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June 30, 2016

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Ms. Addie Walker, Project Manager
SC Department of Health and Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
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**SITE ASSESSMENT,
REMEDICATION &
REVITALIZATION**

Re: Spring 2016 Semi-Annual Groundwater Monitoring Report
Delavan Spray Technologies Site
Bamberg, South Carolina
SCDHEC VCC Number 13-4762-RP
SCDHEC File Number 51778
AECOM Project Number 60314964

Dear Ms. Walker:

On behalf of United Technologies Corporation Aerospace Systems (UTAS), AECOM is providing you one (1) hard copy and one (1) electronic copy of the Spring 2016 Semi-Annual Groundwater Monitoring Report for the Delavan Spray Technologies Site. This report is being submitted to the Department in accordance with The Remedial Investigation Work Plan (Hart & Hickman, August 1, 2013) and voluntary clean-up contract (VCC) number 13-4762-RP, which was signed on July 3, 2013.

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

Sincerely,

AECOM Technical Services, Inc.

Walter C. Gerald, P.G.
Project Manager
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cc: Mr. Bill Penn – United Technologies Corporation
Ms. Evelyn Rogers, PE – AECOM
Project File 60314964

Spring 2016 Semi-Annual Groundwater Monitoring Report

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

VCC 13-4762-RP

Prepared by:

AECOM Technical Services, Inc.
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June 30, 2016

SPRING 2016 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

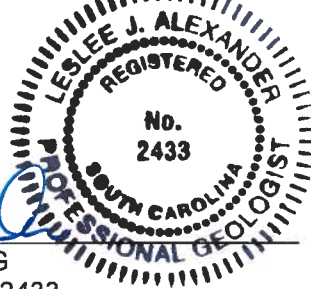
UNITED TECHNOLOGIES CORPORATION (UTC) DELAVAN SPRAY TECHNOLOGIES SITE BAMBERG, SOUTH CAROLINA

RESPONSIBILITY PARTY VOLUNTARY CLEANUP CONTRACT NUMBER 13-4762

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

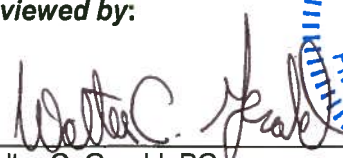
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June 30, 2016
Date

Reviewed by:


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June 30, 2016
Date

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1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) has prepared this *Spring 2016 Semi-Annual Groundwater Monitoring Report* on behalf of United Technologies Corporation (UTC) for the Delavan Spray Technologies Site (the Site) located at 4334 Main Highway (US Highway 301 South) in Bamberg, South Carolina (Figure 1). The spring 2016 semi-annual groundwater sampling was completed to meet the on-going monitoring requirements of Voluntary Cleanup Contract (VCC) (VCC 13-4762-RP) that was signed between South Carolina Department of Health and Environmental Control (SCDHEC) and Delavan Spray, LLC (SCDHEC, 2013) and in accordance with the *Remedial Investigation Work Plan* (Hart & Hickman, 2013) approved by SCDHEC October 22, 2013.

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

2.0 OVERVIEW OF THE SITE

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

2.1 Background

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

In 2005, Hart & Hickman, PC (H&H) injected Hydrogen Release Compound® (HRC) into shallow groundwater to stimulate natural biodegradation of chlorinated compounds in groundwater. Post-injection monitoring was conducted by H&H between 2005 and 2007. The results indicated that the HRC injections were effective in reducing concentrations of chlorinated compounds 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 UST, and soil VOC impacts are present at both of the former degreaser areas, former northern secondary containment area, and northeastern wooded area. No soil VOC impacts were identified in the northwestern wooded area, and no VOC groundwater impacts were identified at the former northern secondary containment area (H&H, 2012 and 2013).

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

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

2.2 Geology

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

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

2.3 Hydrogeology

Groundwater occurrence in the Coastal Plain is typically within the intergranular pore spaces of the sands, silts and limestones (primary porosity) and within solution cavities or fractures of indurated sediments (secondary porosity). Primary production of groundwater occurs from within the more permeable units, while lower permeability clay layers typically retard groundwater movement. Recharge for significant aquifers in the Coastal Plain occurs both as transport from up-dip areas, toward the Fall Line, where the sediments are generally exposed at the land surface and as leakage from adjacent aquifer units through lower permeability aquitards.

3.0 GROUNDWATER MONITORING PROCEDURES

Spring 2016 semi-annual sampling activities were completed by AECOM personnel between April 11, 2016 and April 13, 2016. Monitoring activities were conducted in accordance with the procedures described in the *Remedial Investigation Work Plan* (H&H, 2013) and the sampling plan presented in the *Post RI Report* (AECOM, 2016).

Sampling activities included:

- Groundwater level measurements were collected from all 35 existing monitoring wells;
- Groundwater samples were collected from 27 monitoring wells (Figure 2) using low-flow sampling techniques. All 27 samples were submitted for analysis of VOCs and eight samples (MW-9, MW-10, MW-21, MW-21D, MW-22D, MW-24, MW-25D, and MW-26D) were submitted for analysis of MNA parameters (ethane, ethene, methane, chloride, nitrate, nitrite, sulfate, and total organic carbon); and
- Collection of a composite sample from two drums of aqueous investigation-derived waste (IDW) for analysis of VOCs, semi-volatile organic compounds (SVOCs) and metals for IDW characterization purposes.

The depth to water in the monitoring wells was measured using an electronic water level meter on April 11, 2016, prior to purging any wells for groundwater sampling. 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, 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. Chain-of-custody forms are included in Appendix A.

All groundwater samples were analyzed for VOCs by USEPA Method 8260B and select groundwater samples were also analyzed for methane, ethane, and ethene by USEPA Method RSK 147, chloride, nitrate, nitrite, and sulfate by USEPA Method 9056, and total organic carbon by USEPA Method 5310. The aqueous IDW sample was analyzed for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270D, and metals by USEPA Methods 6010C and 7470B. Water samples were analyzed by Accutest

Laboratories, located in Orlando, Florida, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and state of South Carolina certified laboratory. Laboratory analytical data packages are provided in Appendix B.

4.0 RESULTS

4.1 Groundwater Flow

Water level measurements were collected on April 11, 2016 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 April 2016 water levels within the shallow aquifer zone occur between 133.04 and 141.81 feet in elevation. Shallow water levels were within two feet of those collected during the fall 2015 groundwater monitoring event (October 2015) and approximately 0.2 feet to 2 feet lower than those measured during the spring 2015 groundwater monitoring event (April 2015). Shallow flow patterns resulting from the spring 2016 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 and MW-5/MW-6. Groundwater levels appear depressed at MW-3, MW-8 and MW-18. This phenomenon was previously recognized in the *RI Work Plan* (H&H, 2013) and characterized as a “groundwater trough”, a feature that has been observed to extend to MW-9 during previous field investigation efforts. The variances in groundwater elevation and flow directions in this portion of the Site could be the result of preferential flow pathways resulting from higher permeability zones due to local facies changes or induced drainage from the sanitary sewer line or incised drainage ditch, which forms the northern boundary of the Facility. However, the primary horizontal groundwater flow direction is inferred to be toward the west, toward Halfmoon Branch, which is consistent with findings from prior investigations conducted at the Site.

Based on the April 2016 water level elevations within the deeper limestone aquifer zone, the potentiometric surface occurs between 133.30 and 134.52 feet in elevation (Figure 4). Groundwater elevations in April 2016 were approximately 0.1 to 0.7 feet lower than those measured during the fall 2015 groundwater monitoring event (October 2015) and approximately 0.4 to 1 feet lower than those collected during the spring 2015 groundwater monitoring event (April 2015). From the equal potential lines, the inferred direction of horizontal groundwater flow 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 oxidation-reduction potential (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 15 groundwater samples collected from shallow aquifer zone groundwater during the spring 2016 semi-annual monitoring, six VOCs (1,1,1-trichloroethane [1,1,1-TCA], 1,1-DCE, , cis-1,2-DCE, methylene chloride, PCE, and TCE) were detected (Table 3). Five of these compounds, (PCE, TCE, cis-1,2-DCE, 1,1-DCE, and methylene chloride) 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 (12 detections) and groundwater concentrations exceeded the MCL in 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 concentrations were detected adjacent to the Former PCE UST at MW-21 (13,200 micrograms per liter [µg/L]) and near the northern-most Former PCE Degreaser (located in the Wickman Room) in MW-19 (16,600 µg/L). Elevated but lower concentrations of PCE were detected in shallow aquifer groundwater in MW-24 (1,160 µg/L) along the western property boundary and in MW-9 (771 µg/L) in the eastern-most Northern Wooded Area of Interest.

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 in five groundwater samples (MW-1, MW-9, MW-10, MW-21, and MW-24), and the highest concentrations of TCE were detected in MW-21 (216 µg/L) and MW-9 (115 µg/L).

Cis-1,2-DCE was detected less frequently (seven detections) and exceeded the MCL in two monitoring wells (90.8 µg/L at MW-10 and 383 µg/L at MW-21) (Figure 7). The detections of cis-1,2-DCE in the shallow aquifer generally correspond to “hot-spots” of PCE and TCE.

1,1-DCE was detected in two shallow aquifer zone groundwater samples (Figure 8). The detected concentration of 1,1-DCE exceeded the MCL in the sample from MW-19 (estimated concentration of 39.1 µg/L), located near the northern-most Former PCE Degreaser.

Methylene chloride was detected in one well, MW-19, at an estimated concentration (221 µg/L) which exceeded the MCL (Table 3).

There were no exceedances of VOC MCLs in groundwater samples collected from off-Site wells screened in the shallow aquifer zone.

MNA Parameters

Four shallow wells (MW-9, MW-10, MW-21, and MW-24) were field tested for ferrous iron using a HACH kit and were sampled for MNA parameters including TOC, chloride, nitrate, nitrite, sulfate, methane, ethane, and ethene. The HACH kit results are on the field forms in Appendix A and the analytical results are summarized on Table 3.

The range of MNA parameter values detected in April 2016 samples and select indicator parameters are summarized in the inset table below, along with their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, nitrate and sulfate concentrations are favorable for anaerobic degradation in the shallow aquifer zone. However, low pH and TOC levels, and limited areas with favorable dissolved oxygen concentrations and ORP levels, may inhibit natural degradation of chlorinated VOCs. Furthermore, although daughter products of PCE (i.e., TCE and cis-1,2-DCE) have been detected, ethane and ethene (the ultimate degradation end products) were not detected in the samples from the shallow aquifer groundwater, indicating the degradation is occurring but the pathway is not complete.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	4.00	4.97	4.44	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.21	7.93	4.16	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
Ferrous Iron (mg/L)	0.00	0.86	0.32	>1 mg/L Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions
ORP (mV)	19.4	477.2	300.9	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely
Chloride (µg/L)	3,100	3,900	3,625	>2X background - Daughter product of organic chlorine
Nitrate (µg/L)	70	90	72.5	<1,000 µg/L - At higher concentrations may compete with reductive pathway
Nitrite (µg/L)	50	50	50	
Sulfate (µg/L)	2,500	6,400	3,867	<20,000 µg/L - At higher concentrations may compete with reductive pathway
TOC (µg/L)	370	1,300	843	>20,000 µg/L - Carbon and energy source; drives dechlorination; can be natural or anthropogenic
Methane (µg/L)	13.8	488	240.27	<500 µg/L - VC oxidizes >500 µg/L - Ultimate reductive daughter product, VC Accumulates
Ethane (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene
Ethene (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene

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

Data Trends

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

concentration in MW-9 has decreased from a maximum of 7,500 µg/L detected in December 2003, has been trending between approximately 500 µg/L and 1,800 µg/L since May 2012, with a current concentration of 771 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 43.3 µg/L.

VOC concentrations in some wells near source areas, such as MW-21 located near the Former PCE UST, have been relatively stable with time since they were installed (i.e., detected PCE concentrations of 13,200 µg/L to 16,300 µg/L since MW-21 was first sampled in March 2014). Other wells, such as MW-19 located near the northern-most Former PCE Degreaser, exhibit detected PCE concentration trends that fluctuate with groundwater elevation changes (i.e. the concentrations decrease when water levels are low and increase when water levels are higher). This may indicate residual VOCs in the vadose zone near former source areas.

Deeper Aquifer Zone

VOCs

Twelve groundwater samples were collected from deeper aquifer zone groundwater during the spring 2016 monitoring event, resulting in five VOCs (1,1,1-TCA, 1,1-DCE, cis-1,2-DCE, PCE and TCE) that were detected in one or more samples (Table 3). Of these compounds, only PCE and TCE exceeded their respective MCLs.

PCE was detected in eight deeper aquifer zone groundwater samples (MW-3D, MW-12D, MW-13D, MW-14D, MW-21D, MW-22D, MW-25D, and MW-26D) and groundwater concentrations exceeded the MCL in all eight of these samples (Figure 9). Detected PCE concentrations were highest in the deeper limestone aquifer down-gradient of the southeast corner of the main building, down-gradient of areas where PCE has been used historically on-Site (285 µg/L at MW-3D). PCE concentrations exceeded the MCL in off-Site side-gradient well MW-14D (78.5 µg/L) and in off-Site down-gradient wells MW-22D (65.7 µg/L), MW-25D (74.8 µg/L), and MW-26D (62.6 µg/L).

TCE concentrations were detected in five samples from the deeper aquifer zone in spring 2016, but only one of the detected concentrations, 8.3 µg/L in the sample from MW-3D, exceeded the MCL (Figure 10). TCE was also detected in off-Site down-gradient wells MW-22D, MW-25D, and MW-26D but at low and/or estimated concentrations below the MCL.

Cis-1,2-DCE was detected in four samples from deeper aquifer zone groundwater during the spring 2016 monitoring event (MW-3D, MW-14D, MW-25D, and MW-26D), but none of the detected concentrations exceeded the MCL for cis-1,2-DCE (Figure 11). Similarly, 1,1-DCE was detected in eight deeper aquifer

monitoring wells (MW-3D, MW-12D, MW-13D, MW-14D, MW-21D, MW-22D, MW-25D, and MW-26D), but at concentrations below the MCL (Figure 12).

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

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

MNA Parameters

Four deeper aquifer monitoring wells (MW-21D, MW-22D, MW-25D, and MW-26D) were also field tested for ferrous iron using a HACH kit and sampled for MNA parameters, including TOC, chloride, nitrate, nitrite, sulfate, methane, ethane, and ethene in accordance with the *RI Work Plan* (H&H, 2013). The HACH kit results are on the field forms in Appendix A and the analytical results are summarized on Table 3.

The range of MNA parameter values detected in April 2016 and select indicator parameters are summarized in the inset table below, along with their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, sulfate concentrations are favorable for anaerobic degradation in the deeper aquifer zone and nitrate concentrations are favorable except for the vicinity of MW-25D and MW-26D. Measured pH values were also favorable in all deeper aquifer monitoring wells except MW-12D and chloride concentrations are indicative of organic chlorine production at down-gradient monitoring wells MW-25D and MW-26D. However, TOC levels and limited areas with favorable dissolved oxygen concentrations and ORP levels, may inhibit degradation. Furthermore, although daughter products of PCE (i.e., TCE and cis-1,2-DCE) have been detected, ethane and ethene (the ultimate degradation end products) were not detected in the samples from the deeper aquifer groundwater, indicating the degradation is occurring but the pathway is not complete.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	7.06	10.08	7.75	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.48	9.57	3.8	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
Ferrous Iron (mg/L)	0.03	0.28	0.12	>1 mg/L Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions
ORP (mV)	-56.7	336	193.2	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely
Chloride (µg/L)	3,900	9,800	7,575	>2X background - Daughter product of organic chlorine
Nitrate (µg/L)	70	1,200	840	<1,000 µg/L - At higher concentrations may compete with reductive pathway
Nitrite (µg/L)	ND	ND	ND	
Sulfate (µg/L)	3,100	4,700	3,775	<20,000 µg/L - At higher concentrations may compete with reductive pathway
TOC (µg/L)	240	420	313	>20,000 µg/L - Carbon and energy source; drives dechlorination; can be natural or anthropogenic
Methane (µg/L)	0.17	0.85	0.5	<500 µg/L - VC oxidizes >500 µg/L - Ultimate reductive daughter product, VC Accumulates
Ethane (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene
Ethene (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene

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

ND - not detected

Data Trends

As with the shallow aquifer zone, historic VOC results (Appendix C) and the 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 285 µg/L. 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 65 µg/L since May 2011, until a recent increase to 140 µg/L in April 2016. Similarly, 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. The recent increases in PCE in the deeper, down-gradient monitoring wells may be a lagging response to the higher groundwater levels over the last 18 months.

VOC concentrations in some deeper aquifer wells, such as MW-12D and MW-13D, exhibit trends that correspond to water level fluctuations (Appendix D). Other wells, such as MW-14D and MW-21D, show no clear trend related to groundwater elevation or, in the case of off-Site down-gradient well MW-22D, trend opposite groundwater elevations (i.e., concentrations decrease when water levels increase) in some instances. It is unclear if the reduction in flow during periods of lower water levels simply leads to less

dilution (i.e., higher concentrations in water) or if PCE trends are the result of lag-time in transport to the wells further down-gradient.

4.3 Investigation Derived Waste

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

4.4 Quality Assurance / Quality Control

The analytical data (Appendix B) associated with the semi-annual sampling were validated in accordance with the procedures outlined in the *RI Work Plan* (H&H, 2013). Quality assurance / quality control (QA/QC) sample results are presented in Table 5 and data qualifiers added to the analytical data as a result of the validation process are defined in Table 6. The data assessment reports (DARs; Appendix B) explain data qualifiers added to the sample results as a result of the validation process. No QC excursions were encountered during the validation of the analytical data. Therefore, the analytical data associated with this sampling event should be considered compliant and adequate for its intended use.

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

Field Duplicates

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

Trip Blanks

Trip blank samples, designated with a “-C” suffix, were submitted daily for coolers containing an aqueous sample for the analysis of VOCs. The results of the trip blank samples are provided in Table 5. There

were no analytes detected in trip blank samples and, therefore, no flags were added to primary samples in Table 3 based on the trip blank analyses.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

MS/MSD samples were collected at a frequency of one per twenty primary samples and are included in the analytical data packages provided in Appendix B; however, these results were not tabulated as the information only pertains to the primary sample with which the MS/MSD is associated. During the validation process, no qualifiers were added to the data as a result of MS/MSD analysis.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are submitted based on the evaluation of the spring 2016 semi-annual monitoring results and a limited comparison to RI sampling results:

- Shallow water levels were within two feet of those collected during the fall 2015 groundwater monitoring event (October 2015) and approximately one quarter to two feet lower than those measured during the spring 2015 groundwater monitoring event (April 2015). The shape of the potentiometric surfaces and groundwater flow patterns in both the shallow and deeper aquifer zones are similar to those observed in the fall 2015 monitoring event and previous investigations.
- Concentrations of VOCs in the shallow aquifer are delineated on-site, with no VOC constituents of concern (COC) detections above MCLs in shallow off-site monitoring wells. However, based on the interpreted PCE plume (Figure 5) it is inferred that PCE in the shallow aquifer extends westward from the site at concentrations above the MCL.
- 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 and MW-26D. The occurrence of PCE at these well locations is consistent with the inferred groundwater flow direction.
- Detected concentrations of PCE in groundwater samples from monitoring wells MW-19 (in the vicinity of the northern-most Former PCE Degreaser), MW-3 (down-gradient of the Former PCE UST), MW-12D and MW-13D (located down-gradient of the Site to the west), and MW-14D (located side-gradient of the Site to the south) were higher than those detected in the fall 2015 monitoring event. For example, the PCE concentration detected in MW-19 increased from 8,040 µg/L to 16,600 µg/L, which is higher than the maximum of 14,000 µg/L detected in March 2014. The PCE concentration detected in MW-3 increased from 57.4 µg/L to 98 µg/L. In off-Site down-gradient wells MW-12D and MW-13D, the detected PCE concentrations increased from 25.1 µg/L to 140 µg/L and from 84.5 µg/L to 151 µg/L, respectively. The detected concentration in side-gradient well MW-14D increased from 53.1 µg/L to 78.5 µg/L. These increases may be the result of the higher than normal water levels over the past 18 months and increased leaching of residual contaminants from the vadose zone.
- PCE concentrations decreased compared to the fall 2015 monitoring event in groundwater samples from monitoring wells MW-20 near the southern-most Former PCE Degreaser (623 µg/L to 480 µg/L), MW-21D adjacent to the Former PCE UST (90.8 µg/L to 8.6 µg/L), and MW-3D down-gradient of the former PCE UST (353 µg/L to 285 µg/L). The PCE concentrations also decreased in on-Site wells MW-8 (26 µg/L to 7.8 µg/L), MW-9 (1,070 µg/L to 771 µg/L), and MW-10 (66.4 µg/L to 43.3 µg/L). In off-Site down-gradient well MW-22D, the detected PCE concentration decreased from 156 µg/L to 65.7 µg/L.

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- The detected concentrations of PCE degradation products (i.e., TCE and cis-1,2-DCE) were generally similar to those detected during the fall 2015 semi-annual groundwater monitoring event with a few exceptions. In MW-9 TCE decreased from 172 µg/L to 115 µg/L and cis-1,2-DCE decreased from 116 µg/L to 49.2 µg/L, and in MW-10 TCE decreased from 45.2 µg/L to 22.1 µg/L and cis-1,2-DCE decreased from 506 µg/L to 90.6 µg/L. Minor decreases in TCE were also observed in MW-3D and MW-8. Increases in degradation products were observed in the following wells:
 - MW-1 – cis-1,2-DCE increased from 7.1 µg/L to 19.4 µg/L and TCE increased from 2.8 µg/L to 6.2 µg/L;
 - MW-3D – cis-2,1-DCE increased from 5.6 µg/L to 7.8 µg/L;
 - MW-21 – cis-1,2-DCE increased from 339 µg/L to 383 µg/L and TCE increased from 180 µg/L to 216 µg/L; and
 - MW-24 – cis-1,2-DCE increase from 2.9 µg/L to 59.2 µg/L and TCE increased from non-detect to 6.1 µg/L.
- VC was not detected in any monitoring wells during the spring 2016 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-12D, MW-13D, and MW-19, exhibit trends in PCE concentration that track with water level fluctuations. Other wells, such as MW-22D, have PCE trends that track opposite water level trends, and some wells (e.g., MW-3D and MW-21D) exhibit mixed behavior with regard to VOC and water level trends. For the wells with PCE concentrations trending in the opposite direction of water levels trends, it is not clear whether this behavior is the result of a reduction in flow during lower water levels leading to less dilution (i.e., higher concentrations in water) or if this is simply the result of lag-time in transport to the wells further down-gradient.

In accordance with the monitoring requirement of the VCC, the next semi-annual sampling event is scheduled to occur in October 2016 and will include the wells listed in the sampling plan presented in the *Post RI Report* (AECOM, 2016).

6.0 REFERENCES

AECOM, July 3, 2014. *Remedial Investigation Report, United Technologies Corporation, Delavan Spray Technologies Site, 4334 Main Highway, Bamberg, South Carolina.*

AECOM, June 29, 2015. *Post Remedial Investigation Work Plan, Delavan Spray Technologies Site, Bamberg, South Carolina.*

AECOM, May 17, 2016. *Post Remedial Investigation Report, Delavan Spray Technologies Site, Bamberg, South Carolina.*

H&H, August 29, 2003, *Ground water assessment report, Delavan Spray Technologies Facility, Bamberg, South Carolina.*

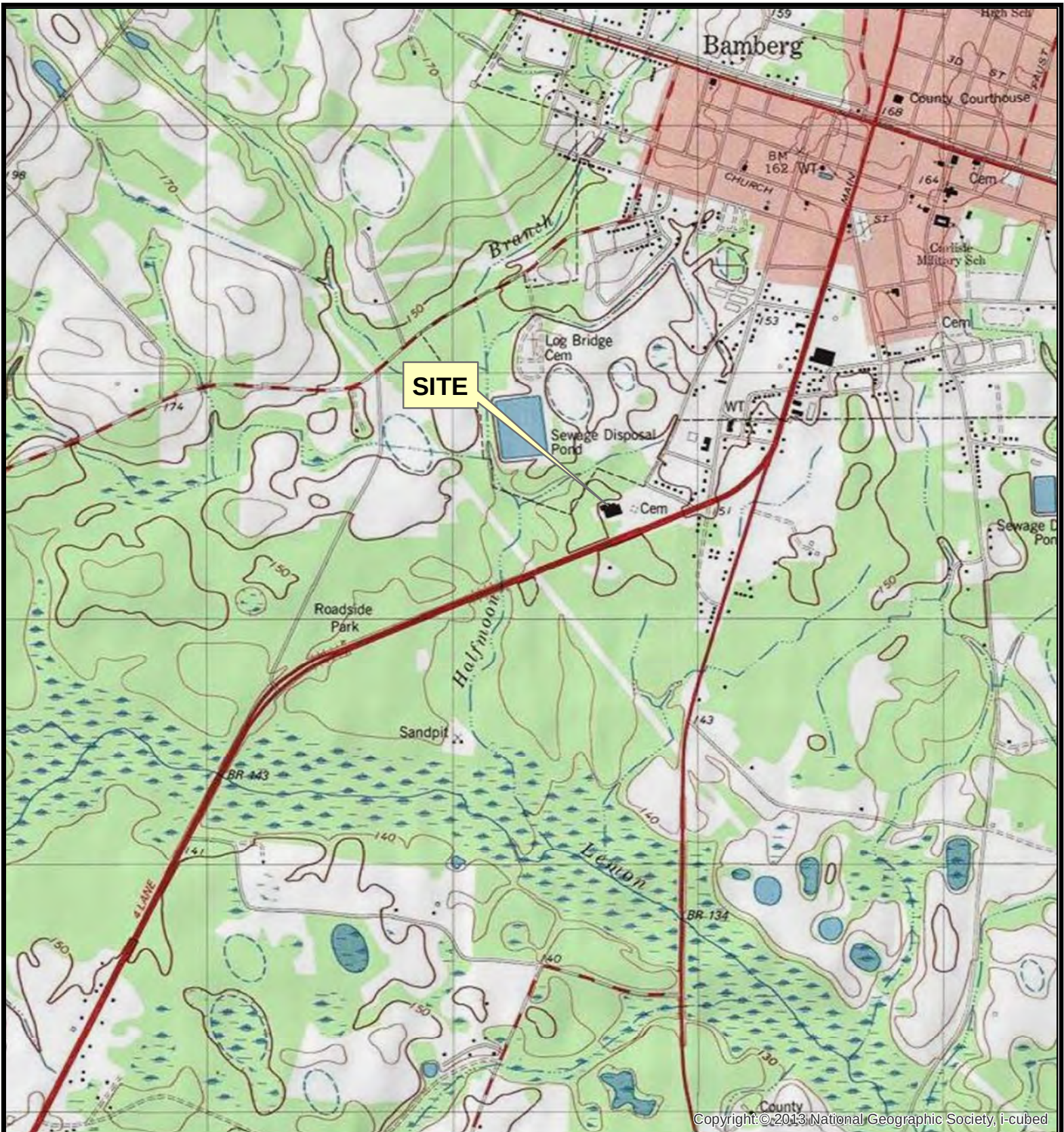
H&H, December 5, 2012, *Supplemental Site Assessment Report, Delavan Spray Technologies Site, Bamberg, South Carolina.*

H&H, August 1, 2013, *Remedial Investigation Work Plan, Delavan Spray Technologies Site, Bamberg, South Carolina.*

SCDHEC, July 3, 2013. Voluntary Cleanup Contract 13-4762-RP.

