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January 31, 2018

FEB 01 2018

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

**SITE ASSESSMENT,
REMEDIATION &
REVITALIZATION**

Re: Fall 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 Aerospace Systems (UTAS), AECOM is providing you one (1) hard copy and one (1) electronic copy of the Fall 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

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Project Manager
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cc: Mr. Bill Penn – United Technologies Corporation
Ms. Kanistha Coombs – Delavan Spray Technologies
Ms. Leslee Alexander, PG – AECOM
Project File 60314964

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Fall 2017 Semi-Annual Groundwater Monitoring Report

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

VCC 13-4762-RP

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FEB 01 2018

Prepared by:

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

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January 31, 2018

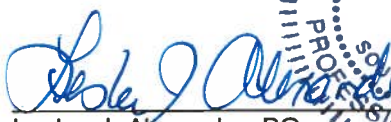
FALL 2017 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

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



January 31, 2018
Date

Reviewed by:


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



January 31, 2018
Date

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1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) has prepared this *Fall 2017 Semi-Annual Groundwater Monitoring Report* 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 fall 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 (Delavan; 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, May 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* (AECOM, September 2016), which included groundwater screening with temporary wells and permanent monitoring well installation, was approved by SCDHEC in correspondence dated October 31, 2016, and was implemented between March 27, 2017 and May 10, 2017. The results of the investigation, which are documented in the *Groundwater Delineation Report* (AECOM, June 2017), confirmed the presence of PCE concentrations greater than the MCL in the limestone aquifer monitoring wells ~3,200 feet south/southwest of the Site.

SCDHEC approved the *Groundwater Delineation Report* in correspondence dated June 26, 2017 and agreed with the report’s recommendation that additional delineation was needed for PCE in the limestone aquifer south/southwest of the monitoring well network. The *Limestone Aquifer Assessment Work Plan* was submitted to SCDHEC on October 13, 2017 to address these recommendations. Delavan and AECOM are coordinating with SCDHEC regarding potential next steps and revisions to the additional assessment activities proposed in the *Limestone Aquifer Assessment Work Plan* (AECOM, October 2017).

In addition, Delavan feels that it is prudent to address elevated concentrations of chlorinated VOCs (cVOCs) in residual “source areas” beneath the Facility, specifically where there are “hot spots” in shallow groundwater in the vicinity of the former PCE degreasers and the former PCE underground storage tank. As such, AECOM, on behalf of Delavan, submitted the *Focused Feasibility Study* to SCDHEC on July 12, 2017. This report was not requested by SCDHEC and was submitted pre-emptively so that, with SCDHEC concurrence, Delavan could begin steps to mitigate source areas while delineation is on-going in the limestone aquifer down-gradient of the Facility. Once the *Focused Feasibility Study* is approved by SCDHEC, a work plan to perform a pilot study of the selected technology will be submitted.

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

Fall 2017 semi-annual sampling activities were completed by AECOM personnel between October 16, 2017 and October 18, 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, January 2017).

Sampling activities included:

- Groundwater level measurements were collected from all 41 existing monitoring wells;
- Groundwater samples were collected from 41 existing wells (Figure 2) using low-flow sampling techniques. Groundwater indicator parameters were collected from each well and all 41 samples were submitted for analysis of VOCs;
- 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 October 16, 2017, prior to the start of sampling activities. 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. 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 October 16, 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 fall 2017 water levels within the shallow aquifer zone occur between 130.48 and 135.54 feet in elevation. Shallow water levels were 1.04 feet to 6.01 feet lower than of those collected during the fall 2016 groundwater monitoring event (October 2016). Compared to water levels measured during the spring 2017 groundwater monitoring event (April 2017), October 2017 water levels are generally 0.18 feet to 4.69 feet lower. Shallow flow patterns resulting from the fall 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-7, MW-11, and MW-17. Groundwater levels appear depressed at MW-8, MW-10, MW-18 and MW-21. 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 and MW-20 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 wells on the Kinsey property to the west of the Site indicate the presence of an isolated groundwater high at MW-27, consistent with the findings of the spring 2017 groundwater monitoring event.

Based on the October 2017 water level elevations within the deeper limestone aquifer zone, the potentiometric surface occurs between 130.09 feet and 132.47 feet in elevation (Figure 4). Groundwater elevations in October 2017 were 1.66 feet to 2.30 feet lower than those measured during the fall 2016 groundwater monitoring event (October 2016) and 0.57 feet to 1.70 feet lower than those collected during the spring 2017 groundwater monitoring event (April 2017). 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 23 groundwater samples collected from shallow aquifer zone groundwater during the fall 2017 semi-annual monitoring, eight VOCs (PCE, TCE, cis-1,2-DCE, trans-1,2-dichloroethene [trans-1,2-DCE], 1,1-DCE, 1,1,1-trichloroethane [1,1,1-TCA], chloroform, and toluene) were detected (Table 3). Five of these compounds, (PCE, TCE, cis-1,2-DCE, 1,1-DCE, and chloroform) 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 (14 detections) and groundwater concentrations exceeded the MCL (5 micrograms per liter [µg/L]) in nine shallow monitoring wells (MW-1, MW-3, MW-8, MW-9, MW-10, MW-19, MW-20, MW-21, and MW-24; Figure 5). The highest concentration was detected near Former PCE UST in MW-21 (23,900 µg/L). Elevated but lower concentrations of PCE were detected in shallow aquifer groundwater in the vicinity of the Former PCE Degreasers in MW-19 (18,700 µg/L) and MW-20 (312 µg/L), in MW-24 (1,600 µg/L) along the western property boundary, in MW-1 (835 µg/L) adjacent to the Former PCE Secondary Containment Area, in MW-9 (646 µg/L) and MW-10 (149 µg/L) located in the wooded areas of interest, in MW-3 (77.3 µg/L) downgradient of the Former PCE Secondary Containment Area, and in MW-8 (47.9 µg/L) located in the asphalt parking lot northeast of the main Facility building.

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 seven shallow monitoring wells and exceeded the MCL (5 µg/L) in four groundwater samples – MW-1 (23.2 µg/L), MW-9 (157 µg/L), MW-10 (70.9 µg/L), and MW-21 (252 µg/L).

Cis-1,2-DCE was detected in seven well locations and exceeded the MCL (70 µg/L) in four monitoring wells – MW-1 (124 µg/L), MW-9 (109 µg/L), MW-10 (350 µg/L), and MW-21 (573 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 one shallow aquifer zone groundwater sample. The detection exceeded the MCL for 1,1-DCE (7 µg/L) in monitoring well MW-10 (23.7 µg /L). Chloroform was detected in three shallow aquifer monitoring wells and concentrations exceeded the MCL (80 µg/L) in samples from MW-19 (299 µg/L) and MW-21 (292 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 October 2017 (i.e., MW-15, MW-16, and MW-21) and not tolerated in six shallow monitoring wells (MW-5, -7, -14, -20, -24, and -27). ORP is not favorable in any location. pH was outside the favorable range, except in down-gradient off-site wells MWW-16, MW-28 and MW-29. The low pH and elevated ORP levels observed over much of the shallow aquifer zone may inhibit natural degradation of chlorinated VOCs.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	3.90	6.72	4.61	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.40	6.69	2.82	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
ORP (mV)	110.7	417.1	308.7	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely

* - 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, decreased to 326 µg/L in June 2017, with a current concentration of 646 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 149 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 835 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 J µg/L in April 2015.

The PCE concentration in MW-3 then exhibited an increasing trend, rising to 199 µg/L. The current concentration has decreased to the value of 77.3 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 was reported to have decreased to 181 µg/L during the October 2016 event, which appears anomalously low, as the current concentration for this well is similar to previous results, but represents a new high concentration at 23,900 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 18,700 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, with a current concentration of 1,600 µg/L. This may be due to migration of mass from the hot-spot near MW-19, but it is too early in the long term monitoring program to tell for certain. Other wells, such MW-20, located near the southern-most Former PCE Degreaser, exhibit detected PCE concentration trends that seem to 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

Eighteen groundwater samples were collected from deeper aquifer zone groundwater during the fall 2017 monitoring event, resulting in five VOCs (1,1,1-TCA, 1,1-DCE, cis-1,2-DCE, PCE, and TCE) that were detected (Table 3). Of these compounds, PCE 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-32DR) and groundwater concentrations exceeded the MCL (5 µg/L) in all 11 of these samples (Figure 8). 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 (290 µg/L at MW-3D). PCE concentrations exceeded the MCL (5 µg/L) in off-Site down-gradient wells MW-14D (63.4 µg/L), MW-22D (130 µg/L), MW-25D (116 µg/L), MW-26D (76 µg/L), MW-30D (88.1 µg/L), MW-31D (161 µg/L), and MW-32DR (26.4 µg/L).

TCE concentrations were detected in nine samples from the deeper aquifer zone in fall 2017, but none of the detected concentrations exceeded the MCL of 5 µg/L (Figure 9). TCE was also detected in off-Site

down-gradient wells MW-14D, MW-22D, MW-25D, MW-26D, MW-30D, MW-31D, and MW-32DR but at low concentrations below the MCL.

Cis-1,2-DCE was detected in nine samples from deeper aquifer zone groundwater during the fall 2017 monitoring event (MW-3D, MW-14D, MW-21D, MW-22D, MW-25D, MW-26D, MW-30D, MW-31D, MW-32DR), but none of the detected concentrations exceeded the MCL for cis-1,2-DCE (70 µg/L; Figure 10).

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-32DR). The detected concentration in MW-3D (8.8 µg/L) exceeded the MCL for 1,1-DCE (7 µg/L).

Other than PCE, the groundwater contaminant plumes in the deeper limestone 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 in all deeper limestone aquifer 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, except for MW-12D (9.25 standard units [S.U]). ORP values are also favorable in down-gradient wells MW-9D, MW-21D, and MW-30D. Dissolved oxygen values were optimal at monitoring wells MW-9D, MW-14D, and MW-21D, but were not tolerated at deep wells MW-12D and MW-13D.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	6.88	9.25	7.61	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.12	5.43	2.40	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
ORP (mV)	-98.6	284.7	144.9	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely

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

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.

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 290 µg/L. Similarly, PCE concentrations in MW-21D have decreased from 283 µg/L in March 2014 to 72.9 µg/L in October 2017. In other wells, such as down-gradient wells MW-14D, MW-25D, and MW-26D, PCE concentrations have remained fairly consistent since installation of the wells. 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 84 µg/L. The recent increases in PCE in the deeper, down-gradient monitoring wells (e.g., MW-12D and MW-13D) 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 exhibit trends that correspond to water level fluctuations, such as with MW-13D concentrations through April 2015 (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 Delavan-approved disposal facility. 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 non-detected results of benzoic acid and phenol were qualified as “/R/c” for sample IDW-1 due to low recovery in the associated laboratory control sample. These qualifiers indicate the non-detections of these compounds are biased low and should be rejected. 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.

With the exception of non-detected results of benzoic acid and phenol in IDW-1, the QC excursions encountered during the validation of this data set did not result in the rejection of any data. Therefore, the remaining data associated with this laboratory batch 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. 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.

5.0 CONCLUSIONS AND RECOMMENDATIONS

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

- Shallow water levels were up to 6.0 feet lower than those collected during the fall 2016 groundwater monitoring event (October 2016) and approximately 0.2 feet to 4.7 feet lower than those measured during the spring 2017 groundwater monitoring event (April 2017). 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 spring 2017 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. There were no VOCs detected above their MCL in off-site monitoring wells screened in the shallow aquifer unit.
- 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-26D and MW-32DR. 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 spring 2017 monitoring event:
 - o MW-1 (in the vicinity of the Former PCE Secondary Containment);
 - o MW-8 (northeast of the Facility in the asphalt parking lot);
 - o MW-9 and MW-10 (in the Wooded Areas of Interest);
 - o MW-21 (located immediately downgradient from the Former PCE UST); and
 - o MW-22D and MW-31D (located off-Site on the forested property south/southwest of the Site).

Some of these increases (e.g., MW-1 and MW-21) may be a lagging response/migration of concentrations after recent increases at the hot spot at MW-19.

- PCE concentrations decreased compared to the spring 2017 monitoring event in groundwater samples from monitoring wells MW-3, MW-12D, MW-13D, MW-19, MW-20, MW-24, and MW-29. For some of these wells (i.e., MW-12D and MW-24), this may be as a result of normal seasonal

fluctuation that has been observed in the data. However, many of these, such as MW-20, have decreased from historic high concentrations and appear to be on a stable or decreasing trend.

- The detected concentrations of PCE degradation products (i.e., TCE and cis-1,2-DCE) were similar to those detected during the spring 2017 semi-annual groundwater monitoring event.
- VC has not been detected in any Site monitoring wells since October 2015 and was not detected in any monitoring wells during the fall 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, MW-14D and MW-21D, exhibit mixed behavior or no trend with regard to VOC and water level trends. The cause for the observed trends is not completely clear and is complicated by the residual VOC 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). Delavan and AECOM recently completed a *Focused Feasibility Study Report* (AECOM, June 2017) to screen remedial alternatives to treat the residual source areas beneath the building. While AECOM and Delavan acknowledge that it is premature to complete a feasibility study for the entire Site before the PCE 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 and investigations conducted between in 2014 and 2017 revealed data gaps in the delineation of the deeper limestone aquifer groundwater plumes associated with the Site. The *Limestone Aquifer Assessment Work Plan* was submitted to SCDHEC in October 2017 to address these data gaps and assess deeper limestone aquifer groundwater south/southwest of the existing groundwater monitoring network. Delavan and AECOM are coordinating with SCDHEC regarding additional assessment activities and any necessary revisions to the *Limestone Aquifer Assessment Work Plan* (AECOM, October 2017).

In accordance with the monitoring requirement of the VCC, the next semi-annual sampling event is scheduled to occur in April 2018. The proposed monitoring plan for 2018 is presented in Table 7. Groundwater monitoring will be conducted in accordance with the proposed plan pending approval from SCDHEC.

6.0 REFERENCES

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- H&H, August 1, 2013, *Remedial Investigation Work Plan, Delavan Spray Technologies Site, Bamberg, South Carolina.*
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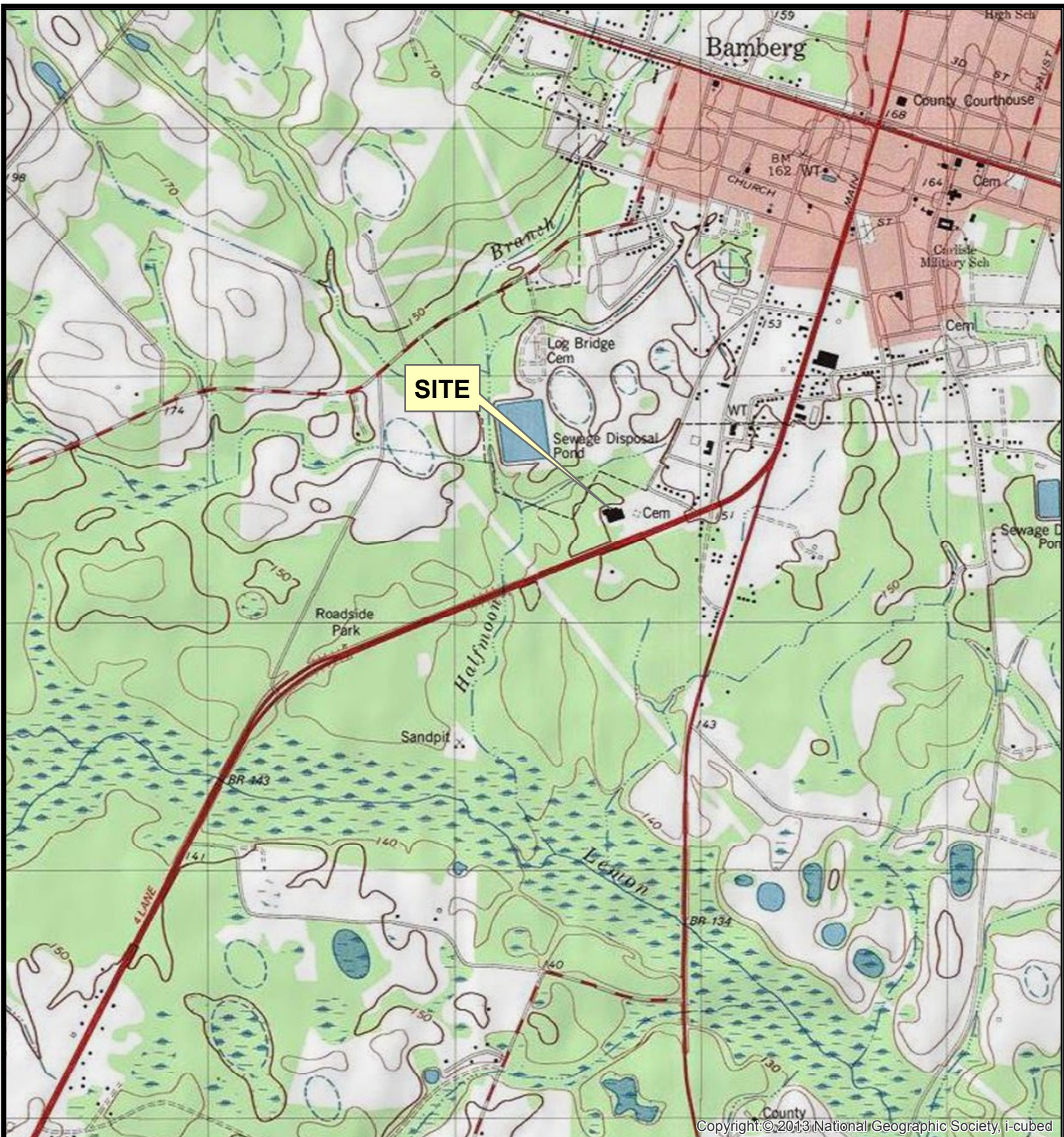
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USEPA, 1998. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water.*

FIGURES



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0 500 1,000 2,000 3,000 4,000 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

Delavan Spray Technologies Site
Bamberg, South Carolina

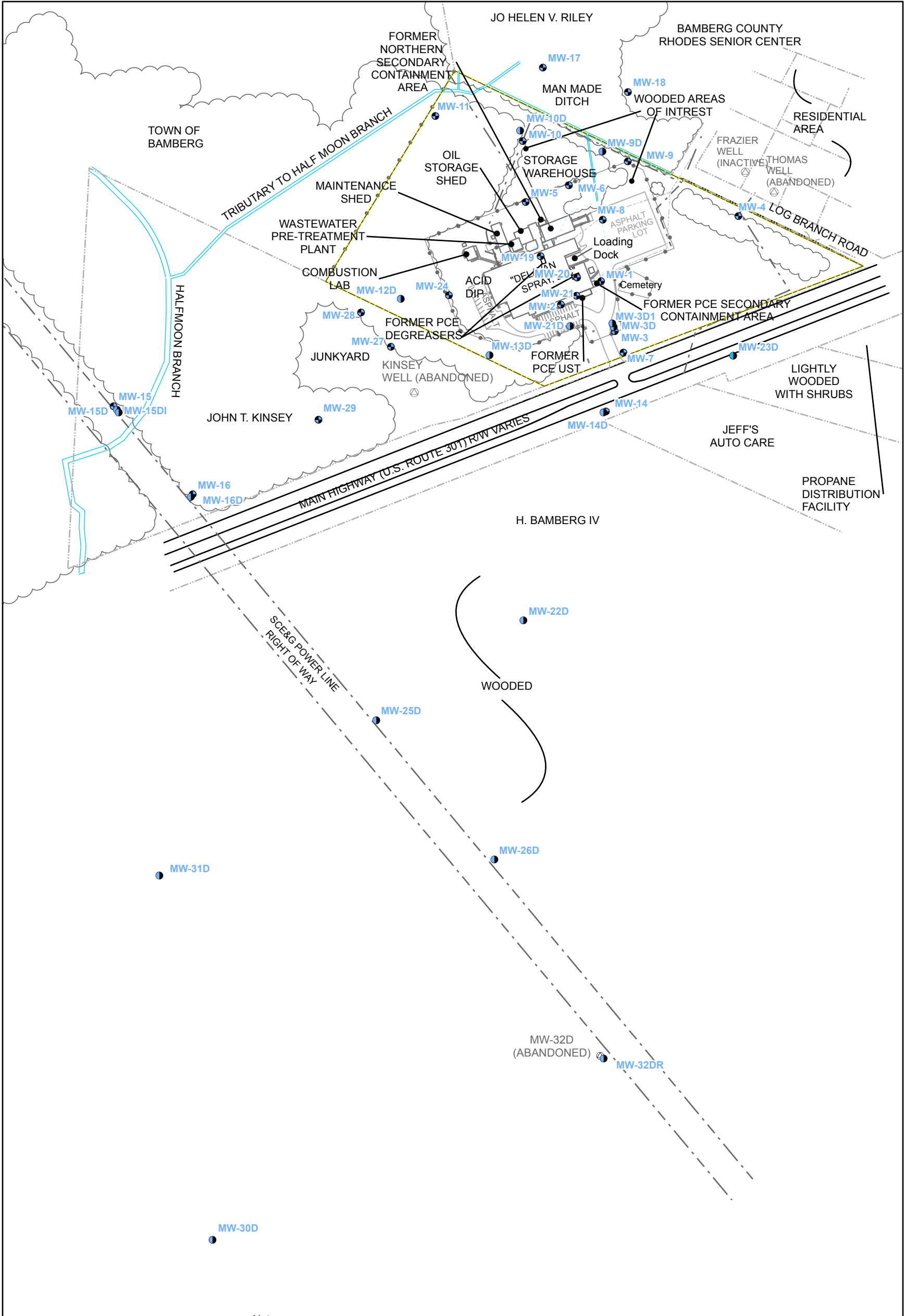
Site Location Map

Project No.
60314964

Prepared by
K. Clark

Date
January 2018

Figure 1



Legend

- ABANDONED OR INACTIVE WELL
- DEEP WELL - SAMPLED IN OCTOBER 2017
- SHALLOW WELL - SAMPLED IN OCTOBER 2017
- DRAINAGE
- FENCE LINE
- PROPERTY BOUNDARY
- OVERHEAD POWER LINE
- ROAD
- SANITARY SEWER LINE
- STORM DRAIN
- SUBJECT PROPERTY BOUNDARY

Notes:

- H&H - Hart & Hickman
RI - Remedial Investigation
- Base map obtained from surveys prepared by Edisto Engineers & Surveyors, Inc. (dated 6/3/2011 and 4/14/2014) and from Work Plan maps provided by H&H (August 2013).
 - 2012 sample locations were surveyed on 8/28/2012 and RI sample locations were surveyed on 3/20/2014. Post RI assessment locations were surveyed on 1/26/2016. Groundwater delineation locations were surveyed on 5/10/2017

0 250 500 750 Feet

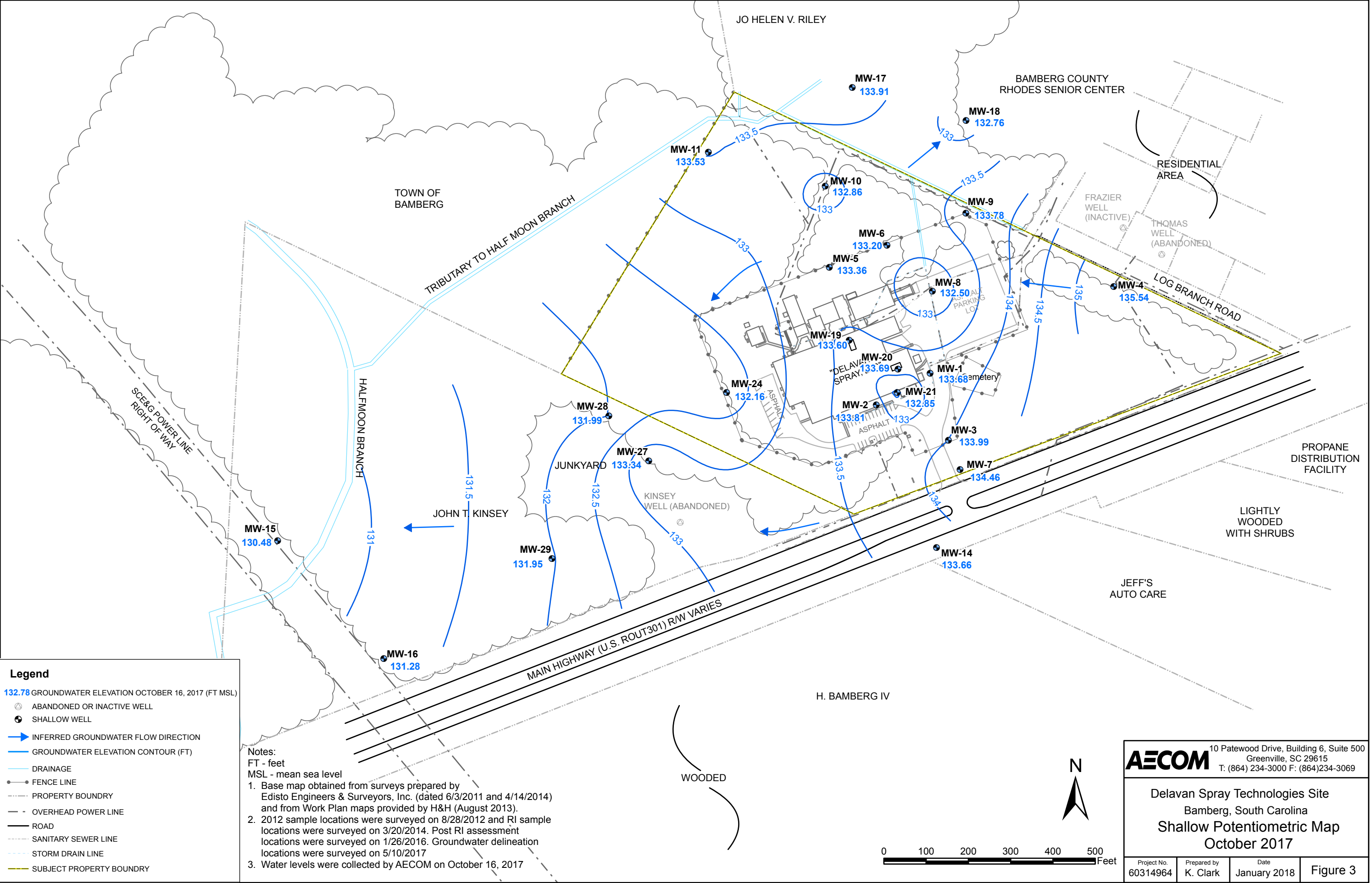


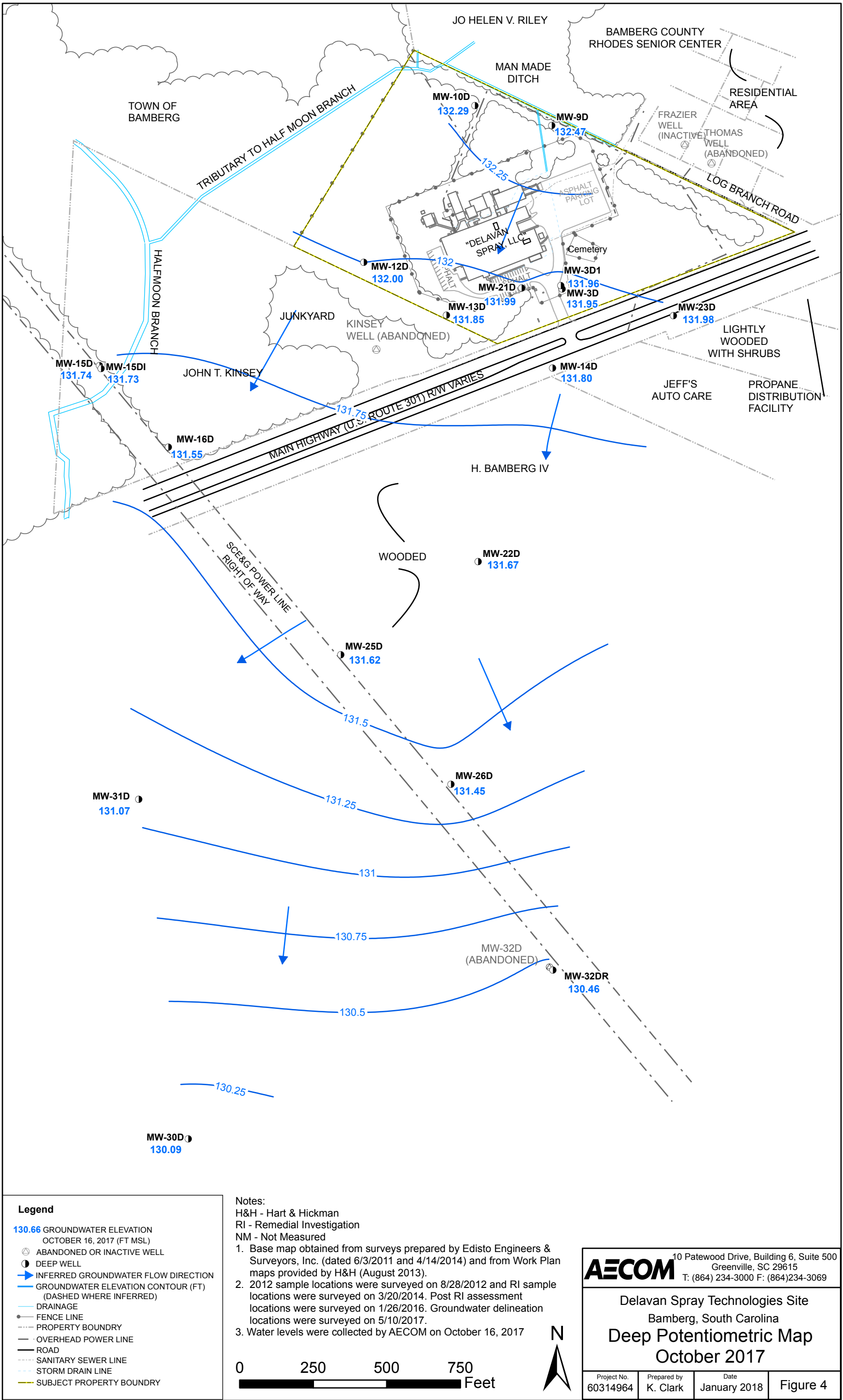
AECOM

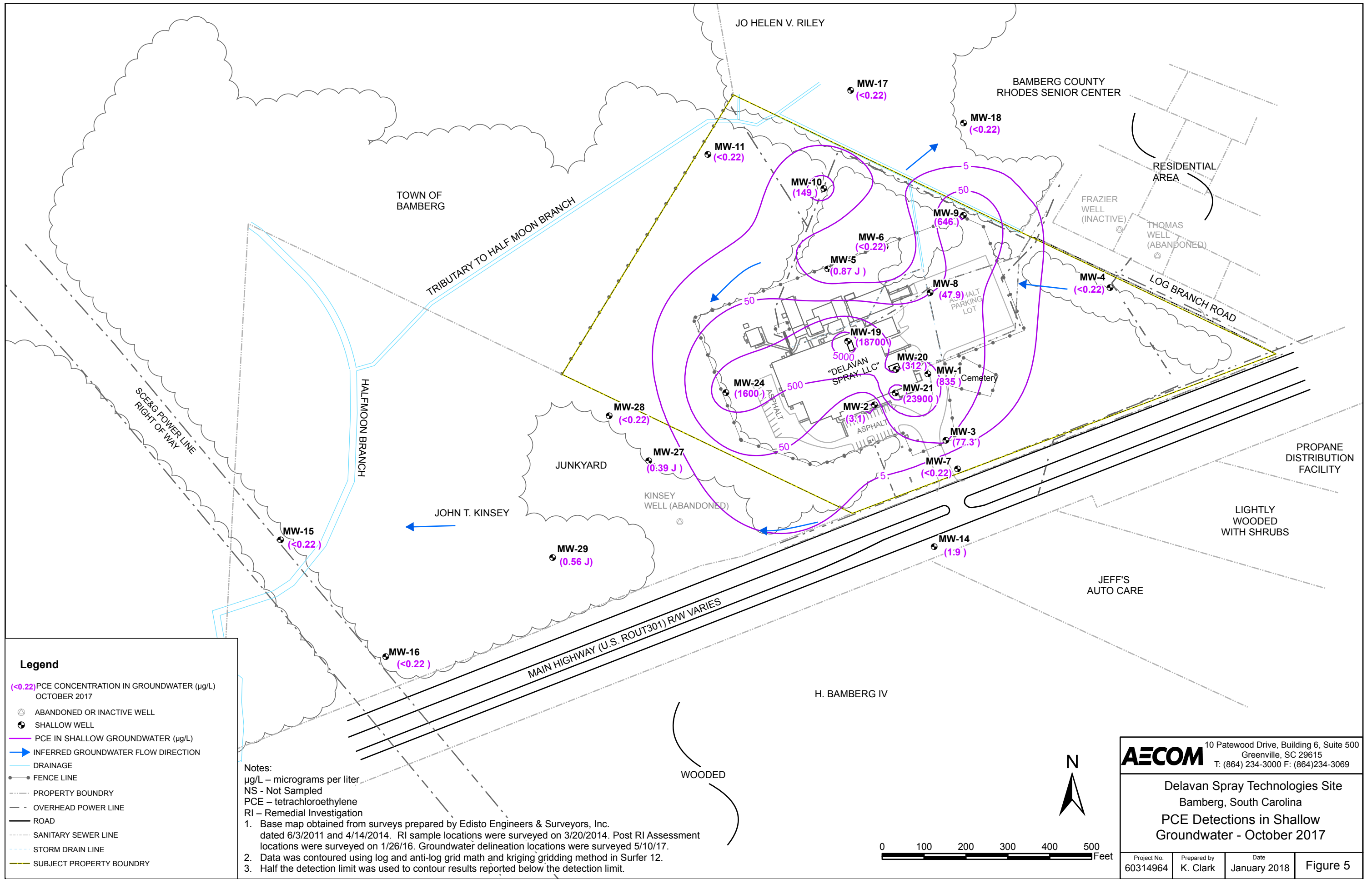
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Greenville, SC 29615
T: (864) 234-3000 F: (864)234-3069

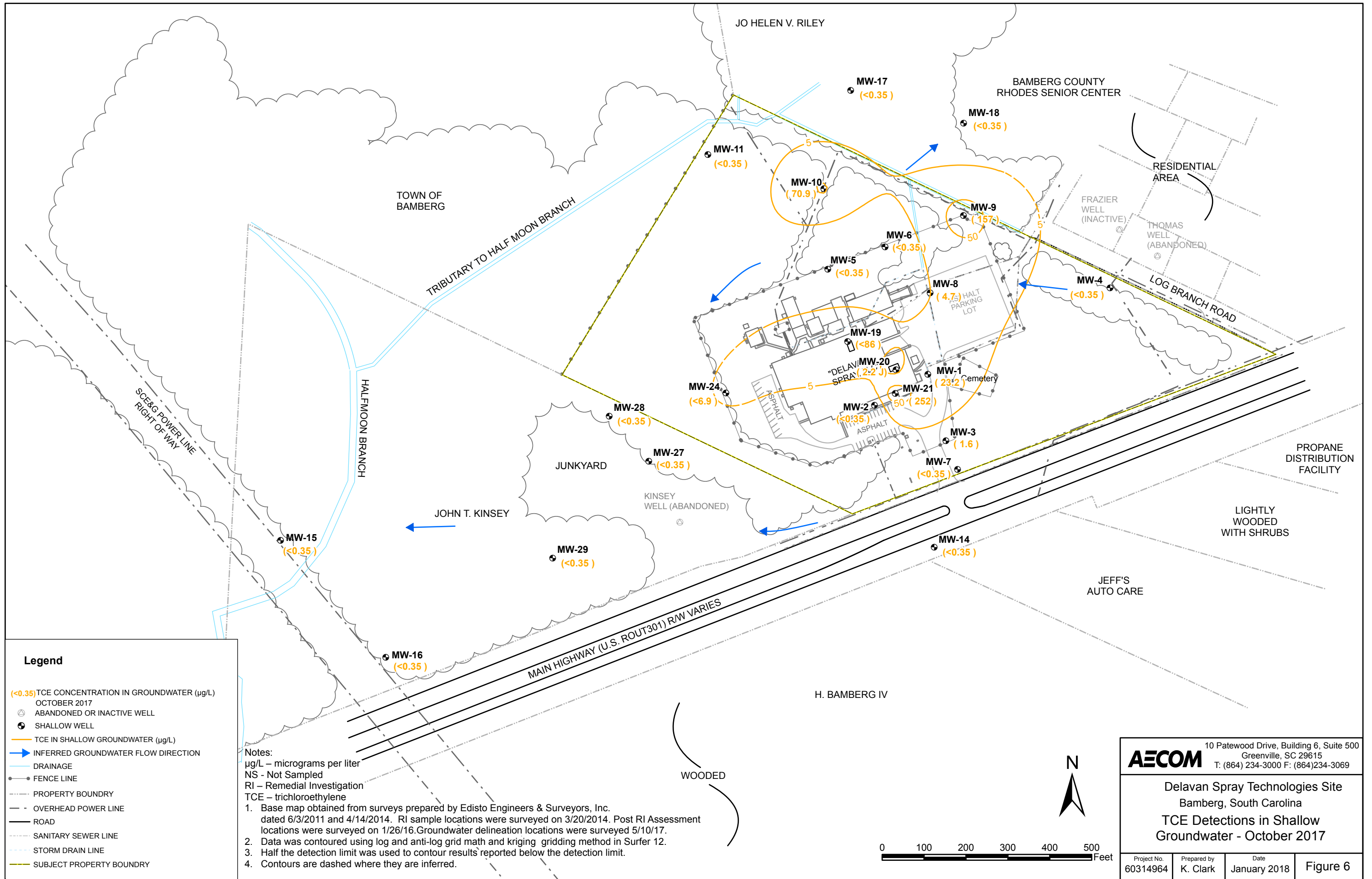
Delavan Spray Technologies Site
Bamberg, South Carolina
Site Layout Map

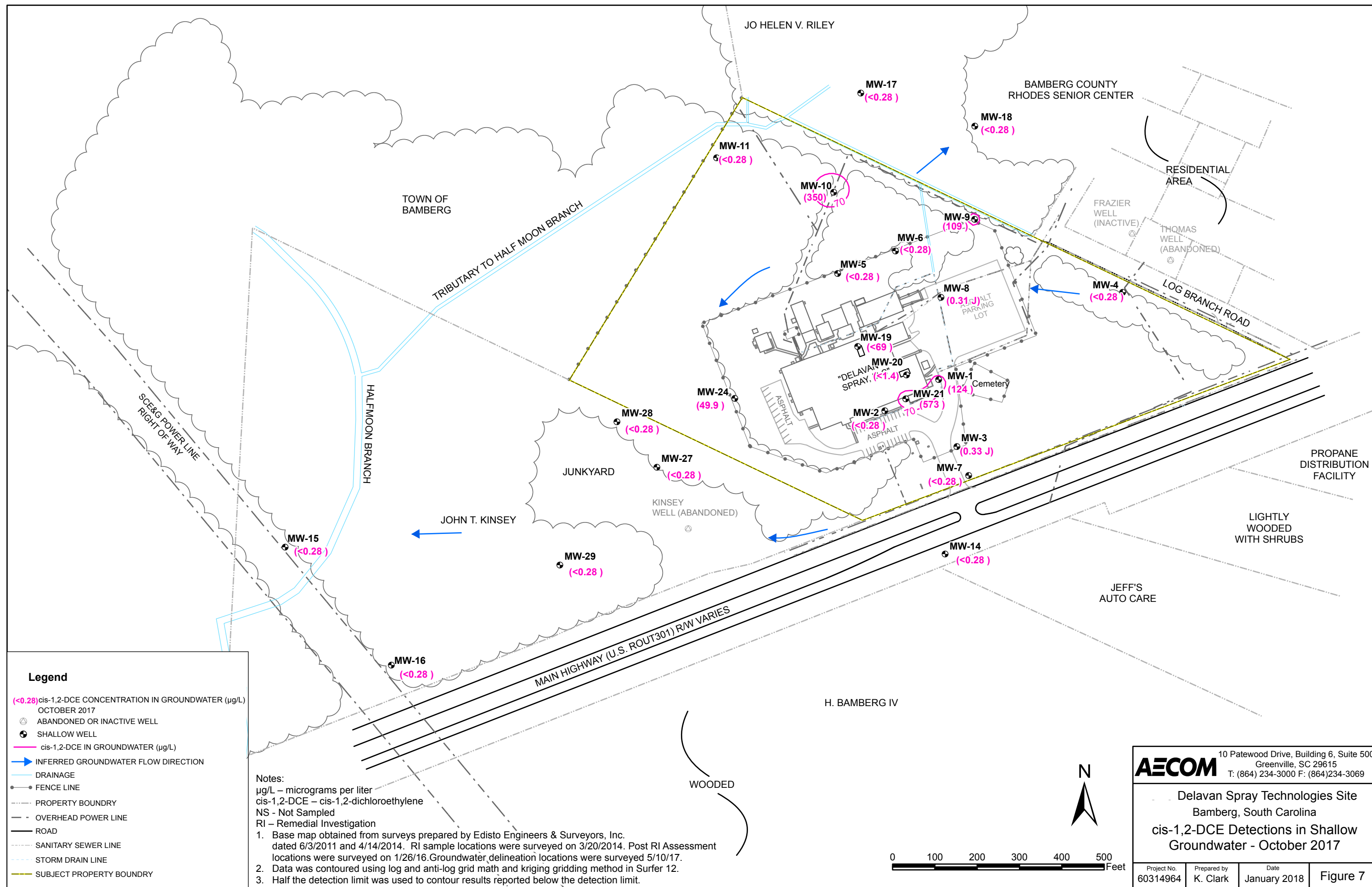
Project No.	Prepared by	Date	Figure 2
60314964	K. Clark	January 2018	

