D8	98%	103%	85-112%
460-00-4	4-Bromofluorobenzene	106%	98%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-8	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49618.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-16	Date Sampled: 04/10/17
Lab Sample ID: FA42997-8	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-9	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49619.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-9	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16D	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-10	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49620.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-16D	Date Sampled: 04/10/17
Lab Sample ID: FA42997-10	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-11	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49631.D	5	04/14/17	SP	n/a	n/a	VP1875
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	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane ^a	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	7.8	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	10	2.9	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	326	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	
79-01-6	Trichloroethylene	43.8	5.0	1.7	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-9	Date Sampled: 04/10/17
Lab Sample ID: FA42997-11	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-12	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121368.D	1	04/17/17	WV	n/a	n/a	VB4882
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.95	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	41.0	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.32	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	51.6	1.0	0.22	ug/l	
108-88-3	Toluene	1.2	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	44.3	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/10/17
Lab Sample ID:	FA42997-12	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-13	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49623.D	250	04/14/17	SP	n/a	n/a	VP1875
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	6300	2500	ug/l	
71-43-2	Benzene	ND	250	78	ug/l	
75-27-4	Bromodichloromethane	ND	250	61	ug/l	
75-25-2	Bromoform	ND	250	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	1300	500	ug/l	
75-15-0	Carbon Disulfide	ND	500	130	ug/l	
56-23-5	Carbon Tetrachloride	ND	250	89	ug/l	
108-90-7	Chlorobenzene	ND	250	50	ug/l	
75-00-3	Chloroethane ^a	ND	500	170	ug/l	
67-66-3	Chloroform	ND	250	75	ug/l	
124-48-1	Dibromochloromethane	ND	250	69	ug/l	
75-34-3	1,1-Dichloroethane	ND	250	85	ug/l	
107-06-2	1,2-Dichloroethane	ND	250	78	ug/l	
75-35-4	1,1-Dichloroethylene	ND	250	81	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	250	69	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	250	55	ug/l	
78-87-5	1,2-Dichloropropane	ND	250	110	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	250	73	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	250	54	ug/l	
100-41-4	Ethylbenzene	ND	250	89	ug/l	
591-78-6	2-Hexanone	ND	2500	500	ug/l	
74-83-9	Methyl Bromide	ND	500	150	ug/l	
74-87-3	Methyl Chloride	ND	500	130	ug/l	
75-09-2	Methylene Chloride	ND	1300	500	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1300	250	ug/l	
100-42-5	Styrene	ND	250	56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	75	ug/l	
127-18-4	Tetrachloroethylene	24600	250	54	ug/l	
108-88-3	Toluene	ND	250	75	ug/l	
71-55-6	1,1,1-Trichloroethane	180	250	62	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	250	120	ug/l	
79-01-6	Trichloroethylene	ND	250	86	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-13	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	250	100	ug/l	
1330-20-7	Xylene (total)	ND	750	180	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-14	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49624.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-15	Date Sampled: 04/11/17
Lab Sample ID: FA42997-14	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-20	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-15	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121369.D	5	04/17/17	WV	n/a	n/a	VB4882
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	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.6	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.5	5.0	1.4	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	10	2.9	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	438	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	
79-01-6	Trichloroethylene	3.1	5.0	1.7	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-20	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-15	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-15D	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-16	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49626.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15D	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-16	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15D1	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-17	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49627.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15D1	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-17	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-18	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49628.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	1.1	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-14	Date Sampled: 04/11/17
Lab Sample ID: FA42997-18	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14-A	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-19	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P49629.D	1	04/14/17	SP	n/a	n/a	VP1875
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	1.1	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14-A	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-19	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated ICV outside control limits.

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14D	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-20	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121277.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	1.7	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.1	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	84.6	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.77	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14D	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-20	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-14D-A	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-21	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121278.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	1.6	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.2	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	97.1	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.76	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14D-A	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-21	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-22	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121279.D	1	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121324.D	5	04/15/17	WV	n/a	n/a	VB4881

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3.6	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	199 ^a	5.0	1.1	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	3.6	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3	Date Sampled: 04/11/17
Lab Sample ID: FA42997-22	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	99%	79-125%
2037-26-5	Toluene-D8	97%	97%	85-112%
460-00-4	4-Bromofluorobenzene	104%	103%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-3D	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-23	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121280.D	1	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121325.D	5	04/15/17	WV	n/a	n/a	VB4881

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	8.0	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	8.0	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	223 ^a	5.0	1.1	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	0.27	1.0	0.25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	8.1	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3D	Date Sampled: 04/11/17
Lab Sample ID: FA42997-23	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	103%	79-125%
2037-26-5	Toluene-D8	99%	97%	85-112%
460-00-4	4-Bromofluorobenzene	103%	104%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-24	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121281.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	18.8	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	1.8	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/11/17
Lab Sample ID:	FA42997-24	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-21D	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-25	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121282.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	2.0	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.74	1.0	0.28	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	74.6	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.39	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-21D	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-25	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-26	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121283.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.92	1.0	0.22	ug/l	J
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-26	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-27	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121284.D	1	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121326.D	100	04/15/17	WV	n/a	n/a	VB4881
Run #3	B121353.D	250	04/17/17	WV	n/a	n/a	VB4882

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	1.2	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	595 ^a	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.38	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	18000 ^b	250	54	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-27	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	260 ^a	100	35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	1.7	3.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	99%	101%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	96%	79-125%
2037-26-5	Toluene-D8	100%	99%	98%	85-112%
460-00-4	4-Bromofluorobenzene	104%	102%	102%	83-118%

(a) Result is from Run# 2

(b) Result is from Run# 3

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-28	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121285.D	1	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121327.D	1	04/15/17	WV	n/a	n/a	VB4881

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.49 ^a	1.0	0.22	ug/l	J
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7	Date Sampled: 04/12/17
Lab Sample ID: FA42997-28	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	104%	79-125%
2037-26-5	Toluene-D8	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	103%	108%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-29	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121286.D	1	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121328.D	10	04/15/17	WV	n/a	n/a	VB4881

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	13.9	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	607 ^a	10	2.2	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	8.4	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1	Date Sampled: 04/12/17
Lab Sample ID: FA42997-29	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	100%	79-125%
2037-26-5	Toluene-D8	98%	96%	85-112%
460-00-4	4-Bromofluorobenzene	105%	102%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-27	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-30	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121287.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	1.0	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-30	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-27	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-30	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF38141.D	1	04/14/17	EG	n/a	n/a	GFF1489
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.43	0.50	0.16	ug/l	J
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-27	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-30	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	1.9 J	2.0	0.80	mg/l	1	04/13/17 19:33 JK	EPA 300/SW846	9056A
Nitrogen, Nitrate	1.7	0.10	0.050	mg/l	1	04/13/17 19:33 JK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/17 19:33 JK	EPA 300/SW846	9056A
Sulfate	0.60 U	2.0	0.60	mg/l	1	04/13/17 19:33 JK	EPA 300/SW846	9056A
Total Organic Carbon	0.23 U	1.0	0.23	mg/l	1	04/18/17 00:35 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-31	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121290.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	2.7	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-31	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-28	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-32	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121291.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.24	1.0	0.22	ug/l	J
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-28	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-32	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-28	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-32	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF38142.D	1	04/14/17	EG	n/a	n/a	GFF1489
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.42	0.50	0.16	ug/l	J
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-28	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-32	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	8.4	2.0	0.80	mg/l	1	04/13/17 19:48 JK	EPA 300/SW846	9056A
Nitrogen, Nitrate	1.0	0.10	0.050	mg/l	1	04/13/17 19:48 JK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/17 19:48 JK	EPA 300/SW846	9056A
Sulfate	12.0	2.0	0.60	mg/l	1	04/13/17 19:48 JK	EPA 300/SW846	9056A
Total Organic Carbon	0.72 J	1.0	0.23	mg/l	1	04/18/17 00:53 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-33	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121292.D	20	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121330.D	50	04/15/17	WV	n/a	n/a	VB4881

	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	200	ug/l	
71-43-2	Benzene	ND	20	6.2	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	8.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	40	ug/l	
75-15-0	Carbon Disulfide	ND	40	11	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	7.1	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.5	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	6.2	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	6.4	ug/l	
156-59-2	cis-1,2-Dichloroethylene	52.7	20	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	20	4.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	8.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.8	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.3	ug/l	
100-41-4	Ethylbenzene	ND	20	7.1	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
74-83-9	Methyl Bromide	ND	40	12	ug/l	
74-87-3	Methyl Chloride	ND	40	10	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	20	ug/l	
100-42-5	Styrene	ND	20	4.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.0	ug/l	
127-18-4	Tetrachloroethylene	2070 ^a	50	11	ug/l	
108-88-3	Toluene	ND	20	6.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	9.3	ug/l	
79-01-6	Trichloroethylene	8.4	20	6.9	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-24	Date Sampled: 04/12/17
Lab Sample ID: FA42997-33	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	20	8.2	ug/l	
1330-20-7	Xylene (total)	ND	60	14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	100%	79-125%
2037-26-5	Toluene-D8	98%	97%	85-112%
460-00-4	4-Bromofluorobenzene	104%	103%	83-118%

(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

Report of Analysis

Client Sample ID:	MW-29	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-34	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121293.D	1	04/14/17	WV	n/a	n/a	VB4879
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	5.4	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-29	Date Sampled: 04/12/17
Lab Sample ID: FA42997-34	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-29	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-34	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF38143.D	1	04/14/17	EG	n/a	n/a	GFF1489
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.17	0.50	0.16	ug/l	J
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-29	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-34	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	5.7	2.0	0.80	mg/l	1	04/13/17 20:03 JK	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.65	0.10	0.050	mg/l	1	04/13/17 20:03 JK	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/17 20:03 JK	EPA	300/SW846 9056A
Sulfate	1.8 J	2.0	0.60	mg/l	1	04/13/17 20:03 JK	EPA	300/SW846 9056A
Total Organic Carbon	0.36 J	1.0	0.23	mg/l	1	04/18/17 01:10 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

4.34
4

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-35	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B121294.D	1	04/14/17	WV	n/a	n/a	VB4879
Run #2	B121331.D	5	04/15/17	WV	n/a	n/a	VB4881

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.36	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	7.2	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	211 ^a	5.0	1.1	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	0.81	1.0	0.25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	3.8	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-35	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	102%	79-125%
2037-26-5	Toluene-D8	97%	97%	85-112%
460-00-4	4-Bromofluorobenzene	100%	103%	83-118%

(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

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-35	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D1369.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid ^a	ND	48	9.6	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	4.8	0.57	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.61	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.80	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.71	ug/l	
51-28-5	2,4-Dinitrophenol ^b	ND	24	4.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.9	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.54	ug/l	
	3&4-Methylphenol	ND	4.8	0.94	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.82	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.48	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.71	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.72	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.60	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.61	ug/l	
120-12-7	Anthracene	ND	4.8	0.77	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.73	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.75	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.75	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.79	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.82	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.59	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	4.8	0.81	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	4.8	0.96	ug/l	
86-74-8	Carbazole	ND	4.8	0.58	ug/l	
106-47-8	4-Chloroaniline ^c	ND	4.8	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.78	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.73	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.48	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-35	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	4.8	0.52	ug/l	
218-01-9	Chrysene	ND	4.8	0.82	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.77	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.58	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.48	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.48	ug/l	
91-94-1	3,3' -Dichlorobenzidine ^c	ND	4.8	0.62	ug/l	
84-66-2	Diethyl Phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl Phthalate	ND	4.8	0.96	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	4.8	0.96	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.69	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	0.96	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.53	ug/l	
86-73-7	Fluorene	ND	4.8	0.67	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.48	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	1.7	ug/l	
67-72-1	Hexachloroethane	ND	4.8	1.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.69	ug/l	
78-59-1	Isophorone ^c	ND	4.8	0.75	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.58	ug/l	
91-20-3	Naphthalene	ND	4.8	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	1.7	ug/l	
99-09-2	3-Nitroaniline ^c	ND	4.8	0.85	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	1.1	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.90	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	4.8	0.64	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.78	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.83	ug/l	
129-00-0	Pyrene	ND	4.8	0.66	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		14-67%
4165-62-2	Phenol-d5	24%		10-50%
118-79-6	2,4,6-Tribromophenol	83%		33-118%

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:	IDW-1	Date Sampled:	04/12/17
Lab Sample ID:	FA42997-35	Date Received:	04/13/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		42-108%
321-60-8	2-Fluorobiphenyl	71%		40-106%
1718-51-0	Terphenyl-d14	70%		39-121%

- (a) Associated CCV outside control limits.
(b) Associated MS/MSD recovery or RPD outside control limits.
(c) Associated BS recovery outside control limits.

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: IDW-1	Date Sampled: 04/12/17
Lab Sample ID: FA42997-35	Date Received: 04/13/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	1.0 U	6.0	1.0	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Arsenic	1.3 U	10	1.3	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Beryllium	0.20 U	4.0	0.20	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Cadmium	0.52 J	5.0	0.20	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Chromium	4.9 J	10	1.0	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Copper	5.1 J	25	1.0	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Lead	2.7 J	5.0	1.1	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Mercury	0.030 U	0.50	0.030	ug/l	1	04/14/17	04/14/17 JL	SW846 7470A ¹	SW846 7470A ³
Nickel	0.90 J	40	0.40	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Selenium	2.9 U	10	2.9	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Silver	0.70 U	10	0.70	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Thallium	1.4 U	10	1.4	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴
Zinc	95.4	20	4.4	ug/l	1	04/18/17	04/20/17 LM	SW846 6010D ²	SW846 3010A ⁴

(1) Instrument QC Batch: MA13989

(2) Instrument QC Batch: MA14001

(3) Prep QC Batch: MP31973

(4) Prep QC Batch: MP31992

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA42997

AECOM**Chain of Custody and Analytical Request**

Page 1 of 3
 Project Number: 60314964
 Chain of Custody Number ⁽¹⁾:
 LIMS Number:

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC				Sample Analysis Requested										Quality Assurance Samples				
Client Name: UTC																		
Collected by: Randy Morgan / Justin Butler				Project Manager: Walter Gerald 864-234-8925														
Sample ID	Date Collected (dd-mm-yyy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	VOC's 8260B TCL	SVOC's (8270D)	P/P Metals (6010C/7472B)								COMMENTS	Cooler ID
			COMP	GRAB	Well													
Trip Blank 1	10-Apr-2017					Groundwater	X											
MW-250 2	10-Apr-2017	1225		X			X											
MW-120 3	10-Apr-2017	1238		X			X											
MW-260 4	10-Apr-2017	1315		X			X											
MW-130 5	10-Apr-2017	1348		X			X											
MW-220 6	10-Apr-2017	1435		X			X											
MW-220-a 7	10-Apr-2017	1435		X			X											
MW-16 8	10-Apr-2017	1508		X			X											
MW-230 9	10-Apr-2017	1525		X			X											
MW-160 10	10-Apr-2017	1543		X			X											
MW-9 11	10-Apr-2017	1705		X			X											
MW-9-MS 11	10-Apr-2017	1705		X			X											
MW-9-MSD 11	10-Apr-2017	1705		X			X											
MW-10 12	10-Apr-2017	1710		X			X											
MW-19 13	11-Apr-2017	0845		X			X											

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
1. <u>Randy Morgan</u>	Date: <u>4/12/17</u>	Time: <u>1800</u>	Received by (signed): <u>[Signature]</u>	Date: <u>04/13/17</u>	Time: <u>930</u>	Delivered Directly to Lab: <u>Fed Ex</u>	Shipped: <u>XXXX</u>
2. <u>Ex</u>						Method of Shipment: <u>Fed Ex</u>	Airbill #: <u>8113 1397 3133</u>
3. <u>Ex</u>						Analytical Lab: <u>Accutest</u>	Location: <u>Orlando FLA</u>
						Lab Recipient:	Date: <u></u> Time: <u></u>

1.) Chain of Custody Number → date collected + custody number (E.G. 01-19-2004-01)

TCL VOC's BY 8260B -unpreserved vials - 7day holding time

3.4 3.8

AECOM CHEMIST - Dori Cullom 8 864-234-8928 doria.cullom@aecom.com

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FA42997: Chain of Custody

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ACCUTEST
 FA42997

FA42997

AECOM

Chain of Custody and Analytical Request

Page 2 of 3
 Project Number: 60314964
 Chain of Custody Number ⁽¹⁾:
 LIMS Number:

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC					Sample Analysis Requested										Quality Assurance Samples		
Client Name: UTC					COMMENTS												Cooler ID
Collected by: Randy Morgan / Justin Butler Project Manager: Walter Gerald 864-234-8925																	
Sample ID	Date Collected (dd-mm-YYYY)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	VOC,s 8260B TCL	SVOC,s (8270D)	P/P Metals (6010C/7470B)								
			COMP	GRAB	Well												
MW-15 14	11-Apr-2017	0900		X		Groundwater	X										
MW-20 15	11-Apr-2017	0945		X			X										
MW-15D 16	11-Apr-2017	1033		X			X										
MW-15D2 17	11-Apr-2017	1108		X			X										
MW-14 18	11-Apr-2017	1248		X			X										
MW-14-a 19	11-Apr-2017	1248		X			X										
MW-14D 20	11-Apr-2017	1323		X			X										
MW-14D-a 21	11-Apr-2017	1323		X			X										
MW-3 22	11-Apr-2017	1423		X			X										
MW-3D 23	11-Apr-2017	1515		X			X										
MW-3D-m3 23	11-Apr-2017	1515		X			X										
MW-3D-m3D 23	11-Apr-2017	1515		X			X										
MW-8 24	11-Apr-2017	1718		X			X										
MW-21D 25	12-Apr-2017	0820		X			X										
MW-2 26	12-Apr-2017	0900		X			X										

Custody Transfers Prior to Receipt by Laboratory

Sample Delivery Details / Laboratory Receipt

Relinquished By (Signed): <u>Randy Morgan</u> Date: <u>4/12/17</u> Time: <u>1800</u>	Received by (signed): <u>[Signature]</u> Date: <u>04/13/17</u> Time: <u>930</u>	Delivered Directly to Lab: _____	Shipped: <u>XXXX</u>
Method of Shipment: <u>Fed Ex</u>	Airbill #: <u>8113 1397 313</u>	Method of Shipment: <u>Fed Ex</u>	Airbill #: <u>8113 1397 313</u>
Analytical Lab: <u>Accutest</u>	Location: <u>Orlando FLA</u>	Analytical Lab: <u>Accutest</u>	Location: <u>Orlando FLA</u>
Lab Recipient: _____	Date: _____ Time: _____	Lab Recipient: _____	Date: _____ Time: _____

1.) Chain of Custody Number = date collected + custody number (E.G. 01-19-2004-01)

TCL VOC,s BY 8260B -unpreserved vials - 7day holding time

AECOM CHEMIST - Dori Cullom 8 864-234-8928 doria.cullom@aecom.com

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FA42997: Chain of Custody

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ACCUTEST
FA42997

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA42997 CLIENT: Aelom PROJECT: UTC Delavan
 DATE/TIME RECEIVED: 04/13/17 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 2
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 7862 2666 6684

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT#s pH 0-3 230313 pH 10-12 219813A

SUMMARY OF COMMENTS: Sample #18 (1) Vial has headspace

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 10.4
☐ OBSERVED TEMPS: 3.0 3.4
☐ CORRECTED TEMPS: 3.4 3.8 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☐ ID'S ON COC DO NOT MATCH LABEL
☒ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

OTHER (specify) _____

TECHNICIAN SIGNATURE/DATE

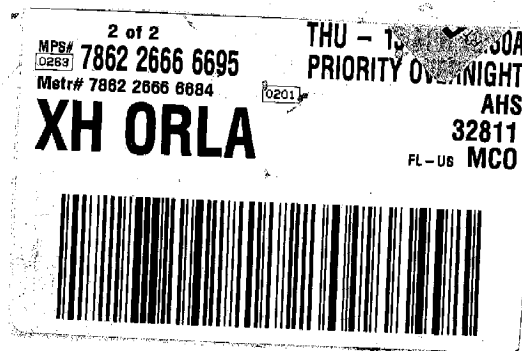
NF 02/16

REVIEWER SIGNATURE/DATE

receipt confirmation 020116.xls

FA42997: Chain of Custody

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GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 2

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1875-MB	P49610.D	1	04/14/17	SP	n/a	n/a	VP1875

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA42997-1, FA42997-2, FA42997-3, FA42997-4, FA42997-5, FA42997-6, FA42997-7, FA42997-8, FA42997-9, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

6.1.1

6

Method Blank Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1875-MB	P49610.D	1	04/14/17	SP	n/a	n/a	VP1875

The QC reported here applies to the following samples: Method: SW846 8260B

FA42997-1, FA42997-2, FA42997-3, FA42997-4, FA42997-5, FA42997-6, FA42997-7, FA42997-8, FA42997-9, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	101% 79-125%
2037-26-5	Toluene-D8	103% 85-112%
460-00-4	4-Bromofluorobenzene	100% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4879-MB	B121272.D	1	04/14/17	WV	n/a	n/a	VB4879

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA42997-20, FA42997-21, FA42997-22, FA42997-23, FA42997-24, FA42997-25, FA42997-26, FA42997-27, FA42997-28, FA42997-29, FA42997-30, FA42997-31, FA42997-32, FA42997-33, FA42997-34, FA42997-35

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

Method Blank Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4879-MB	B121272.D	1	04/14/17	WV	n/a	n/a	VB4879

The QC reported here applies to the following samples: Method: SW846 8260B

FA42997-20, FA42997-21, FA42997-22, FA42997-23, FA42997-24, FA42997-25, FA42997-26, FA42997-27, FA42997-28, FA42997-29, FA42997-30, FA42997-31, FA42997-32, FA42997-33, FA42997-34, FA42997-35

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	97% 79-125%
2037-26-5	Toluene-D8	96% 85-112%
460-00-4	4-Bromofluorobenzene	101% 83-118%

Method Blank Summary

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Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4881-MB	B121322.D	1	04/15/17	WV	n/a	n/a	VB4881

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-22, FA42997-23, FA42997-27, FA42997-28, FA42997-29, FA42997-33, FA42997-35

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	101% 79-125%
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	101% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4882-MB	B121349.D	1	04/17/17	WV	n/a	n/a	VB4882

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA42997-3, FA42997-5, FA42997-7, FA42997-12, FA42997-15, FA42997-27

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

6.1.4

6

Method Blank Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4882-MB	B121349.D	1	04/17/17	WV	n/a	n/a	VB4882

The QC reported here applies to the following samples: Method: SW846 8260B
FA42997-3, FA42997-5, FA42997-7, FA42997-12, FA42997-15, FA42997-27

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	93% 79-125%
2037-26-5	Toluene-D8	95% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1875-BS	P49609.D	1	04/14/17	SP	n/a	n/a	VP1875

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA42997-1, FA42997-2, FA42997-3, FA42997-4, FA42997-5, FA42997-6, FA42997-7, FA42997-8, FA42997-9, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	142	114	50-147
71-43-2	Benzene	25	26.8	107	81-122
75-27-4	Bromodichloromethane	25	28.1	112	79-123
75-25-2	Bromoform	25	28.9	116	66-123
78-93-3	2-Butanone (MEK)	125	124	99	56-143
75-15-0	Carbon Disulfide	25	29.3	117	66-148
56-23-5	Carbon Tetrachloride	25	29.9	120	76-136
108-90-7	Chlorobenzene	25	26.7	107	82-124
75-00-3	Chloroethane	25	31.1	124	62-144
67-66-3	Chloroform	25	27.2	109	80-124
124-48-1	Dibromochloromethane	25	27.7	111	78-122
75-34-3	1,1-Dichloroethane	25	28.6	114	81-122
107-06-2	1,2-Dichloroethane	25	26.0	104	75-125
75-35-4	1,1-Dichloroethylene	25	31.8	127	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.4	106	78-120
156-60-5	trans-1,2-Dichloroethylene	25	30.3	121	76-127
78-87-5	1,2-Dichloropropane	25	25.4	102	76-124
10061-01-5	cis-1,3-Dichloropropene	25	27.2	109	75-118
10061-02-6	trans-1,3-Dichloropropene	25	30.3	121*	80-120
100-41-4	Ethylbenzene	25	28.5	114	81-121
591-78-6	2-Hexanone	125	113	90	61-129
74-83-9	Methyl Bromide	25	32.8	131	59-143
74-87-3	Methyl Chloride	25	22.4	90	50-159
75-09-2	Methylene Chloride	25	26.3	105	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	109	87	66-122
100-42-5	Styrene	25	26.7	107	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	25.0	100	72-120
127-18-4	Tetrachloroethylene	25	28.4	114	76-135
108-88-3	Toluene	25	28.1	112	80-120
71-55-6	1,1,1-Trichloroethane	25	28.1	112	75-130
79-00-5	1,1,2-Trichloroethane	25	27.6	110	76-119
79-01-6	Trichloroethylene	25	28.4	114	81-126
75-01-4	Vinyl Chloride	25	25.8	103	69-159
1330-20-7	Xylene (total)	75	86.6	115	80-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1875-BS	P49609.D	1	04/14/17	SP	n/a	n/a	VP1875