USEPA, 1998. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water.*

FIGURES



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

UTC Delavan Spray Technologies Site
Bamberg, South Carolina

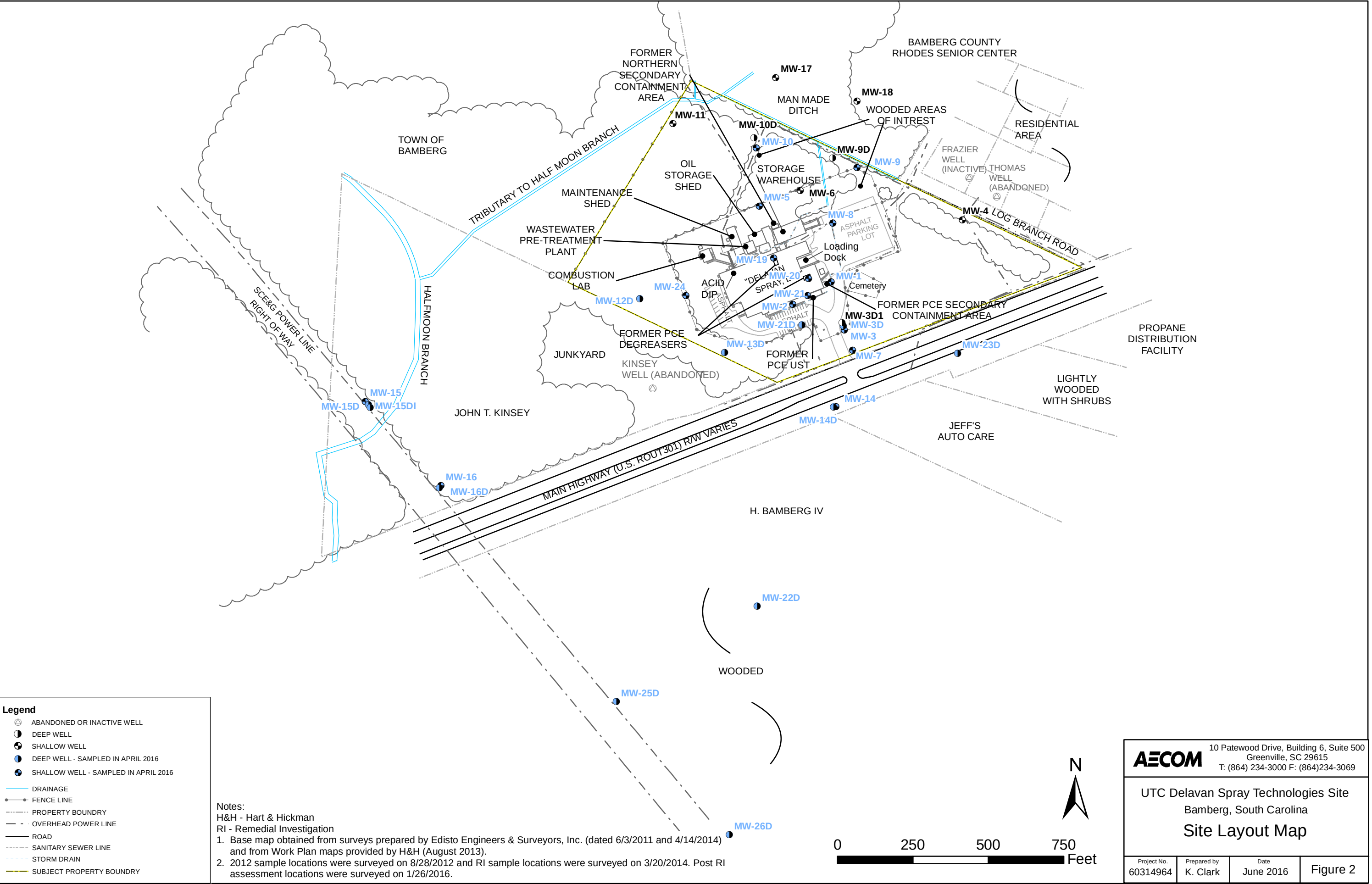
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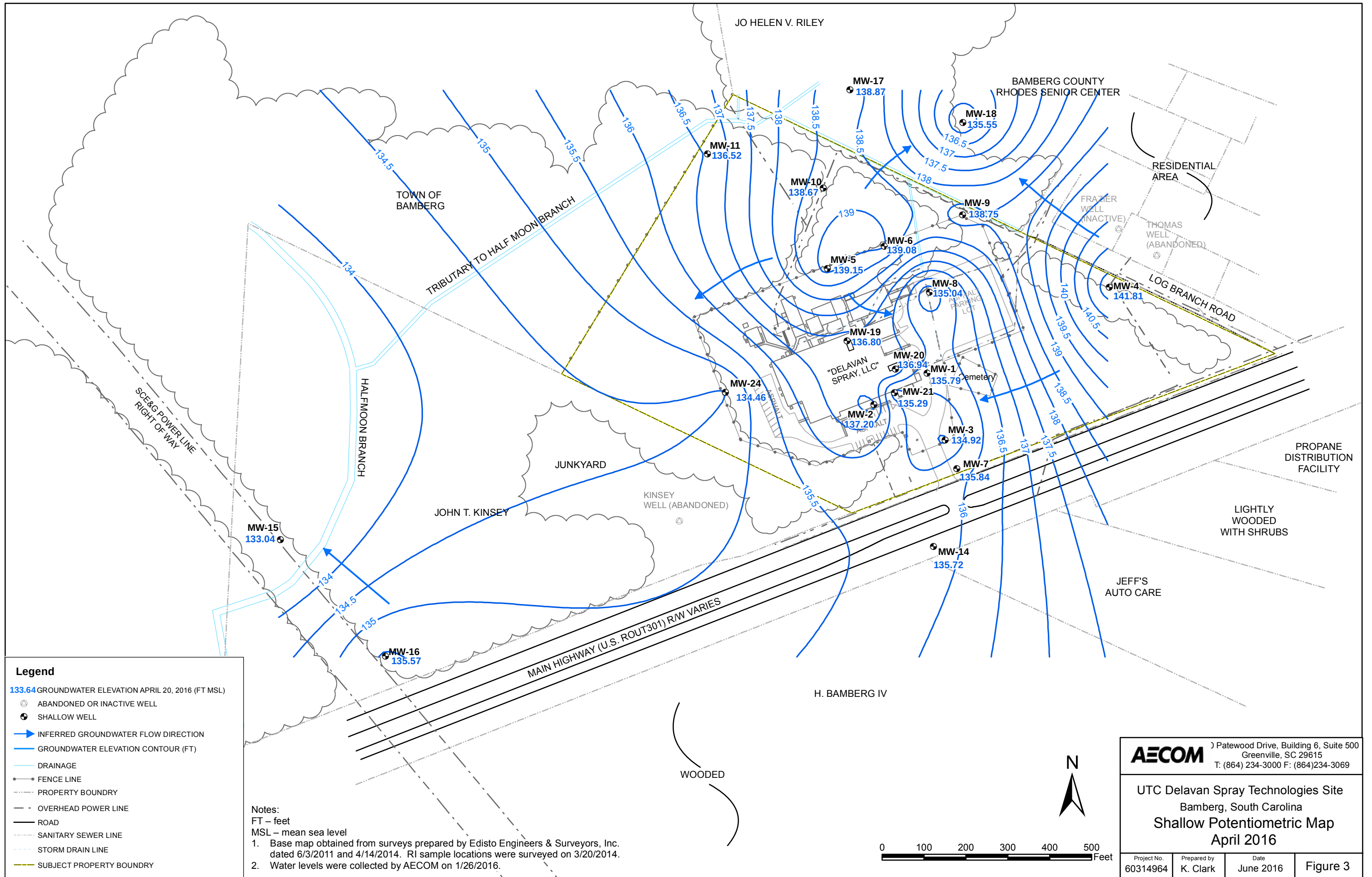
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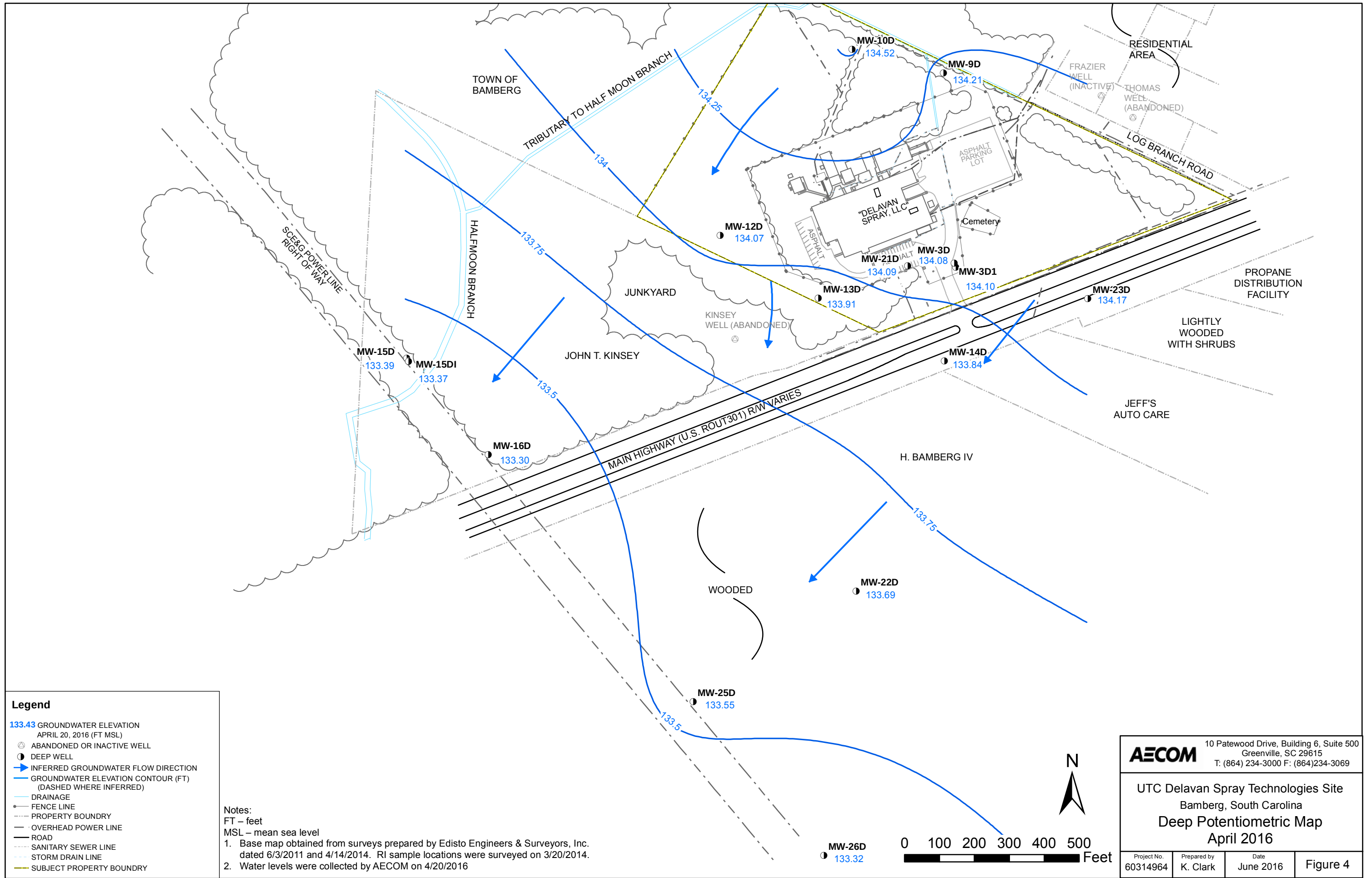
Prepared by
K. Clark