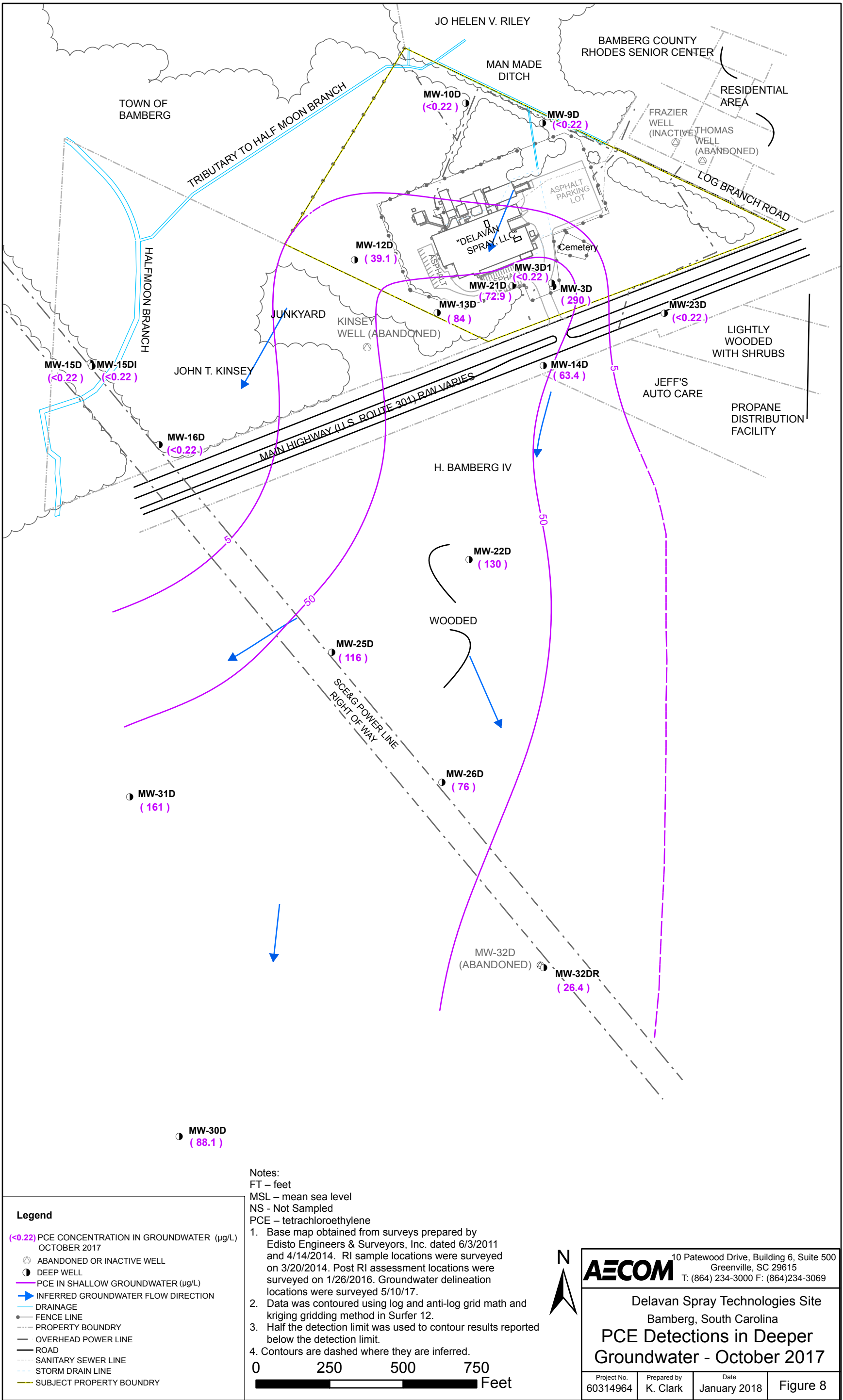


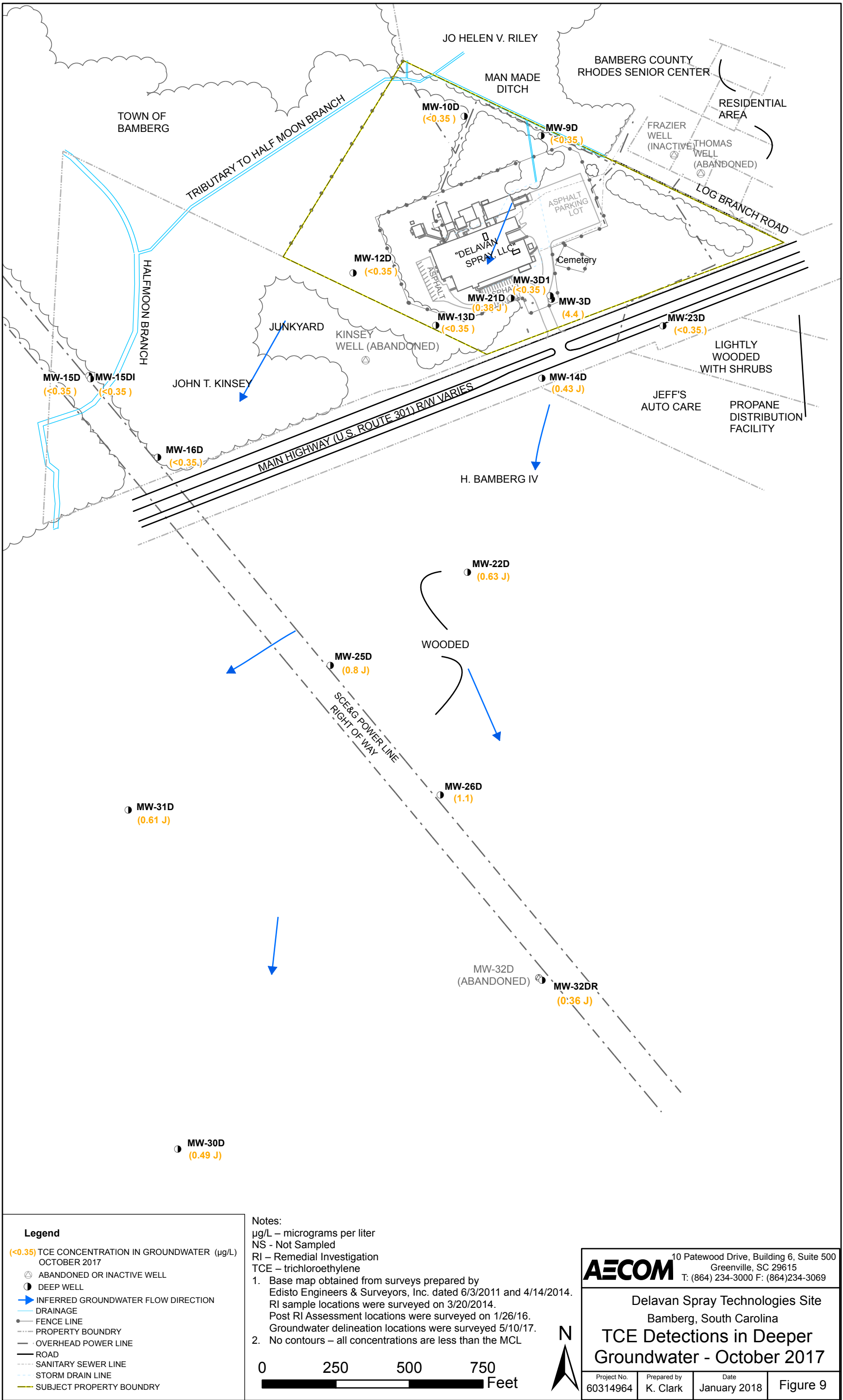


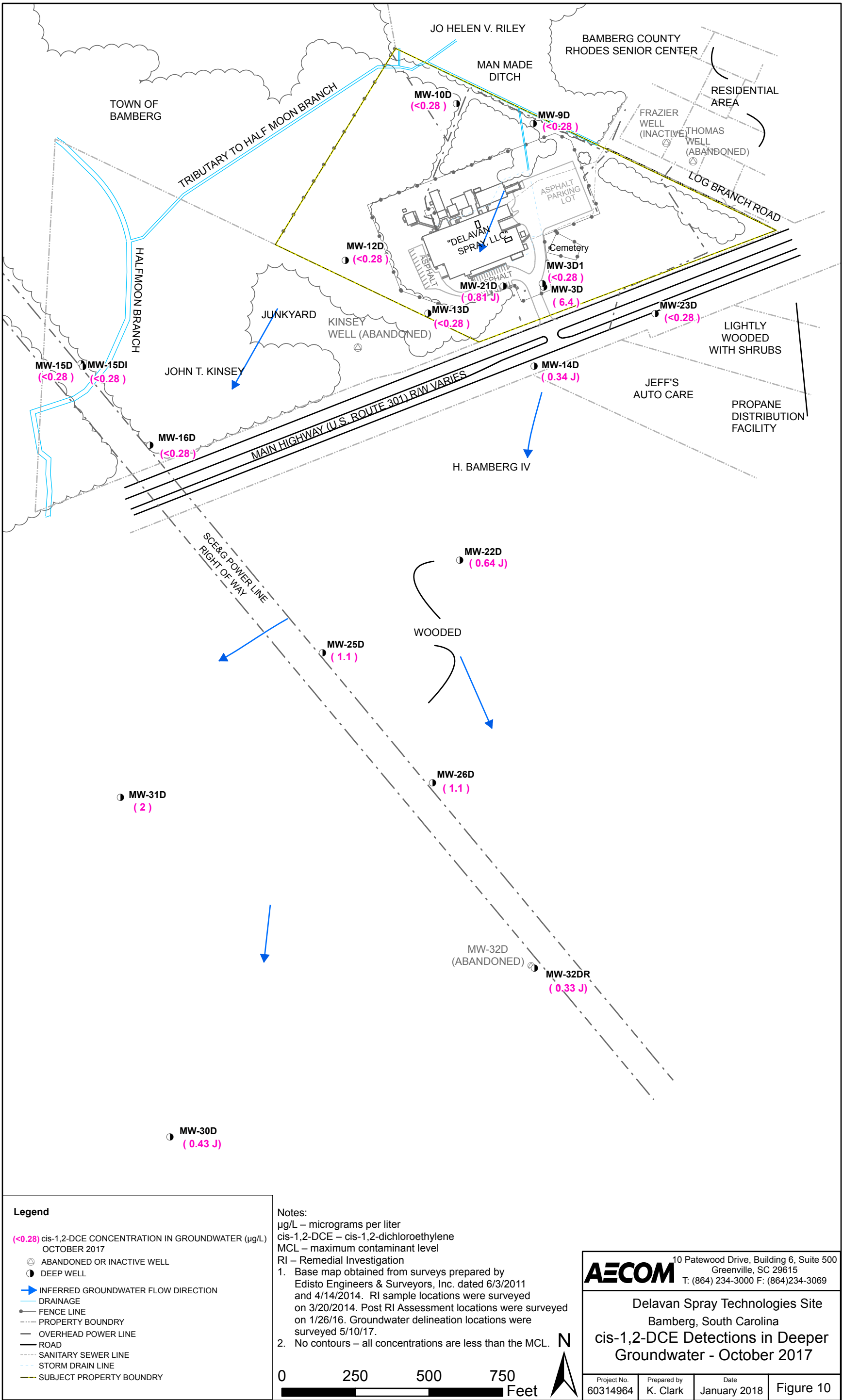












TABLES

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

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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	10/16/2017	
							Depth to Water	Elevation
MW-1	18	--	3-18	Shallow	147.56	147.19	13.51	133.68
MW-2	18	--	3-18	Shallow	147.81	147.63	13.82	133.81
MW-3	18	--	3-18	Shallow	148.34	148.11	14.12	133.99
MW-3D	49	24	44-49	Deeper Limestone	148.28	148.12	16.16	131.96
MW-3D1	85	65	75-85	Deep Sandstone	148.12	147.93	15.98	131.95
MW-4	14	--	4-14	Shallow	147.30	147.03	11.49	135.54
MW-5	14	--	4-14	Shallow	145.34	145.46	12.10	133.36
MW-6	14	--	4-14	Shallow	143.45	143.22	10.02	133.20
MW-7	20	--	5-20	Shallow	149.25	149.03	14.57	134.46
MW-8	20	--	5-20	Shallow	145.95	145.66	13.16	132.50
MW-9	20	--	5-20	Shallow	144.11	143.89	10.11	133.78
MW-9D	49	24	44-49	Deeper Limestone	144.48	144.20	11.73	132.47
MW-10	18	--	3-18	Shallow	142.56	142.19	9.33	132.86
MW-10D	48	30	43-48	Deeper Limestone	142.08	141.79	9.50	132.29
MW-11	18	--	3-18	Shallow	143.77	143.16	9.63	133.53
MW-12D	50	30	40-50	Deeper Limestone	147.86	147.65	15.65	132.00
MW-13D	50	30	40-50	Deeper Limestone	146.41	146.23	14.38	131.85
MW-14	20	--	5-20	Shallow	147.05	146.90	13.24	133.66
MW-14D	50	29	40-50	Deeper Limestone	147.11	146.88	15.08	131.80
MW-15	18	--	4-19	Shallow	136.13	135.73	5.25	130.48
MW-15D	45	30	35-45	Deeper Limestone	135.93	135.59	3.85	131.74
MW-15D1	85	65	75-85	Deep Sandstone	135.94	135.69	3.96	131.73
MW-16	19	--	4-19	Shallow	138.74	138.30	7.02	131.28
MW-16D	45	29	35-45	Deeper Limestone	138.70	138.38	6.83	131.55
MW-17	28.4	--	13-28	Shallow	142.07	141.66	7.75	133.91
MW-18	26.4	--	11-26	Shallow	145.68	145.41	12.65	132.76
MW-19	20.15	--	5-20	Shallow	148.47	148.22	14.62	133.60
MW-20	15.15	--	5-15	Shallow	148.50	148.19	14.50	133.69
MW-21	34.4	--	19-34	Shallow	148.43	147.97	15.12	132.85
MW-21D	53.4	31.5	43-53	Deeper Limestone	147.28	146.92	14.93	131.99
MW-22D	48.4	36	38-48	Deeper Limestone	146.42	145.96	14.29	131.67
MW-23D	50.4	34	40-50	Deeper Limestone	148.48	148.26	16.28	131.98
MW-24	21	--	6-21	Shallow	148.52	147.85	15.69	132.16
MW-25D	62	--	52-62	Deeper Limestone	139.30	139.21	7.59	131.62
MW-26D	48	--	38-48	Deeper Limestone	143.83	143.64	12.19	131.45
MW-27	29	--	19 - 29	Shallow	145.93	145.78	12.44	133.34
MW-28	29	--	19 - 29	Shallow	146.35	146.12	14.13	131.99
MW-29	29	--	19 - 29	Shallow	141.03	140.55	8.60	131.95
MW-30D	60	--	50 - 60	Deeper Limestone	135.90	136.01	5.92	130.09
MW-31D	60	--	50 - 60	Deeper Limestone	141.39	141.39	10.32	131.07
MW-32D	60	--	50 - 60	Deeper Limestone	139.14	138.92	Abandoned	
MW-32DR	60	--	50 - 60	Deeper Limestone	139.20	138.88	8.42	130.46

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 weeks 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
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	4.24	0.033	24.20	3.33	3.03	353.8	NS
MW-2	4.51	0.022	24.39	2.81	2.75	382.1	NS
MW-3	4.52	0.019	24.77	4.10	4.21	320.9	NS
MW-3D	7.35	0.210	21.57	5.88	2.73	237.3	NS
MW-3D1	7.54	0.195	21.08	6.34	0.12	-67.4	NS
MW-4	4.86	0.059	18.97	95.60	0.68	185.4	NS
MW-5	4.77	0.016	21.96	43.01	5.68	334.9	NS
MW-6	4.39	0.016	21.25	7.90	0.62	291.6	NS
MW-7	4.71	0.017	25.65	5.18	6.69	362.6	NS
MW-8	4.33	0.075	27.20	3.04	4.55	350.6	NS
MW-9	4.10	0.023	20.79	8.65	1.35	351.9	NS
MW-9D	7.69	0.192	18.91	0.80	0.34	27.6	NS
MW-10	4.24	0.027	20.14	2.33	0.59	157.9	NS
MW-10D	7.77	0.202	17.52	0.00	4.22	250.0	NS
MW-11	4.71	0.225	20.17	17.92	0.56	341.2	NS
MW-12D	9.25	0.221	18.18	4.27	5.43	256.8	NS
MW-13D	7.49	0.225	19.24	1.58	5.24	284.7	NS
MW-14	4.25	0.023	22.47	7.69	5.31	342.0	NS
MW-14D	7.38	0.208	20.75	8.71	0.13	204.0	NS
MW-15	4.81	0.466	22.12	8.35	0.44	118.9	NS
MW-15D	6.88	0.420	19.41	9.50	2.20	170.2	NS
MW-15D1	7.47	0.216	19.15	5.45	0.23	-98.6	NS
MW-16	5.00	0.034	19.38	13.29	0.40	110.7	NS
MW-16D	7.43	0.257	18.37	2.65	3.88	181.8	NS
MW-17	3.90	0.099	20.23	1.99	2.25	469.7	NS
MW-18	4.12	0.045	21.23	29.64	2.67	430.5	NS
MW-19	4.48	0.119	22.24	3.78	1.49	329.3	NS
MW-20	4.51	0.031	21.76	2.02	6.63	322.8	NS
MW-21	4.04	0.021	21.96	2.57	0.41	336.2	NS
MW-21D	7.40	0.231	21.44	3.92	0.21	-2.7	NS
MW-22D	7.83	0.240	18.86	0.99	2.91	223.5	NS
MW-23D	7.34	0.282	20.23	1.87	2.05	255.8	NS
MW-24	3.99	0.010	21.42	1.21	5.76	417.1	NS
MW-25D	7.65	0.245	19.13	0.84	2.94	210.7	NS
MW-26D	7.52	0.249	19.94	0.96	2.64	228.6	NS
MW-27	4.67	0.029	20.16	1.26	6.30	346.8	0.07
MW-28	6.72	0.440	19.55	14.22	1.35	272.1	0.00
MW-29	6.06	0.135	21.11	25.64	1.15	279.3	0.02
MW-30D	7.65	0.262	18.07	5.46	3.12	20.1	0.20
MW-31D	7.73	0.230	18.47	2.79	2.70	185.4	0.08
MW-32D	Abandoned						
MW-32DR	7.57	0.252	19.82	4.19	2.13	208.5	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
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-1 FA48591-22 10/18/2017	MW-2 FA48531-18 10/17/2017	MW-3 FA48531-16 10/17/2017	MW-3D FA48531-17 10/17/2017	MW-3D1 FA48531-15 10/17/2017	MW-4 FA48531-11 10/17/2017
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25	< 0.62	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.3	< 0.75	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.47	< 1.2	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 0.85	< 0.34	< 0.34
1,1-Dichloroethylene	7	< 0.32	< 0.32	< 0.32	8.8	< 0.32	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.78	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 1.1	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2	< 5	< 2	< 2
2-Hexanone	—	< 2	< 2	< 2	< 5	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 2.5	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 25	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 0.31	< 0.78	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.61	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 1	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 1.3	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 0.89	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 1.7	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.75	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	124	< 0.28	0.33 J//	6.4	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 0.73	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 0.69	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 0.89	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 1.5	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 1.3	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 5	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 0.22	< 0.56	< 0.22	< 0.22
Tetrachloroethylene	5	835	3.1	77.3	290	< 0.22	< 0.22
Toluene	1000	< 0.3	< 0.3	< 0.3	< 0.75	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22	< 0.55	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 0.54	< 0.21	< 0.21
Trichloroethylene	5	23.2	< 0.35	1.6	4.4	< 0.35	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 1	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 1.8	< 0.72	< 0.72

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

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-5 FA48591-7 10/17/2017	MW-6 FA48531-13 10/17/2017	MW-7 FA48531-14 10/17/2017	MW-8 FA48591-21 10/18/2017	MW-9 FA48591-1 10/17/2017	MW-9D FA48531-7 10/17/2017
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25	< 0.25	< 1.2	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 0.3	< 0.3	< 1.5	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 0.47	< 0.47	< 2.3	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 0.34	< 1.7	< 0.34
1,1-Dichloroethylene	7	< 0.32	< 0.32	< 0.32	< 0.32	< 1.6	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 1.6	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 0.43	< 2.1	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2	< 2	< 10	< 2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 10	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 5	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 50	< 10
Benzene	5	< 0.31	< 0.31	< 0.31	< 0.31	< 1.6	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.24	< 1.2	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 0.41	< 2	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 0.53	< 2.7	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 0.36	< 1.8	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 1	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 0.67	< 3.3	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 1.5	< 0.3
cis-1,2-Dichloroethylene	70	< 0.28	< 0.28	< 0.28	0.31 J//	109	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 0.29	< 1.5	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 0.28	< 1.4	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 0.36	< 1.8	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 0.59	< 2.9	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2	< 10	< 2
Styrene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 1.1	< 0.22
Tetrachloroethylene	5	0.87 J//	< 0.22	< 0.22	47.9	646	< 0.22
Toluene	1000	< 0.3	< 0.3	< 0.3	< 0.3	< 1.5	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 1.1	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 0.21	< 1.1	< 0.21
Trichloroethylene	5	< 0.35	< 0.35	< 0.35	4.7	157	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 0.41	< 2	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 0.72	< 3.6	< 0.72

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

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-10 FA48591-6 10/17/2017	MW-10D FA48531-9 10/17/2017	MW-11 FA48531-6 10/16/2017	MW-12D FA48591-9 10/18/2017	MW-13D FA48591-16 10/18/2017	MW-14 FA48591-2 10/17/2017
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25	< 0.25	0.31 J//	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 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	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	23.7	< 0.32	< 0.32	0.48 J//	1.7	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2	< 2	< 2	< 2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	350	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	149	< 0.22	< 0.22	39.1	84	1.9
Toluene	1000	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	0.26 J//	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	70.9	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72

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

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-14D FA48591-4 10/17/2017	MW-15 FA48531-2 10/16/2017	MW-15D FA48531-4 10/16/2017	MW-15D1 FA48531-5 10/16/2017	MW-16 FA48531-8 10/17/2017	MW-16D FA48531-10 10/17/2017
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 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	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	0.72 J//	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 2	< 2	< 2	< 2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	0.34 J//	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	63.4	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Toluene	1000	< 0.3	1.6	< 0.3	< 0.3	38.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	0.43 J//	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72

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

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-17 FA48531-1 10/16/2017	MW-18 FA48531-3 10/16/2017	MW-19 FA48591-23 10/18/2017	MW-20 FA48591-25 10/18/2017	MW-21 FA48591-26 10/18/2017	MW-21D FA48591-24 10/18/2017
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1,1-Trichloroethane	200	< 0.25	< 0.25	74.9 J//	< 1.2	< 62	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 75	< 1.5	< 75	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 120	< 2.3	< 120	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 85	< 1.7	< 85	< 0.34
1,1-Dichloroethylene	7	< 0.32	< 0.32	< 81	< 1.6	< 81	1.7
1,2-Dichloroethane	5	< 0.31	< 0.31	< 78	< 1.6	< 78	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 110	< 2.1	< 110	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 500	< 10	< 500	< 2
2-Hexanone	—	< 2	< 2	< 500	< 10	< 500	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 250	< 5	< 250	< 1
Acetone	—	< 10	< 10	< 2500	< 50	< 2500	< 10
Benzene	5	< 0.31	< 0.31	< 78	< 1.6	< 78	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 61	< 1.2	< 61	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 100	< 2	< 100	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 130	< 2.7	< 130	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 89	< 1.8	< 89	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 50	< 1	< 50	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 170	< 3.3	< 170	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	299	4.8 J//	292	< 0.3
cis-1,2-Dichloroethylene	70	< 0.28	< 0.28	< 69	< 1.4	573	0.81 J//
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 73	< 1.5	< 73	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 69	< 1.4	< 69	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 89	< 1.8	< 89	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 150	< 2.9	< 150	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 130	< 2.5	< 130	< 0.5
Methylene Chloride	5	< 2	< 2	< 500	< 10	< 500	< 2
Styrene	100	< 0.22	< 0.22	< 56	< 1.1	< 56	< 0.22
Tetrachloroethylene	5	< 0.22	< 0.22	18700	312	23900	72.9
Toluene	1000	< 0.3	< 0.3	< 75	< 1.5	< 75	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 55	< 1.1	< 55	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 54	< 1.1	< 54	< 0.21
Trichloroethylene	5	< 0.35	< 0.35	< 86	2.2 J//	252	0.38 J//
Vinyl Chloride	2	< 0.41	< 0.41	< 100	< 2	< 100	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 180	< 3.6	< 180	< 0.72

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

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-22D FA48591-17 10/18/2017	MW-23D FA48531-12 10/17/2017	MW-24 FA48591-27 10/18/2017	MW-25D FA48591-12 10/18/2017	MW-26D FA48591-20 10/18/2017	MW-27 FA48591-11 10/18/2017
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1,1-Trichloroethane	200	< 0.25	< 0.25	< 5	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3	< 6	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	5	< 0.47	< 0.47	< 9.3	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34	< 6.8	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	7	2.4	< 0.32	< 6.4	3.1	1.9	< 0.32
1,2-Dichloroethane	5	< 0.31	< 0.31	< 6.2	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	5	< 0.43	< 0.43	< 8.5	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	—	< 2	< 2	< 40	< 2	< 2	< 2
2-Hexanone	—	< 2	< 2	< 40	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 20	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 200	< 10	< 10	< 10
Benzene	5	< 0.31	< 0.31	< 6.2	< 0.31	< 0.31	< 0.31
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 4.8	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.41	< 0.41	< 8.1	< 0.41	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53	< 11	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	5	< 0.36	< 0.36	< 7.1	< 0.36	< 0.36	< 0.36
Chlorobenzene	100	< 0.2	< 0.2	< 4	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67	< 13	< 0.67	< 0.67	< 0.67
Chloroform	80 ¹	< 0.3	< 0.3	< 6	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	0.64 J//	< 0.28	49.9	1.1	1.1	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29	< 5.8	< 0.29	< 0.29	< 0.29
Dibromochloromethane	80 ¹	< 0.28	< 0.28	< 5.5	< 0.28	< 0.28	< 0.28
Ethylbenzene	700	< 0.36	< 0.36	< 7.1	< 0.36	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59	< 12	< 0.59	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 40	< 2	< 2	< 2
Styrene	100	< 0.22	< 0.22	< 4.4	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	5	130	< 0.22	1600	116	76	0.39 J//
Toluene	1000	< 0.3	< 0.3	7.2 J//	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	100	< 0.22	< 0.22	< 4.4	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21	< 4.3	< 0.21	< 0.21	< 0.21
Trichloroethylene	5	0.63 J//	< 0.35	< 6.9	0.8 J//	1.1	< 0.35
Vinyl Chloride	2	< 0.41	< 0.41	< 8.2	< 0.41	< 0.41	< 0.41
Xylene (total)	10000	< 0.72	< 0.72	< 14	< 0.72	< 0.72	< 0.72

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

Sample ID Lab Sample ID Date Collected	USEPA MCL	MW-28 FA48591-15 10/18/2017	MW-29 FA48591-19 10/18/2017	MW-30D FA48591-8 10/18/2017	MW-31D FA48591-10 10/18/2017	MW-32DR FA48591-13 10/18/2017
Volatile Organic Compounds by Method 8260B (µg/L)						
1,1,1-Trichloroethane	200	< 0.25	< 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	< 0.32	< 0.32	2.1	4.7	0.69 J//
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	0.43 J//	2	0.33 J//
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	< 0.22	0.56 J//	88.1	161	26.4
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	0.49 J//	0.61 J//	0.36 J//
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

Notes:

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.

— - 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
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Sample ID Lab Sample ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA48591-30 10/18/2017
Volatile Organic Compounds by Method 8260B (µg/L)		
1,1,1-Trichloroethane	—	0.69 J//
1,1,2,2-Tetrachloroethane	—	< 0.3
1,1,2-Trichloroethane	—	< 0.47
1,1-Dichloroethane	—	< 0.34
1,1-Dichloroethylene	700	0.99 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	—	23.2
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	511
Toluene	—	< 0.3
trans-1,2-Dichloroethylene	—	< 0.22
trans-1,3-Dichloropropene	—	< 0.21
Trichloroethylene	500	7
Vinyl Chloride	200	< 0.41
Xylene (total)	—	< 0.72
1,2,4-Trichlorobenzene	—	< 1.1
1,2-Dichlorobenzene	—	< 0.5
1,3-Dichlorobenzene	—	< 0.5
1,4-Dichlorobenzene	7,500	< 0.5
2,4,5-Trichlorophenol	400,000	< 0.74
2,4,6-Trichlorophenol	2,000	< 0.75
2,4-Dichlorophenol	—	< 0.84
2,4-Dimethylphenol	—	< 0.74

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

Sample ID Lab Sample ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA48591-30 10/18/2017
Semivolatile Organic Compounds by Method 8270D (µg/L)		
2,4-Dinitrophenol	—	< 5
2,4-Dinitrotoluene	130	< 0.81
2,6-Dinitrotoluene	—	< 0.71
2-Chloronaphthalene	—	< 0.5
2-Chlorophenol	—	< 0.63
2-Methylnaphthalene	—	< 0.6
2-Methylphenol	200,000	< 0.56
2-Nitroaniline	—	< 1.8
2-Nitrophenol	—	< 0.85
3&4-Methylphenol	200,000	< 0.98
Semivolatile Organic Compounds by Method 8270D (µg/L)		
3,3'-Dichlorobenzidine	—	< 0.64
3-Nitroaniline	—	< 0.88
4,6-Dinitro-o-cresol	—	< 2
4-Bromophenyl Phenyl Ether	—	< 0.85
4-Chloro-3-methyl Phenol	—	< 0.59
4-Chloroaniline	—	< 0.63
4-Chlorophenyl Phenyl Ether	—	< 0.54
4-Nitroaniline	—	< 1.2
4-Nitrophenol	—	< 5
Acenaphthene	—	< 0.63
Acenaphthylene	—	< 0.64
Anthracene	—	< 0.8
Benzo(a)anthracene	—	< 0.76
Benzo(a)pyrene	—	< 0.78
Benzo(b)fluoranthene	—	< 0.78
Benzo(g,h,i)perylene	—	< 0.82
Benzo(k)fluoranthene	—	< 0.86
Benzoic Acid	—	< 10 /R/c
Benzyl Alcohol	—	< 0.61
bis(2-Chloroethoxy)methane	—	< 0.81
bis(2-Chloroethyl)ether	—	< 0.73
bis(2-Chloroisopropyl)ether	—	< 0.76
bis(2-Ethylhexyl)phthalate	—	< 1
Butyl Benzyl Phthalate	—	< 1
Carbazole	—	< 0.6
Chrysene	—	< 0.85
Di-n-butyl Phthalate	—	< 1
Di-n-octyl Phthalate	—	< 1
Dibenzo(a,h)anthracene	—	< 0.8
Dibenzofuran	—	< 0.6
Diethyl Phthalate	—	< 1

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

Sample ID Lab Sample ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA48591-30 10/18/2017
Semivolatile Organic Compounds by Method 8270D (µg/L)		
Fluoranthene	—	< 0.55
Fluorene	—	< 0.7
Hexachlorobenzene	130	< 0.69
Hexachlorobutadiene	500	< 0.5
Hexachlorocyclopentadiene	—	< 1.8
Hexachloroethane	3,000	< 1.6
Indeno(1,2,3-cd)pyrene	—	< 0.71
Isophorone	—	< 0.78
N-Nitrosodi-n-propylamine	—	< 0.67
N-Nitrosodiphenylamine	—	< 0.81
Naphthalene	—	< 0.5
Nitrobenzene	2,000	< 0.93
Pentachlorophenol	100,000	< 5
Phenanthrene	—	< 0.86
Phenol	—	< 0.5 /R/c
Pyrene	—	< 0.68
Metals by Method 6010C/7470B (µg/L)		
Antimony	—	< 1
Arsenic	5,000	< 1.3
Beryllium	—	< 0.2
Cadmium	1,000	< 0.2
Chromium	5,000	4 J//
Copper	—	3.3 J//
Lead	5,000	1.6 J//
Mercury	200	< 0.03
Nickel	—	0.7 J//
Selenium	1,000	< 2.9
Silver	5,000	< 0.7
Thallium	—	< 1.4
Zinc	—	25.1

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
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Summary of Calculated Relative Percent Differences in Groundwater Field Duplicate Samples

Sample ID Lab Sample ID Date Collected	MW-14 FA48591-2 10/17/2017	MW-14-A FA48591-3 10/17/2017	Relative Percent Difference	MW-14D FA48591-4 10/17/2017	MW-14D-A FA48591-5 10/17/2017	Relative Percent Difference	MW-22D FA48591-17 10/18/2017	MW-22D-A FA48591-18 10/18/2017	Relative Percent Difference	MW-32DR FA48591-13 10/18/2017	MW-32DR-A FA48591-14 10/18/2017	Relative Percent Difference
Volatile Organic Compounds by Method 8260B (µg/L)												
1,1,1-Trichloroethane	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC
1,1,2,2-Tetrachloroethane	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC
1,1,2-Trichloroethane	< 0.47	< 0.47	NC	< 0.47	< 0.47	NC	< 0.47	< 0.47	NC	< 0.47	< 0.47	NC
1,1-Dichloroethane	< 0.34	< 0.34	NC	< 0.34	< 0.34	NC	< 0.34	< 0.34	NC	< 0.34	< 0.34	NC
1,1-Dichloroethylene	< 0.32	< 0.32	NC	0.72 J//	0.79 J//	NC	2.4	2.2	8.7	0.69 J//	0.69 J//	NC
1,2-Dichloroethane	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC
1,2-Dichloropropane	< 0.43	< 0.43	NC	< 0.43	< 0.43	NC	< 0.43	< 0.43	NC	< 0.43	< 0.43	NC
2-Butanone (MEK)	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC
2-Hexanone	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC
4-Methyl-2-pentanone (MIBK)	< 1	< 1	NC	< 1	< 1	NC	< 1	< 1	NC	< 1	< 1	NC
Acetone	< 10	< 10	NC	< 10	< 10	NC	< 10	< 10	NC	< 10	< 10	NC
Benzene	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC
Bromodichloromethane	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC
Bromoform	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC
Carbon Disulfide	< 0.53	< 0.53	NC	< 0.53	< 0.53	NC	< 0.53	< 0.53	NC	< 0.53	< 0.53	NC
Carbon Tetrachloride	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC
Chlorobenzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
Chloroethane	< 0.67	< 0.67	NC	< 0.67	< 0.67	NC	< 0.67	< 0.67	NC	< 0.67	< 0.67	NC
Chloroform	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC
cis-1,2-Dichloroethylene	< 0.28	< 0.28	NC	0.34 J//	0.38 J//	NC	0.64 J//	0.64 J//	NC	0.33 J//	0.38 J//	NC
cis-1,3-Dichloropropene	< 0.29	< 0.29	NC	< 0.29	< 0.29	NC	< 0.29	< 0.29	NC	< 0.29	< 0.29	NC
Dibromochloromethane	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC
Ethylbenzene	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC	< 0.36	< 0.36	NC
Methyl Bromide	< 0.59	< 0.59	NC	< 0.59	< 0.59	NC	< 0.59	< 0.59	NC	< 0.59	< 0.59	NC
Methyl Chloride	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC
Methylene Chloride	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC
Styrene	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC
Tetrachloroethylene	1.9	1.7	11.1	63.4	52.9	18.1	130	113	14.0	26.4	37.1	33.7
Toluene	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC
trans-1,2-Dichloroethylene	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC
trans-1,3-Dichloropropene	< 0.21	< 0.21	NC	< 0.21	< 0.21	NC	< 0.21	< 0.21	NC	< 0.21	< 0.21	NC
Trichloroethylene	< 0.35	< 0.35	NC	0.43 J//	0.49 J//	NC	0.63 J//	0.71 J//	NC	0.36 J//	0.41 J//	NC
Vinyl Chloride	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC	< 0.41	< 0.41	NC
Xylene (total)	< 0.72	< 0.72	NC	< 0.72	< 0.72	NC	< 0.72	< 0.72	NC	< 0.72	< 0.72	NC

Notes:

-A - Indicates a field duplicate sample.

NC - Not Calculated

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
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Summary of Results in Trip Blank Samples

Sample ID Lab Sample ID Date Collected	TRIP BLANK 1 FA48531-19 10/17/2017	TRIP BLANK 2 FA48531-20 10/17/2017	TRIP BLANK 3 FA48591-28 10/17/2017	TRIP BLANK 4 FA48591-29 10/17/2017
Volatile Organic Compounds by Method 8260B (µg/L)				
1,1,1-Trichloroethane	< 0.25	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	< 0.47	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	< 0.32	< 0.32	< 0.32	< 0.32
1,2-Dichloroethane	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	< 2	< 2	< 2	< 2
2-Hexanone	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	< 1	< 1	< 1	< 1
Acetone	< 10	< 10	< 10	< 10
Benzene	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	< 0.28	< 0.28	< 0.28	< 0.28
cis-1,3-Dichloropropene	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	< 2	< 2	< 2	< 2
Styrene	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	< 0.22	< 0.22	< 0.22	< 0.22
Toluene	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	< 0.35	< 0.35	< 0.35	< 0.35
Vinyl Chloride	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	< 0.72	< 0.72	< 0.72	< 0.72

Notes:

µg/L - micrograms per liter (parts per billion)
See Table 6 for explanation of data qualifiers.

Table 6
Definitions of Data Qualifiers
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>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Analysis Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
c	Laboratory control recovery below the established criteria.

Table 7
2018 Semi-Annual Sampling Plan
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Northing	Easting	Date Installed	Classification	Screen Interval (ft bgs)	Spring 2018 Semi-Annual Sampling			Fall 2018 Semi-Annual Sampling		
						Field Water Quality Indicator Parameters	VOCs	MNA Parameters ¹	Field Water Quality Indicator Parameters	VOCs	MNA Parameters ¹
Off-Site Background Areas											
MW-17	528054.31	1985785.06	3/4/2014	Shallow	13-28	-	-	-	X	X	-
MW-18	527976.58	1986054.35	3/3/2014	Shallow	11-26	-	-	-	X	X	-
On-Site Background Areas											
MW-4	527583.49	1986403.57	6/4/2003	Shallow	4-14	-	-	-	X	X	-
Wooded Areas of Interest											
MW-9	527756.57	1986053.98	12/29/2003	Shallow	5-20	X	X	-	X	X	-
MW-9D	527787.94	1985973.71	12/14/2007	Deep	44-49	-	-	-	X	X	-
MW-10	527820.72	1985721.19	12/30/2003	Shallow	3-18	X	X	-	X	X	-
MW-10D	527855.07	1985712.71	12/14/2007	Deep	43-48	-	-	-	X	X	-
MW-11	527901.23	1985444.60	12/30/2003	Shallow	3-18	-	-	-	X	X	-
Manufacturing Areas											
MW-1	527377.94	1985969.04	6/4/2003	Shallow	3-18	X	X	-	X	X	-
MW-2	527303.71	1985841.78	6/4/2003	Shallow	3-18	X	X	-	X	X	-
MW-3	527219.26	1986012.34	6/4/2003	Shallow	3-18	X	X	-	X	X	-
MW-3D	527231.99	1986009.14	12/13/2007	Deep	44-49	X	X	-	X	X	-
MW-3D1	527243.77	1986004.60	10/29/2009	Deep	75-85	-	-	-	X	X	-
MW-5	527628.44	1985730.62	6/4/2003	Shallow	4-14	X	X	-	X	X	-
MW-6	527681.37	1985867.15	6/4/2003	Shallow	4-14	-	-	-	X	X	-
MW-7	527150.98	1986039.96	12/30/2003	Shallow	5-20	X	X	-	X	X	-
MW-8	527572.13	1985974.43	12/29/2003	Shallow	5-20	X	X	-	X	X	-
MW-12D	527322.24	1985335.17	10/29/2009	Deep	40-50	X	X	-	X	X	-
MW-13D	527143.18	1985615.99	10/29/2009	Deep	40-50	X	X	-	X	X	-
MW-19	527456.18	1985777.81	3/1/2014	Shallow	5-20	X	X	-	X	X	-
MW-20	527388.72	1985893.51	3/2/2014	Shallow	5-15	X	X	-	X	X	-
MW-21	527332.46	1985891.49	2/25/2014	Shallow	19-34	X	X	-	X	X	-
MW-21D	527235.35	1985871.60	2/25/2014	Deep	43-53	X	X	-	X	X	-
MW-24	527332.95	1985487.59	12/3/2015	Shallow	6-21	X	X	-	X	X	-

Table 7
2018 Semi-Annual Sampling Plan
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Northing	Easting	Date Installed	Classification	Screen Interval (ft bgs)	Spring 2018 Semi-Annual Sampling			Fall 2018 Semi-Annual Sampling		
						Field Water Quality Indicator Parameters	VOCs	MNA Parameters ¹	Field Water Quality Indicator Parameters	VOCs	MNA Parameters ¹
Downgradient Off-Site Areas											
MW-14	526965.63	1985984.33	10/26/2009	Shallow	5-20	X	X	-	X	X	-
MW-14D	526962.99	1985976.64	10/27/2009	Deep	40-50	X	X	-	X	X	-
MW-15	526981.84	1984425.77	5/18/2011	Shallow	4-19	X	X	-	X	X	-
MW-15D	526971.08	1984437.05	5/19/2011	Deep	35-45	-	-	-	X	X	-
MW-15D1	526961.60	1984442.37	4/30/2012	Deep	75-85	-	-	-	X	X	-
MW-16	526703.00	1984676.68	5/16/2011	Shallow	4-19	X	X	-	X	X	-
MW-16D	526694.72	1984670.89	5/17/2011	Deep	35-45	X	X	-	X	X	-
MW-22D	526303.91	1985723.83	2/26/2014	Deep	38-48	X	X	-	X	X	-
MW-23D	527141.40	1986387.76	2/27/2014	Deep	40-50	X	X	-	X	X	-
MW-25D	525988.09	1985257.31	12/2/2015	Deep	52-62	X	X	-	X	X	-
MW-26D	525547.18	1985631.39	12/1/2015	Deep	38-48	X	X	-	X	X	-
MW-27	527170.79	1985303.58	3/31/2017	Shallow	19 - 29	X	X	-	X	X	-
MW-28	527277.92	1985209.24	3/31/2017	Shallow	19 - 29	X	X	-	X	X	-
MW-29	526939.42	1985074.63	4/7/2017	Shallow	19 - 29	X	X	-	X	X	-
MW-30D	524342.13	1984738.76	4/12/2017	Deep	50 - 60	X	X	-	X	X	-
MW-31D	525496.61	1984570.76	4/12/2017	Deep	50 - 60	X	X	-	X	X	-
MW-32DR	524925.36	1985966.15	5/8/2017	Deep	50 - 60	X	X	-	X	X	-
Totals											
Totals for all analytes						31	31	0	41	41	0
QA/QC Samples											
Field Duplicate	one per 10 samples					-	3	-	-	4	-
MS/MSD	one per 20 samples					-	2	-	-	2	-
Rinesate Blank	one per 20 samples for re-useable sampling equipment					NA - peristaltic pump / disp. tubing			NA - peristaltic pump / disp. tubing		
Trip Blank	one per cooler shipment					-	3	-	-	4	-

Notes:

bgs = below ground surface NA = Not Applicable

¹ - Previously collected MNA parameter results have been sufficient to characterize the natural attenuation potential of the aquifers beneath the Site. MNA parameter collection is not currently planned for existing wells in 2017, but may be added back in the schedule if data indicates a need.

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

AECOM

Tailgate Safety Meeting Log*

This sign-in log documents the topics of the tailgate safety briefing and individual attendance at the briefing. Personnel who perform work operations onsite are required to attend each safety briefing and acknowledge their ability to ask questions and receipt of such briefings daily. Please provide a brief narrative of the following topics as applicable to the Project

Meeting Leader <i>Randy Meryan</i>	Signature <i>Randy Meryan</i>
Date / Time <i>10/16/17 1100</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions <i>Overcast 70-80's</i>	Project Number 60314964
Topic	Discussion (Circle one)
Today's Scope of Work (All tasks)	☒ yes / ☐ NA
Schedule / New Work / Scope Changes	☒ yes / ☐ NA
Reviewed Procedures, THA, etc.	☒ yes / ☐ NA
Emergency Action Plan & Procedures	☒ yes / ☐ NA
Communications Protocol	☒ yes / ☐ NA
Required PPE	☒ yes / ☐ NA
Required Monitoring / Instruments	yes / ☒ NA
Site Control / Work Zones / Security	yes / ☒ NA
Access / Egress / Slips, Trips, & Falls	☒ yes / ☐ NA
Smoking, Eating, & Drinking	☒ yes / ☐ NA
Washroom / Facilities Location	yes / ☒ NA
Heat/Cold Stress	yes / ☒ NA
Exclusion Areas Barricades / Cones	☒ yes / ☐ NA
Required Permits, Passes, Keys, etc.	☒ yes / ☐ NA
Decon Procedures / IDW Mngmt	☒ yes / ☐ NA
Equipment Inspections / Safety Checklists	yes / ☒ NA
Comments/Other: Cardinal Rules: Confined Space (✓), GFCI (✓), Elevated Work (✓), Lockout/Tagout (✓), and Machine Guarding (✓). No loose/leather gloves near rotating equipment.	
Tailgate Meeting Attendees	
Printed Name	Signature
<i>Justin Butler</i>	<i>Justin Butler</i>

*This form is to be utilized for documenting daily safety meetings and stored with project files upon completion



Tailgate Safety Meeting Log*

This sign-in log documents the topics of the tailgate safety briefing and individual attendance at the briefing. Personnel who perform work operations onsite are required to attend each safety briefing and acknowledge their ability to ask questions and receipt of such briefings daily. Please provide a brief narrative of the following topics as applicable to the Project.

Meeting Leader Justin Butler	Signature
Date / Time 10/17/17 0705	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions Partly Cloudy 50'S	Project Number 60314964
Topic	Discussion (Circle one)
Today's Scope of Work (All tasks)	☒ yes / ☐ NA
Schedule / New Work / Scope Changes	☒ yes / ☐ NA
Reviewed Procedures, THA, etc.	☒ yes / ☐ NA
Emergency Action Plan & Procedures	☒ yes / ☐ NA
Communications Protocol	☒ yes / ☐ NA
Required PPE	☒ yes / ☒ NA
Required Monitoring / Instruments	yes / ☒ NA
Site Control / Work Zones / Security	yes / ☒ NA
Access / Egress / Slips, Trips, & Falls	☒ yes / ☐ NA
Smoking, Eating, & Drinking	☒ yes / ☐ NA
Washroom / Facilities Location	yes / ☒ NA
Heat/Cold Stress	yes / ☒ NA
Exclusion Areas Barricades / Cones	☒ yes / ☐ NA
Required Permits, Passes, Keys, etc.	☒ yes / ☐ NA
Decon Procedures / IDW Mngmt	☒ yes / ☐ NA
Equipment Inspections / Safety Checklists	yes / ☒ NA
Comments/Other: Cardinal Rules: Confined Space (☒), GFCI (☒), Elevated Work (☒), Lockout/Tagout (☒), and Machine Guarding (☒). No loose/leather gloves near rotating equipment.	
Tailgate Meeting Attendees	
Printed Name	Signature
Randy Morgan	
DANIEL CLAYCOMB	

*This form is to be utilized for documenting daily safety meetings and stored with project files upon completion

AECOM

Tailgate Safety Meeting Log*

This sign-in log documents the topics of the tailgate safety briefing and individual attendance at the briefing. Personnel who perform work operations onsite are required to attend each safety briefing and acknowledge their ability to ask questions and receipt of such briefings daily. Please provide a brief narrative of the following topics as applicable to the Project.

Meeting Leader <i>Randy Merya</i>	Signature <i>Randy Merya</i>
--------------------------------------	---------------------------------

Date / Time <i>10/18/2017 0715</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
---------------------------------------	---

Weather Conditions <i>Clear/sunny/chilly 40's 70's</i>	Project Number 60314964.17
---	-------------------------------

Topic	Discussion (Circle one)
Today's Scope of Work (All tasks)	☒ yes / ☐ NA
Schedule / New Work / Scope Changes	yes / ☐ NA
Reviewed Procedures, THA, etc.	☒ yes / ☐ NA
Emergency Action Plan & Procedures	☒ yes / ☐ NA
Communications Protocol	☒ yes / ☒ NA
Required PPE	☒ yes / ☐ NA
Required Monitoring / Instruments	yes / ☒ NA
Site Control / Work Zones / Security	yes / ☒ NA
Access / Egress / Slips, Trips, & Falls	☒ yes / ☐ NA
Smoking, Eating, & Drinking	yes / ☒ NA
Washroom / Facilities Location	yes / ☒ NA
Heat/Cold Stress	yes / ☒ NA
Exclusion Areas Barricades / Cones	☒ yes / ☐ NA
Required Permits, Passes, Keys, etc.	☒ yes / ☐ NA
Decon Procedures / IDW Mngmt	☒ yes / ☒ NA
Equipment Inspections / Safety Checklists	yes / ☐ NA

Comments/Other: Cardinal Rules: Confined Space (), GFCI (), Elevated Work (), Lockout/Tagout (), and Machine Guarding (). No loose/leather gloves near rotating equipment.