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-1, FA42997-2, FA42997-3, FA42997-4, FA42997-5, FA42997-6, FA42997-7, FA42997-8, FA42997-9, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	79-125%
2037-26-5	Toluene-D8	104%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4879-BS	B121271.D	1	04/14/17	WV	n/a	n/a	VB4879

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA42997-20, FA42997-21, FA42997-22, FA42997-23, FA42997-24, FA42997-25, FA42997-26, FA42997-27, FA42997-28, FA42997-29, FA42997-30, FA42997-31, FA42997-32, FA42997-33, FA42997-34, FA42997-35

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	135	108	50-147
71-43-2	Benzene	25	24.9	100	81-122
75-27-4	Bromodichloromethane	25	24.8	99	79-123
75-25-2	Bromoform	25	25.3	101	66-123
78-93-3	2-Butanone (MEK)	125	114	91	56-143
75-15-0	Carbon Disulfide	25	26.7	107	66-148
56-23-5	Carbon Tetrachloride	25	26.3	105	76-136
108-90-7	Chlorobenzene	25	25.3	101	82-124
75-00-3	Chloroethane	25	31.0	124	62-144
67-66-3	Chloroform	25	24.7	99	80-124
124-48-1	Dibromochloromethane	25	26.1	104	78-122
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	23.0	92	75-125
75-35-4	1,1-Dichloroethylene	25	26.2	105	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.4	98	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.9	112	76-127
78-87-5	1,2-Dichloropropane	25	25.0	100	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.8	99	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.1	108	80-120
100-41-4	Ethylbenzene	25	25.7	103	81-121
591-78-6	2-Hexanone	125	111	89	61-129
74-83-9	Methyl Bromide	25	26.3	105	59-143
74-87-3	Methyl Chloride	25	27.3	109	50-159
75-09-2	Methylene Chloride	25	27.3	109	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	107	86	66-122
100-42-5	Styrene	25	25.1	100	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	24.3	97	72-120
127-18-4	Tetrachloroethylene	25	26.5	106	76-135
108-88-3	Toluene	25	24.9	100	80-120
71-55-6	1,1,1-Trichloroethane	25	24.3	97	75-130
79-00-5	1,1,2-Trichloroethane	25	25.0	100	76-119
79-01-6	Trichloroethylene	25	25.5	102	81-126
75-01-4	Vinyl Chloride	25	28.2	113	69-159
1330-20-7	Xylene (total)	75	76.1	101	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4879-BS	B121271.D	1	04/14/17	WV	n/a	n/a	VB4879

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-20, FA42997-21, FA42997-22, FA42997-23, FA42997-24, FA42997-25, FA42997-26, FA42997-27, FA42997-28, FA42997-29, FA42997-30, FA42997-31, FA42997-32, FA42997-33, FA42997-34, FA42997-35

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4881-BS	B121321.D	1	04/15/17	WV	n/a	n/a	VB4881

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-22, FA42997-23, FA42997-27, FA42997-28, FA42997-29, FA42997-33, FA42997-35

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	23.4	94	78-120
127-18-4	Tetrachloroethylene	25	26.1	104	76-135
79-01-6	Trichloroethylene	25	25.8	103	81-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4882-BS	B121348.D	1	04/17/17	WV	n/a	n/a	VB4882

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA42997-3, FA42997-5, FA42997-7, FA42997-12, FA42997-15, FA42997-27

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	134	107	50-147
71-43-2	Benzene	25	25.6	102	81-122
75-27-4	Bromodichloromethane	25	25.2	101	79-123
75-25-2	Bromoform	25	24.3	97	66-123
78-93-3	2-Butanone (MEK)	125	118	94	56-143
75-15-0	Carbon Disulfide	25	27.3	109	66-148
56-23-5	Carbon Tetrachloride	25	25.5	102	76-136
108-90-7	Chlorobenzene	25	24.6	98	82-124
75-00-3	Chloroethane	25	29.7	119	62-144
67-66-3	Chloroform	25	24.9	100	80-124
124-48-1	Dibromochloromethane	25	24.7	99	78-122
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	23.1	92	75-125
75-35-4	1,1-Dichloroethylene	25	26.5	106	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.9	100	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.7	115	76-127
78-87-5	1,2-Dichloropropane	25	25.4	102	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.7	99	75-118
10061-02-6	trans-1,3-Dichloropropene	25	26.4	106	80-120
100-41-4	Ethylbenzene	25	24.8	99	81-121
591-78-6	2-Hexanone	125	114	91	61-129
74-83-9	Methyl Bromide	25	25.7	103	59-143
74-87-3	Methyl Chloride	25	25.7	103	50-159
75-09-2	Methylene Chloride	25	27.0	108	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	113	90	66-122
100-42-5	Styrene	25	24.2	97	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	25.7	103	72-120
127-18-4	Tetrachloroethylene	25	25.3	101	76-135
108-88-3	Toluene	25	25.1	100	80-120
71-55-6	1,1,1-Trichloroethane	25	23.7	95	75-130
79-00-5	1,1,2-Trichloroethane	25	25.2	101	76-119
79-01-6	Trichloroethylene	25	25.9	104	81-126
75-01-4	Vinyl Chloride	25	26.7	107	69-159
1330-20-7	Xylene (total)	75	74.6	99	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4882-BS	B121348.D	1	04/17/17	WV	n/a	n/a	VB4882

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-3, FA42997-5, FA42997-7, FA42997-12, FA42997-15, FA42997-27

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	108%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42997-23MS	B121288.D	1	04/14/17	WV	n/a	n/a	VB4879
FA42997-23MSD	B121289.D	1	04/14/17	WV	n/a	n/a	VB4879
FA42997-23	B121280.D	1	04/14/17	WV	n/a	n/a	VB4879

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-20, FA42997-21, FA42997-22, FA42997-23, FA42997-24, FA42997-25, FA42997-26, FA42997-27, FA42997-28, FA42997-29, FA42997-30, FA42997-31, FA42997-32, FA42997-33, FA42997-34, FA42997-35

CAS No.	Compound	FA42997-23 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	114	91	125	108	86	50-147/21
71-43-2	Benzene	ND		25	27.1	108	25	25.0	100	81-122/14
75-27-4	Bromodichloromethane	ND		25	26.4	106	25	24.4	98	79-123/19
75-25-2	Bromoform	ND		25	22.1	88	25	21.4	86	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	108	86	125	104	83	56-143/18
75-15-0	Carbon Disulfide	ND		25	22.9	92	25	21.5	86	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	28.0	112	25	25.6	102	76-136/23
108-90-7	Chlorobenzene	ND		25	26.5	106	25	25.0	100	82-124/14
75-00-3	Chloroethane	ND		25	31.0	124	25	28.1	112	62-144/20
67-66-3	Chloroform	ND		25	26.7	107	25	24.7	99	80-124/15
124-48-1	Dibromochloromethane	ND		25	25.1	100	25	23.5	94	78-122/19
75-34-3	1,1-Dichloroethane	ND		25	27.5	110	25	25.5	102	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	25.2	101	25	23.0	92	75-125/14
75-35-4	1,1-Dichloroethylene	8.0		25	36.0	112	25	34.2	105	78-137/18
156-59-2	cis-1,2-Dichloroethylene	8.0		25	34.1	104	25	31.6	94	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	30.6	122	25	27.7	111	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	26.9	108	25	24.6	98	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	24.7	99	25	22.5	90	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	25.9	104	25	24.0	96	80-120/22
100-41-4	Ethylbenzene	ND		25	26.7	107	25	25.1	100	81-121/14
591-78-6	2-Hexanone	ND		125	102	82	125	99.7	80	61-129/18
74-83-9	Methyl Bromide	ND		25	26.3	105	25	24.4	98	59-143/19
74-87-3	Methyl Chloride	ND		25	26.2	105	25	24.2	97	50-159/19
75-09-2	Methylene Chloride	ND		25	29.0	116	25	26.8	107	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	106	85	125	101	81	66-122/16
100-42-5	Styrene	ND		25	25.9	104	25	24.3	97	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	25.0	100	25	23.7	95	72-120/14
127-18-4	Tetrachloroethylene	251	E	25	284	132	25	303	208* a	76-135/16
108-88-3	Toluene	ND		25	26.3	105	25	25.0	100	80-120/14
71-55-6	1,1,1-Trichloroethane	0.27	J	25	26.9	107	25	24.2	96	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	26.2	105	25	24.4	98	76-119/14
79-01-6	Trichloroethylene	8.1		25	35.5	110	25	34.1	104	81-126/15
75-01-4	Vinyl Chloride	ND		25	27.5	110	25	25.1	100	69-159/18
1330-20-7	Xylene (total)	ND		75	80.0	107	75	74.8	100	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42997-23MS	B121288.D	1	04/14/17	WV	n/a	n/a	VB4879
FA42997-23MSD	B121289.D	1	04/14/17	WV	n/a	n/a	VB4879
FA42997-23	B121280.D	1	04/14/17	WV	n/a	n/a	VB4879

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-20, FA42997-21, FA42997-22, FA42997-23, FA42997-24, FA42997-25, FA42997-26, FA42997-27, FA42997-28, FA42997-29, FA42997-30, FA42997-31, FA42997-32, FA42997-33, FA42997-34, FA42997-35

CAS No.	Surrogate Recoveries	MS	MSD	FA42997-23	Limits
1868-53-7	Dibromofluoromethane	101%	100%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	99%	100%	79-125%
2037-26-5	Toluene-D8	98%	99%	99%	85-112%
460-00-4	4-Bromofluorobenzene	104%	105%	103%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42997-11MS	P49632.D	5	04/14/17	SP	n/a	n/a	VP1875
FA42997-11MSD	P49633.D	5	04/14/17	SP	n/a	n/a	VP1875
FA42997-11	P49631.D	5	04/14/17	SP	n/a	n/a	VP1875

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-1, FA42997-2, FA42997-3, FA42997-4, FA42997-5, FA42997-6, FA42997-7, FA42997-8, FA42997-9, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19

CAS No.	Compound	FA42997-11 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	625	568	91	625	577	92	2	50-147/21
71-43-2	Benzene	ND	125	134	107	125	134	107	0	81-122/14
75-27-4	Bromodichloromethane	ND	125	143	114	125	129	103	10	79-123/19
75-25-2	Bromoform	ND	125	135	108	125	111	89	20	66-123/21
78-93-3	2-Butanone (MEK)	ND	625	590	94	625	610	98	3	56-143/18
75-15-0	Carbon Disulfide	ND	125	123	98	125	118	94	4	66-148/23
56-23-5	Carbon Tetrachloride	ND	125	152	122	125	141	113	8	76-136/23
108-90-7	Chlorobenzene	ND	125	131	105	125	134	107	2	82-124/14
75-00-3	Chloroethane	ND	125	173	138	125	160	128	8	62-144/20
67-66-3	Chloroform	ND	125	141	113	125	141	113	0	80-124/15
124-48-1	Dibromochloromethane	ND	125	136	109	125	115	92	17	78-122/19
75-34-3	1,1-Dichloroethane	ND	125	143	114	125	143	114	0	81-122/15
107-06-2	1,2-Dichloroethane	ND	125	138	110	125	138	110	0	75-125/14
75-35-4	1,1-Dichloroethylene	ND	125	171	137	125	179	143*	5	78-137/18
156-59-2	cis-1,2-Dichloroethylene	7.8	125	137	103	125	138	104	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	125	149	119	125	148	118	1	76-127/17
78-87-5	1,2-Dichloropropane	ND	125	121	97	125	124	99	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	125	124	99	125	110	88	12	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	125	144	115	125	130	104	10	80-120/22
100-41-4	Ethylbenzene	ND	125	141	113	125	146	117	3	81-121/14
591-78-6	2-Hexanone	ND	625	572	92	625	601	96	5	61-129/18
74-83-9	Methyl Bromide	ND	125	176	141	125	175	140	1	59-143/19
74-87-3	Methyl Chloride	ND	125	106	85	125	115	92	8	50-159/19
75-09-2	Methylene Chloride	ND	125	140	112	125	137	110	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	625	552	88	625	591	95	7	66-122/16
100-42-5	Styrene	ND	125	131	105	125	128	102	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	125	124	99	125	131	105	5	72-120/14
127-18-4	Tetrachloroethylene	326	125	460	107	125	462	109	0	76-135/16
108-88-3	Toluene	ND	125	138	110	125	139	111	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	125	150	120	125	145	116	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	125	132	106	125	135	108	2	76-119/14
79-01-6	Trichloroethylene	43.8	125	191	118	125	191	118	0	81-126/15
75-01-4	Vinyl Chloride	ND	125	121	97	125	125	100	3	69-159/18
1330-20-7	Xylene (total)	ND	375	441	118	375	440	117	0	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42997-11MS	P49632.D	5	04/14/17	SP	n/a	n/a	VP1875
FA42997-11MSD	P49633.D	5	04/14/17	SP	n/a	n/a	VP1875
FA42997-11	P49631.D	5	04/14/17	SP	n/a	n/a	VP1875

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-1, FA42997-2, FA42997-3, FA42997-4, FA42997-5, FA42997-6, FA42997-7, FA42997-8, FA42997-9, FA42997-10, FA42997-11, FA42997-13, FA42997-14, FA42997-16, FA42997-17, FA42997-18, FA42997-19

CAS No.	Surrogate Recoveries	MS	MSD	FA42997-11	Limits
1868-53-7	Dibromofluoromethane	101%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	113%	108%	109%	79-125%
2037-26-5	Toluene-D8	100%	101%	102%	85-112%
460-00-4	4-Bromofluorobenzene	97%	99%	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42765-2MS	B121335.D	1000	04/15/17	WV	n/a	n/a	VB4881
FA42765-2MSD	B121336.D	1000	04/15/17	WV	n/a	n/a	VB4881
FA42765-2	B121332.D	1000	04/15/17	WV	n/a	n/a	VB4881

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-22, FA42997-23, FA42997-27, FA42997-28, FA42997-29, FA42997-33, FA42997-35

CAS No.	Compound	FA42765-2		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
156-59-2	cis-1,2-Dichloroethylene	1000	U	25000	24700	99	25000	23900	96	3	78-120/15
127-18-4	Tetrachloroethylene	1000	U	25000	24600	98	25000	24900	100	1	76-135/16
79-01-6	Trichloroethylene	119000	E	25000	135000	64* a	25000	134000	60* a	1	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA42765-2	Limits
1868-53-7	Dibromofluoromethane	101%	99%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	101%	102%	79-125%
2037-26-5	Toluene-D8	100%	98%	96%	85-112%
460-00-4	4-Bromofluorobenzene	106%	104%	104%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42937-1MS	B121370.D	250	04/17/17	WV	n/a	n/a	VB4882
FA42937-1MSD	B121371.D	250	04/17/17	WV	n/a	n/a	VB4882
FA42937-1	B121357.D	100	04/17/17	WV	n/a	n/a	VB4882
FA42937-1	B121362.D	250	04/17/17	WV	n/a	n/a	VB4882

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-3, FA42997-5, FA42997-7, FA42997-12, FA42997-15, FA42997-27

CAS No.	Compound	FA42937-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	31300	26800	86	31300	26900	86	0	50-147/21
71-43-2	Benzene	9030	6250	14700	91	6250	14900	94	1	81-122/14
75-27-4	Bromodichloromethane	ND	6250	6230	100	6250	6150	98	1	79-123/19
75-25-2	Bromoform	ND	6250	5840	93	6250	5910	95	1	66-123/21
78-93-3	2-Butanone (MEK)	ND	31300	26700	85	31300	27800	89	4	56-143/18
75-15-0	Carbon Disulfide	ND	6250	6580	105	6250	6660	107	1	66-148/23
56-23-5	Carbon Tetrachloride	ND	6250	6530	104	6250	6420	103	2	76-136/23
108-90-7	Chlorobenzene	ND	6250	6300	101	6250	6360	102	1	82-124/14
75-00-3	Chloroethane	ND	6250	7640	122	6250	7450	119	3	62-144/20
67-66-3	Chloroform	ND	6250	6230	100	6250	6160	99	1	80-124/15
124-48-1	Dibromochloromethane	ND	6250	6080	97	6250	6110	98	0	78-122/19
75-34-3	1,1-Dichloroethane	ND	6250	6490	104	6250	6510	104	0	81-122/15
107-06-2	1,2-Dichloroethane	ND	6250	5900	94	6250	5780	92	2	75-125/14
75-35-4	1,1-Dichloroethylene	ND	6250	6520	104	6250	6390	102	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	6250	6070	97	6250	6120	98	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	6250	7070	113	6250	6870	110	3	76-127/17
78-87-5	1,2-Dichloropropane	ND	6250	6160	99	6250	6080	97	1	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	6250	5950	95	6250	5990	96	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	6250	6240	100	6250	6460	103	3	80-120/22
100-41-4	Ethylbenzene	1760	6250	7700	95	6250	7930	99	3	81-121/14
591-78-6	2-Hexanone	ND	31300	25200	81	31300	26000	83	3	61-129/18
74-83-9	Methyl Bromide	ND	6250	6580	105	6250	6500	104	1	59-143/19
74-87-3	Methyl Chloride	ND	6250	6940	111	6250	6960	111	0	50-159/19
75-09-2	Methylene Chloride	ND	6250	6860	110	6250	6780	108	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	31300	25800	83	31300	26100	84	1	66-122/16
100-42-5	Styrene	ND	6250	6170	99	6250	6220	100	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	6250	6000	96	6250	6070	97	1	72-120/14
127-18-4	Tetrachloroethylene	ND	6250	6500	104	6250	6640	106	2	76-135/16
108-88-3	Toluene	11900 ^a	6250	16400	72*	6250	16600	75*	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	6250	6150	98	6250	6070	97	1	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	6250	6190	99	6250	6410	103	3	76-119/14
79-01-6	Trichloroethylene	ND	6250	6490	104	6250	6470	104	0	81-126/15
75-01-4	Vinyl Chloride	ND	6250	6970	112	6250	7060	113	1	69-159/18
1330-20-7	Xylene (total)	12200	18800	29700	93	18800	30200	96	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42937-1MS	B121370.D	250	04/17/17	WV	n/a	n/a	VB4882
FA42937-1MSD	B121371.D	250	04/17/17	WV	n/a	n/a	VB4882
FA42937-1	B121357.D	100	04/17/17	WV	n/a	n/a	VB4882
FA42937-1	B121362.D	250	04/17/17	WV	n/a	n/a	VB4882

The QC reported here applies to the following samples:

Method: SW846 8260B

FA42997-3, FA42997-5, FA42997-7, FA42997-12, FA42997-15, FA42997-27

CAS No.	Surrogate Recoveries	MS	MSD	FA42937-1	FA42937-1	Limits
1868-53-7	Dibromofluoromethane	101%	98%	100%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	100%	96%	79-125%
2037-26-5	Toluene-D8	97%	98%	98%	98%	85-112%
460-00-4	4-Bromofluorobenzene	102%	101%	103%	104%	83-118%

(a) Result is from Run #2.

* = Outside of Control Limits.



GC/MS Semi-volatiles

QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-MB	4D1357.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA42997-35

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	5.0	0.59	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.63	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.84	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.56	ug/l	
	3&4-Methylphenol	ND	5.0	0.98	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.85	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.75	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.63	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.64	ug/l	
120-12-7	Anthracene	ND	5.0	0.80	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.76	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.78	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.78	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.82	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.61	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	5.0	0.85	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	1.0	ug/l	
86-74-8	Carbazole	ND	5.0	0.60	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.81	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.73	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.76	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.50	ug/l	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	5.0	0.54	ug/l	
218-01-9	Chrysene	ND	5.0	0.85	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.80	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.60	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-MB	4D1357.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA42997-35

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.64	ug/l	
84-66-2	Diethyl Phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl Phthalate	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.81	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.71	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.55	ug/l	
86-73-7	Fluorene	ND	5.0	0.70	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	1.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	1.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.71	ug/l	
78-59-1	Isophorone	ND	5.0	0.78	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.60	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.8	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.88	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.93	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	5.0	0.67	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.81	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.86	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	43%	14-67%
4165-62-2	Phenol-d5	31%	10-50%

Method Blank Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-MB	4D1357.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples: Method: SW846 8270D

FA42997-35

CAS No.	Surrogate Recoveries	Limits
118-79-6	2,4,6-Tribromophenol	81% 33-118%
4165-60-0	Nitrobenzene-d5	75% 42-108%
321-60-8	2-Fluorobiphenyl	69% 40-106%
1718-51-0	Terphenyl-d14	70% 39-121%

7.1.1
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Blank Spike Summary

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Job Number: FA42997**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-BS	4D1356.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA42997-35

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	28.5	29	10-69
59-50-7	4-Chloro-3-methyl Phenol	50	46.8	94	54-103
95-57-8	2-Chlorophenol	50	39.6	79	52-98
120-83-2	2,4-Dichlorophenol	50	44.5	89	53-103
105-67-9	2,4-Dimethylphenol	50	39.7	79	43-90
51-28-5	2,4-Dinitrophenol	100	89.2	89	44-112
534-52-1	4,6-Dinitro-o-cresol	100	100	100	66-121
95-48-7	2-Methylphenol	50	34.3	69	43-90
	3&4-Methylphenol	100	58.4	58	36-88
88-75-5	2-Nitrophenol	50	45.8	92	53-102
100-02-7	4-Nitrophenol	100	34.0	34	18-62
87-86-5	Pentachlorophenol	100	101	101	61-115
108-95-2	Phenol	50	14.4	29	19-56
95-95-4	2,4,5-Trichlorophenol	50	46.9	94	62-109
88-06-2	2,4,6-Trichlorophenol	50	47.1	94	59-107
83-32-9	Acenaphthene	50	44.5	89	61-107
208-96-8	Acenaphthylene	50	47.2	94	60-104
120-12-7	Anthracene	50	47.0	94	65-108
56-55-3	Benzo(a)anthracene	50	45.8	92	66-111
50-32-8	Benzo(a)pyrene	50	50.9	102	62-107
205-99-2	Benzo(b)fluoranthene	50	50.4	101	65-114
191-24-2	Benzo(g,h,i)perylene	50	53.3	107	66-116
207-08-9	Benzo(k)fluoranthene	50	50.1	100	65-114
100-51-6	Benzyl Alcohol	50	36.0	72	46-94
101-55-3	4-Bromophenyl Phenyl Ether	50	44.9	90	65-109
85-68-7	Butyl Benzyl Phthalate	50	48.7	97	65-112
86-74-8	Carbazole	50	48.9	98	59-113
106-47-8	4-Chloroaniline	50	55.4	111*	49-105
111-91-1	bis(2-Chloroethoxy)methane	50	44.0	88	51-102
111-44-4	bis(2-Chloroethyl)ether	50	43.6	87	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	43.3	87	45-106
91-58-7	2-Chloronaphthalene	50	41.6	83	57-103
7005-72-3	4-Chlorophenyl Phenyl Ether	50	45.2	90	62-105
218-01-9	Chrysene	50	45.9	92	66-111
53-70-3	Dibenzo(a,h)anthracene	50	53.9	108	66-119
132-64-9	Dibenzofuran	50	45.0	90	61-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-BS	4D1356.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:

Method: SW846 8270D

FA42997-35

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	40.8	82	48-97
541-73-1	1,3-Dichlorobenzene	50	39.4	79	45-95
106-46-7	1,4-Dichlorobenzene	50	39.4	79	45-98
91-94-1	3,3'-Dichlorobenzidine	50	61.3	123*	46-117
84-66-2	Diethyl Phthalate	50	48.0	96	64-108
131-11-3	Dimethyl Phthalate	50	45.1	90	63-106
84-74-2	Di-n-butyl Phthalate	50	49.4	99	65-107
117-84-0	Di-n-octyl Phthalate	50	54.2	108	62-118
121-14-2	2,4-Dinitrotoluene	50	52.9	106	61-110
606-20-2	2,6-Dinitrotoluene	50	47.9	96	63-108
117-81-7	bis(2-Ethylhexyl)phthalate	50	49.7	99	61-117
206-44-0	Fluoranthene	50	48.3	97	63-106
86-73-7	Fluorene	50	46.9	94	62-108
118-74-1	Hexachlorobenzene	50	45.2	90	63-108
87-68-3	Hexachlorobutadiene	50	39.4	79	42-102
77-47-4	Hexachlorocyclopentadiene	50	41.8	84	39-102
67-72-1	Hexachloroethane	50	39.2	78	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	54.4	109	64-119
78-59-1	Isophorone	50	47.7	95*	43-87
91-57-6	2-Methylnaphthalene	50	43.8	88	51-102
91-20-3	Naphthalene	50	42.0	84	47-100
88-74-4	2-Nitroaniline	50	50.3	101	54-128
99-09-2	3-Nitroaniline	50	54.8	110*	56-106
100-01-6	4-Nitroaniline	50	50.4	101	55-120
98-95-3	Nitrobenzene	50	45.6	91	50-104
621-64-7	N-Nitrosodi-n-propylamine	50	45.7	91	52-104
86-30-6	N-Nitrosodiphenylamine	50	49.1	98	64-108
85-01-8	Phenanthrene	50	46.3	93	66-110
129-00-0	Pyrene	50	46.0	92	64-113
120-82-1	1,2,4-Trichlorobenzene	50	40.4	81	45-97