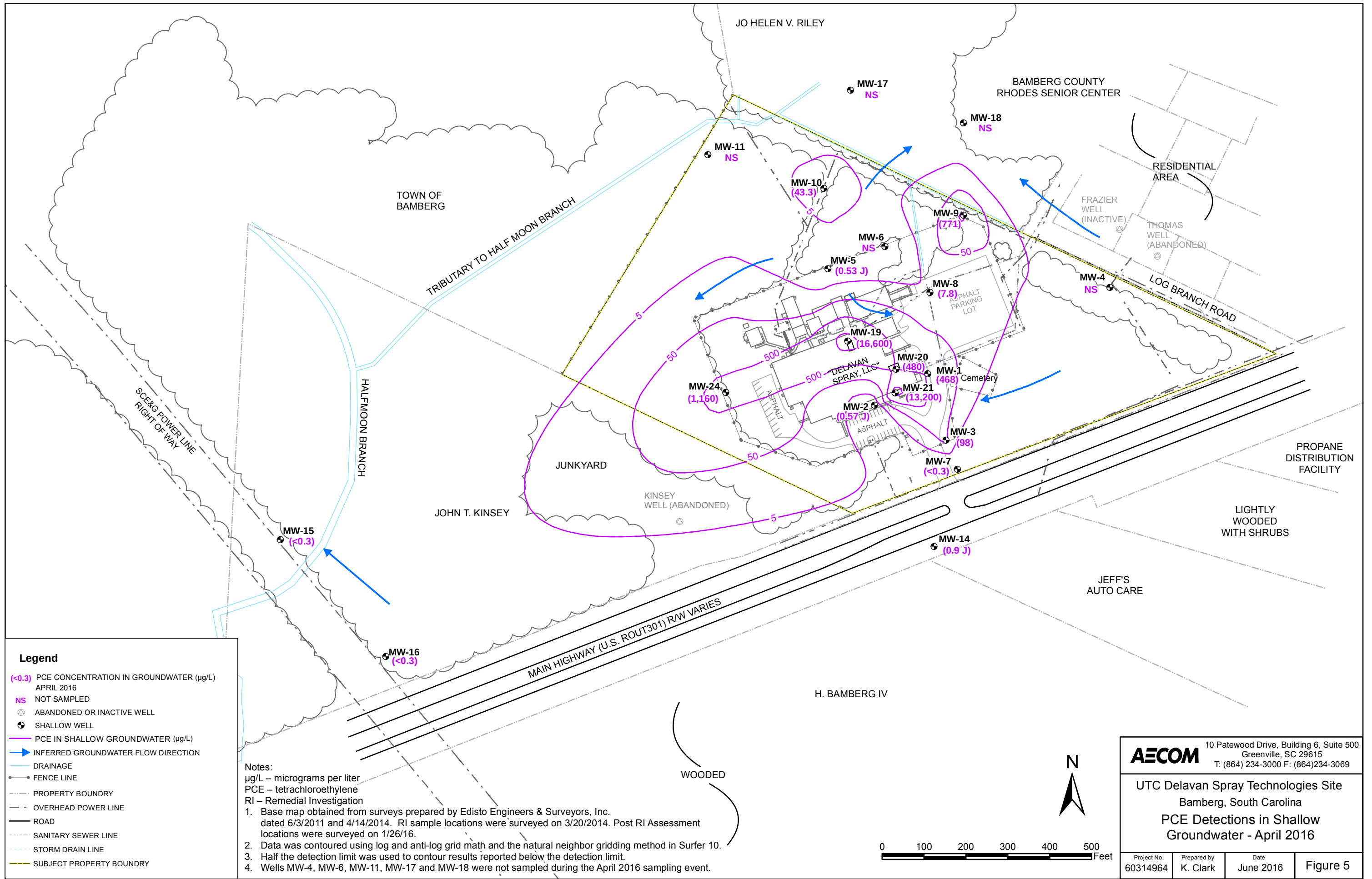
Date
June 2016

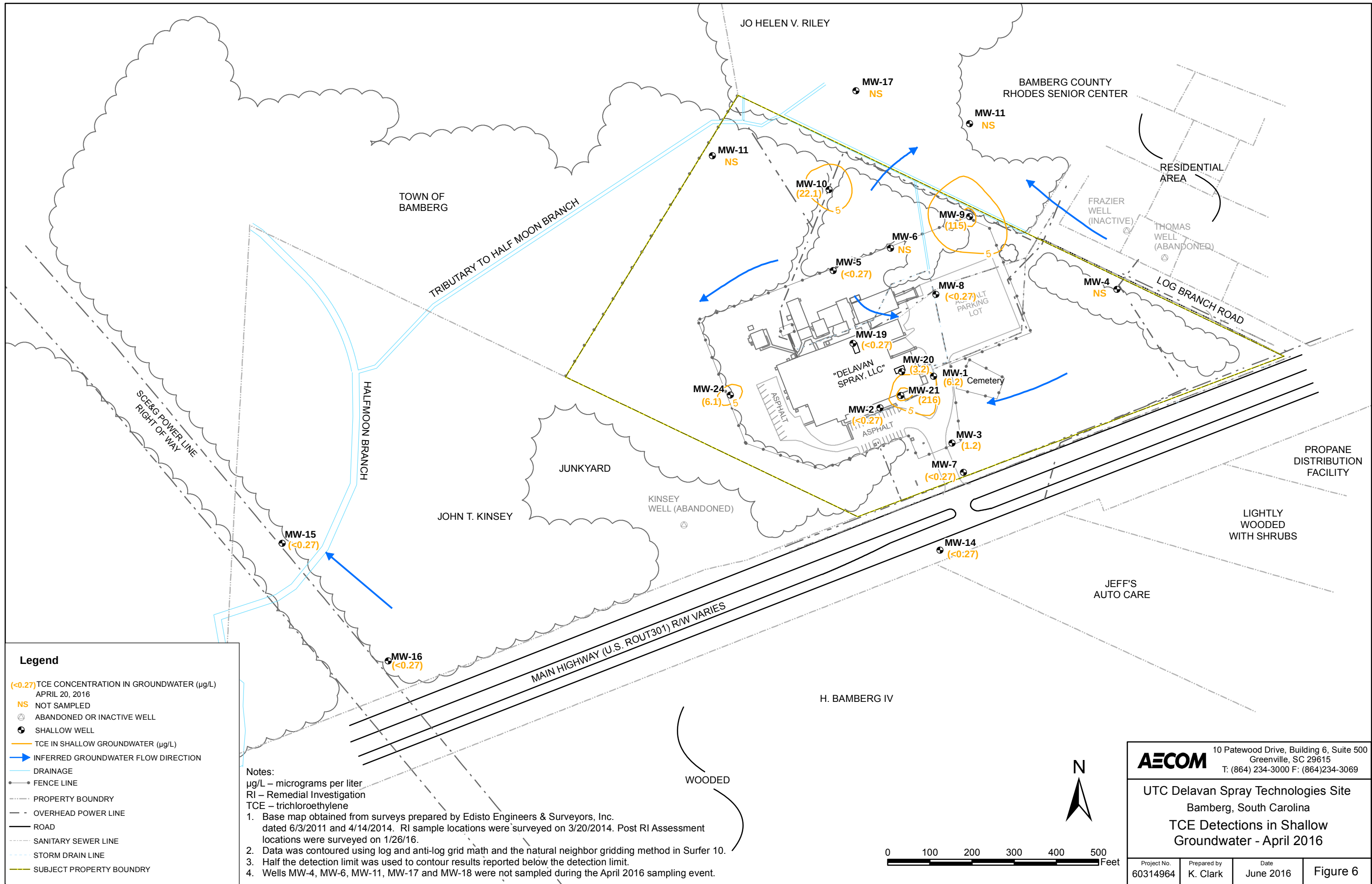
Figure 1

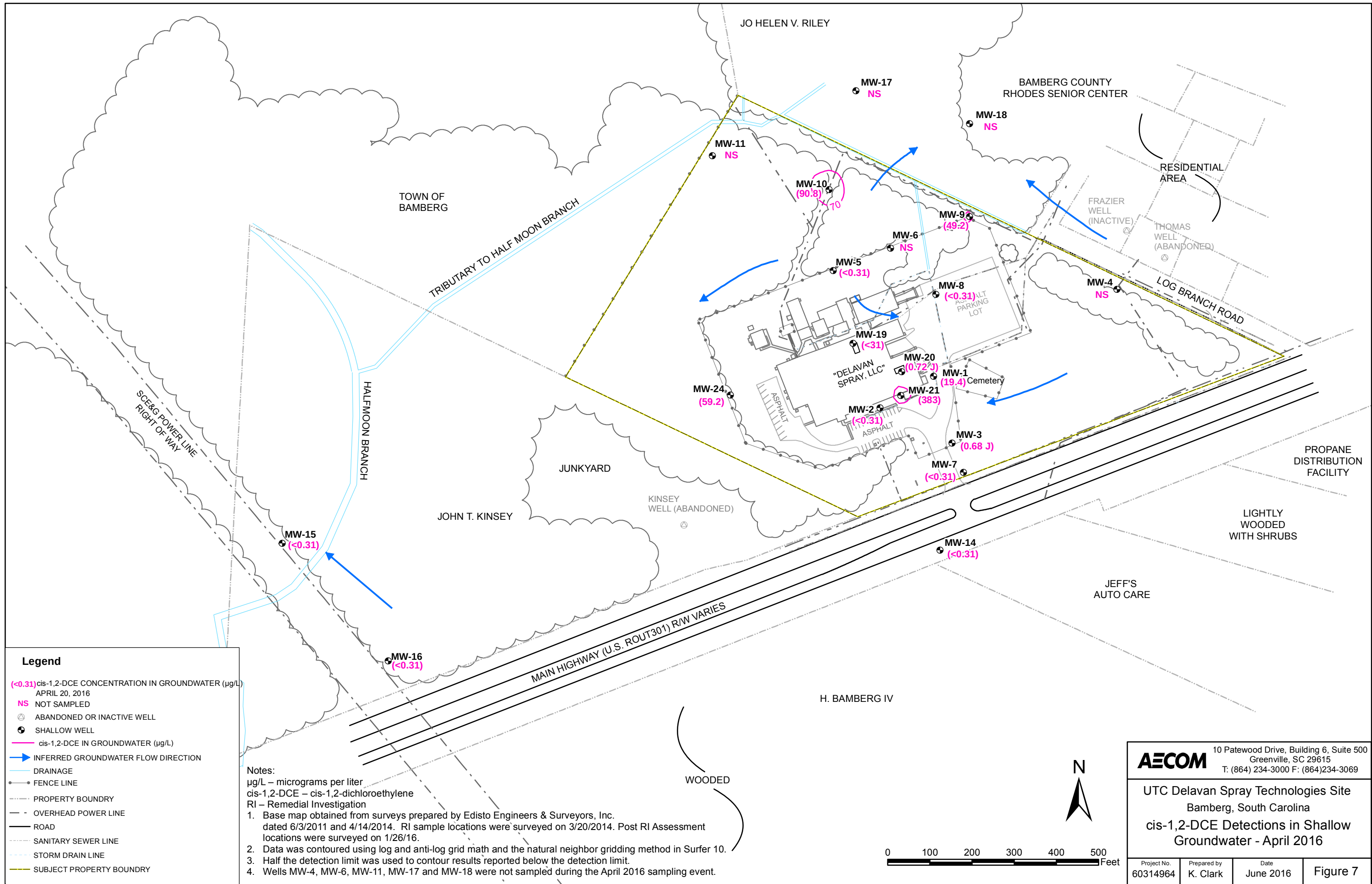


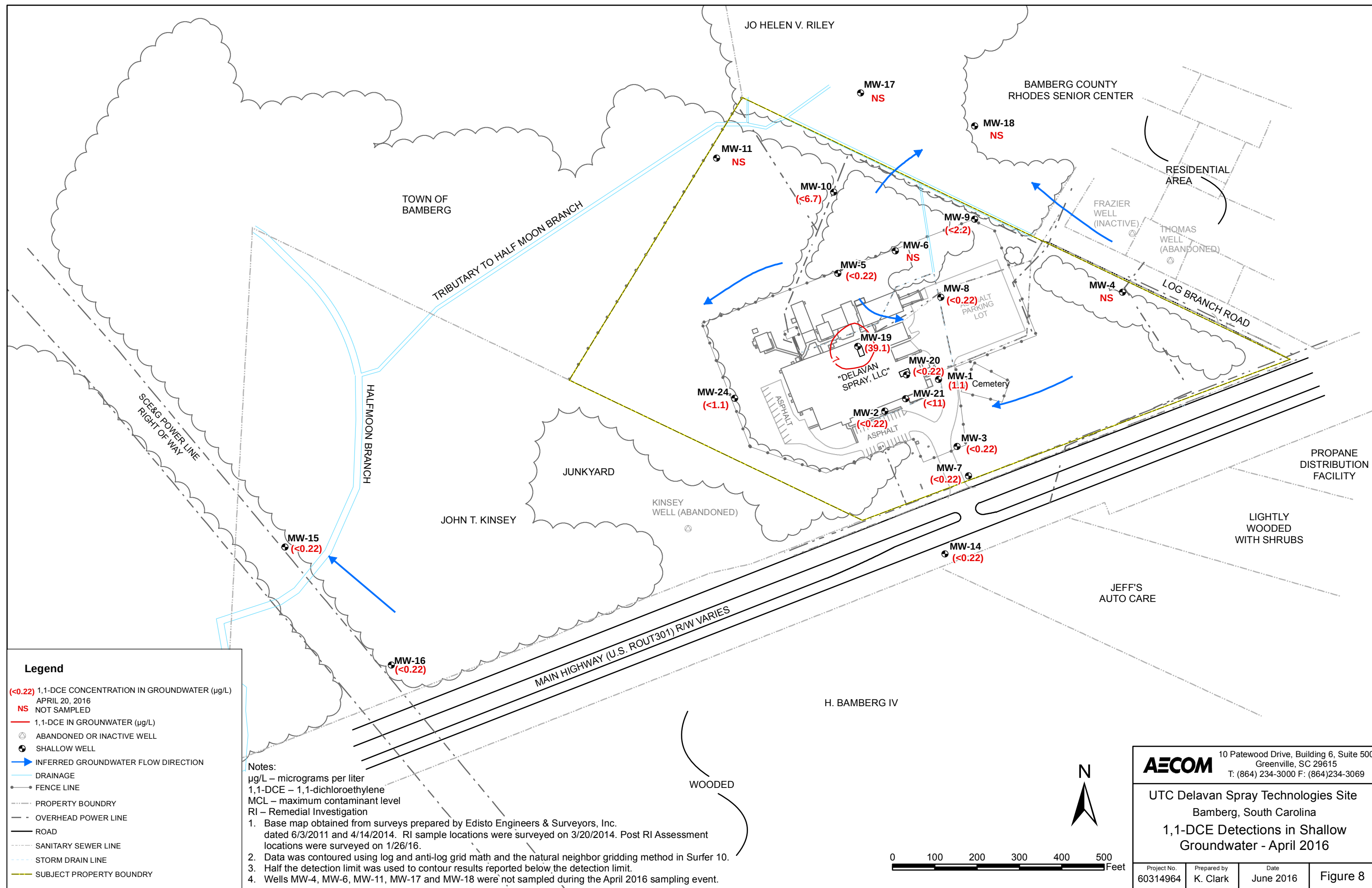


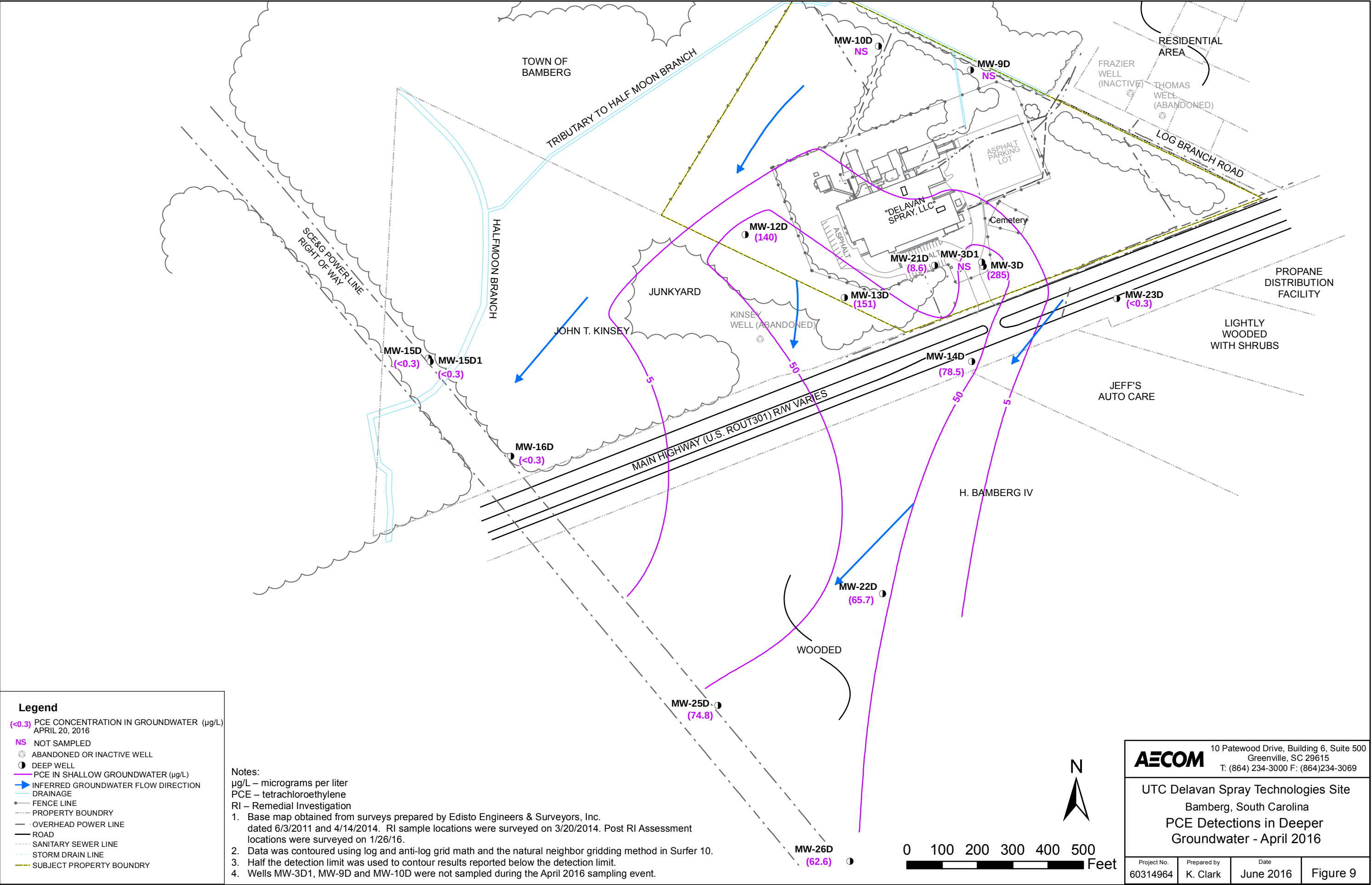


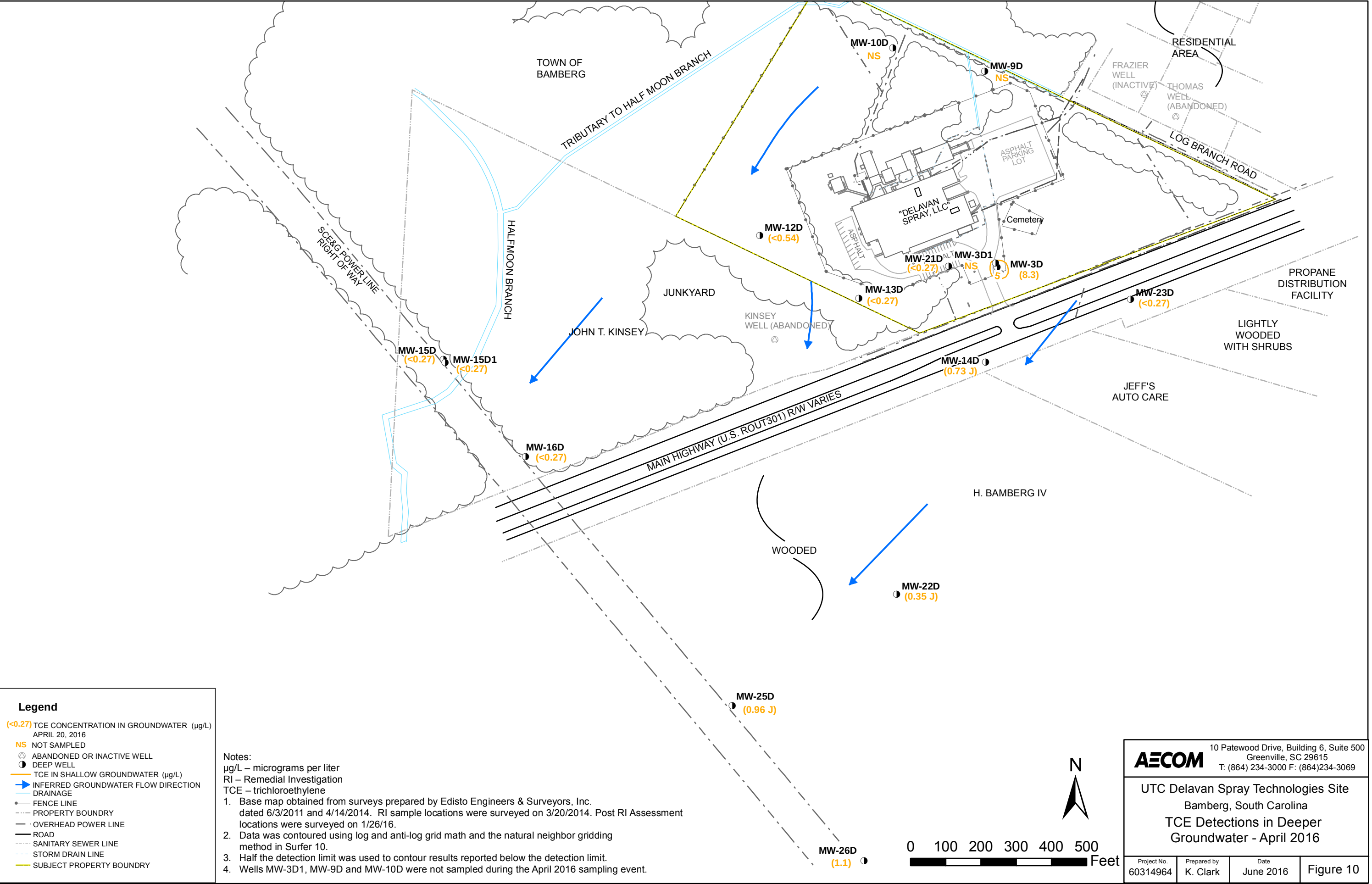


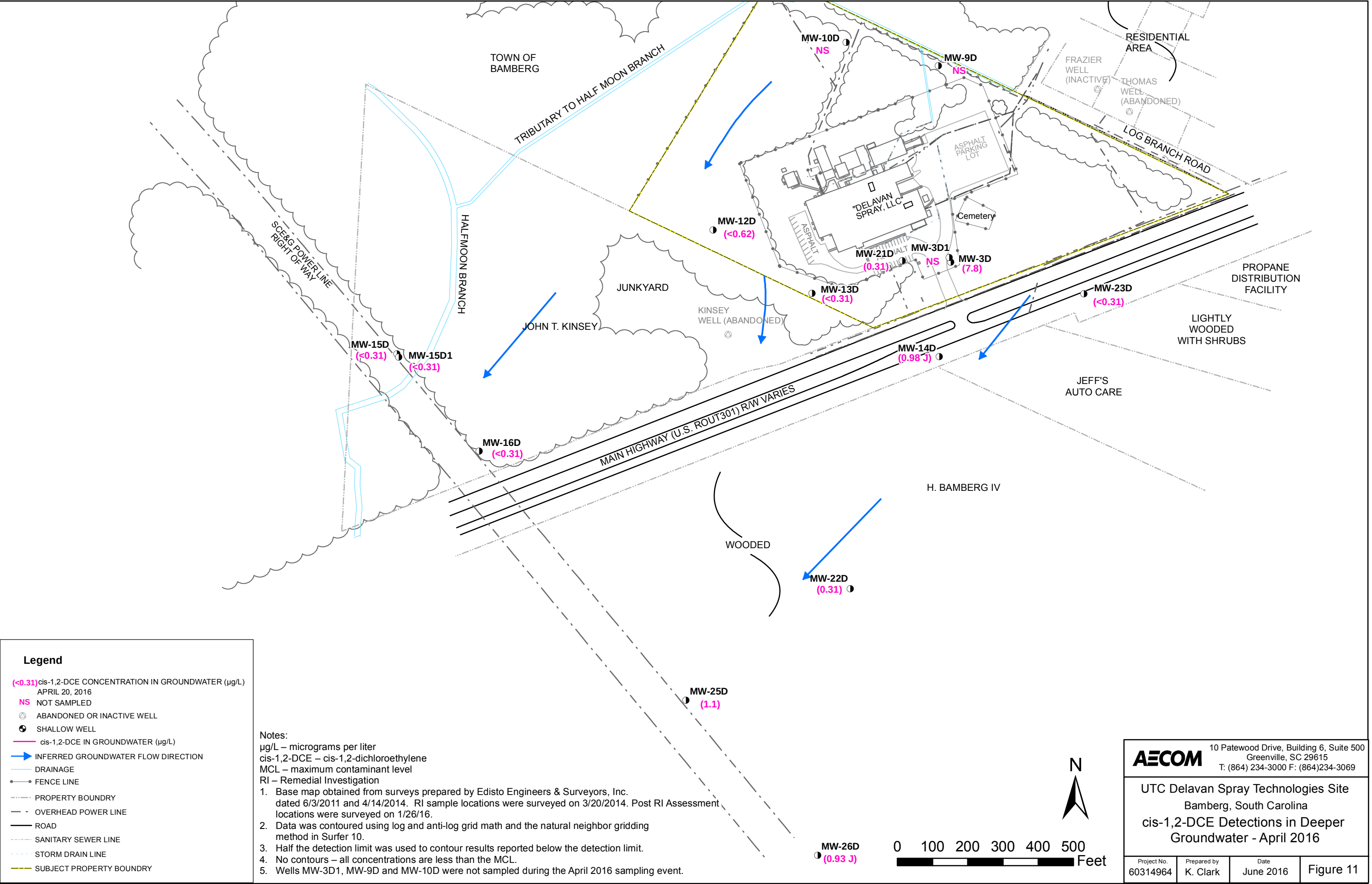


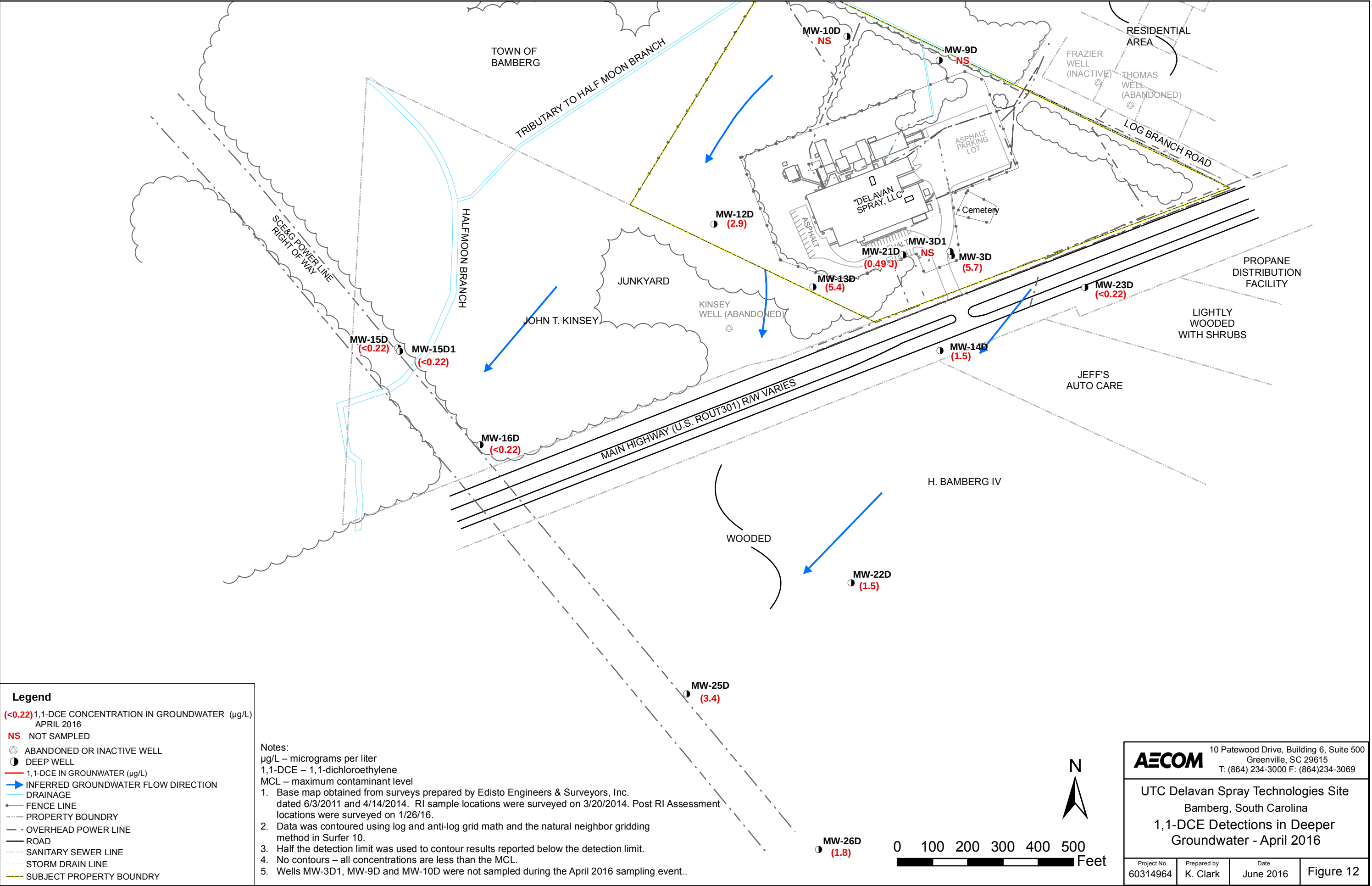












TABLES

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

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

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

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	
							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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
MW-24	21	--	6-21	Shallow	148.52	147.85	NI	NI	NI	NI	NI	NI	13.39	134.46
MW-25D	62	--	52-62	Deeper Limestone	139.30	139.21	NI	NI	NI	NI	NI	NI	5.66	133.55
MW-26D	48	--	38-48	Deeper Limestone	143.83	143.64	NI	NI	NI	NI	NI	NI	10.32	133.32

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.

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. Monitoring weeks NW-24, MW-25D, and MW-26-D were surveyed by AECOM on January 26, 2016.
3. Vertical positions are referenced to the North American Vertical Datum of 1988 (NAVD88).
4. MW-15D1 TOC elevation tied into existing site wells by H&H on April 30, 2012.
5. Information for historic monitoring wells from Table 1 of the RI Workplan (H&H, 2013).

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

Well	pH (S.U.)	Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)
MW-1	4.54	0.033	19.35	2.34	2.42	338.9
MW-2	4.45	0.034	19.27	0.68	5.40	347.1
MW-3	4.00	0.022	19.86	1.90	6.96	434.7
MW-3D	7.51	0.227	20.63	2.67	3.27	265.1
MW-5	4.77	0.021	18.77	1.19	7.93	477.2
MW-7	4.97	0.015	20.05	7.31	3.64	352.7
MW-8	4.61	0.051	21.62	0.54	3.79	462.7
MW-9	4.40	0.030	16.49	2.01	3.34	20.4
MW-10	4.46	0.027	16.25	1.50	1.03	19.4
MW-12D	10.08	0.245	17.95	3.21	5.23	117.6
MW-13D	7.65	0.215	18.53	0.95	5.24	246.4
MW-14	4.00	0.023	18.37	9.67	6.97	444.2
MW-14D	7.72	0.229	20.03	3.59	0.91	201.0
MW-15	4.39	0.201	17.28	3.32	0.21	29.6
MW-15D	7.06	0.428	18.07	2.45	2.04	214.3
MW-15D1	7.48	0.203	19.06	0.69	0.48	-56.7
MW-16	4.84	0.031	16.23	7.39	0.23	106.5
MW-16D	7.44	0.277	17.65	0.00	3.87	193.9
MW-19	4.26	0.077	20.86	0.11	4.87	415.1
MW-20	4.37	0.041	21.38	0.00	6.68	448.5
MW-21	4.17	0.021	20.36	6.86	1.30	304.1
MW-21D	7.38	0.226	20.41	4.41	0.66	-26.4
MW-22D	8.33	0.233	18.15	0.00	3.80	307.9
MW-23D	7.35	0.301	18.97	1.37	2.32	199.2
MW-24	4.33	0.022	17.45	4.25	7.63	312.3
MW-25D	7.57	0.265	18.53	111.30	8.25	319.7
MW-26D	7.45	0.263	18.74	4.17	9.57	336.0

Notes:

°C - degrees Celsius
mg/L - milligrams per liter
mS/cm - milliSiemens per centimeter
mV - millivolts
ORP - oxidation-reduction potential
NS - not sampled
NTUs - Nephelometric Turbidity Units
S.U. - standard units

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-1 FA33107-9 04/13/16	MW-2 FA33107-7 04/13/16	MW-3 FA33107-12 04/13/16	MW-3D FA33107-13 04/13/16	MW-5 FA33062-1 04/11/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)						
1,1,1-Trichloroethane	200	< 1	< 0.2	< 0.2	< 1	< 0.2
1,1,2,2-Tetrachloroethane	—	< 1.6	< 0.33	< 0.33	< 1.6	< 0.33
1,1,2-Trichloroethane	5	< 1.8	< 0.37	< 0.37	< 1.8	< 0.37
1,1-Dichloroethane	—	< 1.3	< 0.26	< 0.26	< 1.3	< 0.26
1,1-Dichloroethylene	7	< 1.1	< 0.22	< 0.22	5.7	< 0.22
1,2-Dichloroethane	5	< 1.4	< 0.28	< 0.28	< 1.4	< 0.28
1,2-Dichloropropane	5	< 1.7	< 0.34	< 0.34	< 1.7	< 0.34
2-Butanone (MEK)	—	< 13	< 2.6	< 2.6	< 13	< 2.6
2-Hexanone	—	< 10	< 2	< 2	< 10	< 2
4-Methyl-2-pentanone (MIBK)	—	< 7	< 1.4	< 1.4	< 7	< 1.4
Acetone	—	< 50	< 10	< 10	< 50	< 10
Benzene	5	< 1	< 0.2	< 0.2	< 1	< 0.2
Bromodichloromethane	80 ¹	< 1.2	< 0.24	< 0.24	< 1.2	< 0.24
Bromoform	80 ¹	< 2.3	< 0.46	< 0.46	< 2.3	< 0.46
Carbon Disulfide	—	< 1.2	< 0.23	< 0.23	< 1.2	< 0.23
Carbon Tetrachloride	5	< 1.5	< 0.3	< 0.3	< 1.5	< 0.3
Chlorobenzene	100	< 1	< 0.2	< 0.2	< 1	< 0.2
Chloroethane	—	< 3.1	< 0.63	< 0.63	< 3.1	< 0.63
Chloroform	80 ¹	< 1.5	< 0.3	< 0.3	< 1.5	< 0.3
cis-1,2-Dichloroethylene	70	19.4	< 0.31	0.68 J//	7.8	< 0.31
cis-1,3-Dichloropropene	—	< 1.3	< 0.26	< 0.26	< 1.3	< 0.26
Dibromochloromethane	80 ¹	< 1.3	< 0.26	< 0.26	< 1.3	< 0.26
Ethylbenzene	700	< 1.3	< 0.25	< 0.25	< 1.3	< 0.25
Methyl Bromide	—	< 2.5	< 0.5	< 0.5	< 2.5	< 0.5
Methyl Chloride	—	< 2.5	< 0.5	< 0.5	< 2.5	< 0.5
Methylene Chloride	5	< 10	< 2	< 2	< 10	< 2
Styrene	100	< 1.2	< 0.24	< 0.24	< 1.2	< 0.24
Tetrachloroethylene	5	468	0.57 J//	98	285	0.53 J//
Toluene	1000	< 1	< 0.2	< 0.2	< 1	< 0.2
trans-1,2-Dichloroethylene	100	< 1.7	< 0.33	< 0.33	< 1.7	< 0.33
trans-1,3-Dichloropropene	—	< 1.2	< 0.25	< 0.25	< 1.2	< 0.25
Trichloroethylene	5	6.2	< 0.27	1.2	8.3	< 0.27
Vinyl Chloride	2	< 1.6	< 0.31	< 0.31	< 1.6	< 0.31
Xylene (total)	10000	< 2.8	< 0.56	< 0.56	< 2.8	< 0.56
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10000	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1000	NA	NA	NA	NA	NA
Sulfate	250,000 ²	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-7 FA33107-11 04/13/16	MW-8 FA33062-4 04/11/16	MW-9 FA33062-9 04/12/16	MW-10 FA33062-7 04/12/16	MW-12D FA33107-2 04/13/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)						
1,1,1-Trichloroethane	200	< 0.2	< 0.2	< 2	< 0.2	< 0.4
1,1,2,2-Tetrachloroethane	—	< 0.33	< 0.33	< 3.3	< 0.33	< 0.65
1,1,2-Trichloroethane	5	< 0.37	< 0.37	< 3.7	< 0.37	< 0.73
1,1-Dichloroethane	—	< 0.26	< 0.26	< 2.6	< 0.26	< 0.51
1,1-Dichloroethylene	7	< 0.22	< 0.22	< 2.2	6.7	2.9
1,2-Dichloroethane	5	< 0.28	< 0.28	< 2.8	< 0.28	< 0.57
1,2-Dichloropropane	5	< 0.34	< 0.34	< 3.4	< 0.34	< 0.69
2-Butanone (MEK)	—	< 2.6	< 2.6	< 26	< 2.6	< 5.1
2-Hexanone	—	< 2	< 2	< 20	< 2	< 4
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 1.4	< 14	< 1.4	< 2.8
Acetone	—	< 10	< 10	< 100	< 10	< 20
Benzene	5	< 0.2	< 0.2	< 2	< 0.2	< 0.41
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 2.4	< 0.24	< 0.48
Bromoform	80 ¹	< 0.46	< 0.46	< 4.6	< 0.46	< 0.93
Carbon Disulfide	—	< 0.23	< 0.23	< 2.3	< 0.23	< 0.46
Carbon Tetrachloride	5	< 0.3	< 0.3	< 3	< 0.3	< 0.6
Chlorobenzene	100	< 0.2	< 0.2	< 2	< 0.2	< 0.4
Chloroethane	—	< 0.63	< 0.63	< 6.3	< 0.63	< 1.3
Chloroform	80 ¹	< 0.3	< 0.3	< 3	< 0.3	< 0.6
cis-1,2-Dichloroethylene	70	< 0.31	< 0.31	49.2	90.8	< 0.62
cis-1,3-Dichloropropene	—	< 0.26	< 0.26	< 2.6	< 0.26	< 0.53
Dibromochloromethane	80 ¹	< 0.26	< 0.26	< 2.6	< 0.26	< 0.52
Ethylbenzene	700	< 0.25	< 0.25	< 2.5	< 0.25	< 0.5
Methyl Bromide	—	< 0.5	< 0.5	< 5	< 0.5	< 1
Methyl Chloride	—	< 0.5	< 0.5	< 5	< 0.5	< 1
Methylene Chloride	5	< 2	< 2	< 20	< 2	< 4
Styrene	100	< 0.24	< 0.24	< 2.4	< 0.24	< 0.48
Tetrachloroethylene	5	< 0.3	7.8	771	43.3	140
Toluene	1000	< 0.2	< 0.2	< 2	1.2	< 0.4
trans-1,2-Dichloroethylene	100	< 0.33	< 0.33	< 3.3	< 0.33	< 0.66
trans-1,3-Dichloropropene	—	< 0.25	< 0.25	< 2.5	< 0.25	< 0.49
Trichloroethylene	5	< 0.27	< 0.27	115	22.1	< 0.54
Vinyl Chloride	2	< 0.31	< 0.31	< 3.1	< 0.31	< 0.63
Xylene (total)	10000	< 0.56	< 0.56	< 5.6	< 0.56	< 1.1
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	< 0.32	< 0.32	NA
Ethene	—	NA	NA	< 0.43	< 0.43	NA
Methane	—	NA	NA	13.8	488	NA
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	NA	NA	3100	3900	NA
Nitrogen, Nitrate	10000	NA	NA	90 J//	< 50	NA
Nitrogen, Nitrite	1000	NA	NA	< 50	< 50	NA
Sulfate	250,000 ²	NA	NA	6400	2700	NA
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	NA	NA	1300	780 J//	NA

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-13D FA33107-6 04/13/16	MW-14 FA33107-8 04/13/16	MW-14D FA33107-10 04/13/16	MW-15 FA33062-5 04/11/16	MW-15D FA33062-3 04/11/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)						
1,1,1-Trichloroethane	200	3.1	< 0.2	< 0.2	< 0.2	< 0.2
1,1,2,2-Tetrachloroethane	—	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37
1,1-Dichloroethane	—	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
1,1-Dichloroethylene	7	5.4	< 0.22	1.5	< 0.22	< 0.22
1,2-Dichloroethane	5	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichloropropane	5	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
2-Butanone (MEK)	—	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acetone	—	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Carbon Disulfide	—	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Carbon Tetrachloride	5	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.31	< 0.31	0.98 J//	< 0.31	< 0.31
cis-1,3-Dichloropropene	—	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Dibromochloromethane	80 ¹	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Ethylbenzene	700	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Methyl Bromide	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2	< 2
Styrene	100	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Tetrachloroethylene	5	151	0.9 J//	78.5	< 0.3	< 0.3
Toluene	1000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
trans-1,2-Dichloroethylene	100	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
trans-1,3-Dichloropropene	—	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Trichloroethylene	5	< 0.27	< 0.27	0.73 J//	< 0.27	< 0.27
Vinyl Chloride	2	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Xylene (total)	10000	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	NA	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA	NA
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	NA	NA	NA	NA	NA
Nitrogen, Nitrate	10000	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1000	NA	NA	NA	NA	NA
Sulfate	250,000 ²	NA	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	NA	NA	NA	NA	NA

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-15D1 FA33062-2 04/11/16	MW-16 FA33107-1 04/13/16	MW-16D FA33107-3 04/13/16	MW-19 FA33062-6 04/12/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)					
1,1,1-Trichloroethane	200	< 0.2	< 0.2	< 0.2	97.5 J//
1,1,2,2-Tetrachloroethane	—	< 0.33	< 0.33	< 0.33	< 33
1,1,2-Trichloroethane	5	< 0.37	< 0.37	< 0.37	< 37
1,1-Dichloroethane	—	< 0.26	< 0.26	< 0.26	< 26
1,1-Dichloroethylene	7	< 0.22	< 0.22	< 0.22	39.1 J//
1,2-Dichloroethane	5	< 0.28	< 0.28	< 0.28	< 28
1,2-Dichloropropane	5	< 0.34	< 0.34	< 0.34	< 34
2-Butanone (MEK)	—	< 2.6	< 2.6	< 2.6	< 260
2-Hexanone	—	< 2	< 2	< 2	< 200
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 1.4	< 1.4	< 140
Acetone	—	< 10	< 10	< 10	< 1000
Benzene	5	< 0.2	< 0.2	< 0.2	< 20
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 0.24	< 24
Bromoform	80 ¹	< 0.46	< 0.46	< 0.46	< 46
Carbon Disulfide	—	< 0.23	< 0.23	< 0.23	< 23
Carbon Tetrachloride	5	< 0.3	< 0.3	< 0.3	< 30
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 20
Chloroethane	—	< 0.63	< 0.63	< 0.63	< 63
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 30
cis-1,2-Dichloroethylene	70	< 0.31	< 0.31	< 0.31	< 31
cis-1,3-Dichloropropene	—	< 0.26	< 0.26	< 0.26	< 26
Dibromochloromethane	80 ¹	< 0.26	< 0.26	< 0.26	< 26
Ethylbenzene	700	< 0.25	< 0.25	< 0.25	< 25
Methyl Bromide	—	< 0.5	< 0.5	< 0.5	< 50
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 50
Methylene Chloride	5	< 2	< 2	< 2	221 J//
Styrene	100	< 0.24	< 0.24	< 0.24	< 24
Tetrachloroethylene	5	< 0.3	< 0.3	< 0.3	16600
Toluene	1000	< 0.2	< 0.2	< 0.2	< 20
trans-1,2-Dichloroethylene	100	< 0.33	< 0.33	< 0.33	< 33
trans-1,3-Dichloropropene	—	< 0.25	< 0.25	< 0.25	< 25
Trichloroethylene	5	< 0.27	< 0.27	< 0.27	< 27
Vinyl Chloride	2	< 0.31	< 0.31	< 0.31	< 31
Xylene (total)	10000	< 0.56	< 0.56	< 0.56	< 56
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)					
Ethane	—	NA	NA	NA	NA
Ethene	—	NA	NA	NA	NA
Methane	—	NA	NA	NA	NA
Water Quality Parameters by USEPA Method 9056 (µg/L)					
Chloride	250,000 ²	NA	NA	NA	NA
Nitrogen, Nitrate	10000	NA	NA	NA	NA
Nitrogen, Nitrite	1000	NA	NA	NA	NA
Sulfate	250,000 ²	NA	NA	NA	NA
Total Organic Carbon by USEPA Method 5310 (µg/L)					
Total Organic Carbon	—	NA	NA	NA	NA