Tailgate Meeting Attendees	
Printed Name	Signature
Justin Butler	<i>Justin Butler</i>

*This form is to be utilized for documenting daily safety meetings and stored with project files upon completion

WATER LEVEL DATA SUMMARY

PROJECT: UTC Delavan Spray Technologies Site

JOB NUMBER: 60314964

LOCATION: Bamberg, South Carolina

DATE: 10/16/17

CLIENT: UTC

MEASURED BY: R Morgan / J Butler

SURVEY DATUM: electronic water level Indicator
SN 10678

MEASURING DEVICE:

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				13.51	Bolts Broken
MW-2				13.82	Bolts Broken/need new cap
MW-3				14.12	Bolts Broken
MW-3D				16.16	Needs new cap
MW-3D1				15.98	
MW-4				11.49	Bolts Broken
MW-5				12.10	
MW-6				10.02	
MW-7				14.57	Needs new cap
MW-8				13.16	
MW-9				10.11	
MW-9D				11.23	
MW-10				9.33	
MW-10D				9.50	
MW-11				9.43	
MW-12D				15.65	
MW-13D				14.38	
MW-14				13.24	
MW-14D				15.08	
MW-15				5.25	
MW-15D				3.85	
MW-15D1				3.96	
MW-16				7.02	
MW-16D				6.83	
MW-17				7.75	
MW-18				12.65	

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard

Temp, LAB, C : 20-96 Temp, FIELD, C :

Conductivity

1413 UMHO/CM

at 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7606073	7/17	1.278		(+/- .5%)

PH 4.00

at 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7612194	12/18	4.00		(+/- 0.2 units)

PH 7.01

at 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7612195	1/19	7.01		(+/- 0.2 units)

PH 10.01

at 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7701115	1/19	10.01		(+/- 0.2 units)

ORP
ZOBELLS

231.0 MV at 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7609339	1/17	237.5		(+/- 20 MV)

Dissolved Oxygen

(Saturated Air)

Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) (+/- 2%)
	22.45	97.8	8.48	
Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane

☐ Yes ☒ No

Do Cap Color

☐ Black ☒ Blue ☐ Yellow

Model

556

S/N

05B1017 AF

Cable

16216

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
60601	JUN-18	0.02		(0.196 to 0.204)
70320	JUN-18	9.51		(9.8 to 10.2)
60663	JUN-18	999.1		(970 to 1031)

Model

Micro TPW

S/N

2007111 99

Calibrated By

Eric Olson

Date of Calibration

10-13-17

Project Name

VIC

Project number

60314969-17

Signed :



YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard

Temp, LAB, C : 22.39 Temp, FIELD, C :

Conductivity

1413 UMHO/CM

@ 25°

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7606073	7/17	<u>1.278</u>		($\pm .5\%$)

PH 4.00

@ 25°

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7612194	12/18	<u>4.00</u>		(± 0.2 units)

PH 7.01

@ 25°

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7612195	1/19	<u>7.01</u>		(± 0.2 units)

PH 10.01

@ 25°

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7701115	1/19	<u>10.05</u>		(± 0.2 units)

ORP
ZOBELLS231.0 MV *@ 25°*

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7609339	1/17	<u>237.5</u>		(± 20 MV)

Dissolved Oxygen

(Saturated Air)

Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range ($\pm 2\%$) ($\pm 2\%$)
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

16K08

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>70301</u>	<u>MAR-19</u>	<u>0.02</u>		(.0196 to .0204)
<u>70320</u>	<u>MAR-19</u>	<u>10.03</u>		(9.8 to 10.2)
<u>70303</u>	<u>MAR-19</u>	<u>993.4</u>		(970 to 1031)

Model

Micro TPW

S/N

200703026

Calibrated By

Eric Olson

Date of Calibration

10-13-17

Project Name

UTC

Project number

60314964.17

Signed :

Project Name: UTC Delavan

YSI 556 SN: 084101000

Project Number: Q0314964.17

Turbidimeter Model/SN: MicroTPW 200703026

Calibrated By: Randy Nozka

Additional Equipment/SN:

Signature: Randy Nozka

Date: 10-16-2017

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	659
278	752	1413	722	2587	652
558	745	1703	714	2887	644
841	737	1995	707	3190	636

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	754.5		0903	mmHg
Temperature (Saturated Air)	22.70	22.41	0903	c
Temperature (Calibration Solution)	22.40	22.14	0925	c
D.O.	8.53	8.53	0903	mg/L
PH 7	6.73	7.02	0913	SU
PH 4	3.67	4.00	0918	SU
PH 10	9.93	10.03	0928	SU
Specific Conductance	1.278	1.278	0908	mS/cm
ORP	243.2	237.5	0928	mV

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

Project Name: UTC Delavan
 Project Number: 60314964.17
 Calibrated By: Randy Meyer
 Signature: Randy Meyer

YSI 556 SN: 05B1017 AF
 Turbidimeter Model/SN: MicroTPW 20071199
 Additional Equipment/SN: _____
 Date: 10-16-2017

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	659
278	752	1413	722	2587	652
558	745	1703	714	2887	644
841	737	1995	707	3190	636

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	254.2		0900	mmHg
Temperature (Saturated Air)	22.60	22.39	0900	c
Temperature (Calibration Solution)	22.01	22.22	0925	c
D.O.	9.43	8.61	0900	mg/L
PH 7	6.97	7.02	0910	SU
PH 4	3.99	4.00	0915	SU
PH 10	10.05	10.05	0920	SU
Specific Conductance	1.273	1.278	0905	mS/cm
ORP	236.2	237.5	0925	mV

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

Project Name: UTC Delavan Spray Systems

YSI 556 SN: 0531017 AF

Project Number: 60314964

Turbidimeter Model/SN: MicroTPW 200711199

Calibrated By: Justin Butler

Additional Equipment/USN: _____

Signature: [Signature]

Date: 10/17/17

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	659
278	752	1413	722	2587	652
558	745	1703	714	2887	644
841	737	1995	707	3190	636

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	9.865	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	7.681	34	7.065	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	764.0		0707	mmHg
Temperature (Saturated Air)	16.01	16.05	0712	°C
Temperature (Calibration Solution)	15.78	15.67	0722	°C
D.O.	9.93	9.87	0707	mg/L
PH 7	6.94	7.04	0713	SU
PH 4	3.95	4.00	0716	SU
PH 10	10.04	10.09	0719	SU
Specific Conductance	1.263	1.147	0710	mS/cm
ORP	251.3	244.0	0722	mV

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

Project Name: UTC Delavan
 Project Number: 6034964.17
 Calibrated By: Randy Mory
 Signature: Randy Mory

YSI 556 SN: 08401000
 Turbidimeter Model/SN: MicroTPW 200703026
 Additional Equipment/SN: _____
 Date: 10-17-17

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	659
278	752	1413	722	2587	652
558	745	1703	714	2887	644
841	737	1995	707	3190	636

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	6.620
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	765.2		0705	mmHg
Temperature (Saturated Air)	12.40	12.51	0708	C
Temperature (Calibration Solution)	15.61	16.10	0715	C
D.O.	11.42	10.23	0708	mg/L
PH 7	7.10	7.04	0716	SU
PH 4	3.94	4.00	0720	SU
PH 10	9.98	10.08	0724	SU
Specific Conductance	1.289	1.147	0712	mS/cm
ORP	257.5	244.0	0728	mV

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

Project Name: UTC Delavan spray Technologies

YSI 556 SN: 05B1017AF

Project Number: 60314964

Turbidimeter Model/SN: MicroTPW 200711199

Calibrated By: Justin Butler

Additional Equipment/USN: _____

Signature: [Signature]

Date: 10/18/17

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.

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	9.685	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

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	765.5		0733	mmHg
Temperature (Saturated Air)	12.92 15.97	15.41	0733	C
Temperature (Calibration Solution)	13.78	13.38	0748	C
D.O.	10.07	9.87	0738	mg/L
PH 7	7.10	7.04	0739	SU
PH 4	3.90	4.00	0742	SU
PH 10	9.99	10.08	0745	SU
Specific Conductance	1.149	1.147	0736	mS/cm
ORP	247.5	244.0	0748	mV

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

Project Name: UTC Delavan
 Project Number: 60314964.17
 Calibrated By: Randy Morgan
 Signature: Randy Morgan

YSI 556 SN: 08401000
 Turbidimeter Model/SN: MicroTPW 200703026
 Additional Equipment/SN: _____
 Date: 10-18-17

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	659
278	752	1413	722	2587	652
558	745	1703	714	2887	644
841	737	1995	707	3190	636

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	6.620
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	766.8		0700	mmHg
Temperature (Saturated Air)	22.46	22.97	0700	c
Temperature (Calibration Solution)	22.13	21.45	0723	c
D.O.	8.07	8.66	0700	mg/L
PH 7	7.10	7.02	0710	SU
PH 4	3.96	4.00	0714	SU
PH 10	9.93	10.03	0719	SU
Specific Conductance	1.143	1.278	0705	mS/cm
ORP	232.4	237.5	0723	mV

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

FA48531

AECOM

Chain of Custody and Analytical Request

Page 1 of 2
Project Number: 60319961
Chain of Custody Number (1): PO 87457
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-yy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	TCL VOCs 8260B											COMMENTS	Cooler ID
			COMP	GRAB	Well														
MW-17 1	16-OCT-2017	1530		X			X												
MW-15 2	16-OCT-2017	1553		X			X												
MW-18 3	16-OCT-2017	1630		X			X												
MW-15D 4	16-OCT-2017	1637		X			X												
MW-15D1 5	16-OCT-2017	1718		X			X												
MW-11 6	16-OCT-2017	1205 ^{PM} 1235		X			X												
MW-9D 7	16-OCT-2017	0835		X			X												
MW-16 8	17-OCT-2017	0922		X			X												
MW-10D 9	17-OCT-2017	0925		X			X												
MW-16D 10	17-OCT-2017	1025		X			X												
MW-4 11	17-OCT-2017	1025		X			X												
MW-23D 12	17-OCT-2017	1120		X			X												
MW-6 13	17-OCT-2017	1150		X			X												
MW-7 14	17-OCT-2017	1225		X			X												
MW-3D1 15	17-OCT-2017	1232		X			X												

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. <i>[Signature]</i>	10/17/17	1500	1. <i>[Signature]</i> Fed Ex	10/18/17	900
2. Fed Ex			2. <i>[Signature]</i>		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	Shipped: XXXX
Method of Shipment: Fed Ex	Airbill #: 812012030013
Analytical Lab: Accutest	Location: Orlando FLA
Lab Recipient:	Date: Time:

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

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

52745\admin\project control\project farms\Blank COC

FA48531: Chain of Custody

Page 1 of 3

FA48531: Chain of Custody
Page 2 of 3



Chain of Custody and Analytical Request

Chain of Custody Number (1): 87457 RM
P.D.# LIMS Number: 87457

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC						Sample Analysis Requested								Quality Assurance Samples			
Client Name: UTC						TCL VOC's 8260B											
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											
			COMP	GRAB	Well												
MW-9	17-Oct-2017	1630	X			Groundwater	X										
MW-9-MS	17-OCT-2017	1630	X				X										
MW-9-MSD	17.OCT-2017	1630	X				X										
② MW-14	17-OCT-2017	1637	X				X										
③ MW-14-a	17-OCT-2017	1637	X				X										
④ MW-14D	17-OCT-2017	1718	X				X										
⑤ MW-14D-a	17-OCT-2017	1718	X				X										
⑥ MW-14D	17-OCT-2017	1720	X				X										
⑦ MW-5	17-OCT-2017	1740	X				X										
⑧ MW-30D	18-OCT-2017	0830	X				X										
⑨ MW-12D	18-OCT-2017	0907	X				X										
⑩ MW-31D	18-OCT-2017	0910	X				X										
⑪ MW-27	18-OCT-2017	0955	X				X										
⑫ MW-25D	18-OCT-2017	0955	X				X										
⑬ MW-32DR	18-OCT-2017	1040	X				X										

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed) _____ Date _____ Time _____	Received by (signed) _____ Date _____ Time _____
1. Randy Morgan 10/19/17 0300	1. Fed Ex 10/20/17 900
2. Fed Ex	2.
3.	3.

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____	Shipped: XXXX
Method of Shipment: Fed Ex	Airbill #: 812012030447
Analytical Lab: Accutest	Location: Orlando FLA
Lab Recipient: _____	Date: _____ Time: _____

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

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

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FA48591: Chain of Custody

Page 1 of 4

AECOM

Chain of Custody and Analytical Request

Page 2 of 3

Project Number: 60314464.17

Chain of Custody Number (1):

P.O.# 87457

Chain of Custody Number: 87457

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			TCL VOCs 8260B											COMMENTS	Cooler ID
			COMP	GRAB	Well													
14 MW-32DR-a	18-OCT-2017	1040		X	Groundwater	X											un preserved	
15 MW-28	18-OCT-2017	1043		X		X												
16 MW-13D	18-OCT-2017	1130		X		X												
17 MW-22D	18-OCT-2017	1145		X		X												
18 MW-22D-a	18-OCT-2017	1145		X		X												
19 MW-29	18-OCT-2017	1225		X		X												
20 MW-26D	18-OCT-2017	1245		X		X												
21 MW-8	18-OCT-2017	1323		X		X												
22 MW-1	18-OCT-2017	1410		X		X												
23 MW-19	18-OCT-2017	1435		X		X												
24 MW-21D	18-OCT-2017	1512		X		X												
25 MW-20	18-OCT-2017	1525		X		X												
26 MW-21	18-OCT-2017	1605		X		X												
27 MW-24	18-OCT-2017	1630		X		X												
28 Trip Blank 3						X												

Custody Transfers Prior to Receipt by Laboratory						Sample Delivery Details / Laboratory Receipt					
Relinquished By (Signed)			Received by (signed)			Delivered Directly to Lab:			Shipped:		
Date	Time		Date	Time		Method of Shipment:			Airbill #:		
Randy Morgan	10/19/17	0800	Fed Ex	10/20/17	900	Fed Ex			8720 1203 0747		
2. Fed Ex			3. Fed Ex			Analytical Lab:	Accutest		Location:	Orlando FLA	
3.						Lab Recipient:			Date:		Time:

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

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

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FA48591: Chain of Custody

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FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	Oct 18, 2017			
Field Personnel	Randy Morgan			
Site Name	UTC Delavan Spray Technologies Site			
AECOM Job #	60314964			
Sample ID*	MW-1			
Upgradient	Downgradient	Sidegradient	X	Source
Weather Conditions	Clear Sunny			
Air Temperature	70s ° F			
Total Well Depth (TWD) =	18.00	1/100 ft		
Depth to Ground Water (DGW) =	13.16	1/100 ft		
Length of Water Column (LWC) = TWD - DGW =	4.84	1/100 ft		
1 Casing Volume (OCV)* = LWC x 0.163 =	0.78	gal		
3 Casing Volumes =	2.36	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	147.56	1/100 ft		
Height of Riser (above land surface)	-0.37	1/100 ft		
Land Surface Elevation	147.19	1/100 ft		
Screened Interval	3 - 18	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	X	MODERATE	HIGH
Comments/Observations	Sample Time: 1410			
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						
	Initial	25	50	75	1.0	1.25	1.50
VOLUME PURGED (gallons)	1338	1379	1348	1353	1358	1403	1408
TIME (Military)	13.88	14.03	14.15	14.38	14.50	14.70	14.81
Water Level (ft BTOC)	4.39	4.36	4.28	4.30	4.28	4.22	4.24
pH (S.U.)	0.033	0.033	0.033	0.033	0.033	0.033	0.033
Sp. Cond. (mS/cm)	24.47	24.48	24.46	24.37	24.29	24.33	24.20
Water Temp. (°C)	9.22	10.08	7.16	6.72	3.87	2.94	3.33
Turbidity (NTUs)	2.73	2.93	3.55	3.24	3.29	3.13	3.03
DO - (mg/L)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Salinity (ppt)	358.5	3566	354.5	354.9	353.1	354.1	353.8
ORP (mV)							

COMMENTS/OBSERVATIONS

replaced cap - No lock



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J. Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-2		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>clear</u>		
Air Temperature	<u>70.5</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>13.82</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>4.18</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>0.68</u> gal
3 Casing Volumes =	<u>2.04</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>1.20</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>147.63</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.18</u>	1/100 ft
Land Surface Elevation	<u>147.81</u>	1/100 ft
Screened Interval	<u>3</u> - <u>18</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>1425</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).

VOLUME PURGED (gallons)	FIELD ANALYSES						
	Initial	0.20	0.40	0.60	0.80	1.00	1.20
TIME (Military)	<u>1354</u>	<u>1359</u>	<u>1404</u>	<u>1409</u>	<u>1414</u>	<u>1419</u>	<u>1424</u>
Water Level (ft BTOC)	<u>14.05</u>	<u>14.09</u>	<u>14.12</u>	<u>14.14</u>	<u>14.14</u>	<u>14.14</u>	<u>14.15</u>
pH (S.U.)	<u>4.64</u>	<u>4.59</u>	<u>4.55</u>	<u>4.55</u>	<u>4.50</u>	<u>4.50</u>	<u>4.51</u>
Sp. Cond. (mS/cm)	<u>0.021</u>	<u>0.021</u>	<u>0.021</u>	<u>0.022</u>	<u>0.022</u>	<u>0.022</u>	<u>0.022</u>
Water Temp. (°C)	<u>24.07</u>	<u>24.20</u>	<u>24.23</u>	<u>24.30</u>	<u>24.33</u>	<u>24.37</u>	<u>24.39</u>
Turbidity (NTUs)	<u>5.36</u>	<u>4.65</u>	<u>4.57</u>	<u>4.69</u>	<u>3.68</u>	<u>3.24</u>	<u>2.81</u>
DO - (mg/L)	<u>2.51</u>	<u>2.42</u>	<u>2.49</u>	<u>2.65</u>	<u>2.69</u>	<u>2.23</u>	<u>2.75</u>
Salinity (ppt)	<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>
ORP (mV)	<u>369.2</u>	<u>370.7</u>	<u>370.8</u>	<u>369.1</u>	<u>375.6</u>	<u>377.2</u>	<u>382.1</u>

COMMENTS/OBSERVATIONS

Began purging at 1350 Purging rate: 151 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>Oct 17, 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>148.11</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.23</u> 1/100 ft	
Sample ID* <u>MW-3</u>		Land Surface Elevation <u>148.34</u> 1/100 ft	
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____		Screened Interval <u>3</u> - <u>18</u> 1/100 ft	
Weather Conditions <u>clear & sunny</u>		Dedicated Pump or Bailer YES _____ NO ☒ Type _____	
Air Temperature <u>70's</u> ° F		Steel Guard Pipe Around Casing ☒ YES ☒ NO _____	
Total Well Depth (TWD) = <u>18.00</u> 1/100 ft		Locking Cap YES ☒ NO _____	
Depth to Ground Water (DGW) = <u>14.18</u> 1/100 ft		Protective Post/Abutment YES _____ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>3.82</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO _____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>0.62</u> gal		Yield LOW _____ MODERATE _____ HIGH ☒	
3 Casing Volumes = <u>1.86</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time <u>1330</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>1.75</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)	Initial	<u>.35</u>	<u>.70</u>	<u>1.05</u>	<u>1.40</u>	<u>1.75</u>						
TIME (Military)	<u>1303</u>	<u>1308</u>	<u>1313</u>	<u>1318</u>	<u>1323</u>	<u>1328</u>						
Water Level (ft BTOC)	<u>14.44</u>	<u>14.61</u>	<u>14.88</u>	<u>15.28</u>	<u>15.42</u>	<u>15.55</u>						
pH (S.U.)	<u>5.31</u>	<u>4.78</u>	<u>4.61</u>	<u>4.54</u>	<u>4.53</u>	<u>4.52</u>						
Sp. Cond. (mS/cm)	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>	<u>0.019</u>						
Water Temp. (°C)	<u>23.60</u>	<u>24.28</u>	<u>24.50</u>	<u>24.70</u>	<u>24.78</u>	<u>24.71</u>						
Turbidity (NTUs)	<u>5.48</u>	<u>6.50</u>	<u>4.57</u>	<u>3.14</u>	<u>5.68</u>	<u>4.10</u>						
DO - (mg/L)	<u>3.65</u>	<u>4.39</u>	<u>5.11</u>	<u>3.89</u>	<u>4.10</u>	<u>4.21</u>						
Salinity (ppt)	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>						
ORP (mV)	<u>280.1</u>	<u>302.6</u>	<u>311.1</u>	<u>312.3</u>	<u>318.7</u>	<u>320.9</u>						

COMMENTS/OBSERVATIONS _____

Began purging at _____ Purging rate _____ ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 17 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>148.12</u>	1/100 ft
AECOM Job #	<u>60314964</u>	Height of Riser (above land surface)	<u>-0.16</u>	1/100 ft
Sample ID*	<u>MW-3D</u>	Land Surface Elevation	<u>148.28</u>	1/100 ft
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐		Screened Interval	<u>44 - 49</u>	1/100 ft
Weather Conditions	<u>clear/sunny</u>	Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Air Temperature	<u>70.5</u> °F	Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Total Well Depth (TWD) =	<u>49.00</u>	Locking Cap	YES ☒ NO ☐	
Depth to Ground Water (DGW) =	<u>16.22</u>	Protective Post/Abutment	YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW =	<u>32.78</u>	Well Integrity Satisfactory	YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>5.34</u>	Yield	LOW ☐ MODERATE ☐ HIGH ☒	
3 Casing Volumes =	<u>16.02</u>	Comments/Observations		
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>	Sample Time:	<u>1407</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>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	<u>.40</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>					
VOLUME PURGED (gallons)											
TIME (Military)	<u>1340</u>	<u>1345</u>	<u>1350</u>	<u>1355</u>	<u>1400</u>	<u>1405</u>					
Water Level (ft BTOC)	<u>16.21</u>	<u>16.21</u>	<u>16.21</u>	<u>16.21</u>	<u>16.21</u>	<u>16.21</u>					
pH (S.U.)	<u>6.82</u>	<u>7.19</u>	<u>7.30</u>	<u>7.32</u>	<u>7.34</u>	<u>7.35</u>					
Sp. Cond. (mS/cm)	<u>0.208</u>	<u>0.209</u>	<u>0.210</u>	<u>0.210</u>	<u>0.210</u>	<u>0.210</u>					
Water Temp. (°C)	<u>21.88</u>	<u>21.93</u>	<u>21.75</u>	<u>21.67</u>	<u>21.52</u>	<u>21.57</u>					
Turbidity (NTUs)	<u>16.26</u>	<u>15.10</u>	<u>12.79</u>	<u>8.69</u>	<u>10.63</u>	<u>5.88</u>					
DO - (mg/L)	<u>3.05</u>	<u>3.50</u>	<u>3.40</u>	<u>3.29</u>	<u>2.49</u>	<u>2.23</u>					
Salinity (ppt)	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>					
ORP (mV)	<u>180.7</u>	<u>205.8</u>	<u>221.7</u>	<u>229.0</u>	<u>235.6</u>	<u>237.3</u>					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 17, 2017
Field Personnel Randy Marga
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-3D1
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐
Weather Conditions Clear + Sunny
Air Temperature 70's ° F
Total Well Depth (TWD) = 85.00 1/100 ft
Depth to Ground Water (DGW) = 16.12 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 68.88 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 11.22 gal
3 Casing Volumes = 33.68 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 1.600 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation 147.93 1/100 ft
Height of Riser (above land surface) -0.19 1/100 ft
Land Surface Elevation 148.12 1/100 ft
Screened Interval 75 - 85 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: 1232
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	.40	.80	1.20	1.60						
1210	1215	1220	1225	1230						
16.12	16.12	16.12	16.12	16.12						
7.37	7.47	7.52	7.54	7.54						
0.194	0.194	0.195	0.195	0.195						
21.46	21.19	21.25	21.13	21.08						
18.88	10.80	8.11	2.82	6.34						
0.36	0.15	0.14	0.12	0.12						
0.09	0.09	0.09	0.09	0.09						
-7.6	-48.4	-59.2	-65.5	-67.4						

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-4		
☒ X Upgradient	☐ Downgradient	☐ Sidegradient	☐ Source
Weather Conditions	<u>Partly Cloudy</u>		
Air Temperature	<u>50's</u>	° F	
Total Well Depth (TWD) =	<u>14.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.49</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>2.51</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>0.41</u> gal
3 Casing Volumes =	<u>1.23</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>1.60</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>147.03</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.27</u>	1/100 ft
Land Surface Elevation	<u>147.30</u>	1/100 ft
Screened Interval	<u>4</u> - <u>14</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>1025</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>0.20</u>	<u>0.40</u>	<u>0.60</u>	<u>0.80</u>	<u>1.00</u>	<u>1.20</u>	<u>1.40</u>	<u>1.60</u>		
<u>0941</u>	<u>0946</u>	<u>0951</u>	<u>0956</u>	<u>1001</u>	<u>1006</u>	<u>1011</u>	<u>1016</u>	<u>1021</u>		
<u>12.29</u>	<u>12.40</u>	<u>12.50</u>	<u>12.61</u>	<u>12.72</u>	<u>12.81</u>	<u>12.90</u>	<u>13.02</u>	<u>13.14</u>		
<u>5.15</u>	<u>4.94</u>	<u>4.73</u>	<u>4.79</u>	<u>4.82</u>	<u>4.83</u>	<u>4.87</u>	<u>4.83</u>	<u>4.86</u>		
<u>0.063</u>	<u>0.060</u>	<u>0.060</u>	<u>0.061</u>	<u>0.060</u>	<u>0.060</u>	<u>0.060</u>	<u>0.059</u>	<u>0.059</u>		
<u>19.32</u>	<u>19.32</u>	<u>18.59</u>	<u>18.39</u>	<u>18.39</u>	<u>18.66</u>	<u>18.79</u>	<u>18.99</u>	<u>18.97</u>		
<u>143.2</u>	<u>140.3</u>	<u>136.0</u>	<u>146.3</u>	<u>149.1</u>	<u>110.7</u>	<u>104.9</u>	<u>99.9</u>	<u>95.6</u>		
<u>1.02</u>	<u>0.73</u>	<u>0.73</u>	<u>0.73</u>	<u>0.72</u>	<u>0.72</u>	<u>0.70</u>	<u>0.69</u>	<u>0.68</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>	<u>0.03</u>	<u>0.03</u>		
<u>134.6</u>	<u>169.8</u>	<u>231.4</u>	<u>154.4</u>	<u>163.9</u>	<u>180.8</u>	<u>194.2</u>	<u>187.2</u>	<u>185.4</u>		

COMMENTS/OBSERVATIONS

Began purging at 0937 Purging rate: 151 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-5</u>		
☒ X 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>12.10</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>1.9</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>0.31</u> gal
3 Casing Volumes =	<u>0.93</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>1.20</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
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>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>1740</u>	
Sample Analytes:	<u>VOL'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

* - One casing volume (gallons) for a 0.5 inch well is 0.0102X LWC; 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	0.20	0.40	0.60	0.80	1.00	1.20	1.40			
	1308	1313	1318	1323	1328	1333	1338	1740		
	12.39	12.61	12.83	13.07	13.30	13.75	DRY			
	4.23	4.31	4.43	4.45	4.52	4.47	4.77			
	0.016	0.016	0.016	0.017	0.017	0.017	0.016			
	23.19	23.11	23.07	22.97	22.93	22.87	21.96			
	18.83	15.40	12.20	13.91	17.34	15.22	43.01			
	5.73	5.66	5.28	4.66	4.25	4.19	5.68			
	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
	383.7	389.0	390.3	397.3	396.9	405.9	334.9			

COMMENTS/OBSERVATIONS

Began purging at 1305 Purging rate: 151 ml/min

AECOM

DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 17, 2017

Field Personnel Randy Morgan

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-6

☒ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source

Weather Conditions Clear / Sunny

Air Temperature 60.3 °F

Total Well Depth (TWD) = 14.00 1/100 ft

Depth to Ground Water (DGW) = 10.12 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 3.88 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.163 = 0.63 gal

3 Casing Volumes = 1.89 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 2.15 gal

Casing Diameter 2.0 inches

Casing Material PVC

Measuring Point Elevation 143.22 1/100 ft

Height of Riser (above land surface) -0.23 1/100 ft

Land Surface Elevation 143.45 1/100 ft

Screened Interval 4 - 14 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: 11:50

Sample Analytes: DOC'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	.30	.60	.90	1.15	1.40	1.65	1.90	2.15		
1108	1113	1118	1123	1128	1133	1138	1143	1148		
10.42	10.29	11.07	11.50	11.97	12.03	12.32	12.49	12.60		
4.75	4.50	4.44	4.38	4.38	3.91	4.38	4.37	4.39		
0.019	0.018	0.017	0.017	0.017	0.016	0.017	0.016	0.016		
20.81	21.29	21.43	21.41	21.29	21.14	21.15	21.24	21.25		
12.98	10.36	5.42	6.88	9.13	9.08	8.61	8.27	7.90		
1.55	1.17	0.64	0.49	0.46	1.19	0.71	0.65	0.62		
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
294.6	297.9	289.4	280.9	281.8	315.2	285.7	289.0	291.6		

COMMENTS/OBSERVATIONS

turned pump all the way down



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page i of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-7		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>60's</u>	° F	
Total Well Depth (TWD) =	<u>20.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>14.57</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>5.43</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>0.89</u> gal
3 Casing Volumes =	<u>2.67</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>1.40</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>149.03</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.22</u>	1/100 ft
Land Surface Elevation	<u>149.25</u>	1/100 ft
Screened Interval	<u>5</u> - <u>20</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>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>0.20</u>	<u>0.40</u>	<u>0.60</u>	<u>0.80</u>	<u>1.00</u>	<u>1.20</u>	<u>1.40</u>			
	<u>1145</u>	<u>1150</u>	<u>1155</u>	<u>1200</u>	<u>1205</u>	<u>1210</u>	<u>1215</u>	<u>1220</u>		
	<u>15.06</u>	<u>15.26</u>	<u>15.58</u>	<u>15.85</u>	<u>16.08</u>	<u>16.23</u>	<u>16.50</u>	<u>16.70</u>		
	<u>5.46</u>	<u>4.87</u>	<u>4.81</u>	<u>4.75</u>	<u>4.76</u>	<u>4.72</u>	<u>4.74</u>	<u>4.71</u>		
	<u>0.018</u>	<u>0.016</u>	<u>0.015</u>	<u>0.015</u>	<u>0.015</u>	<u>0.016</u>	<u>0.016</u>	<u>0.017</u>		
	<u>24.19</u>	<u>24.42</u>	<u>24.62</u>	<u>24.68</u>	<u>25.01</u>	<u>25.45</u>	<u>25.45</u>	<u>25.65</u>		
	<u>4.88</u>	<u>4.49</u>	<u>4.26</u>	<u>4.82</u>	<u>6.67</u>	<u>4.50</u>	<u>5.02</u>	<u>5.18</u>		
	<u>3.35</u>	<u>3.76</u>	<u>6.89</u>	<u>6.94</u>	<u>6.76</u>	<u>5.80</u>	<u>6.75</u>	<u>6.69</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>286.6</u>	<u>319.9</u>	<u>329.5</u>	<u>336.4</u>	<u>342.4</u>	<u>352.0</u>	<u>357.4</u>	<u>362.6</u>		

COMMENTS/OBSERVATIONS

Began purging at 1141 Purging rate: 151 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) 10-18-17
Field Personnel Randy Morgan
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-8
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐
Weather Conditions clear / sunny
Air Temperature 70.5 ° F
Total Well Depth (TWD) = 20.00 1/100 ft
Depth to Ground Water (DGW) = 13.51 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 6.49 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 1.05 gal
3 Casing Volumes = 3.15 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 145.66 1/100 ft
Height of Riser (above land surface) -0.29 1/100 ft
Land Surface Elevation 145.95 1/100 ft
Screened Interval 5 - 20 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: 1323
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).

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	.40	.80	1.20	1.60	2.0					
TIME (Military)	1255	1300	1305	1310	1315	1320					
Water Level (ft BTOC)	13.54	13.78	13.95	14.03	14.10	14.20					
pH (S.U.)	4.79	4.53	4.44	4.43	4.37	4.33					
Sp. Cond. (mS/cm)	0.083	0.082	0.078	0.077	0.076	0.075					
Water Temp. (°C)	26.57	27.39	27.34	27.20	27.28	27.20					
Turbidity (NTUs)	5.80	4.36	1.69	2.26	1.90	3.04					
DO - (mg/L)	4.18	4.45	4.51	4.53	4.37	4.55					
Salinity (ppt)	0.04	0.04	0.04	0.03	0.03	0.03					
ORP (mV)	358.5	356.0	352.3	352.2	349.8	350.6					

COMMENTS/OBSERVATIONS

Batts holes stripped out



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J. Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-9		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>clear</u>		
Air Temperature	<u>70.5</u>	° F	
Total Well Depth (TWD) =	<u>20.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>10.11</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>9.89</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>1.61</u> gal
3 Casing Volumes =	<u>4.83</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>1.40</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	PVC	
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>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>1630</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	0.20	0.40	0.60	0.80	1.00	1.20	1.40			
1551	1556	1601	1606	1611	1616	1621	1626			
11.01	11.26	11.51	11.85	12.19	12.44	12.68	16.87			
5.07	3.76	4.02	4.07	4.11	4.11	4.13	4.10			
0.034	0.024	0.023	0.023	0.023	0.023	0.023	0.023			
21.14	20.89	20.84	20.87	20.83	20.81	20.80	20.79			
28.84	22.10	18.30	15.92	13.18	11.13	10.16	8.65			
2.22	2.10	1.92	1.52	1.49	1.47	1.32	1.35			
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
174.0	295.4	327.3	345.2	350.9	357.2	351.2	351.9			

COMMENTS/OBSERVATIONS

Began purging at 1547 Purging rate: 151 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/12/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-9D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Partly cloudy</u>		
Air Temperature	<u>50.5</u>	° F	
Total Well Depth (TWD) =	<u>49.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.13</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>37.27</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>6.08</u> gal
3 Casing Volumes =	<u>18.24</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>144.20</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.60</u>	1/100 ft
Land Surface Elevation	<u>144.80</u>	1/100 ft
Screened Interval	<u>44</u> - <u>49</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>0835</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>0.50</u>	<u>1.75</u>			
	<u>0759</u>	<u>0804</u>	<u>0809</u>	<u>0814</u>	<u>0819</u>	<u>0824</u>	<u>0829</u>	<u>0834</u>		
	<u>11.86</u>	<u>11.86</u>	<u>11.86</u>	<u>11.86</u>	<u>11.86</u>	<u>11.86</u>	<u>11.86</u>	<u>11.86</u>		
	<u>7.67</u>	<u>7.67</u>	<u>7.68</u>	<u>7.69</u>	<u>7.70</u>	<u>7.70</u>	<u>7.69</u>	<u>7.69</u>		
	<u>0.193</u>	<u>0.192</u>	<u>0.192</u>	<u>0.192</u>	<u>0.192</u>	<u>0.192</u>	<u>0.192</u>	<u>0.192</u>		
	<u>18.62</u>	<u>18.82</u>	<u>18.93</u>	<u>18.85</u>	<u>18.92</u>	<u>18.90</u>	<u>18.91</u>	<u>18.91</u>		
	<u>3.34</u>	<u>2.27</u>	<u>1.83</u>	<u>1.54</u>	<u>1.16</u>	<u>1.01</u>	<u>0.93</u>	<u>0.80</u>		
	<u>1.60</u>	<u>0.55</u>	<u>0.42</u>	<u>0.39</u>	<u>0.39</u>	<u>0.35</u>	<u>0.35</u>	<u>0.34</u>		
	<u>0.09</u>	<u>0.09</u>	<u>0.09</u>	<u>0.09</u>	<u>0.09</u>	<u>0.09</u>	<u>0.09</u>	<u>0.09</u>		
	<u>248.0</u>	<u>252.8</u>	<u>184.0</u>	<u>95.6</u>	<u>53.9</u>	<u>38.2</u>	<u>31.1</u>	<u>27.6</u>		

COMMENTS/OBSERVATIONS

Began purging at 0755 Purging rate: 1.89 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J 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>70.5</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>9.53</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>8.67</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<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>1.75</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</u> - <u>18</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>1720</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	0.25	0.50	0.75	1.00	1.25	1.50	1.75			
1643	1648	1653	1658	1703	1708	1713	1718			
9.08	9.32	9.55	9.55	9.55	9.55	9.56	9.56			
5.04	4.57	4.41	4.48	4.32	4.26	4.26	4.24			
0.035	0.034	0.031	0.029	0.028	0.028	0.027	0.027			
19.65	19.91	20.06	20.12	20.12	20.12	20.14	20.14			
8.73	5.11	3.92	3.37	4.10	3.71	2.62	2.33			
0.96	0.61	0.50	0.49	0.52	0.73	0.53	0.59			
0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
87.3	100.2	116.4	113.6	124.7	147.4	153.2	157.9			

COMMENTS/OBSERVATIONS

Began purging at 1640 Purging rate: 189 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J. Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-10D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Partly Cloudy</u>		
Air Temperature	<u>50.5</u>	° F	
Total Well Depth (TWD) =	<u>48.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>9.50</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>38.5</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>6.28</u> gal
3 Casing Volumes =	<u>18.84</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>141.79</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.29</u>	1/100 ft
Land Surface Elevation	<u>142.08</u>	1/100 ft
Screened Interval	<u>43</u> - <u>48</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>0925</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	0.30	0.60	0.90	1.20	1.50					
0855	0800	0905	0910	0915	0920					
9.63	9.63	9.63	9.63	9.63	9.63					
7.76	7.80	7.77	7.78	7.77	7.77					
0.200	0.201	0.202	0.202	0.201	0.202					
17.19	17.51	17.58	17.63	17.60	17.52					
2.47	0.67	0.00	0.00	0.00	0.00					
5.06	4.44	4.33	4.24	4.24	4.22					
0.10	0.10	0.10	0.10	0.10	0.10					
239.9	238.8	246.7	245.0	247.8	250.0					

COMMENTS/OBSERVATIONS

Began purging at 0851 Purging rate: 227 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/16/17</u>	Casing Diameter	<u>2.0</u>	inches
Field Personnel	<u>J Butler</u>	Casing Material	<u>PVC</u>	
Site Name	<u>UTC Delavan Spray Technologies Site</u>	Measuring Point Elevation	<u>143.16</u>	1/100 ft
AECOM Job #	<u>60314964</u>	Height of Riser (above land surface)	<u>-0.61</u>	1/100 ft
Sample ID*	<u>MW-11</u>	Land Surface Elevation	<u>143.77</u>	1/100 ft
Upgradient ☐ X Downgradient ☐ Sidegradient ☐ Source ☐		Screened Interval	<u>3</u> - <u>18</u>	1/100 ft
Weather Conditions	<u>cloudy</u>	Dedicated Pump or Bailor	YES ☒ NO ☐	Type <u>tubing</u>
Air Temperature	<u>70.5</u> ° F	Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Total Well Depth (TWD) =	<u>18.00</u>	Locking Cap	YES ☒ NO ☐	
Depth to Ground Water (DGW) =	<u>9.63</u>	Protective Post/Abutment	YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW =	<u>8.37</u>	Well Integrity Satisfactory	YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x <u>0.163</u>	= <u>1.36</u>	Yield	LOW ☐ MODERATE ☐ HIGH ☒	
3 Casing Volumes = <u>4.08</u>	gal = Standard Evacuation Volume	Comments/Observations		
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>	Sample Time	<u>1735</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>2.10</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	0.35	0.70	1.05	1.40	1.75	2.10				
	1700	1705	1710	1715	1720	1725	1730			
	9.92	9.94	9.96	9.98	9.99	9.99	9.99			
	4.77	4.25	4.65	4.70	4.70	4.71	4.71			
	0.226	0.226	0.225	0.225	0.226	0.226	0.225			
	20.04	20.03	20.07	20.12	20.14	20.17	20.17			
	58.52	37.20	30.11	24.73	21.75	19.22	17.92			
	0.67	0.56	0.50	0.55	0.58	0.56	0.56			
	0.11	0.11	0.11	0.11	0.11	0.11	0.11			
	244.0	312.7	525.3	345.6	352.2	348.9	341.2			

COMMENTS/OBSERVATIONS

Began purging at 1657 Purging rate: 265 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 18, 2017
Field Personnel Randy Mingo
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-12D
____ Upgradient ☒ Downgradient ____ Sidegradient ____ Source ____
Weather Conditions clear sunny
Air Temperature 40's ° F
Total Well Depth (TWD) = 50.00 1/100 ft
Depth to Ground Water (DGW) = 15.65 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 34.35 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 5.59 gal
3 Casing Volumes = 16.79 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 7.0 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation 147.65 1/100 ft
Height of Riser (above land surface) -0.21 1/100 ft
Land Surface Elevation 147.86 1/100 ft
Screened Interval 40 - 50 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: 0907
Sample Analytes: VOC'S
Hack Fe Kit: 17A 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	1.0	2.0	3.0	4.0	5.0	5.40	5.80	6.20	6.60	7.0
TIME (Military)	0750	0800	0810	0820	0830	0840	0845	0850	0855	0900	0905
Water Level (ft BTOC)	18.12	19.48	19.93	19.90	19.92	19.90	19.18	18.80	18.55	18.47	18.43
pH (S.U.)	11.81	11.73	11.03	10.29	9.75	9.60	9.60	9.50	9.41	9.33	9.25
Sp. Cond. (mS/cm)	1.084	0.793	0.332	0.239	0.223	0.222	0.221	0.220	0.220	0.220	0.221
Water Temp. (°C)	18.14	18.22	18.19	18.19	18.20	18.23	18.13	18.17	18.15	18.16	18.18
Turbidity (NTUs)	3.54	2.76	3.12	7.55	4.52	5.65	4.97	3.84	4.08	4.72	4.27
DO - (mg/L)	5.74	5.82	5.77	5.76	5.70	5.72	4.77	4.93	5.02	5.39	5.43
Salinity (ppt)	0.54	0.38	0.16	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10
ORP (mV)	131.9	139.2	173.8	202.8	228.0	237.4	242.0	247.3	251.6	254.4	256.8

COMMENTS/OBSERVATIONS

Ph and Conductivity are high stabilize after 5 gals pump test at first to get parameters low to start readings



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 18, 2017
Field Personnel Randy Noyes
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-13D
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐
Weather Conditions clear/sunny
Air Temperature 60.5 ° F
Total Well Depth (TWD) = 50.00 1/100 ft
Depth to Ground Water (DGW) = 14.38 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 35.62 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 5.80 gal
3 Casing Volumes = 17.41 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 146.23 1/100 ft
Height of Riser (above land surface) -0.18 1/100 ft
Land Surface Elevation 146.41 1/100 ft
Screened Interval 40 - 50 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: 1130
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	.40	.80	1.20	1.60	2.0					
	1103	1108	1113	1118	1123	1128				
	14.48	14.49	14.49	14.48	14.48	14.48				
	8.03	7.61	7.58	7.54	7.50	7.49				
	0.217	0.223	0.223	0.224	0.225	0.225				
	19.23	19.19	19.27	19.28	19.23	19.24				
	6.07	5.61	7.54	3.36	4.22	1.58				
	4.43	5.24	4.99	5.24	5.32	5.24				
	0.10	0.11	0.11	0.11	0.11	0.11				
	295.5	285.4	283.6	299.7	283.2	284.7				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 17, 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 and sunny
Air Temperature 70's ° F
Total Well Depth (TWD) = 20.00 1/100 ft
Depth to Ground Water (DGW) = 13.24 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 6.76 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 1.10 gal
3 Casing Volumes = 3.30 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 2.25 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 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: 1637
Sample Analytes: VOC'S
Hack Fe Kit: NA mg/L

* - One casing volume (gallons) for a 0.5 inch well is 0.0102X LWC; 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	.25	.50	.75	1.0	1.25	1.50	1.75	2.0	2.25	
1550	1555	1600	1605	1610	1615	1620	1625	1630	1635	
13.67	13.94	14.21	14.58	15.03	15.28	15.69	15.92	16.07	16.22	
4.48	4.32	4.31	4.25	4.26	4.25	4.26	4.28	4.27	4.25	
0.021	0.021	0.021	0.021	0.021	0.022	0.022	0.023	0.023	0.023	
21.75	21.56	22.38	22.65	22.61	22.62	22.58	22.48	22.52	22.47	
20.36	9.56	4.85	6.74	6.95	6.92	9.27	8.09	8.65	7.69	
4.63	4.42	4.67	5.49	5.83	5.64	5.49	5.42	5.32	5.31	
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
347.6	343.7	344.3	347.4	344.0	343.9	343.5	342.5	340.9	342.0	
	22.17									