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	44%	14-67%
4165-62-2	Phenol-d5	29%	10-50%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-BS	4D1356.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples: Method: SW846 8270D

FA42997-35

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	93%	33-118%
4165-60-0	Nitrobenzene-d5	87%	42-108%
321-60-8	2-Fluorobiphenyl	80%	40-106%
1718-51-0	Terphenyl-d14	81%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-MS	4D1370.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
OP64672-MSD	4D1371.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
FA42997-35	4D1369.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:

Method: SW846 8270D

FA42997-35

CAS No.	Compound	FA42997-35 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
65-85-0	Benzoic Acid	ND		192	116	60	192	97.8	17	10-69/39	
59-50-7	4-Chloro-3-methyl Phenol	ND		96.2	89.4	93	96.2	89.8	0	54-103/23	
95-57-8	2-Chlorophenol	ND		96.2	77.0	80	96.2	77.4	1	52-98/25	
120-83-2	2,4-Dichlorophenol	ND		96.2	83.8	87	96.2	86.1	3	53-103/26	
105-67-9	2,4-Dimethylphenol	ND		96.2	75.4	78	96.2	77.0	2	43-90/27	
51-28-5	2,4-Dinitrophenol	ND		192	25.6	13*	192	37.3	19*	44-112/25	
534-52-1	4,6-Dinitro-o-cresol	ND		192	133	69	192	142	7	66-121/23	
95-48-7	2-Methylphenol	ND		96.2	73.4	76	96.2	73.1	0	43-90/28	
	3&4-Methylphenol	ND		192	142	74	192	132	7	36-88/28	
88-75-5	2-Nitrophenol	ND		96.2	81.7	85	96.2	87.1	6	53-102/29	
100-02-7	4-Nitrophenol	ND		192	123	64*	192	102	19	18-62/33	
87-86-5	Pentachlorophenol	ND		192	62.3	32*	192	72.0	14	61-115/26	
108-95-2	Phenol	ND		96.2	46.6	48	96.2	40.3	14	19-56/35	
95-95-4	2,4,5-Trichlorophenol	ND		96.2	89.7	93	96.2	92.2	3	62-109/22	
88-06-2	2,4,6-Trichlorophenol	ND		96.2	88.8	92	96.2	91.3	3	59-107/23	
83-32-9	Acenaphthene	ND		96.2	84.2	88	96.2	84.0	0	61-107/22	
208-96-8	Acenaphthylene	ND		96.2	88.6	92	96.2	88.8	0	60-104/22	
120-12-7	Anthracene	ND		96.2	88.7	92	96.2	88.4	0	65-108/20	
56-55-3	Benzo(a)anthracene	ND		96.2	88.4	92	96.2	88.5	0	66-111/22	
50-32-8	Benzo(a)pyrene	ND		96.2	98.1	102	96.2	99.4	103	1	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		96.2	99.1	103	96.2	101	105	2	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		96.2	98.7	103	96.2	100	104	1	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		96.2	91.4	95	96.2	94.5	98	3	65-114/24
100-51-6	Benzyl Alcohol	ND		96.2	83.7	87	96.2	79.5	83	5	46-94/27
101-55-3	4-Bromophenyl Phenyl Ether	ND		96.2	84.7	88	96.2	84.8	88	0	65-109/23
85-68-7	Butyl Benzyl Phthalate	ND		96.2	89.5	93	96.2	92.0	96	3	65-112/24
86-74-8	Carbazole	ND		96.2	91.8	95	96.2	91.7	95	0	59-113/21
106-47-8	4-Chloroaniline	ND		96.2	100	104	96.2	103	107*	3	49-105/27
111-91-1	bis(2-Chloroethoxy)methane	ND		96.2	78.8	82	96.2	82.7	86	5	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		96.2	81.3	85	96.2	81.8	85	1	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		96.2	76.9	80	96.2	78.7	82	2	45-106/26
91-58-7	2-Chloronaphthalene	ND		96.2	78.4	82	96.2	78.5	82	0	57-103/23
7005-72-3	4-Chlorophenyl Phenyl Ether	ND		96.2	85.6	89	96.2	84.0	87	2	62-105/20
218-01-9	Chrysene	ND		96.2	86.5	90	96.2	87.3	91	1	66-111/22
53-70-3	Dibenzo(a,h)anthracene	ND		96.2	103	107	96.2	102	106	1	66-119/24
132-64-9	Dibenzofuran	ND		96.2	86.7	90	96.2	85.5	89	1	61-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-MS	4D1370.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
OP64672-MSD	4D1371.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
FA42997-35	4D1369.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:

Method: SW846 8270D

FA42997-35

CAS No.	Compound	FA42997-35 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND	96.2	74.7	78	96.2	77.0	80	3	48-97/24
541-73-1	1,3-Dichlorobenzene	ND	96.2	73.1	76	96.2	74.7	78	2	45-95/25
106-46-7	1,4-Dichlorobenzene	ND	96.2	72.2	75	96.2	73.5	76	2	45-98/25
91-94-1	3,3'-Dichlorobenzidine	ND	96.2	112	116	96.2	112	116	0	46-117/29
84-66-2	Diethyl Phthalate	ND	96.2	89.4	93	96.2	88.8	92	1	64-108/21
131-11-3	Dimethyl Phthalate	ND	96.2	86.9	90	96.2	84.5	88	3	63-106/22
84-74-2	Di-n-butyl Phthalate	ND	96.2	91.8	95	96.2	94.3	98	3	65-107/21
117-84-0	Di-n-octyl Phthalate	ND	96.2	100	104	96.2	105	109	5	62-118/24
121-14-2	2,4-Dinitrotoluene	ND	96.2	98.7	103	96.2	96.3	100	2	61-110/21
606-20-2	2,6-Dinitrotoluene	ND	96.2	91.8	95	96.2	90.4	94	2	63-108/21
117-81-7	bis(2-Ethylhexyl)phthalate	ND	96.2	94.5	98	96.2	97.5	101	3	61-117/23
206-44-0	Fluoranthene	ND	96.2	92.2	96	96.2	91.7	95	1	63-106/21
86-73-7	Fluorene	ND	96.2	88.8	92	96.2	88.7	92	0	62-108/20
118-74-1	Hexachlorobenzene	ND	96.2	86.1	90	96.2	85.3	89	1	63-108/22
87-68-3	Hexachlorobutadiene	ND	96.2	73.5	76	96.2	77.3	80	5	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND	96.2	76.0	79	96.2	77.8	81	2	39-102/29
67-72-1	Hexachloroethane	ND	96.2	72.7	76	96.2	72.7	76	0	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND	96.2	106	110	96.2	108	112	2	64-119/24
78-59-1	Isophorone	ND	96.2	86.1	90*	96.2	90.0	94*	4	43-87/25
91-57-6	2-Methylnaphthalene	ND	96.2	80.2	83	96.2	82.5	86	3	51-102/26
91-20-3	Naphthalene	ND	96.2	77.1	80	96.2	79.8	83	3	47-100/29
88-74-4	2-Nitroaniline	ND	96.2	93.6	97	96.2	93.9	98	0	54-128/24
99-09-2	3-Nitroaniline	ND	96.2	103	107*	96.2	100	104	3	56-106/27
100-01-6	4-Nitroaniline	ND	96.2	98.6	103	96.2	92.6	96	6	55-120/24
98-95-3	Nitrobenzene	ND	96.2	80.7	84	96.2	84.4	88	4	50-104/28
621-64-7	N-Nitrosodi-n-propylamine	ND	96.2	83.2	87	96.2	85.6	89	3	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND	96.2	88.4	92	96.2	93.9	98	6	64-108/23
85-01-8	Phenanthrene	ND	96.2	86.6	90	96.2	87.8	91	1	66-110/21
129-00-0	Pyrene	ND	96.2	85.1	89	96.2	87.6	91	3	64-113/23
120-82-1	1,2,4-Trichlorobenzene	ND	96.2	75.4	78	96.2	78.0	81	3	45-97/28

CAS No.	Surrogate Recoveries	MS	MSD	FA42997-35	Limits
367-12-4	2-Fluorophenol	62%	56%	34%	14-67%
4165-62-2	Phenol-d5	49%	42%	24%	10-50%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA42997

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64672-MS	4D1370.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
OP64672-MSD	4D1371.D	1	04/21/17	NG	04/17/17	OP64672	S4D49
FA42997-35	4D1369.D	1	04/21/17	NG	04/17/17	OP64672	S4D49

The QC reported here applies to the following samples:

Method: SW846 8270D

FA42997-35

CAS No.	Surrogate Recoveries	MS	MSD	FA42997-35	Limits
118-79-6	2,4,6-Tribromophenol	88%	90%	83%	33-118%
4165-60-0	Nitrobenzene-d5	79%	83%	73%	42-108%
321-60-8	2-Fluorobiphenyl	78%	79%	71%	40-106%
1718-51-0	Terphenyl-d14	78%	79%	70%	39-121%

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries



Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1489-MB	FF38136.D	1	04/14/17	EG	n/a	n/a	GFF1489

The QC reported here applies to the following samples: Method: RSKSOP-147/175
FA42997-30, FA42997-32, FA42997-34

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

8.1.1
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1489-BS	FF38137.D	1	04/14/17	EG	n/a	n/a	GFF1489
GFF1489-BSD	FF38138.D	1	04/14/17	EG	n/a	n/a	GFF1489

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA42997-30, FA42997-32, FA42997-34

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	114	106	121	112	6	62-139/30
74-84-0	Ethane	219	229	105	235	107	3	67-141/30
74-85-1	Ethene	290	318	110	327	113	3	68-141/30

8.2.1
8

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA42997-30MS	FF38144.D	1	04/14/17	EG	n/a	n/a	GFF1489
FA42997-30	FF38141.D	1	04/14/17	EG	n/a	n/a	GFF1489

The QC reported here applies to the following samples: Method: RSKSOP-147/175
FA42997-30, FA42997-32, FA42997-34

CAS No.	Compound	FA42997-30 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	0.43	J	108	124	114	62-139
74-84-0	Ethane	ND		219	246	112	67-141
74-85-1	Ethene	ND		290	341	118	68-141

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA42997
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43021-2DUP	FF38147.D	1	04/14/17	EG	n/a	n/a	GFF1489
FA43021-2	FF38140.D	1	04/14/17	EG	n/a	n/a	GFF1489

The QC reported here applies to the following samples: Method: RSKSOP-147/175
FA42997-30, FA42997-32, FA42997-34

CAS No.	Compound	FA43021-2 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	13.1	12.0		8	30
74-84-0	Ethane	1.0 U	ND		nc	30
74-85-1	Ethene	1.0 U	ND		nc	30

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA42997
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31973
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/14/17

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	0.019	<0.50

Associated samples MP31973: FA42997-35

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31973
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/14/17 04/14/17

Metal	FA42813-21 Original	DUP	RPD	QC Limits	FA42813-21 Original MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.11	0.054	68.3 (a)	0-20	0.11 2.8	3	89.7	80-120

Associated samples MP31973: FA42997-35

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31973
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/14/17

Metal	FA42813-21 Original MSD		Spike lot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.11	2.8	3	89.7	0.0	20

Associated samples MP31973: FA42997-35

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31973
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/14/17

Metal	BSP Result	SpikeLot HGFLWS1	% Rec	QC Limits
Mercury	3.2	3	106.7	80-120

Associated samples MP31973: FA42997-35

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31973
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/14/17

Metal	FA42813-21			QC Limits
	Original	SDL 1:5	%DIF	
Mercury	0.108	0.00	100.0(a)	0-10

Associated samples MP31973: FA42997-35

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA42997
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31992
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 04/18/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1	0.20	<6.0
Arsenic	10	1.3	1.3	-1.1	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2	0.010	<4.0
Cadmium	5.0	.2	.2	-0.10	<5.0
Calcium	1000	50	50		
Chromium	10	1	1	0.20	<10
Cobalt	50	.2	.2		
Copper	25	1	1	0.30	<25
Iron	300	17	17		
Lead	5.0	1	1.1	0.0	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4	-0.30	<40
Potassium	10000	200	200		
Selenium	10	2.4	2.9	-0.30	<10
Silver	10	.7	.7	-0.30	<10
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4	-1.4	<10
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4	0.90	<20

Associated samples MP31992: FA42997-35

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31992
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 04/18/17 04/18/17

Metal	FA43042-1 Original DUP		RPD	QC Limits	FA43042-1 Original MS		Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr								
Antimony	1.4	0.0	200.0(a)	0-20	1.4	508	500	101.3	80-120
Arsenic	0.0	0.0	NC	0-20	0.0	2030	2000	101.5	80-120
Barium	anr								
Beryllium	0.0	0.0	NC	0-20	0.0	53.2	50	106.4	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	50.3	50	100.6	80-120
Calcium	anr								
Chromium	0.0	0.0	NC	0-20	0.0	205	200	102.5	80-120
Cobalt	anr								
Copper	0.0	0.0	NC	0-20	0.0	254	250	101.6	80-120
Iron	anr								
Lead	1.0	0.0	200.0(a)	0-20	1.0	484	500	96.6	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	0.0	0.0	NC	0-20	0.0	513	500	102.6	80-120
Potassium	anr								
Selenium	0.0	0.0	NC	0-20	0.0	1970	2000	98.5	80-120
Silver	0.0	0.0	NC	0-20	0.0	45.9	50	91.8	80-120
Sodium	anr								
Strontium									
Thallium	0.0	0.0	NC	0-20	0.0	1930	2000	96.5	80-120
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	69.0	68.3	1.0	0-20	69.0	568	500	99.8	80-120

Associated samples MP31992: FA42997-35

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31992
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 04/18/17

Metal	FA43042-1 Original	MSD	SpikeLot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	1.4	503	500	100.3	1.0	20
Arsenic	0.0	2000	2000	100.0	1.5	20
Barium	anr					
Beryllium	0.0	52.3	50	104.6	1.7	20
Cadmium	0.0	49.7	50	99.4	1.2	20
Calcium	anr					
Chromium	0.0	201	200	100.5	2.0	20
Cobalt	anr					
Copper	0.0	250	250	100.0	1.6	20
Iron	anr					
Lead	1.0	478	500	95.4	1.2	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	0.0	506	500	101.2	1.4	20
Potassium	anr					
Selenium	0.0	1940	2000	97.0	1.5	20
Silver	0.0	44.5	50	89.0	3.1	20
Sodium	anr					
Strontium						
Thallium	0.0	1920	2000	96.0	0.5	20
Tin	anr					
Titanium						
Vanadium	anr					
Zinc	69.0	561	500	98.4	1.2	20

Associated samples MP31992: FA42997-35

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31992
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 04/18/17

Metal	BSP Result	SpikeLot MPFLICP2 % Rec	QC Limits
Aluminum	anr		
Antimony	507	500	101.4 80-120
Arsenic	2020	2000	101.0 80-120
Barium	anr		
Beryllium	53.1	50	106.2 80-120
Cadmium	51.2	50	102.4 80-120
Calcium	anr		
Chromium	207	200	103.5 80-120
Cobalt	anr		
Copper	251	250	100.4 80-120
Iron	anr		
Lead	486	500	97.2 80-120
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	521	500	104.2 80-120
Potassium	anr		
Selenium	1960	2000	98.0 80-120
Silver	44.9	50	89.8 80-120
Sodium	anr		
Strontium			
Thallium	1940	2000	97.0 80-120
Tin	anr		
Titanium			
Vanadium	anr		
Zinc	515	500	103.0 80-120

Associated samples MP31992: FA42997-35

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31992
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 04/18/17

Metal	FA43042-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	1.40	0.00	100.0(a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	0.00	0.00	NC	0-10
Cobalt	anr			
Copper	0.00	0.00	NC	0-10
Iron	anr			
Lead	1.00	0.00	100.0(a)	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	0.00	0.00	NC	0-10
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	69.0	101	45.7 (a)	0-10

Associated samples MP31992: FA42997-35

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA42997
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31992
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date:

04/18/17

Metal	Sample ml	Final ml	FA43042-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10	1.4	1.372	109.4	0.2	5	100	108.0	80-120
Arsenic	9.8	10			108.3	0.2	5	100	108.3	80-120
Barium										
Beryllium	9.8	10			53.46	0.2	2.5	50	106.9	80-120
Cadmium	9.8	10			52.41	0.2	2.5	50	104.8	80-120
Calcium										
Chromium	9.8	10			53	0.2	2.5	50	106.0	80-120
Cobalt										
Copper	9.8	10			103.5	0.2	5	100	103.5	80-120
Iron										
Lead	9.8	10	1	.98	49.2	0.2	2.5	50	96.4	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10			104.3	0.2	5	100	104.3	80-120
Potassium										
Selenium	9.8	10			100.1	0.2	5	100	100.1	80-120
Silver	9.8	10			45.6	0.2	2.5	50	91.2	80-120
Sodium										
Strontium										
Thallium	9.8	10			96.2	0.2	5	100	96.2	80-120
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	69	67.62	333.1	0.2	12.5	250	106.2	80-120

Associated samples MP31992: FA42997-35

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA42997
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP29636/GN74802	2.0	0.0	mg/l	50	48.2	96.4	90-110%
Nitrogen, Nitrate	GP29636/GN74802	0.10	0.0	mg/l	2.5	2.32	92.8	90-110%
Nitrogen, Nitrite	GP29636/GN74802	0.10	0.0	mg/l	2.5	2.61	104.4	90-110%
Sulfate	GP29636/GN74802	2.0	0.0	mg/l	50	49.1	98.2	90-110%
Total Organic Carbon	GP29646/GN74831	1.0	0.0	mg/l	15	15.7	104.7	90-110%

Associated Samples:

Batch GP29636: FA42997-30, FA42997-32, FA42997-34

Batch GP29646: FA42997-30, FA42997-32, FA42997-34

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA42997
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP29636/GN74802	FA42993-8	mg/l	19.3	50	69.1	99.6	90-110%
Nitrogen, Nitrate	GP29636/GN74802	FA42993-8	mg/l	5.4	2.5	7.8	96.0	90-110%
Nitrogen, Nitrite	GP29636/GN74802	FA42993-8	mg/l	0.0	2.5	3.0	120.0N(a)	90-110%
Sulfate	GP29636/GN74802	FA42993-8	mg/l	12.5	50	61.7	98.4	90-110%
Total Organic Carbon	GP29646/GN74831	FA42961-8	mg/l	0.66	15	15.9	101.6	90-110%

Associated Samples:

Batch GP29636: FA42997-30, FA42997-32, FA42997-34

Batch GP29646: FA42997-30, FA42997-32, FA42997-34

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA42997
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP29636/GN74802	FA42993-8	mg/l	19.3	50	70.0	1.3	20%
Nitrogen, Nitrate	GP29636/GN74802	FA42993-8	mg/l	5.4	2.5	7.9	1.3	20%
Nitrogen, Nitrite	GP29636/GN74802	FA42993-8	mg/l	0.0	2.5	3.0	0.0	20%
Sulfate	GP29636/GN74802	FA42993-8	mg/l	12.5	50	62.2	0.8	20%
Total Organic Carbon	GP29646/GN74831	FA42961-8	mg/l	0.66	15	16.2	1.9	20%

Associated Samples:

Batch GP29636: FA42997-30, FA42997-32, FA42997-34

Batch GP29646: FA42997-30, FA42997-32, FA42997-34

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

SGS Accutest Job Number: FA43039

Sampling Date: 04/13/17

Report to:

AECOM Environment
10 Patewood Dr Bldg VI, Suite 500
Greenville, SC 29615
doria.cullom@aecom.com

ATTN: Doria Cullom

Total number of pages in report: 46



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
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Test results relate only to samples analyzed.

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Sample Summary

United Technologies Corporation

Job No: FA43039

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA43039-1	04/13/17	14:05 RMJB	04/14/17	AQ	Ground Water	MW-30D
FA43039-2	04/13/17	15:30 RMJB	04/14/17	AQ	Ground Water	MW-31D
FA43039-3	04/13/17	16:50 RMJB	04/14/17	AQ	Ground Water	MW-32D
FA43039-4	04/13/17	00:00 RMJB	04/14/17	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

2

Client: United Technologies Corporation

Job No: FA43039

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 4/27/2017 8:32:01 PM

3 Samples and 1 Trip Blank were collected on 04/13/2017 and were received at SGS Accutest Southeast (SASE) on 04/14/2017 properly preserved, at 2.6 Deg. C and intact. These Samples received an SASE job number of FA43039. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: V1A180

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA43077-3MS were used as the QC samples indicated.

V1A180-MB: Sample was treated with an anti-foaming agent.

Matrix: AQ

Batch ID: V1A181

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA43095-1MS, FA43095-1MSD were used as the QC samples indicated.

Volatiles by GC By Method RSKSOP-147/175

Matrix: AQ

Batch ID: GFF1491

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA43088-2DUP, FA43088-2MS were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ

Batch ID: GP29643

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA43039-3MS, FA43039-3MSD were used as the QC samples for Chloride, Nitrogen, Nitrate, Sulfate, Nitrogen, Nitrite.

Matrix Spike Recovery(s) for Nitrogen, Nitrite are outside control limits. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ

Batch ID: GP29669

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA43114-3MS, FA43114-3MSD were used as the QC samples for Total Organic Carbon.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: April 27, 2017

Lovelie Metzgar, QA Officer (signature on file)

Thursday, April 27, 2017

Page 1 of 1

Summary of Hits

Job Number: FA43039
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/13/17



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA43039-1 MW-30D

Chloroform	0.41 J	1.0	0.30	ug/l	SW846 8260B
1,1-Dichloroethylene	2.3	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.64 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	75.2	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene	0.87 J	1.0	0.35	ug/l	SW846 8260B
Methane	1.4	0.50	0.16	ug/l	RSKSOP-147/175
Ethane	0.61 J	1.0	0.32	ug/l	RSKSOP-147/175
Ethene	0.44 J	1.0	0.43	ug/l	RSKSOP-147/175
Chloride	9.6	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.85	0.10	0.050	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.097 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	4.9	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.52 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA43039-2 MW-31D

Bromodichloromethane	0.82 J	1.0	0.24	ug/l	SW846 8260B
Chloroform	1.8	1.0	0.30	ug/l	SW846 8260B
1,1-Dichloroethylene	3.1	1.0	0.32	ug/l	SW846 8260B
Ethylbenzene	0.55 J	1.0	0.36	ug/l	SW846 8260B
4-Methyl-2-pentanone (MIBK)	8.5	5.0	1.0	ug/l	SW846 8260B
Tetrachloroethylene	89.2	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene	0.41 J	1.0	0.35	ug/l	SW846 8260B
Xylene (total)	2.6 J	3.0	0.72	ug/l	SW846 8260B
Methane	0.70	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	8.4	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.1	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	5.7	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.53 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA43039-3 MW-32D

Bromodichloromethane	0.27 J	1.0	0.24	ug/l	SW846 8260B
Chloroform	0.79 J	1.0	0.30	ug/l	SW846 8260B
1,1-Dichloroethylene	0.63 J	1.0	0.32	ug/l	SW846 8260B
4-Methyl-2-pentanone (MIBK)	3.5 J	5.0	1.0	ug/l	SW846 8260B
Tetrachloroethylene	25.0	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene	0.36 J	1.0	0.35	ug/l	SW846 8260B
Xylene (total)	1.2 J	3.0	0.72	ug/l	SW846 8260B
Methane	0.68	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	9.8	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.93	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	7.4	2.0	0.60	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA43039
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/13/17



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Total Organic Carbon		1.4	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA43039-4	TRIP BLANK					
Methylene Chloride		2.7 J	5.0	2.0	ug/l	SW846 8260B



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-30D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-1	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A04735.D	1	04/19/17	AJ	n/a	n/a	V1A180
Run #2	1A04758.D	2	04/20/17	AJ	n/a	n/a	V1A181

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	0.41	1.0	0.30	ug/l	J
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	2.3	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.64	1.0	0.28	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	75.2 ^a	2.0	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.87	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-30D	Date Sampled: 04/13/17
Lab Sample ID: FA43039-1	Date Received: 04/14/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	105%	79-125%
2037-26-5	Toluene-D8	91%	94%	85-112%
460-00-4	4-Bromofluorobenzene	97%	97%	83-118%

(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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-30D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-1	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF38207.D	1	04/18/17	EG	n/a	n/a	GFF1491
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.4	0.50	0.16	ug/l	
74-84-0	Ethane	0.61	1.0	0.32	ug/l	J
74-85-1	Ethene	0.44	1.0	0.43	ug/l	J

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

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

Report of Analysis

Client Sample ID:	MW-30D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-1	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	9.6	2.0	0.80	mg/l	1	04/14/17 10:43 JK	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.85	0.10	0.050	mg/l	1	04/14/17 10:43 JK	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.097 J	0.10	0.050	mg/l	1	04/14/17 10:43 JK	EPA	300/SW846 9056A
Sulfate	4.9	2.0	0.60	mg/l	1	04/14/17 10:43 JK	EPA	300/SW846 9056A
Total Organic Carbon	0.52 J	1.0	0.23	mg/l	1	04/21/17 21:29 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-31D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-2	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A04736.D	1	04/19/17	AJ	n/a	n/a	V1A180
Run #2	1A04759.D	2	04/20/17	AJ	n/a	n/a	V1A181