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-20 FA33062-8 04/12/16	MW-21 FA33062-15 04/12/16	MW-21D FA33062-17 04/12/16	MW-22D FA33062-10 04/12/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)					
1,1,1-Trichloroethane	200	< 0.2	< 10	< 0.2	< 0.2
1,1,2,2-Tetrachloroethane	—	< 0.33	< 16	< 0.33	< 0.33
1,1,2-Trichloroethane	5	< 0.37	< 18	< 0.37	< 0.37
1,1-Dichloroethane	—	< 0.26	< 13	< 0.26	< 0.26
1,1-Dichloroethylene	7	< 0.22	< 11	0.49 J//	1.5
1,2-Dichloroethane	5	< 0.28	< 14	< 0.28	< 0.28
1,2-Dichloropropane	5	< 0.34	< 17	< 0.34	< 0.34
2-Butanone (MEK)	—	< 2.6	< 130	< 2.6	< 2.6
2-Hexanone	—	< 2	< 100	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 70	< 1.4	< 1.4
Acetone	—	< 10	< 500	< 10	< 10
Benzene	5	< 0.2	< 10	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.24	< 12	< 0.24	< 0.24
Bromoform	80 ¹	< 0.46	< 23	< 0.46	< 0.46
Carbon Disulfide	—	< 0.23	< 12	< 0.23	< 0.23
Carbon Tetrachloride	5	< 0.3	< 15	< 0.3	< 0.3
Chlorobenzene	100	< 0.2	< 10	< 0.2	< 0.2
Chloroethane	—	< 0.63	< 31	< 0.63	< 0.63
Chloroform	80 ¹	< 0.3	< 15	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	0.72 J//	383	< 0.31	< 0.31
cis-1,3-Dichloropropene	—	< 0.26	< 13	< 0.26	< 0.26
Dibromochloromethane	80 ¹	< 0.26	< 13	< 0.26	< 0.26
Ethylbenzene	700	< 0.25	< 13	< 0.25	< 0.25
Methyl Bromide	—	< 0.5	< 25	< 0.5	< 0.5
Methyl Chloride	—	< 0.5	< 25	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 100	< 2	< 2
Styrene	100	< 0.24	< 12	< 0.24	< 0.24
Tetrachloroethylene	5	480	13200	8.6	65.7
Toluene	1000	< 0.2	< 10	< 0.2	< 0.2
trans-1,2-Dichloroethylene	100	< 0.33	< 17	< 0.33	< 0.33
trans-1,3-Dichloropropene	—	< 0.25	< 12	< 0.25	< 0.25
Trichloroethylene	5	3.2	216	< 0.27	0.35 J//
Vinyl Chloride	2	< 0.31	< 16	< 0.31	< 0.31
Xylene (total)	10000	< 0.56	< 28	< 0.56	< 0.56
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)					
Ethane	—	NA	< 0.32	< 0.32	< 0.32
Ethene	—	NA	< 0.43	< 0.43	< 0.43
Methane	—	NA	219	0.85	< 0.16
Water Quality Parameters by USEPA Method 9056 (µg/L)					
Chloride	250,000 ²	NA	3700	3900	6800
Nitrogen, Nitrate	10000	NA	70 J//	70 J//	890
Nitrogen, Nitrite	1000	NA	50 J//	< 50	< 50
Sulfate	250,000 ²	NA	< 600	3100	4700
Total Organic Carbon by USEPA Method 5310 (µg/L)					
Total Organic Carbon	—	NA	920 J//	280 J//	420 J//

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-23D FA33107-4 04/13/16	MW-24 FA33062-12 04/12/16	MW-25D FA33062-14 04/12/16	MW-26D FA33062-16 04/12/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)					
1,1,1-Trichloroethane	200	< 0.2	< 1	< 0.2	< 0.2
1,1,2,2-Tetrachloroethane	—	< 0.33	< 1.6	< 0.33	< 0.33
1,1,2-Trichloroethane	5	< 0.37	< 1.8	< 0.37	< 0.37
1,1-Dichloroethane	—	< 0.26	< 1.3	< 0.26	< 0.26
1,1-Dichloroethylene	7	< 0.22	< 1.1	3.4	1.8
1,2-Dichloroethane	5	< 0.28	< 1.4	< 0.28	< 0.28
1,2-Dichloropropane	5	< 0.34	< 1.7	< 0.34	< 0.34
2-Butanone (MEK)	—	< 2.6	< 13	< 2.6	< 2.6
2-Hexanone	—	< 2	< 10	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 7	< 1.4	< 1.4
Acetone	—	< 10	< 50	< 10	< 10
Benzene	5	< 0.2	< 1	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.24	< 1.2	< 0.24	< 0.24
Bromoform	80 ¹	< 0.46	< 2.3	< 0.46	< 0.46
Carbon Disulfide	—	< 0.23	< 1.2	< 0.23	< 0.23
Carbon Tetrachloride	5	< 0.3	< 1.5	< 0.3	< 0.3
Chlorobenzene	100	< 0.2	< 1	< 0.2	< 0.2
Chloroethane	—	< 0.63	< 3.1	< 0.63	< 0.63
Chloroform	80 ¹	< 0.3	< 1.5	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.31	59.2	1.1	0.93 J//
cis-1,3-Dichloropropene	—	< 0.26	< 1.3	< 0.26	< 0.26
Dibromochloromethane	80 ¹	< 0.26	< 1.3	< 0.26	< 0.26
Ethylbenzene	700	< 0.25	< 1.3	< 0.25	< 0.25
Methyl Bromide	—	< 0.5	< 2.5	< 0.5	< 0.5
Methyl Chloride	—	< 0.5	< 2.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 10	< 2	< 2
Styrene	100	< 0.24	< 1.2	< 0.24	< 0.24
Tetrachloroethylene	5	< 0.3	1160	74.8	62.6
Toluene	1000	< 0.2	< 1	< 0.2	< 0.2
trans-1,2-Dichloroethylene	100	< 0.33	< 1.7	< 0.33	< 0.33
trans-1,3-Dichloropropene	—	< 0.25	< 1.2	< 0.25	< 0.25
Trichloroethylene	5	< 0.27	6.1	0.96 J//	1.1
Vinyl Chloride	2	< 0.31	< 1.6	< 0.31	< 0.31
Xylene (total)	10000	< 0.56	< 2.8	< 0.56	< 0.56
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)					
Ethane	—	NA	< 0.32	< 0.32	< 0.32
Ethene	—	NA	< 0.43	< 0.43	< 0.43
Methane	—	NA	< 0.16	0.17 J//	< 0.16
Water Quality Parameters by USEPA Method 9056 (µg/L)					
Chloride	250,000 ²	NA	3800	9800	9800
Nitrogen, Nitrate	10000	NA	80 J//	1200	1200
Nitrogen, Nitrite	1000	NA	< 50	< 50	< 50
Sulfate	250,000 ²	NA	2500	3400	3900
Total Organic Carbon by USEPA Method 5310 (µg/L)					
Total Organic Carbon	—	NA	370 J//	< 230	240 J//

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 µg/L.

² Secondary Standard.

— - Indicates No Standard (for screening criteria) or Not Analyzed (for analytical data).

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 22, 2012) were also identified for the list of detected chemicals in groundwater. In each case, however, they were the same values as the USEPA MCLs.

See Table 6 for explanation of data qualifiers.

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

Sample ID Laboratory ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA33107-14 4/13/2016
Volatile Organic Compounds by Method 8260B (µg/L)		
1,1,1-Trichloroethane	—	1.3 J//
1,1,1,2-Tetrachloroethane	—	< 0.82
1,1,2-Trichloroethane	—	< 0.92
1,1-Dichloroethane	—	< 0.64
1,1-Dichloroethylene	700	0.8 J//
1,2-Dichloroethane	500	< 0.71
1,2-Dichloropropane	—	< 0.86
2-Butanone (MEK)	200,000	< 6.4
2-Hexanone	—	< 5
4-Methyl-2-pentanone (MIBK)	—	< 3.5
Acetone	—	< 25
Benzene	500	< 0.51
Bromodichloromethane	—	< 0.6
Bromoform	—	< 1.2
Carbon Disulfide	—	< 0.58
Carbon Tetrachloride	500	< 0.75
Chlorobenzene	100,000	< 0.5
Chloroethane	—	< 1.6
Chloroform	6,000	< 0.75
cis-1,2-Dichloroethylene	—	9.4
cis-1,3-Dichloropropene	—	< 0.66
Dibromochloromethane	—	< 0.65
Ethylbenzene	—	< 0.63
Methyl Bromide	—	< 1.3
Methyl Chloride	—	< 1.3
Methylene Chloride	—	< 5
Styrene	—	< 0.6
Tetrachloroethylene	700	273
Toluene	—	< 0.5
trans-1,2-Dichloroethylene	—	< 0.83
trans-1,3-Dichloropropene	—	< 0.62
Trichloroethylene	500	4.4
Vinyl Chloride	200	< 0.79
Xylene (total)	—	< 1.4
Semivolatile Organic Compounds by Method 8270D (µg/L)		
1,2,4-Trichlorobenzene	—	< 0.5
1,2-Dichlorobenzene	—	< 0.5
1,3-Dichlorobenzene	—	< 0.5
1,4-Dichlorobenzene	7,500	< 0.5
2,4,5-Trichlorophenol	400,000	< 1
2,4,6-Trichlorophenol	2,000	< 0.86
2,4-Dichlorophenol	—	< 0.63
2,4-Dimethylphenol	—	< 0.7
2,4-Dinitrophenol	—	< 5
2,4-Dinitrotoluene	130	< 0.63
2,6-Dinitrotoluene	—	< 0.58
2-Chloronaphthalene	—	< 0.5
2-Chlorophenol	—	< 0.64
2-Methylnaphthalene	—	< 0.56
2-Methylphenol	200,000	< 0.58
2-Nitroaniline	—	< 0.7
2-Nitrophenol	—	< 0.62
3&4-Methylphenol	200,000	< 1.1
3,3'-Dichlorobenzidine	—	< 0.5
3-Nitroaniline	—	< 0.75
4,6-Dinitro-o-cresol	—	< 2
4-Bromophenyl Phenyl Ether	—	< 0.5
4-Chloro-3-methyl Phenol	—	< 0.74
4-Chloroaniline	—	< 0.72
4-Chlorophenyl Phenyl Ether	—	< 0.58
4-Nitroaniline	—	< 0.72
4-Nitrophenol	—	< 5
Acenaphthene	—	< 0.56
Acenaphthylene	—	< 0.58
Anthracene	—	< 0.61
Benzo(a)anthracene	—	< 0.5
Benzo(a)pyrene	—	< 0.5
Benzo(b)fluoranthene	—	< 0.54

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

Sample ID Laboratory ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA33107-14 4/13/2016
Semivolatile Organic Compounds by Method 8270D (µg/L)		
Benzo(g,h,i)perylene	—	< 0.5
Benzo(k)fluoranthene	—	< 0.63
Benzoic Acid	—	< 10
Benzyl Alcohol	—	< 0.56
bis(2-Chloroethoxy)methane	—	< 0.68
bis(2-Chloroethyl)ether	—	< 0.69
bis(2-Chloroisopropyl)ether	—	< 0.69
bis(2-Ethylhexyl)phthalate	—	< 1
Butyl Benzyl Phthalate	—	< 1
Carbazole	—	< 0.56
Chrysene	—	< 0.53
Dibenzo(a,h)anthracene	—	< 0.76
Dibenzofuran	—	< 0.67
Diethyl Phthalate	—	< 1
Dimethyl Phthalate	—	< 1
Di-n-butyl Phthalate	—	< 1
Di-n-octyl Phthalate	—	< 1
Fluoranthene	—	< 0.5
Fluorene	—	< 0.65
Hexachlorobenzene	130	< 0.55
Hexachlorobutadiene	500	< 0.51
Hexachlorocyclopentadiene	—	< 1
Hexachloroethane	3,000	< 0.51
Indeno(1,2,3-cd)pyrene	—	< 0.5
Isophorone	—	< 0.67
Naphthalene	—	< 0.5
Nitrobenzene	2,000	< 0.66
N-Nitrosodi-n-propylamine	—	< 0.58
N-Nitrosodiphenylamine	—	< 0.7
Pentachlorophenol	100,000	< 5
Phenanthrene	—	< 0.6
Phenol	—	< 0.5
Pyrene	—	< 0.55
Metals by Method 6010C/7470B (µg/L)		
Antimony	—	< 1
Arsenic	5,000	< 1.3
Beryllium	—	0.2 J//
Cadmium	1,000	0.2 J//
Chromium	5,000	9.4 J//
Copper	—	1.3 J//
Lead	5,000	< 1.1
Mercury	200	< 0.03
Nickel	—	1.9 J//
Selenium	1,000	< 2.9
Silver	5,000	< 0.7
Thallium	—	< 1.4
Zinc	—	15.2 J//

Notes:

— - No Standard

IDW - Investigation Derived Waste

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

USEPA Toxicity Characteristic - United States Environmental Protection

Agency Maximum Concentration of Contaminants for the Toxicity

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

Bold font and shading indicates the analyte was detected.

See Table 6 for explanation of data qualifiers.

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

Summary of Calculated Relative Percent Differences in Groundwater Field Duplicate Samples

Sample ID Laboratory ID Date Collected	MW-22D FA33062-10 04/12/16	MW-22D-A FA33062-11 04/12/16	Relative Percent Difference	MW-23D FA33107-4 04/13/16	MW-23D-A FA33107-5 04/13/16	Relative Percent Difference	MW-24 FA33062-12 04/12/16	MW-24-A FA33062-13 04/12/16	Relative Percent Difference
Volatile Organic Compounds by USEPA Method 8260B (µg/L)									
1,1,1-Trichloroethane	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 1	< 2	NC
1,1,2,2-Tetrachloroethane	< 0.33	< 0.33	NC	< 0.33	< 0.33	NC	< 1.6	< 3.3	NC
1,1,2-Trichloroethane	< 0.37	< 0.37	NC	< 0.37	< 0.37	NC	< 1.8	< 3.7	NC
1,1-Dichloroethane	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 1.3	< 2.6	NC
1,1-Dichloroethylene	1.5	1.8	18	< 0.22	< 0.22	NC	< 1.1	< 2.2	NC
1,2-Dichloroethane	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 1.4	< 2.8	NC
1,2-Dichloropropane	< 0.34	< 0.34	NC	< 0.34	< 0.34	NC	< 1.7	< 3.4	NC
2-Butanone (MEK)	< 2.6	< 2.6	NC	< 2.6	< 2.6	NC	< 13	< 26	NC
2-Hexanone	< 2	< 2	NC	< 2	< 2	NC	< 10	< 20	NC
4-Methyl-2-pentanone (MIBK)	< 1.4	< 1.4	NC	< 1.4	< 1.4	NC	< 7	< 14	NC
Acetone	< 10	< 10	NC	< 10	< 10	NC	< 50	< 100	NC
Benzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 1	< 2	NC
Bromodichloromethane	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 1.2	< 2.4	NC
Bromoform	< 0.46	< 0.46	NC	< 0.46	< 0.46	NC	< 2.3	< 4.6	NC
Carbon Disulfide	< 0.23	< 0.23	NC	< 0.23	< 0.23	NC	< 1.2	< 2.3	NC
Carbon Tetrachloride	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 1.5	< 3	NC
Chlorobenzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 1	< 2	NC
Chloroethane	< 0.63	< 0.63	NC	< 0.63	< 0.63	NC	< 3.1	< 6.3	NC
Chloroform	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 1.5	< 3	NC
cis-1,2-Dichloroethylene	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	59.2	51.7	14
cis-1,3-Dichloropropene	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 1.3	< 2.6	NC
Dibromochloromethane	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 1.3	< 2.6	NC
Ethylbenzene	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 1.3	< 2.5	NC
Methyl Bromide	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 2.5	< 5	NC
Methyl Chloride	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 2.5	< 5	NC
Methylene Chloride	< 2	< 2	NC	< 2	< 2	NC	< 10	< 20	NC
Styrene	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 1.2	< 2.4	NC
Tetrachloroethylene	65.7	85.8	27	< 0.3	< 0.3	NC	1160	925	23
Toluene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 1	< 2	NC
trans-1,2-Dichloroethylene	< 0.33	< 0.33	NC	< 0.33	< 0.33	NC	< 1.7	< 3.3	NC
trans-1,3-Dichloropropene	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 1.2	< 2.5	NC
Trichloroethylene	0.35	0.41	J//	< 0.27	< 0.27	NC	6.1	6.6	J//
Vinyl Chloride	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 1.6	< 3.1	NC
Xylene (total)	< 0.56	< 0.56	NC	< 0.56	< 0.56	NC	< 2.8	< 5.6	NC

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

Summary of Calculated Relative Percent Differences in Groundwater Field Duplicate Samples

Sample ID Laboratory ID Date Collected	MW-22D FA33062-10 04/12/16	MW-22D-A FA33062-11 04/12/16	Relative Percent Difference	MW-23D FA33107-4 04/13/16	MW-23D-A FA33107-5 04/13/16	Relative Percent Difference	MW-24 FA33062-12 04/12/16	MW-24-A FA33062-13 04/12/16	Relative Percent Difference
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)									
Ethane	< 0.32	NA	NC	NA	NA	NC	< 0.32	NA	NC
Ethene	< 0.43	NA	NC	NA	NA	NC	< 0.43	NA	NC
Methane	< 0.16	NA	NC	NA	NA	NC	< 0.16	NA	NC
Water Quality Parameters by USEPA Method 9056 (µg/L)									
Chloride	6800	NA	NC	NA	NA	NC	3800	NA	NC
Nitrogen, Nitrate	890	NA	NC	NA	NA	NC	80 J//	NA	NC
Nitrogen, Nitrite	< 50	NA	NC	NA	NA	NC	< 50	NA	NC
Sulfate	4700	NA	NC	NA	NA	NC	2500	NA	NC
Total Organic Carbon by USEPA Method 5310 (µg/L)									
Total Organic Carbon	420 J//	NA	NC	NA	NA	NC	370 J//	NA	NC

Notes:

-A - Indicates a field duplicate sample.

NA - Not Analyzed

NC - Not Calculated

RPD - Relative Percent Difference

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

Bold font and shading indicate the concentration is detected.

See Table 6 for explanation of data qualifiers.

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

Summary of Results in Trip Blank Samples

Sample ID Laboratory ID Date Collected	TRIP BLANK FA33062-18 04/12/16	TRIP BLANK FA33107-15 04/13/16
Volatile Organic Compounds by USEPA Method 8260B (µg/L)		
1,1,1-Trichloroethane	< 0.2	< 0.2
1,1,2,2-Tetrachloroethane	< 0.33	< 0.33
1,1,2-Trichloroethane	< 0.37	< 0.37
1,1-Dichloroethane	< 0.26	< 0.26
1,1-Dichloroethylene	< 0.22	< 0.22
1,2-Dichloroethane	< 0.28	< 0.28
1,2-Dichloropropane	< 0.34	< 0.34
2-Butanone (MEK)	< 2.6	< 2.6
2-Hexanone	< 2	< 2
4-Methyl-2-pentanone (MIBK)	< 1.4	< 1.4
Acetone	< 10	< 10
Benzene	< 0.2	< 0.2
Bromodichloromethane	< 0.24	< 0.24
Bromoform	< 0.46	< 0.46
Carbon Disulfide	< 0.23	< 0.23
Carbon Tetrachloride	< 0.3	< 0.3
Chlorobenzene	< 0.2	< 0.2
Chloroethane	< 0.63	< 0.63
Chloroform	< 0.3	< 0.3
cis-1,2-Dichloroethylene	< 0.31	< 0.31
cis-1,3-Dichloropropene	< 0.26	< 0.26
Dibromochloromethane	< 0.26	< 0.26
Ethylbenzene	< 0.25	< 0.25
Methyl Bromide	< 0.5	< 0.5
Methyl Chloride	< 0.5	< 0.5
Methylene Chloride	< 2	< 2
Styrene	< 0.24	< 0.24
Tetrachloroethylene	< 0.3	< 0.3
Toluene	< 0.2	< 0.2
trans-1,2-Dichloroethylene	< 0.33	< 0.33
trans-1,3-Dichloropropene	< 0.25	< 0.25
Trichloroethylene	< 0.27	< 0.27
Vinyl Chloride	< 0.31	< 0.31
Xylene (total)	< 0.56	< 0.56

Notes:

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

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

<u>Modifier</u>	<u>Description</u>
<	Indicates not detected at the reporting limit indicated.
"/"	Separates the laboratory added data qualifiers from the validation data qualifiers. The laboratory added data qualifiers precede the first "/". The result qualifiers follow the first "/", and the analysis qualifiers follow the second "/". The result qualifiers are a product of the data validation process, and the analysis qualifier defines 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>
No result data qualifiers were added as a result of the validation process.	

Analysis Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
No analysis data qualifiers were added as a result of the validation process.	

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 Forms
Log Books



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 Muga</i>	Signature <i>Randy Muga</i>
Date / Time 4-11-2016	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions	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 <i>Justin B. Her</i>	Signature <i>Justin B. Her</i>
Date / Time <i>4/12/16 0730</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions <i>Cloudy / Rain So'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>Randy Merga</i>	<i>Randy Merga</i>

*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>Justin Butler</i>	Signature <i>Justin Butler</i>
Date / Time <i>4/13/16 0730</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions <i>cloudy 60'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>Randy Morgan</i>	<i>Randy Morgan</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: 4-11-2016

CLIENT: UTC

MEASURED BY: R Morgan / J. Butler

SURVEY DATUM:

MEASURING DEVICE: electronic water level indicator

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				11.40	
MW-2				10.43	
MW-3				13.19	
MW-3D				14.04	
MW-3DI				13.83	
MW-4				5.22	
MW-5				6.31	
MW-6				4.14	
MW-7				13.19	
MW-8				10.62	
MW-9				5.14	
MW-9D				9.44	
MW-10				3.52	
MW-10D				7.27	
MW-11				6.64	
MW-12D				13.58	
MW-13D				12.32	
MW-14				11.18	
MW-14D				13.04	
MW-15				2.69	
MW-15D				2.20	
MW-15DI				2.32	
MW-16				2.73	
MW-16D				5.08	
MW-17				2.79	
MW-18				9.86	

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

MEASURING DEVICE: electronic water level indicator

[illegible]

LLMH - Lower Lip of Man Hole

YSI 556 MPS / Water Quality Calibration Certificate



Cal Standard	Temp, LAB, C :	Temp, FIELD, C :
Conductivity 1413 UMHO/CM @ 25°C	Lot # 7507209	Expiration 7/16
	Post-Cal, LAB 1.278	Post-Cal, FIELD
	Acceptable Range (+/- .5%)	
PH 4.00 @ 25°C	Lot # 4662304	Expiration 2/18
	Post-Cal, LAB 4.00	Post-Cal, FIELD
	Acceptable Range (+/- 0.2 units)	
PH 7.01 @ 25°C	Lot # 760163	Expiration 2/15
	Post-Cal, LAB 7.01	Post-Cal, FIELD
	Acceptable Range (+/- 0.2 units)	
PH 10.01 @ 25°C	Lot # 7603017	Expiration 3/18
	Post-Cal, LAB 10.00	Post-Cal, FIELD
	Acceptable Range (+/- 0.2 units)	
ORP ZOBELLS 231.0 MV @ 25°C	Lot # 7603533	Expiration 7/16
	Post-Cal, LAB 237.5	Post-Cal, FIELD
	Acceptable Range (+/- 20 MV)	

Dissolved Oxygen (Saturated Air)	Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) / (+/- 2%)
		21.61	96.1	8.42	
	Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane: ☒ Yes ☐ No

Do Cap Color: ☐ Black ☒ Blue ☐ Yellow

Model: 556 S/N: 085101253 Cable: 15548

Calibration referenced to the temperature of the calibration standards.

Turbidity	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
.02 NTU	40701	JUL-16	0.02		(.0196 to .0204)
10 NTU	40846	AUG-16	10.01		(9.8 to 10.2)
1000 NTU	40703	JUL-16	10.00 1000		(970 to 1031)

Model: Micro TPW S/N: 200711199

Calibrated By: Eric Olson Date of Calibration: 4-8-16

Project Name: UTC Project number: 60314964.9

Signed: Eric Olson

YSI 556 MPS / Water Quality Calibration Certificate



Cal Standard

Temp, LAB, C :

21-8

Temp, FIELD, C :

Conductivity

1413 UMHO/CM

@ 25°C

Lot #

7507209

Expiration

7/16

Post-Cal, LAB

1.278

Post-Cal, FIELD

Acceptable Range

(+/- .5%)

PH 4.00

@ 25°C

Lot #

4662304

Expiration

2/18

Post-Cal, LAB

4.01

Post-Cal, FIELD

Acceptable Range

(+/- 0.2 units)

PH 7.01

@ 25°C

Lot #

760163

Expiration

2/15

Post-Cal, LAB

7.01

Post-Cal, FIELD

Acceptable Range

(+/- 0.2 units)

PH 10.01

@ 25°C

Lot #

7603017

Expiration

3/18

Post-Cal, LAB

9.98

Post-Cal, FIELD

Acceptable Range

(+/- 0.2 units)

ORP

ZOBELLS

231.0 MV @ 25°C

Lot #

7603533

Expiration

7/16

Post-Cal, LAB

237.5

Post-Cal, FIELD

Acceptable Range

(+/- 20 MV)

Dissolved Oxygen

(Saturated Air)

Post-Cal, LAB

Temp, C

22.75

% Saturation

96.0

mg/L

8.27

Acceptable Range

(+/- 2%) / (+/- 2%)

Post-Cal, FIELD

Temp, C

% Saturation

mg/L

New DO Membrane

☐ Yes☒ No

Do Cap Color

☐ Black☒ Blue☐ Yellow

Model

556

S/N

05D1437AR

Cable

14633

Calibration referenced to the temperature of the calibration standards.