COMMENTS/OBSERVATIONS

on slowest setting



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 17, 2017
Field Personnel Randy Morgan
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-14D
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐
Weather Conditions Clear Sunny
Air Temperature 70.5 ° F
Total Well Depth (TWD) = 50.00 1/100 ft
Depth to Ground Water (DGW) = 15.08 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 34.92 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 5.69 gal
3 Casing Volumes = 17.07 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 146.88 1/100 ft
Height of Riser (above land surface) -0.23 1/100 ft
Land Surface Elevation 147.11 1/100 ft
Screened Interval 40 - 50 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: 1718
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)	Initial	.40	.80	1.20	1.60	2.0					
TIME (Military)	1650	1655	1700	1705	1710	1715					
Water Level (ft BTOC)	15.93	15.08	15.12	15.13	15.13	15.13					
pH (S.U.)	8.10	7.47	7.35	7.35	7.37	7.38					
Sp. Cond. (mS/cm)	0.186	0.206	0.208	0.207	0.208	0.208					
Water Temp. (°C)	20.99	20.93	20.86	20.83	20.82	20.75					
Turbidity (NTUs)	11.25	9.04	8.60	8.86	8.65	8.71					
DO - (mg/L)	0.62	0.22	0.13	0.13	0.12	0.13					
Salinity (ppt)	0.09	0.09	0.10	0.10	0.10	0.10					
ORP (mV)	257.7	252.3	240.6	215.6	206.3	204.0					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 16, 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-15</u>		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>overcast</u>		
Air Temperature	<u>80</u>	° F	
Total Well Depth (TWD) =	<u>19.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>5.25</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>13.75</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>2.24</u> gal
3 Casing Volumes =	<u>6.72</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>135.73</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.40</u>	1/100 ft
Land Surface Elevation	<u>136.13</u>	1/100 ft
Screened Interval	<u>4</u> - <u>19</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	<u>Sample Time: 1553</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L <u>NA</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	.40	.80	1.20	1.60	2.0	2.40	2.80	3.20	3.60
1505	1510	1515	1520	1525	1530	1535	1540	1545	1550
5.50	5.58	5.63	5.67	5.69	5.70	5.72	5.73	5.75	5.77
5.11	4.81	4.78	4.62	4.40	4.48	4.63	4.74	4.78	4.81
0.517	0.488	0.473	0.461	0.458	0.459	0.462	0.464	0.465	0.466
21.54	21.57	21.65	21.82	21.92	22.01	21.98	22.00	22.06	22.12
16.82	15.73	9.29	8.64	8.79	9.02	8.05	8.16	9.21	8.35
0.36	0.40	0.35	0.39	0.43	0.44	0.43	0.43	0.43	0.44
0.25	0.23	0.23	0.22	0.22	0.22	0.22	0.22	0.22	0.22
111.5	144.9	152.8	174.0	194.0	181.3	145.5	131.1	123.3	118.9

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 16, 2017
Field Personnel Randy Meyer
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-15D
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐
Weather Conditions overcast
Air Temperature 80 ° F
Total Well Depth (TWD) = 45.00 1/100 ft
Depth to Ground Water (DGW) = 3.85 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 41.15 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 6.70 gal
3 Casing Volumes = 20.12 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 2.8 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation 135.59 1/100 ft
Height of Riser (above land surface) -0.34 1/100 ft
Land Surface Elevation 135.93 1/100 ft
Screened Interval 35 - 45 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: 1637
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

	Initial	.40	.80	1.20	1.60	2.0	2.4	2.8			
VOLUME PURGED (gallons)	1600	1605	1610	1615	1620	1625	1630	1635			
TIME (Military)	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83			
Water Level (ft BTOC)	6.83	6.74	6.80	6.82	6.85	6.87	6.87	6.88			
pH (S.U.)	0.420	0.421	0.421	0.420	0.420	0.420	0.420	0.420			
Sp. Cond. (mS/cm)	20.34	19.94	19.72	19.65	19.58	19.52	19.45	19.41			
Water Temp. (°C)	18.78	10.56	9.50	9.56	9.58	9.60	9.39	9.50			
Turbidity (NTUs)	2.11	2.15	2.15	2.15	2.20	2.27	2.25	2.20			
DO - (mg/L)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20			
Salinity (ppt)	-33.1	+50.7	+107.4	+114.7	+131.2	151.4	163.3	170.2			
ORP (mV)											

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 16, 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-15D1</u>		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>overcast</u>		
Air Temperature	<u>80</u>	° F	
Total Well Depth (TWD) =	<u>85.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>3.96</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>81.04</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>13.20</u> gal
3 Casing Volumes =	<u>39.62</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>135.69</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.25</u>	1/100 ft
Land Surface Elevation	<u>135.94</u>	1/100 ft
Screened Interval	<u>75</u> - <u>85</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: 1718</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>1.40</u>	<u>1.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.40</u>				
	<u>1645</u>	<u>1650</u>	<u>1655</u>	<u>1700</u>	<u>1705</u>	<u>1710</u>	<u>1715</u>			
	<u>4.04</u>	<u>4.04</u>	<u>4.04</u>	<u>4.04</u>	<u>4.04</u>	<u>4.04</u>	<u>4.04</u>			
	<u>7.40</u>	<u>7.36</u>	<u>7.42</u>	<u>7.46</u>	<u>7.46</u>	<u>7.47</u>	<u>7.47</u>			
	<u>0.208</u>	<u>0.208</u>	<u>0.211</u>	<u>0.214</u>	<u>0.214</u>	<u>0.216</u>	<u>0.216</u>			
	<u>19.67</u>	<u>19.38</u>	<u>19.30</u>	<u>19.25</u>	<u>19.21</u>	<u>19.17</u>	<u>19.15</u>			
	<u>22.19</u>	<u>7.45</u>	<u>4.91</u>	<u>5.22</u>	<u>6.36</u>	<u>6.49</u>	<u>5.45</u>			
	<u>0.32</u>	<u>0.11</u>	<u>0.10</u>	<u>0.14</u>	<u>0.16</u>	<u>0.20</u>	<u>0.23</u>			
	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>			
	<u>-82.6</u>	<u>-111.1</u>	<u>-109.2</u>	<u>-106.1</u>	<u>-103.9</u>	<u>-100.1</u>	<u>-98.6</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) Oct 17, 2017
Field Personnel Randy Morgan
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-16
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐
Weather Conditions mostly sunny
Air Temperature 60.5 ° F
Total Well Depth (TWD) = 19.00 1/100 ft
Depth to Ground Water (DGW) = 7.09 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 11.91 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 1.94 gal
3 Casing Volumes = 5.82 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 2.05 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation 138.30 1/100 ft
Height of Riser (above land surface) -0.44 1/100 ft
Land Surface Elevation 138.74 1/100 ft
Screened Interval 4 - 19 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 0922
Sample Time: 0922
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	<u>1.35</u>	<u>.70</u>	<u>1.05</u>	<u>1.30</u>	<u>1.55</u>	<u>1.80</u>	<u>2.05</u>			
<u>0843</u>	<u>0848</u>	<u>0855</u>	<u>0900</u>	<u>0905</u>	<u>0910</u>	<u>0915</u>	<u>0920</u>			
<u>7.43</u>	<u>8.10</u>	<u>8.36</u>	<u>8.68</u>	<u>8.92</u>	<u>9.13</u>	<u>9.29</u>	<u>9.48</u>			
<u>6.05</u>	<u>5.56</u>	<u>5.33</u>	<u>5.20</u>	<u>5.08</u>	<u>5.07</u>	<u>5.04</u>	<u>5.00</u>			
<u>0.072</u>	<u>0.052</u>	<u>0.039</u>	<u>0.034</u>	<u>0.033</u>	<u>0.033</u>	<u>0.034</u>	<u>0.034</u>			
<u>17.98</u>	<u>19.55</u>	<u>19.74</u>	<u>19.72</u>	<u>19.67</u>	<u>19.49</u>	<u>19.37</u>	<u>19.38</u>			
<u>47.60</u>	<u>40.71</u>	<u>44.89</u>	<u>25.35</u>	<u>17.64</u>	<u>14.53</u>	<u>14.12</u>	<u>13.29</u>			
<u>7.39</u>	<u>0.39</u>	<u>0.44</u>	<u>0.45</u>	<u>0.44</u>	<u>0.42</u>	<u>0.40</u>	<u>0.40</u>			
<u>0.03</u>	<u>0.02</u>	<u>0.02</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>			
<u>48.6</u>	<u>56.3</u>	<u>81.7</u>	<u>97.6</u>	<u>106.2</u>	<u>107.2</u>	<u>109.5</u>	<u>110.7</u>			

COMMENTS/OBSERVATIONS

0843 275 ml
0848 200 ml minute
0908 200 ml minute



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 13, 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>mostly sunny</u>		
Air Temperature	<u>60's</u>	° F	
Total Well Depth (TWD) =	<u>45.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>6.89</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>38.11</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>6.21</u> gal
3 Casing Volumes =	<u>18.43</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>3.20</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: 1025</u>	
	<u>Sample Analytes: VOC'S</u>	
	<u>Hack Fe Kit: 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	.40	.80	1.20	1.60	2.0	2.4	2.8	3.20		
0943	0948	0953	0958	1003	1008	1013	1018	1023		
6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.89		
6.79	7.28	7.38	7.41	7.43	7.44	7.41	7.43	7.43		
0.256	0.257	0.257	0.257	0.256	0.257	0.257	0.257	0.257		
18.05	18.35	18.38	18.41	18.36	18.36	18.37	18.36	18.37		
3.81	1.64	2.11	1.94	4.14	1.58	4.01	2.29	2.65		
3.70	4.30	4.02	3.94	4.25	4.23	4.02	3.98	3.88		
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12		
57.6	64.4	101.5	124.1	140.3	152.6	166.6	173.8	181.8		

COMMENTS/OBSERVATIONS

300 ml/minute



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/16/17</u>
Field Personnel	<u>J Butler</u>
Site Name	<u>UTC Delavan Spray Technologies Site</u>
AECOM Job #	<u>60314964</u>
Sample ID*	<u>MW-17</u>
Upgradient ☐ X Downgradient ☐ Sidegradient ☐ Source ☐	
Weather Conditions	<u>cloudy</u>
Air Temperature	<u>70.5</u> °F
Total Well Depth (TWD) =	<u>28.40</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>7.75</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>20.65</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x	<u>0.163</u> = <u>3.37</u> gal
3 Casing Volumes =	<u>10.11</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>2.4</u> gal

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>141.66</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.05</u>	1/100 ft
Land Surface Elevation	<u>141.71</u>	1/100 ft
Screened Interval	<u>13</u> - <u>28</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>1530</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	0.40	0.80	1.20	1.60	2.00	2.40				
1457	1502	1507	1512	1517	1522	1527				
8.17	8.28	8.39	8.40	8.40	8.40	8.40				
4.97	4.12	3.90	3.85	3.90	3.87	3.90				
0.104	0.103	0.102	0.101	0.100	0.099	0.099				
21.10	20.74	20.30	20.28	20.20	20.18	20.23				
28.26	10.11	3.94	3.11	2.76	2.31	1.99				
2.60	2.56	2.33	2.26	2.24	2.25	2.25				
0.05	0.05	0.05	0.05	0.05	0.05	0.05				
369.7	449.8	471.3	473.5	482.9	477.3	469.7				

COMMENTS/OBSERVATIONS

Began purging at 1454 Purging rate: 303 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/16/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-18		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Cloudy</u>		
Air Temperature	<u>70.5</u>	° F	
Total Well Depth (TWD) =	<u>26.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.65</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>13.75</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>2.24</u> gal
3 Casing Volumes =	<u>6.72</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	<u>PVC</u>	
Measuring Point Elevation	<u>145.41</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.05</u>	1/100 ft
Land Surface Elevation	<u>145.46</u>	1/100 ft
Screened Interval	<u>11</u> - <u>26</u>	1/100 ft
Dedicated Pump or Bailor	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>1630</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>1603</u>	<u>1608</u>	<u>1613</u>	<u>1618</u>	<u>1623</u>	<u>1628</u>				
	<u>12.72</u>	<u>12.73</u>	<u>12.74</u>	<u>12.74</u>	<u>12.74</u>	<u>12.74</u>				
	<u>4.18</u>	<u>4.14</u>	<u>4.13</u>	<u>4.11</u>	<u>4.12</u>	<u>4.12</u>				
	<u>0.046</u>	<u>0.045</u>	<u>0.045</u>	<u>0.045</u>	<u>0.045</u>	<u>0.045</u>				
	<u>21.91</u>	<u>21.59</u>	<u>21.42</u>	<u>21.30</u>	<u>21.27</u>	<u>21.23</u>				
	<u>58.76</u>	<u>46.91</u>	<u>42.31</u>	<u>38.79</u>	<u>32.71</u>	<u>29.64</u>				
	<u>3.69</u>	<u>3.15</u>	<u>2.85</u>	<u>2.74</u>	<u>2.64</u>	<u>2.67</u>				
	<u>0.02</u>	<u>0.02</u>	<u>0.02</u>	<u>0.02</u>	<u>0.02</u>	<u>0.02</u>				
	<u>439.6</u>	<u>422.9</u>	<u>410.3</u>	<u>423.5</u>	<u>426.6</u>	<u>430.5</u>				

COMMENTS/OBSERVATIONS

Began purging at 1600 Purging rate: 265 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/18/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-19		
Upgradient	Downgradient	Sidegradient	X Source
Weather Conditions <u>Clear</u>			
Air Temperature	<u>70.5</u> ° F		
Total Well Depth (TWD) =	<u>20.15</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>14.62</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>5.53</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.041</u>	=	<u>0.23</u> gal
3 Casing Volumes =	<u>2.70</u>	<u>0.69</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>1.20</u> gal		

Casing Diameter	<u>1.0</u>	inches
Casing Material	PVC	
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 Bailor	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>1435</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	0.20	0.40	0.60	0.80	1.00	1.20				
1401	1406	1411	1416	1421	1426	1431				
15.40	15.43	15.46	15.48	15.49	15.49	15.50				
5.74	5.05	4.66	4.55	4.50	4.47	4.48				
0.113	0.118	0.120	0.119	0.119	0.119	0.119				
22.21	22.21	22.24	22.23	22.22	22.23	22.24				
24.60	26.76	20.69	9.82	5.64	4.12	3.78				
2.31	1.87	1.57	1.45	1.43	1.47	1.49				
0.05	0.06	0.06	0.06	0.06	0.06	0.06				
245.1	271.7	293.9	307.4	316.9	325.4	329.3				

COMMENTS/OBSERVATIONS

Began purging at 1357 Purging rate: 151 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	10/18/17		
Field Personnel	J 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	70's		° F
Total Well Depth (TWD) =	15.15		1/100 ft
Depth to Ground Water (DGW) =	14.50		1/100 ft
Length of Water Column (LWC) = TWD - DGW =	0.65		1/100 ft
1 Casing Volume (OCV)* = LWC x	0.041	=	0.03 gal
3 Casing Volumes =	0.09	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	~ 0.05 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 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:	1525	
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																			
1501																			
Dry																			
4.51																			
0.031																			
21.76																			
2.02																			
6.63																			
0.01																			
322.8																			

COMMENTS/OBSERVATIONS

Began purging at 1500 Purging rate: Dry ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 18, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-21		
☐ Upgradient ☐ Downgradient ☐ Sidegradient ☒ Source			
Weather Conditions	<u>clear/sunny</u>		
Air Temperature	<u>70's</u>	° F	
Total Well Depth (TWD) =	<u>34.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>15.12</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>19.28</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>3.14</u> gal
3 Casing Volumes =	<u>9.42</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>2-10</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
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 - 34</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	<u>Sample Time: 1605</u>	
	<u>Sample Analytes: 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>1.50</u>	<u>1.60</u>	<u>1.90</u>	<u>1.20</u>	<u>1.50</u>	<u>1.80</u>	<u>2.10</u>			
	<u>1528</u>	<u>1533</u>	<u>1538</u>	<u>1543</u>	<u>1548</u>	<u>1553</u>	<u>1558</u>	<u>1603</u>		
	<u>16.03</u>	<u>16.55</u>	<u>16.88</u>	<u>17.00</u>	<u>17.07</u>	<u>17.10</u>	<u>17.12</u>	<u>17.13</u>		
	<u>4.87</u>	<u>4.30</u>	<u>4.04</u>	<u>3.96</u>	<u>3.99</u>	<u>4.02</u>	<u>4.02</u>	<u>4.04</u>		
	<u>0.022</u>	<u>0.021</u>	<u>0.020</u>	<u>0.020</u>	<u>0.021</u>	<u>0.021</u>	<u>0.021</u>	<u>0.021</u>		
	<u>22.35</u>	<u>22.23</u>	<u>22.05</u>	<u>22.01</u>	<u>21.98</u>	<u>22.00</u>	<u>21.97</u>	<u>21.96</u>		
	<u>8.59</u>	<u>5.36</u>	<u>5.59</u>	<u>4.31</u>	<u>4.09</u>	<u>4.36</u>	<u>3.30</u>	<u>2.57</u>		
	<u>0.53</u>	<u>0.39</u>	<u>0.46</u>	<u>0.41</u>	<u>0.32</u>	<u>0.37</u>	<u>0.43</u>	<u>0.41</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>305.1</u>	<u>332.1</u>	<u>349.0</u>	<u>353.0</u>	<u>354.2</u>	<u>339.8</u>	<u>338.6</u>	<u>336.2</u>		

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	Oct 18 2017		
Field Personnel	Randy Moya		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-21D		
Upgradient	Downgradient	Sidegradient	X Source
Weather Conditions clear / sunny			
Air Temperature	70's ° F		
Total Well Depth (TWD) =	53.40	1/100 ft	
Depth to Ground Water (DGW) =	14.93	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	38.47	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	= 6.27	gal
3 Casing Volumes =	18.81	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	146.92	1/100 ft
Height of Riser (above land surface)	-0.31	1/100 ft
Land Surface Elevation	147.23	1/100 ft
Screened Interval	43 - 53	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		
Sample Time:	1512	
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	.40	.80	1.20	1.60	2.0	2.4	2.80	3.20	3.60	
1425	1430	1435	1440	1445	1450	1455	1500	1505	1510	
14.97	15.00	15.02	15.02	15.02	15.02	15.02	15.02	15.02	15.02	
9.68	9.78	8.99	8.04	7.61	7.49	7.47	7.42	7.41	7.40	
0.263	0.276	0.231	0.232	0.232	0.232	0.231	0.231	0.231	0.231	
22.23	21.80	21.71	21.69	21.62	21.55	21.54	21.48	21.46	21.44	
11.27	8.01	3.97	1.14	2.96	4.07	3.70	3.73	4.06	3.92	
0.61	0.22	0.16	0.18	0.16	0.16	0.18	0.18	0.20	0.21	
0.13	0.13	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
269.7	260.7	273.7	201.1	22.1	-7.0	-27.5	-17.5	-8.7	-2.7	

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/18/17</u>		
Field Personnel	<u>J. B. Alex</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>60.5</u>	° F	
Total Well Depth (TWD) =	<u>48.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>14.29</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>34.11</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>5.56</u> gal
3 Casing Volumes =	<u>16.68</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>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 Bailor	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>1145</u>	<u>Dup</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	0.30	0.60	0.90	1.20	1.50	1.80				
	11.11	11.16	11.28	11.26	11.31	11.36	11.41			
	14.36	14.36	14.36	14.36	14.36	14.36	14.36			
	8.34	8.36	8.26	7.87	7.83	7.79	7.83			
	0.169	0.169	0.193	0.231	0.238	0.239	0.246			
	18.73	18.74	18.77	18.75	18.80	18.74	18.86			
	0.67	0.59	0.64	0.94	0.77	1.25	0.99			
	4.65	4.61	4.09	3.20	2.97	2.94	2.91			
	0.08	0.08	0.09	0.01	0.11	0.11	0.11			
	218.3	219.0	220.0	221.6	221.0	223.0	223.5			

COMMENTS/OBSERVATIONS

Began purging at 1108 Purging rate: 227 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

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Date (mo/day/yr)	<u>10/17/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-23D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>60.5</u>	° F	
Total Well Depth (TWD) =	<u>50.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>16.28</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>34.12</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>5.56</u> gal
3 Casing Volumes =	<u>16.68</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>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>slurbing</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>1120</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	0.30	0.60	0.90	1.20	1.50					
1050	1057	1102	1107	1112	1117					
16.36	16.36	16.36	16.37	16.37	16.37					
7.22	7.41	7.34	7.35	7.35	7.34					
0.227	0.255	0.278	0.281	0.281	0.282					
20.19	20.16	20.21	20.23	20.20	20.23					
3.64	0.55	3.43	1.12	2.87	1.87					
4.68	3.34	2.22	2.02	2.07	2.05					
0.11	0.12	0.13	0.13	0.13	0.13					
242.7	253.2	255.6	253.9	254.9	255.8					

COMMENTS/OBSERVATIONS

Began purging at 1048 Purging rate: 227 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	10/18/17		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-24		
Upgradient	X	Downgradient	
Sidegradient		Source	
Weather Conditions	Clear		
Air Temperature	70.5 °F		
Total Well Depth (TWD) =	21.00	1/100 ft	
Depth to Ground Water (DGW) =	15.69	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	5.31	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	0.87	gal	
3 Casing Volumes =	2.61	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	2.10 gal		

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation	147.85	1/100 ft
Height of Riser (above land surface)	-0.67	1/100 ft
Land Surface Elevation	148.52	1/100 ft
Screened Interval	6 - 21	1/100 ft
Dedicated Pump or Bailer	YES ☒ NO ☐	Type tubing
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:	1630	
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 BTOW)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	0.30	0.60	0.90	1.20	1.50	1.80	2.10			
1553	1558	1603	1608	1613	1618	1623	1628			
15.88	15.89	15.89	15.89	15.89	15.89	15.89	15.89			
4.58	4.07	4.19	4.14	4.04	3.98	4.01	3.99			
0.012	0.011	0.011	0.010	0.00	0.010	0.010	0.010			
21.71	21.69	21.56	21.59	21.53	21.42	21.43	21.42			
83.70	24.84	11.81	6.78	3.60	4.00	2.11	1.21			
5.72	5.76	5.79	5.67	5.69	5.74	5.76	5.76			
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
341.7	378.7	377.4	396.1	398.1	405.5	40.3	417.1			

COMMENTS/OBSERVATIONS

Began purging at 1550 Purging rate: 227 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/18/17</u>		
Field Personnel	<u>J 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>50's</u>	° F	
Total Well Depth (TWD) =	62.00	1/100 ft	
Depth to Ground Water (DGW) =	<u>2.59</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>54.41</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	<u>8.87</u> gal
3 Casing Volumes =	<u>26.61</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	2.0		inches
Casing Material	PVC		
Measuring Point Elevation	139.21	1/100 ft	
Height of Riser (above land surface)	-0.09	1/100 ft	
Land Surface Elevation	139.30	1/100 ft	
Screened Interval	52 - 62	1/100 ft	
Dedicated Pump or Bailor	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>0955</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	0.30	0.60	0.90	1.20	1.50					
0925	0930	0935	0940	0945	0950					
7.70	7.70	7.70	7.70	7.70	7.70					
7.64	7.67	7.65	7.64	7.64	7.65					
0.244	0.244	0.245	0.245	0.245	0.245					
18.49	18.84	18.93	19.01	19.03	19.13					
2.23	1.97	1.41	1.01	0.87	0.84					
3.72	3.26	3.02	2.98	2.97	2.94					
0.12	0.12	0.12	0.12	0.12	0.12					
199.9	201.2	203.7	205.9	208.5	210.1					

COMMENTS/OBSERVATIONS

Began purging at 0921 Purging rate: 227 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/8/17</u>		
Field Personnel	<u>J Butler</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-26D</u>		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>60's</u>	° F	
Total Well Depth (TWD) =	<u>48.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.19</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>35.81</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>5.84</u>	gal	
3 Casing Volumes =	<u>17.52</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>1.50</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>143.64</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.19</u>	1/100 ft
Land Surface Elevation	<u>143.83</u>	1/100 ft
Screened Interval	<u>38</u> - <u>48</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>1245</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	0.30	0.60	0.90	1.20	1.50					
1215	1220	1225	1230	1235	1240					
12.24	12.25	12.26	12.26	12.26	12.26					
7.63	7.53	7.51	7.51	7.50	7.52					
0.250	0.250	0.250	0.250	0.249	0.249					
19.89	19.89	19.91	19.94	19.91	19.94					
57.55	10.75	4.81	1.42	1.07	0.96					
3.18	2.82	2.74	2.69	2.67	2.64					
0.12	0.12	0.12	0.12	0.12	0.12					
228.4	226.8	226.0	227.5	229.5	228.6					

COMMENTS/OBSERVATIONS

Began purging at 1212 Purging rate: 227 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 18, 2017</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-27		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>clear sunny</u>			
Air Temperature	<u>50's</u>	° F	
Total Well Depth (TWD) =	<u>29.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>12.44</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>16.56</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>2.69</u> gal
3 Casing Volumes =	<u>8.09</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>2.40</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		
Sample Time: <u>0955</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 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>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.40</u>				
	<u>0923</u>	<u>0928</u>	<u>0933</u>	<u>0938</u>	<u>0943</u>	<u>0948</u>	<u>0953</u>			
	<u>13.17</u>	<u>13.53</u>	<u>13.70</u>	<u>13.80</u>	<u>13.84</u>	<u>13.85</u>	<u>13.85</u>			
	<u>7.23</u>	<u>5.58</u>	<u>5.03</u>	<u>4.92</u>	<u>4.77</u>	<u>4.73</u>	<u>4.67</u>			
	<u>0.032</u>	<u>0.032</u>	<u>0.032</u>	<u>0.030</u>	<u>0.029</u>	<u>0.029</u>	<u>0.029</u>			
	<u>19.44</u>	<u>19.87</u>	<u>19.99</u>	<u>20.08</u>	<u>20.13</u>	<u>20.15</u>	<u>20.16</u>			
	<u>4.29</u>	<u>1.06</u>	<u>3.78</u>	<u>1.79</u>	<u>2.21</u>	<u>0.27</u>	<u>1.26</u>			
	<u>5.75</u>	<u>5.98</u>	<u>5.91</u>	<u>5.82</u>	<u>5.90</u>	<u>6.06</u>	<u>6.30</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>298.0</u>	<u>328.1</u>	<u>343.1</u>	<u>342.7</u>	<u>345.6</u>	<u>344.1</u>	<u>346.8</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 18, 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-28</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>clear/sunny</u>			
Air Temperature	<u>60.5</u> ° F		
Total Well Depth (TWD) =	<u>29.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>14.13</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>14.87</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	= <u>2.42</u>	gal
3 Casing Volumes =	<u>7.27</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>2.80</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		
Sample Time: <u>1043</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>.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>1005</u>	<u>1010</u>	<u>1015</u>	<u>1020</u>	<u>1025</u>	<u>1030</u>	<u>1035</u>	<u>1040</u>		
	<u>15.20</u>	<u>15.57</u>	<u>15.63</u>	<u>15.65</u>	<u>15.65</u>	<u>15.64</u>	<u>15.64</u>	<u>15.64</u>		
	<u>6.75</u>	<u>6.85</u>	<u>6.83</u>	<u>6.81</u>	<u>6.80</u>	<u>6.77</u>	<u>6.77</u>	<u>6.72</u>		
	<u>0.377</u>	<u>0.392</u>	<u>0.411</u>	<u>0.432</u>	<u>0.435</u>	<u>0.439</u>	<u>0.441</u>	<u>0.440</u>		
	<u>19.09</u>	<u>19.30</u>	<u>19.26</u>	<u>19.30</u>	<u>19.35</u>	<u>19.46</u>	<u>19.54</u>	<u>19.55</u>		
	<u>36.37</u>	<u>42.46</u>	<u>33.27</u>	<u>26.57</u>	<u>18.23</u>	<u>14.57</u>	<u>14.27</u>	<u>14.22</u>		
	<u>1.16</u>	<u>1.00</u>	<u>1.12</u>	<u>1.31</u>	<u>1.30</u>	<u>1.26</u>	<u>1.29</u>	<u>1.35</u>		
	<u>0.18</u>	<u>0.19</u>	<u>0.20</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>		
	<u>293.6</u>	<u>278.7</u>	<u>271.4</u>	<u>267.3</u>	<u>267.6</u>	<u>264.8</u>	<u>258.6</u>	<u>272.1</u>		

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 18 2017</u>	Casing Diameter	<u>2.0</u>	inches
Field Personnel	<u>Randy Murphy</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-29</u>	Land Surface Elevation		1/100 ft
Upgradient		Screened Interval	<u>19</u> - <u>29</u>	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>clear / sunny</u>	Protective Post/Abutment	YES ☐ NO ☒	
Air Temperature	<u>70.5</u>	Well Integrity Satisfactory	YES ☒ NO ☐	
Total Well Depth (TWD) =	<u>29.00</u>	Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Depth to Ground Water (DGW) =	<u>8.60</u>	Comments/Observations		
Length of Water Column (LWC) = TWD - DGW =	<u>20.40</u>	Sample Time:	<u>1225</u>	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>3.32</u>	Sample Analytes:	<u>NOCS</u>	
3 Casing Volumes =	<u>9.97</u>	Hack Fe Kit:	<u>NA</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>2.40</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)	Initial	.40	.80	1.20	1.60	2.0	2.40				
TIME (Military)	<u>1152</u>	<u>1157</u>	<u>1202</u>	<u>1207</u>	<u>1212</u>	<u>1217</u>	<u>1222</u>				
Water Level (ft BTOC)	<u>9.04</u>	<u>9.13</u>	<u>9.13</u>	<u>9.13</u>	<u>9.13</u>	<u>9.13</u>	<u>9.13</u>				
pH (S.U.)	<u>6.18</u>	<u>5.99</u>	<u>6.01</u>	<u>6.05</u>	<u>6.06</u>	<u>6.07</u>	<u>6.06</u>				
Sp. Cond. (mS/cm)	<u>20.92</u>	<u>0.105</u>	<u>0.111</u>	<u>0.122</u>	<u>0.129</u>	<u>0.131</u>	<u>0.133</u>				
Water Temp. (°C)	<u>20.72</u>	<u>20.92</u>	<u>20.90</u>	<u>21.05</u>	<u>21.04</u>	<u>21.03</u>	<u>21.11</u>				
Turbidity (NTUs)	<u>73.30</u>	<u>56.18</u>	<u>41.62</u>	<u>34.73</u>	<u>27.32</u>	<u>25.65</u>	<u>25.64</u>				
DO - (mg/L)	<u>1.54</u>	<u>1.39</u>	<u>1.34</u>	<u>1.25</u>	<u>1.24</u>	<u>1.17</u>	<u>1.15</u>				
Salinity (ppt)	<u>0.04</u>	<u>0.05</u>	<u>0.05</u>	<u>0.06</u>	<u>0.06</u>	<u>0.06</u>	<u>0.06</u>				
ORP (mV)	<u>330.8</u>	<u>297.1</u>	<u>283.0</u>	<u>287.3</u>	<u>284.7</u>	<u>281.7</u>	<u>279.3</u>				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	10/18/17		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-30D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions Clear			
Air Temperature	40.5 ° F		
Total Well Depth (TWD) =	59.78	1/100 ft	
Depth to Ground Water (DGW) =	5.98	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	53.86	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	8.78	gal	
3 Casing Volumes =	26.34	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	2.10 gal		

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation	N/A	1/100 ft
Height of Riser (above land surface)	N/A	1/100 ft
Land Surface Elevation	N/A	1/100 ft
Screened Interval	49 - 59	1/100 ft
Dedicated Pump or Bailer	YES ☒ NO ☐	Type tubing
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☒	Broken Pod
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time: 0830		
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	0.30	0.60	0.90	1.20	1.50	1.80	2.10			
0751	0756	0801	0806	0811	0816	0821	0826			
5.98	5.98	5.98	5.98	5.98	5.98	5.98	5.98			
8.07	7.91	7.84	7.72	7.66	7.66	7.65	7.65			
0.240	0.225	0.219	0.241	0.251	0.261	0.262	0.262			
17.80	17.91	18.00	18.05	18.08	18.08	18.08	18.07			
6.10	4.26	2.84	2.56	3.13	4.00	4.71	5.46			
0.68	0.41	0.36	0.72	1.74	3.05	3.11	3.12			
0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12			
-161.3	-176.8	-180.3	-130.3	-78.5	9.8	17.2	20.1			

COMMENTS/OBSERVATIONS

Begin purging: 0747 @ 22.7 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	10/18/17		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-31D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions Clear			
Air Temperature	40.5 ° F		
Total Well Depth (TWD) =	60.35	1/100 ft	
Depth to Ground Water (DGW) =	10.32	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	50.03	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	8.15	gal	
3 Casing Volumes =	24.45	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	N/A	1/100 ft
Height of Riser (above land surface)	N/A	1/100 ft
Land Surface Elevation	N/A	1/100 ft
Screened Interval	50 - 60	1/100 ft
Dedicated Pump or Bailer	YES ☒ NO ☐	Type tubing
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:	0910	
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									
	Initial	0.30	0.60	0.90	1.20	1.50				
VOLUME PURGED (gallons)	0842	0847	0852	0857	0902	0907				
TIME (Military)	16.43	16.43	16.43	16.43	16.43	16.43				
Water Level (ft BTOC)	7.73	7.74	7.74	7.73	7.73	7.73				
pH (S.U.)	0.231	0.230	0.230	0.230	0.230	0.230				
Sp. Cond. (mS/cm)	18.17	18.38	18.48	18.48	18.43	18.47				
Water Temp. (°C)	3.67	3.11	2.17	2.47	2.51	2.79				
Turbidity (NTUs)	2.93	2.79	2.77	2.76	2.73	2.70				
DO - (mg/L)	0.11	0.11	0.11	0.11	0.11	0.11				
Salinity (ppt)	149.0	159.2	170.1	176.2	182.3	185.4				
ORP (mV)										

COMMENTS/OBSERVATIONS Begin purging 0839 @ 227 mL/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	10/18/17		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-32DR		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	Clear		
Air Temperature	50.5	° F	
Total Well Depth (TWD) =	66.70	1/100 ft	
Depth to Ground Water (DGW) =	8.42	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	52.28	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	8.52	gal	
3 Casing Volumes =	25.56	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	N/A	1/100 ft	
Height of Riser (above land surface)	N/A	1/100 ft	
Land Surface Elevation	N/A	1/100 ft	
Screened Interval		1/100 ft	
Dedicated Pump or Bailer	YES ☒ NO ☐	Type tubing	
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: 1040 dup 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	0.30	0.60	0.90	1.20	1.50					
1013	1018	1023	1028	1033	1038					
8.50	8.50	8.50	8.50	8.50	8.50					
7.84	7.66	7.61	7.60	7.60	7.57					
0.246	0.251	0.252	0.252	0.252	0.252					
19.83	19.73	19.72	19.80	19.80	19.82					
5.60	3.10	2.36	2.91	3.58	4.19					
2.36	2.22	2.18	2.16	2.16	2.13					
0.12	0.12	0.12	0.12	0.12	0.12					
183.6	185.4	195.2	200.8	205.0	208.5					

COMMENTS/OBSERVATIONS

Begin purging 1010 @ 227 ml/min

IDW MANAGEMENT FORM

AECOM

PROJECT: UTC Delavan Spray Technologies Site RI

SITE NAME: Delavan Spray Technologies Site

LOCATION: Bamberg, South Carolina

PROJECT #: 60314964

[illegible]

5/10/17 UTC Delavan GW delineation
1635 Chuck & Jason finish & we are

mob to Krazy property

1650 Set up for slug testing on
mw-27. Survey crew begins
surveying borings & wells
mw-27 DW=9.73 ft BDC
TD=29.10' BDC

1730 Set up for slug testing on
mw-28. Jason finishes
up & heads back to Columbia
Chuck stays to help w/ slug testing.

1800 Mr. Krazy comes out. Not happy
about permanent wells on his property.

1910 Set up for slug test on mw-29
DW=7.24' BDC

2000 Finish up tests at mw-29. CSiddeth
& Alexander pack up & head
to Columbia

2130 Alexander drops CSiddeth at
Car in Columbia. Continues on
to office in Greenville.

1115 Arrive at office in Greenville.
Unload equipment & drop
keys for rental pick up
in the morning.

10/16/17

Justin Butler

0730 Leave office

1000 Arrive @ hotel, check in

1100 Arrive @ site, badge in

1130 Begin water levels

1400 Finish water levels

1415 Drop off drums

1440 mob to mw-17

1454 Begin purging mw-17

1530 sample time mw-17

1600 Begin purging mw-18

1630 sample time mw-18

1657 Begin purging mw-11

1735 sample time mw-11

1745 Empty purge water

1800 Leave site

10/17/17

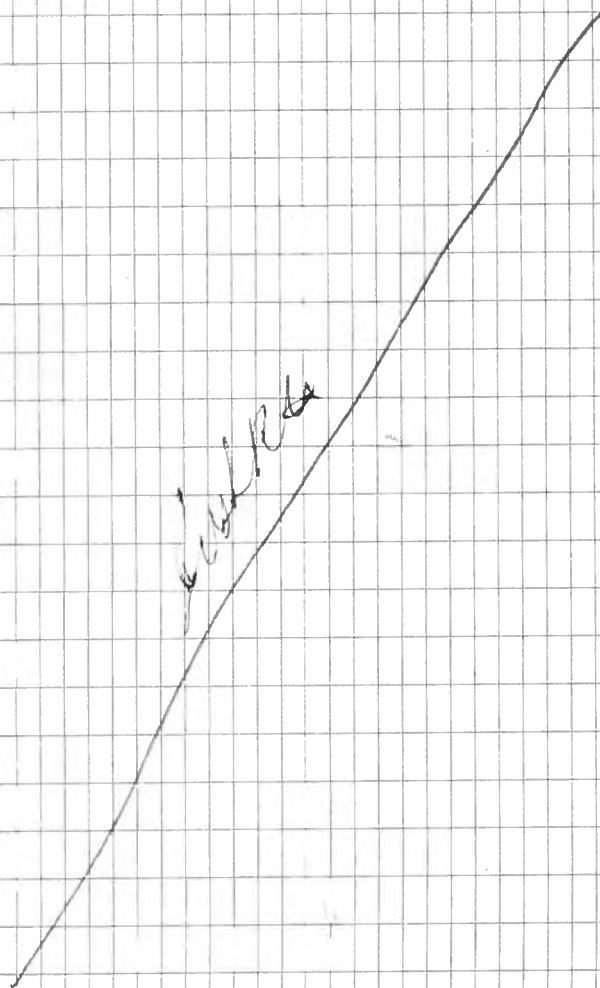
Justin Baker

- 0630 Leave Hotel
- 0700 Arrive on site
- 0705 Begin calibrating YSI + Turbidity meter
- 0730 Finish calibrating + sign in
- 0745 mob to MW-9D
- 0755 Begin purging MW-9D
- 0835 sample time MW-9D
- 0851 Begin purging MW-10D
- 0925 sample time MW-10D
- 0937 Begin purging MW-4
- 1025 sample time MW-4
- 1048 Begin purging MW-23D
- 1120 sample time MW-23D
- 1141 Begin purging MW-7
- 1225 sample time MW-7
- 1305 Begin purging MW-5
- 1338 well dry, will come back
- 1350 Begin purging MW-2
- 1425 sample time MW-2
- 1445 Pack cooler for shipment Trip Blank 2
is associated with these wells
- 1547 Begin purging MW-9
- 1630 sample time MW-9
- 1640 Begin purging MW-10
- 1710 sample time MW-10

10/17/17

Justin Baker

- 1740 Empty purge water, sample MW-5
- 1800 leave site



10/13/17

Justin Butler

0700 Arrive on site

0715 Start meters, move to MW-30D

0730 Begin calibration of VSL + turbidity meter

0747 Begin purging MW-30D

0830 sample time MW-30D

0839 Begin purging MW-31D

0910 sample time MW-31D

0921 Begin purging MW-25D

0955 sample time MW-25D

1010 Begin purging MW-32DR dup

1040 sample time MW-32DR

1108 Begin purging MW-22D dup

1145 sample time MW-22D

1212 Begin purging MW-26D

1245 sample time MW-26D

1351 Begin purging MW-19

1430 sample time MW-19

1500 Begin purging MW-20, Ry

1525 sample time MW-20

1550 Begin purging MW-24

1630 sample time MW-24

1655 sample time IDW-1, Trip Blank 4

1725 Leave site

~~Justin Butler~~

10/16/2017 (62) UTC Delavan

- 0600 leave to pick up equipment
0750 stop at Shealy ~~to~~ to pickup
bottlenecks for another job.
0850 arrive in Orangeburg at County Jail & Sub.
0900 Calibrate both YSI 536 water
quality meters RM-511084101000
0930 complete calibrating meters - see
calibration logs for details
1015 Justin Butter arrives we head on
to UTC Delavan site
1057 arrive at UTC Delavan sign in,
receive badges, HVS Briefing
1105 begin to open wells to equilibrate
1230 begin collecting water levels 5/11/0678
1435 Complete water levels - put empty
drums under shelter near drum storage
We's said - only drums with contents can
be stored in drum storage area with
Non Hazardous Label on the drum.
1445 Randy at MW-15 well cluster
carry equipment over Creek-Ditch to
well cluster.
1505 begin to micro purge MW-15
1553 sampled MW-15
1600 at MW-150 begin to micro purge

UTC Delavan

10/16/2017
(63)

- 1637 Sampled MW-150
1645 at MW-1501 begin to micro purge.
1718 Sampled MW-1501
1725 carry equipment and purge water
back over Creek/Ditch to Van
1748 at drum storage area - put
(1) drum in bldg labeled w/ Non Hazardous
label, put well IDW into
55 gal steel drum
1805 Justin arrive we put His well
IDW into drum - close drum and leave site
office is closed ~~we~~ will hold onto badges
until 10-17-17.
1815 off site to motel in Orangeburg
1845 end of the day
Trip Blank #1

Randy Meyer 10-16-2017

10-17-17 (64) UTC Delavan

0630 leave for UTC Bomberg
purchase ice

0705 arrive on site - calibrate
YSI 556 water quality meter
S/N 08L101000

0815 Dan Claycomb w/ Environmental Standards
on site for Audit of well sampling
get Dan budged in

0835 at MW-16 dedicated tubing
water level 7.09 pull tubing up
~ 3' from bottom to middle of saturated
screen zone

0843 begin to micro purge w/ peristaltic pump

0922 sampled MW-16 reverse flow

0943 at MW-16 begin to micro purge
with peristaltic pump - water level 6.89
set tubing intake middle of screen

1025 sampled MW-16 reverse flow

1108 at MW-6 begin to micro purge with
peristaltic pump - set tubing inlet 2' off bottom

1150 sampled MW-6 reverse flow

1212 at MW-301 begin to micro purge
with peristaltic pump, tubing inlet set at
80" b to c

1232 sampled MW-301 reverse flow

10/17/17 UTC Delavan

(65)

1250 purchase additional ice to ship samples
1303 at MW-3 begin to micro purge with
peristaltic pump - tubing inlet set at
2' off bottom

1330 Sampled MW-3 reverse flow

1340 at MW-30 begin to micro purge

1407 sampled MW-30 also MS/msb

1430 pack samples for shipment

Fed Ex from UTC Delavan facility
1500 re-label with sample codes

1510 empty purge water into drum in
drum storage bldg.

1525 Debriefing w/ Dan Claycomb
with Environmental standards

1530 Dan Claycomb off site - end of
Audit.

1535 scope out wells in Junkyard - Cannot
drive to well anymore due to trash all
around access to wells, will need to walk
everything into wells on Wednesday

1550 at MW-14 begin to micro purge
with ^{em} micro peristaltic pump - pump at lowest
speed - water level still drops.

1637 Sampled MW-14 reverse flow / duplicate

1650 at MW-140 begin to micro purge with

⑥⑥ 10-17-17 UTC Delavan

peristaltic pump - tubing inlet set at
45' BTCL
1718 Sampled MW-14D also duplicate
1730 empty purge water into drum in
drum storage bldg.
1800 off site to note 1
Trip Blank #1

Karen / May 10-17-17

⑥⑦ 10-18-17 UTC Delavan

0630 leave for UTC
0700 arrive on site - calibrate
YSI 556 S/N 08401000 - see
calibration log for details
0730 purchase ice for sample coolers
0735 cut lock at Bamberg property would
not open for Justin
0750 at MW-120 begin to ^{pm} micro purge with
peristaltic pump at a fast flow to get
pH & Cond. to stabilize usually take
5 gals purged out before stabilizes.
0907 Sampled MW-120 reverse flow
0915 walk equipment to MW-27 due
to NO access to area due to trash piled
along the perimeter of the junk yard.
0928 begin to micro purge MW-27 with
peristaltic pump - tubing inlet at 24' BTCL
0955 Sampled MW-27 reverse flow
1005 at MW-28 begin to micro purge with
peristaltic pump - tubing inlet at 24' BTCL
1043 Sampled MW-28 reverse flow
1103 at MW-13D begin to micro purge
with peristaltic pump tubing inlet 45' BTCL
1130 Sampled MW-13D reverse flow
1138 mob to MW-29
D. L. MARRON 11-18-2017

⑥⑧ 10-18-17 UTC ^{2m} Delavan Bamburg

1152 at MW-29 begin to micro purge
with peristaltic pump - tubing inlet at 24' BTAC
1225 sampled MW-29 reverse flow
1235 empty purge water in 2" drum
IDW-2

1255 at MW-8 begin to micro purge
with peristaltic pump - tubing inlet set at 17'
1323 sampled MW-8

1338 at MW-1 begin to micro purge
with peristaltic pump tubing inlet set at 12.5'
1410 sampled MW-1 reverse flow

1425 at MW-210 begin to micro purge
with peristaltic pump tubing inlet set at 48'
1512 sampled MW-210 reverse flow

1528 at MW-21 begin to micro purge
with peristaltic pump - tubing set 27' BTAC
1605 sampled MW-21 reverse flow
1615 empty purge water into drum in
drum storage area.

check with Walter about putting fencepost
at the wells in powerline right away on Bamburg
property to protect them - No has not been
approved by Mr Bamburg.