	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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	0.82	1.0	0.24	ug/l	J
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	1.8	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	3.1	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.55	1.0	0.36	ug/l	J
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	8.5	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	89.2 ^a	2.0	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.41	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-31D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-2	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	2.6	3.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	105%	79-125%
2037-26-5	Toluene-D8	89%	94%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	83-118%

(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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-31D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-2	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF38208.D	1	04/18/17	EG	n/a	n/a	GFF1491
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.70	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-31D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-2	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	8.4	2.0	0.80	mg/l	1	04/14/17 10:58 JK	EPA 300/SW846	9056A
Nitrogen, Nitrate	1.1	0.10	0.050	mg/l	1	04/14/17 10:58 JK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/14/17 10:58 JK	EPA 300/SW846	9056A
Sulfate	5.7	2.0	0.60	mg/l	1	04/14/17 10:58 JK	EPA 300/SW846	9056A
Total Organic Carbon	0.53 J	1.0	0.23	mg/l	1	04/21/17 21:46 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-32D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-3	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A04737.D	1	04/19/17	AJ	n/a	n/a	V1A180
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	0.27	1.0	0.24	ug/l	J
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	0.79	1.0	0.30	ug/l	J
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.63	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	3.5	5.0	1.0	ug/l	J
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	25.0	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.36	1.0	0.35	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-32D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-3	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	1.2	3.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-32D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-3	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF38209.D	1	04/18/17	EG	n/a	n/a	GFF1491
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.68	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-32D	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-3	Date Received:	04/14/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	9.8	2.0	0.80	mg/l	1	04/14/17 11:13 JK	EPA 300/SW846	9056A
Nitrogen, Nitrate	0.93	0.10	0.050	mg/l	1	04/14/17 11:13 JK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/14/17 11:13 JK	EPA 300/SW846	9056A
Sulfate	7.4	2.0	0.60	mg/l	1	04/14/17 11:13 JK	EPA 300/SW846	9056A
Total Organic Carbon	1.4	1.0	0.23	mg/l	1	04/21/17 22:01 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-4	Date Received:	04/14/17
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A04738.D	1	04/19/17	AJ	n/a	n/a	V1A180
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	2.7	5.0	2.0	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/13/17
Lab Sample ID:	FA43039-4	Date Received:	04/14/17
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA43039 CLIENT: Recom PROJECT: UTC Delavan
 DATE/TIME RECEIVED: 04/14/17 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 7862 3976 5143

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☒ TRIP BLANK PROVIDED
☐ TRIP BLANK NOT PROVIDED
☐ TRIP BLANK NOT ON COC
☒ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☒ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT#s pH 0-3 230315

pH 10-12 219813A

OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 10.4
☐ OBSERVED TEMPS: 2.2
☐ CORRECTED TEMPS: 2.6 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☐ ID'S ON COC DO NOT MATCH LABEL
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE

NE 02/16

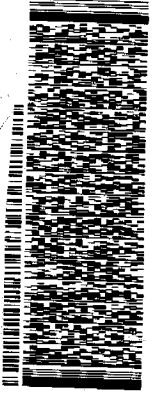
REVIEWER SIGNATURE/DATE

receipt confirmation 020416.xls

FA43039: Chain of Custody

Page 2 of 3



FRI - 14 APR 10:30A
PRIORITY OVERNIGHT

7862 3976 5143
XH ORLA

32811
FL-US MCO





GC/MS Volatiles

9

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 2

Job Number: FA43039**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A180-MB ^a	1A04727.D	1	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

Method Blank Summary

Page 2 of 2

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A180-MB ^a	1A04727.D	1	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 83-118%
17060-07-0	1,2-Dichloroethane-D4	102% 79-125%
2037-26-5	Toluene-D8	98% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

(a) Sample was treated with an anti-foaming agent.

Method Blank Summary

Page 1 of 1

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A181-MB	1A04757.D	1	04/20/17	AJ	n/a	n/a	V1A181

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	96% 83-118%
17060-07-0	1,2-Dichloroethane-D4	102% 79-125%
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	96% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA43039**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A180-BS	1A04726.D	1	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	131	105	50-147
71-43-2	Benzene	25	25.9	104	81-122
75-27-4	Bromodichloromethane	25	23.9	96	79-123
75-25-2	Bromoform	25	25.5	102	66-123
78-93-3	2-Butanone (MEK)	125	114	91	56-143
75-15-0	Carbon Disulfide	25	26.1	104	66-148
56-23-5	Carbon Tetrachloride	25	26.1	104	76-136
108-90-7	Chlorobenzene	25	23.3	93	82-124
75-00-3	Chloroethane	25	27.4	110	62-144
67-66-3	Chloroform	25	25.5	102	80-124
124-48-1	Dibromochloromethane	25	25.0	100	78-122
75-34-3	1,1-Dichloroethane	25	27.9	112	81-122
107-06-2	1,2-Dichloroethane	25	25.2	101	75-125
75-35-4	1,1-Dichloroethylene	25	28.8	115	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.8	103	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.9	112	76-127
78-87-5	1,2-Dichloropropane	25	24.7	99	76-124
10061-01-5	cis-1,3-Dichloropropene	25	22.8	91	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.3	101	80-120
100-41-4	Ethylbenzene	25	25.9	104	81-121
591-78-6	2-Hexanone	125	107	86	61-129
74-83-9	Methyl Bromide	25	23.8	95	59-143
74-87-3	Methyl Chloride	25	27.8	111	50-159
75-09-2	Methylene Chloride	25	25.9	104	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	119	95	66-122
100-42-5	Styrene	25	23.2	93	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	21.2	85	72-120
127-18-4	Tetrachloroethylene	25	27.0	108	76-135
108-88-3	Toluene	25	25.7	103	80-120
71-55-6	1,1,1-Trichloroethane	25	26.5	106	75-130
79-00-5	1,1,2-Trichloroethane	25	23.7	95	76-119
79-01-6	Trichloroethylene	25	26.4	106	81-126
75-01-4	Vinyl Chloride	25	26.4	106	69-159
1330-20-7	Xylene (total)	75	75.9	101	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA43039
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A180-BS	1A04726.D	1	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples: Method: SW846 8260B
FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A181-BS	1A04756.D	1	04/20/17	AJ	n/a	n/a	V1A181

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	26.6	106	76-135

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	97%	83-118%

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43077-3MS	1A04751.D	20	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04731.D	10	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04749.D	20	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Compound	FA43077-3 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	1570		2500	3570	80	50-147
71-43-2	Benzene	10 U		500	508	102	81-122
75-27-4	Bromodichloromethane	10 U		500	457	91	79-123
75-25-2	Bromoform	10 U		500	491	98	66-123
78-93-3	2-Butanone (MEK)	91.5		2500	2340	90	56-143
75-15-0	Carbon Disulfide	20 U		500	492	98	66-148
56-23-5	Carbon Tetrachloride	10 U		500	513	103	76-136
108-90-7	Chlorobenzene	10 U		500	464	93	82-124
75-00-3	Chloroethane	20 U		500	551	110	62-144
67-66-3	Chloroform	10 U		500	514	103	80-124
124-48-1	Dibromochloromethane	10 U		500	482	96	78-122
75-34-3	1,1-Dichloroethane	10 U		500	549	110	81-122
107-06-2	1,2-Dichloroethane	10 U		500	519	104	75-125
75-35-4	1,1-Dichloroethylene	10 U		500	546	109	78-137
156-59-2	cis-1,2-Dichloroethylene	16.6		500	522	101	78-120
156-60-5	trans-1,2-Dichloroethylene	10 U		500	533	107	76-127
78-87-5	1,2-Dichloropropane	10 U		500	490	98	76-124
10061-01-5	cis-1,3-Dichloropropene	10 U		500	414	83	75-118
10061-02-6	trans-1,3-Dichloropropene	10 U		500	489	98	80-120
100-41-4	Ethylbenzene	10 U		500	518	104	81-121
591-78-6	2-Hexanone	100 U		2500	2100	84	61-129
74-83-9	Methyl Bromide	20 U		500	467	93	59-143
74-87-3	Methyl Chloride	20 U		500	565	113	50-159
75-09-2	Methylene Chloride	50 U		500	513	103	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	50 U		2500	2400	96	66-122
100-42-5	Styrene	10 U		500	461	92	78-119
79-34-5	1,1,2,2-Tetrachloroethane	10 U		500	432	86	72-120
127-18-4	Tetrachloroethylene	1180 ^a		500	1760	116	76-135
108-88-3	Toluene	10 U		500	514	103	80-120
71-55-6	1,1,1-Trichloroethane	10 U		500	547	109	75-130
79-00-5	1,1,2-Trichloroethane	10 U		500	478	96	76-119
79-01-6	Trichloroethylene	21.4		500	558	107	81-126
75-01-4	Vinyl Chloride	10 U		500	538	108	69-159
1330-20-7	Xylene (total)	30 U		1500	1500	100	80-126

* = Outside of Control Limits.

Matrix Spike Summary

Page 2 of 2

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43077-3MS	1A04751.D	20	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04731.D	10	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04749.D	20	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Surrogate Recoveries	MS	FA43077-3	FA43077-3	Limits
1868-53-7	Dibromofluoromethane	108%	99%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	110%	79-125%
2037-26-5	Toluene-D8	95%	89%	94%	85-112%
460-00-4	4-Bromofluorobenzene	96%	100%	98%	83-118%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 2

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43077-3MS	1A04752.D	20	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04731.D	10	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04749.D	20	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Compound	FA43077-3 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	1570		2500	3580	80	50-147
71-43-2	Benzene	10 U		500	502	100	81-122
75-27-4	Bromodichloromethane	10 U		500	453	91	79-123
75-25-2	Bromoform	10 U		500	506	101	66-123
78-93-3	2-Butanone (MEK)	91.5		2500	2370	91	56-143
75-15-0	Carbon Disulfide	20 U		500	479	96	66-148
56-23-5	Carbon Tetrachloride	10 U		500	509	102	76-136
108-90-7	Chlorobenzene	10 U		500	465	93	82-124
75-00-3	Chloroethane	20 U		500	498	100	62-144
67-66-3	Chloroform	10 U		500	500	100	80-124
124-48-1	Dibromochloromethane	10 U		500	493	99	78-122
75-34-3	1,1-Dichloroethane	10 U		500	539	108	81-122
107-06-2	1,2-Dichloroethane	10 U		500	513	103	75-125
75-35-4	1,1-Dichloroethylene	10 U		500	534	107	78-137
156-59-2	cis-1,2-Dichloroethylene	16.6		500	515	100	78-120
156-60-5	trans-1,2-Dichloroethylene	10 U		500	521	104	76-127
78-87-5	1,2-Dichloropropane	10 U		500	482	96	76-124
10061-01-5	cis-1,3-Dichloropropene	10 U		500	416	83	75-118
10061-02-6	trans-1,3-Dichloropropene	10 U		500	502	100	80-120
100-41-4	Ethylbenzene	10 U		500	516	103	81-121
591-78-6	2-Hexanone	100 U		2500	2160	86	61-129
74-83-9	Methyl Bromide	20 U		500	405	81	59-143
74-87-3	Methyl Chloride	20 U		500	563	113	50-159
75-09-2	Methylene Chloride	50 U		500	507	101	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	50 U		2500	2410	96	66-122
100-42-5	Styrene	10 U		500	463	93	78-119
79-34-5	1,1,2,2-Tetrachloroethane	10 U		500	435	87	72-120
127-18-4	Tetrachloroethylene	1180 ^a		500	1710	106	76-135
108-88-3	Toluene	10 U		500	509	102	80-120
71-55-6	1,1,1-Trichloroethane	10 U		500	536	107	75-130
79-00-5	1,1,2-Trichloroethane	10 U		500	486	97	76-119
79-01-6	Trichloroethylene	21.4		500	547	105	81-126
75-01-4	Vinyl Chloride	10 U		500	527	105	69-159
1330-20-7	Xylene (total)	30 U		1500	1500	100	80-126

* = Outside of Control Limits.

Matrix Spike Summary

Page 2 of 2

Job Number: FA43039

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43077-3MS	1A04752.D	20	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04731.D	10	04/19/17	AJ	n/a	n/a	V1A180
FA43077-3	1A04749.D	20	04/19/17	AJ	n/a	n/a	V1A180

The QC reported here applies to the following samples:

Method: SW846 8260B

FA43039-1, FA43039-2, FA43039-3, FA43039-4

CAS No.	Surrogate Recoveries	MS	FA43077-3	FA43077-3	Limits
1868-53-7	Dibromofluoromethane	106%	99%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	105%	110%	79-125%
2037-26-5	Toluene-D8	95%	89%	94%	85-112%
460-00-4	4-Bromofluorobenzene	97%	100%	98%	83-118%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA43039
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43095-1MS	1A04778.D	50	04/20/17	AJ	n/a	n/a	V1A181
FA43095-1MSD	1A04779.D	50	04/20/17	AJ	n/a	n/a	V1A181
FA43095-1	1A04766.D	50	04/20/17	AJ	n/a	n/a	V1A181

The QC reported here applies to the following samples: Method: SW846 8260B

FA43039-1, FA43039-2

CAS No.	Compound	FA43095-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	50 U	1250	1330	106	1250	1360	109	2	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA43095-1	Limits
1868-53-7	Dibromofluoromethane	109%	108%	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	108%	111%	79-125%
2037-26-5	Toluene-D8	93%	94%	98%	85-112%
460-00-4	4-Bromofluorobenzene	97%	98%	96%	83-118%

* = Outside of Control Limits.



GC Volatiles

QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA43039
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1491-MB	FF38192.D	1	04/18/17	EG	n/a	n/a	GFF1491

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA43039-1, FA43039-2, FA43039-3

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

7.1.1
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Blank Spike/Blank Spike Duplicate Summary

Job Number: FA43039
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1491-BS	FF38193.D	1	04/18/17	EG	n/a	n/a	GFF1491
GFF1491-BSD	FF38194.D	1	04/18/17	EG	n/a	n/a	GFF1491

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA43039-1, FA43039-2, FA43039-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	126	117	120	111	5	62-139/30
74-84-0	Ethane	219	255	116	237	108	7	67-141/30
74-85-1	Ethene	290	353	122	326	112	8	68-141/30

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA43039
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43088-2MS	FF38200.D	1	04/18/17	EG	n/a	n/a	GFF1491
FA43088-2	FF38199.D	1	04/18/17	EG	n/a	n/a	GFF1491

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA43039-1, FA43039-2, FA43039-3

CAS No.	Compound	FA43088-2 ug/l	Spike Q	MS ug/l	MS %	Limits
74-82-8	Methane	5.0	108	113	100	62-139
74-84-0	Ethane	1.0 U	219	218	100	67-141
74-85-1	Ethene	1.0 U	290	302	104	68-141

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA43039
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA43088-2DUP	FF38214.D	1	04/18/17	EG	n/a	n/a	GFF1491
FA43088-2	FF38199.D	1	04/18/17	EG	n/a	n/a	GFF1491

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA43039-1, FA43039-2, FA43039-3

CAS No.	Compound	FA43088-2 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	5.0	4.7		6	30
74-84-0	Ethane	1.0 U	ND		nc	30
74-85-1	Ethene	1.0 U	ND		nc	30

* = Outside of Control Limits.



General Chemistry

QC Data Summaries



Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA43039
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP29643/GN74819	2.0	0.0	mg/l	50	48.5	97.0	90-110%
Nitrogen, Nitrate	GP29643/GN74819	0.10	0.0	mg/l	2.5	2.39	95.6	90-110%
Nitrogen, Nitrite	GP29643/GN74819	0.10	0.0	mg/l	2.5	2.60	104.0	90-110%
Sulfate	GP29643/GN74819	2.0	0.0	mg/l	50	49.2	98.4	90-110%
Total Organic Carbon	GP29669/GN74886	1.0	0.0	mg/l	15	16.0	106.7	90-110%

Associated Samples:

Batch GP29643: FA43039-1, FA43039-2, FA43039-3

Batch GP29669: FA43039-1, FA43039-2, FA43039-3

(*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA43039
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP29643/GN74819	FA43039-3	mg/l	9.8	50	59.2	98.8	90-110%
Nitrogen, Nitrate	GP29643/GN74819	FA43039-3	mg/l	0.93	2.5	3.4	98.8	90-110%
Nitrogen, Nitrite	GP29643/GN74819	FA43039-3	mg/l	0.050 U	2.5	2.9	116.0N(a)	90-110%
Sulfate	GP29643/GN74819	FA43039-3	mg/l	7.4	50	57.2	99.6	90-110%
Total Organic Carbon	GP29669/GN74912	FA43114-3	mg/l	2.5	15	17.3	98.7	90-110%

Associated Samples:

Batch GP29643: FA43039-1, FA43039-2, FA43039-3

Batch GP29669: FA43039-1, FA43039-2, FA43039-3

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

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MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA43039
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP29643/GN74819	FA43039-3	mg/l	9.8	50	59.8	1.0	20%
Nitrogen, Nitrate	GP29643/GN74819	FA43039-3	mg/l	0.93	2.5	3.4	0.0	20%
Nitrogen, Nitrite	GP29643/GN74819	FA43039-3	mg/l	0.050 U	2.5	2.9	0.0	20%
Sulfate	GP29643/GN74819	FA43039-3	mg/l	7.4	50	57.9	1.2	20%
Total Organic Carbon	GP29669/GN74912	FA43114-3	mg/l	2.5	15	17.2	0.6	20%

Associated Samples:

Batch GP29643: FA43039-1, FA43039-2, FA43039-3

Batch GP29669: FA43039-1, FA43039-2, FA43039-3

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.3

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DATA ASSESSMENT REPORT

Data assessment is a systematic process for reviewing a body of data against a predefined set of criteria to provide assurance that the data meet project Data Quality Objective (DQO) requirements. The purpose of the data assessment process is to determine if and how the usability of the analytical data is affected by the overall analytical processes and sample collection and handling procedures. If specific DQOs are not met, the data are qualified (i.e., data flags are assigned to sample results) in accordance with guidelines established by the United States Environmental Protection Agency (USEPA). Data assessment allows the data user to adequately determine if the data can be used for its intended purpose. The data acceptance criteria are established according to Standard Operating Procedures (SOPs) and Statements of Work (SOWs) provided to the contracted analytical laboratory. The assessment of data quality and usability involves five components, as described below.

- 1) **Field Sampling Check** is a process to ensure that all samples were collected and the laboratory analyses were performed as stipulated in the applicable site-specific Work Plan or Field Sampling Plan (FSP). Inspection of sample preservation procedures, sample handling, analysis requested, sample description and identification (ID), cooler receipt forms, holding time evaluation, and Chain of Custody procedures are all evaluated to ensure that the evidentiary nature of the samples and the resulting analytical data have not been compromised.
- 2) **Data Verification** is a process for determining the completeness, correctness, consistency, and compliance of a data package in accordance with requirements contained in the applicable SOW and/or contract-specific requirements. This is a review of the data package, electronic data deliverable (EDD), and invoice received from the contract laboratory to ensure that the contract required information is present and complete prior to data validation.
- 3) **Data Review** is a process of reviewing the primary quality control (QC) data provided by the laboratory and the results of any internal quality assurance (QA)/QC samples, such as field blanks, trip blanks, equipment blanks or ambient blanks, field split samples, and duplicate samples, to ascertain any effect the laboratory's procedures or the sample collection process has on the data.
- 4) **Data Evaluation** is a process to determine if the data meet project-specific DQOs and contract requirements. This evaluation may involve a review of field sampling and sample management procedures, laboratory audits, Performance Evaluation (PE) sample results, and any other data quality indicators that are available.
- 5) **Data Validation** is a process to determine the accuracy and precision of analytical data generated and to identify any anomalies encountered. The validation process is performed in accordance with USEPA regional or national functional guidelines, project-specific guidelines, and

compliance with the requirements of each analytical method. Two major components of data validation are laboratory performance and matrix interferences. Evaluation of laboratory performance is a check for compliance for each analytical method to determine if the samples were analyzed within the prescribed acceptance criteria of the method. Evaluation of matrix interferences involves the analysis of surrogate spike recoveries, matrix spike recoveries, and duplicate sample results. Data not meeting project-specific DQOs or the requirements of the analytical method are qualified with data flags according to referenced guidelines.

Data Assessment Procedures

AECOM performed independent QC checks of field and laboratory procedures that were used in collecting and analyzing the data. The QC checks verify that the data collected are of appropriate quality for the intended data use and that the DQOs were met. The steps and guidelines followed during the data validation process were modeled on the *USEPA National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, August 2014) and *USEPA National Functional Guidelines for Superfund Organic Data Review* (USEPA, August 2014). In addition, method-specific criteria set forth in the compendium of analytical methods found in the *Test Methods for Evaluation Solid Waste (SW-846), Update IV* (USEPA, February 2007) are also evaluated during the validation process. This validation process has been adapted to meet the DQO requirements for generation of definitive critical data.

Data Validation Results

The analytical data associated with analytical data package FA42997 were collected on April 10-12, 2017 for UTC - Delavan Spray Technologies located in Bamberg, South Carolina. The analytical data were validated according to the procedures outlined above. Where data flags have been applied to this data set, they are separated by a slash "/" and presented in the following format:

Laboratory Flag / Result Flags / Analysis Flags

- **Laboratory Flag:** This flag precedes the first slash and is added by the laboratory as a result of QC excursions from the analytical method. These flags are laboratory-specific and are described in the associated laboratory report.
- **Result Flags:** These are presented after the first slash and are added by AECOM based on data validation procedures and guidelines. They tell how and if the data should be used.
- **Analysis Flags:** These flags are presented after the second slash and are added by AECOM to inform the data user of any specific QA/QC problems that were encountered.

Any data requiring qualification as a result of the validation process were assigned data flags, as discussed below. The validation flags indicate how any QC excursions may have impacted the usability of the data.

Volatile Organic Compounds by Method 8260B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Semivolatile Organic Compounds by Method 8270D

Results 2,4-dinitrophenol in sample IDW-1 were qualified “/M/m” due to low recovery in the associated matrix spike sample below the established criteria of 15-160% (13%). These qualifiers indicate the results should be considered biased low.

Results 2,4-dinitrophenol in sample IDW-1 were qualified “/M/D” due to the relative percent difference between the matrix spike and matrix spike duplicate samples exceeding the established criteria of 35% (37%). These qualifiers indicate imprecision with laboratory methodology, instrumentation, or matrix interference.

Priority Pollutant Metals by Methods 6010D/7470A

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Total Organic Carbon by Method 9060A

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Chloride, Nitrate, Nitrite, and Sulfate by Method 9056A

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Dissolved Gases (Methane, Ethane, and Ethene) by Method RSK-175

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Data Summary and Usability

The QC excursions encountered during the validation of this data set did not result in the rejection of any data. Therefore, the data associated with this laboratory batch should be considered compliant and adequate for its intended use.

Site Name: UTC - Delavan Spray Technologies

Laboratory Batch Number: FA42997

Collection Date: April 10-12, 2017

References

United States Environmental Protection Agency (USEPA), February 2007. *Test Methods for Evaluating Solid Waste (SW-846), Update IV.*

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Superfund Organic Data Review.* Publication #EPA540-R-014-002.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Inorganic Superfund Data Review.* Publication #USEPA540/R-013-001.

DATA ASSESSMENT REPORT

Data assessment is a systematic process for reviewing a body of data against a predefined set of criteria to provide assurance that the data meet project Data Quality Objective (DQO) requirements. The purpose of the data assessment process is to determine if and how the usability of the analytical data is affected by the overall analytical processes and sample collection and handling procedures. If specific DQOs are not met, the data are qualified (i.e., data flags are assigned to sample results) in accordance with guidelines established by the United States Environmental Protection Agency (USEPA). Data assessment allows the data user to adequately determine if the data can be used for its intended purpose. The data acceptance criteria are established according to Standard Operating Procedures (SOPs) and Statements of Work (SOWs) provided to the contracted analytical laboratory. The assessment of data quality and usability involves five components, as described below.

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- 5) **Data Validation** is a process to determine the accuracy and precision of analytical data generated and to identify any anomalies encountered. The validation process is performed in accordance with USEPA regional or national functional guidelines, project-specific guidelines, and

compliance with the requirements of each analytical method. Two major components of data validation are laboratory performance and matrix interferences. Evaluation of laboratory performance is a check for compliance for each analytical method to determine if the samples were analyzed within the prescribed acceptance criteria of the method. Evaluation of matrix interferences involves the analysis of surrogate spike recoveries, matrix spike recoveries, and duplicate sample results. Data not meeting project-specific DQOs or the requirements of the analytical method are qualified with data flags according to referenced guidelines.