Turbidity

.02 NTU

10 NTU

1000 NTU

Lot #

40701

Expiration

JUL-16

Post-Cal, LAB

0.02

Post-Cal, FIELD

Acceptable Range

(.0196 to .0204)

40846

AUG-16

9.98

(9.8 to 10.2)

40703

JUL-16

1003

(970 to 1031)

Model

Micro TPW

S/N

200711197

Calibrated By

Eric Olson

Date of Calibration

4-8-16

Project Name

UTC

Project number

60314964.9

Signed :

YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard

Temp, LAB, C : 21.8 Temp, FIELD, C :

Conductivity

1413 UMHO/CM
@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7507209	7/16	1.278		(+/- .5%)

PH 4.00

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
4662304	2/18	4.01		(+/- 0.2 units)

PH 7.01

@ 25°C

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

PH 10.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7603017	3/18	9.98		(+/- 0.2 units)

ORP
ZOBELLS

231.0 MV @ 25°C

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

Dissolved Oxygen

(Saturated Air)

Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) / (+/- 2%)
	22.75	96.0	8.27	
Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane

☐ Yes ☒ No

Do Cap Color

☐ Black ☒ Blue ☐ Yellow

Model

556 ▼

S/N 05D1437AR ▼

Cable 14633 ▼

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
40701	JUL-16	0.02		(.0196 to .0204)
40846	AUG-16	9.98		(9.8 to 10.2)
40703	JUL-16	1003		(970 to 1031)

Model

Micro TPW ▼

S/N 200711197 ▼

Calibrated By

Eric Olson ▼

Date of Calibration 4-8-16

Project Name

UTC

Project number

60314964.9

Signed :

Eric Olson

YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard

Temp, LAB, C : 21.46 Temp, FIELD, C :

Conductivity

1413 UMHO/CM
@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7507209	7/16	1.278		(+/- .5%)

PH 4.00

@ 25°C

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

PH 7.01

@ 25°C

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

PH 10.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7603017	3/18	10.00		(+/- 0.2 units)

 ORP
ZOBELLS

231.0 MV @ 25°C

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

 Dissolved Oxygen
(Saturated Air)

Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) / (+/- 2%)
	21.61	96.1	8.42	
Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane

☒ Yes ☐ No

Do Cap Color

☐ Black ☒ Blue ☐ Yellow

Model

556 ▼

S/N

085101253 ▼

Cable

15J48 ▼

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
40701	JUL-16	0.02		(.0196 to .0204)
40846	AUG-16	10.01		(9.8 to 10.2)
40703	JUL-16	10.00 1000		(970 to 1031)

Model

Micro TPW ▼

S/N

200711199 ▼

Calibrated By

Eric Olson ▼

Date of Calibration

4-8-16

Project Name

UTC

Project number

60314964.9

Signed :

Eric Olson

Project Name: UTC Delavan
 Project Number: 00314964.9
 Calibrated By: Randy Nuyga
 Signature: Randy Nuyga

YSI 556 SN: 05D1437 AR
 Turbidimeter Model/ SN: MicroTPW 200711197
 Additional Equipment/ SN: 4-11-2016
 Date: 4-11-2016

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

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

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

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

Table 2: Atmospheric Pressure / Altitude Table					
Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)
0	760	1126	730	2290	699
276	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

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

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	<u>762.0</u>		<u>0930</u>	mmHg
Temperature (Saturated Air)	<u>18.99</u>		<u>0930</u>	c
Temperature (Calibration Solution)				c
D.O.	<u>4.80</u>		<u>0930</u>	mg/L
PH 7				SU
PH 4				SU
PH 10				SU
Specific Conductance				mS/cm
ORP				mV

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

*D.O. out of range will not calibrate
 returned for another meter*

Project Name: UTC Delavan
 Project Number: 00314964.9
 Calibrated By: Kandy Morya
 Signature: Kandy Morya

YSI 556 SN: 085101253
 Turbidimeter Model/SN: MicroTPW 220711199
 Additional Equipment/VSN: 4-11-2016
 Date: 4-11-2016

Operation Notes:

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

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

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

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

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

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

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	762.1	762.1	0933	mmHg
Temperature (Saturated Air)	18.96	19.24	0933	c
Temperature (Calibration Solution)	20.03	19.97	0950	c
D.O.	9.72	9.26	0933	mg/L
PH 7	7.09	7.02	0937	SU
PH 4	3.88	4.00	0941	SU
PH 10	9.79	10.00	0945	SU
Specific Conductance	1.281	1.278	0937	mS/cm
ORP	244.4	237.5	0950	mV

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

Project Name: UTC Delavan
 Project Number: 60314964.9
 Calibrated By: Randy Morgan
 Signature: Randy Morgan

YSI 556 SN: 0501437 AR
 Turbidimeter Model/SN: MicroTPW 200711197
 Additional Equipment/SN: _____
 Date: 4-18-16

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	898.00	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	1276.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

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

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

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

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	756.8		0730	mmHg
Temperature (Saturated Air)	23.18	22.49	0730	c
Temperature (Calibration Solution)	22.67	22.82	0750	c
D.O.	7.82	8.51	0730	mg/L
PH 7	7.15	7.02	0738	SU
PH 4	3.90	4.00	0742	SU
PH 10	9.81	10.01	0746	SU
Specific Conductance	1.282	1.278	0734	mS/cm
ORP	229.6	237.5	0750	mV

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

Project Name: LTC Delavan
 Project Number: 603149649
 Calibrated By: Randy Morgan
 Signature: Randy Morgan

YSI 556 SN: 0501437AR
 Turbidimeter Model/SN: MicroTPW
 Additional Equipment/SN: _____
 Date: April 13, 2016

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

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

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	<u>757.6</u>	<u>757.6</u>		mmHg
Temperature (Saturated Air)	<u>22.90</u>	<u>23.35</u>		C
Temperature (Calibration Solution)	<u>23.30</u>	<u>22.90</u>		C
D.O.	<u>8.53</u>	<u>8.50</u>		mg/L
PH 7	<u>7.10</u>	<u>7.02</u>		SU
PH 4	<u>3.88</u>	<u>4.00</u>		SU
PH 10	<u>9.79</u>	<u>10.00</u>		SU
Specific Conductance	<u>1.264</u>	<u>1.278</u>		mS/cm
ORP	<u>237.7</u>	<u>237.5</u>		mV

Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: <u>YES</u> NO Circle One
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Project Name: UTC Delavan Spray Technologies Site
 Project Number: 60314964
 Calibrated By: Justin Butler
 Signature: Justin Butler

YSI 556 SN: 04M1790 AA
 Turbidimeter Model/SN: MicroTPW 20071197
 Additional Equipment/SN: _____
 Date: 4/11/16

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	763.3		1615	mmHg
Temperature (Saturated Air)	30.57	31.01	1628	c
Temperature (Calibration Solution)	27.45	27.41	1625	c
D.O.	7.52	7.43	1615	mg/L
PH 7	7.09	7.01	1619	SU
PH 4	3.86	4.00	1621	SU
PH 10	9.67	9.95	1623	SU
Specific Conductance	1288 1.446	1278 1.443	1617	mS/cm
ORP	228.6	231.0	1625	mV

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

Project Name: 60314 UTC Delmar Spray Technologies site YSI 556 SN: 04TM1480AA
 Project Number: 60314969 Turbidimeter Model/SN: MicroTPW 200711197
 Calibrated By: JOHN BUTLER Additional Equipment/SN: _____
 Signature: [Signature] Date: 4/12/16

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	10.15	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	669
278	752	1413	722	2587	662
558	745	1703	714	2887	664
841	737	1995	707	3190	676

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

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	760.4		0739	mmHg
Temperature (Saturated Air)	18.57	18.76	0753	c
Temperature (Calibration Solution)	19.25	19.50	0749	c
D.O.	9.46	9.28	0739	mg/L
PH 7	7.19	7.02	0743	SU
PH 4	3.80	4.00	0745	SU
PH 10	9.68	9.98	0747	SU
Specific Conductance	1.391	1.278	0741	mS/cm
ORP	243.9	237.5	0749	mV

Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: YES NO Circle One
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Project Name: LTC Delavan Spray Technologies Site YSI 556 SN: 04M1486A#
 Project Number: 60314961 Turbidimeter Model/SN: MicroTPW 200711197
 Calibrated By: Justin Butler Additional Equipment/SN: _____
 Signature: [Signature] Date: 4/13/16

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	689
278	752	1413	722	2587	682
558	745	1703	714	2887	684
841	737	1995	707	3190	676

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

Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	762.2		0740	mmHg
Temperature (Saturated Air)	19.16	19.12	0754	c
Temperature (Calibration Solution)	18.98	19.01	0750	c
D.O.	10.57	9.28	0740	mg/L
PH 7	7.17	7.02	0744	SU
PH 4	4.31	4.00	0746	SU
PH 10	10.11	10.06	0748	SU
Specific Conductance	16.57 1.269	9.28 1.278	0742	mS/cm
ORP	240.2	237.5	0750	mV

Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: ☒ YES ☐ NO Circle One
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FA33062

AECOM

Chain of Custody and Analytical Request

Page 1 of 2

Project Number: 6031496

Chain of Custody Number (1): PO# 67246

LIMS Number:

Project Name / Location:

UTC, Delavan Spray Technologies site, Bomberg SC

Sample Analysis Requested

Quality Assurance Samples

Client Name:

UTC

Collected by:

Randy Morgan/Justin Butler

Project Manager:

Walter Gerald 864-234-9925

See Comments

Sample ID

Date Collected
(dd-mm-yy)Time Collected (Military)
(hh:mm)

COMP

GRAB

Well

Sample Information

VOC 8160 TEL

TOC

MEE 836175

AN30, A02, S04, CHL

COMMENTS

Cooler ID

1	MW-5	11-APR-2016	1735	X			X													
2	MW-15D1	11-APR-2016	1728	X			X													
3	MW-15D	11-APR-2016	1908	X			X													
4	MW-8	11-APR-2016	1815	X			X													
5	MW-15	11-APR-2016	1835	X			X													
6	MW-19	12-APR-2016	0845	X			X													
7	MW-10	12-APR-2016	0900	X			X	X	X	X										
8	MW-20	12-APR-2016	0930	X			X													
9	MW-9	12-APR-2016	1000	X			X	X	X	X										
10	MW-22D	12-APR-2016	1050	X			X	X	X	X										
11	MW-22D-a	12-APR-2016	1050	X			X													
12	MW-24	12-APR-2016	1118	X			X	X	X	X										
13	MW-24-a	12-APR-2016	1118	X			X													
14	MW-25D	12-APR-2016	1245	X			X	X	X	X										
15	MW-21	12-APR-2016	1305	X			X	X	X	X										

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. <i>[Signature]</i>	4/16/16	1500	1. <i>[Signature]</i>	4/13/16	9:30
2. <i>[Signature]</i>			2. <i>[Signature]</i>		
3. <i>[Signature]</i>			3. <i>[Signature]</i>		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	Shipped: <i>X</i>
Method of Shipment: <i>FEDEX</i>	Airbill #: <i>910012246622</i>
Analytical Lab: <i>AcuTest</i>	Location: <i>Orlando, FL</i>
Lab Recipient:	Date: _____ Time: _____

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

5.0

32745\admin\project control\project forms\Blank COC

FA33062: Chain of Custody

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SGS

65 of 102
ACCUTEST
FA33062



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>7/18/16</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-1</u> Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source ☐ Weather Conditions <u>cloudy</u> Air Temperature <u>60's</u> ° F Total Well Depth (TWD) = <u>18.00</u> 1/100 ft Depth to Ground Water (DGW) = <u>11.90</u> 1/100 ft Length of Water Column (LWC) = TWD - DGW = <u>6.6</u> 1/100 ft 1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>1.08</u> gal 3 Casing Volumes = <u>3.24</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>2.64</u> gal	Casing Diameter <u>2.0</u> inches Casing Material <u>PVC</u> Measuring Point Elevation <u>147.56</u> 1/100 ft Height of Riser (above land surface) <u>-0.37</u> 1/100 ft Land Surface Elevation <u>147.19</u> 1/100 ft Screened Interval <u>3 - 18</u> 1/100 ft Dedicated Pump or Bailer YES ☐ NO ☒ Type <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: 1235</u> <u>Sample Analytes: VOC</u> <u>Hack Fe Kit: NA mg/L</u>
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* - 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	0.33	0.46	0.99	1.32	1.65	1.98	2.31	2.64	
VOLUME PURGED (gallons)										
TIME (Military)	1151	1156	1201	1206	1211	1216	1221	1226	1231	
Water Level (ft BTOC)	11.77	12.06	12.32	12.48	12.75	12.95	13.15	13.35	13.55	
pH (S.U.)	4.82	4.70	4.63	4.60	4.59	4.59	4.56	4.52	4.54	
Sp. Cond. (mS/cm)	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.033	
Water Temp. (°C)	19.98	19.38	19.26	19.25	19.20	19.18	19.29	19.33	19.35	
Turbidity (NTUs)	19.19	7.21	4.04	3.77	3.98	2.41	1.99	1.91	2.34	
DO - (mg/L)	2.47	1.97	1.77	1.80	1.94	2.05	2.46	2.47	2.42	
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
ORP (mV)	312.6	321.8	334.4	338.3	338.4	338.7	340.2	342.1	338.9	

COMMENTS/OBSERVATIONS Began purging at 1148 Purging rate: 250 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	7/13/16		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-2		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	cloudy		
Air Temperature	60.5 ° F		
Total Well Depth (TWD) =	18.00	1/100 ft	
Depth to Ground Water (DGW) =	10.43	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	7.57	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	1.23	gal	
3 Casing Volumes =	3.69	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	2.31 gal		

Casing Diameter	2.0		inches
Casing Material	PVC		
Measuring Point Elevation	147.63	1/100 ft	
Height of Riser (above land surface)	-0.18	1/100 ft	
Land Surface Elevation	147.81	1/100 ft	
Screened Interval	3 - 18	1/100 ft	
Dedicated Pump or Bailer	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	MODERATE	HIGH
Comments/Observations			
Sample Time:	1110		
Sample Analytes:	VOC		
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	0.33	0.66	0.99	1.32	1.65	1.98	2.31			
TIME (Military)	1034	1039	1044	1049	1054	1059	1104	1109			
Water Level (ft BTOC)	10.53	10.53	10.53	10.53	10.53	10.53	10.53	10.53			
pH (S.U.)	5.07	4.78	4.63	4.61	4.58	4.48	4.48	4.45			
Sp. Cond. (mS/cm)	0.037	0.035	0.035	0.035	0.035	0.035	0.035	0.034			
Water Temp. (°C)	18.94	19.07	19.14	19.14	19.24	19.34	19.34	19.27			
Turbidity (NTUs)	8.18	2.36	1.75	1.31	1.07	0.94	0.81	0.68			
DO - (mg/L)	7.10	6.43	6.22	6.20	6.02	5.34	5.38	5.40			
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01			
ORP (mV)	267.0	294.5	313.9	327.5	333.7	340.2	343.2	347.1			

COMMENTS/OBSERVATIONS

Began purging at 1031 Purging rate: 250 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 13, 2016</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>mostly cloudy</u>		Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>67</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>13.19</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>4.81</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x 0.163 = <u>0.78</u> gal		Yield LOW ☐ MODERATE ☐ HIGH ☒	
3 Casing Volumes = <u>2.35</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1340</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC'S</u>	
Total Volume of Water Removed <u>2.0</u> gal		Hack Fe Kit: <u>N/A</u> mg/L	

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

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

FIELD ANALYSES

	Initial	1.40	1.80	1.20	1.60	2.0				
VOLUME PURGED (gallons)	1313	1318	1323	1328	1333	1338				
TIME (Military)	13.33	1335	13.37	13.38	13.38	13.38				
Water Level (ft BTOC)	4.39	3.81	4.02	4.06	4.09	4.00				
pH (S.U.)	0.024	0.023	0.023	0.023	0.023	0.022				
Sp. Cond. (mS/cm)	20.21	20.04	20.03	19.91	19.86	19.86				
Water Temp. (°C)	14.68	10.62	5.09	3.69	3.63	1.90				
Turbidity (NTUs)	6.27	6.92	7.26	7.21	7.13	6.96				
DO - (mg/L)	0.01	0.01	0.01	0.01	0.01	0.01				
Salinity (ppt)	393.6	420.4	425.7	432.3	429.9	439.7				
ORP (mV)										

COMMENTS/OBSERVATIONS Began purging at 1310 Purging rate: 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page

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Date (mo/day/yr) April 13, 2016
Field Personnel Randy Moya
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-3D
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions mostly cloudy
Air Temperature 67 ° F
Total Well Depth (TWD) = 49.00 1/100 ft
Depth to Ground Water (DGW) = 14.04 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 34.96 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 5.69 gal
3 Casing Volumes = 17.09 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 2.4 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation 148.12 1/100 ft
Height of Riser (above land surface) -0.16 1/100 ft
Land Surface Elevation 148.28 1/100 ft
Screened Interval 44 - 49 1/100 ft
Dedicated Pump or Bailer YES ____ NO 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: 1422
Sample Analytes: VOC'S
Hack Fe Kit: N/A 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	.40	.80	1.20	1.60	2.0	2.4				
1350	1355	1400	1405	1410	1415	1420				
1406	14.06	14.06	14.06	14.06	14.06	14.06				
7.44	7.40	7.49	7.51	7.47	7.46	7.51				
0.225	0.227	0.227	0.228	0.227	0.227	0.227				
20.67	20.70	20.65	20.66	20.57	20.59	20.63				
115.2	31.76	18.88	11.10	5.61	3.17	2.67				
3.63	3.31	3.28	3.30	3.31	3.38	3.27				
0.11	0.11	0.11	0.11	0.11	0.11	0.11				
304.2	288.3	277.8	272.7	269.3	269.9	265.1				

COMMENTS/OBSERVATIONS

Began purging at 1345 Purging rate: 300 ml/min
1347



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/11/16</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>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	<u>Partly Cloudy</u>		
Air Temperature	<u>mid 70's</u> ° F		
Total Well Depth (TWD) =	<u>14.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>6.31</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>7.69</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>1.25</u> gal
3 Casing Volumes =	<u>3.75</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>2.5</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 - 14</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☒ MODERATE ☐ HIGH ☐	
Comments/Observations		
Sample Time:	<u>1725</u>	
Sample Analytes:	<u>VOC</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

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

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

FIELD ANALYSES

VOLUME PURGED (gallons)

TIME (Military)

Water Level (ft BTOC)

pH (S.U.)

Sp. Cond. (mS/cm)

Water Temp. (°C)

Turbidity (NTUs)

DO - (mg/L)

Salinity (ppt)

ORP (mV)

Initial	<u>0.5</u>	<u>1.0</u>	<u>1.5</u>	<u>2.0</u>	<u>2.5</u>					
	<u>1657</u>	<u>1702</u>	<u>1707</u>	<u>1712</u>	<u>1717</u>	<u>1722</u>				
	<u>6.50</u>	<u>6.77</u>	<u>6.82</u>	<u>6.88</u>	<u>6.90</u>	<u>6.91</u>				
	<u>4.65</u>	<u>4.75</u>	<u>4.78</u>	<u>4.79</u>	<u>4.77</u>	<u>4.77</u>				
	<u>0.022</u>	<u>0.021</u>	<u>0.022</u>	<u>0.022</u>	<u>0.023</u>	<u>0.021</u>				
	<u>18.94</u>	<u>18.70</u>	<u>18.75</u>	<u>18.74</u>	<u>18.79</u>	<u>18.77</u>				
	<u>12.86</u>	<u>2.16</u>	<u>1.39</u>	<u>1.54</u>	<u>1.51</u>	<u>1.19</u>				
	<u>8.53</u>	<u>8.41</u>	<u>8.10</u>	<u>8.08</u>	<u>7.99</u>	<u>7.93</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>421.4</u>	<u>444.1</u>	<u>459.2</u>	<u>466.5</u>	<u>473.0</u>	<u>477.2</u>				

COMMENTS/OBSERVATIONS

Began purging at 1652 Purging rate: 375 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/13/16			
Field Personnel	J Butler			
Site Name	UTC Delavan Spray Technologies Site			
AECOM Job #	60314964			
Sample ID*	MW-7			
Upgradient	Downgradient	Sidegradient	Source	
Weather Conditions				Cloudy
Air Temperature				60's ° F
Total Well Depth (TWD) =	20.00			1/100 ft
Depth to Ground Water (DGW) =	13.19			1/100 ft
Length of Water Column (LWC) = TWD - DGW =	6.81			1/100 ft
1 Casing Volume (OCV)* = LWC x	0.163	=	1.11	gal
3 Casing Volumes =	3.33	gal = Standard Evacuation Volume		
Method of Sample Evacuation	Purge with Peristaltic Pump			
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S			
Total Volume of Water Removed	264 gal			

Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation	149.03	1/100 ft	
Height of Riser (above land surface)	-0.22	1/100 ft	
Land Surface Elevation	149.25	1/100 ft	
Screened Interval	5 - 20	1/100 ft	
Dedicated Pump or Bailer	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	X	MODERATE HIGH
Comments/Observations			
Sample Time: 1340			
Sample Analytes: VOC			
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	0.33	0.66	0.99	1.32	1.65	1.98	2.31	2.64		
TIME (Military)	1258	1303	1308	1313	1318	1323	1328	1333	1338		
Water Level (ft BTOC)	13.62	13.98	14.34	14.70	15.02	15.35	15.71	16.06	16.36		
pH (S.U.)	5.27	5.07	5.04	5.03	5.02	4.98	4.98	4.98	4.97		
Sp. Cond. (mS/cm)	0.015	0.014	0.013	0.013	0.013	0.014	0.014	0.014	0.015		
Water Temp. (°C)	20.07	19.79	19.82	20.00	20.06	19.99	20.01	19.94	20.05		
Turbidity (NTUs)	10.80	4.41	4.02	3.75	4.71	4.64	5.22	10.64	7.31		
DO - (mg/L)	7.19	6.59	4.57	4.16	3.61	3.48	3.57	3.61	3.64		
Salinity (ppt)	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01		
ORP (mV)	333.8	343.2	346.3	347.7	348.0	349.9	350.8	350.8	352.7		

COMMENTS/OBSERVATIONS

Began purging at 1255 Purging rate: 250 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/11/16		
Field Personnel	JBH		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-8		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions Partly Cloudy			
Air Temperature	Low 70's °F		
Total Well Depth (TWD) =	20.00	1/100 ft	
Depth to Ground Water (DGW) =	10.62	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	9.38	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	= 1.53	gal
3 Casing Volumes =	4.59	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	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 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: 1815		
Sample Analytes: VOC		
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	0.36	0.72	1.08	1.44	1.8	2.16				
TIME (Military)	1741	1746	1751	1756	1801	1806	1811				
Water Level (ft BTOC)	10.86	11.08	11.33	11.38	11.42	11.43	11.44				
pH (S.U.)	4.61	4.60	4.60	4.61	4.60	4.61	4.61				
Sp. Cond. (mS/cm)	0.043	0.045	0.053	0.055	0.055	0.052	0.051				
Water Temp. (°C)	21.72	21.61	21.61	21.66	21.64	21.65	21.62				
Turbidity (NTUs)	1.26	0.89	0.69	0.65	0.80	0.60	0.54				
DO - (mg/L)	3.06	2.99	3.55	3.79	3.68	3.82	3.79				
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02				
ORP (mV)	466.0	463.0	462.0	462.6	462.5	462.4	462.7				

COMMENTS/OBSERVATIONS

Began purging at 1735 Purging rate: 275 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 12, 2016</u>		Casing Diameter <u>2.0</u> inches	
Field Personnel <u>Randy Muga</u>		Casing Material <u>PVC</u>	
Site Name <u>UTC Delavan Spray Technologies Site</u>		Measuring Point Elevation <u>143.89</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.22</u> 1/100 ft	
Sample ID* <u>MW-9</u>		Land Surface Elevation <u>144.11</u> 1/100 ft	
☐ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source		Screened Interval <u>5</u> - <u>20</u> 1/100 ft	
Weather Conditions <u>cloudy</u>		Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>62</u> °F		Steel Guard Pipe Around Casing YES ☒ NO ☐	
Total Well Depth (TWD) = <u>20.00</u> 1/100 ft		Locking Cap YES ☒ NO ☐	
Depth to Ground Water (DGW) = <u>5.14</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>14.86</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x 0.163 = <u>2.42</u> gal		Yield LOW ☒ MODERATE ☒ HIGH ☐	
3 Casing Volumes = <u>7.26</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1000</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC'S, TOC, PEST-175, NA30, NO2, SO4, CHL</u>	
Total Volume of Water Removed <u> </u> gal		Hack Fe Kit: <u>0.43</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	Initial	1.40	1.80	1.20	1.60	2.0	2.4	2.8
VOLUME PURGED (gallons)	0.828	0.920	0.925	0.930	0.935	0.940	0.945	0.950	0.955
TIME (Military)	3:23	5:47	5:70	5:79	5:90	6:01	6:05	6:05	6:05
Water Level (ft BTOC)		4.21	4.16	4.09	4.26	4.36	4.41	4.43	4.40
pH (S.U.)		0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
Sp. Cond. (mS/cm)		16.67	16.57	16.53	16.50	16.47	16.49	16.53	16.49
Water Temp. (°C)		3.94	4.25	4.45	6.70	7.28	3.31	2.06	4.38
Turbidity (NTUs)			3.27	3.49	3.53	3.44	3.45	3.45	3.38
DO - (mg/L)			0.01	0.01	0.01	0.01	0.01	0.01	0.01
Salinity (ppt)			225.5	251.1	122.2	57.0	25.6	17.0	16.6
ORP (mV)									20.4

COMMENTS/OBSERVATIONS 0917
 Began purging at 0825 Purging rate: 300 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 12, 2016</u>		Casing Diameter <u>2.0</u> inches	
Field Personnel <u>Randy Moya</u>		Casing Material <u>PVC</u>	
Site Name <u>UTC Delavan Spray Technologies Site</u>		Measuring Point Elevation <u>142.19</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.37</u> 1/100 ft	
Sample ID* <u>MW-10</u>		Land Surface Elevation <u>142.56</u> 1/100 ft	
_____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____		Screened Interval <u>3</u> - <u>18</u> 1/100 ft	
Weather Conditions <u>Cloudy</u>		Dedicated Pump or Bailer YES _____ NO <u>X</u> Type _____	
Air Temperature <u>62</u> °F		Steel Guard Pipe Around Casing YES <u>X</u> NO _____	
Total Well Depth (TWD) = <u>18.00</u> 1/100 ft		Locking Cap YES <u>X</u> NO _____	
Depth to Ground Water (DGW) = <u>3.52</u> 1/100 ft		Protective Post/Abutment YES _____ NO <u>X</u>	
Length of Water Column (LWC) = TWD - DGW = <u>14.48</u> 1/100 ft		Well Integrity Satisfactory YES <u>X</u> NO _____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.36</u> gal		Yield LOW _____ MODERATE _____ HIGH <u>X</u>	
3 Casing Volumes = <u>7.08</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>0900</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC'S, RSK-175, TOC, NO30, NO2, SO4, CHL</u>	
Total Volume of Water Removed <u>2.4</u> gal		Hack Fe Kit: <u>0.86</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	1.40	1.80	1.20	1.60	2.0	2.4				
VOLUME PURGED (gallons)	0828	0833	0838	0843	0848	0853	0858				
TIME (Military)	3.73	3.77	3.79	3.80	3.82	3.83	3.83				
Water Level (ft BTOC)	4.16	4.24	4.40	4.48	4.45	4.47	4.46				
pH (S.U.)	0.028	0.027	0.027	0.027	0.027	0.027	0.027				
Sp. Cond. (mS/cm)	16.42	16.37	16.33	16.30	16.27	16.26	16.25				
Water Temp. (°C)	3.74	5.58	2.99	2.00	2.37	1.54	1.50				
Turbidity (NTUs)	1.86	1.81	1.34	1.18	1.03	1.08	1.03				
DO - (mg/L)	0.01	0.01	0.01	0.01	0.01	0.01	0.01				
Salinity (ppt)	56.3	51.9	41.5	32.3	26.8	22.2	19.4				
ORP (mV)											