1655 sample IDW-1+2 composite
1705 off site end of event
1 m.m. 10-18-17

10/18/17 UTC Delavan

⑥⑨

Samples will be stored on ice in
secure location until 10-19-2017.
Fed Ex has already picked up from
site and we will ship on the way
home on Thursday

1738 at motel

Randy
Mayer

10-18-17

(70) 10-19-2017 UTC Delavan

0700 leave to ship samples in
Columbia SC

0708 purchase ice to pack cooler

0815 relinquish samples to Fed Ex
Columbia Airport

0940 return to Greenville to return
equipment

9000 at Greenville office

Randy Meyer

10-19-2017

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: FA48531

Sampling Dates: 10/16/17 - 10/17/17

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: 65



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.



Caitlin Brice, M.S.
General Manager

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),
AK, AR, GA, IA, KY, MA, NV, OK, OR, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

United Technologies Corporation

Job No: FA48531

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA48531-1	10/16/17	15:30 JD	10/18/17	AQ	Ground Water	MW-17
FA48531-2	10/16/17	15:53 JD	10/18/17	AQ	Ground Water	MW-15
FA48531-3	10/16/17	16:30 JD	10/18/17	AQ	Ground Water	MW-18
FA48531-4	10/16/17	16:37 JD	10/18/17	AQ	Ground Water	MW-15D
FA48531-5	10/16/17	17:18 JD	10/18/17	AQ	Ground Water	MW-15D1
FA48531-6	10/16/17	17:35 JD	10/18/17	AQ	Ground Water	MW-11
FA48531-7	10/17/17	08:35 JD	10/18/17	AQ	Ground Water	MW-9D
FA48531-8	10/17/17	09:22 JD	10/18/17	AQ	Ground Water	MW-16
FA48531-9	10/17/17	09:25 JD	10/18/17	AQ	Ground Water	MW-10D
FA48531-10	10/17/17	10:25 JD	10/18/17	AQ	Ground Water	MW-16D
FA48531-11	10/17/17	10:25 JD	10/18/17	AQ	Ground Water	MW-4
FA48531-12	10/17/17	11:20 JD	10/18/17	AQ	Ground Water	MW-23D
FA48531-13	10/17/17	11:50 JD	10/18/17	AQ	Ground Water	MW-6



Sample Summary
(continued)

United Technologies Corporation

Job No: FA48531

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA48531-14	10/17/17	12:25 JD	10/18/17	AQ	Ground Water	MW-7
FA48531-15	10/17/17	12:32 JD	10/18/17	AQ	Ground Water	MW-3D1
FA48531-16	10/17/17	13:30 JD	10/18/17	AQ	Ground Water	MW-3
FA48531-17	10/17/17	14:07 JD	10/18/17	AQ	Ground Water	MW-3D
FA48531-17D	10/17/17	14:07 JD	10/18/17	AQ	Water Dup/MSD	MW-3D
FA48531-17S	10/17/17	14:07 JD	10/18/17	AQ	Water Matrix Spike	MW-3D
FA48531-18	10/17/17	14:25 JD	10/18/17	AQ	Ground Water	MW-2
FA48531-19	10/17/17	00:00 JD	10/18/17	AQ	Trip Blank Water	TRIP BLANK 1
FA48531-20	10/17/17	00:00 JD	10/18/17	AQ	Trip Blank Water	TRIP BLANK 2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job No: FA48531

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 10/25/2017 7:51:00 AM

18 Samples and 2 Trip Blanks were collected on/between 10/16/2017 and 10/17/2017 and were received at SGS Accutest Southeast (SASE) on 10/18/2017 properly preserved, at 4 Deg. C and intact. These Samples received an SASE job number of FA48531. 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.

MS Volatiles By Method SW846 8260B

Matrix: AQ

Batch ID: V1A294

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA48531-17MS, FA48531-17MSD were used as the QC samples indicated.

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

FA48531-1: Sample was not preserved to a pH < 2.

FA48531-2: Sample was not preserved to a pH < 2.

FA48531-3: Sample was not preserved to a pH < 2.

FA48531-4: Sample was not preserved to a pH < 2.

FA48531-5: Sample was not preserved to a pH < 2.

FA48531-6: Sample was not preserved to a pH < 2.

FA48531-7: Sample was not preserved to a pH < 2.

FA48531-8: Sample was not preserved to a pH < 2.

FA48531-9: Sample was not preserved to a pH < 2. Sample contains residual chlorine.

FA48531-10: Sample was not preserved to a pH < 2. Sample contains residual chlorine.

FA48531-11: Sample was not preserved to a pH < 2.

FA48531-12: Sample was not preserved to a pH < 2.

FA48531-13: Sample was not preserved to a pH < 2.

FA48531-14: Sample was not preserved to a pH < 2.

FA48531-15: Sample was not preserved to a pH < 2.

FA48531-16: Sample was not preserved to a pH < 2.

FA48531-17: Sample was not preserved to a pH < 2.

FA48531-18: Sample was not preserved to a pH < 2.

FA48531-19: Sample was not preserved to a pH < 2.

FA48531-20: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: V1A296

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA48638-2MS, FA48638-2MSD were used as the QC samples indicated.

FA48531-16: Sample was not preserved to a pH < 2.

FA48531-17: Sample was not preserved to a pH < 2.

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: October 25, 2017

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Page 1 of 2

Job Number: FA48531
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/16/17 thru 10/17/17



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA48531-1 **MW-17**

No hits reported in this sample.

FA48531-2 **MW-15**

Toluene ^a	1.6	1.0	0.30	ug/l	SW846 8260B
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FA48531-3 **MW-18**

No hits reported in this sample.

FA48531-4 **MW-15D**

No hits reported in this sample.

FA48531-5 **MW-15D1**

No hits reported in this sample.

FA48531-6 **MW-11**

No hits reported in this sample.

FA48531-7 **MW-9D**

No hits reported in this sample.

FA48531-8 **MW-16**

Toluene ^a	38.3	1.0	0.30	ug/l	SW846 8260B
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FA48531-9 **MW-10D**

No hits reported in this sample.

FA48531-10 **MW-16D**

No hits reported in this sample.

FA48531-11 **MW-4**

No hits reported in this sample.

Summary of Hits

Job Number: FA48531
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/16/17 thru 10/17/17



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA48531-12 MW-23D

No hits reported in this sample.

FA48531-13 MW-6

No hits reported in this sample.

FA48531-14 MW-7

No hits reported in this sample.

FA48531-15 MW-3D1

No hits reported in this sample.

FA48531-16 MW-3

cis-1,2-Dichloroethylene ^a	0.33 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a	77.3	2.5	0.54	ug/l	SW846 8260B
Trichloroethylene ^a	1.6	1.0	0.35	ug/l	SW846 8260B

FA48531-17 MW-3D

1,1-Dichloroethylene ^a	8.8	2.5	0.81	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	6.4	2.5	0.69	ug/l	SW846 8260B
Tetrachloroethylene ^a	290	5.0	1.1	ug/l	SW846 8260B
Trichloroethylene ^a	4.4	2.5	0.86	ug/l	SW846 8260B

FA48531-18 MW-2

Tetrachloroethylene ^a	3.1	1.0	0.22	ug/l	SW846 8260B
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FA48531-19 TRIP BLANK 1

No hits reported in this sample.

FA48531-20 TRIP BLANK 2

No hits reported in this sample.

(a) Sample was not preserved to a pH < 2.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-17	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-1	Date Received:	10/18/17
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 ^a	1A08002.D	1	10/20/17 12:12	SP	n/a	n/a	V1A294
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	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-17	Date Sampled: 10/16/17
Lab Sample ID: FA48531-1	Date Received: 10/18/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	107%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Sample was not preserved to a pH < 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-15	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-2	Date Received:	10/18/17
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 ^a	1A08003.D	1	10/20/17 12:34	SP	n/a	n/a	V1A294
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	ND	1.0	0.22	ug/l	
108-88-3	Toluene	1.6	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-15	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-2	Date Received:	10/18/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	108%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Sample was not preserved to a pH < 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-18	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-3	Date Received:	10/18/17
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 ^a	1A08004.D	1	10/20/17 12:56	SP	n/a	n/a	V1A294
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	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-18	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-3	Date Received:	10/18/17
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	101%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Sample was not preserved to a pH < 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-15D	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-4	Date Received:	10/18/17
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 ^a	1A08005.D	1	10/20/17 13:18	SP	n/a	n/a	V1A294
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	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-15D	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-4	Date Received:	10/18/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample was not preserved to a pH < 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-15D1	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-5	Date Received:	10/18/17
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 ^a	1A08006.D	1	10/20/17 13:40	SP	n/a	n/a	V1A294
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	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-15D1	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-5	Date Received:	10/18/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample was not preserved to a pH < 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-11	Date Sampled:	10/16/17
Lab Sample ID:	FA48531-6	Date Received:	10/18/17
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 ^a	1A08007.D	1	10/20/17 14:02	SP	n/a	n/a	V1A294
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	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-11	Date Sampled: 10/16/17
Lab Sample ID: FA48531-6	Date Received: 10/18/17
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	102%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample was not preserved to a pH < 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-9D	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-7	Date Received:	10/18/17
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 ^a	1A08008.D	1	10/20/17 14:24	SP	n/a	n/a	V1A294
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	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-9D	Date Sampled: 10/17/17
Lab Sample ID: FA48531-7	Date Received: 10/18/17
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	102%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Sample was not preserved to a pH < 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:	10/17/17
Lab Sample ID:	FA48531-8	Date Received:	10/18/17
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 ^a	1A08009.D	1	10/20/17 14:45	SP	n/a	n/a	V1A294
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	ND	1.0	0.22	ug/l	
108-88-3	Toluene	38.3	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-16	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-8	Date Received:	10/18/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Sample was not preserved to a pH < 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-10D	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-9	Date Received:	10/18/17
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 ^a	1A08010.D	1	10/20/17 15:07	SP	n/a	n/a	V1A294
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	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-10D	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-9	Date Received:	10/18/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 2. Sample contains residual chlorine.

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:	10/17/17
Lab Sample ID:	FA48531-10	Date Received:	10/18/17
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 ^a	1A08011.D	1	10/20/17 15:28	SP	n/a	n/a	V1A294
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	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:	10/17/17
Lab Sample ID:	FA48531-10	Date Received:	10/18/17
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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

(a) Sample was not preserved to a pH < 2. Sample contains residual chlorine.

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-4	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-11	Date Received:	10/18/17
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 ^a	1A08012.D	1	10/20/17 15:50	SP	n/a	n/a	V1A294
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	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-4	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-11	Date Received:	10/18/17
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	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	107%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-23D	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-12	Date Received:	10/18/17
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 ^a	1A08013.D	1	10/20/17 16:13	SP	n/a	n/a	V1A294
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	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-23D	Date Sampled: 10/17/17
Lab Sample ID: FA48531-12	Date Received: 10/18/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-6	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-13	Date Received:	10/18/17
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 ^a	1A08014.D	1	10/20/17 16:34	SP	n/a	n/a	V1A294
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	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-6	Date Sampled: 10/17/17
Lab Sample ID: FA48531-13	Date Received: 10/18/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Sample was not preserved to a pH < 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-7	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-14	Date Received:	10/18/17
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 ^a	1A08015.D	1	10/20/17 16:56	SP	n/a	n/a	V1A294
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	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-7	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-14	Date Received:	10/18/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-3D1	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-15	Date Received:	10/18/17
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 ^a	1A08016.D	1	10/20/17 17:17	SP	n/a	n/a	V1A294
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	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-3D1	Date Sampled: 10/17/17
Lab Sample ID: FA48531-15	Date Received: 10/18/17
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	110%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Sample was not preserved to a pH < 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-3	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-16	Date Received:	10/18/17
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 ^a	1A08058.D	1	10/23/17 11:26	SP	n/a	n/a	V1A296
Run #2 ^a	1A08017.D	2.5	10/20/17 17:39	SP	n/a	n/a	V1A294

	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	0.33	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	77.3 ^b	2.5	0.54	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	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	1.6	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:	10/17/17
Lab Sample ID:	FA48531-16	Date Received:	10/18/17
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%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	103%	79-125%
2037-26-5	Toluene-D8	105%	110%	85-112%
460-00-4	4-Bromofluorobenzene	108%	107%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3D	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-17	Date Received:	10/18/17
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 ^a	1A08018.D	2.5	10/20/17 18:01	SP	n/a	n/a	V1A294
Run #2 ^a	1A08059.D	5	10/23/17 11:47	SP	n/a	n/a	V1A296

	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	63	25	ug/l	
71-43-2	Benzene	ND	2.5	0.78	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.61	ug/l	
75-25-2	Bromoform	ND	2.5	1.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	13	5.0	ug/l	
75-15-0	Carbon Disulfide	ND	5.0	1.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	2.5	0.89	ug/l	
108-90-7	Chlorobenzene	ND	2.5	0.50	ug/l	
75-00-3	Chloroethane	ND	5.0	1.7	ug/l	
67-66-3	Chloroform	ND	2.5	0.75	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.69	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.5	0.85	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	0.78	ug/l	
75-35-4	1,1-Dichloroethylene	8.8	2.5	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethylene	6.4	2.5	0.69	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.5	0.55	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	1.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.73	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.54	ug/l	
100-41-4	Ethylbenzene	ND	2.5	0.89	ug/l	
591-78-6	2-Hexanone	ND	25	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl Chloride	ND	5.0	1.3	ug/l	
75-09-2	Methylene Chloride	ND	13	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	13	2.5	ug/l	
100-42-5	Styrene	ND	2.5	0.56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.75	ug/l	
127-18-4	Tetrachloroethylene	290 ^b	5.0	1.1	ug/l	
108-88-3	Toluene	ND	2.5	0.75	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.62	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	1.2	ug/l	
79-01-6	Trichloroethylene	4.4	2.5	0.86	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-3D	Date Sampled: 10/17/17
Lab Sample ID: FA48531-17	Date Received: 10/18/17
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	2.5	1.0	ug/l	
1330-20-7	Xylene (total)	ND	7.5	1.8	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	102%	79-125%
2037-26-5	Toluene-D8	108%	108%	85-112%
460-00-4	4-Bromofluorobenzene	109%	108%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-18	Date Received:	10/18/17
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 ^a	1A08019.D	1	10/20/17 18:22	SP	n/a	n/a	V1A294
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	3.1	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-2	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-18	Date Received:	10/18/17
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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	108%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Sample was not preserved to a pH < 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:	TRIP BLANK 1	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-19	Date Received:	10/18/17
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 ^a	1A08020.D	1	10/20/17 18:44	SP	n/a	n/a	V1A294
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	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 1	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-19	Date Received:	10/18/17
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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

(a) Sample was not preserved to a pH < 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:	TRIP BLANK 2	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-20	Date Received:	10/18/17
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 ^a	1A08021.D	1	10/20/17 19:06	SP	n/a	n/a	V1A294
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	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 2	Date Sampled:	10/17/17
Lab Sample ID:	FA48531-20	Date Received:	10/18/17
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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

(a) Sample was not preserved to a pH < 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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Page	1 of 2
Project Number:	60314964
Chain of Custody Number ⁽¹⁾ :	PO 87457
LIMS Number:	



Quality Assurance Samples

COMMENTS

Cooler ID

Project Manager: Walter Gerald 864-234-8925

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	Delivered Directly to Lab:	Shipped: XXXX
1. <i>[Signature]</i>	11/17/17	1500	1. <i>[Signature]</i>	10/18/17	900	Method of Shipment: Fed Ex	Airbill #: 812012030013
2. Fed Ex			2. <i>[Signature]</i>			Analytical Lab: Accutest	Location: Orlando FLA
3.			3.			Lab Recipient:	Date: Time:

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

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

52745\admin\project control\project forms\Blank COC

FA48531: Chain of Custody

Page 1 of 3

SGS Accutest Sample Receipt Summary

Job Number: FA48531

Client: AECOM

Project: UTC

Date / Time Received: 10/18/2017 9:00:00 AM

Delivery Method: FED EX

Airbill #s: 8120 1203 0013

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.2);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Information
Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information
Y or N N/A

- | | | | |
|--------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler | ☒ | ☐ | ☐ |
| 2. Trip Blank listed on COC | ☒ | ☐ | ☐ |
| | W or S | N/A | |
| 3. Type Of TB Received | ☒ | ☐ | ☐ |

Sample Information
Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☒ | ☐ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

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) _____

Residual Chlorine Test Strip Lot #: _____

Comments

 SM001
Rev. Date 05/24/17

Technician: SHAYLAP

Date: 10/18/2017 9:00:00 A

Reviewer: _____

Date: _____

FA48531: Chain of Custody
Page 3 of 3



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: FA48531**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A294-MB	1A08002.D	1	10/20/17	SP	n/a	n/a	V1A294

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

FA48531-1, FA48531-2, FA48531-3, FA48531-4, FA48531-5, FA48531-6, FA48531-7, FA48531-8, FA48531-9, FA48531-10, FA48531-11, FA48531-12, FA48531-13, FA48531-14, FA48531-15, FA48531-16, FA48531-17, FA48531-18, FA48531-19, FA48531-20

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

Page 2 of 2

Job Number: FA48531

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A294-MB	1A08002.D	1	10/20/17	SP	n/a	n/a	V1A294

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48531-1, FA48531-2, FA48531-3, FA48531-4, FA48531-5, FA48531-6, FA48531-7, FA48531-8, FA48531-9, FA48531-10, FA48531-11, FA48531-12, FA48531-13, FA48531-14, FA48531-15, FA48531-16, FA48531-17, FA48531-18, FA48531-19, FA48531-20

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 83-118%
17060-07-0	1,2-Dichloroethane-D4	101% 79-125%
2037-26-5	Toluene-D8	109% 85-112%
460-00-4	4-Bromofluorobenzene	106% 83-118%

6.1.1

6

Method Blank Summary

Page 1 of 2

Job Number: FA48531**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-MB	1A08056.D	1	10/23/17	SP	n/a	n/a	V1A296

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

FA48531-16, FA48531-17

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: FA48531
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-MB	1A08056.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples: Method: SW846 8260B
FA48531-16, FA48531-17

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	107% 85-112%
460-00-4	4-Bromofluorobenzene	107% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA48531**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A294-BS	1A08003.D	1	10/20/17	SP	n/a	n/a	V1A294

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

FA48531-1, FA48531-2, FA48531-3, FA48531-4, FA48531-5, FA48531-6, FA48531-7, FA48531-8, FA48531-9, FA48531-10, FA48531-11, FA48531-12, FA48531-13, FA48531-14, FA48531-15, FA48531-16, FA48531-17, FA48531-18, FA48531-19, FA48531-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	120	96	50-147
71-43-2	Benzene	25	25.2	101	81-122
75-27-4	Bromodichloromethane	25	26.9	108	79-123
75-25-2	Bromoform	25	24.8	99	66-123
78-93-3	2-Butanone (MEK)	125	123	98	56-143
75-15-0	Carbon Disulfide	25	22.6	90	66-148
56-23-5	Carbon Tetrachloride	25	26.9	108	76-136
108-90-7	Chlorobenzene	25	24.9	100	82-124
75-00-3	Chloroethane	25	30.1	120	62-144
67-66-3	Chloroform	25	25.4	102	80-124
124-48-1	Dibromochloromethane	25	28.1	112	78-122
75-34-3	1,1-Dichloroethane	25	26.7	107	81-122
107-06-2	1,2-Dichloroethane	25	25.3	101	75-125
75-35-4	1,1-Dichloroethylene	25	25.2	101	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.1	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.3	105	76-127
78-87-5	1,2-Dichloropropane	25	25.0	100	76-124
10061-01-5	cis-1,3-Dichloropropene	25	22.2	89	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.4	110	80-120
100-41-4	Ethylbenzene	25	25.2	101	81-121
591-78-6	2-Hexanone	125	115	92	61-129
74-83-9	Methyl Bromide	25	25.5	102	59-143
74-87-3	Methyl Chloride	25	22.3	89	50-159
75-09-2	Methylene Chloride	25	24.3	97	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	133	106	66-122
100-42-5	Styrene	25	26.9	108	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	27.1	108	72-120
127-18-4	Tetrachloroethylene	25	26.1	104	76-135
108-88-3	Toluene	25	25.4	102	80-120
71-55-6	1,1,1-Trichloroethane	25	25.1	100	75-130
79-00-5	1,1,2-Trichloroethane	25	26.5	106	76-119
79-01-6	Trichloroethylene	25	25.7	103	81-126
75-01-4	Vinyl Chloride	25	22.8	91	69-159
1330-20-7	Xylene (total)	75	77.6	103	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA48531

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A294-BS	1A08003.D	1	10/20/17	SP	n/a	n/a	V1A294

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48531-1, FA48531-2, FA48531-3, FA48531-4, FA48531-5, FA48531-6, FA48531-7, FA48531-8, FA48531-9, FA48531-10, FA48531-11, FA48531-12, FA48531-13, FA48531-14, FA48531-15, FA48531-16, FA48531-17, FA48531-18, FA48531-19, FA48531-20

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA48531**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-BS	1A08057.D	1	10/23/17	SP	n/a	n/a	V1A296

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

FA48531-16, FA48531-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	112	90	50-147
71-43-2	Benzene	25	27.2	109	81-122
75-27-4	Bromodichloromethane	25	28.1	112	79-123
75-25-2	Bromoform	25	25.1	100	66-123
78-93-3	2-Butanone (MEK)	125	116	93	56-143
75-15-0	Carbon Disulfide	25	24.7	99	66-148
56-23-5	Carbon Tetrachloride	25	29.1	116	76-136
108-90-7	Chlorobenzene	25	25.6	102	82-124
75-00-3	Chloroethane	25	31.0	124	62-144
67-66-3	Chloroform	25	26.4	106	80-124
124-48-1	Dibromochloromethane	25	28.7	115	78-122
75-34-3	1,1-Dichloroethane	25	28.3	113	81-122
107-06-2	1,2-Dichloroethane	25	25.9	104	75-125
75-35-4	1,1-Dichloroethylene	25	27.4	110	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.1	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.2	113	76-127
78-87-5	1,2-Dichloropropane	25	26.6	106	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.0	96	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.4	114	80-120
100-41-4	Ethylbenzene	25	26.9	108	81-121
591-78-6	2-Hexanone	125	109	87	61-129
74-83-9	Methyl Bromide	25	25.1	100	59-143
74-87-3	Methyl Chloride	25	22.7	91	50-159
75-09-2	Methylene Chloride	25	25.5	102	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	126	101	66-122
100-42-5	Styrene	25	28.0	112	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	27.2	109	72-120
127-18-4	Tetrachloroethylene	25	27.2	109	76-135
108-88-3	Toluene	25	26.9	108	80-120
71-55-6	1,1,1-Trichloroethane	25	26.9	108	75-130
79-00-5	1,1,2-Trichloroethane	25	27.2	109	76-119
79-01-6	Trichloroethylene	25	27.5	110	81-126
75-01-4	Vinyl Chloride	25	22.9	92	69-159
1330-20-7	Xylene (total)	75	81.8	109	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA48531
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-BS	1A08057.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples: Method: SW846 8260B
FA48531-16, FA48531-17

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA48531

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48531-17MS	1A08022.D	2.5	10/20/17	SP	n/a	n/a	V1A294
FA48531-17MSD	1A08023.D	2.5	10/20/17	SP	n/a	n/a	V1A294
FA48531-17 ^a	1A08018.D	2.5	10/20/17	SP	n/a	n/a	V1A294

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48531-1, FA48531-2, FA48531-3, FA48531-4, FA48531-5, FA48531-6, FA48531-7, FA48531-8, FA48531-9, FA48531-10, FA48531-11, FA48531-12, FA48531-13, FA48531-14, FA48531-15, FA48531-16, FA48531-17, FA48531-18, FA48531-19, FA48531-20

CAS No.	Compound	FA48531-17 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	ND		313	270	86	313	285	91	5	50-147/21
71-43-2	Benzene	ND		62.5	65.3	104	62.5	64.0	102	2	81-122/14
75-27-4	Bromodichloromethane	ND		62.5	65.9	105	62.5	65.3	104	1	79-123/19
75-25-2	Bromoform	ND		62.5	56.8	91	62.5	57.2	92	1	66-123/21
78-93-3	2-Butanone (MEK)	ND		313	285	91	313	295	94	3	56-143/18
75-15-0	Carbon Disulfide	ND		62.5	58.9	94	62.5	59.4	95	1	66-148/23
56-23-5	Carbon Tetrachloride	ND		62.5	67.2	108	62.5	67.1	107	0	76-136/23
108-90-7	Chlorobenzene	ND		62.5	62.2	100	62.5	62.2	100	0	82-124/14
75-00-3	Chloroethane	ND		62.5	75.5	121	62.5	79.7	128	5	62-144/20
67-66-3	Chloroform	ND		62.5	63.1	101	62.5	62.6	100	1	80-124/15
124-48-1	Dibromochloromethane	ND		62.5	66.6	107	62.5	66.6	107	0	78-122/19
75-34-3	1,1-Dichloroethane	ND		62.5	68.5	110	62.5	68.6	110	0	81-122/15
107-06-2	1,2-Dichloroethane	ND		62.5	63.1	101	62.5	62.3	100	1	75-125/14
75-35-4	1,1-Dichloroethylene	8.8		62.5	75.4	107	62.5	75.2	106	0	78-137/18
156-59-2	cis-1,2-Dichloroethylene	6.4		62.5	72.8	106	62.5	72.2	105	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		62.5	68.1	109	62.5	67.4	108	1	76-127/17
78-87-5	1,2-Dichloropropane	ND		62.5	64.4	103	62.5	62.3	100	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		62.5	55.8	89	62.5	54.8	88	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		62.5	68.7	110	62.5	68.7	110	0	80-120/22
100-41-4	Ethylbenzene	ND		62.5	65.5	105	62.5	65.0	104	1	81-121/14
591-78-6	2-Hexanone	ND		313	271	87	313	284	91	5	61-129/18
74-83-9	Methyl Bromide	ND		62.5	59.2	95	62.5	64.2	103	8	59-143/19
74-87-3	Methyl Chloride	ND		62.5	51.7	83	62.5	59.0	94	13	50-159/19
75-09-2	Methylene Chloride	ND		62.5	63.4	101	62.5	63.6	102	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		313	319	102	313	335	107	5	66-122/16
100-42-5	Styrene	ND		62.5	67.7	108	62.5	67.5	108	0	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		62.5	67.1	107	62.5	66.4	106	1	72-120/14
127-18-4	Tetrachloroethylene	420	E	62.5	467	75* ^b	62.5	455	56* ^b	3	76-135/16
108-88-3	Toluene	ND		62.5	64.4	103	62.5	64.8	104	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		62.5	64.8	104	62.5	63.8	102	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		62.5	66.1	106	62.5	65.2	104	1	76-119/14
79-01-6	Trichloroethylene	4.4		62.5	70.5	106	62.5	70.0	105	1	81-126/15
75-01-4	Vinyl Chloride	ND		62.5	53.7	86	62.5	61.6	99	14	69-159/18
1330-20-7	Xylene (total)	ND		188	199	106	188	197	105	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA48531

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48531-17MS	1A08022.D	2.5	10/20/17	SP	n/a	n/a	V1A294
FA48531-17MSD	1A08023.D	2.5	10/20/17	SP	n/a	n/a	V1A294
FA48531-17 ^a	1A08018.D	2.5	10/20/17	SP	n/a	n/a	V1A294

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48531-1, FA48531-2, FA48531-3, FA48531-4, FA48531-5, FA48531-6, FA48531-7, FA48531-8, FA48531-9, FA48531-10, FA48531-11, FA48531-12, FA48531-13, FA48531-14, FA48531-15, FA48531-16, FA48531-17, FA48531-18, FA48531-19, FA48531-20

CAS No.	Surrogate Recoveries	MS	MSD	FA48531-17	Limits
1868-53-7	Dibromofluoromethane	102%	102%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	101%	102%	79-125%
2037-26-5	Toluene-D8	99%	100%	108%	85-112%
460-00-4	4-Bromofluorobenzene	101%	103%	109%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) 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: FA48531

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48638-2MS	1A08078.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2MSD	1A08079.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2	1A08071.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48531-16, FA48531-17

CAS No.	Compound	FA48638-2 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	125	113	90	125	115	92	2	50-147/21
71-43-2	Benzene	44.5	25	69.0	98	25	67.5	92	2	81-122/14
75-27-4	Bromodichloromethane	ND	25	25.8	103	25	25.5	102	1	79-123/19
75-25-2	Bromoform	ND	25	21.9	88	25	21.6	86	1	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	112	90	125	113	90	1	56-143/18
75-15-0	Carbon Disulfide	ND	25	22.4	90	25	22.6	90	1	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	25.6	102	25	26.1	104	2	76-136/23
108-90-7	Chlorobenzene	ND	25	23.7	95	25	23.2	93	2	82-124/14
75-00-3	Chloroethane	ND	25	32.0	128	25	32.0	128	0	62-144/20
67-66-3	Chloroform	ND	25	24.7	99	25	24.4	98	1	80-124/15
124-48-1	Dibromochloromethane	ND	25	25.2	101	25	25.5	102	1	78-122/19
75-34-3	1,1-Dichloroethane	ND	25	26.4	106	25	26.3	105	0	81-122/15
107-06-2	1,2-Dichloroethane	3.4	25	27.7	97	25	27.0	94	3	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	25.3	101	25	25.1	100	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	24.8	99	25	25.0	100	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	25.6	102	25	25.7	103	0	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	25.0	100	25	24.5	98	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	25	19.3	77	25	19.2	77	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	25.3	101	25	25.3	101	0	80-120/22
100-41-4	Ethylbenzene	ND	25	25.2	101	25	24.4	98	3	81-121/14
591-78-6	2-Hexanone	ND	125	108	86	125	104	83	4	61-129/18
74-83-9	Methyl Bromide	ND	25	24.6	98	25	25.2	101	2	59-143/19
74-87-3	Methyl Chloride	ND	25	22.4	90	25	23.6	94	5	50-159/19
75-09-2	Methylene Chloride	ND	25	24.2	97	25	23.6	94	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	122	98	125	118	94	3	66-122/16
100-42-5	Styrene	ND	25	25.5	102	25	24.9	100	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	25.0	100	25	25.3	101	1	72-120/14
127-18-4	Tetrachloroethylene	ND	25	23.8	95	25	23.6	94	1	76-135/16
108-88-3	Toluene	5.6	25	29.8	97	25	29.2	94	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	25	24.4	98	25	24.4	98	0	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	25.4	102	25	24.9	100	2	76-119/14
79-01-6	Trichloroethylene	ND	25	25.5	102	25	24.8	99	3	81-126/15
75-01-4	Vinyl Chloride	ND	25	22.1	88	25	23.3	93	5	69-159/18
1330-20-7	Xylene (total)	2.7	75	78.5	101	75	76.7	99	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA48531

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48638-2MS	1A08078.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2MSD	1A08079.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2	1A08071.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48531-16, FA48531-17

CAS No.	Surrogate Recoveries	MS	MSD	FA48638-2	Limits
1868-53-7	Dibromofluoromethane	101%	102%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	101%	104%	79-125%
2037-26-5	Toluene-D8	97%	96%	109%	85-112%
460-00-4	4-Bromofluorobenzene	99%	102%	109%	83-118%

* = Outside of Control Limits.

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964.17

SGS Accutest Job Number: FA48591

Sampling Dates: 10/17/17 - 10/18/17

Report to:

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Total number of pages in report: **130**



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Sample Summary

United Technologies Corporation

Job No: FA48591

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964.17

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA48591-1	10/17/17	16:30	RMJB	10/20/17	AQ	Ground Water	MW-9
FA48591-1D	10/17/17	16:30	RMJB	10/20/17	AQ	Water Dup/MSD	MW-9
FA48591-1S	10/17/17	16:30	RMJB	10/20/17	AQ	Water Matrix Spike	MW-9
FA48591-2	10/17/17	16:37	RMJB	10/20/17	AQ	Ground Water	MW-14
FA48591-3	10/17/17	16:37	RMJB	10/20/17	AQ	Ground Water	MW-14-A
FA48591-4	10/17/17	17:18	RMJB	10/20/17	AQ	Ground Water	MW-14D
FA48591-5	10/17/17	17:18	RMJB	10/20/17	AQ	Ground Water	MW-14D-A
FA48591-6	10/17/17	17:20	RMJB	10/20/17	AQ	Ground Water	MW-10
FA48591-7	10/17/17	17:40	RMJB	10/20/17	AQ	Ground Water	MW-5
FA48591-8	10/18/17	08:30	RMJB	10/20/17	AQ	Ground Water	MW-30D
FA48591-9	10/18/17	09:07	RMJB	10/20/17	AQ	Ground Water	MW-12D
FA48591-10	10/18/17	09:10	RMJB	10/20/17	AQ	Ground Water	MW-31D
FA48591-11	10/18/17	09:55	RMJB	10/20/17	AQ	Ground Water	MW-27

Sample Summary

(continued)

United Technologies Corporation

Job No: FA48591

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964.17

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA48591-12	10/18/17	09:55 RMJB	10/20/17	AQ	Ground Water	MW-25D
FA48591-13	10/18/17	10:40 RMJB	10/20/17	AQ	Ground Water	MW-32DR
FA48591-14	10/18/17	10:40 RMJB	10/20/17	AQ	Ground Water	MW-32DR-A
FA48591-15	10/18/17	10:43 RMJB	10/20/17	AQ	Ground Water	MW-28
FA48591-16	10/18/17	11:30 RMJB	10/20/17	AQ	Ground Water	MW-13D
FA48591-17	10/18/17	11:45 RMJB	10/20/17	AQ	Ground Water	MW-22D
FA48591-18	10/18/17	11:45 RMJB	10/20/17	AQ	Ground Water	MW-22D-A
FA48591-19	10/18/17	12:25 RMJB	10/20/17	AQ	Ground Water	MW-29
FA48591-20	10/18/17	12:45 RMJB	10/20/17	AQ	Ground Water	MW-26D
FA48591-21	10/18/17	13:23 RMJB	10/20/17	AQ	Ground Water	MW-8
FA48591-22	10/18/17	14:10 RMJB	10/20/17	AQ	Ground Water	MW-1
FA48591-23	10/18/17	14:35 RMJB	10/20/17	AQ	Ground Water	MW-19
FA48591-24	10/18/17	15:12 RMJB	10/20/17	AQ	Ground Water	MW-21D



Sample Summary
(continued)

United Technologies Corporation

Job No: FA48591

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60314964.17

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA48591-25	10/18/17	15:25 RMJB	10/20/17	AQ	Ground Water	MW-20
FA48591-26	10/18/17	16:05 RMJB	10/20/17	AQ	Ground Water	MW-21
FA48591-27	10/18/17	16:30 RMJB	10/20/17	AQ	Ground Water	MW-24
FA48591-28	10/17/17	00:00 RMJB	10/20/17	AQ	Trip Blank Water	TRIP BLANK 3
FA48591-29	10/17/17	00:00 RMJB	10/20/17	AQ	Trip Blank Water	TRIP BLANK 4
FA48591-30	10/18/17	16:55 RMJB	10/20/17	AQ	Ground Water	IDW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job FA48591

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report 11/3/2017 2:09:20

28 Samples and 2 Trip Blanks were collected on/between 10/17/2017 and 10/18/2017 and were received at SGS Accutest Southeast (SASE) on 10/20/2017 properly preserved, at 5 Deg. C and intact. These Samples received an SASE job number of FA48591. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results

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.

MS Volatiles By Method SW846 8260B

Matrix: AQ

Batch ID: V1A295

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA48591-1MS, FA48591-1MSD were used as the QC samples indicated.

FA48591-1: Sample was not preserved to a pH < 2.

FA48591-2: Sample was not preserved to a pH < 2.

FA48591-3: Sample was not preserved to a pH < 2.

FA48591-4: Sample was not preserved to a pH < 2.

FA48591-6: Sample was not preserved to a pH < 2.

FA48591-7: Sample was not preserved to a pH < 2.

FA48591-8: Sample was not preserved to a pH < 2.

FA48591-10: Sample was not preserved to a pH < 2.

FA48591-11: Sample was not preserved to a pH < 2.

FA48591-12: Sample was not preserved to a pH < 2.

FA48591-13: Sample was not preserved to a pH < 2.

FA48591-14: Sample was not preserved to a pH < 2.

FA48591-15: Sample was not preserved to a pH < 2.

FA48591-16: Sample was not preserved to a pH < 2.

FA48591-17: Sample was not preserved to a pH < 2.

FA48591-18: Sample was not preserved to a pH < 2.

FA48591-19: Sample was not preserved to a pH < 2.

FA48591-20: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: V1A296

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA48638-2MS, FA48638-2MSD were used as the QC samples indicated.

FA48591-1: Sample was not preserved to a pH < 2.

FA48591-5: Sample was not preserved to a pH < 2.

FA48591-6: Sample was not preserved to a pH < 2.

FA48591-8: Sample was not preserved to a pH < 2.

FA48591-9: Sample was not preserved to a pH < 2.

FA48591-10: Sample was not preserved to a pH < 2.

FA48591-12: Sample was not preserved to a pH < 2.

FA48591-16: Sample was not preserved to a pH < 2.

FA48591-17: Sample was not preserved to a pH < 2.

FA48591-18: Sample was not preserved to a pH < 2.

FA48591-20: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: V5E176

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

MS Volatiles By Method SW846 8260B

Matrix: AQ

Batch ID: V5E176

Sample(s) FA48347-1MS, FA48347-1MSD were used as the QC samples indicated.

FA48591-21: Sample was not preserved to a pH < 2.

FA48591-22: Sample was not preserved to a pH < 2.

FA48591-23: Sample was not preserved to a pH < 2.

FA48591-24: Sample was not preserved to a pH < 2.

FA48591-25: Sample was not preserved to a pH < 2.

FA48591-26: Sample was not preserved to a pH < 2.

FA48591-28: Sample was not preserved to a pH < 2.

FA48591-29: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: V5E177

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA48591-30MS, FA48591-30MSD were used as the QC samples indicated.

FA48591-24: Sample was not preserved to a pH < 2.

FA48591-22: Sample was not preserved to a pH < 2.

FA48591-27: Sample was not preserved to a pH < 2.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ

Batch ID: OP67313

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) FA48617-1MS, FA48617-1MSD were used as the QC samples indicated.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP32945

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) FA48778-3DUP, FA48778-3MS, FA48778-3MSD, FA48778-3PS, FA48778-3SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Chromium are outside control limits for sample MP32945-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Chromium, Zinc are outside control limits for sample MP32945-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP32937

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) FA48762-8FDUP, FA48762-8FMS, FA48762-8FMSD, FA48762-8FSDL were used as the QC samples for metals

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:

Lovelie Metzgar, QA Officer (signature on file)

Date: November 3, 2017

Summary of Hits

Job Number: FA48591
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/17/17 thru 10/18/17



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA48591-1	MW-9					
cis-1,2-Dichloroethylene ^a		109	5.0	1.4	ug/l	SW846 8260B
Tetrachloroethylene ^a		646	10	2.2	ug/l	SW846 8260B
Trichloroethylene ^a		157	5.0	1.7	ug/l	SW846 8260B
FA48591-2	MW-14					
Tetrachloroethylene ^a		1.9	1.0	0.22	ug/l	SW846 8260B
FA48591-3	MW-14-A					
Tetrachloroethylene ^a		1.7	1.0	0.22	ug/l	SW846 8260B
FA48591-4	MW-14D					
1,1-Dichloroethylene ^a		0.72 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.34 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		63.4	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene ^a		0.43 J	1.0	0.35	ug/l	SW846 8260B
FA48591-5	MW-14D-A					
1,1-Dichloroethylene ^a		0.79 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.38 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		52.9	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene ^a		0.49 J	1.0	0.35	ug/l	SW846 8260B
FA48591-6	MW-10					
1,1-Dichloroethylene ^a		23.7	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		350	10	2.8	ug/l	SW846 8260B
trans-1,2-Dichloroethylene ^a		0.26 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a		149	10	2.2	ug/l	SW846 8260B
Trichloroethylene ^a		70.9	1.0	0.35	ug/l	SW846 8260B
FA48591-7	MW-5					
Tetrachloroethylene ^a		0.87 J	1.0	0.22	ug/l	SW846 8260B
FA48591-8	MW-30D					
1,1-Dichloroethylene ^a		2.1	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.43 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		88.1	2.0	0.43	ug/l	SW846 8260B

Summary of Hits

Job Number: FA48591
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/17/17 thru 10/18/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Trichloroethylene ^a		0.49 J	1.0	0.35	ug/l	SW846 8260B
FA48591-9	MW-12D					
1,1-Dichloroethylene ^a		0.48 J	1.0	0.32	ug/l	SW846 8260B
Tetrachloroethylene ^a		39.1	1.0	0.22	ug/l	SW846 8260B
FA48591-10	MW-31D					
1,1-Dichloroethylene ^a		4.7	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		2.0	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		161	5.0	1.1	ug/l	SW846 8260B
Trichloroethylene ^a		0.61 J	1.0	0.35	ug/l	SW846 8260B
FA48591-11	MW-27					
Tetrachloroethylene ^a		0.39 J	1.0	0.22	ug/l	SW846 8260B
FA48591-12	MW-25D					
1,1-Dichloroethylene ^a		3.1	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		1.1	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		116	2.5	0.54	ug/l	SW846 8260B
Trichloroethylene ^a		0.80 J	1.0	0.35	ug/l	SW846 8260B
FA48591-13	MW-32DR					
1,1-Dichloroethylene ^a		0.69 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.33 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		26.4	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene ^a		0.36 J	1.0	0.35	ug/l	SW846 8260B
FA48591-14	MW-32DR-A					
1,1-Dichloroethylene ^a		0.69 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.38 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		37.1	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene ^a		0.41 J	1.0	0.35	ug/l	SW846 8260B
FA48591-15	MW-28					

No hits reported in this sample.

Summary of Hits

Job Number: FA48591
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/17/17 thru 10/18/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA48591-16 MW-13D						
1,1-Dichloroethylene ^a		1.7	1.0	0.32	ug/l	SW846 8260B
Tetrachloroethylene ^a		84.0	2.0	0.43	ug/l	SW846 8260B
1,1,1-Trichloroethane ^a		0.31 J	1.0	0.25	ug/l	SW846 8260B
FA48591-17 MW-22D						
1,1-Dichloroethylene ^a		2.4	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.64 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		130	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene ^a		0.63 J	1.0	0.35	ug/l	SW846 8260B
FA48591-18 MW-22D-A						
1,1-Dichloroethylene ^a		2.2	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		0.64 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		113	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene ^a		0.71 J	1.0	0.35	ug/l	SW846 8260B
FA48591-19 MW-29						
Tetrachloroethylene ^a		0.56 J	1.0	0.22	ug/l	SW846 8260B
FA48591-20 MW-26D						
1,1-Dichloroethylene ^a		1.9	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a		1.1	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		76.0	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene ^a		1.1	1.0	0.35	ug/l	SW846 8260B
FA48591-21 MW-8						
cis-1,2-Dichloroethylene ^a		0.31 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a		47.9	1.0	0.22	ug/l	SW846 8260B
Trichloroethylene ^a		4.7	1.0	0.35	ug/l	SW846 8260B
FA48591-22 MW-1						
cis-1,2-Dichloroethylene ^a		124	20	5.5	ug/l	SW846 8260B
Tetrachloroethylene ^a		835	20	4.3	ug/l	SW846 8260B
Trichloroethylene ^a		23.2	1.0	0.35	ug/l	SW846 8260B

Summary of Hits

Job Number: FA48591
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/17/17 thru 10/18/17



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA48591-23 MW-19

Chloroform ^a	299	250	75	ug/l	SW846 8260B
Tetrachloroethylene ^a	18700	250	54	ug/l	SW846 8260B
1,1,1-Trichloroethane ^a	74.9 J	250	62	ug/l	SW846 8260B

FA48591-24 MW-21D

1,1-Dichloroethylene ^a	1.7	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	0.81 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene ^a	72.9	2.0	0.43	ug/l	SW846 8260B
Trichloroethylene ^a	0.38 J	1.0	0.35	ug/l	SW846 8260B

FA48591-25 MW-20

Chloroform ^a	4.8 J	5.0	1.5	ug/l	SW846 8260B
Tetrachloroethylene ^a	312	5.0	1.1	ug/l	SW846 8260B
Trichloroethylene ^a	2.2 J	5.0	1.7	ug/l	SW846 8260B

FA48591-26 MW-21

Chloroform ^a	292	250	75	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	573	250	69	ug/l	SW846 8260B
Tetrachloroethylene ^a	23900	250	54	ug/l	SW846 8260B
Trichloroethylene ^a	252	250	86	ug/l	SW846 8260B

FA48591-27 MW-24

cis-1,2-Dichloroethylene ^a	49.9	20	5.5	ug/l	SW846 8260B
Tetrachloroethylene ^a	1600	20	4.3	ug/l	SW846 8260B
Toluene ^a	7.2 J	20	6.0	ug/l	SW846 8260B

FA48591-28 TRIP BLANK 3

No hits reported in this sample.

FA48591-29 TRIP BLANK 4

No hits reported in this sample.