Data Assessment Procedures

AECOM performed independent QC checks of field and laboratory procedures that were used in collecting and analyzing the data. The QC checks verify that the data collected are of appropriate quality for the intended data use and that the DQOs were met. The steps and guidelines followed during the data validation process were modeled on the *USEPA National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, August 2014) and *USEPA National Functional Guidelines for Superfund Organic Data Review* (USEPA, August 2014). In addition, method-specific criteria set forth in the compendium of analytical methods found in the *Test Methods for Evaluation Solid Waste (SW-846), Update IV* (USEPA, February 2007) are also evaluated during the validation process. This validation process has been adapted to meet the DQO requirements for generation of definitive critical data.

Data Validation Results

The analytical data associated with analytical data package FA43039 were collected on April 13, 2017 for UTC - Delavan Spray Technologies located in Bamberg, South Carolina. The analytical data were validated according to the procedures outlined above. Where data flags have been applied to this data set, they are separated by a slash "/" and presented in the following format:

Laboratory Flag / Result Flags / Analysis Flags

- **Laboratory Flag:** This flag precedes the first slash and is added by the laboratory as a result of QC excursions from the analytical method. These flags are laboratory-specific and are described in the associated laboratory report.
- **Result Flags:** These are presented after the first slash and are added by AECOM based on data validation procedures and guidelines. They tell how and if the data should be used.
- **Analysis Flags:** These flags are presented after the second slash and are added by AECOM to inform the data user of any specific QA/QC problems that were encountered.

Any data requiring qualification as a result of the validation process were assigned data flags, as discussed below. The validation flags indicate how any QC excursions may have impacted the usability of the data.

Volatile Organic Compounds by Method 8260B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Total Organic Carbon by Method 9060A

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Chloride, Nitrate, Nitrite, and Sulfate by Method 9056A

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Dissolved Gases (Methane, Ethane, and Ethene) by Method RSK-175

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Data Summary and Usability

No QC excursions were encountered during the validation of this data set. Therefore, the data associated with this laboratory batch should be considered compliant and adequate for its intended use.

References

United States Environmental Protection Agency (USEPA), February 2007. *Test Methods for Evaluating Solid Waste (SW-846), Update IV.*

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Superfund Organic Data Review.* Publication #EPA540-R-014-002.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Inorganic Superfund Data Review.* Publication #USEPA540/R-013-001.

APPENDIX C
HISTORIC VOC DATA

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MCL		ug/L	200	NS	7	5	80	NS	80	70	80	NS	5	1000	100	5	2	10000
MW-1	6/4/2003	ug/L	<50	<50	<50	NA	NA	NA	NA	<50	NA	140	15000	<250	<50	<50	<50	<150
MW-1	12/30/2003	ug/L	<800	<800	<800	NA	NA	NA	NA	<800	NA	<800	11000	<800	<800	<800	<800	<800
MW-1	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	10.1	NA	<1.00	5470	NA	<1.00	34.8	<1.00	NA
MW-1	6/1/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	10.1	NA	<1.00	5750	NA	<1.00	41.3	<1.00	NA
MW-1	9/20/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	9.6	NA	<1.00	3150	NA	<1.00	38.4	<1.00	NA
MW-1	12/12/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	11.4	NA	<1.00	4750	NA	<1.00	35.6	<1.00	NA
MW-1	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	11.9	NA	<1.00	6580	NA	<1.00	48.1	<1.00	NA
MW-1	6/26/2006	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	13	NA	<1.0	4100	NA	<1.0	32	<1.0	NA
MW-1	10/21/2006	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	17.9	NA	<1.0	9550	NA	<1.0	65.8	<1.0	NA
MW-1	1/12/2007	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	23.1	NA	<1.00	6790	NA	<1.00	85.6	<1.00	NA
MW-1	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	102	NA	<1.00	5390	NA	<1.00	83.7	<1.00	NA
MW-1	11/5/2009	ug/L	<1.00	<1.00	1.74	NA	NA	NA	NA	382	NA	<1.00	7680	NA	<1.00	108	<1.00	NA
MW-1	4/30/2010	ug/L	<5.00	<5.00	<5.00	NA	NA	NA	NA	184	NA	<5.00	5940	NA	<5.00	79.6	<5.00	NA
MW-1	10/25/2010	ug/L	<50.0	<50.0	<50.0	NA	NA	NA	NA	648	NA	<50.0	5690	NA	<50.0	99.5	<50.0	NA
MW-1	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	210	NA	<1.0	3000	<1.0	<1.0	28	<2.0	<10
MW-1	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	265	NA	<1.00	2320	NA	<1.00	35	<1.00	NA
MW-1	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	298	NA	<1.00	3120	NA	<1.00	41.4	<1.00	NA
MW-1	2/26/2014	ug/L	<6.7	<5.1	<5.1	<4.8	<5.2	<4	<6.2	110 J/A	<7.2	69.3 J	1280 J/A	<4	<6.9	11.5 J	<6.5	<13
MW-1	10/27/2014	ug/L	<6.7	<5.1	<5.1	<4.8	<5.2	<4	<6.2	131	<7.2	<40	785	<4	<6.9	18.6 J	10.9 J	<13
MW-1	4/20/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	6.1	<1	<10	447	<2	<1	2.6 J	<1.3	<2.6
MW-1	10/28/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	7.1	<1	<10	383	<2	<1	2.8 J	<1.3	<2.6
MW-1	4/13/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	19.4	<1.3	<10	468	<1	<1.7	6.2	<1.6	<2.8
MW-1	10/25/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	7	<1.3	<10	410	<1	<1.7	3.5 J	<1.6	<2.8
MW-1	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	13.9	<0.28	<2	607	<0.3	<0.22	8.4	<0.41	<0.72
MW-2	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
MW-2	12/30/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	4.5	<2	<2	<2	<2	<4
MW-2	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	4.3	NA	<1.00	<1.00	<1.00	NA
MW-2	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.21	NA	<1.00	<1.00	<1.00	NA
MW-2	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	2.5	NA	<1.00	<1.00	<1.00	NA
MW-2	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.17	NA	<1.00	<1.00	<1.00	NA
MW-2	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.27	NA	<1.00	<1.00	<1.00	NA
MW-2	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1	NA	<1.00	<1.00	<1.00	NA
MW-2	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-2	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.86	NA	<1.00	<1.00	<1.00	NA
MW-2	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	6.55	NA	<1.00	<1.00	<1.00	NA
MW-2	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	1.6	<0.2	<0.34	<0.3	<0.33	<0.66
MW-2	10/27/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	1.2	<0.2	<0.34	<0.3	<0.33	<0.66
MW-2	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.53 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-2	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.85 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-2	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.57	<0.2	<0.33	<0.27	<0.31	<0.56
MW-2	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.83 J	<0.2	<0.33	<0.27	<0.31	<0.56
MW-2	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	0.92 J	<0.3	<0.22	<0.35	<0.41	<0.72
MW-3	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	74	<5.0	<1.0	<1.0	<1.0	<3.0
MW-3	12/30/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	220	<2	<2	<2	<2	<4
MW-3	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	113	NA	<1.00	<1.00	<1.00	NA
MW-3	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	305	NA	<1.00	<1.00	<1.00	NA
MW-3	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	59.8	NA	<1.00	<1.00	<1.00	NA
MW-3	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	82.1	NA	<1.00	<1.00	<1.00	NA
MW-3	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	238	NA	<1.00	1.03	<1.00	NA
MW-3	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	391	NA	<1.00	2.79	<1.00	NA
MW-3	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	47	<1.0	<1.0	<1.0	<2.0	<10
MW-3	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	140	NA	<1.00	3.23	<1.00	NA
MW-3	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	64.5	NA	<1.00	<1.00	<1.00	NA
MW-3	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	45.1	<0.2	<0.34	1.1	<0.33	<0.66
MW-3	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	49.9	<0.2	<0.34	1.4	<0.33	<0.66
MW-3	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.92 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-3	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	0.24 J	<0.2	<2	57.4	<0.4	<0.21	0.79 J	<0.25	<0.51
MW-3	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	0.68	<0.26	<2	98	<0.2	<0.33	1.2	<0.31	<0.56
MW-3	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	0.58 J	<0.26	<2	91.6	<0.2	<0.33	1.1	<0.31	<0.56
MW-3	4/11/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	3.6	<0.28	<2	199	<0.3	<0.22	3.6	<0.41	<0.72

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-3D	1/9/2008	ug/L	<1.00	<1.00	9.68	NA	NA	NA	NA	5.52	NA	<1.00	432	NA	<1.00	3.33	<1.00	NA
MW-3D	11/5/2009	ug/L	<1.00	<1.00	11.8	NA	NA	NA	NA	8.92	NA	<1.00	612	NA	<1.00	4.11	<1.00	NA
MW-3D	4/30/2010	ug/L	<1.00	<1.00	9.92	NA	NA	NA	NA	9.33	NA	<1.00	764	NA	<1.00	6.1	<1.00	NA
MW-3D	10/26/2010	ug/L	<1.00	<1.00	11.7	NA	NA	NA	NA	9.98	NA	<1.00	544	NA	<1.00	4.51	<1.00	NA
MW-3D	5/24/2011	ug/L	<1.0	<1.0	11	NA	NA	NA	NA	9.4	NA	<1.0	600	<1.0	<1.0	4.7	<2.0	<10
MW-3D	11/9/2011	ug/L	<1.00	<1.00	10.8	NA	NA	NA	NA	9.93	NA	<1.00	526	NA	<1.00	4.01	<1.00	NA
MW-3D	5/9/2012	ug/L	<1.00	<1.00	10.3	NA	NA	NA	NA	8.58	NA	<1.00	520	NA	<1.00	4.48	<1.00	NA
MW-3D	3/5/2014	ug/L	<0.34	<0.26	10.4	<0.24	<0.26	<0.2	<0.31	7	<0.36	<2	204	<0.2	<0.34	6	<0.33	<0.66
MW-3D	10/28/2014	ug/L	0.58 J	<0.26	16.2	<0.24	<0.26	<0.2	<0.31	5.9	<0.36	<2	384	<0.2	<0.34	4.2	<0.33	<0.66
MW-3D	4/21/2015	ug/L	<0.26	<0.2	12.4	<0.2	<0.22	<0.29	<0.3	8.4	<0.2	<2	316 /M/M	<0.4	<0.21	8.1	<0.25	<0.51
MW-3D	10/27/2015	ug/L	<1.3	<1	9.7	<1	<1.1	<1.5	<1.5	5.6	<1	<10	353	<2	<1	6.7	<1.3	<2.6
MW-3D	4/13/2016	ug/L	<1	<1.3	5.7	<1.4	<1.2	<1.2	<1.5	7.8	<1.3	<10	285	<1	<1.7	8.3	<1.6	<2.8
MW-3D	10/26/2016	ug/L	0.25 J	<0.26	8.8	<0.28	<0.24	<0.23	<0.3	8.3	<0.26	<2	331	<0.2	<0.33	7.6	<0.31	<0.56
MW-3D	4/11/2017	ug/L	0.27 J	<0.34	8	<0.31	<0.24	<0.53	<0.3	8	<0.28	<2	223	<0.3	<0.22	8.1	<0.41	<0.72
MW-3D1	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-3D1	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-3D1	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-3D1	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-3D1	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-3D1	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-4	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
MW-4	12/30/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	<4
MW-4	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	11/5/2009	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	10/25/2010	ug/L	<10.0	<10.0	<10.0	NA	NA	NA	NA	<10.0	NA	<10.0	<10.0	NA	<10.0	<10.0	<10.0	NA
MW-4	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-4	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	3/12/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-4	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	0.54 J	<0.21	<0.22	<0.25	<0.51
MW-4	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-4	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	0.42 J	<0.33	<0.27	<0.31	<0.56
MW-5	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	160	<5.0	<1.0	<1.0	<1.0	<3.0
MW-5	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	230	<2	<2	<2	<2	<4
MW-5	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	345	NA	<1.00	<1.00	<1.00	NA
MW-5	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	3.79	NA	<1.00	<1.00	<1.00	NA
MW-5	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	97.6	NA	<1.00	<1.00	<1.00	NA
MW-5	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	2.42	NA	<1.00	<1.00	<1.00	NA
MW-5	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.46	NA	<1.00	<1.00	<1.00	NA
MW-5	10/26/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-5	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-5	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.55	NA	<1.00	<1.00	<1.00	NA
MW-5	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	2.57	NA	<1.00	<1.00	<1.00	NA
MW-5	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	11.7	<0.2	<0.34	<0.3	<0.33	<0.66
MW-5	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	1.1	<0.2	<0.34	<0.3	<0.33	<0.66
MW-5	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	1	<0.2	<2	74.3	<0.4	<0.21	1.3	<0.25	<0.51
MW-5	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	16.2	<0.4	<0.21	<0.22	<0.25	<0.51
MW-5	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.53	<0.2	<0.33	<0.27	<0.31	<0.56
MW-5	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	2.5	<0.2	<0.33	<0.27	<0.31	<0.56
MW-5	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	2.7	<0.3	<0.22	<0.35	<0.41	<0.72

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-6	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
MW-6	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	<4
MW-6	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-6	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	0.59 J	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-6	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-6	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-6	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-7	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	5.3
MW-7	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-7	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-7	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-7	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	1.4	<0.4	<0.21	<0.22	<0.25	<0.51
MW-7	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-7	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-7	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	0.49 J	<0.3	<0.22	<0.35	<0.41	<0.72
MW-8	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	30	1.9J	<2	<2	<2	4.7
MW-8	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	135	NA	<1.00	1.1	<1.00	NA
MW-8	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	102	NA	<1.00	1.1	<1.00	NA
MW-8	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	159	NA	<1.00	1.66	<1.00	NA
MW-8	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	94.1	NA	<1.00	1.38	<1.00	NA
MW-8	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	28.3	NA	<1.00	<1.00	<1.00	NA
MW-8	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	76.4	NA	<1.00	1.22	<1.00	NA
MW-8	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	100	<1.0	<1.0	2.3	<2.0	<10
MW-8	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	276	NA	<1.00	5.31	<1.00	NA
MW-8	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	1.11	NA	<1.00	491	NA	<1.00	8.42	<1.00	NA
MW-8	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	114	<0.2	<0.34	6.8	<0.33	<0.66
MW-8	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	71.4	<0.2	<0.34	3.2	<0.33	<0.66
MW-8	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	28.5	<0.4	<0.21	0.97 J	<0.25	<0.51
MW-8	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	26	<0.4	<0.21	2.2	<0.25	<0.51
MW-8	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	7.8	<0.2	<0.33	<0.27	<0.31	<0.56
MW-8	10/24/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	35.8	<0.2	<0.33	4.9	<0.31	<0.56
MW-8	4/11/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	18.8	<0.3	<0.22	1.8	<0.41	<0.72

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MWT-1/MW-9	12/31/2003	ug/L	<800	<800	<800	NA	NA	NA	NA	<800	NA	<800	7500	<800	<800	<800	<800	<2,000
MWT-1/MW-9	3/14/2005	ug/L	<1.00	<1.00	7.3	NA	NA	NA	NA	19.1	NA	<1.00	3520	NA	<1.00	76	<1.00	NA
MWT-1/MW-9	6/1/2005	ug/L	<1.00	<1.00	6.7	NA	NA	NA	NA	226	NA	<1.00	4670	NA	1.4	280	<1.00	NA
MWT-1/MW-9	9/20/2005	ug/L	1.28	<1.00	13.6	NA	NA	NA	NA	158	NA	<1.00	5000	NA	1.9	295	<1.00	NA
MWT-1/MW-9	12/12/2005	ug/L	2.05	<1.00	8.94	NA	NA	NA	NA	182	NA	<1.00	3920	NA	1.37	286	<1.00	NA
MWT-1/MW-9	3/28/2006	ug/L	<1.00	<1.00	8.51	NA	NA	NA	NA	362	NA	<1.00	4560	NA	1.57	372	<1.00	NA
MWT-1/MW-9	6/26/2006	ug/L	<1.0	<1.0	12	NA	NA	NA	NA	520	NA	<1.0	1500	NA	1.7	330	<1.0	NA
MWT-1/MW-9	10/21/2006	ug/L	<1.0	<1.0	23.5	NA	NA	NA	NA	540	NA	<1.0	7490	NA	<1.0	504	<1.0	NA
MWT-1/MW-9	1/12/2007	ug/L	<1.00	<1.00	25.3	NA	NA	NA	NA	442	NA	<1.00	5630	NA	1.97	626	<1.00	NA
MWT-1/MW-9	1/9/2008	ug/L	1.08	<1.00	5.01	NA	NA	NA	NA	271	NA	<1.00	2410	NA	1.39	297	8.73	NA
MWT-1/MW-9	11/4/2009	ug/L	<1.00	<1.00	11.6	NA	NA	NA	NA	379	NA	<1.00	2950	NA	2.21	559	<1.00	NA
MWT-1/MW-9	4/29/2010	ug/L	<1.00	<1.00	11.1	NA	NA	NA	NA	236	NA	<1.00	4170	NA	3.41	320	4.79	NA
MWT-1/MW-9	10/25/2010	ug/L	<20.0	<20.0	<20.0	NA	NA	NA	NA	326	NA	<20.0	3660	NA	<20.0	579	<20.0	NA
MWT-1/MW-9	5/24/2011	ug/L	<10	<10	<10	NA	NA	NA	NA	160	NA	<10	1200	<10	<10	380	<20	<100
MWT-1/MW-9	11/9/2011	ug/L	1.2	<1.00	19.7	NA	NA	NA	NA	200	NA	<1.00	4000	NA	1.47	450	<1.00	NA
MWT-1/MW-9	5/8/2012	ug/L	<1.00	<1.00	2.92	NA	NA	NA	NA	127	NA	<1.00	755	NA	1.09	258	<1.00	NA
MW-9	3/6/2014	ug/L	<1.7	<1.3	<1.3	<1.2	<1.3	<1	<1.6	31.5	<1.8	<10	498	<1	<1.7	55.3	<1.6	<3.3
MW-9	10/29/2014	ug/L	<0.34	<0.26	2.2	<0.24	<0.26	<0.2	<0.31	92.2	<0.36	<2	727 /M/m	<0.2	0.59 J	159	<0.33	<0.66
MW-9	4/22/2015	ug/L	<2.6	<2	<2.7	<2	<2.2	<2.9	<3	33.1	<2	<20	1760	<4	<2.1	133	<2.5	<5.1
MW-9	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	116	<0.2	<2	1070	<0.4	1.1	172 /M/M	<0.25	<0.51
MW-9	4/12/2016	ug/L	<2	<2.6	<2.2	<2.8	<2.4	<2.3	<3	49.2	<2.6	<20	771	<2	<3.3	115	<3.1	<5.6
MW-9	10/26/2016	ug/L	<2	<2.6	<2.2	<2.8	<2.4	<2.3	<3	19.2	<2.6	<20	685	<2	<3.3	106	<3.1	<5.6
MW-9	4/10/2017	ug/L	<1.2	<1.7	<1.6	<1.6	<1.2	<2.7	<1.5	7.8	<1.4	<10	326	<1.5	<1.1	43.8	<2	<3.6
MW-9D	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-9D	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	3/6/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-9D	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-9D	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-9D	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MWT-2/MW-10	12/31/2003	ug/L	<200	<200	520	NA	NA	NA	NA	<200	NA	<200	5800	<200	<200	<200	<200	<400
MWT-2/MW-10	3/14/2005	ug/L	26.4	<1.00	18.6	NA	NA	NA	NA	40.1	NA	<1.00	4360	NA	1	62.3	<1.00	NA
MWT-2/MW-10	6/1/2005	ug/L	12.7	1.7	17.5	NA	NA	NA	NA	40.8	NA	<1.00	5680	NA	<1.00	52	<1.00	NA
MWT-2/MW-10	9/20/2005	ug/L	9.03	<1.00	40	NA	NA	NA	NA	27.8	NA	<1.00	4360	NA	<1.00	46.2	<1.00	NA
MWT-2/MW-10	12/12/2005	ug/L	11.7	<1.00	14.4	NA	NA	NA	NA	23.2	NA	<1.00	3050	NA	<1.00	45.2	<1.00	NA
MWT-2/MW-10	3/28/2006	ug/L	6.1	<1.00	13.4	NA	NA	NA	NA	16.8	NA	<1.00	3090	NA	<1.00	27.4	<1.00	NA
MWT-2/MW-10	6/26/2006	ug/L	<20	<20	<20	NA	NA	NA	NA	21	NA	<20	1800	NA	<20	31	<20	NA
MWT-2/MW-10	10/21/2006	ug/L	<100	<100	<100	NA	NA	NA	NA	121	NA	<100	3380	NA	<100	<100	114	NA
MWT-2/MW-10	1/12/2007	ug/L	1.22	<1.00	2.08	NA	NA	NA	NA	12.4	NA	<1.00	2980	NA	<1.00	32.7	<1.00	NA
MWT-2/MW-10	1/9/2008	ug/L	10.9	<1.00	24.1	NA	NA	NA	NA	89.1	NA	<1.00	3250	NA	<1.00	71.9	<1.00	NA
MWT-2/MW-10	11/4/2009	ug/L	1.49	1.56	82.2	NA	NA	NA	NA	1120	NA	<1.00	1600	NA	1.22	33.9	<1.00	NA
MWT-2/MW-10	4/29/2010	ug/L	<1.00	<1.00	2.85	NA	NA	NA	NA	104	NA	<1.00	53.8	NA	<1.00	3.22	<1.00	NA
MWT-2/MW-10	10/25/2010	ug/L	<10.0	<10.0	108	NA	NA	NA	NA	1270	NA	<10.0	1150	NA	<10.0	129	<10.0	NA
MWT-2/MW-10	5/24/2011	ug/L	<20	<20	<20	NA	NA	NA	NA	390	NA	<20	2000	<20	<20	88	<40.0	<200
MWT-2/MW-10	11/9/2011	ug/L	<5.00	8.8	285	NA	NA	NA	NA	4250	NA	<5.00	4670	NA	<5.00	154	<5.00	NA
MWT-2/MW-10	5/8/2012	ug/L	3.7	<1.00	7.83	NA	NA	NA	NA	885	NA	<1.00	1810	NA	17.1	386	<1.00	NA
MW-10	3/5/2014	ug/L	<0.34	<0.26	0.36 J	<0.24	<0.26	<0.2	<0.31	13.9	<0.36	<2	93.2	<0.2	<0.34	15.1	<0.33	<0.66
MW-10	10/29/2014	ug/L	<0.34	0.37 J	32.7	<0.24	<0.26	<0.2	<0.31	664	<0.36	<2	136	2.6	0.51 J	36.9	<0.33	<0.66
MW-10	4/22/2015	ug/L	<0.26	<0.2	5.2	<0.2	<0.22	<0.29	<0.3	98.8	<0.2	<2	54.1	<0.4	<0.21	7.8	<0.25	<0.51
MW-10	10/26/2015	ug/L	<0.26	0.49 J	30.3	0.22 J	<0.22	<0.29	<0.3	506	<0.2	<2	66.4	1.1	0.25 J	45.2	0.5 J	<0.51
MW-10	4/12/2016	ug/L	<0.2	<0.26	6.7	<0.28	<0.24	<0.23	<0.3	90.8	<0.26	<2	43.3	1.2	<0.33	22.1	<0.31	<0.56
MW-10	10/25/2016	ug/L	<0.2	<0.26	9	<0.28	<0.24	<0.23	<0.3	146	<0.26	<2	41.4	7.2	0.49 J	13.5	<0.31	<0.56
MW-10	4/10/2017	ug/L	<0.25	<0.34	0.95 J	<0.31	<0.24	<0.53	<0.3	41	<0.28	<2	51.6	1.2	0.32 J	44.3	<0.41	<0.72