COMMENTS/OBSERVATIONS Began purging at 0825 Purging rate 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 13, 2016</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-12D</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>Cloudy</u>			
Air Temperature	<u>100</u> °F		
Total Well Depth (TWD) =	<u>50.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>13.58</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>36.42</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>5.93</u> gal
3 Casing Volumes =	<u>17.80</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>6.80</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	<u>PVC</u>		
Measuring Point Elevation	<u>147.65</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.21</u>	1/100 ft	
Land Surface Elevation	<u>147.86</u>	1/100 ft	
Screened Interval	<u>40</u> - <u>50</u>	1/100 ft	
Dedicated Pump or Bailer	YES ☐ NO ☒	Type	<u>X</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: 0900</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 0.0102X 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)	Initial	1.80	1.60	2.40	3.20	4.0	4.80	5.60	6.0	6.4	6.8
TIME (Military)	0733	0753	0753	0803	0813	0823	0833	0843	0848	0853	0858
Water Level (ft BTOW)	14.59	16.44	17.58	17.69	17.69	17.69	17.69	17.69	17.69	17.69	17.69
pH (S.U.)	12.29	12.37	12.19	11.91	11.48	11.04	10.68	10.39	10.19	10.14	10.08
Sp. Cond. (mS/cm)	2.457	2.400	1.682	1.017	0.571	0.383	0.312	0.273	0.264	0.257	0.245
Water Temp. (°C)	17.62	17.77	17.85	17.89	17.92	17.95	17.95	17.93	17.94	17.93	17.95
Turbidity (NTUs)	8.44	1.04	0.62	0.50	3.74	2.13	2.32	2.19	3.00	2.16	3.21
DO - (mg/L)	6.37	6.37	6.18	6.13	5.50	5.48	5.42	5.56	5.35	5.29	5.23
Salinity (ppt)	1.27	1.24	0.84	0.63	0.27	0.18	0.15	0.13	0.13	0.12	0.12
ORP (mV)	-9.4	-19.6	-4.4	+18.0	+41.3	+69.4	+85.4	+96.2	+107.6	+112.9	+117.6

COMMENTS/OBSERVATIONS

Began purging at 0730 Purging rate 300 ml/min water level dropped ~4' then stabilized
Ph and Conductivity are high stabilize after 5 gals readings every 10 min until stabilize then every 5 minutes

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>APR 13, 2016</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>146.23</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.18</u> 1/100 ft	
Sample ID* <u>MW-13D</u>		Land Surface Elevation <u>146.41</u> 1/100 ft	
Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source ☐		Screened Interval <u>40</u> - <u>50</u> 1/100 ft	
Weather Conditions <u>cloudy</u>		Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>60</u> ° F		Steel Guard Pipe Around Casing YES ☒ NO ☐	
Total Well Depth (TWD) = <u>50.00</u> 1/100 ft		Locking Cap YES ☒ NO ☐	
Depth to Ground Water (DGW) = <u>12.32</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>37.68</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x 0.163 = <u>6.14</u> gal		Yield LOW ☐ MODERATE ☐ HIGH ☒	
3 Casing Volumes = <u>18.42</u> gal = Standard Evacuation Volume		Comments/Observations <u>1025</u>	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1025</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>NOCL</u>	
Total Volume of Water Removed <u>4.80</u> gal		Hack Fe Kit: <u>N/A</u> mg/L	

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

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

FIELD ANALYSES

	Initial	0.80	1.60	2.40	3.20	3.60	4.0	4.40	4.80		
VOLUME PURGED (gallons)	0923	0933	0943	0953	1003	1008	1013	1018	1023		
TIME (Military)	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33		
Water Level (ft BTOC)	8.32	7.97	7.81	7.73	7.65	7.63	7.66	7.66	7.65		
pH (S.U.)	0.207	0.213	0.216	0.216	0.216	0.216	0.215	0.215	0.215		
Sp. Cond. (mS/cm)	18.13	18.41	18.45	18.45	18.52	18.46	18.47	18.50	18.53		
Water Temp. (°C)	23.00	8.19	6.64	3.14	2.72	1.18	1.38	0.89	0.95		
Turbidity (NTUs)	5.15	5.79	5.19	5.44	5.57	5.37	5.58	5.31	5.24		
DO - (mg/L)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		
Salinity (ppt)	164.5	187.3	203.6	215.3	222.3	255.9	256.5	258.3	246.4		
ORP (mV)											

COMMENTS/OBSERVATIONS

Began purging at 0920 Purging rate: 300 ml/min

readings every 10 minutes to start until stabilizes then every 5 minutes High Ph will stabilize ~ 6.5 gals required



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 2

Date (mo/day/yr)	<u>April 13, 2016</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-14</u>
Upgradient	☐
Downgradient	☐
Sidegradient	☐
Source	☐
Weather Conditions	<u>Cloudy</u>
Air Temperature	<u>60</u> °F
Total Well Depth (TWD) =	<u>20.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>11.18</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>8.82</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>1.43</u> gal
3 Casing Volumes =	<u>4.31</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>3.9</u> gal
Casing Diameter	<u>2.0</u> inches
Casing Material	<u>PVC</u>
Measuring Point Elevation	<u>146.90</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.15</u> 1/100 ft
Land Surface Elevation	<u>147.05</u> 1/100 ft
Screened Interval	<u>5</u> - <u>20</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒ Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☒ MODERATE ☐ HIGH ☐
Comments/Observations	<u>Sample Time: 1202</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

	Initial	.30	.60	.90	1.20	1.50	1.80	2.10	2.40	2.70	3.0
VOLUME PURGED (gallons)											
TIME (Military)	1055	1100	1105	1110	1115	1120	1125	1130	1135	1140	1145
Water Level (ft BTOC)	11.56	11.90	12.28	12.73	13.05	13.29	13.65	14.00	14.35	14.66	15.00
pH (S.U.)	4.37	4.51	4.43	4.34	4.40	4.35	4.47	4.51	4.57	4.04	3.89
Sp. Cond. (mS/cm)	0.024	0.022	0.022	0.022	0.022	0.022	0.022	0.023	0.023	0.023	0.023
Water Temp. (°C)	17.47	17.70	17.74	17.67	17.82	17.83	17.96	17.97	18.07	18.09	18.23
Turbidity (NTUs)	8.59	4.96	6.57	5.85	5.64	4.85	4.80	4.71	5.83	7.97	7.80
DO - (mg/L)	7.01	6.99	7.12	7.24	7.89	7.51	7.63	7.22	6.91	7.29	7.17
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
ORP (mV)	365.5	372.0	395.5	397.0	396.1	405.8	399.6	399.6	399.6	440.8	435.9

COMMENTS/OBSERVATIONS

Began purging at 1052 Purging rate: 125 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 2 of 2

Site Name <u>April 13 2016</u> AECOM Job # <u>60314964</u> Sample ID* <u>MW-14</u>	Date (mo/day/yr) <u>April 13 2016</u> Field Personnel <u>Randy Morgan</u> Comments/Observations:
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	FIELD ANALYSES									
VOLUME PURGED (gallons)	3.3	3.6	3.9							
TIME (Military)	1150	1155	1200							
Water Level (ft BTOC)	15.18	15.43	15.50							
pH (S.U.)	4.11	4.06	4.00							
Sp. Cond. (mS/cm)	0.023	0.023	0.023							
Water Temp. (°C)	18.31	18.36	18.37							
Turbidity (NTUs)	8.67	8.31	9.67							
DO - (mg/L)	7.08	7.18	6.97							
Salinity (ppt)	0.01	0.01	0.01							
ORP (mV)	430.7	442.7	444.2							

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

COMMENTS/OBSERVATIONS _____

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>April 13, 2016</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>146.88</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-14D</u>		Land Surface Elevation <u>147.11</u> 1/100 ft	
_____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____		Screened Interval <u>40</u> - <u>50</u> 1/100 ft	
Weather Conditions <u>cloudy</u>		Dedicated Pump or Bailer YES _____ NO <u>X</u> Type _____	
Air Temperature <u>61</u> °F		Steel Guard Pipe Around Casing YES <u>X</u> NO _____	
Total Well Depth (TWD) = <u>50.00</u> 1/100 ft		Locking Cap YES <u>X</u> NO _____	
Depth to Ground Water (DGW) = <u>13.04</u> 1/100 ft		Protective Post/Abutment YES _____ NO <u>X</u>	
Length of Water Column (LWC) = TWD - DGW = <u>36.96</u> 1/100 ft		Well Integrity Satisfactory YES <u>X</u> NO _____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.02</u> gal		Yield LOW _____ MODERATE _____ HIGH <u>X</u>	
3 Casing Volumes = <u>18.07</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1242</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>2.4</u> gal		Hack Fe Kit: <u>NA</u> mg/L	

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

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

	FIELD ANALYSES										
VOLUME PURGED (gallons)	Initial	<u>1.40</u>	<u>1.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.4</u>				
TIME (Military)	<u>1210</u>	<u>1215</u>	<u>1220</u>	<u>1225</u>	<u>1230</u>	<u>1235</u>	<u>1240</u>				
Water Level (ft BTOC)	<u>13.02</u>	<u>13.03</u>	<u>13.03</u>	<u>13.03</u>	<u>13.03</u>	<u>13.03</u>	<u>13.03</u>				
pH (S.U.)	<u>8.87</u>	<u>7.94</u>	<u>7.71</u>	<u>7.72</u>	<u>7.73</u>	<u>7.66</u>	<u>7.72</u>				
Sp. Cond. (mS/cm)	<u>0.219</u>	<u>0.229</u>	<u>0.230</u>	<u>0.230</u>	<u>0.229</u>	<u>0.229</u>	<u>0.229</u>				
Water Temp. (°C)	<u>19.55</u>	<u>19.65</u>	<u>19.71</u>	<u>19.78</u>	<u>19.82</u>	<u>19.82</u>	<u>20.03</u>				
Turbidity (NTUs)	<u>128.3</u>	<u>57.14</u>	<u>27.78</u>	<u>17.11</u>	<u>6.73</u>	<u>5.92</u>	<u>3.59</u>				
DO - (mg/L)	<u>1.68</u>	<u>1.08</u>	<u>0.90</u>	<u>0.90</u>	<u>0.92</u>	<u>0.90</u>	<u>0.91</u>				
Salinity (ppt)	<u>0.10</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>				
ORP (mV)	<u>249.1</u>	<u>248.9</u>	<u>226.7</u>	<u>214.0</u>	<u>208.0</u>	<u>205.6</u>	<u>201.0</u>				

COMMENTS/OBSERVATIONS Began purging at 1208 Purging rate 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	April 11 2016		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-15		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	mostly Cloudy		
Air Temperature	73	° F	
Total Well Depth (TWD) =	19.00	1/100 ft	
Depth to Ground Water (DGW) =	2.69	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	16.31	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	= 2.65	gal	
3 Casing Volumes =	7.97	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.80	gal	
Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation	135.73	1/100 ft	
Height of Riser (above land surface)	-0.40	1/100 ft	
Land Surface Elevation	136.13	1/100 ft	
Screened Interval	4 - 19	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
Comments/Observations	Sample Time: 1855		
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)	Initial	1.40	1.80	1.20	1.60	2.0	2.40	2.80			
TIME (Military)	1818	1823	1828	1833	1838	1843	1848	1853			
Water Level (ft BTOW)	2.87	2.98	3.05	3.10	3.12	3.18	3.14	3.14			
pH (S.U.)	5.20	5.03	4.82	4.41	4.47	4.34	4.32	4.39			
Sp. Cond. (mS/cm)	0.441	0.441	0.381	0.288	0.231	0.220	0.206	0.201			
Water Temp. (°C)	17.77	17.41	17.22	17.24	17.30	17.28	17.32	17.28			
Turbidity (NTUs)	25.73	11.02	16.14	23.47	8.91	6.32	3.29	3.32			
DO - (mg/L)	0.40	0.35	0.25	0.21	0.23	0.21	0.18	0.21			
Salinity (ppt)	0.21	0.21	0.18	0.13	0.11	0.10	0.10	0.09			
ORP (mV)	31.7	22.7	23.8	69.8	54.7	44.4	38.4	29.6			

COMMENTS/OBSERVATIONS

Began purging at 1815 Purging rate 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 11, 2016</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-15D</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>mostly cloudy</u>			
Air Temperature	<u>75</u>	° F	
Total Well Depth (TWD) =	<u>45.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>2.20</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>42.80</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>6.97</u> gal
3 Casing Volumes =	<u>20.92</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>135.59</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.34</u>	1/100 ft
Land Surface Elevation	<u>135.93</u>	1/100 ft
Screened Interval	<u>35</u> - <u>45</u>	1/100 ft
Dedicated Pump or Bailer	YES <u>X</u> NO <u>X</u>	Type <u> </u>
Steel Guard Pipe Around Casing	YES <u>X</u> NO <u> </u>	
Locking Cap	YES <u>X</u> NO <u> </u>	
Protective Post/Abutment	YES <u> </u> NO <u>X</u>	
Well Integrity Satisfactory	YES <u>X</u> NO <u> </u>	
Yield	LOW <u> </u> MODERATE <u> </u> HIGH <u>X</u>	
Comments/Observations <u>1808</u>		
Sample Time: <u>1808</u>		
Sample Analytes: <u>VOC'S</u>		
Hack Fe Kit: <u>N/A</u> mg/L		

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

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

	FIELD ANALYSES												
	Initial	<u>.40</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.4</u>						
VOLUME PURGED (gallons)	<u>1735</u>	<u>1740</u>	<u>1745</u>	<u>1750</u>	<u>1755</u>	<u>1800</u>	<u>1805</u>						
TIME (Military)	<u>2.19</u>	<u>2.19</u>	<u>2.19</u>	<u>2.19</u>	<u>2.19</u>	<u>2.19</u>	<u>2.19</u>						
Water Level (ft BTOC)	<u>7.18</u>	<u>7.19</u>	<u>7.21</u>	<u>7.18</u>	<u>7.15</u>	<u>7.10</u>	<u>7.06</u>						
pH (S.U.)	<u>0.426</u>	<u>0.427</u>	<u>0.427</u>	<u>0.428</u>	<u>0.428</u>	<u>0.428</u>	<u>0.428</u>						
Sp. Cond. (mS/cm)	<u>18.45</u>	<u>18.30</u>	<u>18.18</u>	<u>18.10</u>	<u>18.09</u>	<u>18.09</u>	<u>18.07</u>						
Water Temp. (°C)	<u>191.7</u>	<u>103.6</u>	<u>23.63</u>	<u>9.80</u>	<u>3.64</u>	<u>4.78</u>	<u>2.45</u>						
Turbidity (NTUs)	<u>2.17</u>	<u>2.09</u>	<u>2.08</u>	<u>2.04</u>	<u>2.06</u>	<u>2.05</u>	<u>2.04</u>						
DO - (mg/L)	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>	<u>0.21</u>						
Salinity (ppt)	<u>170.4</u>	<u>176.5</u>	<u>185.0</u>	<u>193.6</u>	<u>201.2</u>	<u>209.8</u>	<u>214.3</u>						
ORP (mV)													

COMMENTS/OBSERVATIONS

Began purging at 1732 Purging rate 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>April 11, 2016</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>cloudy</u>			
Air Temperature	<u>75</u>	° F	
Total Well Depth (TWD) =	<u>85.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>232</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>82.68</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>13.47</u> gal
3 Casing Volumes =	<u>40.43</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>2.8</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	<u>X</u> Type
Steel Guard Pipe Around Casing	YES	<u>X</u> NO	
Locking Cap	YES	<u>X</u> NO	
Protective Post/Abutment	YES	NO	<u>X</u>
Well Integrity Satisfactory	YES	<u>X</u> NO	
Yield	LOW	MODERATE	HIGH <u>X</u>
Comments/Observations			
Sample Time: <u>1728</u>			
Sample Analytes: <u>VO C'S</u>			
Hack Fe Kit: <u>N/A</u> mg/L			

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

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

FIELD ANALYSES

VOLUME PURGED (gallons)	Initial	<u>.40</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.4</u>	<u>2.8</u>			
TIME (Military)	<u>1650</u>	<u>1655</u>	<u>1700</u>	<u>1705</u>	<u>1710</u>	<u>1715</u>	<u>1720</u>	<u>1725</u>			
Water Level (ft BTOC)	<u>2.37</u>	<u>2.39</u>	<u>2.39</u>	<u>2.39</u>	<u>2.39</u>	<u>2.38</u>	<u>2.38</u>	<u>2.38</u>			
pH (S.U.)	<u>7.51</u>	<u>7.24</u>	<u>6.87</u>	<u>7.41</u>	<u>7.36</u>	<u>7.54</u>	<u>7.49</u>	<u>7.48</u>			
Sp. Cond. (mS/cm)	<u>0.201</u>	<u>0.200</u>	<u>0.201</u>	<u>0.201</u>	<u>0.202</u>	<u>0.203</u>	<u>0.203</u>	<u>0.203</u>			
Water Temp. (°C)	<u>19.24</u>	<u>18.71</u>	<u>18.63</u>	<u>18.63</u>	<u>18.61</u>	<u>19.11</u>	<u>19.08</u>	<u>19.06</u>			
Turbidity (NTUs)	<u>12.34</u>	<u>8.93</u>	<u>9.46</u>	<u>5.49</u>	<u>3.84</u>	<u>1.57</u>	<u>1.25</u>	<u>0.69</u>			
DO - (mg/L)	<u>0.48</u>	<u>0.29</u>	<u>0.34</u>	<u>0.34</u>	<u>0.39</u>	<u>0.45</u>	<u>0.49</u>	<u>0.48</u>			
Salinity (ppt)	<u>0.10</u>	<u>0.09</u>	<u>0.09</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>			
ORP (mV)	<u>1.5</u>	<u>-5.7</u>	<u>-8.1</u>	<u>-39.4</u>	<u>-40.5</u>	<u>-55.9</u>	<u>-54.0</u>	<u>-56.7</u>			

COMMENTS/OBSERVATIONS

Began purging at 1647 Purging rate: 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/13/16</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-16</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>Cloudy</u>			
Air Temperature	<u>60's</u> ° F		
Total Well Depth (TWD) =	<u>19.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>2.13</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>16.27</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>2.65</u> gal
3 Casing Volumes =	<u>7.95</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>1.98</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>138.30</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.44</u>	1/100 ft
Land Surface Elevation	<u>138.74</u>	1/100 ft
Screened Interval	<u>4</u> - <u>19</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>0730</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						
	Initial	0.33	0.66	0.99	1.32	1.65	1.98
VOLUME PURGED (gallons)							
TIME (Military)	<u>0757</u>	<u>0802</u>	<u>0807</u>	<u>0812</u>	<u>0817</u>	<u>0822</u>	<u>0829</u>
Water Level (ft BTOC)	<u>2.87</u>	<u>3.03</u>	<u>3.05</u>	<u>3.07</u>	<u>3.08</u>	<u>3.09</u>	<u>3.10</u>
pH (S.U.)	<u>5.12</u>	<u>4.90</u>	<u>4.83</u>	<u>4.86</u>	<u>4.86</u>	<u>4.84</u>	<u>4.84</u>
Sp. Cond. (mS/cm)	<u>0.037</u>	<u>0.031</u>	<u>0.030</u>	<u>0.031</u>	<u>0.031</u>	<u>0.031</u>	<u>0.031</u>
Water Temp. (°C)	<u>16.42</u>	<u>16.31</u>	<u>16.27</u>	<u>16.26</u>	<u>16.25</u>	<u>16.23</u>	<u>16.23</u>
Turbidity (NTUs)	<u>26.11</u>	<u>19.25</u>	<u>11.71</u>	<u>8.08</u>	<u>7.76</u>	<u>7.01</u>	<u>7.39</u>
DO - (mg/L)	<u>1.51</u>	<u>0.51</u>	<u>0.41</u>	<u>0.36</u>	<u>0.29</u>	<u>0.26</u>	<u>0.23</u>
Salinity (ppt)	<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>0.01</u>
ORP (mV)	<u>12.0</u>	<u>-52.6</u>	<u>-66.2</u>	<u>-82.1</u>	<u>-93.3</u>	<u>-101.8</u>	<u>-106.5</u>

COMMENTS/OBSERVATIONS Began purging at 0754 Purging rate: 250 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/13/16		
Field Personnel	JB, MeC		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-16D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions Cloudy			
Air Temperature	60's ° F		
Total Well Depth (TWD) =	45.00	1/100 ft	
Depth to Ground Water (DGW) =	5.08	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	39.92	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	6.51	gal	
3 Casing Volumes =	19.53	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	3.22 gal		
Casing Diameter	2.0		inches
Casing Material	PVC		
Measuring Point Elevation	138.38	1/100 ft	
Height of Riser (above land surface)	-0.32	1/100 ft	
Land Surface Elevation	138.70	1/100 ft	
Screened Interval	35 - 45	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 X
Comments/Observations			
Sample Time: 0915			
Sample Analytes: VOC			
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	0.46	0.92	1.38	1.84	2.30	2.76	3.22			
TIME (Military)	0835	0840	0845	0850	0855	0900	0905	0910			
Water Level (ft BTOC)	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08			
pH (S.U.)	7.21	7.41	7.43	7.42	7.43	7.44	7.45	7.44			
Sp. Cond. (mS/cm)	0.280	0.282	0.282	0.281	0.281	0.280	0.279	0.277			
Water Temp. (°C)	17.27	17.51	17.58	17.60	17.62	17.62	17.64	17.65			
Turbidity (NTUs)	5.71	0.87	0.31	0.26	0.00	0.00	0.00	0.00			
DO - (mg/L)	4.56	4.05	3.95	3.93	3.91	3.93	3.90	3.87			
Salinity (ppt)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13			
ORP (mV)	49.1	105.0	138.5	155.4	167.9	178.4	187.3	193.9			

COMMENTS/OBSERVATIONS Began purging at 0832 Purging rate: 350 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/16</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-19</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>cloudy/Rain</u>			
Air Temperature	<u>60's</u>	° F	
Total Well Depth (TWD) =	<u>20.15</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.42</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>8.73</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.041</u>	=	<u>0.36</u> gal
3 Casing Volumes =	<u>1.08</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.0</u> gal		

Casing Diameter	<u>1.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>148.22</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.25</u>	1/100 ft
Land Surface Elevation	<u>148.47</u>	1/100 ft
Screened Interval	<u>5</u> - <u>20</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☒ MODERATE ☐ HIGH ☐	
Comments/Observations		
Sample Time: <u>0845</u>		
Sample Analytes: <u>VOC</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										
	Initial	0.40	0.80	1.20	1.60	2.00					
VOLUME PURGED (gallons)											
TIME (Military)	0819	0824	0829	0834	0839	0844					
Water Level (ft BTOC)	12.42	12.73	12.84	12.86	12.88	12.89					
pH (S.U.)	4.26	4.20	4.27	4.28	4.27	4.26					
Sp. Cond. (mS/cm)	0.093	0.102	0.085	0.080	0.078	0.077					
Water Temp. (°C)	20.69	20.83	20.84	20.85	20.86	20.86					
Turbidity (NTUs)	24.87	13.44	5.86	1.93	0.97	0.11					
DO - (mg/L)	3.73	5.29	5.17	5.04	4.93	4.87					
Salinity (ppt)	0.04	0.05	0.04	0.04	0.04	0.04					
ORP (mV)	339.5	391.3	398.4	408.5	412.1	415.1					

COMMENTS/OBSERVATIONS Began purging at 0815 Purging rate: 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/12/16		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-20		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions cloudy/Rain			
Air Temperature	60's ° F		
Total Well Depth (TWD) =	15.15	1/100 ft	
Depth to Ground Water (DGW) =	11.25	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	3.9	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.041	=	0.16 gal
3 Casing Volumes =	0.48	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	1.65 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
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 X
Comments/Observations			
Sample Time: 0930			
Sample Analytes: VOC			
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	0.33	0.66	0.99	1.32	1.65					
VOLUME PURGED (gallons)	0.04	0.09	0.14	0.19	0.24	0.29					
TIME (Military)	11.92	12.06	12.28	12.38	12.42	12.44					
Water Level (ft BTOC)	4.48	4.38	4.36	4.33	4.34	4.37					
pH (S.U.)	0.045	0.042	0.042	0.041	0.041	0.041					
Sp. Cond. (mS/cm)	21.54	21.44	21.40	21.40	21.39	21.38					
Water Temp. (°C)	8.31	3.95	0.22	0.00	0.00	0.00					
Turbidity (NTUs)	7.21	6.89	7.23	6.75	6.61	6.68					
DO - (mg/L)	0.02	0.02	0.02	0.02	0.02	0.02					
Salinity (ppt)	433.0	437.7	442.2	446.4	447.8	448.5					
ORP (mV)											

COMMENTS/OBSERVATIONS Began purging at 0900 Purging rate: 250 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) April 12, 2016
 Field Personnel Randy Morgan
 Site Name UTC Delavan Spray Technologies Site
 AECOM Job # 60314964
 Sample ID* MW-21
 _____ Upgradient _____ Downgradient _____ Sidegradient _____ Source
 Weather Conditions cloudy
 Air Temperature 68 ° F
 Total Well Depth (TWD) = 34.40 1/100 ft
 Depth to Ground Water (DGW) = 12.68 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 21.72 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 3.54 gal
 3 Casing Volumes = 10.62 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 3.20 gal

Casing Diameter 2.0 inches
 Casing Material PVC
 Measuring Point Elevation 147.97 1/100 ft
 Height of Riser (above land surface) -0.20 1/100 ft
 Land Surface Elevation 148.17 1/100 ft
 Screened Interval 19 - 34 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 1305
 Sample Time: 1305
 Sample Analytes: VOC'S, RSK175, TOC, NO30, NO2, SO4, CHL
 Hack Fe Kit: 0.00 mg/L

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

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

	FIELD ANALYSES									
VOLUME PURGED (gallons)	Initial	.40	.80	1.20	1.60	2.0	2.40	2.80	3.20	
TIME (Military)	1223	1228	1233	1238	1243	1248	1253	1258	1303	
Water Level (ft BTOC)	13.57	13.81	14.10	14.22	14.18	14.17	14.13	14.13	14.13	
pH (S.U.)	4.62	4.55	4.59	4.16	4.18	4.19	4.30	4.14	4.17	
Sp. Cond. (mS/cm)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	
Water Temp. (°C)	19.83	20.01	20.14	20.16	20.18	20.21	20.24	20.27	20.36	
Turbidity (NTUs)	18.62	12.15	13.27	11.21	13.31	10.92	8.36	7.75	6.86	
DO - (mg/L)	1.69	1.89	1.81	1.64	1.58	1.55	1.47	1.39	1.30	
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
ORP (mV)	296.9	296.6	296.3	312.1	307.9	305.5	299.2	307.4	304.1	

COMMENTS/OBSERVATIONS Began purging at 1220 Purging rate: 300 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Date (mo/day/yr) <u>April 12, 2016</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>146.92</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.31</u> 1/100 ft	
Sample ID* <u>MW-21D</u>		Land Surface Elevation <u>147.23</u> 1/100 ft	
_____ Upgradient _____ Downgradient _____ Sidegradient _____ Source Weather Conditions <u>cloudy</u> Air Temperature <u>68</u> ° F		Screened Interval <u>43</u> - <u>53</u> 1/100 ft	
Total Well Depth (TWD) = <u>53.40</u> 1/100 ft		Dedicated Pump or Bailer YES _____ NO <u>X</u> Type _____	
Depth to Ground Water (DGW) = <u>12.83</u> 1/100 ft		Steel Guard Pipe Around Casing YES <u>X</u> NO _____	
Length of Water Column (LWC) = TWD - DGW = <u>40.57</u> 1/100 ft		Locking Cap YES <u>X</u> NO _____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.61</u> gal		Protective Post/Abutment YES _____ NO <u>X</u>	
3 Casing Volumes = <u>19.83</u> gal = Standard Evacuation Volume		Well Integrity Satisfactory YES <u>X</u> NO _____	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Yield LOW _____ MODERATE _____ HIGH <u>X</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Comments/Observations	
Total Volume of Water Removed <u>2.0</u> gal		Sample Time: <u>1405</u>	
		Sample Analytes: <u>VOC'S, RSK175, TOC, NO30, NO3, SO4, CHL</u>	
		Hack Fe Kit: <u>0.08</u> mg/L	

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

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

FIELD ANALYSES

	Initial	.40	.80	1.20	1.60	2.0					
VOLUME PURGED (gallons)											
TIME (Military)	<u>1335</u>	<u>1340</u>	<u>1345</u>	<u>1350</u>	<u>1355</u>	<u>1400</u>					
Water Level (ft BTOC)	<u>12.83</u>	<u>12.83</u>	<u>12.82</u>	<u>12.82</u>	<u>12.82</u>	<u>12.82</u>					
pH (S.U.)	<u>7.47</u>	<u>7.44</u>	<u>7.45</u>	<u>7.34</u>	<u>7.37</u>	<u>7.38</u>					
Sp. Cond. (mS/cm)	<u>0.227</u>	<u>0.226</u>	<u>0.226</u>	<u>0.227</u>	<u>0.226</u>	<u>0.226</u>					
Water Temp. (°C)	<u>20.62</u>	<u>20.48</u>	<u>20.40</u>	<u>20.33</u>	<u>20.35</u>	<u>20.41</u>					
Turbidity (NTUs)	<u>16.36</u>	<u>12.93</u>	<u>11.58</u>	<u>9.36</u>	<u>6.72</u>	<u>4.41</u>					
DO - (mg/L)	<u>0.99</u>	<u>0.70</u>	<u>0.60</u>	<u>0.65</u>	<u>0.66</u>	<u>0.66</u>					
Salinity (ppt)	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>	<u>0.11</u>					
ORP (mV)	<u>-1.4</u>	<u>-13.4</u>	<u>-24.1</u>	<u>-23.0</u>	<u>-24.6</u>	<u>-26.4</u>					

COMMENTS/OBSERVATIONS

Began purging at 1332 Purging rate: 300 ml/min

Breathing Zone: N/A ppm

Well Head: N/A ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 4

Date (mo/day/yr) <u>4/12/16</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>145.96</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.10</u> 1/100 ft	
Sample ID* <u>MW-22D</u>		Land Surface Elevation <u>146.06</u> 1/100 ft	
Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source ☐		Screened Interval <u>38</u> - <u>48</u> 1/100 ft	
Weather Conditions <u>cloudy</u>		Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>60's</u> ° F		Steel Guard Pipe Around Casing YES ☒ NO ☐	
Total Well Depth (TWD) = <u>48.40</u> 1/100 ft		Locking Cap YES ☒ NO ☐	
Depth to Ground Water (DGW) = <u>12.27</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>36.13</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>5.89</u> gal		Yield LOW ☐ MODERATE ☐ HIGH ☐	
3 Casing Volumes = <u>17.67</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1050</u> <u>Dup</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC/MNA</u>	
Total Volume of Water Removed <u>3.87</u> gal		Hack Fe Kit: <u>0.03</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).