FA48591-30 IDW-1

1,1-Dichloroethylene	0.99 J	1.0	0.32	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	23.2	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene	511	10	2.2	ug/l	SW846 8260B

Summary of Hits

Job Number: FA48591

Account: United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Collected: 10/17/17 thru 10/18/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1,1-Trichloroethane		0.69 J	1.0	0.25	ug/l	SW846 8260B
Trichloroethylene		7.0	1.0	0.35	ug/l	SW846 8260B
Chromium		4.0 J	10	1.0	ug/l	SW846 6010D
Copper		3.3 J	25	1.0	ug/l	SW846 6010D
Lead		1.6 J	5.0	1.1	ug/l	SW846 6010D
Nickel		0.70 J	40	0.40	ug/l	SW846 6010D
Zinc		25.1	20	4.4	ug/l	SW846 6010D

(a) Sample was not preserved to a pH < 2.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-1	Date Received:	10/20/17
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 ^a	1A08029.D	5	10/20/17 21:59	SP	n/a	n/a	V1A295
Run #2 ^a	1A08060.D	10	10/23/17 12:09	SP	n/a	n/a	V1A296

	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	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	109	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	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	646 ^b	10	2.2	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	157	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: 10/17/17
Lab Sample ID: FA48591-1	Date Received: 10/20/17
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	96%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	102%	79-125%
2037-26-5	Toluene-D8	108%	106%	85-112%
460-00-4	4-Bromofluorobenzene	109%	109%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-2	Date Received:	10/20/17
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 ^a	1A08030.D	1	10/20/17 22:20	SP	n/a	n/a	V1A295
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	1.9	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: 10/17/17
Lab Sample ID: FA48591-2	Date Received: 10/20/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	108%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

(a) Sample was not preserved to a pH < 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-14-A	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-3	Date Received:	10/20/17
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 ^a	1A08031.D	1	10/20/17 22:42	SP	n/a	n/a	V1A295
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	1.7	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-14-A	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-3	Date Received:	10/20/17
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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-14D	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-4	Date Received:	10/20/17
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 ^a	1A08032.D	1	10/20/17 23:03	SP	n/a	n/a	V1A295
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	0.72	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.34	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	63.4	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	0.43	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: 10/17/17
Lab Sample ID: FA48591-4	Date Received: 10/20/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-14D-A	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-5	Date Received:	10/20/17
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 ^a	1A08061.D	1	10/23/17 12:31	SP	n/a	n/a	V1A296
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	0.79	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.38	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	52.9	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	0.49	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:	10/17/17
Lab Sample ID:	FA48591-5	Date Received:	10/20/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	107%		85-112%
460-00-4	4-Bromofluorobenzene	110%		83-118%

(a) Sample was not preserved to a pH < 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-10	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-6	Date Received:	10/20/17
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 ^a	1A08034.D	1	10/20/17 23:46	SP	n/a	n/a	V1A295
Run #2 ^a	1A08062.D	10	10/23/17 12:52	SP	n/a	n/a	V1A296

	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	23.7	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	350 ^b	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.26	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	149 ^b	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	70.9	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: 10/17/17
Lab Sample ID: FA48591-6	Date Received: 10/20/17
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	103%	102%	79-125%
2037-26-5	Toluene-D8	109%	107%	85-112%
460-00-4	4-Bromofluorobenzene	107%	109%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-7	Date Received:	10/20/17
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 ^a	1A08035.D	1	10/21/17 00:08	SP	n/a	n/a	V1A295
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	0.87	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-5	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-7	Date Received:	10/20/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	108%		85-112%
460-00-4	4-Bromofluorobenzene	110%		83-118%

(a) Sample was not preserved to a pH < 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-30D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-8	Date Received:	10/20/17
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 ^a	1A08063.D	1	10/23/17 13:14	SP	n/a	n/a	V1A296
Run #2 ^a	1A08036.D	2	10/21/17 00:30	SP	n/a	n/a	V1A295

	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	0.43	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	88.1 ^b	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	0.49	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:	10/18/17
Lab Sample ID:	FA48591-8	Date Received:	10/20/17
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	95%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	102%	79-125%
2037-26-5	Toluene-D8	107%	108%	85-112%
460-00-4	4-Bromofluorobenzene	108%	112%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-9	Date Received:	10/20/17
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 ^a	1A08064.D	1	10/23/17 13:36	SP	n/a	n/a	V1A296
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	0.48	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)	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	39.1	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-12D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-9	Date Received:	10/20/17
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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	107%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

(a) Sample was not preserved to a pH < 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-31D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-10	Date Received:	10/20/17
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 ^a	1A08038.D	1	10/21/17 01:14	SP	n/a	n/a	V1A295
Run #2 ^a	1A08065.D	5	10/23/17 13:57	SP	n/a	n/a	V1A296

	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	4.7	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.0	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	161 ^b	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	0.61	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:	10/18/17
Lab Sample ID:	FA48591-10	Date Received:	10/20/17
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	94%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	79-125%
2037-26-5	Toluene-D8	107%	108%	85-112%
460-00-4	4-Bromofluorobenzene	112%	106%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-11	Date Received:	10/20/17
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 ^a	1A08039.D	1	10/21/17 01:35	SP	n/a	n/a	V1A295
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	0.39	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-27	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-11	Date Received:	10/20/17
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	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	110%		83-118%

(a) Sample was not preserved to a pH < 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-25D		
Lab Sample ID:	FA48591-12	Date Sampled:	10/18/17
Matrix:	AQ - Ground Water	Date Received:	10/20/17
Method:	SW846 8260B	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1A08040.D	1	10/21/17 01:57	SP	n/a	n/a	V1A295
Run #2 ^a	1A08066.D	2.5	10/23/17 14:19	SP	n/a	n/a	V1A296

	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	3.1	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	116 ^b	2.5	0.54	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	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.80	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-25D	
Lab Sample ID: FA48591-12	Date Sampled: 10/18/17
Matrix: AQ - Ground Water	Date Received: 10/20/17
Method: SW846 8260B	Percent Solids: n/a
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	95%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	102%	79-125%
2037-26-5	Toluene-D8	107%	107%	85-112%
460-00-4	4-Bromofluorobenzene	109%	110%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-32DR	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-13	Date Received:	10/20/17
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 ^a	1A08041.D	1	10/21/17 02:18	SP	n/a	n/a	V1A295
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	0.69	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.33	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	26.4	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	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-32DR	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-13	Date Received:	10/20/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	109%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-32DR-A	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-14	Date Received:	10/20/17
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 ^a	1A08042.D	1	10/21/17 02:39	SP	n/a	n/a	V1A295
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	0.69	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.38	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	37.1	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	0.41	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-32DR-A	Date Sampled: 10/18/17
Lab Sample ID: FA48591-14	Date Received: 10/20/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-28	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-15	Date Received:	10/20/17
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 ^a	1A08043.D	1	10/21/17 03:01	SP	n/a	n/a	V1A295
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	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-28	Date Sampled: 10/18/17
Lab Sample ID: FA48591-15	Date Received: 10/20/17
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was not preserved to a pH < 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-13D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-16	Date Received:	10/20/17
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 ^a	1A08067.D	1	10/23/17 14:41	SP	n/a	n/a	V1A296
Run #2 ^a	1A08044.D	2	10/21/17 03:23	SP	n/a	n/a	V1A295

	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	1.7	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	84.0 ^b	2.0	0.43	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	0.31	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	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:	10/18/17
Lab Sample ID:	FA48591-16	Date Received:	10/20/17
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%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	79-125%
2037-26-5	Toluene-D8	107%	109%	85-112%
460-00-4	4-Bromofluorobenzene	108%	111%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-17	Date Received:	10/20/17
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 ^a	1A08045.D	1	10/21/17 03:45	SP	n/a	n/a	V1A295
Run #2 ^a	1A08068.D	2	10/23/17 15:02	SP	n/a	n/a	V1A296

	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	2.4	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	130 ^b	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	0.63	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	
Lab Sample ID: FA48591-17	Date Sampled: 10/18/17
Matrix: AQ - Ground Water	Date Received: 10/20/17
Method: SW846 8260B	Percent Solids: n/a
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	95%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	101%	79-125%
2037-26-5	Toluene-D8	108%	107%	85-112%
460-00-4	4-Bromofluorobenzene	109%	108%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-18	Date Received:	10/20/17
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 ^a	1A08046.D	1	10/21/17 04:07	SP	n/a	n/a	V1A295
Run #2 ^a	1A08069.D	2	10/23/17 15:24	SP	n/a	n/a	V1A296

	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	2.2	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	113 ^b	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	0.71	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:	10/18/17
Lab Sample ID:	FA48591-18	Date Received:	10/20/17
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	95%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	79-125%
2037-26-5	Toluene-D8	108%	107%	85-112%
460-00-4	4-Bromofluorobenzene	111%	107%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-29	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-19	Date Received:	10/20/17
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 ^a	1A08047.D	1	10/21/17 04:28	SP	n/a	n/a	V1A295
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	0.56	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-29	Date Sampled: 10/18/17
Lab Sample ID: FA48591-19	Date Received: 10/20/17
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%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	110%		85-112%
460-00-4	4-Bromofluorobenzene	113%		83-118%

(a) Sample was not preserved to a pH < 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:	10/18/17
Lab Sample ID:	FA48591.20	Date Received:	10/20/17
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 ^a	1A08048.D	1	10/21/17 04:49	SP	n/a	n/a	V1A295
Run #2 ^a	1A08070.D	2	10/23/17 15:45	SP	n/a	n/a	V1A296

	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	1.9	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	76.0 ^b	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	1.1	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-26D	
Lab Sample ID: FA48591-20	Date Sampled: 10/18/17
Matrix: AQ - Ground Water	Date Received: 10/20/17
Method: SW846 8260B	Percent Solids: n/a
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	95%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	79-125%
2037-26-5	Toluene-D8	108%	109%	85-112%
460-00-4	4-Bromofluorobenzene	109%	108%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-21	Date Received:	10/20/17
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 ^a	5E4194.D	1	10/23/17 13:08	MM	n/a	n/a	V5E176
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	0.31	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	47.9	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	4.7	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: 10/18/17
Lab Sample ID: FA48591-21	Date Received: 10/20/17
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	104%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Sample was not preserved to a pH < 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:	10/18/17
Lab Sample ID:	FA48591-22	Date Received:	10/20/17
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 ^a	5E4203.D	1	10/23/17 16:50	MM	n/a	n/a	V5E176
Run #2 ^a	5E4231.D	20	10/24/17 17:14	MM	n/a	n/a	V5E177

	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	124 ^b	20	5.5	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	835 ^b	20	4.3	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	23.2	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:	10/18/17
Lab Sample ID:	FA48591-22	Date Received:	10/20/17
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	97%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	102%	79-125%
2037-26-5	Toluene-D8	105%	103%	85-112%
460-00-4	4-Bromofluorobenzene	104%	106%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-23	Date Received:	10/20/17
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 ^a	5E4198.D	250	10/23/17 14:47	MM	n/a	n/a	V5E176
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	ND	500	170	ug/l	
67-66-3	Chloroform	299	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	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	18700	250	54	ug/l	
108-88-3	Toluene	ND	250	75	ug/l	
71-55-6	1,1,1-Trichloroethane	74.9	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: 10/18/17
Lab Sample ID: FA48591-23	Date Received: 10/20/17
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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Sample was not preserved to a pH < 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-21D	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-24	Date Received:	10/20/17
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 ^a	5E4195.D	1	10/23/17 13:33	MM	n/a	n/a	V5E176
Run #2 ^a	5E4232.D	2	10/24/17 17:39	MM	n/a	n/a	V5E177

	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	1.7	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.81	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	72.9 ^b	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	0.38	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	
Lab Sample ID: FA48591-24	Date Sampled: 10/18/17
Matrix: AQ - Ground Water	Date Received: 10/20/17
Method: SW846 8260B	Percent Solids: n/a
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%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	103%	79-125%
2037-26-5	Toluene-D8	104%	103%	85-112%
460-00-4	4-Bromofluorobenzene	103%	106%	83-118%

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-20	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-25	Date Received:	10/20/17
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 ^a	5E4199.D	5	10/23/17 15:11	MM	n/a	n/a	V5E176
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	4.8	5.0	1.5	ug/l	J
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	ND	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	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	312	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	2.2	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: 10/18/17
Lab Sample ID: FA48591-25	Date Received: 10/20/17
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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample was not preserved to a pH < 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-21	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-26	Date Received:	10/20/17
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 ^a	5E4200.D	250	10/23/17 15:36	MM	n/a	n/a	V5E176
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	ND	500	170	ug/l	
67-66-3	Chloroform	292	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	573	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	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	23900	250	54	ug/l	
108-88-3	Toluene	ND	250	75	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	250	62	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	250	120	ug/l	
79-01-6	Trichloroethylene	252	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-21	Date Sampled: 10/18/17
Lab Sample ID: FA48591-26	Date Received: 10/20/17
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	97%		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	105%		83-118%

(a) Sample was not preserved to a pH < 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-24	Date Sampled:	10/18/17
Lab Sample ID:	FA48591-27	Date Received:	10/20/17
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 ^a	5E4233.D	20	10/24/17 18:03	MM	n/a	n/a	V5E177
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	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	49.9	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	1600	20	4.3	ug/l	
108-88-3	Toluene	7.2	20	6.0	ug/l	J
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	ND	20	6.9	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-24	Date Sampled: 10/18/17
Lab Sample ID: FA48591-27	Date Received: 10/20/17
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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Sample was not preserved to a pH < 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:	TRIP BLANK 3	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-28	Date Received:	10/20/17
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 ^a	5E4188.D	1	10/23/17 10:40	MM	n/a	n/a	V5E176
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	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 3	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-28	Date Received:	10/20/17
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	102%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample was not preserved to a pH < 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:	TRIP BLANK 4	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-29	Date Received:	10/20/17
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 ^a	5E4189.D	1	10/23/17 11:05	MM	n/a	n/a	V5E176
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	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:	TRIP BLANK 4	Date Sampled:	10/17/17
Lab Sample ID:	FA48591-29	Date Received:	10/20/17
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	102%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample was not preserved to a pH < 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:	10/18/17
Lab Sample ID:	FA48591-30	Date Received:	10/20/17
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	5E4204.D	1	10/23/17 17:14	MM	n/a	n/a	V5E176
Run #2	5E4234.D	10	10/24/17 18:28	MM	n/a	n/a	V5E177

	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	0.99	1.0	0.32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	23.2	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	511 ^a	10	2.2	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	0.69	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	7.0	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:	10/18/17
Lab Sample ID:	FA48591-30	Date Received:	10/20/17
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	97%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	103%	79-125%
2037-26-5	Toluene-D8	104%	103%	85-112%
460-00-4	4-Bromofluorobenzene	104%	107%	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:	10/18/17
Lab Sample ID:	FA48591-30	Date Received:	10/20/17
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	4D2862.D	1	10/24/17 16:13	MV	10/23/17 12:00	OP67313	S4D108
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

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	

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:	10/18/17
Lab Sample ID:	FA48591-30	Date Received:	10/20/17
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	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	
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	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	24%		14-67%
4165-62-2	Phenol-d5	14%		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:	10/18/17
Lab Sample ID:	FA48591-30	Date Received:	10/20/17
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	72%		42-108%
321-60-8	2-Fluorobiphenyl	76%		40-106%
1718-51-0	Terphenyl-d14	49%		39-121%

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: 10/18/17
Lab Sample ID: FA48591-30	Date Received: 10/20/17
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	Analyzed By	Method	Prep Method
Antimony	1.0 U	6.0	1.0	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Arsenic	1.3 U	10	1.3	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Beryllium	0.20 U	4.0	0.20	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Cadmium	0.20 U	5.0	0.20	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Chromium	4.0 J	10	1.0	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Copper	3.3 J	25	1.0	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Lead	1.6 J	5.0	1.1	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Mercury	0.030 U	0.50	0.030	ug/l	1	11/01/17	11/01/17 DM	SW846 7470A ¹	SW846 7470A ³
Nickel	0.70 J	40	0.40	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Selenium	2.9 U	10	2.9	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Silver	0.70 U	10	0.70	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Thallium	1.4 U	10	1.4	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴
Zinc	25.1	20	4.4	ug/l	1	11/02/17	11/02/17 LM	SW846 6010D ²	SW846 3010A ⁴

(1) Instrument QC Batch: MA14470

(2) Instrument QC Batch: MA14475

(3) Prep QC Batch: MP32937

(4) Prep QC Batch: MP32945

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

P.O.# LIMS Number: 87457

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ACCUTEST
FA48591

Page 2 of 3
Project Number: 60314964.17
Custody Number ⁽¹⁾:
LHMS Number: 87457

Chain of Custody and Analytical Request

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-yyyy)	Time Collected (Military) (hh:mm)	See Comments			TCL VOC's							COMMENTS
			COMP	GRAB	Well								
(14) MW-32DR-a	18-OCT-2017	1040	X			Groundwater	X						un preserved
(15) MW-28	18-oct-2017	1043	X				X						
(16) MW-13D	18-OCT-2017	1130	X				X						
(17) MW-22D	18-OCT-2017	1145	X				X						
(18) MW-22D-a	18-OCT-2017	1145	X				X						
(19) MW-29	18-Oct-2017	1225	X				X						
(20) MW-26D	18-OCT-2017	1245	X				X						
(21) MW-8	18-OCT-2017	12 ⁵⁰ 1245 1323	X				X						
(22) MW-1	18-OCT-2017	1410	X				X						
(23) MW-19	18-OCT-2017	1435	X				X						
(24) MW-21D	18-OCT-2017	1512	X				X						
(25) MW-20	18-OCT-2017	1525	X				X						
(26) MW-21	18-OCT-2017	1605	X				X						
(27) MW-24	18-OCT-2017	1630	X				X						
(28) Trip Blank 3							X						

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time	Delivered Directly to Lab:	Shipped:
<i>[Signature]</i>	10/9/17	8:00	1. <i>[Signature]</i> Fed Ex	10/10/17	9:00	Method of Shipment: Fed Ex	Airbill #: 8720 1203 0447
2. Fed Ex			2. <i>[Signature]</i>			Analytical Lab: Accutest	Location: Orlando FLA
3.			3.			Lab Recipient:	Date: Time:

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

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

52745\admin\project control\project forms\Blank COC

FA48591: Chain of Custody

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ACCUTEST
FA48591

SGS Accutest Sample Receipt Summary

Job Number: FA48591

Client: AECOM

Project: UTC DELAVAN

Date / Time Received: 10/20/2017 9:00:00 AM

Delivery Method: FED EX

Airbill #s: 1002239512860003281100812012030447

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (5.2);

Cooler Temps (Corrected) °C: Cooler 1: (5.0);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler | ☒ | ☐ | ☐ |
| 2. Trip Blank listed on COC | ☒ | ☐ | ☐ |

W or S N/A

- | | | | |
|------------------------|-------------------------------------|--------------------------|--------------------------|
| 3. Type Of TB Received | ☒ | ☐ | ☐ |
|------------------------|-------------------------------------|--------------------------|--------------------------|

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☒ | ☐ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____

Test Strip Lot #: pH 0-3 230315

Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____

pH 10-12 219813A

Number of Lab Filtered Metals: _____

Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP

Date: 10/20/2017 9:00:00 A

Reviewer: P.H

Date: 10/20/2017

FA48591: Chain of Custody

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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: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A295-MB	1A08027.D	1	10/20/17	SP	n/a	n/a	V1A295

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

FA48591-1, FA48591-2, FA48591-3, FA48591-4, FA48591-6, FA48591-7, FA48591-8, FA48591-10, FA48591-11, FA48591-12, FA48591-13, FA48591-14, FA48591-15, FA48591-16, FA48591-17, FA48591-18, FA48591-19, FA48591-20

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: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A295-MB	1A08027.D	1	10/20/17	SP	n/a	n/a	V1A295

The QC reported here applies to the following samples: Method: SW846 8260B
FA48591-1, FA48591-2, FA48591-3, FA48591-4, FA48591-6, FA48591-7, FA48591-8, FA48591-10, FA48591-11, FA48591-12, FA48591-13, FA48591-14, FA48591-15, FA48591-16, FA48591-17, FA48591-18, FA48591-19, FA48591-20

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 83-118%
17060-07-0	1,2-Dichloroethane-D4	101% 79-125%
2037-26-5	Toluene-D8	110% 85-112%
460-00-4	4-Bromofluorobenzene	106% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E176-MB	5E4186.D	1	10/23/17	MM	n/a	n/a	V5E176

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

FA48591-21, FA48591-22, FA48591-23, FA48591-24, FA48591-25, FA48591-26, FA48591-28, FA48591-29, FA48591-30

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	

6.1.2

6

Method Blank Summary

Job Number: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E176-MB	5E4186.D	1	10/23/17	MM	n/a	n/a	V5E176

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

FA48591-21, FA48591-22, FA48591-23, FA48591-24, FA48591-25, FA48591-26, FA48591-28, FA48591-29, FA48591-30

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	103% 79-125%
2037-26-5	Toluene-D8	103% 85-112%
460-00-4	4-Bromofluorobenzene	105% 83-118%

Method Blank Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-MB	1A08056.D	1	10/23/17	SP	n/a	n/a	V1A296

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

FA48591-1, FA48591-5, FA48591-6, FA48591-8, FA48591-9, FA48591-10, FA48591-12, FA48591-16, FA48591-17, FA48591-18, FA48591-20

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	

6.1.3

6

Method Blank Summary

Page 2 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-MB	1A08056.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-5, FA48591-6, FA48591-8, FA48591-9, FA48591-10, FA48591-12, FA48591-16, FA48591-17, FA48591-18, FA48591-20

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	107% 85-112%
460-00-4	4-Bromofluorobenzene	107% 83-118%

Method Blank Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E177-MB	5E4213.D	1	10/24/17	MM	n/a	n/a	V5E177

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

FA48591-22, FA48591-24, FA48591-27, FA48591-30

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: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E177-MB	5E4213.D	1	10/24/17	MM	n/a	n/a	V5E177

The QC reported here applies to the following samples: Method: SW846 8260B
FA48591-22, FA48591-24, FA48591-27, FA48591-30

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	103% 85-112%
460-00-4	4-Bromofluorobenzene	106% 83-118%

Blank Spike Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A295-BS	1A08028.D	1	10/20/17	SP	n/a	n/a	V1A295

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

FA48591-1, FA48591-2, FA48591-3, FA48591-4, FA48591-6, FA48591-7, FA48591-8, FA48591-10, FA48591-11, FA48591-12, FA48591-13, FA48591-14, FA48591-15, FA48591-16, FA48591-17, FA48591-18, FA48591-19, FA48591-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	102	82	50-147
71-43-2	Benzene	25	23.6	94	81-122
75-27-4	Bromodichloromethane	25	23.9	96	79-123
75-25-2	Bromoform	25	20.6	82	66-123
78-93-3	2-Butanone (MEK)	125	106	85	56-143
75-15-0	Carbon Disulfide	25	21.3	85	66-148
56-23-5	Carbon Tetrachloride	25	25.0	100	76-136
108-90-7	Chlorobenzene	25	23.0	92	82-124
75-00-3	Chloroethane	25	31.4	126	62-144
67-66-3	Chloroform	25	23.0	92	80-124
124-48-1	Dibromochloromethane	25	24.4	98	78-122
75-34-3	1,1-Dichloroethane	25	24.6	98	81-122
107-06-2	1,2-Dichloroethane	25	22.7	91	75-125
75-35-4	1,1-Dichloroethylene	25	23.8	95	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.0	96	78-120
156-60-5	trans-1,2-Dichloroethylene	25	24.5	98	76-127
78-87-5	1,2-Dichloropropane	25	23.0	92	76-124
10061-01-5	cis-1,3-Dichloropropene	25	20.1	80	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	80-120
100-41-4	Ethylbenzene	25	23.9	96	81-121
591-78-6	2-Hexanone	125	102	82	61-129
74-83-9	Methyl Bromide	25	25.3	101	59-143
74-87-3	Methyl Chloride	25	22.5	90	50-159
75-09-2	Methylene Chloride	25	22.4	90	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	119	95	66-122
100-42-5	Styrene	25	24.8	99	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.8	95	72-120
127-18-4	Tetrachloroethylene	25	24.2	97	76-135
108-88-3	Toluene	25	23.9	96	80-120
71-55-6	1,1,1-Trichloroethane	25	23.6	94	75-130
79-00-5	1,1,2-Trichloroethane	25	23.7	95	76-119
79-01-6	Trichloroethylene	25	24.1	96	81-126
75-01-4	Vinyl Chloride	25	23.1	92	69-159
1330-20-7	Xylene (total)	75	72.3	96	80-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A295-BS	1A08028.D	1	10/20/17	SP	n/a	n/a	V1A295

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-2, FA48591-3, FA48591-4, FA48591-6, FA48591-7, FA48591-8, FA48591-10, FA48591-11, FA48591-12, FA48591-13, FA48591-14, FA48591-15, FA48591-16, FA48591-17, FA48591-18, FA48591-19, FA48591-20

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	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

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E176-BS	5E4185.D	1	10/23/17	MM	n/a	n/a	V5E176

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

FA48591-21, FA48591-22, FA48591-23, FA48591-24, FA48591-25, FA48591-26, FA48591-28, FA48591-29, FA48591-30

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	124	99	50-147
71-43-2	Benzene	25	26.0	104	81-122
75-27-4	Bromodichloromethane	25	26.7	107	79-123
75-25-2	Bromoform	25	25.6	102	66-123
78-93-3	2-Butanone (MEK)	125	121	97	56-143
75-15-0	Carbon Disulfide	25	25.4	102	66-148
56-23-5	Carbon Tetrachloride	25	27.0	108	76-136
108-90-7	Chlorobenzene	25	25.9	104	82-124
75-00-3	Chloroethane	25	33.2	133	62-144
67-66-3	Chloroform	25	25.9	104	80-124
124-48-1	Dibromochloromethane	25	26.6	106	78-122
75-34-3	1,1-Dichloroethane	25	28.1	112	81-122
107-06-2	1,2-Dichloroethane	25	25.7	103	75-125
75-35-4	1,1-Dichloroethylene	25	28.1	112	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.4	106	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.1	112	76-127
78-87-5	1,2-Dichloropropane	25	26.7	107	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.1	100	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.5	110	80-120
100-41-4	Ethylbenzene	25	26.4	106	81-121
591-78-6	2-Hexanone	125	116	93	61-129
74-83-9	Methyl Bromide	25	26.7	107	59-143
74-87-3	Methyl Chloride	25	26.3	105	50-159
75-09-2	Methylene Chloride	25	25.5	102	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	117	94	66-122
100-42-5	Styrene	25	27.3	109	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.0	104	72-120
127-18-4	Tetrachloroethylene	25	27.9	112	76-135
108-88-3	Toluene	25	26.4	106	80-120
71-55-6	1,1,1-Trichloroethane	25	25.6	102	75-130
79-00-5	1,1,2-Trichloroethane	25	26.2	105	76-119
79-01-6	Trichloroethylene	25	26.5	106	81-126
75-01-4	Vinyl Chloride	25	26.4	106	69-159
1330-20-7	Xylene (total)	75	81.2	108	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E176-BS	5E4185.D	1	10/23/17	MM	n/a	n/a	V5E176

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

FA48591-21, FA48591-22, FA48591-23, FA48591-24, FA48591-25, FA48591-26, FA48591-28, FA48591-29, FA48591-30

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

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-BS	1A08057.D	1	10/23/17	SP	n/a	n/a	V1A296

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

FA48591-1, FA48591-5, FA48591-6, FA48591-8, FA48591-9, FA48591-10, FA48591-12, FA48591-16, FA48591-17, FA48591-18, FA48591-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	112	90	50-147
71-43-2	Benzene	25	27.2	109	81-122
75-27-4	Bromodichloromethane	25	28.1	112	79-123
75-25-2	Bromoform	25	25.1	100	66-123
78-93-3	2-Butanone (MEK)	125	116	93	56-143
75-15-0	Carbon Disulfide	25	24.7	99	66-148
56-23-5	Carbon Tetrachloride	25	29.1	116	76-136
108-90-7	Chlorobenzene	25	25.6	102	82-124
75-00-3	Chloroethane	25	31.0	124	62-144
67-66-3	Chloroform	25	26.4	106	80-124
124-48-1	Dibromochloromethane	25	28.7	115	78-122
75-34-3	1,1-Dichloroethane	25	28.3	113	81-122
107-06-2	1,2-Dichloroethane	25	25.9	104	75-125
75-35-4	1,1-Dichloroethylene	25	27.4	110	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.1	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.2	113	76-127
78-87-5	1,2-Dichloropropane	25	26.6	106	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.0	96	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.4	114	80-120
100-41-4	Ethylbenzene	25	26.9	108	81-121
591-78-6	2-Hexanone	125	109	87	61-129
74-83-9	Methyl Bromide	25	25.1	100	59-143
74-87-3	Methyl Chloride	25	22.7	91	50-159
75-09-2	Methylene Chloride	25	25.5	102	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	126	101	66-122
100-42-5	Styrene	25	28.0	112	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	27.2	109	72-120
127-18-4	Tetrachloroethylene	25	27.2	109	76-135
108-88-3	Toluene	25	26.9	108	80-120
71-55-6	1,1,1-Trichloroethane	25	26.9	108	75-130
79-00-5	1,1,2-Trichloroethane	25	27.2	109	76-119
79-01-6	Trichloroethylene	25	27.5	110	81-126
75-01-4	Vinyl Chloride	25	22.9	92	69-159
1330-20-7	Xylene (total)	75	81.8	109	80-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A296-BS	1A08057.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-5, FA48591-6, FA48591-8, FA48591-9, FA48591-10, FA48591-12, FA48591-16, FA48591-17, FA48591-18, FA48591-20

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

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E177-BS	5E4212.D	1	10/24/17	MM	n/a	n/a	V5E177

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

FA48591-22, FA48591-24, FA48591-27, FA48591-30

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	127	102	50-147
71-43-2	Benzene	25	26.8	107	81-122
75-27-4	Bromodichloromethane	25	27.2	109	79-123
75-25-2	Bromoform	25	25.5	102	66-123
78-93-3	2-Butanone (MEK)	125	128	102	56-143
75-15-0	Carbon Disulfide	25	25.5	102	66-148
56-23-5	Carbon Tetrachloride	25	27.4	110	76-136
108-90-7	Chlorobenzene	25	26.6	106	82-124
75-00-3	Chloroethane	25	33.9	136	62-144
67-66-3	Chloroform	25	26.7	107	80-124
124-48-1	Dibromochloromethane	25	26.9	108	78-122
75-34-3	1,1-Dichloroethane	25	29.1	116	81-122
107-06-2	1,2-Dichloroethane	25	26.5	106	75-125
75-35-4	1,1-Dichloroethylene	25	28.9	116	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.0	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.1	116	76-127
78-87-5	1,2-Dichloropropane	25	27.2	109	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.5	102	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.1	112	80-120
100-41-4	Ethylbenzene	25	27.2	109	81-121
591-78-6	2-Hexanone	125	123	98	61-129
74-83-9	Methyl Bromide	25	26.9	108	59-143
74-87-3	Methyl Chloride	25	27.3	109	50-159
75-09-2	Methylene Chloride	25	26.5	106	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	125	100	66-122
100-42-5	Styrene	25	27.8	111	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	27.3	109	72-120
127-18-4	Tetrachloroethylene	25	28.1	112	76-135
108-88-3	Toluene	25	27.5	110	80-120
71-55-6	1,1,1-Trichloroethane	25	25.9	104	75-130
79-00-5	1,1,2-Trichloroethane	25	26.7	107	76-119
79-01-6	Trichloroethylene	25	27.5	110	81-126
75-01-4	Vinyl Chloride	25	26.6	106	69-159
1330-20-7	Xylene (total)	75	83.2	111	80-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E177-BS	5E4212.D	1	10/24/17	MM	n/a	n/a	V5E177

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-22, FA48591-24, FA48591-27, FA48591-30

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	102%	85-112%
460-00-4	4-Bromofluorobenzene	104%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48591-1MS	1A08049.D	5	10/21/17	SP	n/a	n/a	V1A295
FA48591-1MSD	1A08050.D	5	10/21/17	SP	n/a	n/a	V1A295
FA48591-1 ^a	1A08029.D	5	10/20/17	SP	n/a	n/a	V1A295

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-2, FA48591-3, FA48591-4, FA48591-6, FA48591-7, FA48591-8, FA48591-10, FA48591-11, FA48591-12, FA48591-13, FA48591-14, FA48591-15, FA48591-16, FA48591-17, FA48591-18, FA48591-19, FA48591-20

CAS No.	Compound	FA48591-1 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		625	558	89	625	561	90	1	50-147/21
71-43-2	Benzene	ND		125	129	103	125	131	105	2	81-122/14
75-27-4	Bromodichloromethane	ND		125	133	106	125	134	107	1	79-123/19
75-25-2	Bromoform	ND		125	111	89	125	114	91	3	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	591	95	625	589	94	0	56-143/18
75-15-0	Carbon Disulfide	ND		125	118	94	125	121	97	3	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	134	107	125	137	110	2	76-136/23
108-90-7	Chlorobenzene	ND		125	123	98	125	125	100	2	82-124/14
75-00-3	Chloroethane	ND		125	164	131	125	162	130	1	62-144/20
67-66-3	Chloroform	ND		125	129	103	125	129	103	0	80-124/15
124-48-1	Dibromochloromethane	ND		125	131	105	125	135	108	3	78-122/19
75-34-3	1,1-Dichloroethane	ND		125	138	110	125	138	110	0	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	127	102	125	127	102	0	75-125/14
75-35-4	1,1-Dichloroethylene	ND		125	132	106	125	135	108	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	109		125	238	103	125	239	104	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	135	108	125	137	110	1	76-127/17
78-87-5	1,2-Dichloropropane	ND		125	127	102	125	130	104	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		125	106	85	125	109	87	3	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	131	105	125	134	107	2	80-120/22
100-41-4	Ethylbenzene	ND		125	129	103	125	131	105	2	81-121/14
591-78-6	2-Hexanone	ND		625	566	91	625	573	92	1	61-129/18
74-83-9	Methyl Bromide	ND		125	127	102	125	129	103	2	59-143/19
74-87-3	Methyl Chloride	ND		125	114	91	125	118	94	3	50-159/19
75-09-2	Methylene Chloride	ND		125	130	104	125	128	102	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	667	107	625	661	106	1	66-122/16
100-42-5	Styrene	ND		125	134	107	125	135	108	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	133	106	125	136	109	2	72-120/14
127-18-4	Tetrachloroethylene	538	E	125	655	94	125	666	102	2	76-135/16
108-88-3	Toluene	ND		125	128	102	125	130	104	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		125	130	104	125	129	103	1	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	130	104	125	134	107	3	76-119/14
79-01-6	Trichloroethylene	157		125	287	104	125	289	106	1	81-126/15
75-01-4	Vinyl Chloride	ND		125	117	94	125	124	99	6	69-159/18
1330-20-7	Xylene (total)	ND		375	394	105	375	395	105	0	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48591-1MS	1A08049.D	5	10/21/17	SP	n/a	n/a	V1A295
FA48591-1MSD	1A08050.D	5	10/21/17	SP	n/a	n/a	V1A295
FA48591-1 ^a	1A08029.D	5	10/20/17	SP	n/a	n/a	V1A295

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-2, FA48591-3, FA48591-4, FA48591-6, FA48591-7, FA48591-8, FA48591-10, FA48591-11, FA48591-12, FA48591-13, FA48591-14, FA48591-15, FA48591-16, FA48591-17, FA48591-18, FA48591-19, FA48591-20

CAS No.	Surrogate Recoveries	MS	MSD	FA48591-1	Limits
1868-53-7	Dibromofluoromethane	103%	102%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	101%	100%	79-125%
2037-26-5	Toluene-D8	99%	100%	108%	85-112%
460-00-4	4-Bromofluorobenzene	102%	103%	109%	83-118%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48347-1MS	5E4206.D	5	10/23/17	MM	n/a	n/a	V5E176
FA48347-1MSD	5E4207.D	5	10/23/17	MM	n/a	n/a	V5E176
FA48347-1	5E4190.D	1	10/23/17	MM	n/a	n/a	V5E176
FA48347-1 ^a	5E4202.D	5	10/23/17	MM	n/a	n/a	V5E176

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-21, FA48591-22, FA48591-23, FA48591-24, FA48591-25, FA48591-26, FA48591-28, FA48591-29, FA48591-30

CAS No.	Compound	FA48347-1 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	25 U	625	666	107	625	652	104	2	50-147/21
71-43-2	Benzene	1.0 U	125	132	106	125	130	104	2	81-122/14
75-27-4	Bromodichloromethane	1.0 U	125	129	103	125	125	100	3	79-123/19
75-25-2	Bromoform	1.0 U	125	98.9	79	125	95.5	76	3	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	625	667	107	625	648	104	3	56-143/18
75-15-0	Carbon Disulfide	2.0 U	125	116	93	125	115	92	1	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	125	130	104	125	129	103	1	76-136/23
108-90-7	Chlorobenzene	1.0 U	125	132	106	125	130	104	2	82-124/14
75-00-3	Chloroethane	2.0 U	125	172	138	125	170	136	1	62-144/20
67-66-3	Chloroform	1.0 U	125	136	109	125	134	107	1	80-124/15
124-48-1	Dibromochloromethane	1.0 U	125	115	92	125	112	90	3	78-122/19
75-34-3	1,1-Dichloroethane	1.0 U	125	144	115	125	143	114	1	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	125	133	106	125	130	104	2	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	125	142	114	125	142	114	0	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	125	130	104	125	130	104	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U	125	143	114	125	143	114	0	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	125	134	107	125	131	105	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	1.0 U	125	104	83	125	105	84	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	125	121	97	125	121	97	0	80-120/22
100-41-4	Ethylbenzene	1.0 U	125	134	107	125	133	106	1	81-121/14
591-78-6	2-Hexanone	10 U	625	670	107	625	651	104	3	61-129/18
74-83-9	Methyl Bromide	2.0 U	125	131	105	125	132	106	1	59-143/19
74-87-3	Methyl Chloride	0.54 J	125	131	104	125	131	104	0	50-159/19
75-09-2	Methylene Chloride	5.0 U	125	137	110	125	135	108	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	625	667	107	625	651	104	2	66-122/16
100-42-5	Styrene	1.0 U	125	126	101	125	125	100	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	125	140	112	125	137	110	2	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	125	128	102	125	127	102	1	76-135/16
108-88-3	Toluene	1.0 U	125	133	106	125	131	105	2	80-120/14
71-55-6	1,1,1-Trichloroethane	1.0 U	125	128	102	125	127	102	1	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	125	134	107	125	131	105	2	76-119/14
79-01-6	Trichloroethylene	1.0 U	125	136	109	125	136	109	0	81-126/15
75-01-4	Vinyl Chloride	1.0 U	125	129	103	125	132	106	2	69-159/18
1330-20-7	Xylene (total)	3.0 U	375	407	109	375	402	107	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48347-1MS	5E4206.D	5	10/23/17	MM	n/a	n/a	V5E176
FA48347-1MSD	5E4207.D	5	10/23/17	MM	n/a	n/a	V5E176
FA48347-1	5E4190.D	1	10/23/17	MM	n/a	n/a	V5E176
FA48347-1 ^a	5E4202.D	5	10/23/17	MM	n/a	n/a	V5E176

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-21, FA48591-22, FA48591-23, FA48591-24, FA48591-25, FA48591-26, FA48591-28, FA48591-29, FA48591-30

CAS No.	Surrogate Recoveries	MS	MSD	FA48347-1	FA48347-1	Limits
1868-53-7	Dibromofluoromethane	99%	99%	98%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	104%	105%	79-125%
2037-26-5	Toluene-D8	100%	100%	104%	104%	85-112%
460-00-4	4-Bromofluorobenzene	102%	104%	104%	105%	83-118%

(a) Confirmation run.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48638-2MS	1A08078.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2MSD	1A08079.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2	1A08071.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-5, FA48591-6, FA48591-8, FA48591-9, FA48591-10, FA48591-12, FA48591-16, FA48591-17, FA48591-18, FA48591-20

CAS No.	Compound	FA48638-2 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	113	90	125	115	92	2	50-147/21
71-43-2	Benzene	44.5	25	69.0	98	25	67.5	92	2	81-122/14
75-27-4	Bromodichloromethane	ND	25	25.8	103	25	25.5	102	1	79-123/19
75-25-2	Bromoform	ND	25	21.9	88	25	21.6	86	1	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	112	90	125	113	90	1	56-143/18
75-15-0	Carbon Disulfide	ND	25	22.4	90	25	22.6	90	1	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	25.6	102	25	26.1	104	2	76-136/23
108-90-7	Chlorobenzene	ND	25	23.7	95	25	23.2	93	2	82-124/14
75-00-3	Chloroethane	ND	25	32.0	128	25	32.0	128	0	62-144/20
67-66-3	Chloroform	ND	25	24.7	99	25	24.4	98	1	80-124/15
124-48-1	Dibromochloromethane	ND	25	25.2	101	25	25.5	102	1	78-122/19
75-34-3	1,1-Dichloroethane	ND	25	26.4	106	25	26.3	105	0	81-122/15
107-06-2	1,2-Dichloroethane	3.4	25	27.7	97	25	27.0	94	3	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	25.3	101	25	25.1	100	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	24.8	99	25	25.0	100	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	25.6	102	25	25.7	103	0	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	25.0	100	25	24.5	98	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	25	19.3	77	25	19.2	77	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	25.3	101	25	25.3	101	0	80-120/22
100-41-4	Ethylbenzene	ND	25	25.2	101	25	24.4	98	3	81-121/14
591-78-6	2-Hexanone	ND	125	108	86	125	104	83	4	61-129/18
74-83-9	Methyl Bromide	ND	25	24.6	98	25	25.2	101	2	59-143/19
74-87-3	Methyl Chloride	ND	25	22.4	90	25	23.6	94	5	50-159/19
75-09-2	Methylene Chloride	ND	25	24.2	97	25	23.6	94	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	122	98	125	118	94	3	66-122/16
100-42-5	Styrene	ND	25	25.5	102	25	24.9	100	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	25.0	100	25	25.3	101	1	72-120/14
127-18-4	Tetrachloroethylene	ND	25	23.8	95	25	23.6	94	1	76-135/16
108-88-3	Toluene	5.6	25	29.8	97	25	29.2	94	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	25	24.4	98	25	24.4	98	0	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	25.4	102	25	24.9	100	2	76-119/14
79-01-6	Trichloroethylene	ND	25	25.5	102	25	24.8	99	3	81-126/15
75-01-4	Vinyl Chloride	ND	25	22.1	88	25	23.3	93	5	69-159/18
1330-20-7	Xylene (total)	2.7	75	78.5	101	75	76.7	99	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48638-2MS	1A08078.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2MSD	1A08079.D	1	10/23/17	SP	n/a	n/a	V1A296
FA48638-2	1A08071.D	1	10/23/17	SP	n/a	n/a	V1A296

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-1, FA48591-5, FA48591-6, FA48591-8, FA48591-9, FA48591-10, FA48591-12, FA48591-16, FA48591-17, FA48591-18, FA48591-20

CAS No.	Surrogate Recoveries	MS	MSD	FA48638-2	Limits
1868-53-7	Dibromofluoromethane	101%	102%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	101%	104%	79-125%
2037-26-5	Toluene-D8	97%	96%	109%	85-112%
460-00-4	4-Bromofluorobenzene	99%	102%	109%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48591-30MS	5E4235.D	10	10/24/17	MM	n/a	n/a	V5E177
FA48591-30MSD	5E4236.D	10	10/24/17	MM	n/a	n/a	V5E177
FA48591-30	5E4234.D	10	10/24/17	MM	n/a	n/a	V5E177

The QC reported here applies to the following samples:

Method: SW846 8260B

FA48591-22, FA48591-24, FA48591-27, FA48591-30

CAS No.	Compound	FA48591-30 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	ND		1250	1160	93	1250	1170	94	1	50-147/21
71-43-2	Benzene	ND		250	254	102	250	256	102	1	81-122/14
75-27-4	Bromodichloromethane	ND		250	257	103	250	258	103	0	79-123/19
75-25-2	Bromoform	ND		250	238	95	250	238	95	0	66-123/21
78-93-3	2-Butanone (MEK)	ND		1250	1270	102	1250	1250	100	2	56-143/18
75-15-0	Carbon Disulfide	ND		250	215	86	250	219	88	2	66-148/23
56-23-5	Carbon Tetrachloride	ND		250	258	103	250	261	104	1	76-136/23
108-90-7	Chlorobenzene	ND		250	257	103	250	258	103	0	82-124/14
75-00-3	Chloroethane	ND		250	317	127	250	318	127	0	62-144/20
67-66-3	Chloroform	ND		250	258	103	250	259	104	0	80-124/15
124-48-1	Dibromochloromethane	ND		250	251	100	250	254	102	1	78-122/19
75-34-3	1,1-Dichloroethane	ND		250	276	110	250	279	112	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		250	255	102	250	257	103	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND		250	267	107	250	271	108	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	19.7		250	275	102	250	278	103	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		250	274	110	250	277	111	1	76-127/17
78-87-5	1,2-Dichloropropane	ND		250	259	104	250	262	105	1	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		250	224	90	250	227	91	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		250	261	104	250	261	104	0	80-120/22
100-41-4	Ethylbenzene	ND		250	263	105	250	263	105	0	81-121/14
591-78-6	2-Hexanone	ND		1250	1270	102	1250	1230	98	3	61-129/18
74-83-9	Methyl Bromide	ND		250	250	100	250	249	100	0	59-143/19
74-87-3	Methyl Chloride	ND		250	274	110	250	275	110	0	50-159/19
75-09-2	Methylene Chloride	ND		250	251	100	250	257	103	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1250	1260	101	1250	1230	98	2	66-122/16
100-42-5	Styrene	ND		250	268	107	250	269	108	0	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	263	105	250	265	106	1	72-120/14
127-18-4	Tetrachloroethylene	511		250	772	104	250	754	97	2	76-135/16
108-88-3	Toluene	3.7	J	250	264	104	250	267	105	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		250	248	99	250	251	100	1	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		250	259	104	250	260	104	0	76-119/14
79-01-6	Trichloroethylene	5.9	J	250	267	104	250	269	105	1	81-126/15
75-01-4	Vinyl Chloride	ND		250	258	103	250	259	104	0	69-159/18
1330-20-7	Xylene (total)	ND		750	806	107	750	811	108	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA48591-30MS	5E4235.D	10	10/24/17	MM	n/a	n/a	V5E177
FA48591-30MSD	5E4236.D	10	10/24/17	MM	n/a	n/a	V5E177
FA48591-30	5E4234.D	10	10/24/17	MM	n/a	n/a	V5E177

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

FA48591-22, FA48591-24, FA48591-27, FA48591-30

CAS No.	Surrogate Recoveries	MS	MSD	FA48591-30	Limits
1868-53-7	Dibromofluoromethane	98%	98%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	102%	103%	79-125%
2037-26-5	Toluene-D8	100%	101%	103%	85-112%
460-00-4	4-Bromofluorobenzene	105%	106%	107%	83-118%

* = Outside of Control Limits.