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-10D	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	4.09	NA	<1.00	<1.00	<1.00	NA
MW-10D	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-10D	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-10D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-10D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-10D	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-10D	10/25/2016	ug/L	<0.2 //h	<0.26 //h	<0.22 //h	<0.28 //h	<0.24 //h	<0.23 //h	<0.3 //h	<0.31 //h	<0.26 //h	<2 //h	<0.3 //h	<0.2 //h	<0.33 //h	<0.27 //h	<0.31 //h	<0.56 //h
MWT-3/MW-11	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	<4
MWT-3/MW-11	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MWT-3/MW-11	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-11	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-11	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-11	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	4.2	<0.21	<0.22	<0.25	<0.51
MW-11	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	1	<0.33	<0.27	<0.31	<0.56
MW-12D	11/5/2009	ug/L	<1.00	<1.00	1.11	NA	NA	NA	NA	<1.00	NA	<1.00	87.7	NA	<1.00	<1.00	<1.00	NA
MW-12D	4/30/2010	ug/L	1.13	<1.00	3.67	NA	NA	NA	NA	<1.00	NA	<1.00	451	NA	<1.00	<1.00	<1.00	NA
MW-12D	10/25/2010	ug/L	<1.00	<1.00	1.07	NA	NA	NA	NA	<1.00	NA	<1.00	72.3	NA	<1.00	<1.00	<1.00	NA
MW-12D	5/23/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	12	<1.0	<1.0	<1.0	<2.0	<10
MW-12D	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	20.8	NA	<1.00	<1.00	<1.00	NA
MW-12D	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	21.4	NA	<1.00	<1.00	<1.00	NA
MW-12D	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	40.7	<0.2	<0.34	<0.3	<0.33	<0.66
MW-12D	10/29/2014	ug/L	<0.34	<0.26	0.64 J	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	25.5	<0.2	<0.34	<0.3	<0.33	<0.66
MW-12D	4/21/2015	ug/L	<0.26	<0.2	1.4	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	65.6	<0.4	<0.21	<0.22	<0.25	<0.51
MW-12D	10/27/2015	ug/L	<0.26	<0.2	0.54 J	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	25.1	<0.4	<0.21	<0.22	<0.25	<0.51
MW-12D	4/13/2016	ug/L	<0.4	<0.51	2.9	<0.57	<0.48	<0.46	<0.6	<0.62	<0.52	<4	140	<0.4	<0.66	<0.54	<0.63	<1.1
MW-12D	10/25/2016	ug/L	<0.2 //h	<0.26 //h	1.2 //h	<0.28 //h	<0.24 //h	<0.23 //h	<0.3 //h	<0.31 //h	<0.26 //h	<2 //h	69.2 //h	<0.2 //h	<0.33 //h	<0.27 //h	<0.31 //h	<0.56 //h
MW-12D	4/10/2017	ug/L	<0.25	<0.34	2.4	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	98.6	<0.3	<0.22	<0.35	<0.41	<0.72
MW-13D	11/5/2009	ug/L	<1.00	<1.00	1.92	NA	NA	NA	NA	<1.00	NA	<1.00	96.4	NA	<1.00	<1.00	<1.00	NA
MW-13D	4/30/2010	ug/L	3.34	<1.00	4.6	NA	NA	NA	NA	<1.00	NA	<1.00	292	NA	<1.00	<1.00	<1.00	NA
MW-13D	10/25/2010	ug/L	1.21	<1.00	3.45	NA	NA	NA	NA	<1.00	NA	<1.00	120	NA	<1.00	<1.00	<1.00	NA
MW-13D	5/23/2011	ug/L	<1.0	<1.0	1.6	NA	NA	NA	NA	<1.0	NA	<1.0	56	<1.0	<1.0	<1.0	<2.0	<10
MW-13D	11/8/2011	ug/L	<1.00	<1.00	1.4	NA	NA	NA	NA	<1.00	NA	<1.00	74.9	NA	<1.00	<1.00	<1.00	NA
MW-13D	5/9/2012	ug/L	<1.00	<1.00	1.25	NA	NA	NA	NA	<1.00	NA	<1.00	74.3	NA	<1.00	<1.00	<1.00	NA
MW-13D	3/11/2014	ug/L	1	<0.26	3.6	<0.24	<0.26	<0.2	0.6 J	<0.33	<0.36	<2	94.1	<0.2	<0.34	<0.3	<0.33	<0.66
MW-13D	10/29/2014	ug/L	<0.34	<0.26	2	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	47.6	<0.2	<0.34	<0.3	<0.33	<0.66
MW-13D	4/22/2015	ug/L	1.5	<0.2	4.4	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	84.8	<0.4	<0.21	<0.22	<0.25	<0.51
MW-13D	10/27/2015	ug/L	0.39 J	<0.2	1.7	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	84.5	<0.4	<0.21	<0.22	<0.25	<0.51
MW-13D	4/13/2016	ug/L	3.1	<0.26	5.4	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	151	<0.2	<0.33	<0.27	<0.31	<0.56
MW-13D	10/25/2016	ug/L	2.5 J	<1.3	7	<1.4	<1.2	<1.2	<1.5	<1.6	<1.3	<10	298	<1	<1.7	<1.4	<1.6	<2.8
MW-13D	4/10/2017	ug/L	1.6	<0.34	4.1	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	168	<0.3	<0.22	<0.35	<0.41	<0.72

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-14	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	5/23/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-14	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	2/26/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-14	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-14	4/20/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.46 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-14	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.72 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-14	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.9	<0.2	<0.33	<0.27	<0.31	<0.56
MW-14	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.66 J	<0.2	<0.33	<0.27	<0.31	<0.56
MW-14	4/11/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	1.1	<0.3	<0.22	<0.35	<0.41	<0.72
MW-14D	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	18.7	NA	<1.00	<1.00	<1.00	NA
MW-14D	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	74.8	NA	<1.00	<1.00	<1.00	NA
MW-14D	10/25/2010	ug/L	<1.00	<1.00	1.12	NA	NA	NA	NA	<1.00	NA	<1.00	85.3	NA	<1.00	<1.00	<1.00	NA
MW-14D	5/23/2011	ug/L	<1.0	<1.0	1.4	NA	NA	NA	NA	<1.0	NA	<1.0	92	<1.0	<1.0	<1.0	<2.0	<10
MW-14D	11/8/2011	ug/L	<1.00	<1.00	1.11	NA	NA	NA	NA	<1.00	NA	<1.00	77.3	NA	<1.00	<1.00	<1.00	NA
MW-14D	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	82.1	NA	<1.00	<1.00	<1.00	NA
MW-14D	2/26/2014	ug/L	<0.34	<0.26	1.6	<0.24	<0.26	<0.2	<0.31	0.95 J	<0.36	<2	81.5	<0.2	<0.34	0.56 J	<0.33	<0.66
MW-14D	10/28/2014	ug/L	<0.34	<0.26	1.2	<0.24	<0.26	<0.2	<0.31	0.65 J	<0.36	<2	79.3	<0.2	<0.34	0.56 J	<0.33	<0.66
MW-14D	4/20/2015	ug/L	<0.26	<0.2	1.8	<0.2	<0.22	<0.29	<0.3	0.9 J	<0.2	<2	69.7	<0.4	<0.21	0.61 J	<0.25	<0.51
MW-14D	10/28/2015	ug/L	<0.26	<0.2	1	<0.2	<0.22	<0.29	<0.3	0.34 J	<0.2	<2	53.1	<0.4	<0.21	<0.22	<0.25	<0.51
MW-14D	4/13/2016	ug/L	<0.2	<0.26	1.5	<0.28	<0.24	<0.23	<0.3	0.98	<0.26	<2	78.5	<0.2	<0.33	0.73	<0.31	<0.56
MW-14D	10/26/2016	ug/L	<0.2	<0.26	1.4	<0.28	<0.24	<0.23	<0.3	0.86 J	<0.26	<2	84.3	<0.2	<0.33	0.65 J	<0.31	<0.56
MW-14D	4/11/2017	ug/L	<0.25	<0.34	1.7	<0.31	<0.24	<0.53	<0.3	1.1	<0.28	<2	84.6	<0.3	<0.22	0.77 J	<0.41	<0.72
MW-15	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-15	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-15	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15	4/11/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	<0.3	<0.22	<0.35	<0.41	<0.72
MW-15D	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-15D	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-15D	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15D	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	0.24 J	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D	4/11/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	<0.3	<0.22	<0.35	<0.41	<0.72
MW-15D1	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15D1	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D1	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D1	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D1	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D1	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D1	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D1	4/11/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	<0.3	<0.22	<0.35	<0.41	<0.72

Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-16	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-16	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-16	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16	3/6/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-16	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	0.48 J	<0.33	<0.27	<0.31	<0.56
MW-16	4/10/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	<0.3	<0.22	<0.35	<0.41	<0.72
MW-16D	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-16D	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-16D	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16D	3/6/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16D	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16D	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-16D	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-16D	4/10/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	<0.3	<0.22	<0.35	<0.41	<0.72
MW-17	3/10/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-17	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-17	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-17	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-17	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-18	3/10/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-18	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-18	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-18	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-18	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-19	3/6/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	<65	<72	639 J	14000	<40	<69	<60	<65	<130
MW-19	10/28/2014	ug/L	16 J	<5.1	12 J	<4.8	<5.2	<4	<6.2	<6.5	<7.2	<40	3470	<4	<6.9	<6	<6.5	<13
MW-19	4/21/2015	ug/L	19.8 J	<4	15.6 J	<4	<4.3	<5.9	<6	12.5 J	<4	<40	4170	<8	<4.2	5.5 J	<5	<10
MW-19	10/28/2015	ug/L	34.6	<5	21.6 J	<5	<5.4	<7.4	<7.5	<5.5	<5	<50	8040	<10	<5.2	<5.4	<6.3	<13
MW-19	4/12/2016	ug/L	97.5	<26	39.1	<28	<24	<23	<30	<31	<26	221	16600	<20	<33	<27	<31	<56
MW-19	10/24/2016	ug/L	245	<51	<43	<57	<48	<46	<60	<62	<52	<400	34600	<40	<66	<54	<63	<110
MW-19	4/11/2017	ug/L	180 J	<85	<81	<78	<61	<130	<75	<69	<69	<500	24600	<75	<55	<86	<100	<180
MW-20	3/6/2014	ug/L	<3.4	<2.6	<2.5	<2.4	<2.6	<2	<3.1	4 J	<3.6	<20	648	<2	<3.4	5 J	<3.3	<6.6
MW-20	10/28/2014	ug/L	<1.7	<1.3	<1.3	<1.2	<1.3	<1	<1.6	<1.6	<1.8	<10	428	<1	<1.7	2.7 J	<1.6	<3.3
MW-20	4/21/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	2.6 J	<1	<10	452	<2	<1	4.2 J	<1.3	<2.6
MW-20	10/28/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	<1.1	<1	11.1 J	623	<2	<1	4.6 J	<1.3	<2.6
MW-20	4/12/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	0.72	<0.26	<2	480	<0.2	<0.33	3.2	<0.31	<0.56
MW-20	10/24/2016	ug/L	<2	<2.6	<2.2	<2.8	<2.4	<2.3	<3	<3.1	<2.6	<20	503	<2	<3.3	<2.7	<3.1	<5.6
MW-20	4/11/2017	ug/L	<1.2	<1.7	<1.6	<1.6	<1.2	<2.7	<1.5	1.5 J	<1.4	<10	438	<1.5	<1.1	3.1 J	<2	<3.6
MW-21	3/11/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	466	<72	765 J	16300	<40	<69	209	<65	<130
MW-21	10/28/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	733	<72	<400	14500	<40	<69	354	<65	<130
MW-21	4/22/2015	ug/L	<0.26	<0.2	1	<0.2	<0.22	<0.29	<0.3	351	<0.2	<2	14500	<0.4	<0.21	225	<0.25	0.89 J
MW-21	10/28/2015	ug/L	<13	<10	<14	<10	<11	<15	<15	339	<10	<100	14600	<20	<10	180	<13	<26
MW-21	4/12/2016	ug/L	<10	<13	<11	<14	<12	<12	<15	383	<13	<100	13200	<10	<17	216	<16	<28
MW-21	10/25/2016	ug/L	<0.5	<0.64	<0.54	<0.71	<0.6	<0.58	<0.75	4.2	<0.65	<5	181	<0.5	<0.83	2.3 J	<0.79	<1.4
MW-21	4/12/2017	ug/L	<0.25	<0.34	1.2	<0.31	<0.24	<0.53	<0.3	595	<0.28	<2	18000	<0.3	0.38 J	260	<0.41	1.7 J
MW-21D	3/11/2014	ug/L	<0.67	<0.51	1.5 J	<0.48	10.4	1.8 J	131	0.84 J	1.8 J	13.3	283	0.41 J	<0.69	<0.6	<0.65	<1.3
MW-21D	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	2	<0.2	<0.34	<0.3	<0.33	<0.66
MW-21D	4/20/2015	ug/L	<0.26	<0.2	0.89 J	<0.2	<0.22	<0.29	<0.3	0.3 J	<0.2	<2	29.4	<0.4	<0.21	<0.22	<0.25	<0.51
MW-21D	10/27/2015	ug/L	<0.26	<0.2	0.36 J	<0.2	<0.22	<0.29	<0.3	0.23 J	<0.2	2.2 J	90.8	<0.4	<0.21	<0.22	<0.25	<0.51
MW-21D	4/12/2016	ug/L	<0.2	<0.26	0.49	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	8.6	<0.2	<0.33	<0.27	<0.31	<0.56
MW-21D	10/25/2016	ug/L	<0.5	<0.64	1.2 J	<0.71	<0.6	<0.58	<0.75	<0.78	<0.65	<5	169	<0.5	<0.83	<0.68	<0.79	<1.4
MW-21D	4/12/2017	ug/L	<0.25	<0.34	2	<0.31	<0.24	<0.53	<0.3	0.74 J	<0.28	<2	74.6	<0.3	<0.22	0.39 J	<0.41	<0.72

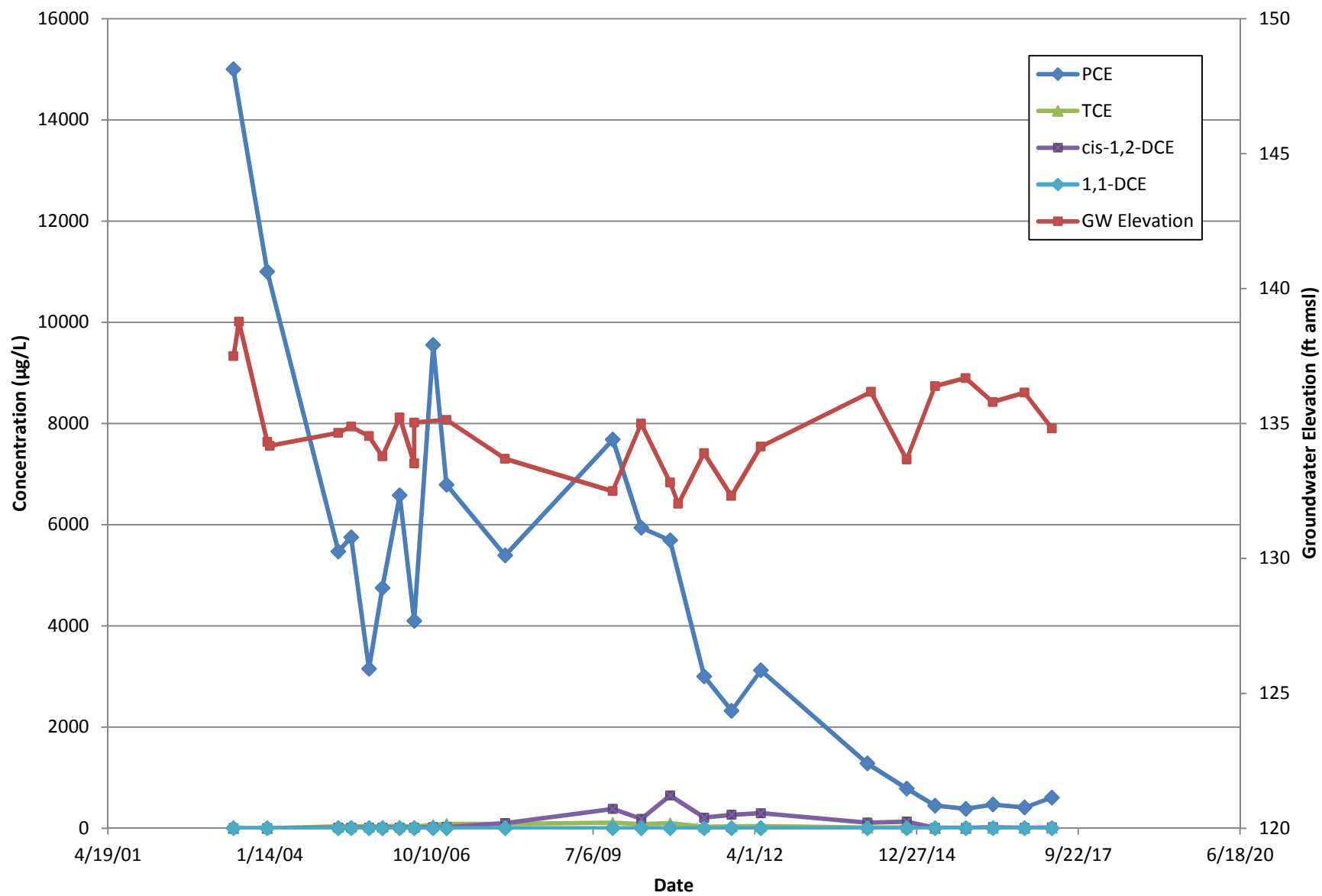
Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-22D	3/11/2014	ug/L	<0.34	<0.26	2.5	<0.24	7.2	<0.2	180	0.35 J	0.68 J	<2	99.8	<0.2	<0.34	0.33 J	<0.33	<0.66
MW-22D	10/28/2014	ug/L	<0.34	<0.26	3.7	<0.24	<0.26	<0.2	<0.31	0.41 J	<0.36	<2	149	<0.2	<0.34	0.86 J	<0.33	<0.66
MW-22D	4/22/2015	ug/L	0.27 J	<0.2	3.8	<0.2	<0.22	<0.29	<0.3	0.56 J	<0.2	<2	107	<0.4	<0.21	0.68 J	<0.25	<0.51
MW-22D	10/27/2015	ug/L	0.38 J	<0.2	2.9	<0.2	<0.22	<0.29	<0.3	0.4 J	<0.2	<2	156	<0.4	<0.21	0.44 J	<0.25	<0.51
MW-22D	4/12/2016	ug/L	<0.2	<0.26	1.5	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	65.7	<0.2	<0.33	0.35	<0.31	<0.56
MW-22D	10/25/2016	ug/L	<0.2	<0.26	2.2	<0.28	<0.24	<0.23	<0.3	0.38 J	<0.26	<2	122	<0.2	<0.33	0.62 J	<0.31	<0.56
MW-22D	4/10/2017	ug/L	<0.5	<0.68	2	<0.62	<0.48	<1.1	<0.6	0.61 J	<0.55	<4	96.6	<0.6	<0.44	0.79 J	<0.82	<1.4
MW-23D	3/12/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-23D	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-23D	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-23D	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-23D	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-23D	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-23D	4/10/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	<0.3	<0.22	<0.35	<0.41	<0.72
MW-24	12/4/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	2.9	<1	<10	344	<2	<1	<1.1	<1.3	<2.6
MW-24	4/12/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	59.2	<1.3	<10	1160	<1	<1.7	6.1	<1.6	<2.8
MW-24	10/24/2016	ug/L	<4	<5.1	<4.3	<5.7	<4.8	<4.6	<6	22.9	<5.2	<40	1340	<4	<6.6	<5.4	<6.3	<11
MW-24	4/12/2017	ug/L	<5	<6.8	<6.4	<6.2	<4.8	<11	<6	52.7	<5.5	<40	2070	<6	<4.4	8.4 J	<8.2	<14
MW-25D	12/4/2015	ug/L	<0.26	<0.2	3.4	<0.2	<0.22	<0.29	<0.3	1.3	<0.2	<2	129	<0.4	<0.21	0.95	<0.25	<0.51
MW-25D	4/12/2016	ug/L	<0.2	<0.26	3.4	<0.28	<0.24	<0.23	<0.3	1.1	<0.26	<2	74.8	<0.2	<0.33	0.96	<0.31	<0.56
MW-25D	10/25/2016	ug/L	<0.4	<0.51	2.3	<0.57	<0.48	<0.46	<0.6	0.89 J	<0.52	6.1 J	125	<0.4	<0.66	0.84 J	<0.63	<1.1
MW-25D	4/10/2017	ug/L	<0.5	<0.68	3.1	<0.62	<0.48	<1.1	<0.6	1 J	<0.55	<4	105	<0.6	<0.44	0.88 J	<0.82	<1.4
MW-26D	12/4/2015	ug/L	<0.26	<0.2	1.9	<0.2	<0.22	<0.29	<0.3	1.1	<0.2	<2	98.1	<0.4	<0.21	1.1	<0.25	<0.51
MW-26D	4/12/2016	ug/L	<0.2	<0.26	1.8	<0.28	<0.24	<0.23	<0.3	0.93	<0.26	<2	62.6	<0.2	<0.33	1.1	<0.31	<0.56
MW-26D	10/25/2016	ug/L	<0.2	<0.26	1.6	<0.28	<0.24	<0.23	<0.3	1	<0.26	<2	75	<0.2	<0.33	0.97 J	<0.31	<0.56
MW-26D	4/10/2017	ug/L	<0.25	<0.34	1.9	<0.31	<0.24	<0.53	<0.3	0.97 J	<0.28	<2	75.2	<0.3	<0.22	1.2	<0.41	<0.72
MW-27	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	1	<0.3	<0.22	<0.35	<0.41	<0.72
MW-28	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	0.24 J	<0.3	<0.22	<0.35	<0.41	<0.72
MW-29	4/12/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	5.4	<0.3	<0.22	<0.35	<0.41	<0.72
MW-30D	4/13/2017	ug/L	<0.25	<0.34	2.3	<0.31	<0.24	<0.53	0.41 J	0.64 J	<0.28	<2	75.2	<0.3	<0.22	0.87 J	<0.41	<0.72
MW-31D	4/13/2017	ug/L	<0.25	<0.34	3.1	<0.31	0.82 J	<0.53	1.8	<0.28	<0.28	<2	89.2	<0.3	<0.22	0.41 J	<0.41	2.6 J
MW-32D	4/13/2017	ug/L	<0.25	<0.34	0.63 J	<0.31	0.27 J	<0.53	0.79 J	<0.28	<0.28	<2	25	<0.3	<0.22	0.36 J	<0.41	1.2 J
MWT-4	8/24/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	68.8	NA	<1.00	136000	8.79	2.03	477	<1.00	37
MWT-5	8/24/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.03	<1.00	<1.00	<1.00	<1.00	<3.00
SW-1	6/5/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	1	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
SW-1	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
SW-1	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
SW-1	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA

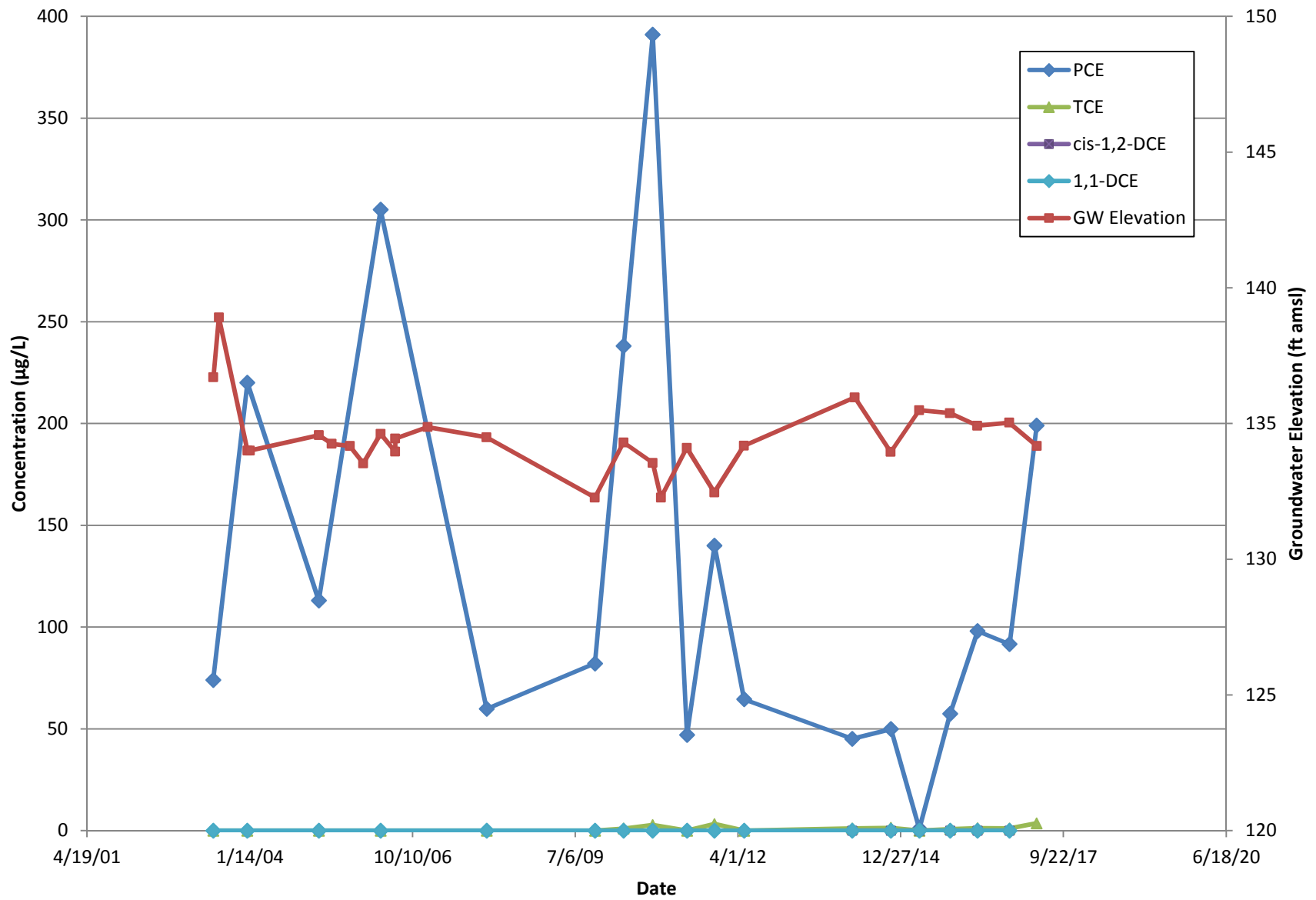
Notes:
NA - Not available NS - Not sampled