	Initial	0.43	0.86	1.29	1.72	2.15	2.58	3.01	3.44	3.87	
VOLUME PURGED (gallons)	100.3	100.8	101.3	101.8	102.3	102.8	103.3	103.8	104.3	104.8	
TIME (Military)	12.25	12.26	12.26	12.26	12.26	12.27	12.27	12.27	12.27	12.27	
Water Level (ft BTOC)	8.21	8.20	8.13	8.16	8.25	8.34	8.38	8.32	8.30	8.33	
pH (S.U.)	0.218	0.230	0.234	0.236	0.236	0.236	0.235	0.235	0.235	0.233	
Sp. Cond. (mS/cm)	18.17	18.07	18.06	18.06	18.06	18.09	18.11	18.12	18.12	18.15	
Water Temp. (°C)	5.29	1.12	0.73	0.93	1.01	0.27	0.00	0.00	0.00	0.00	
Turbidity (NTUs)	4.66	4.15	3.89	3.85	3.70	3.93	3.77	3.82	3.76	3.80	
DO - (mg/L)	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
Salinity (ppt)	360.0	346.5	338.6	331.3	325.6	318.5	314.1	314.6	312.0	307.9	
ORP (mV)											

COMMENTS/OBSERVATIONS Began purging at 1000 Purging rate: 325 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	4/13/16		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-23D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions cloudy			
Air Temperature	60's ° F		
Total Well Depth (TWD) =	50.40	1/100 ft	
Depth to Ground Water (DGW) =	14.09	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	36.31	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	5.92	gal	
3 Casing Volumes =	17.76	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	2.52 gal		

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation	148.26	1/100 ft
Height of Riser (above land surface)	-0.09	1/100 ft
Land Surface Elevation	148.35	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	X
Comments/Observations		
Sample Time: 1010 Dup		
Sample Analytes: VOC		
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	0.36	0.72	1.08	1.44	1.80	2.16	2.52
VOLUME PURGED (gallons)	0934	0939	0944	0949	0954	0959	1004	1009
TIME (Military)	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05
Water Level (ft BTOC)	8.01	7.86	7.47	7.43	7.40	7.36	7.35	7.35
pH (S.U.)	0.269	0.277	0.294	0.298	0.299	0.300	0.302	0.301
Sp. Cond. (mS/cm)	18.38	18.71	18.79	18.91	19.00	18.96	19.00	18.97
Water Temp. (°C)	13.23	5.67	2.95	2.08	1.67	1.45	1.47	1.57
Turbidity (NTUs)	8.68	7.32	4.70	3.71	2.61	2.36	2.36	2.32
DO - (mg/L)	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14
Salinity (ppt)	181.1	191.1	196.2	195.2	195.9	197.1	198.9	199.2
ORP (mV)								

COMMENTS/OBSERVATIONS Began purging at 0931 Purging rate: 275 ml/min

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) April 12, 2016
 Field Personnel Randy Moraga
 Site Name UTC Delavan Spray Technologies Site
 AECOM Job # 60314964
 Sample ID* MW-24
 _____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____
 Weather Conditions cloudy
 Air Temperature 63 ° F
 Total Well Depth (TWD) = 21.00 1/100 ft
 Depth to Ground Water (DGW) = 13.39 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 7.61 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 1.24 gal
 3 Casing Volumes = 3.72 gal = Standard Evacuation Volume
 Method of Sample Evacuation Purge with Peristaltic Pump
 Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
 Total Volume of Water Removed 2.80 gal

Casing Diameter 2.0 inches
 Casing Material PVC
 Measuring Point Elevation 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 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 1118
 Sample Time: 1118
 Sample Analytes: VOC'S RSK-175, TOC, NO30, NO2, SO4, CHL
 Hack Fe Kit: 0.00 mg/L

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

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

	FIELD ANALYSES							
	Initial	1.40	1.80	1.20	1.60	2.0	2.40	2.80
VOLUME PURGED (gallons)								
TIME (Military)	1040	1045	1050	1055	1100	1105	1110	1115
Water Level (ft BTOC)	13.77	13.74	13.74	13.77	13.77	13.77	13.77	13.77
pH (S.U.)	4.80	4.44	4.67	4.52	4.49	4.50	4.49	4.33
Sp. Cond. (mS/cm)	0.021	0.022	0.022	0.023	0.023	0.022	0.022	0.022
Water Temp. (°C)	17.34	17.35	17.38	17.41	17.42	17.43	17.44	17.45
Turbidity (NTUs)	26.02	37.32	27.75	18.63	11.80	8.08	5.81	4.25
DO - (mg/L)	6.91	7.94	7.86	7.81	7.71	7.54	7.60	7.63
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
ORP (mV)	205.6	250.8	256.6	274.8	288.6	298.5	303.1	312.3

COMMENTS/OBSERVATIONS Began purging at 1037 Purging rate: 300 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>4/12/16</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-25D</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	<u>cloudy</u>		
Air Temperature	<u>70.5</u>	° F	
Total Well Depth (TWD) =	<u>62.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>5.66</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>56.34</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>9.18</u> gal
3 Casing Volumes =	<u>27.54</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>3.24</u> gal		

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>139.21</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.09</u>	1/100 ft
Land Surface Elevation	<u>139.30</u>	1/100 ft
Screened Interval	<u>52</u> - <u>62</u>	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	<u>1245</u>	
Sample Analytes:	<u>VOC/MNA</u>	
Hack Fe Kit:	<u>0.28</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	0.36	0.72	1.08	1.44	1.80	2.16	2.52	2.88	3.24
VOLUME PURGED (gallons)	11.57	12.62	12.67	12.12	12.17	12.22	12.27	12.32	12.37	12.42
TIME (Military)	5.69	5.68	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69
Water Level (ft BTOC)	7.53	7.53	7.58	7.58	7.57	7.59	7.58	7.58	7.57	7.57
pH (S.U.)	0.270	0.268	0.266	0.265	0.265	0.267	0.266	0.266	0.265	0.265
Sp. Cond. (mS/cm)	18.31	18.44	18.42	18.51	18.53	18.55	18.54	18.57	18.58	18.53
Water Temp. (°C)	14.98	7.1106	7.1100	8.49.6	185.8	157.8	123.6	115.2	107.5	111.3
Turbidity (NTUs)	9.15	9.07	8.90	8.77	8.23	8.27	8.24	8.26	8.21	8.25
DO - (mg/L)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Salinity (ppt)	316.3	317.0	316.4	318.0	319.1	318.9	318.7	318.8	319.0	319.7
ORP (mV)										

COMMENTS/OBSERVATIONS Began purging at 1153 Purging rate: 275 ml/min



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>4/12/16</u>		Casing Diameter <u>2.0</u> inches	
Field Personnel <u>J. Bamberg</u>		Casing Material <u>PVC</u>	
Site Name <u>UTC Delavan Spray Technologies Site</u>		Measuring Point Elevation <u>143.64</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.19</u> 1/100 ft	
Sample ID* <u>MW-26D</u>		Land Surface Elevation <u>143.83</u> 1/100 ft	
Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source ☐		Screened Interval <u>38</u> - <u>48</u> 1/100 ft	
Weather Conditions <u>cloudy</u>		Dedicated Pump or Bailor YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>70's</u> ° F		Steel Guard Pipe Around Casing YES ☒ NO ☐	
Total Well Depth (TWD) = <u>48.00</u> 1/100 ft		Locking Cap YES ☒ NO ☐	
Depth to Ground Water (DGW) = <u>10.32</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>37.68</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.14</u> gal		Yield LOW ☐ MODERATE ☐ HIGH ☒	
3 Casing Volumes = <u>18.42</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1405</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC/MNA</u>	
Total Volume of Water Removed <u>2.88</u> gal		Hack Fe Kit: <u>0.24</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	0.36	0.72	1.08	1.44	1.80	2.16	2.52	2.88
VOLUME PURGED (gallons)									
TIME (Military)	1321	1326	1331	1336	1341	1346	1351	1356	1401
Water Level (ft BTOC)	10.25	10.25	10.28	10.29	10.29	10.29	10.29	10.29	10.29
pH (S.U.)	7.48	7.46	7.45	7.44	7.46	7.44	7.44	7.45	7.45
Sp. Cond. (mS/cm)	0.263	0.267	0.266	0.265	0.264	0.264	0.264	0.263	0.263
Water Temp. (°C)	18.54	18.60	18.66	18.70	18.64	18.64	18.66	18.67	18.74
Turbidity (NTUs)	5.01	4.85	4.72	4.68	4.49	4.31	4.21	4.13	4.17
DO - (mg/L)	900.1	787.6	101.72	60.28	41.21	26.49	25.07	11.49	9.57
Salinity (ppt)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
ORP (mV)	318.3	325.0	328.6	330.7	331.9	333.9	335.7	336.0	336.0

COMMENTS/OBSERVATIONS Began purging at 1317 Purging rate: 275 ml/min

IDW MANAGEMENT FORM

PROJECT: UTC Delavan Spray Technologies Site
Annual GW Sampling

SITE NAME: Delavan Spray Technologies Site

LOCATION: Bamberg, South Carolina

PROJECT #: 60314964

[illegible]

12/3/15

- 0730 Arrive on site, conduct tailgate safety meeting, ~~was~~ Smeak was in meeting.
- 0800 Begin drilling MW-24. R. Morgan prep for well development.
- 0920 At 27 ft. Encountered calcareous sand with shells (top of limestone) at 22 ft. Discuss well depth with W. Gerald. Plan for screen 6-21. Add bentonite pellets starting at 27 ft. Tag bentonite at 22 ft. Add PVC well materials, screen 6-21. Add sand. Tag sand at 5 ft. Add bentonite pellets. Tag bentonite at 3.5 ft. Mix Aqua-Guard grout & place grout from 0-3.5 ft.
- 1045 Drillers clean up, load equipment, and build pads with flush-mount completions at monitoring wells.
- 1200 Break for lunch.
- 1245 Back on site. Provide oversight for drillers. Move all IDW to Haz waste area behind plant.
- 1600 Depart site.

4/11/16

- 0730 Leave Greenville.
- 1030 Arrive in Orangeburg. Meet with R. Morgan. Return to Columbia to wait for additional piece of equipment.
- 1330 Arrive on site. Help R. Morgan complete water levels on hand out equipment.
- 1600 Calibrate YSI.
- 1645 Arrive @ MW-5, begin purge.
- 1725 Sample time MW-5.
- 1755 Arrive @ MW-8, begin purge.
- 1815 Sample time MW-8.
- 1830 Grab R. Morgan purge water.
- 1845 Empty purge water.
- 1900 Leave site.

4/12/16

- 0700 Leave hotel
0730 Arrive on site, begin Calibration of YSI
0800 mob equipment to MW-19, begin purge
0845 sample time MW-19
0855 mob equipment to MW-20, begin purge
0930 sample time MW-20
0945 mob to MW-20D, dup
1050 sample time MW-20D
1100 mob to MW-25D
1245 sample time MW-25D
1250 mob to MW-26D
1405 sample time MW-26D
1430 Empty purge water, pack samples
1530 End of day, leave site. Bad weather

4/13/16

- 0700 Leave hotel
0750 Arrive onsite, begin calibration of YSI
0750 mob to MW-16 + MW-16D, begin purge MW-16
0830 sample time MW-16, begin purge MW-16D
0835 Sample time MW-16D
0925 mob to MW-23D, begin purge
1010 sample time MW-23D, Dup
1025 mob to MW-2, Begin purge
1110 sample time MW-2
1120 Empty Purge water
1140 mob to MW-1, begin purge
1235 sample time MW-1
1255 mob to MW-7
1340 sample time MW-7
1400 Drive back to hotel for IDW Bottlewear
1515 Leave hotel
1545 Arrive back on site
1550 IDW-1 sample time, pack cooler

7-11-2014
4/11/16

UTC Delavan Spring GW
Sampling event

0630 leave AECOM to pick up equipment

0925 arrive in Orangeburg to find rooms - used coupon for Fairfield Inn 94.99 a night

0930 begin to calibrate YSI 556 water quality meters while waiting for Justin to arrive.

1 of the meters D.O. is out of range and will not calibrate called Eric and He will prepare another meter and meet Justin in Chapin SC to exchange meters R Morgan continues to calibrate other YSI 556 meter - recorded on calibration logs

1000 leave for UTC Bamberg to start water levels until Justin returns.

1045 on site at UTC Bamberg - Walter Gerald / Bryan Wright are on site for a site walk for future work sign in and begin to open wells to equilibrate - mw-100 & mw-90 buried

1230 begin water levels until Justin

UTC Delavan Spring GW

Sampling event

4/11/16

arrive then will uncover mw-100 & 90
1315 Justin on site - get badge to go into bldg for mw-19 & 20
1340 begin to remove brush pile over mw-100

1400 try to locate mw-90 was covered when culvert was repaired located mw-90 not damaged

1430 divide up equipment

1510 head toward MW-15 cluster due to rain in forecast

1520 stuck going to MW-15 cluster try to locate tow strap

1600 Wesley w/ UTC loads loans us chain to pull out Van

1620 begin to carry equipment from MW-16 cluster area to MW-15 cluster the creek is wider now ~ 8-10" deep & 10' wide

1647 at MW-1501 begin to micro purge w/ peristaltic pump - tubing set middle of screen

1728 sampled MW-1501

1732 at MW-1501 begin to micro purge w/ peristaltic pump

4/11/16

UTC Delavan Spring GW

Sampling event

- 1808 Sampled MW-15D
 1815 at MW-15~~5~~ begin to micro
 purge w/ peristaltic pump
 1855 Sampled MW-15
 1905 begin to carry equipment &
 purge water out to van at
 MW-16 area.
 1915 empty purge water into
 55 gal steel drum - staged at
 UTC site
 Justin purchased ice - samples will
 be stored on ice in secure location
 until 4-12-2016 then will be
 shipped FedEx to Accu-test.
 1920 off site / Purchased Bug spray
 2000 at motel in Orangeburg

UTC Delavan Spring GW

Sampling DTW

4/11/16

well ID	DTW
MW-1	11.40
MW-2	10.43
MW-3	13.19
MW-3D	14.04
MW-3D1	13.83
MW-4	5.22
MW-5	6.31
MW-6	4.14
MW-7	13.19
MW-8	10.62
MW-9	5.14
MW-9D	
MW-10	3.52
MW-10D	7.27
MW-11	6.64
MW-12D	13.58
MW-13D	12.32
MW-14	11.18
MW-14D	13.04
MW-15	2.69
MW-15D	2.20
MW-15D1	2.32
MW-16	2.73
MW-16D	5.08
MW-17	2.79

4/11/16

-UTC Delavan Spring GW

Sampling event

Well ID	DTW
MW-18	9.86
MW-19	11.42
MW-20	11.25
MW-21	12.68
MW-210	12.83
MW-220	12.27
MW-230	14.09
MW-24	13.39
MW-250	5.66
MW-260	10.32

UTC Delavan Spring

7/12/10

4/12/16

GW Sampling event

0700 leave Motel for UTC Bomberg SC
 0730 calibrate YSI 556 water quality meter - see calibration log for details
 divide up bottleware w/ Justin
 0815 at MW-10 set up to micro purge with peristaltic pump - tubing intake set at the middle of the screen zone
 0900 sampled MW-10 VOC's & MNA
 0910 at MW-9 set up to micro purge with peristaltic pump - tubing intake set in middle of screen zone
 0917 begin purging MW-9
 1000 sampled MW-9 VOC's & MNA
 1025 at MW-24 set up to micro purge w/ peristaltic pump - tubing intake set in the middle of the screen zone
 1037 begin to purge MW-24
 1118 sampled MW-24 VOC's & MNA
 1145 empty purge water into 55 gal steel drum and Wesley said to get a box from maintenance shop that belong to Sauerco and return it.
 1200 off site for ice to pack samples / lunch
 1220 at MW-21 set up and begin to

4/12/16

UTC Delavan GW Spring event

micro purge w/ peristaltic pump
1305 Sampled MW-21 VOC's & MNA
1325 at MW-210 set up to micro
purge w/ peristaltic pump
1332 begin to purge MW-210
1405 Sampled MW-210 VOC's & MNA
also dup on VOC's only
1430 bag ice and pack cooler
for FedEx shipment
1500 empty purge water and
take cooler to shipping dept.
at UTC Delavan for FedEx to pick up
light rain and dark skies
1530 off site will finish sampling
on 4-13-2016.
1605 at motel.

UTC Delavan GW Spring 4-13-2016
Sampling event

0645 Calibrate YSI 556 water quality
meter on site
0715 get badge and sign in
0730 at MW-120 begin to micro purge
with peristaltic pump. Take reading every
10 minutes to start due to high pH &
conductivity it will drop and stabilize
after running ~ 5 gals
water level has dropped 4' this event
while purging then stabilized.
0900 Sampled MW-120 VOC's
0920 at MW-130 begin to micro purge
with peristaltic pump - tubing inlet set middle
of screen zone
1025 Sampled MW-130 VOC's
1030 empty purge water into 55 gal
Steel drum.
1052 at MW-14 low yield well set up
and begin to micro purge w/ peristaltic pump
tubing intake 3' off bottom
1202 Sampled MW-14 VOC's
1208 at MW-140 begin to micro purge with
peristaltic pump - tubing set in middle of the
screen zone
1242 Sampled MW-140

7 157
4/13/16

UTC Delavan Spring GW sampling Event

- 1230 off site to purchase additional ice for samples / lunch
- 1300 back on site setup at MW-3
- 1310 begin to purge w/ peristaltic pump tubing intake at 1.5' off bottom at MW-30 RM
- 1340 Sampled MW-3
- 1347 at MW-30 set up to micro purge with peristaltic pump tubing intake in middle of screen zone
- 1422 Sampled MW-30
- 1430 empty purge water into 55 gal steel drum
- 1445 Complete IDW log for the 2-drum on site w/ purge water
1 - 100% full 2 - 50% full
- 1500 off site to clear around MW-10D where someone has dumped brush / limbs
- 1530 waiting for Justin to return with IDW bottleware
- 1550 Justin back on site collect a composite of IDW#1 & IDW#2 purge water - secure drums labeled pack ~~cooler~~ cooler at samples for FedEx shipment in Columbia
- 1630 off site after returning badge return equipment in Greenville

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: FA33062

Sampling Dates: 04/11/16 - 04/12/16

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: **102**



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

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

United Technologies Corporation

Job No: FA33062

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA33062-1	04/11/16	17:25 RMJB	04/13/16	AQ	Ground Water	MW-5
FA33062-2	04/11/16	17:28 RMJB	04/13/16	AQ	Ground Water	MW-15D1
FA33062-3	04/11/16	18:08 RMJB	04/13/16	AQ	Ground Water	MW-15D
FA33062-4	04/11/16	18:15 RMJB	04/13/16	AQ	Ground Water	MW-8
FA33062-5	04/11/16	18:55 RMJB	04/13/16	AQ	Ground Water	MW-15
FA33062-6	04/12/16	08:45 RMJB	04/13/16	AQ	Ground Water	MW-19
FA33062-7	04/12/16	09:00 RMJB	04/13/16	AQ	Ground Water	MW-10
FA33062-8	04/12/16	09:30 RMJB	04/13/16	AQ	Ground Water	MW-20
FA33062-9	04/12/16	10:00 RMJB	04/13/16	AQ	Ground Water	MW-9
FA33062-10	04/12/16	10:50 RMJB	04/13/16	AQ	Ground Water	MW-22D
FA33062-11	04/12/16	10:50 RMJB	04/13/16	AQ	Ground Water	MW-22D-A
FA33062-12	04/12/16	11:18 RMJB	04/13/16	AQ	Ground Water	MW-24
FA33062-13	04/12/16	11:18 RMJB	04/13/16	AQ	Ground Water	MW-24-A



Sample Summary
(continued)

United Technologies Corporation

Job No: FA33062

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA33062-14	04/12/16	12:45 RMJB	04/13/16	AQ	Ground Water	MW-25D
FA33062-15	04/12/16	13:05 RMJB	04/13/16	AQ	Ground Water	MW-21
FA33062-16	04/12/16	14:05 RMJB	04/13/16	AQ	Ground Water	MW-26D
FA33062-17	04/12/16	14:05 RMJB	04/13/16	AQ	Ground Water	MW-21D
FA33062-17D	04/12/16	14:05 RMJB	04/13/16	AQ	Water Dup/MSD	MW-21D
FA33062-17S	04/12/16	14:05 RMJB	04/13/16	AQ	Water Matrix Spike	MW-21D
FA33062-18	04/12/16	00:00 RMJB	04/13/16	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job FA33062

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 4/26/2016 12:04:44 PM

17 Samples and 1 Trip Blank were collected on/between 04/11/2016 and 04/12/2016 and were received at SGS Accutest Southeast (SASE) on 04/13/2016 properly preserved, at 3 Deg. C and intact. These Samples received an SASE job number of FA33062. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VJ5266

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33062-17MS, FA33062-17MSD were used as the QC samples indicated.

FA33062-17: Confirmation run.

Matrix: AQ

Batch ID: VJ5268

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33062-11MS, FA33062-11MSD 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.

Matrix: AQ

Batch ID: VN4253

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33012-30MS, FA33012-30MSD were used as the QC samples indicated.

Matrix: AQ

Batch ID: VN4260

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33200-12MS, FA33200-12MSD were used as the QC samples indicated.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for cis-1,2-Dichloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Volatiles by GC By Method RSKSOP-147/175

Matrix: AQ

Batch ID: GFF1318

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33057-1MS, FA33058-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ

Batch ID: GP27778

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33055-1MS, FA33055-1MSD were used as the QC samples for Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate.

Tuesday, April 26, 2016

Page 1 of 2

Wet Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ

Batch ID: GP27783

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33062-7MS, FA33062-7MSD were used as the QC samples for Total Organic Carbon.

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

Narrative prepared by:

Lovelie Metzgar, QA Officer (signature on file)

Date: April 26, 2016

Tuesday, April 26, 2016

Page 2 of 2

Summary of Hits

Job Number: FA33062
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/11/16 thru 04/12/16



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA33062-1 MW-5						
Tetrachloroethylene		0.53 J	1.0	0.30	ug/l	SW846 8260B
FA33062-2 MW-15D1						
No hits reported in this sample.						
FA33062-3 MW-15D						
No hits reported in this sample.						
FA33062-4 MW-8						
Tetrachloroethylene		7.8	1.0	0.30	ug/l	SW846 8260B
FA33062-5 MW-15						
No hits reported in this sample.						
FA33062-6 MW-19						
1,1-Dichloroethylene		39.1 J	100	22	ug/l	SW846 8260B
Methylene Chloride		221 J	500	200	ug/l	SW846 8260B
Tetrachloroethylene		16600	250	76	ug/l	SW846 8260B
1,1,1-Trichloroethane		97.5 J	100	20	ug/l	SW846 8260B
FA33062-7 MW-10						
1,1-Dichloroethylene		6.7	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		90.8	10	3.1	ug/l	SW846 8260B
Tetrachloroethylene		43.3	1.0	0.30	ug/l	SW846 8260B
Toluene		1.2	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene		22.1	1.0	0.27	ug/l	SW846 8260B
Methane		488	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		3.9	2.0	0.80	mg/l	EPA 300/SW846 9056A
Sulfate		2.7	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.78 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA33062-8 MW-20						
cis-1,2-Dichloroethylene		0.72 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene		480	10	3.0	ug/l	SW846 8260B
Trichloroethylene		3.2	1.0	0.27	ug/l	SW846 8260B

Summary of Hits

Job Number: FA33062
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/11/16 thru 04/12/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA33062-9 MW-9

cis-1,2-Dichloroethylene	49.2	10	3.1	ug/l	SW846 8260B
Tetrachloroethylene	771	10	3.0	ug/l	SW846 8260B
Trichloroethylene	115	10	2.7	ug/l	SW846 8260B
Methane	13.8	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	3.1	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.091 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	6.4	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	1.3	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA33062-10 MW-22D

1,1-Dichloroethylene	1.5	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	65.7	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.35 J	1.0	0.27	ug/l	SW846 8260B
Chloride	6.8	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.89	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	4.7	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.42 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA33062-11 MW-22D-A

1,1-Dichloroethylene	1.8	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	85.8	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.41 J	1.0	0.27	ug/l	SW846 8260B

FA33062-12 MW-24

cis-1,2-Dichloroethylene	59.2	5.0	1.6	ug/l	SW846 8260B
Tetrachloroethylene	1160	20	6.1	ug/l	SW846 8260B
Trichloroethylene	6.1	5.0	1.4	ug/l	SW846 8260B
Chloride	3.8	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.080 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	2.5	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.37 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA33062-13 MW-24-A

cis-1,2-Dichloroethylene	51.7	10	3.1	ug/l	SW846 8260B
Tetrachloroethylene	925	10	3.0	ug/l	SW846 8260B
Trichloroethylene	6.6 J	10	2.7	ug/l	SW846 8260B

Summary of Hits

Job Number: FA33062
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/11/16 thru 04/12/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA33062-14 MW-25D

1,1-Dichloroethylene	3.4	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	1.1	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	74.8	2.5	0.76	ug/l	SW846 8260B
Trichloroethylene	0.96 J	1.0	0.27	ug/l	SW846 8260B
Methane	0.17 J	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	9.8	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.2	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	3.4	2.0	0.60	mg/l	EPA 300/SW846 9056A

FA33062-15 MW-21

cis-1,2-Dichloroethylene	383	50	16	ug/l	SW846 8260B
Tetrachloroethylene	13200	200	61	ug/l	SW846 8260B
Trichloroethylene	216	50	14	ug/l	SW846 8260B
Methane	219	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	3.7	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.073 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.058 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.92 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA33062-16 MW-26D

1,1-Dichloroethylene	1.8	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.93 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	62.6	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	1.1	1.0	0.27	ug/l	SW846 8260B
Chloride	9.8	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.2	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	3.9	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.24 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA33062-17 MW-21D

1,1-Dichloroethylene	0.49 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	8.6	1.0	0.30	ug/l	SW846 8260B
Methane	0.85	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	3.9	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.077 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	3.1	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.28 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