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

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-MB	4D2855.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA48591-30

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

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-MB	4D2855.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA48591-30

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	20% 14-67%
4165-62-2	Phenol-d5	12% 10-50%

Method Blank Summary

Job Number: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-MB	4D2855.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples: Method: SW846 8270D

FA48591-30

CAS No.	Surrogate Recoveries	Limits
118-79-6	2,4,6-Tribromophenol	92% 33-118%
4165-60-0	Nitrobenzene-d5	82% 42-108%
321-60-8	2-Fluorobiphenyl	81% 40-106%
1718-51-0	Terphenyl-d14	79% 39-121%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	unknown	4.76	34	ug/l	J
	Total TIC, Semi-Volatile		34	ug/l	J

7.1.1
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Blank Spike Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-BS	4D2854.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA48591-30

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	23.1	23	10-69
59-50-7	4-Chloro-3-methyl Phenol	50	38.2	76	54-103
95-57-8	2-Chlorophenol	50	34.4	69	52-98
120-83-2	2,4-Dichlorophenol	50	43.4	87	53-103
105-67-9	2,4-Dimethylphenol	50	34.6	69	43-90
51-28-5	2,4-Dinitrophenol	100	82.5	83	44-112
534-52-1	4,6-Dinitro-o-cresol	100	101	101	66-121
95-48-7	2-Methylphenol	50	28.1	56	43-90
	3&4-Methylphenol	100	49.6	50	36-88
88-75-5	2-Nitrophenol	50	43.0	86	53-102
100-02-7	4-Nitrophenol	100	27.7	28	18-62
87-86-5	Pentachlorophenol	100	105	105	61-115
108-95-2	Phenol	50	11.5	23	19-56
95-95-4	2,4,5-Trichlorophenol	50	45.9	92	62-109
88-06-2	2,4,6-Trichlorophenol	50	47.4	95	59-107
83-32-9	Acenaphthene	50	42.9	86	61-107
208-96-8	Acenaphthylene	50	45.9	92	60-104
120-12-7	Anthracene	50	44.4	89	65-108
56-55-3	Benzo(a)anthracene	50	46.9	94	66-111
50-32-8	Benzo(a)pyrene	50	44.5	89	62-107
205-99-2	Benzo(b)fluoranthene	50	46.4	93	65-114
191-24-2	Benzo(g,h,i)perylene	50	45.4	91	66-116
207-08-9	Benzo(k)fluoranthene	50	45.0	90	65-114
100-51-6	Benzyl Alcohol	50	31.5	63	46-94
101-55-3	4-Bromophenyl Phenyl Ether	50	46.7	93	65-109
85-68-7	Butyl Benzyl Phthalate	50	48.4	97	65-112
86-74-8	Carbazole	50	47.2	94	59-113
106-47-8	4-Chloroaniline	50	42.1	84	49-105
111-91-1	bis(2-Chloroethoxy)methane	50	38.8	78	51-102
111-44-4	bis(2-Chloroethyl)ether	50	40.7	81	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	41.5	83	45-106
91-58-7	2-Chloronaphthalene	50	42.8	86	57-103
7005-72-3	4-Chlorophenyl Phenyl Ether	50	43.1	86	62-105
218-01-9	Chrysene	50	46.7	93	66-111
53-70-3	Dibenzo(a,h)anthracene	50	45.8	92	66-119
132-64-9	Dibenzofuran	50	42.4	85	61-106

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA48591**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-BS	4D2854.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples:**Method:** SW846 8270D

FA48591-30

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	38.2	76	48-97
541-73-1	1,3-Dichlorobenzene	50	36.7	73	45-95
106-46-7	1,4-Dichlorobenzene	50	36.6	73	45-98
91-94-1	3,3'-Dichlorobenzidine	50	55.9	112	46-117
84-66-2	Diethyl Phthalate	50	44.2	88	64-108
131-11-3	Dimethyl Phthalate	50	43.6	87	63-106
84-74-2	Di-n-butyl Phthalate	50	47.3	95	65-107
117-84-0	Di-n-octyl Phthalate	50	48.9	98	62-118
121-14-2	2,4-Dinitrotoluene	50	46.9	94	61-110
606-20-2	2,6-Dinitrotoluene	50	45.0	90	63-108
117-81-7	bis(2-Ethylhexyl)phthalate	50	49.2	98	61-117
206-44-0	Fluoranthene	50	46.0	92	63-106
86-73-7	Fluorene	50	44.4	89	62-108
118-74-1	Hexachlorobenzene	50	47.1	94	63-108
87-68-3	Hexachlorobutadiene	50	40.1	80	42-102
77-47-4	Hexachlorocyclopentadiene	50	42.7	85	39-102
67-72-1	Hexachloroethane	50	38.2	76	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	46.6	93	64-119
78-59-1	Isophorone	50	42.1	84	43-87
91-57-6	2-Methylnaphthalene	50	41.2	82	51-102
91-20-3	Naphthalene	50	40.0	80	47-100
88-74-4	2-Nitroaniline	50	47.1	94	54-128
99-09-2	3-Nitroaniline	50	43.9	88	56-106
100-01-6	4-Nitroaniline	50	41.6	83	55-120
98-95-3	Nitrobenzene	50	41.6	83	50-104
621-64-7	N-Nitrosodi-n-propylamine	50	40.9	82	52-104
86-30-6	N-Nitrosodiphenylamine	50	45.8	92	64-108
85-01-8	Phenanthrene	50	45.0	90	66-110
129-00-0	Pyrene	50	47.5	95	64-113
120-82-1	1,2,4-Trichlorobenzene	50	39.4	79	45-97

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	34%	14-67%
4165-62-2	Phenol-d5	21%	10-50%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-BS	4D2854.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples: Method: SW846 8270D

FA48591-30

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	99%	33-118%
4165-60-0	Nitrobenzene-d5	86%	42-108%
321-60-8	2-Fluorobiphenyl	85%	40-106%
1718-51-0	Terphenyl-d14	83%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-MS	4D2857.D	1	10/24/17	MV	10/23/17	OP67313	S4D108
OP67313-MSD	4D2858.D	1	10/24/17	MV	10/23/17	OP67313	S4D108
FA48617-1	4D2856.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples:

Method: SW846 8270D

FA48591-30

CAS No.	Compound	FA48617-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50 U	200	73.9	37	200	68.5	34	8	10-69/39
59-50-7	4-Chloro-3-methyl Phenol	5.0 U	100	79.3	79	100	81.3	81	2	54-103/23
95-57-8	2-Chlorophenol	5.0 U	100	72.0	72	100	70.1	70	3	52-98/25
120-83-2	2,4-Dichlorophenol	5.0 U	100	84.0	84	100	84.3	84	0	53-103/26
105-67-9	2,4-Dimethylphenol	5.0 U	100	70.3	70	100	69.6	70	1	43-90/27
51-28-5	2,4-Dinitrophenol	25 U	200	171	86	200	179	90	5	44-112/25
534-52-1	4,6-Dinitro-o-cresol	10 U	200	188	94	200	205	103	9	66-121/23
95-48-7	2-Methylphenol	5.0 U	100	63.2	63	100	60.0	60	5	43-90/28
	3&4-Methylphenol	5.0 U	200	118	59	200	113	57	4	36-88/28
88-75-5	2-Nitrophenol	5.0 U	100	83.9	84	100	84.1	84	0	53-102/29
100-02-7	4-Nitrophenol	25 U	200	85.0	43	200	85.5	43	1	18-62/33
87-86-5	Pentachlorophenol	25 U	200	196	98	200	215	108	9	61-115/26
108-95-2	Phenol	5.0 U	100	34.4	34	100	30.5	31	12	19-56/35
95-95-4	2,4,5-Trichlorophenol	5.0 U	100	88.1	88	100	91.5	92	4	62-109/22
88-06-2	2,4,6-Trichlorophenol	5.0 U	100	91.3	91	100	94.2	94	3	59-107/23
83-32-9	Acenaphthene	5.0 U	100	84.5	85	100	88.9	89	5	61-107/22
208-96-8	Acenaphthylene	5.0 U	100	90.1	90	100	92.3	92	2	60-104/22
120-12-7	Anthracene	5.0 U	100	82.8	83	100	89.4	89	8	65-108/20
56-55-3	Benzo(a)anthracene	5.0 U	100	81.8	82	100	83.8	84	2	66-111/22
50-32-8	Benzo(a)pyrene	5.0 U	100	88.5	89	100	94.3	94	6	62-107/23
205-99-2	Benzo(b)fluoranthene	5.0 U	100	90.2	90	100	95.2	95	5	65-114/23
191-24-2	Benzo(g,h,i)perylene	5.0 U	100	94.7	95	100	97.9	98	3	66-116/23
207-08-9	Benzo(k)fluoranthene	5.0 U	100	87.2	87	100	96.2	96	10	65-114/24
100-51-6	Benzyl Alcohol	5.0 U	100	73.0	73	100	64.1	64	13	46-94/27
101-55-3	4-Bromophenyl Phenyl Ether	5.0 U	100	85.9	86	100	89.3	89	4	65-109/23
85-68-7	Butyl Benzyl Phthalate	5.0 U	100	86.7	87	100	91.0	91	5	65-112/24
86-74-8	Carbazole	5.0 U	100	85.3	85	100	90.0	90	5	59-113/21
106-47-8	4-Chloroaniline	5.0 U	100	84.7	85	100	78.6	79	7	49-105/27
111-91-1	bis(2-Chloroethoxy)methane	5.0 U	100	74.0	74	100	74.3	74	0	51-102/28
111-44-4	bis(2-Chloroethyl)ether	5.0 U	100	78.6	79	100	77.4	77	2	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	5.0 U	100	78.1	78	100	77.8	78	0	45-106/26
91-58-7	2-Chloronaphthalene	5.0 U	100	84.5	85	100	86.7	87	3	57-103/23
7005-72-3	4-Chlorophenyl Phenyl Ether	5.0 U	100	86.4	86	100	91.9	92	6	62-105/20
218-01-9	Chrysene	5.0 U	100	81.2	81	100	83.6	84	3	66-111/22
53-70-3	Dibenzo(a,h)anthracene	5.0 U	100	90.5	91	100	94.7	95	5	66-119/24
132-64-9	Dibenzofuran	5.0 U	100	84.1	84	100	86.3	86	3	61-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA48591

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-MS	4D2857.D	1	10/24/17	MV	10/23/17	OP67313	S4D108
OP67313-MSD	4D2858.D	1	10/24/17	MV	10/23/17	OP67313	S4D108
FA48617-1	4D2856.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples:

Method: SW846 8270D

FA48591-30

CAS No.	Compound	FA48617-1 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	5.0 U	100	75.9	76	100	75.2	75	1	48-97/24
541-73-1	1,3-Dichlorobenzene	5.0 U	100	74.1	74	100	72.2	72	3	45-95/25
106-46-7	1,4-Dichlorobenzene	5.0 U	100	72.6	73	100	72.3	72	0	45-98/25
91-94-1	3,3'-Dichlorobenzidine	5.0 U	100	86.8	87	100	92.1	92	6	46-117/29
84-66-2	Diethyl Phthalate	5.0 U	100	85.0	85	100	91.3	91	7	64-108/21
131-11-3	Dimethyl Phthalate	5.0 U	100	87.1	87	100	90.1	90	3	63-106/22
84-74-2	Di-n-butyl Phthalate	5.0 U	100	86.7	87	100	92.4	92	6	65-107/21
117-84-0	Di-n-octyl Phthalate	5.0 U	100	98.8	99	100	107	107	8	62-118/24
121-14-2	2,4-Dinitrotoluene	5.0 U	100	88.9	89	100	96.1	96	8	61-110/21
606-20-2	2,6-Dinitrotoluene	5.0 U	100	87.2	87	100	89.4	89	2	63-108/21
117-81-7	bis(2-Ethylhexyl)phthalate	5.0 U	100	91.0	91	100	94.0	94	3	61-117/23
206-44-0	Fluoranthene	5.0 U	100	83.2	83	100	88.3	88	6	63-106/21
86-73-7	Fluorene	5.0 U	100	88.2	88	100	91.4	91	4	62-108/20
118-74-1	Hexachlorobenzene	5.0 U	100	85.2	85	100	89.5	90	5	63-108/22
87-68-3	Hexachlorobutadiene	5.0 U	100	79.0	79	100	79.4	79	1	42-102/28
77-47-4	Hexachlorocyclopentadiene	5.0 U	100	84.0	84	100	85.6	86	2	39-102/29
67-72-1	Hexachloroethane	5.0 U	100	77.1	77	100	74.5	75	3	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	5.0 U	100	99.3	99	100	104	104	5	64-119/24
78-59-1	Isophorone	5.0 U	100	80.7	81	100	81.5	82	1	43-87/25
91-57-6	2-Methylnaphthalene	5.0 U	100	79.7	80	100	78.6	79	1	51-102/26
91-20-3	Naphthalene	5.0 U	100	78.5	79	100	77.5	78	1	47-100/29
88-74-4	2-Nitroaniline	5.0 U	100	91.5	92	100	94.7	95	3	54-128/24
99-09-2	3-Nitroaniline	5.0 U	100	82.1	82	100	83.5	84	2	56-106/27
100-01-6	4-Nitroaniline	5.0 U	100	83.3	83	100	87.2	87	5	55-120/24
98-95-3	Nitrobenzene	5.0 U	100	79.8	80	100	80.4	80	1	50-104/28
621-64-7	N-Nitrosodi-n-propylamine	5.0 U	100	77.1	77	100	78.3	78	2	52-104/25
86-30-6	N-Nitrosodiphenylamine	5.0 U	100	81.6	82	100	87.8	88	7	64-108/23
85-01-8	Phenanthrene	5.0 U	100	84.6	85	100	90.9	91	7	66-110/21
129-00-0	Pyrene	5.0 U	100	81.3	81	100	84.9	85	4	64-113/23
120-82-1	1,2,4-Trichlorobenzene	5.0 U	100	77.0	77	100	77.8	78	1	45-97/28

CAS No.	Surrogate Recoveries	MS	MSD	FA48617-1	Limits
367-12-4	2-Fluorophenol	45%	42%	28%	14-67%
4165-62-2	Phenol-d5	32%	27%	17%	10-50%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA48591
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP67313-MS	4D2857.D	1	10/24/17	MV	10/23/17	OP67313	S4D108
OP67313-MSD	4D2858.D	1	10/24/17	MV	10/23/17	OP67313	S4D108
FA48617-1	4D2856.D	1	10/24/17	MV	10/23/17	OP67313	S4D108

The QC reported here applies to the following samples: Method: SW846 8270D

FA48591-30

CAS No.	Surrogate Recoveries	MS	MSD	FA48617-1	Limits
118-79-6	2,4,6-Tribromophenol	88%	92%	88%	33-118%
4165-60-0	Nitrobenzene-d5	82%	80%	75%	42-108%
321-60-8	2-Fluorobiphenyl	82%	83%	79%	40-106%
1718-51-0	Terphenyl-d14	71%	74%	65%	39-121%

* = 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: FA48591
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32937
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 11/01/17

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.035	<0.50

Associated samples MP32937: FA48591-30

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: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32937
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/01/17 11/01/17

Metal	FA48762-8F Original DUP		RPD	QC Limits	FA48762-8F Original MS		Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	2.7	3	90.0	80-120

Associated samples MP32937: FA48591-30

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32937
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/01/17

Metal	FA48762-8F Original	MSD	Spike lot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.8	3	93.3	3.6	20

Associated samples MP32937: FA48591-30

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: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32937
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/01/17

Metal	BSP Result	SpikeLot HGFLWS1	% Rec	QC Limits
Mercury	2.8	3	93.3	80-120

Associated samples MP32937: FA48591-30

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32937
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/01/17

Metal	FA48762-8F		QC	
	Original	SDL 1:5	%DIF	Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP32937: FA48591-30

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.1.4

8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA48591
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32945
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 11/02/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1	0.30	<6.0
Arsenic	10	1.3	1.3	-0.90	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2	-0.21	<4.0
Cadmium	5.0	.2	.2	-0.20	<5.0
Calcium	1000	50	50		
Chromium	10	1	1	0.0	<10
Cobalt	50	.2	.2		
Copper	25	1	1	0.10	<25
Iron	300	17	17		
Lead	5.0	1	1.1	-0.30	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4	-0.40	<40
Potassium	10000	200	200		
Selenium	10	2.4	2.9	0.60	<10
Silver	10	.7	.7	0.10	<10
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4	-0.40	<10
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4	0.10	<20

Associated samples MP32945: FA48591-30

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.2.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32945
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date:

11/02/17

11/02/17

Metal	FA48778-3 Original DUP		RPD	QC Limits	FA48778-3 Original MS		Spikelot MPFLICP2 % Rec	QC Limits		
Aluminum	anr									
Antimony	0.0	0.0		NC	0-20	0.0	491	500	98.2	80-120
Arsenic	0.0	0.0		NC	0-20	0.0	1940	2000	97.0	80-120
Barium	anr									
Beryllium	0.0	0.0	NC	0-20	0.0	52.7	50	105.4	80-120	
Cadmium	0.0	0.0	NC	0-20	0.0	49.3	50	98.6	80-120	
Calcium	anr		20.7 (a)							
Chromium	1.6	1.3		0-20	1.6	206	200	102.2	80-120	
Cobalt	anr									
Copper	0.0	0.0		NC	0-20	0.0	256	250	102.4	80-120
Iron	anr		NC							
Lead	0.0	0.0		0-20	0.0	473	500	94.6	80-120	
Magnesium	anr									
Manganese	anr									
Molybdenum	anr		NC							
Nickel	0.0	0.0		0-20	0.0	518	500	103.6	80-120	
Potassium	anr									
Selenium	0.0	0.0		0-20	0.0	1930	2000	96.5	80-120	
Silver	0.0	0.0	NC	0-20	0.0	49.1	50	98.2	80-120	
Sodium	anr									
Strontium										
Thallium	0.0	0.0		NC	0-20	0.0	1870	2000	93.5	80-120
Tin										
Titanium										
Vanadium	anr									
Zinc	18.7	17.2		8.4	0-20	18.7	509	500	98.1	80-120

Associated samples MP32945: FA48591-30

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: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32945
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 11/02/17

Metal	FA48778-3 Original MSD		Spikelet MPFLICP2 % Rec		MSD RPD	QC Limit
Aluminum	anr					
Antimony	0.0	478	500	95.6	2.7	20
Arsenic	0.0	1890	2000	94.5	2.6	20
Barium	anr					
Beryllium	0.0	51.4	50	102.8	2.5	20
Cadmium	0.0	47.8	50	95.6	3.1	20
Calcium	anr					
Chromium	1.6	202	200	100.2	2.0	20
Cobalt	anr					
Copper	0.0	252	250	100.8	1.6	20
Iron	anr					
Lead	0.0	462	500	92.4	2.4	20
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	0.0	505	500	101.0	2.5	20
Potassium	anr					
Selenium	0.0	1870	2000	93.5	3.2	20
Silver	0.0	48.7	50	97.4	0.8	20
Sodium	anr					
Strontium						
Thallium	0.0	1820	2000	91.0	2.7	20
Tin						
Titanium						
Vanadium	anr					
Zinc	18.7	496	500	95.5	2.6	20

Associated samples MP32945: FA48591-30

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: FA48591

Account: UTC - United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32945

Methods: SW846 6010D

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 11/02/17

Metal	BSP Result	SpikeLot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony	476	500	95.2	80-120
Arsenic	1870	2000	93.5	80-120
Barium	anr			
Beryllium	50.1	50	100.2	80-120
Cadmium	48.1	50	96.2	80-120
Calcium	anr			
Chromium	201	200	100.5	80-120
Cobalt	anr			
Copper	249	250	99.6	80-120
Iron	anr			
Lead	455	500	91.0	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	506	500	101.2	80-120
Potassium	anr			
Selenium	1860	2000	93.0	80-120
Silver	47.5	50	95.0	80-120
Sodium	anr			
Strontium				
Thallium	1820	2000	91.0	80-120
Tin				
Titanium				
Vanadium	anr			
Zinc	478	500	95.6	80-120

Associated samples MP32945: FA48591-30

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

8.2.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32945
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 11/02/17

Metal	FA48778-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	0.00	0.00	NC	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	1.60	0.00	100.0(a)	0-10
Cobalt	anr			
Copper	0.00	0.00	NC	0-10
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
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				
Titanium				
Vanadium	anr			
Zinc	18.7	74.2	296.8(a)	0-10

Associated samples MP32945: FA48591-30

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: FA48591
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP32945
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date:

11/02/17

Metal	Sample ml	Final ml	FA48778-3 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10			108.3	0.2	5	100	108.3	80-120
Arsenic	9.8	10			105.4	0.2	5	100	105.4	80-120
Barium										
Beryllium	9.8	10			55.26	0.2	2.5	50	110.5	80-120
Cadmium	9.8	10			52.53	0.2	2.5	50	105.1	80-120
Calcium										
Chromium	9.8	10	1.6	1.568	55.8	0.2	2.5	50	108.5	80-120
Cobalt										
Copper	9.8	10			110.6	0.2	5	100	110.6	80-120
Iron										
Lead	9.8	10			49.1	0.2	2.5	50	98.2	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10			108.5	0.2	5	100	108.5	80-120
Potassium										
Selenium	9.8	10			101.1	0.2	5	100	101.1	80-120
Silver	9.8	10			52.2	0.2	2.5	50	104.4	80-120
Sodium										
Strontium										
Thallium	9.8	10			97.2	0.2	5	100	97.2	80-120
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	18.7	18.326	293.2	0.2	12.5	250	109.9	80-120

Associated samples MP32945: FA48591-30

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

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 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 FA48531 were collected on October 16-17, 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.

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.

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 FA48591 were collected on October 17-18, 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

Non-detected results of benzoic acid and phenol associated with preparatory batch OP67313/analytical batch S4D108 were qualified “R/c” due to low recovery in the associated laboratory control sample (23 and 23%, respectively < 25%). These qualifiers indicate the non-detections of these compounds are biased low and should be rejected.

PP Metals by Methods 6010C/7470B

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

With the exception of non-detected results of benzoic acid and phenol associated with preparatory batch OP67313/analytical batch S4D108, the QC excursions encountered during the validation of this data set did not result in the rejection of any data. Therefore, the remaining 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
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-1	10/18/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	124	<0.28	<2	835	<0.3	<0.22	23.2	<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-2	10/17/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	3.1	<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
MW-3	10/17/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	0.33 J	<0.28	<2	77.3	<0.3	<0.22	1.6	<0.41	<0.72

Appendix C
Historic VOC Data
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-3D	10/17/2017	ug/L	<0.62	<0.85	8.8	<0.78	<0.61	<1.3	<0.75	6.4	<0.69	<5	290	<0.75	<0.55	4.4	<1	<1.8
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-3D1	10/17/2017	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-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-4	10/17/2017	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-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
MW-5	10/17/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	0.87 J	<0.3	<0.22	<0.35	<0.41	<0.72

Appendix C
Historic VOC Data
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-6	10/17/2017	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-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-7	10/17/2017	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-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
MW-8	10/18/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	0.31 J	<0.28	<2	47.9	<0.3	<0.22	4.7	<0.41	<0.72

Appendix C
Historic VOC Data
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-9	10/17/2017	ug/L	<1.2	<1.7	<1.6	<1.6	<1.2	<2.7	<1.5	109	<1.4	<10	646	<1.5	<1.1	157	<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
MW-9D	10/17/2017	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
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
MW-10	10/17/2017	ug/L	<0.25	<0.34	23.7	<0.31	<0.24	<0.53	<0.3	350	<0.28	<2	149	<0.3	0.26 J	70.9	<0.41	<0.72

Appendix C
Historic VOC Data
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
MW-10D	10/17/2017	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
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-11	10/16/2017	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-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-12D	10/18/2017	ug/L	<0.25	<0.34	0.48 J	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	39.1	<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
MW-13D	10/18/2017	ug/L	0.31 J	<0.34	1.7	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	84	<0.3	<0.22	<0.35	<0.41	<0.72

Appendix C
Historic VOC Data
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-14	10/17/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	1.9	<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-14D	10/17/2017	ug/L	<0.25	<0.34	0.72 J	<0.31	<0.24	<0.53	<0.3	0.34 J	<0.28	<2	63.4	<0.3	<0.22	0.43 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-15	10/16/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	1.6	<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-15D	10/16/2017	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
MW-15D1	10/16/2017	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
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-16	10/17/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	<0.22	38.3	<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-16D	10/17/2017	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-17	10/16/2017	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-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-18	10/16/2017	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-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-19	10/18/2017	ug/L	74.9 J	<85	<81	<78	<61	<130	299	<69	<69	<500	18700	<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	<1.5	<1.5	1.5 J	<1.4	<10	438	<1.5	<1.1	3.1 J	<2	<3.6
MW-20	10/18/2017	ug/L	<1.2	<1.7	<1.6	<1.6	<1.2	<2.7	4.8 J	<1.4	<1.4	<10	312	<1.5	<1.1	2.2 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	14500	<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	181	<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-21	10/18/2017	ug/L	<62	<85	<81	<78	<61	<130	292	573	<69	<500	23900	<75	<55	252	<100	<180
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									

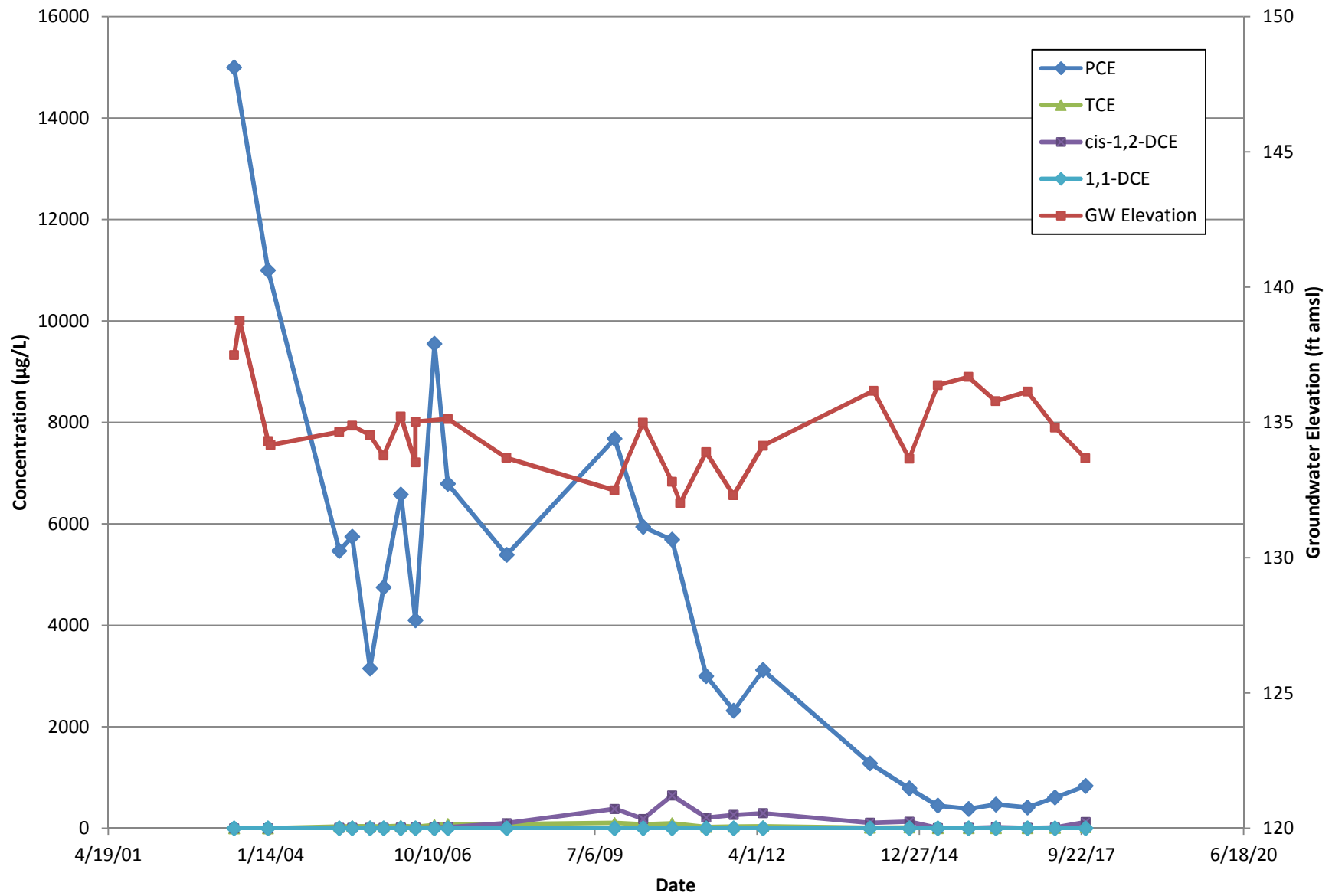
Appendix C
Historic VOC Data
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

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-22D	10/18/2017	ug/L	<0.25	<0.34	2.4	<0.31	<0.24	<0.53	<0.3	0.64 J	<0.28	<2	130	<0.3	<0.22	0.63 J	<0.41	<0.72
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-23D	10/17/2017	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-24	10/18/2017	ug/L	<5	<6.8	<6.4	<6.2	<4.8	<11	<6	49.9	<5.5	<40	1600	7.2 J	<4.4	<6.9	<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-25D	10/18/2017	ug/L	<0.25	<0.34	3.1	<0.31	<0.24	<0.53	<0.3	1.1	<0.28	<2	116	<0.3	<0.22	0.8 J	<0.41	<0.72
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-26D	10/18/2017	ug/L	<0.25	<0.34	1.9	<0.31	<0.24	<0.53	<0.3	1.1	<0.28	<2	76	<0.3	<0.22	1.1	<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-27	10/18/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	0.39 J	<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-28	10/18/2017	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-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-29	10/18/2017	ug/L	<0.25	<0.34	<0.32	<0.31	<0.24	<0.53	<0.3	<0.28	<0.28	<2	0.56 J	<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-30D	10/18/2017	ug/L	<0.25	<0.34	2.1	<0.31	<0.24	<0.53	<0.3	0.43 J	<0.28	<2	88.1	<0.3	<0.22	0.49 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-31D	10/18/2017	ug/L	<0.25	<0.34	4.7	<0.31	<0.24	<0.53	<0.3	2	<0.28	<2	161	<0.3	<0.22	0.61 J	<0.41	<0.72
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
MW-32DR	10/18/2017	ug/L	<0.25	<0.34	0.69 J	<0.31	<0.24	<0.53	<0.3	0.33 J	<0.28	<2	26.4	<0.3	<0.22	0.36 J	<0.41	<0.72
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

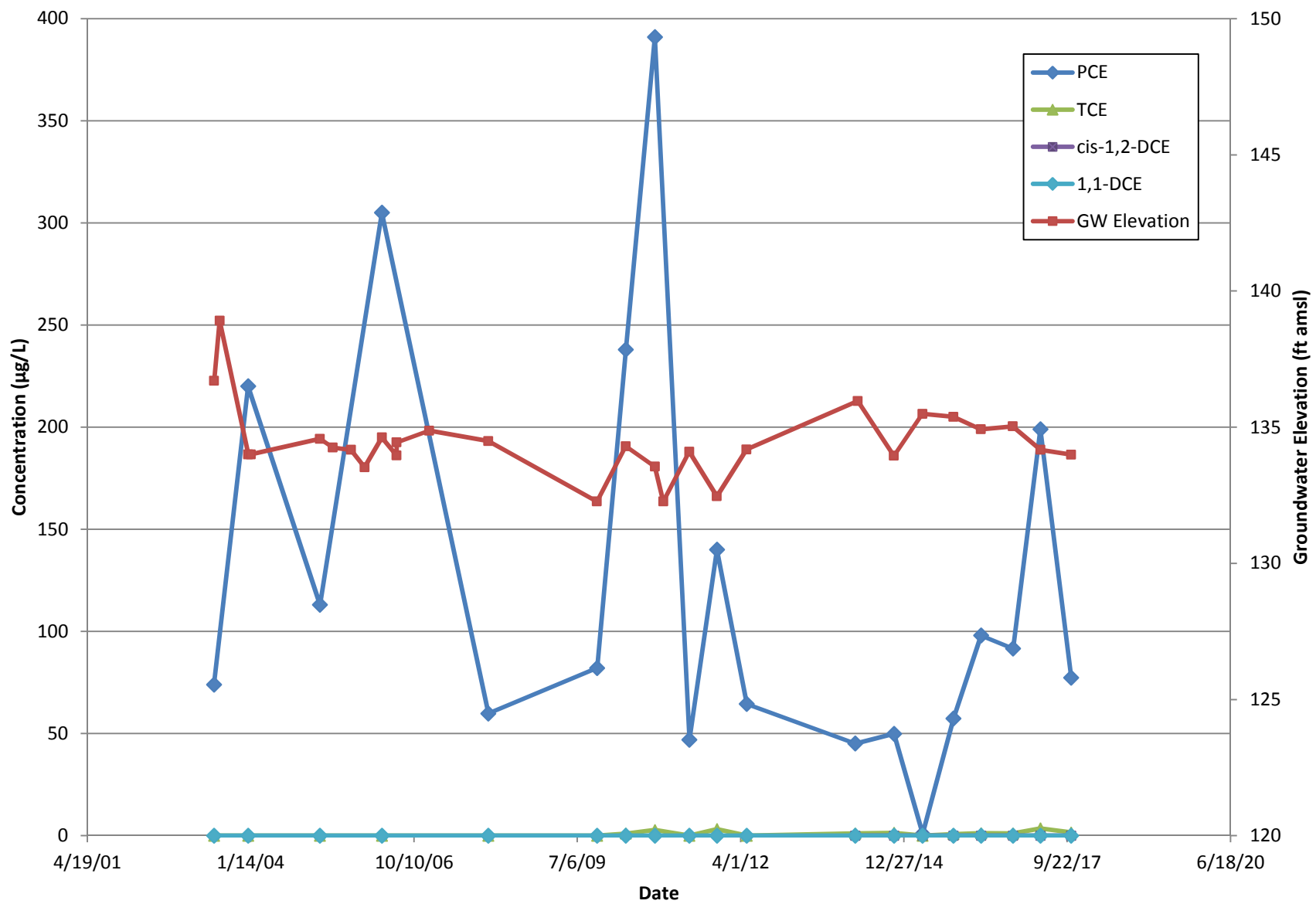
Notes:
NA - Not available NS - Not sampled

APPENDIX D
TREND PLOTS

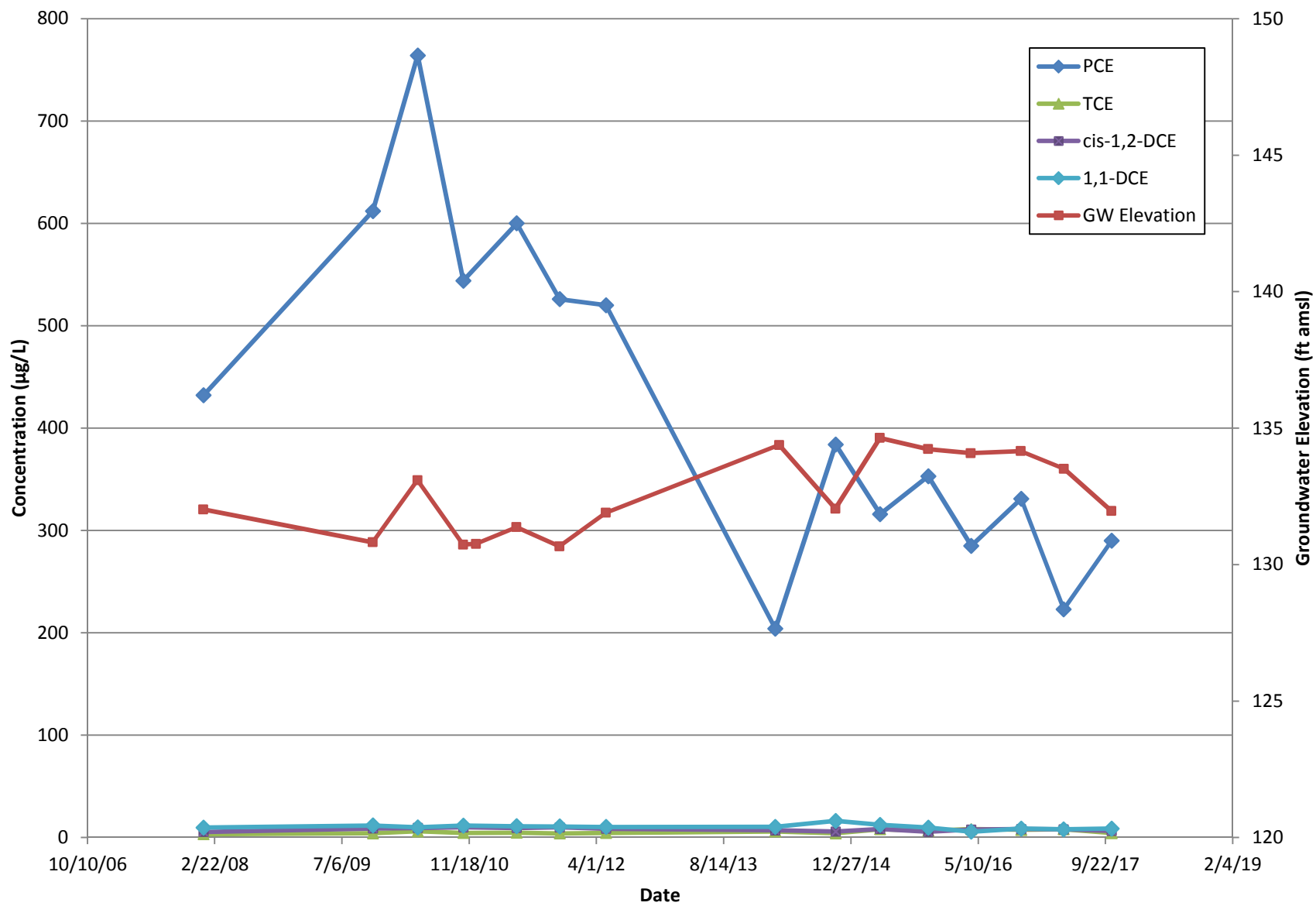
MW-1 Concentrations and Groundwater Elevation with Time



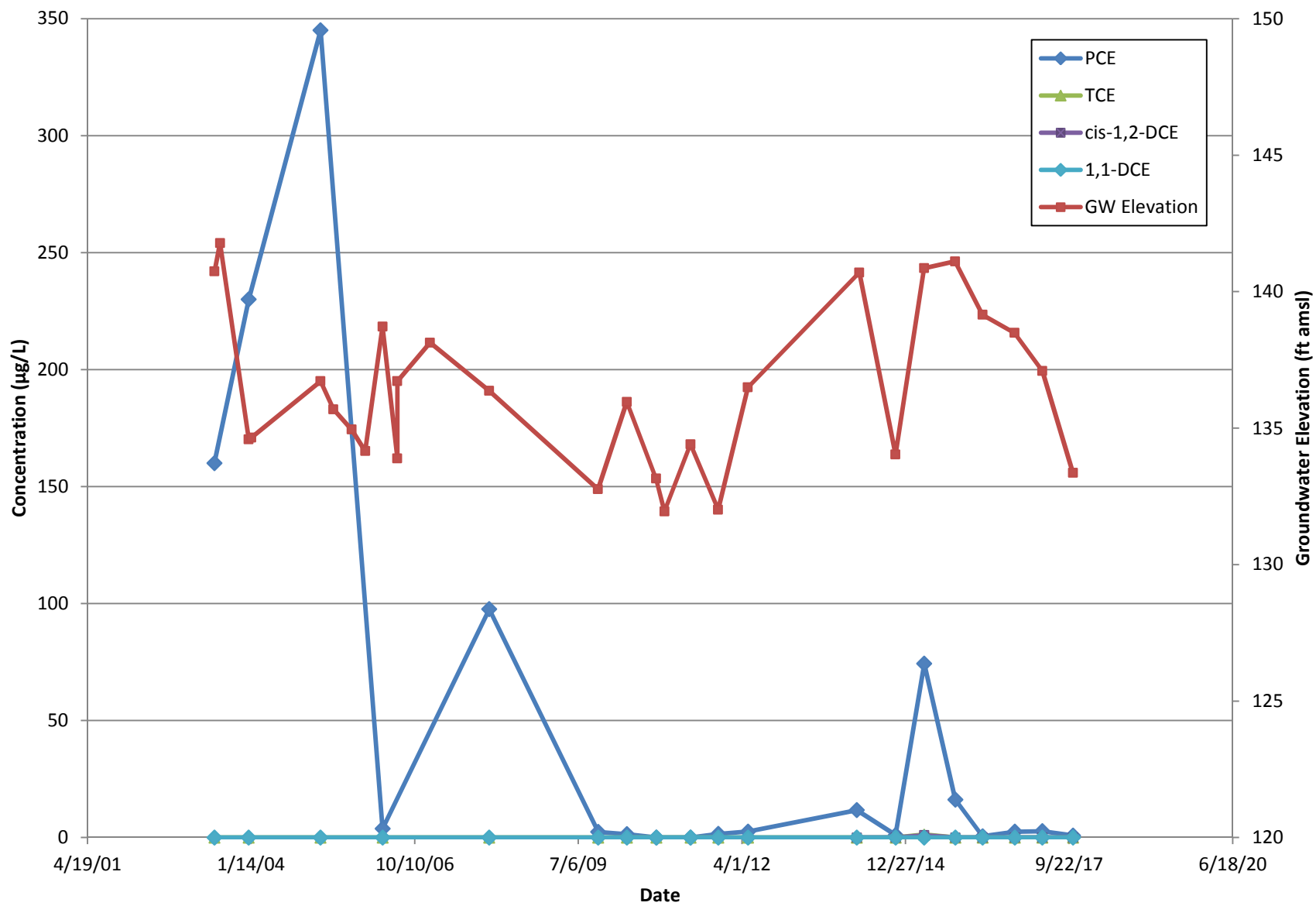
MW-3 Concentrations and Groundwater Elevation with Time