**APPENDIX D
TREND PLOTS**

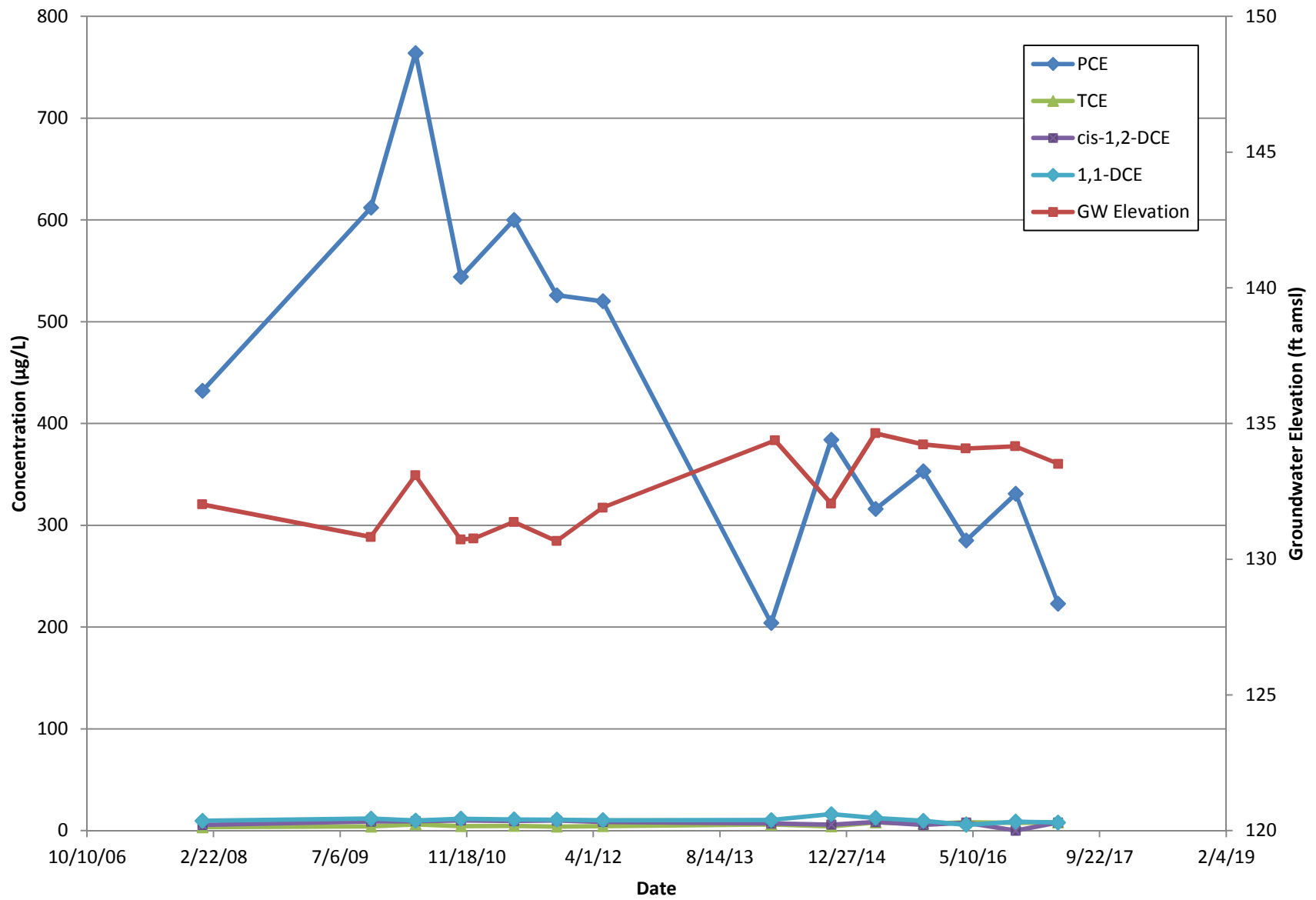
MW-1 Concentrations and Groundwater Elevation with Time



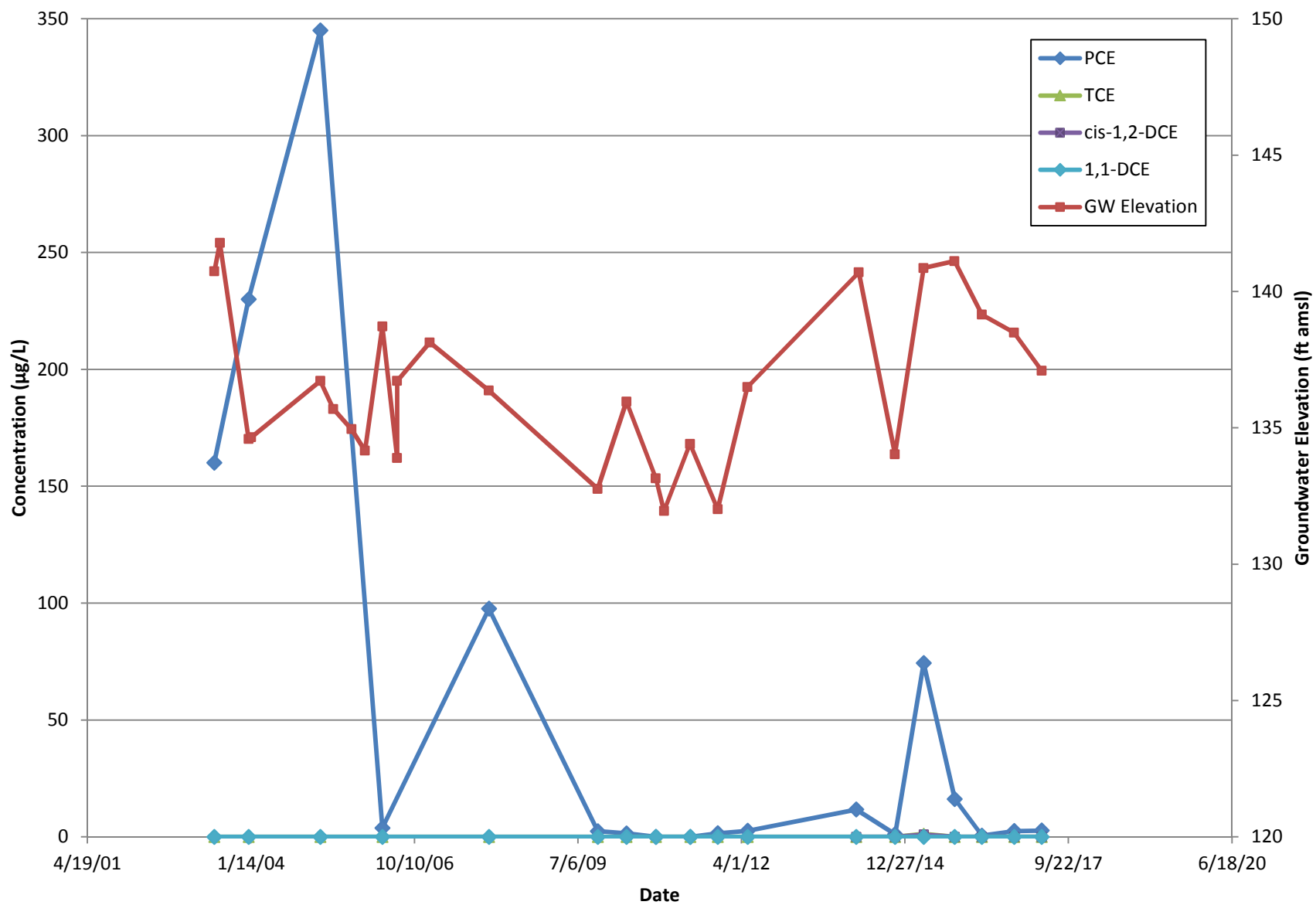
MW-3 Concentrations and Groundwater Elevation with Time



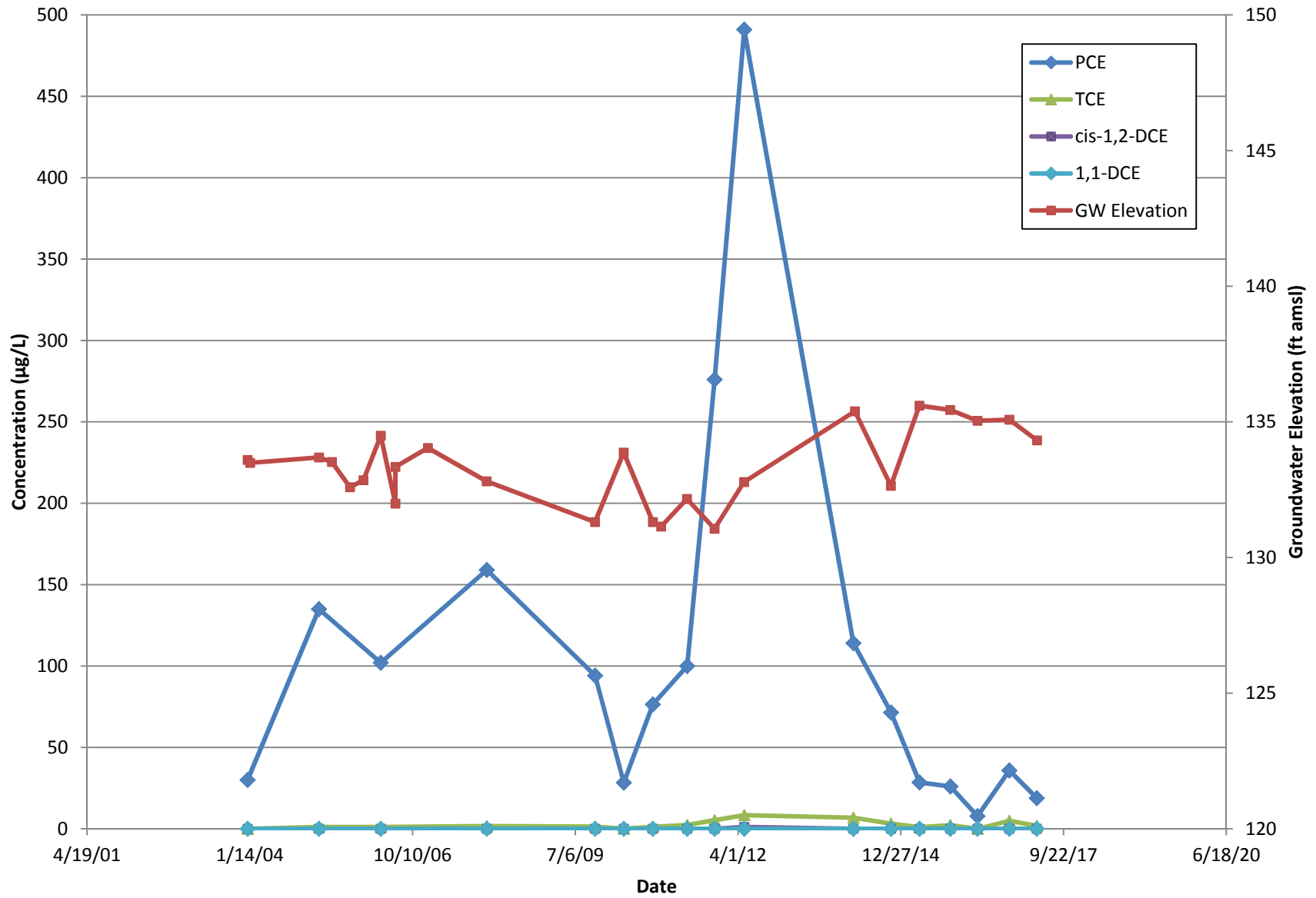
MW-3D Concentrations and Groundwater Elevation with Time



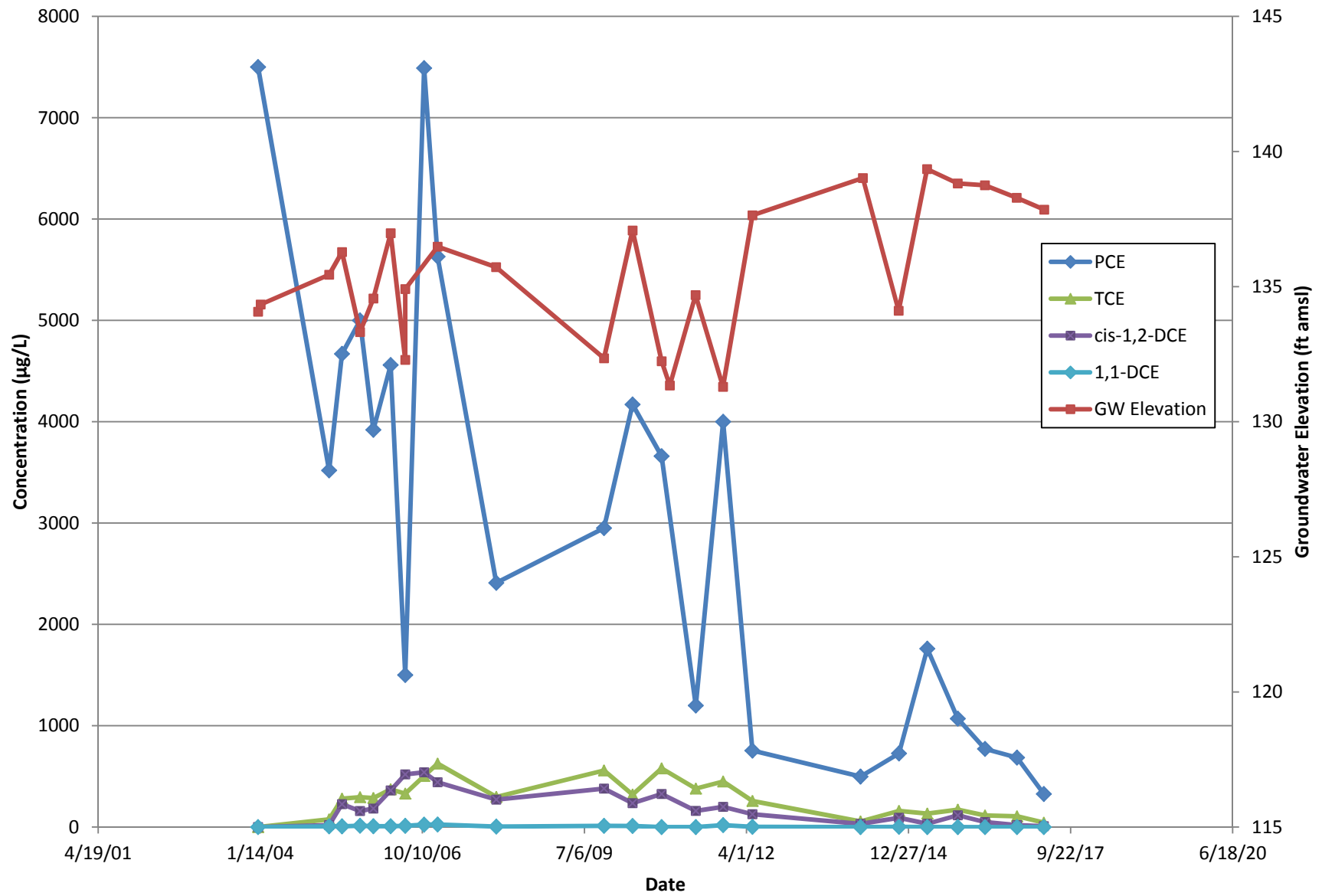
MW-5 Concentrations and Groundwater Elevation with Time



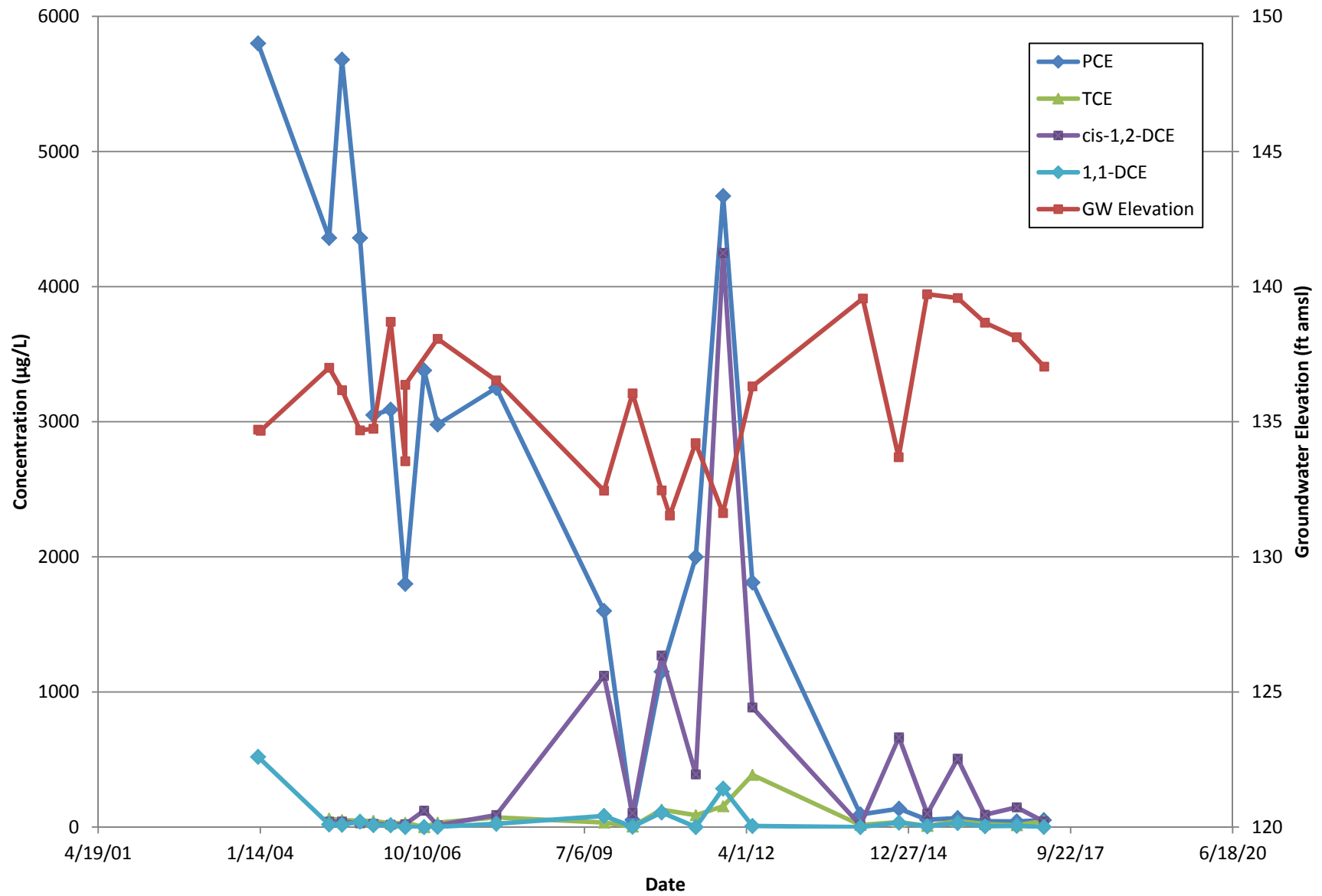
MW-8 Concentrations and Groundwater Elevation with Time



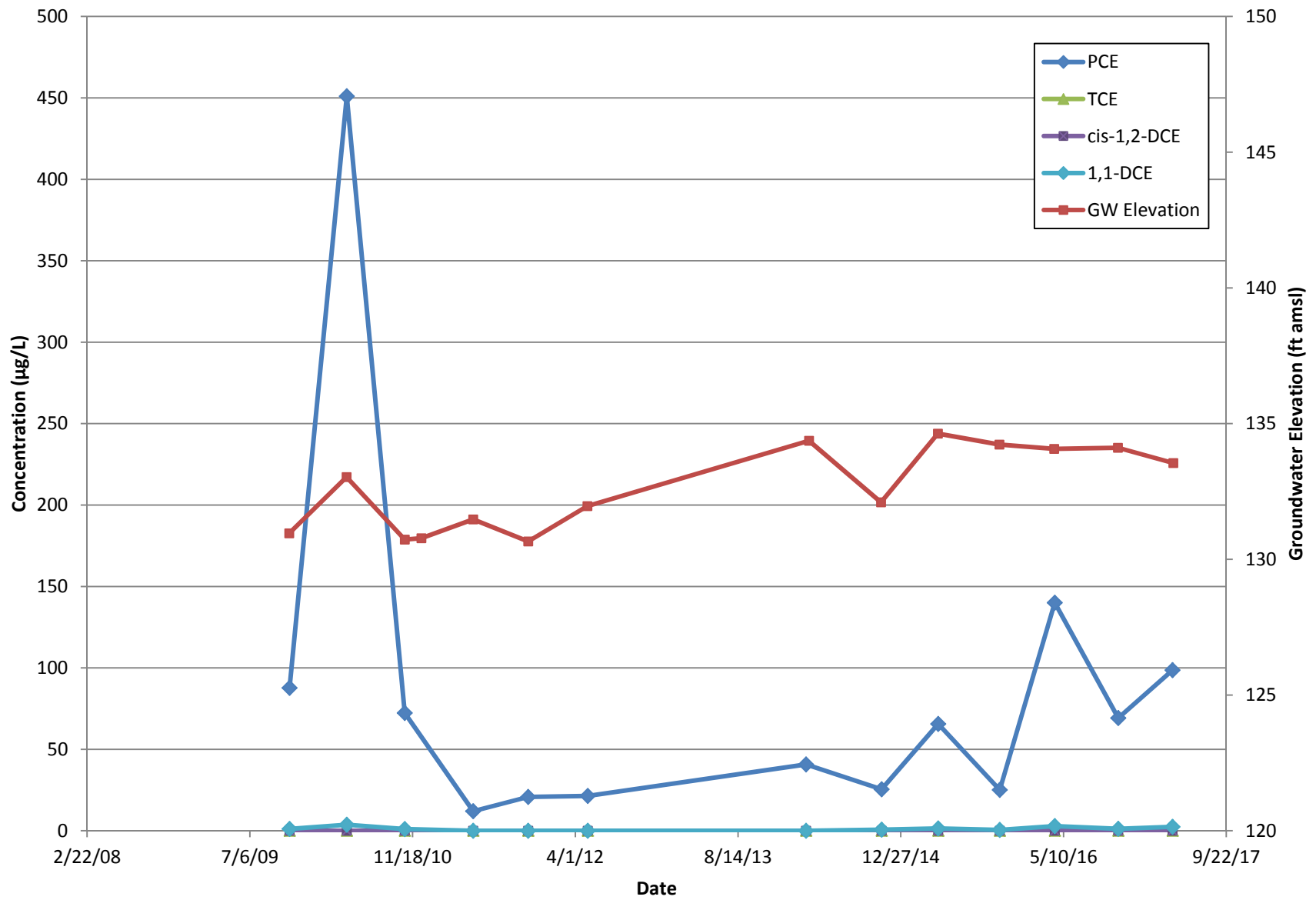
MW-9 Concentrations and Groundwater Elevation with Time