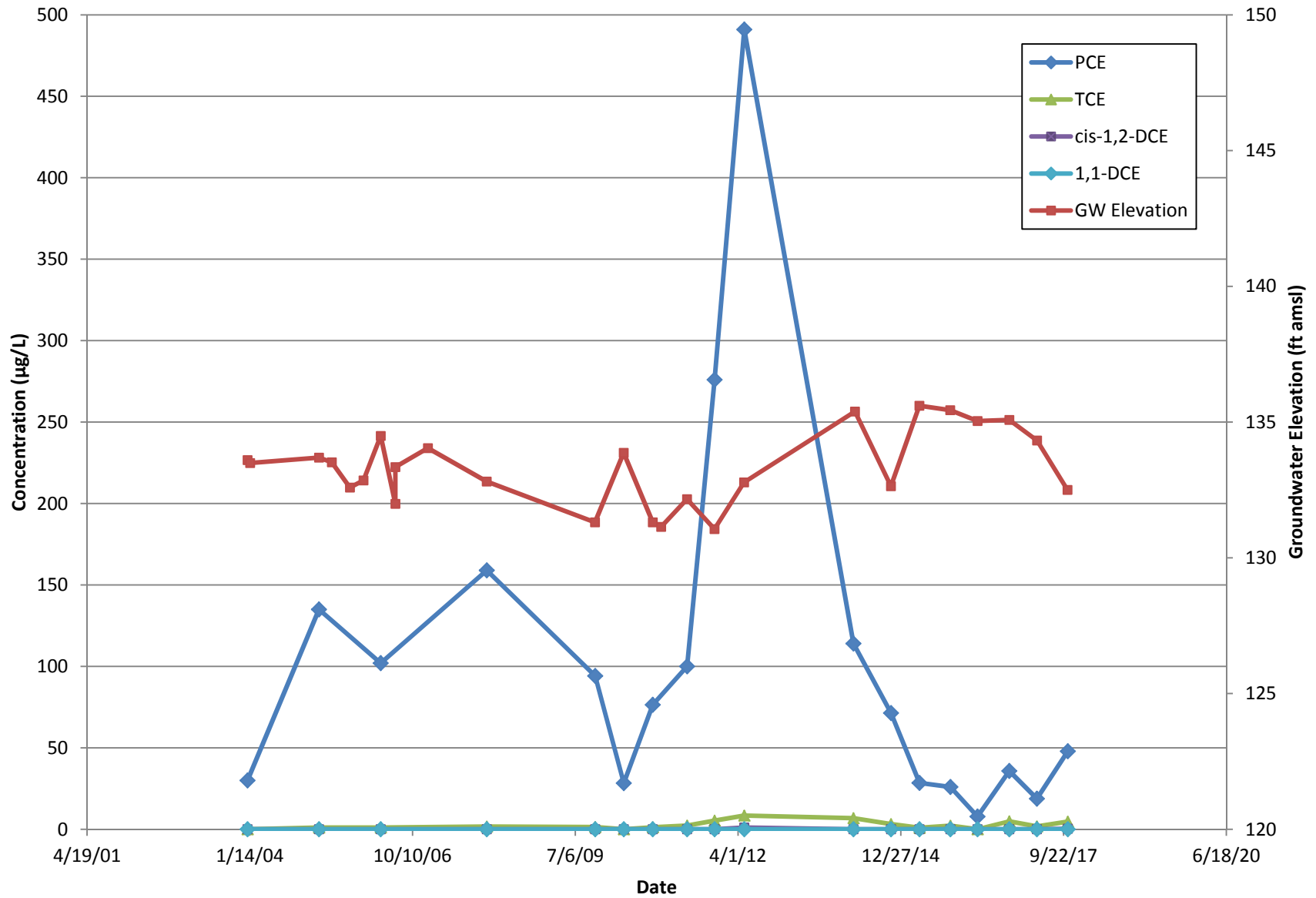
MW-3D Concentrations and Groundwater Elevation with Time



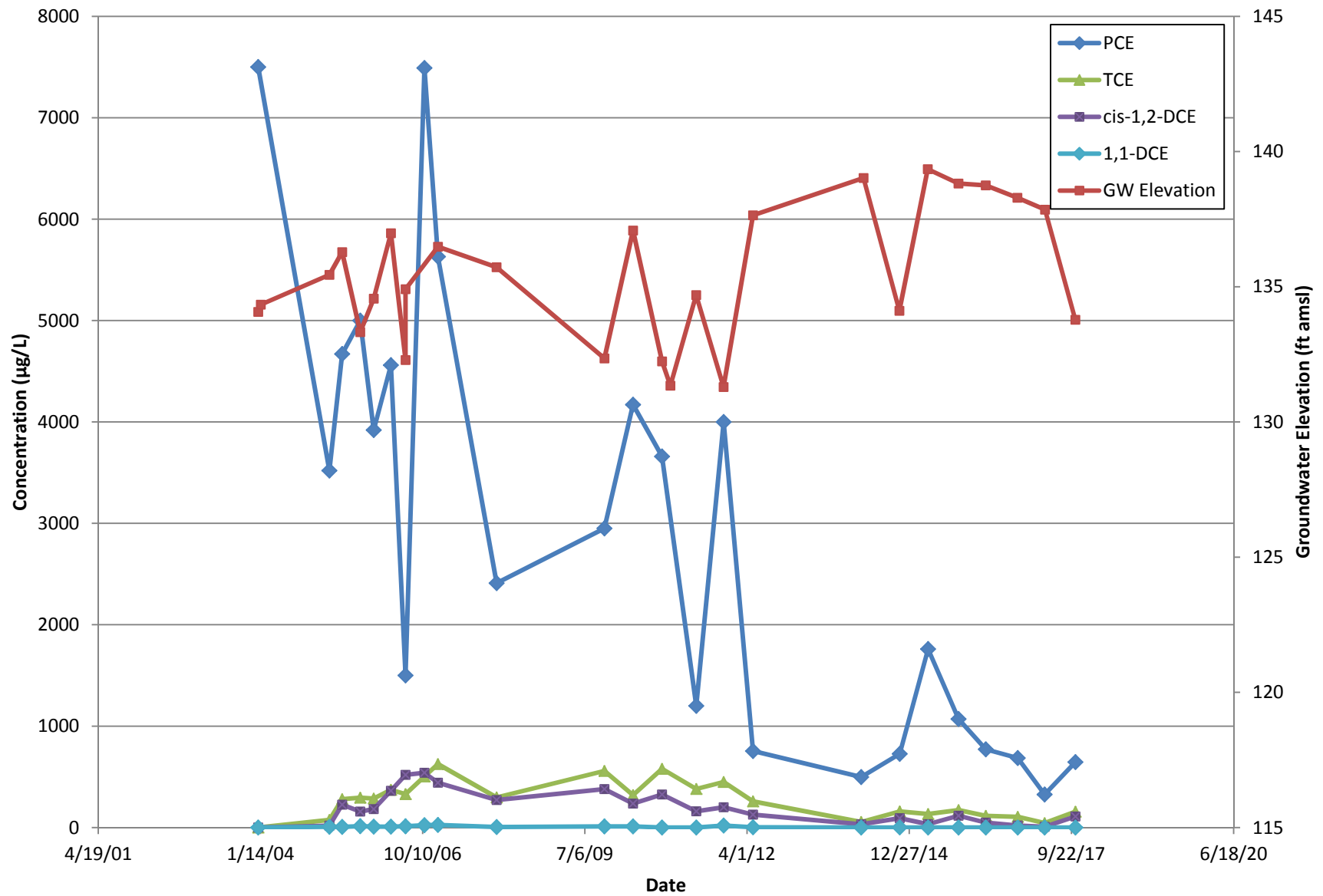
MW-5 Concentrations and Groundwater Elevation with Time



MW-8 Concentrations and Groundwater Elevation with Time



MW-9 Concentrations and Groundwater Elevation with Time

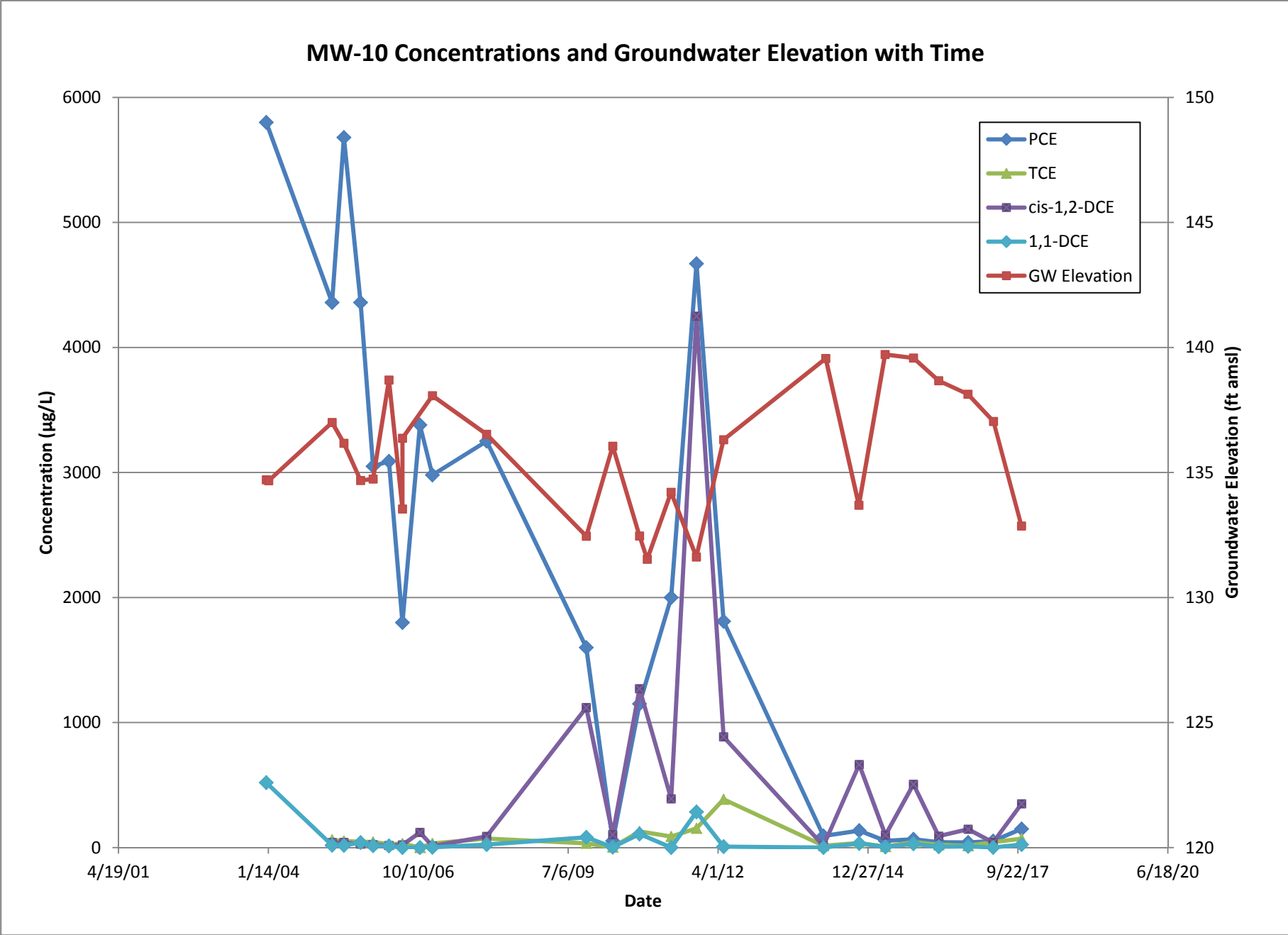


The graph displays the temporal variation of groundwater concentrations for four volatile organic compounds (VOCs) and the groundwater elevation at monitoring well MW-10. The x-axis represents time from 2001 to 2020. The left y-axis measures concentration in micrograms per liter (µg/L) for the VOCs, while the right y-axis measures groundwater elevation in feet above mean sea level (ft amsl).

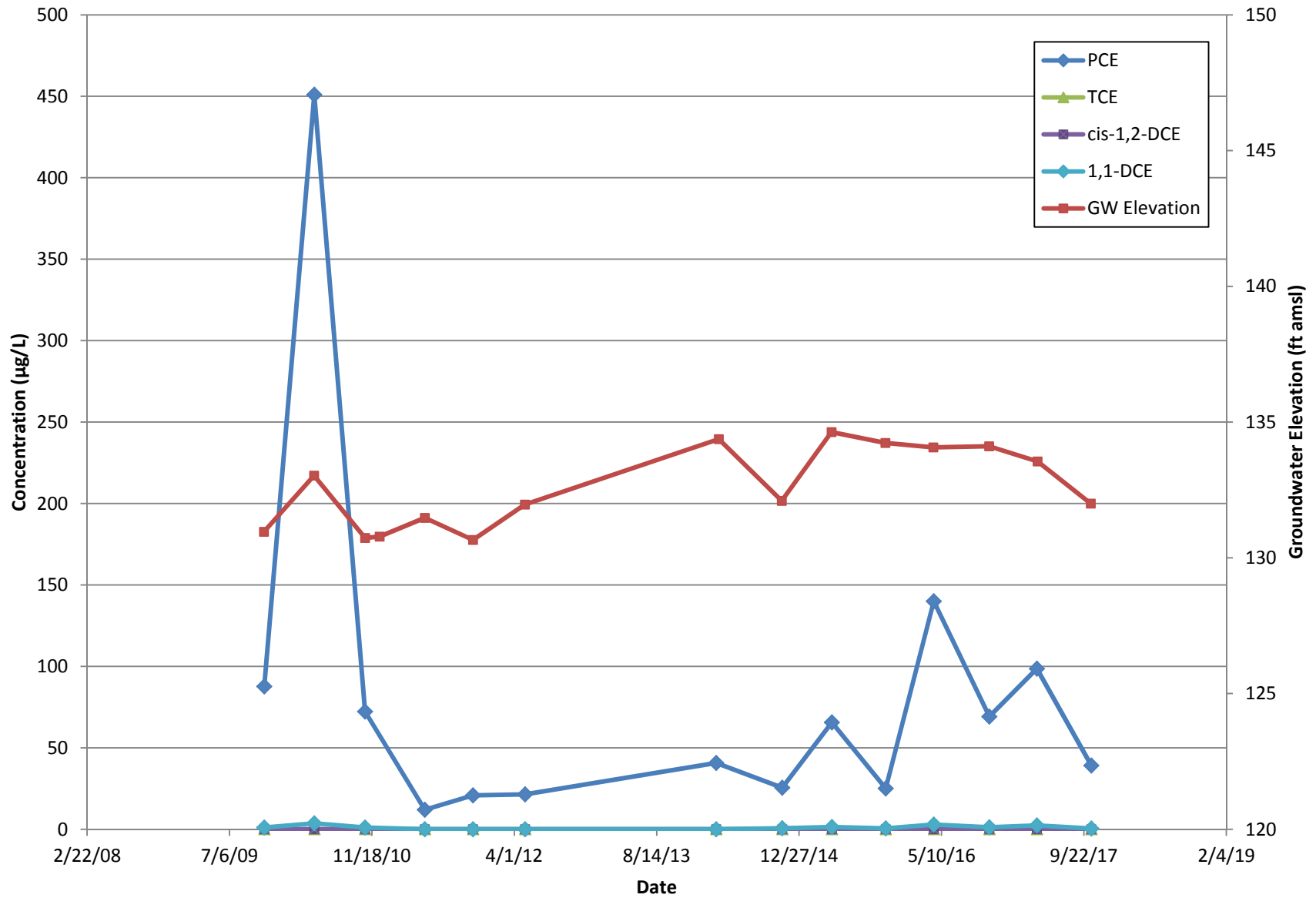
Key observations include:

- PCE (blue diamonds):** Shows the highest concentrations, peaking at approximately 5800 µg/L in early 2004 and again at about 4700 µg/L in early 2012. It generally decreases over time, with a significant drop around 2006.
- TCE (green triangles):** Concentrations are mostly below 1000 µg/L, with a notable peak of about 400 µg/L in early 2012.
- cis-1,2-DCE (purple squares):** Concentrations are generally low, with a peak of about 1200 µg/L in early 2012.
- 1,1-DCE (cyan diamonds):** Concentrations are consistently very low, mostly below 500 µg/L.
- GW Elevation (red squares):** Fluctuates between approximately 132 ft amsl and 140 ft amsl, showing a general upward trend from 2004 to 2012, followed by a slight decline.

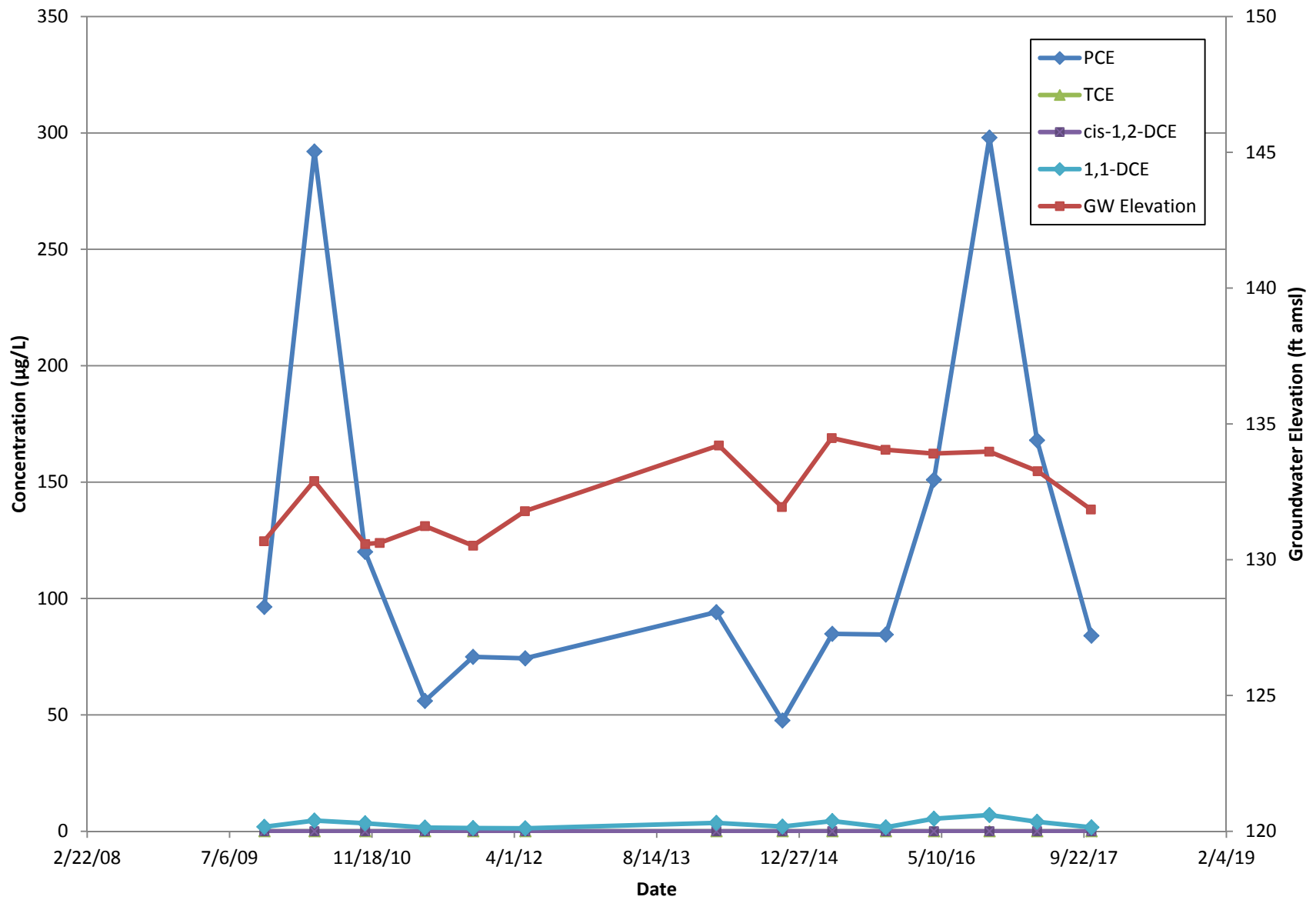
Date	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	1,1-DCE (µg/L)	GW Elevation (ft amsl)
1/14/04	5800	0	0	500	134.5
10/10/06	1800	0	0	0	137.5
7/6/09	1600	0	1100	100	133.5
4/1/12	4700	400	1200	0	135.5
12/27/14	100	0	600	0	139.5
9/22/17	100	0	300	0	132.5



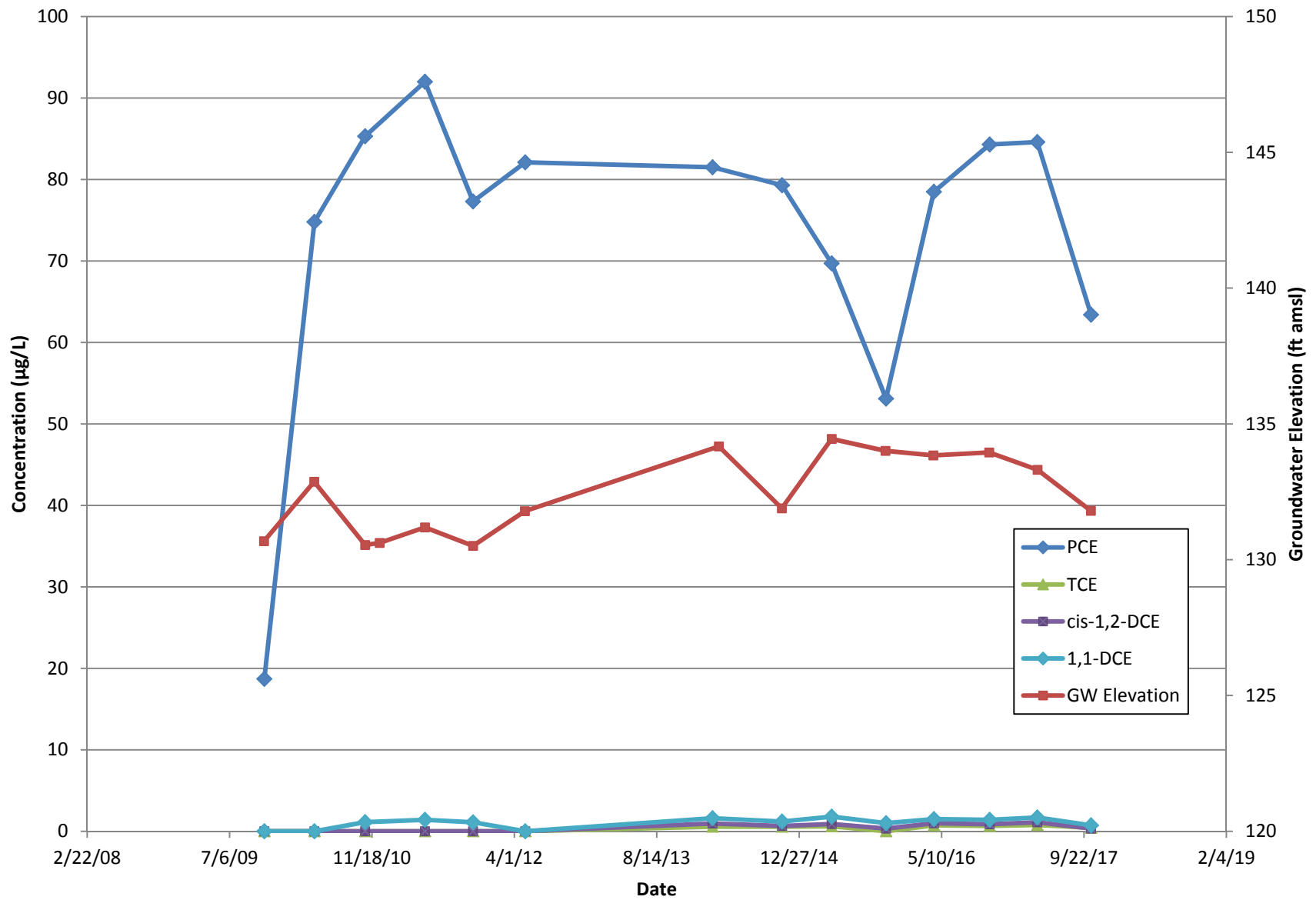
MW-12D Concentrations and Groundwater Elevation with Time



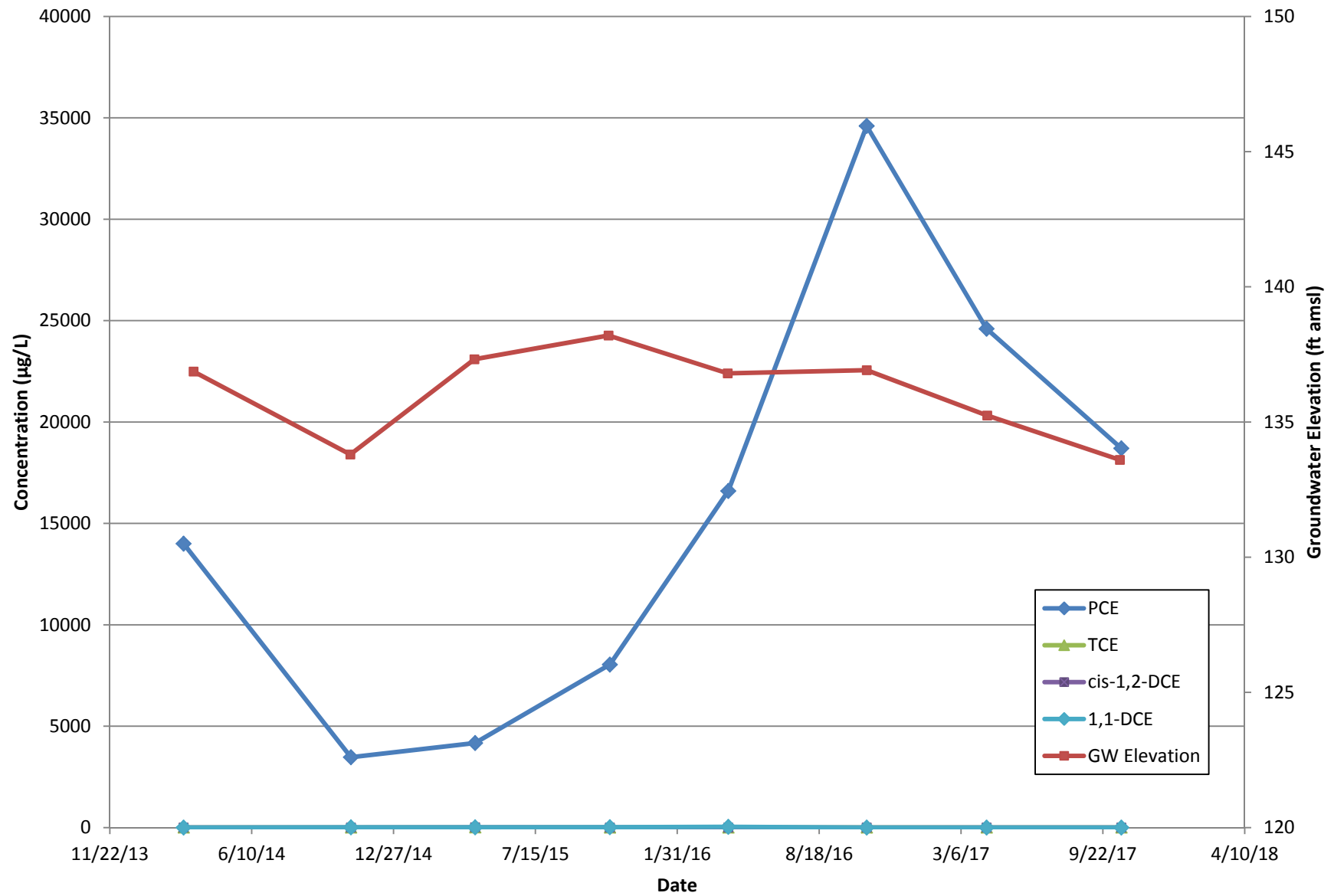
MW-13D Concentrations and Groundwater Elevation with Time



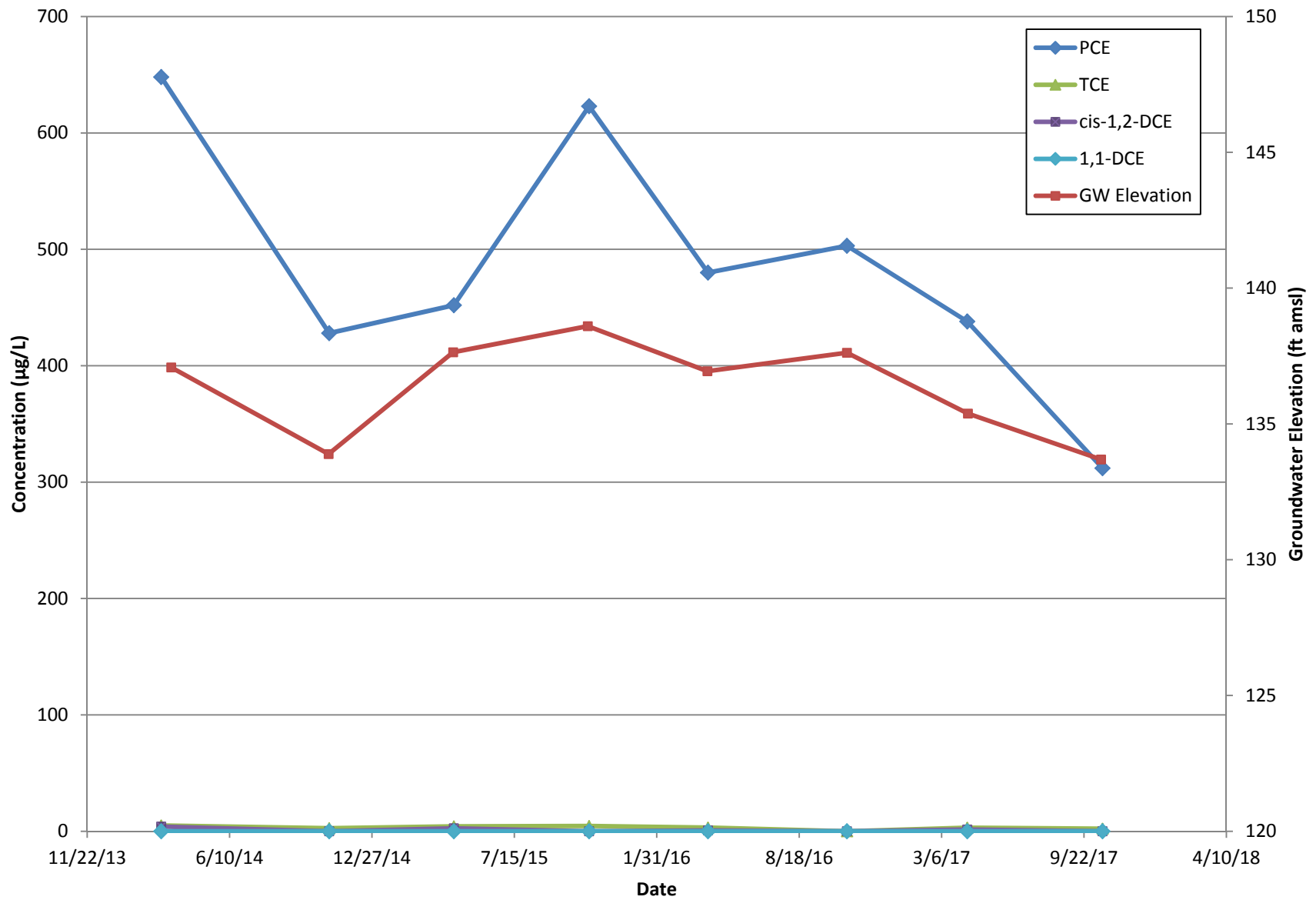
MW-14D Concentrations and Groundwater Elevation with Time



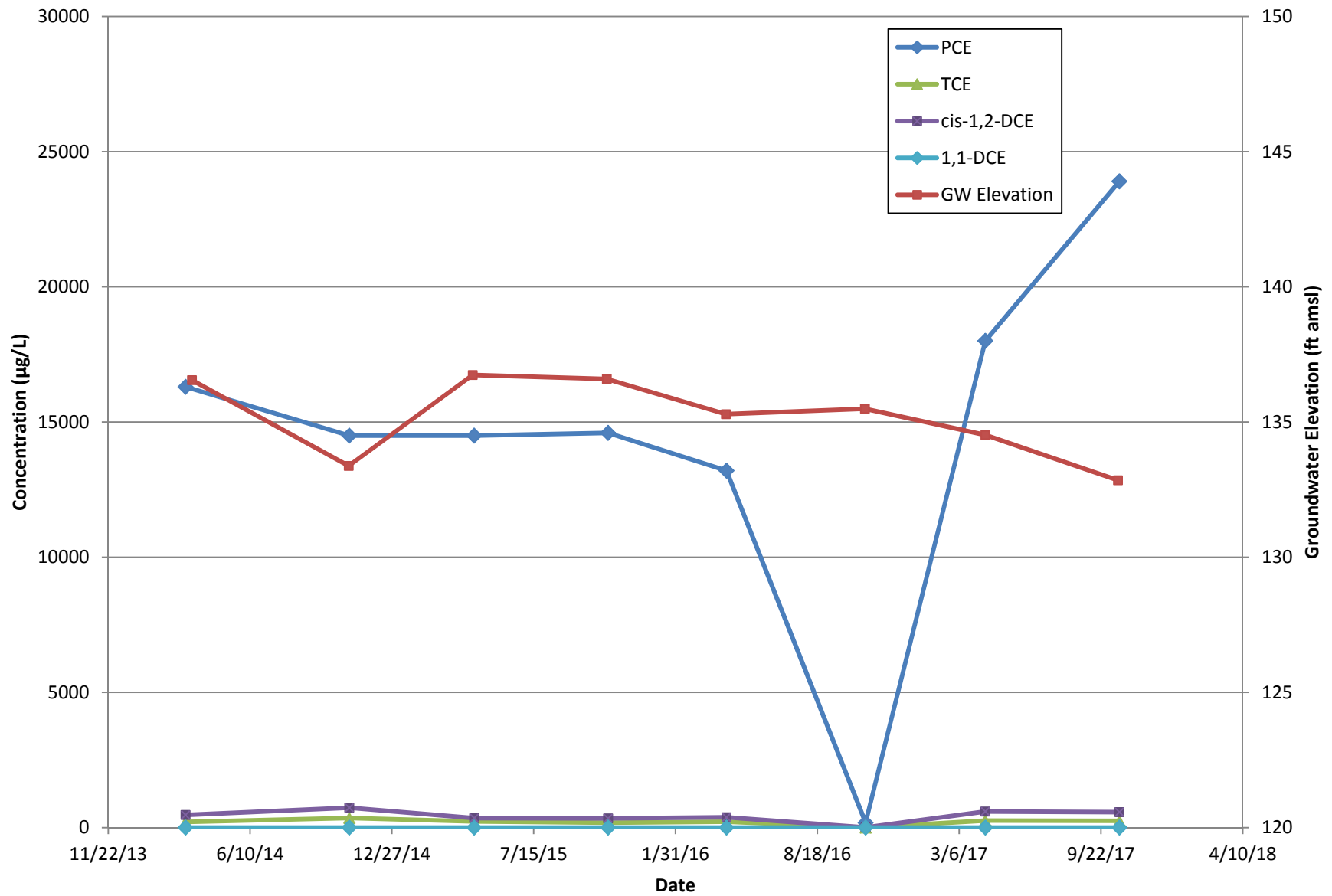
MW-19 Concentrations and Groundwater Elevation with Time



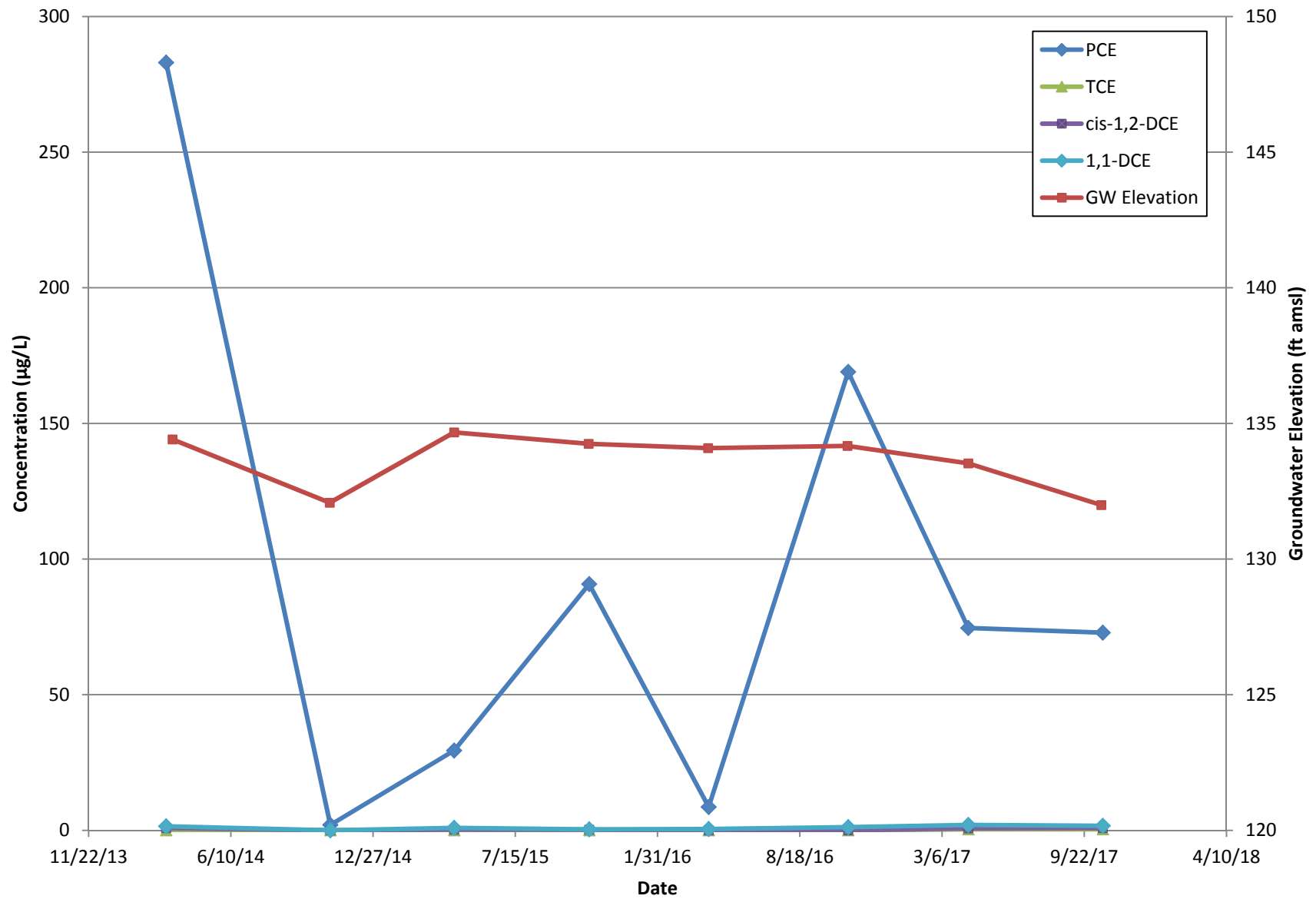
MW-20 Concentrations and Groundwater Elevation with Time



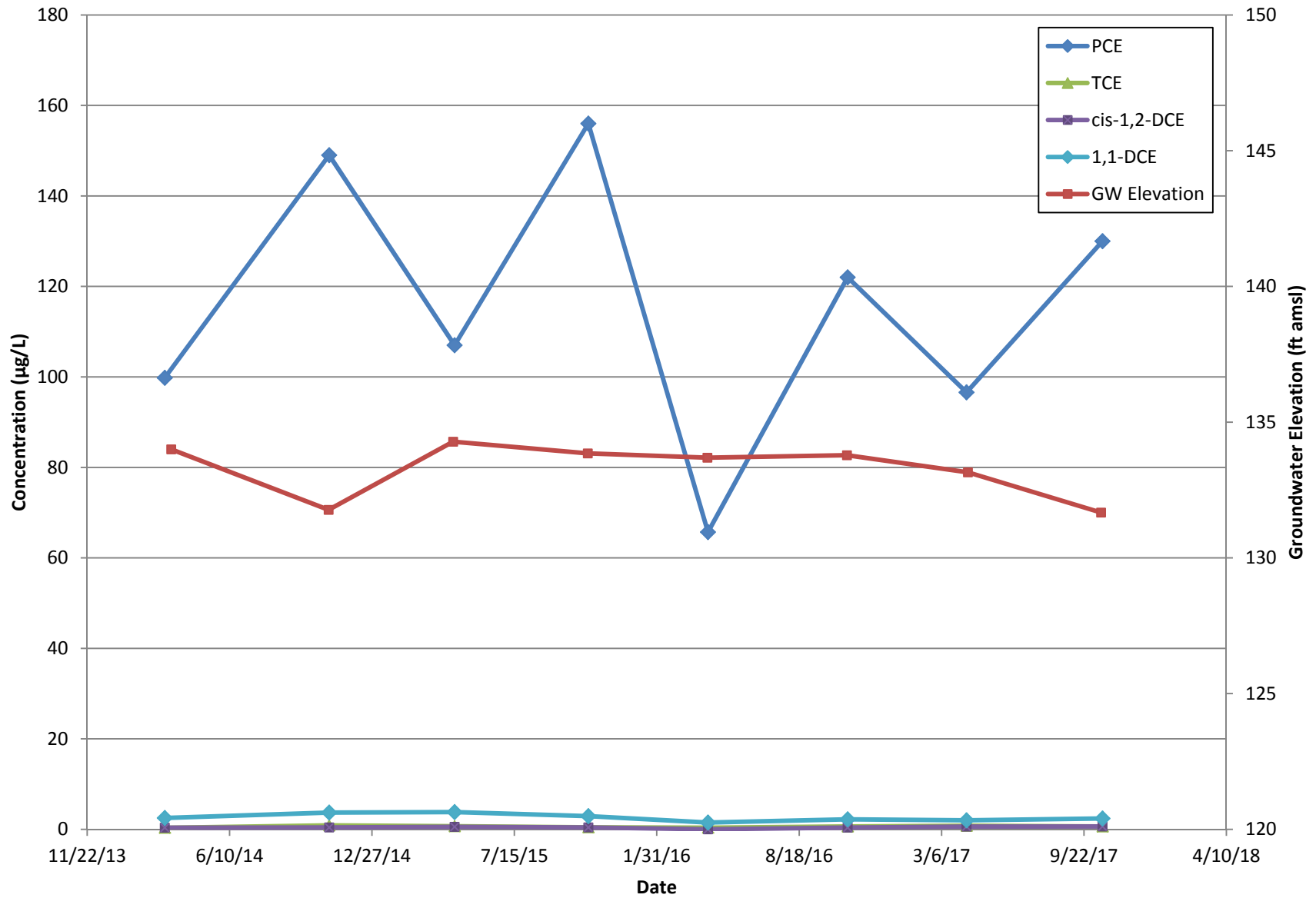
MW-21 Concentrations and Groundwater Elevation with Time



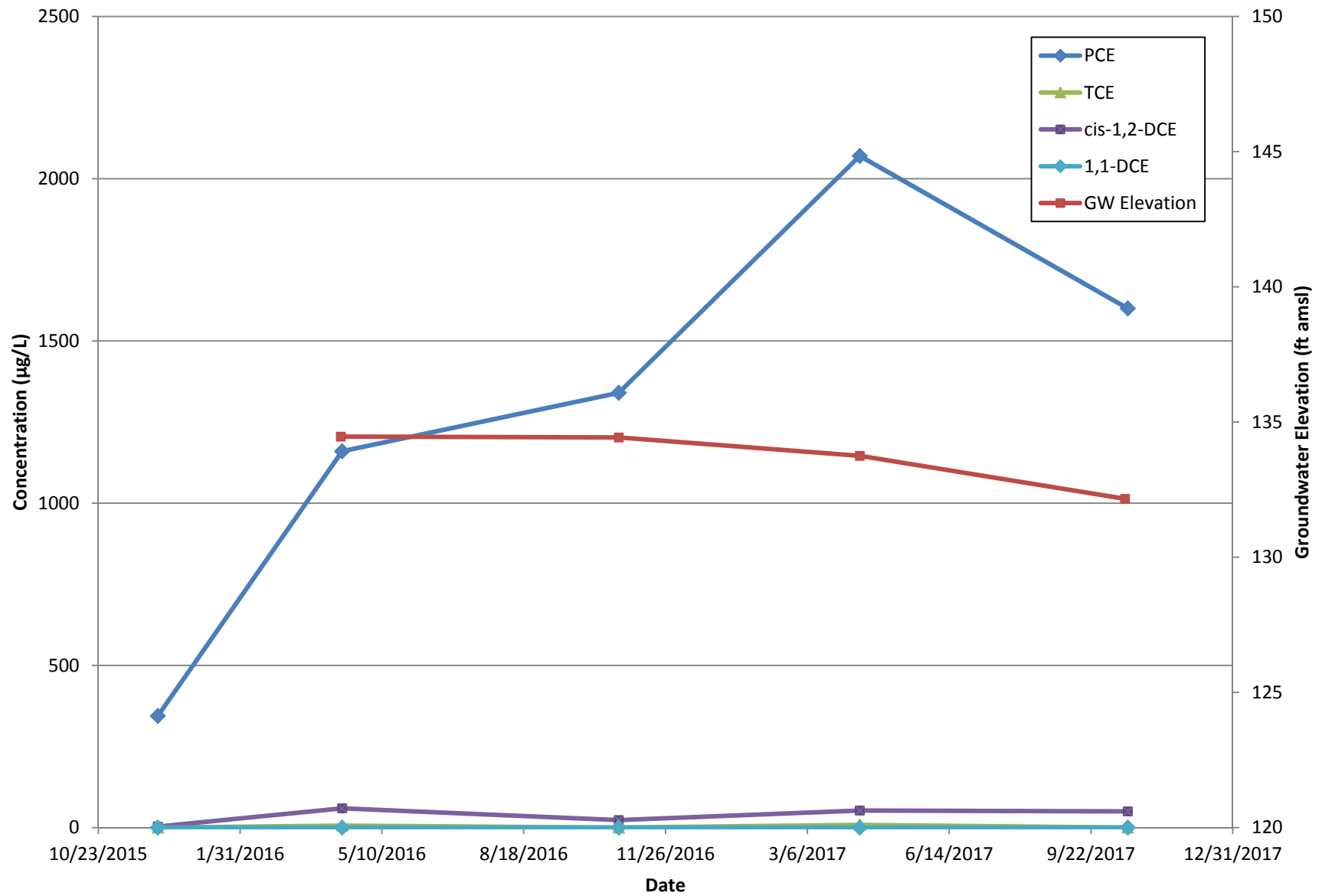
MW-21D Concentrations and Groundwater Elevation with Time



MW-22D Concentrations and Groundwater Elevation with Time



MW-24 Concentrations and Groundwater Elevation with Time



MW-25D Concentrations and Groundwater Elevation with Time



MW-26D Concentrations and Groundwater Elevation with Time