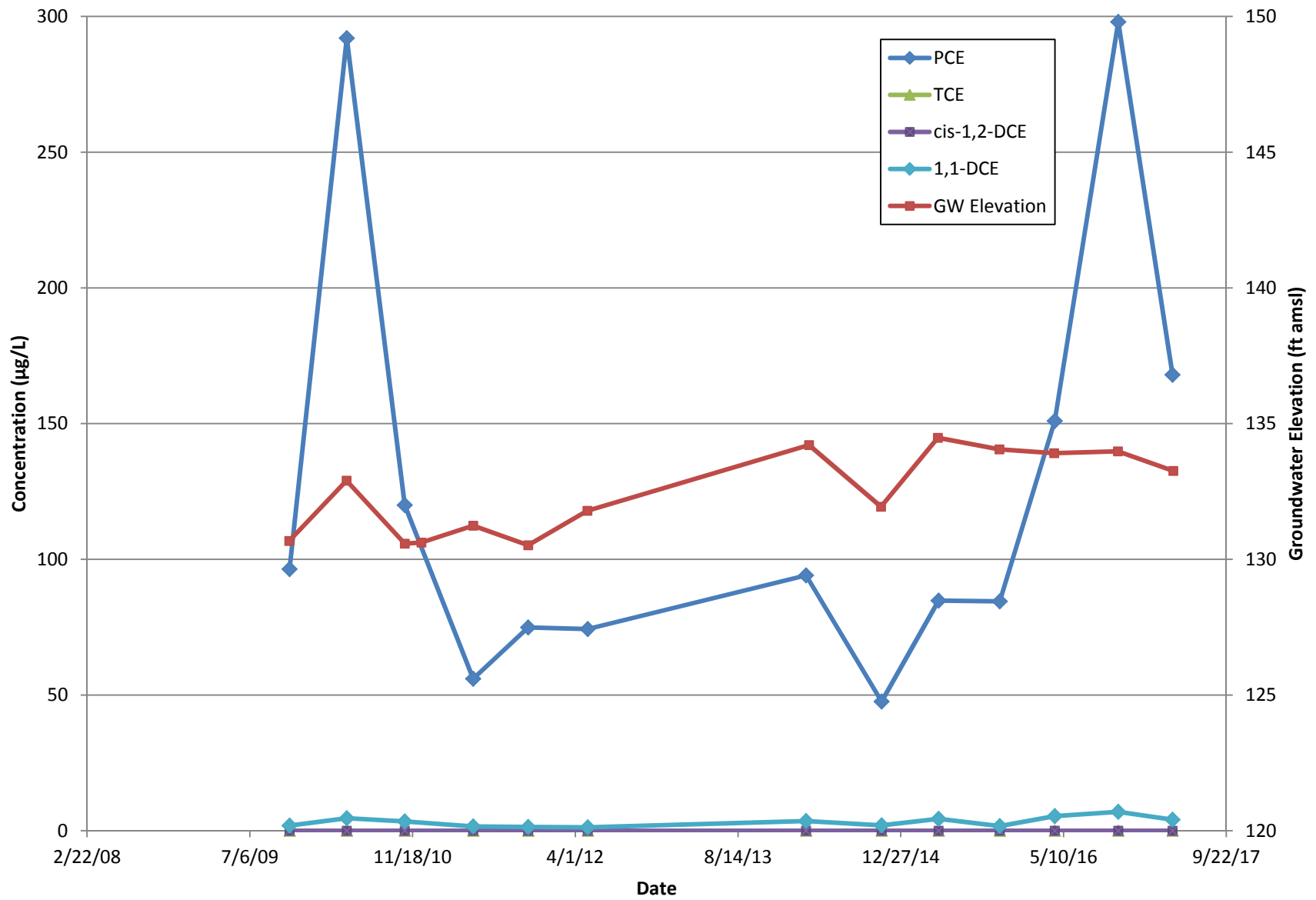
MW-10 Concentrations and Groundwater Elevation with Time



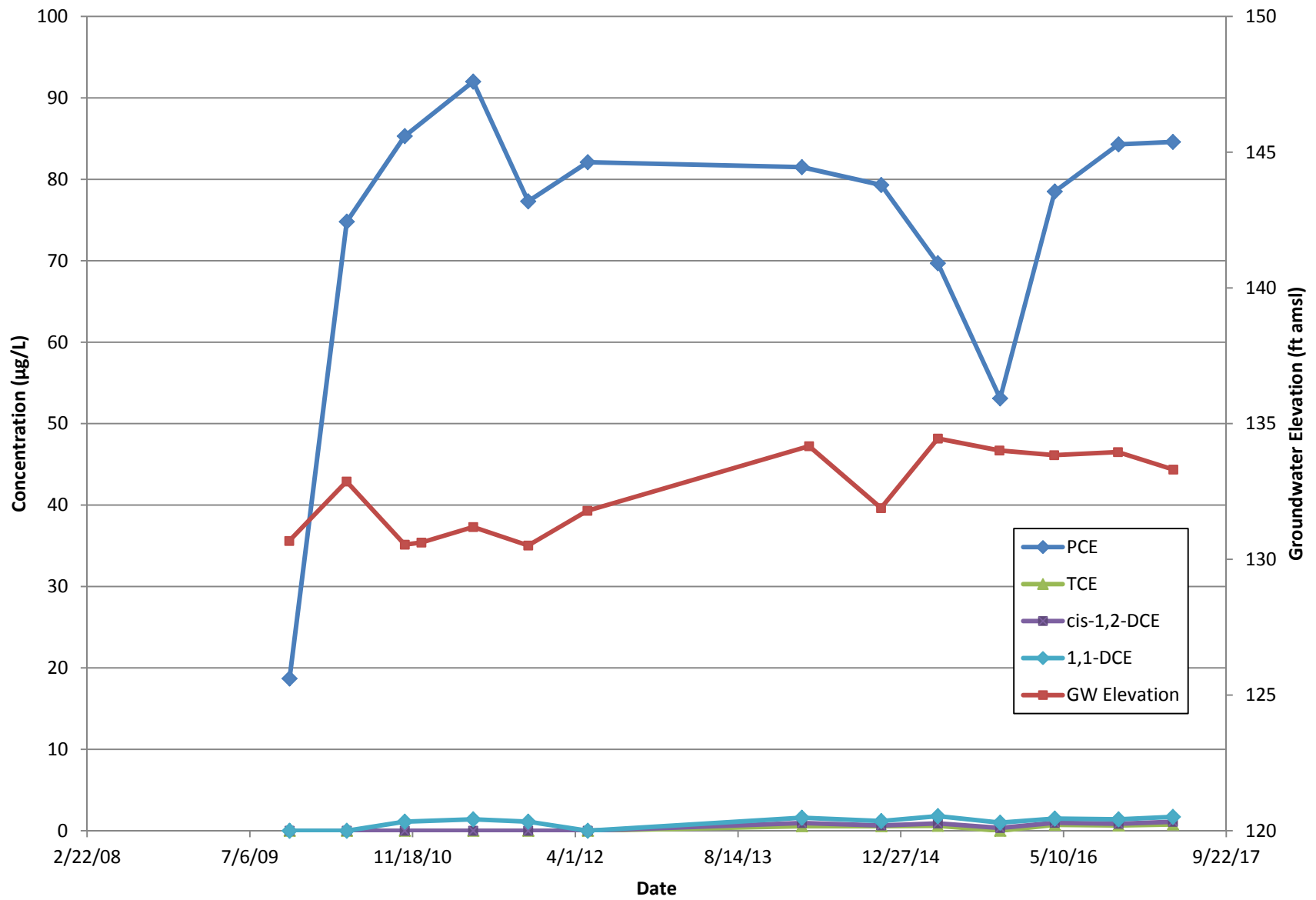
MW-12D Concentrations and Groundwater Elevation with Time



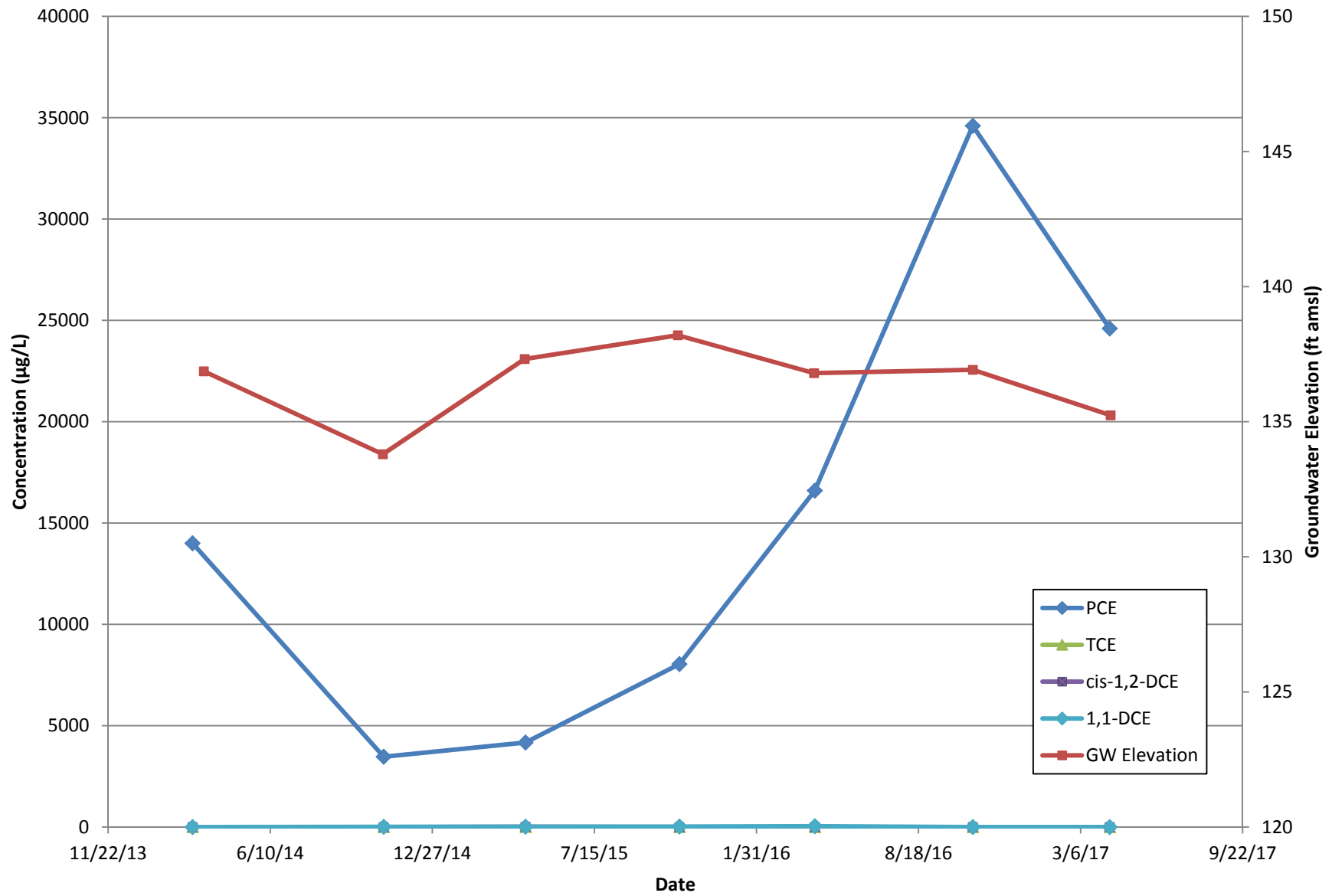
MW-13D Concentrations and Groundwater Elevation with Time



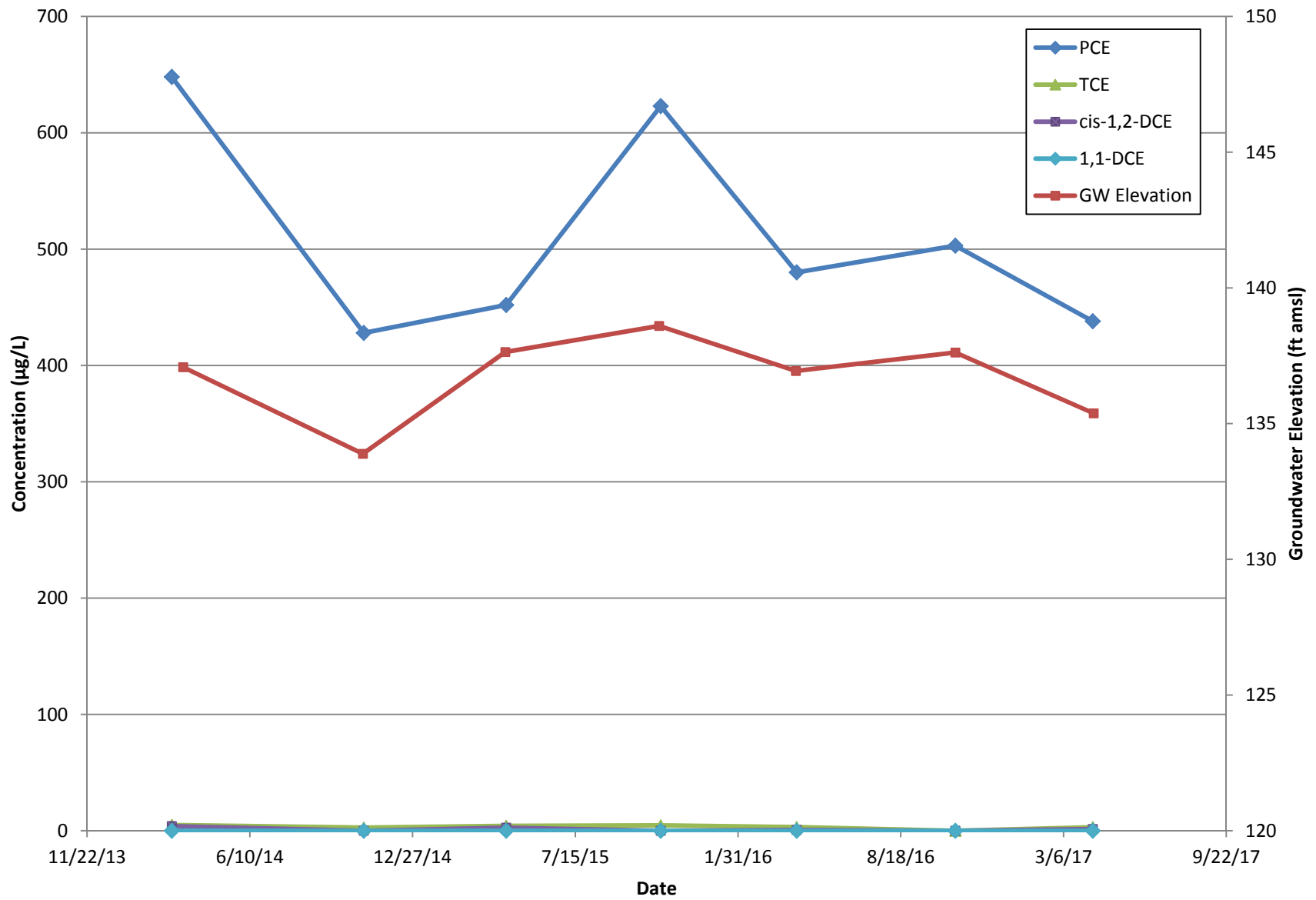
MW-14D Concentrations and Groundwater Elevation with Time



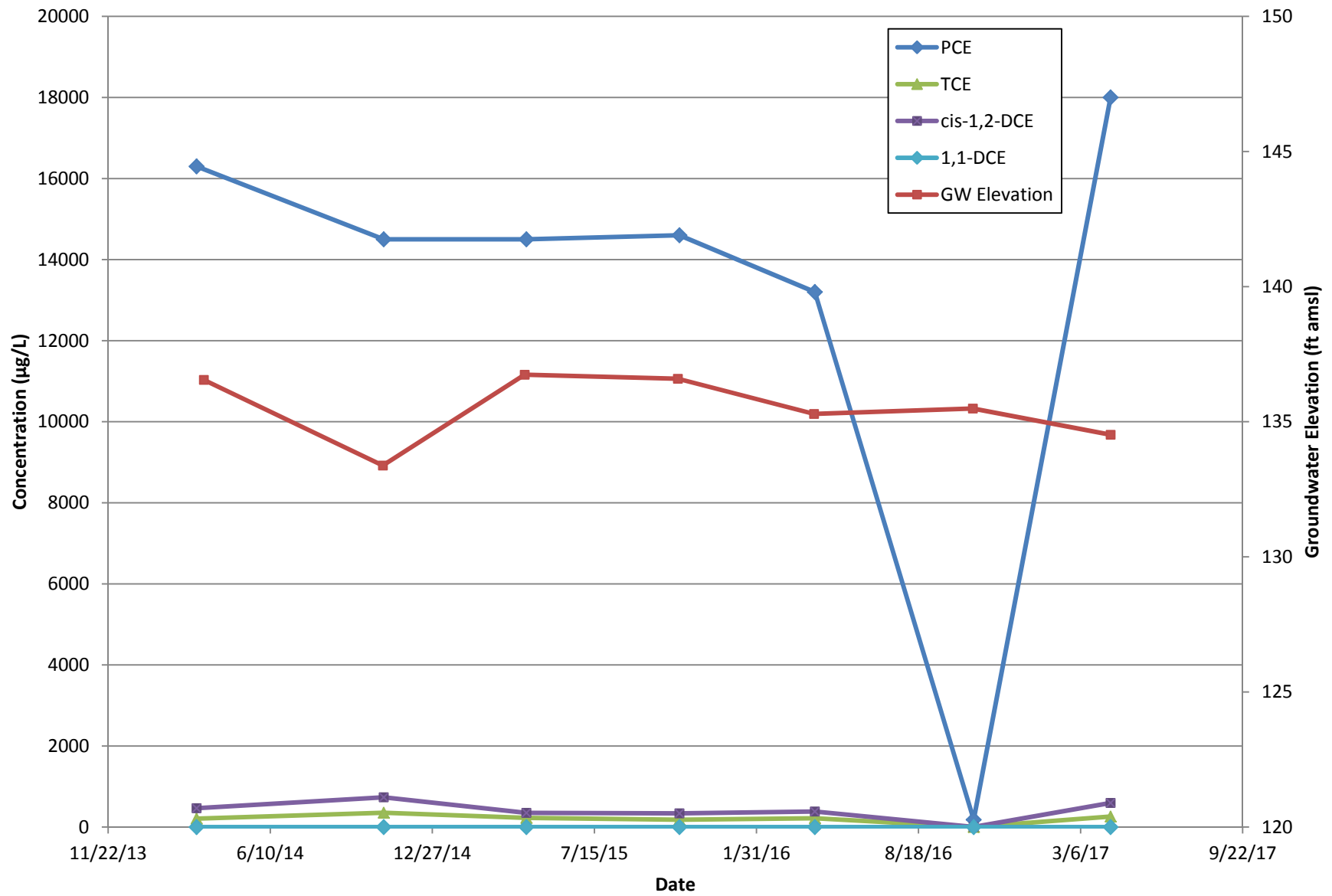
MW-19 Concentrations and Groundwater Elevation with Time



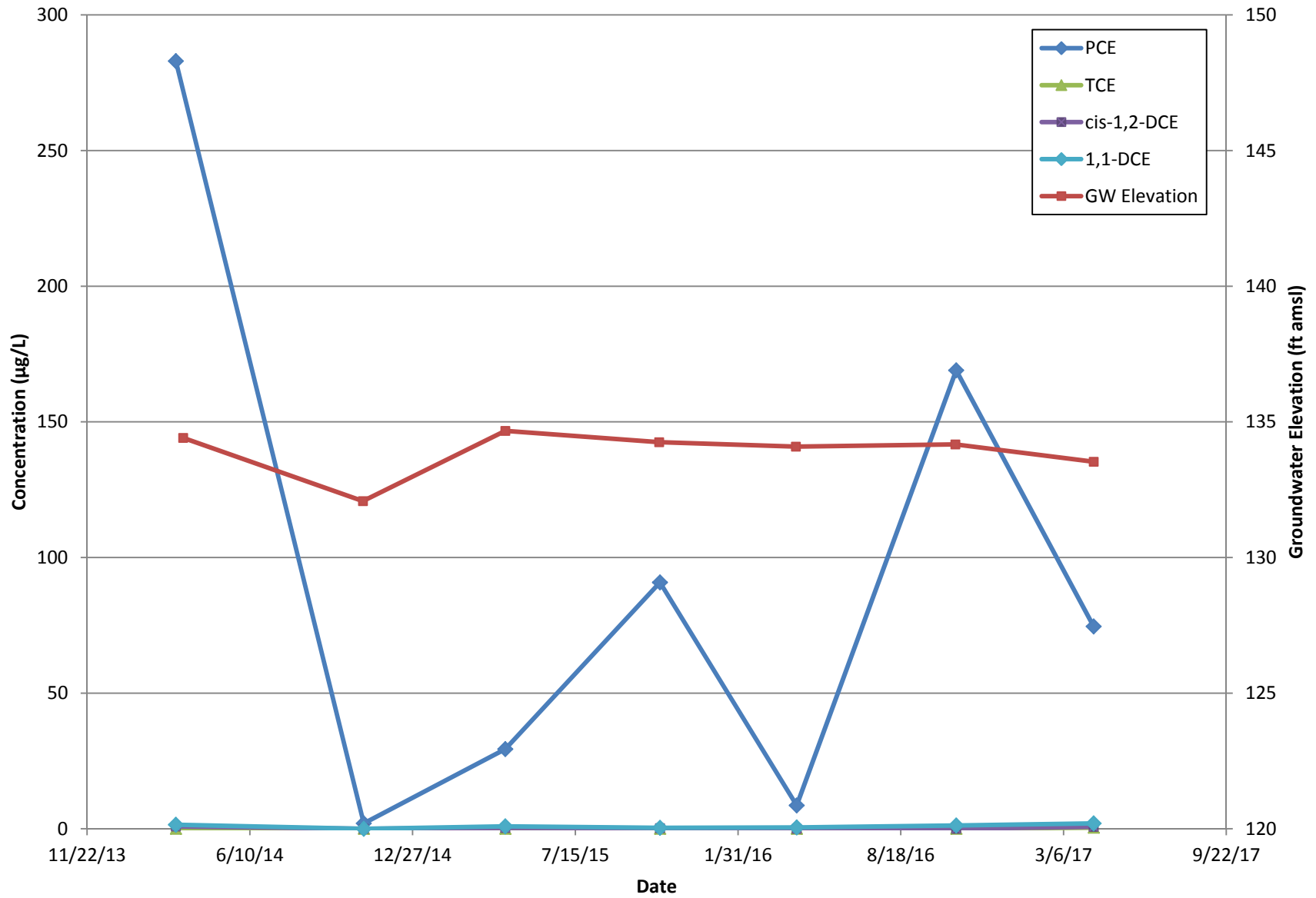
MW-20 Concentrations and Groundwater Elevation with Time



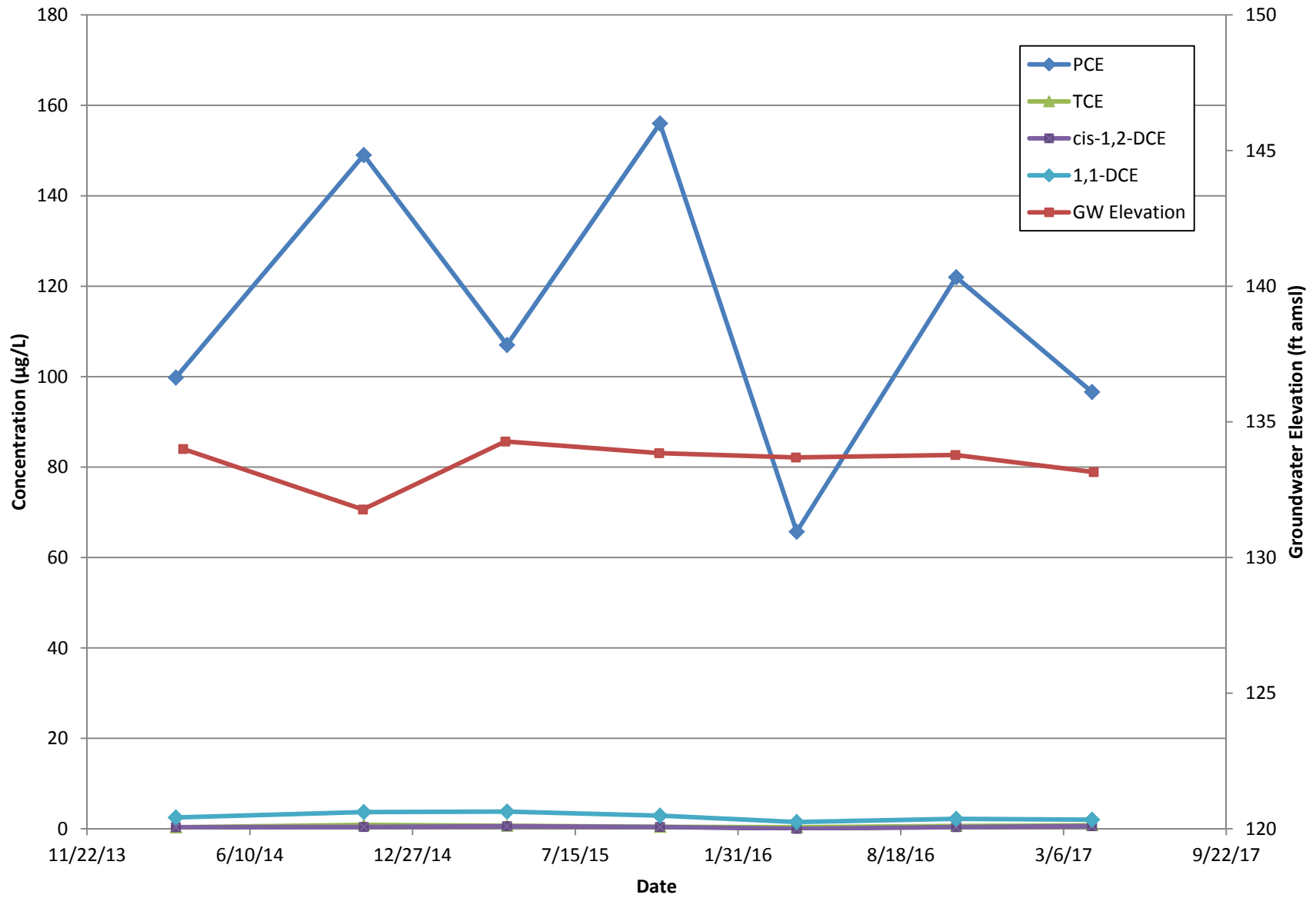
MW-21 Concentrations and Groundwater Elevation with Time



MW-21D Concentrations and Groundwater Elevation with Time



MW-22D Concentrations and Groundwater Elevation with Time



MW-24 Concentrations and Groundwater Elevation with Time