Summary of Hits

Job Number: FA33062
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/11/16 thru 04/12/16



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

FA33062-18 TRIP BLANK

No hits reported in this sample.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-1	Date Received:	04/13/16
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	J0975923.D	1	04/19/16	DP	n/a	n/a	VJ5266
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	0.53	1.0	0.30	ug/l	J
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-5	Date Sampled: 04/11/16
Lab Sample ID: FA33062-1	Date Received: 04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	MW-15D1	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-2	Date Received:	04/13/16
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	J0975924.D	1	04/19/16	DP	n/a	n/a	VJ5266
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15D1	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-2	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	MW-15D	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-3	Date Received:	04/13/16
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	N0094044.D	1	04/20/16	RB	n/a	n/a	VN4260
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	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:	04/11/16
Lab Sample ID:	FA33062-3	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	105%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-4	Date Received:	04/13/16
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	N0094040.D	1	04/20/16	RB	n/a	n/a	VN4260
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	7.8	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-4	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	106%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/11/16
Lab Sample ID:	FA33062-5	Date Received:	04/13/16
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	J0975905.D	1	04/19/16	DP	n/a	n/a	VJ5266
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	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: 04/11/16
Lab Sample ID: FA33062-5	Date Received: 04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		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	103%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-6	Date Received:	04/13/16
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	J0975906.D	100	04/19/16	DP	n/a	n/a	VJ5266
Run #2	J0975962.D	250	04/20/16	DP	n/a	n/a	VJ5268

	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	2500	1000	ug/l	
71-43-2	Benzene	ND	100	20	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	46	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	260	ug/l	
75-15-0	Carbon Disulfide	ND	200	23	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	30	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	200	63	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	26	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	26	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	28	ug/l	
75-35-4	1,1-Dichloroethylene	39.1	100	22	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	ND	100	31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	33	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	25	ug/l	
100-41-4	Ethylbenzene	ND	100	25	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide	ND	200	50	ug/l	
74-87-3	Methyl Chloride	ND	200	50	ug/l	
75-09-2	Methylene Chloride	221	500	200	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	140	ug/l	
100-42-5	Styrene	ND	100	24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	33	ug/l	
127-18-4	Tetrachloroethylene	16600 ^a	250	76	ug/l	
108-88-3	Toluene	ND	100	20	ug/l	
71-55-6	1,1,1-Trichloroethane	97.5	100	20	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	100	37	ug/l	
79-01-6	Trichloroethylene	ND	100	27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-6	Date Received:	04/13/16
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	100	31	ug/l	
1330-20-7	Xylene (total)	ND	300	56	ug/l	

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

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-7	Date Received:	04/13/16
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	J0975957.D	1	04/20/16	DP	n/a	n/a	VJ5268
Run #2	J0975907.D	10	04/19/16	DP	n/a	n/a	VJ5266

	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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	6.7	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	90.8 ^a	10	3.1	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	43.3	1.0	0.30	ug/l	
108-88-3	Toluene	1.2	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	22.1	1.0	0.27	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-10	Date Sampled: 04/12/16
Lab Sample ID: FA33062-7	Date Received: 04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

(a) Result is from Run# 2

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-10	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-7	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33637.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	488	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-7	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	3.9	2.0	0.80	mg/l	1	04/13/16 14:02 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.050 U	0.10	0.050	mg/l	1	04/13/16 14:02 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 14:02 DM	EPA	300/SW846 9056A
Sulfate	2.7	2.0	0.60	mg/l	1	04/13/16 14:02 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.78 J	1.0	0.23	mg/l	1	04/15/16 12:44 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-20	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-8	Date Received:	04/13/16
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	J0975975.D	1	04/20/16	DP	n/a	n/a	VJ5268
Run #2	J0975908.D	10	04/19/16	DP	n/a	n/a	VJ5266

	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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.72	1.0	0.31	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	480 ^a	10	3.0	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	3.2	1.0	0.27	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-20	Date Sampled: 04/12/16
Lab Sample ID: FA33062-8	Date Received: 04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-9	Date Received:	04/13/16
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	J0975963.D	10	04/20/16	DP	n/a	n/a	VJ5268
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	250	100	ug/l	
71-43-2	Benzene	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	26	ug/l	
75-15-0	Carbon Disulfide	ND	20	2.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.0	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.3	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.6	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.8	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	49.2	10	3.1	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	3.3	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	3.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.6	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.5	ug/l	
100-41-4	Ethylbenzene	ND	10	2.5	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	20	5.0	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	14	ug/l	
100-42-5	Styrene	ND	10	2.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.3	ug/l	
127-18-4	Tetrachloroethylene	771	10	3.0	ug/l	
108-88-3	Toluene	ND	10	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	3.7	ug/l	
79-01-6	Trichloroethylene	115	10	2.7	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-9	Date Sampled: 04/12/16
Lab Sample ID: FA33062-9	Date Received: 04/13/16
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	10	3.1	ug/l	
1330-20-7	Xylene (total)	ND	30	5.6	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-9	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33638.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	13.8	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit 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

4.9
4

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-9	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	3.1	2.0	0.80	mg/l	1	04/13/16 14:16 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.091 J	0.10	0.050	mg/l	1	04/13/16 14:16 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 14:16 DM	EPA	300/SW846 9056A
Sulfate	6.4	2.0	0.60	mg/l	1	04/13/16 14:16 DM	EPA	300/SW846 9056A
Total Organic Carbon	1.3	1.0	0.23	mg/l	1	04/15/16 13:53 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

4.9
4

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-10	Date Received:	04/13/16
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	J0975958.D	1	04/20/16	DP	n/a	n/a	VJ5268
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	1.5	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	65.7	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.35	1.0	0.27	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-10	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-10	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33643.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

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

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

4.10
4

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-10	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	6.8	2.0	0.80	mg/l	1	04/13/16 14:30 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.89	0.10	0.050	mg/l	1	04/13/16 14:30 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 14:30 DM	EPA	300/SW846 9056A
Sulfate	4.7	2.0	0.60	mg/l	1	04/13/16 14:30 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.42 J	1.0	0.23	mg/l	1	04/15/16 14:12 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

4.10
4

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-11	Date Received:	04/13/16
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	J0975959.D	1	04/20/16	DP	n/a	n/a	VJ5268
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	1.8	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	85.8	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.41	1.0	0.27	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-11	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-12	Date Received:	04/13/16
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	J0975912.D	5	04/19/16	DP	n/a	n/a	VJ5266
Run #2	J0975964.D	20	04/20/16	DP	n/a	n/a	VJ5268

	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	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	13	ug/l	
75-15-0	Carbon Disulfide	ND	10	1.2	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.1	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.3	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.4	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.1	ug/l	
156-59-2	cis-1,2-Dichloroethylene	59.2	5.0	1.6	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	10	2.5	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	7.0	ug/l	
100-42-5	Styrene	ND	5.0	1.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.6	ug/l	
127-18-4	Tetrachloroethylene	1160 ^a	20	6.1	ug/l	
108-88-3	Toluene	ND	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/l	
79-01-6	Trichloroethylene	6.1	5.0	1.4	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: 04/12/16
Lab Sample ID: FA33062-12	Date Received: 04/13/16
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	1.6	ug/l	
1330-20-7	Xylene (total)	ND	15	2.8	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	79-125%
2037-26-5	Toluene-D8	100%	100%	85-112%
460-00-4	4-Bromofluorobenzene	102%	105%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-12	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33644.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

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

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

4.12
4

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-12	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	3.8	2.0	0.80	mg/l	1	04/13/16 14:44 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.080 J	0.10	0.050	mg/l	1	04/13/16 14:44 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 14:44 DM	EPA	300/SW846 9056A
Sulfate	2.5	2.0	0.60	mg/l	1	04/13/16 14:44 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.37 J	1.0	0.23	mg/l	1	04/15/16 14:31 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

4.12
4

Report of Analysis

Client Sample ID:	MW-24-A	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-13	Date Received:	04/13/16
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	J0975913.D	10	04/19/16	DP	n/a	n/a	VJ5266
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	250	100	ug/l	
71-43-2	Benzene	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	26	ug/l	
75-15-0	Carbon Disulfide	ND	20	2.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.0	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.3	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.6	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.8	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	51.7	10	3.1	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	3.3	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	3.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.6	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.5	ug/l	
100-41-4	Ethylbenzene	ND	10	2.5	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	20	5.0	ug/l	
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	14	ug/l	
100-42-5	Styrene	ND	10	2.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.3	ug/l	
127-18-4	Tetrachloroethylene	925	10	3.0	ug/l	
108-88-3	Toluene	ND	10	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	3.7	ug/l	
79-01-6	Trichloroethylene	6.6	10	2.7	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-24-A	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-13	Date Received:	04/13/16
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	10	3.1	ug/l	
1330-20-7	Xylene (total)	ND	30	5.6	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	MW-25D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-14	Date Received:	04/13/16
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	J0975960.D	1	04/20/16	DP	n/a	n/a	VJ5268
Run #2	J0975914.D	2.5	04/19/16	DP	n/a	n/a	VJ5266

	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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	3.4	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.1	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	74.8 ^a	2.5	0.76	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.96	1.0	0.27	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-25D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-14	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	97%	79-125%
2037-26-5	Toluene-D8	98%	100%	85-112%
460-00-4	4-Bromofluorobenzene	103%	103%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-25D						
Lab Sample ID:	FA33062-14					Date Sampled:	04/12/16
Matrix:	AQ - Ground Water					Date Received:	04/13/16
Method:	RSKSOP-147/175					Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33645.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

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

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

MDL = Method Detection Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-25D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-14	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	9.8	2.0	0.80	mg/l	1	04/13/16 14:58 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	1.2	0.10	0.050	mg/l	1	04/13/16 14:58 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 14:58 DM	EPA	300/SW846 9056A
Sulfate	3.4	2.0	0.60	mg/l	1	04/13/16 14:58 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.23 U	1.0	0.23	mg/l	1	04/15/16 15:29 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-15	Date Received:	04/13/16
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	J0975915.D	50	04/19/16	DP	n/a	n/a	VJ5266
Run #2	J0975965.D	200	04/20/16	DP	n/a	n/a	VJ5268

	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	1300	500	ug/l	
71-43-2	Benzene	ND	50	10	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	23	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	130	ug/l	
75-15-0	Carbon Disulfide	ND	100	12	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	15	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	31	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	13	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	13	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	14	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	11	ug/l	
156-59-2	cis-1,2-Dichloroethylene	383	50	16	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	17	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	13	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	12	ug/l	
100-41-4	Ethylbenzene	ND	50	13	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide	ND	100	25	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	70	ug/l	
100-42-5	Styrene	ND	50	12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	16	ug/l	
127-18-4	Tetrachloroethylene	13200 ^a	200	61	ug/l	
108-88-3	Toluene	ND	50	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	10	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	18	ug/l	
79-01-6	Trichloroethylene	216	50	14	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-21	Date Sampled: 04/12/16
Lab Sample ID: FA33062-15	Date Received: 04/13/16
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	50	16	ug/l	
1330-20-7	Xylene (total)	ND	150	28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	98%	79-125%
2037-26-5	Toluene-D8	99%	99%	85-112%
460-00-4	4-Bromofluorobenzene	103%	103%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-21		
Lab Sample ID:	FA33062-15	Date Sampled:	04/12/16
Matrix:	AQ - Ground Water	Date Received:	04/13/16
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33646.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	219	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit 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

4.15
4

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-15	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	3.7	2.0	0.80	mg/l	1	04/13/16 15:40 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.073 J	0.10	0.050	mg/l	1	04/13/16 15:40 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.058 J	0.10	0.050	mg/l	1	04/13/16 15:40 DM	EPA	300/SW846 9056A
Sulfate	0.60 U	2.0	0.60	mg/l	1	04/13/16 15:40 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.92 J	1.0	0.23	mg/l	1	04/15/16 15:49 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

4.15
4

Report of Analysis

Client Sample ID:	MW-26D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-16	Date Received:	04/13/16
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	J0975916.D	1	04/19/16	DP	n/a	n/a	VJ5266
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
62-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	1.8	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.93	1.0	0.31	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	62.6	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	1.1	1.0	0.27	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	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-16	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	MW-26D						
Lab Sample ID:	FA33062-16				Date Sampled:	04/12/16	
Matrix:	AQ - Ground Water				Date Received:	04/13/16	
Method:	RSKSOP-147/175				Percent Solids:	n/a	
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33647.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

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

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

MDL = Method Detection Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

4.16
4

Report of Analysis

Client Sample ID:	MW-26D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-16	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	9.8	2.0	0.80	mg/l	1	04/13/16 15:54 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	1.2	0.10	0.050	mg/l	1	04/13/16 15:54 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 15:54 DM	EPA	300/SW846 9056A
Sulfate	3.9	2.0	0.60	mg/l	1	04/13/16 15:54 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.24 J	1.0	0.23	mg/l	1	04/15/16 16:08 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

4.16
4

Report of Analysis

Client Sample ID:	MW-21D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-17	Date Received:	04/13/16
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	J0975961.D	1	04/20/16	DP	n/a	n/a	VJ5268
Run #2 ^a	J0975917.D	2.5	04/19/16	DP	n/a	n/a	VJ5266

	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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	0.49	1.0	0.22	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	8.6	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	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-21D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-17	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

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

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates 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		
Lab Sample ID:	FA33062-17	Date Sampled:	04/12/16
Matrix:	AQ - Ground Water	Date Received:	04/13/16
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF33648.D	1	04/14/16	EG	n/a	n/a	GFF1318
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.85	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit 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

4.17
4

Report of Analysis

Client Sample ID:	MW-21D	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-17	Date Received:	04/13/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	3.9	2.0	0.80	mg/l	1	04/13/16 16:08 DM	EPA	300/SW846 9056A
Nitrogen, Nitrate	0.077 J	0.10	0.050	mg/l	1	04/13/16 16:08 DM	EPA	300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/13/16 16:08 DM	EPA	300/SW846 9056A
Sulfate	3.1	2.0	0.60	mg/l	1	04/13/16 16:08 DM	EPA	300/SW846 9056A
Total Organic Carbon	0.28 J	1.0	0.23	mg/l	1	04/15/16 16:43 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

4.17
4

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-18	Date Received:	04/13/16
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	N0093961.D	1	04/17/16	RB	n/a	n/a	VN4253
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/12/16
Lab Sample ID:	FA33062-18	Date Received:	04/13/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

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

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA33062

AECOM

Chain of Custody and Analytical Request

Page 1 of 2

Project Number: 6031496

Chain of Custody Number (1): PO# 67246

LIMS Number:

Project Name / Location:

UTC, Delavan Spray Technologies site, Bomberg SC

Sample Analysis Requested

Quality Assurance Samples

Client Name:

UTC

Collected by:

Randy Morgan/Justin Butler

Project Manager:

Walter Gerald 864-234-9925

See Comments

Sample ID

Date Collected
(dd-mm-yy)Time Collected (Military)
(hh:mm)

COMP

GRAB

Well

Sample Information

VOC 8160 TEL

TOC

MEE 836175

AN30, AN2, SO4, CHL

COMMENTS

Cooler ID

1	MW-5	11-APR-2016	1735	X			X													
2	MW-15D1	11-APR-2016	1728	X			X													
3	MW-15D	11-APR-2016	1808	X			X													
4	MW-8	11-APR-2016	1815	X			X													
5	MW-15	11-APR-2016	1835	X			X													
6	MW-19	12-APR-2016	0845	X			X													
7	MW-10	12-APR-2016	0900	X			X	X	X	X										
8	MW-20	12-APR-2016	0930	X			X													
9	MW-9	12-APR-2016	1000	X			X	X	X	X										
10	MW-22D	12-APR-2016	1050	X			X	X	X	X										
11	MW-22D-a	12-APR-2016	1050	X			X													
12	MW-24	12-APR-2016	1118	X			X	X	X	X										
13	MW-24-a	12-APR-2016	1118	X			X													
14	MW-25D	12-APR-2016	1245	X			X	X	X	X										
15	MW-21	12-APR-2016	1305	X			X	X	X	X										

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. <i>[Signature]</i>	4/16/16	1500	1. <i>[Signature]</i>	4/13/16	9:30
2. <i>[Signature]</i>			2. <i>[Signature]</i>		
3. <i>[Signature]</i>			3. <i>[Signature]</i>		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	Shipped: <i>X</i>
Method of Shipment: <i>FEDEX</i>	Airbill #: <i>910012246622</i>
Analytical Lab: <i>AcuTest</i>	Location: <i>Orlando, FL</i>
Lab Recipient:	Date: _____ Time: _____

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

5.0

32745\admin\project control\project forms\Blank COC

FA33062: Chain of Custody

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SGS

65 of 102
ACCUTEST
FA33062

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 33062 CLIENT: AECOM PROJECT: UTC
 DATE/TIME RECEIVED: 4/13/16 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8100 1224 6622

COOLER INFORMATION

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

TRIP BLANK INFORMATION

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

MISC. INFORMATION

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

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS: RECEIVED 1 VIAL BROKEN FOR SAMPLE # 4

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.2
☐ OBSERVED TEMPS: 2.8
☐ CORRECTED TEMPS: 3.0 (USED FOR LIMS)

SAMPLE INFORMATION

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

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TECHNICIAN SIGNATURE/DATE [Signature] 4/13/16 REVIEWER SIGNATURE/DATE C 1-13-16

NF 11/15

RECEIPTLOG040416.xls

FA33062: Chain of Custody

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FA33062: Chain of Custody
Page 4 of 4

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 2

Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4253-MB	N0093960.D	1	04/17/16	RB	n/a	n/a	VN4253

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

FA33062-18

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

Method Blank Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4253-MB	N0093960.D	1	04/17/16	RB	n/a	n/a	VN4253

The QC reported here applies to the following samples: Method: SW846 8260B
FA33062-18

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

Method Blank Summary

Page 1 of 2

Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5266-MB	J0975904.D	1	04/19/16	DP	n/a	n/a	VJ5266

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

FA33062-1, FA33062-2, FA33062-5, FA33062-6, FA33062-7, FA33062-8, FA33062-12, FA33062-13, FA33062-14, FA33062-15, FA33062-16

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

Method Blank Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5266-MB	J0975904.D	1	04/19/16	DP	n/a	n/a	VJ5266

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

FA33062-1, FA33062-2, FA33062-5, FA33062-6, FA33062-7, FA33062-8, FA33062-12, FA33062-13, FA33062-14, FA33062-15, FA33062-16

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

Method Blank Summary

Page 1 of 2

Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4260-MB	N0094038.D	1	04/20/16	RB	n/a	n/a	VN4260

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

FA33062-3, FA33062-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

Method Blank Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4260-MB	N0094038.D	1	04/20/16	RB	n/a	n/a	VN4260

The QC reported here applies to the following samples: Method: SW846 8260B
FA33062-3, FA33062-4

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 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	110% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5268-MB	J0975956.D	1	04/20/16	DP	n/a	n/a	VJ5268

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

FA33062-6, FA33062-7, FA33062-8, FA33062-9, FA33062-10, FA33062-11, FA33062-12, FA33062-14, FA33062-15, FA33062-17

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

Method Blank Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5268-MB	J0975956.D	1	04/20/16	DP	n/a	n/a	VJ5268

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

FA33062-6, FA33062-7, FA33062-8, FA33062-9, FA33062-10, FA33062-11, FA33062-12, FA33062-14, FA33062-15, FA33062-17

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

Blank Spike Summary

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Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4253-BS	N0093959.D	1	04/17/16	RB	n/a	n/a	VN4253

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

FA33062-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	105	84	50-147
71-43-2	Benzene	25	22.1	88	81-122
75-27-4	Bromodichloromethane	25	23.8	95	79-123
75-25-2	Bromoform	25	23.9	96	66-123
78-93-3	2-Butanone (MEK)	125	99.0	79	56-143
75-15-0	Carbon Disulfide	25	20.8	83	66-148
56-23-5	Carbon Tetrachloride	25	25.2	101	76-136
108-90-7	Chlorobenzene	25	22.5	90	82-124
75-00-3	Chloroethane	25	26.7	107	62-144
67-66-3	Chloroform	25	22.7	91	80-124
124-48-1	Dibromochloromethane	25	25.2	101	78-122
75-34-3	1,1-Dichloroethane	25	23.0	92	81-122
107-06-2	1,2-Dichloroethane	25	22.8	91	75-125
75-35-4	1,1-Dichloroethylene	25	23.6	94	78-137
156-59-2	cis-1,2-Dichloroethylene	25	22.1	88	78-120
156-60-5	trans-1,2-Dichloroethylene	25	23.8	95	76-127
78-87-5	1,2-Dichloropropane	25	22.1	88	76-124
10061-01-5	cis-1,3-Dichloropropene	25	23.9	96	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.5	102	80-120
100-41-4	Ethylbenzene	25	22.5	90	81-121
591-78-6	2-Hexanone	125	98.2	79	61-129
74-83-9	Methyl Bromide	25	24.3	97	59-143
74-87-3	Methyl Chloride	25	22.7	91	50-159
75-09-2	Methylene Chloride	25	23.0	92	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	107	86	66-122
100-42-5	Styrene	25	23.1	92	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	22.5	90	72-120
127-18-4	Tetrachloroethylene	25	23.7	95	76-135
108-88-3	Toluene	25	22.4	90	80-120
71-55-6	1,1,1-Trichloroethane	25	23.1	92	75-130
79-00-5	1,1,2-Trichloroethane	25	22.1	88	76-119
79-01-6	Trichloroethylene	25	23.1	92	81-126
75-01-4	Vinyl Chloride	25	27.5	110	69-159
1330-20-7	Xylene (total)	75	70.0	93	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4253-BS	N0093959.D	1	04/17/16	RB	n/a	n/a	VN4253

The QC reported here applies to the following samples: Method: SW846 8260B
FA33062-18

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

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5266-BS	J0975903.D	1	04/19/16	DP	n/a	n/a	VJ5266

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

FA33062-1, FA33062-2, FA33062-5, FA33062-6, FA33062-7, FA33062-8, FA33062-12, FA33062-13, FA33062-14, FA33062-15, FA33062-16

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	27.0	108	81-122
75-27-4	Bromodichloromethane	25	27.2	109	79-123
75-25-2	Bromoform	25	25.6	102	66-123
78-93-3	2-Butanone (MEK)	125	111	89	56-143
75-15-0	Carbon Disulfide	25	32.1	128	66-148
56-23-5	Carbon Tetrachloride	25	30.9	124	76-136
108-90-7	Chlorobenzene	25	26.4	106	82-124
75-00-3	Chloroethane	25	27.9	112	62-144
67-66-3	Chloroform	25	26.8	107	80-124
124-48-1	Dibromochloromethane	25	26.5	106	78-122
75-34-3	1,1-Dichloroethane	25	28.7	115	81-122
107-06-2	1,2-Dichloroethane	25	24.5	98	75-125
75-35-4	1,1-Dichloroethylene	25	29.8	119	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.4	102	78-120
156-60-5	trans-1,2-Dichloroethylene	25	30.6	122	76-127
78-87-5	1,2-Dichloropropane	25	24.9	100	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.6	102	75-118
10061-02-6	trans-1,3-Dichloropropene	25	26.6	106	80-120
100-41-4	Ethylbenzene	25	27.1	108	81-121
591-78-6	2-Hexanone	125	114	91	61-129
74-83-9	Methyl Bromide	25	22.5	90	59-143
74-87-3	Methyl Chloride	25	26.4	106	50-159
75-09-2	Methylene Chloride	25	27.3	109	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	112	90	66-122
100-42-5	Styrene	25	24.1	96	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.8	95	72-120
127-18-4	Tetrachloroethylene	25	25.0	100	76-135
108-88-3	Toluene	25	26.3	105	80-120
71-55-6	1,1,1-Trichloroethane	25	28.1	112	75-130
79-00-5	1,1,2-Trichloroethane	25	25.2	101	76-119
79-01-6	Trichloroethylene	25	26.8	107	81-126
75-01-4	Vinyl Chloride	25	29.4	118	69-159
1330-20-7	Xylene (total)	75	78.6	105	80-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5266-BS	J0975903.D	1	04/19/16	DP	n/a	n/a	VJ5266

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-1, FA33062-2, FA33062-5, FA33062-6, FA33062-7, FA33062-8, FA33062-12, FA33062-13, FA33062-14, FA33062-15, FA33062-16

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

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4260-BS	N0094037.D	1	04/20/16	RB	n/a	n/a	VN4260

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

FA33062-3, FA33062-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	96.7	77	50-147
71-43-2	Benzene	25	24.9	100	81-122
75-27-4	Bromodichloromethane	25	26.4	106	79-123
75-25-2	Bromoform	25	26.4	106	66-123
78-93-3	2-Butanone (MEK)	125	98.8	79	56-143
75-15-0	Carbon Disulfide	25	23.0	92	66-148
56-23-5	Carbon Tetrachloride	25	26.6	106	76-136
108-90-7	Chlorobenzene	25	24.4	98	82-124
75-00-3	Chloroethane	25	25.8	103	62-144
67-66-3	Chloroform	25	25.0	100	80-124
124-48-1	Dibromochloromethane	25	26.4	106	78-122
75-34-3	1,1-Dichloroethane	25	25.4	102	81-122
107-06-2	1,2-Dichloroethane	25	25.3	101	75-125
75-35-4	1,1-Dichloroethylene	25	26.0	104	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.9	96	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.1	104	76-127
78-87-5	1,2-Dichloropropane	25	24.1	96	76-124
10061-01-5	cis-1,3-Dichloropropene	25	26.6	106	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.3	113	80-120
100-41-4	Ethylbenzene	25	24.4	98	81-121
591-78-6	2-Hexanone	125	95.6	76	61-129
74-83-9	Methyl Bromide	25	23.8	95	59-143
74-87-3	Methyl Chloride	25	22.9	92	50-159
75-09-2	Methylene Chloride	25	25.5	102	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	105	84	66-122
100-42-5	Styrene	25	25.8	103	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.1	104	72-120
127-18-4	Tetrachloroethylene	25	25.2	101	76-135
108-88-3	Toluene	25	24.8	99	80-120
71-55-6	1,1,1-Trichloroethane	25	25.1	100	75-130
79-00-5	1,1,2-Trichloroethane	25	24.4	98	76-119
79-01-6	Trichloroethylene	25	25.8	103	81-126
75-01-4	Vinyl Chloride	25	27.5	110	69-159
1330-20-7	Xylene (total)	75	76.6	102	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4260-BS	N0094037.D	1	04/20/16	RB	n/a	n/a	VN4260

The QC reported here applies to the following samples: Method: SW846 8260B
FA33062-3, FA33062-4

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

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA33062**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5268-BS	J0975955.D	1	04/20/16	DP	n/a	n/a	VJ5268

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

FA33062-6, FA33062-7, FA33062-8, FA33062-9, FA33062-10, FA33062-11, FA33062-12, FA33062-14, FA33062-15, FA33062-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	109	87	50-147
71-43-2	Benzene	25	26.5	106	81-122
75-27-4	Bromodichloromethane	25	26.6	106	79-123
75-25-2	Bromoform	25	24.1	96	66-123
78-93-3	2-Butanone (MEK)	125	107	86	56-143
75-15-0	Carbon Disulfide	25	33.0	132	66-148
56-23-5	Carbon Tetrachloride	25	30.9	124	76-136
108-90-7	Chlorobenzene	25	25.6	102	82-124
75-00-3	Chloroethane	25	29.5	118	62-144
67-66-3	Chloroform	25	26.7	107	80-124
124-48-1	Dibromochloromethane	25	25.1	100	78-122
75-34-3	1,1-Dichloroethane	25	27.9	112	81-122
107-06-2	1,2-Dichloroethane	25	23.8	95	75-125
75-35-4	1,1-Dichloroethylene	25	30.4	122	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.5	102	78-120
156-60-5	trans-1,2-Dichloroethylene	25	30.4	122	76-127
78-87-5	1,2-Dichloropropane	25	25.3	101	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.2	101	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.2	101	80-120
100-41-4	Ethylbenzene	25	26.7	107	81-121
591-78-6	2-Hexanone	125	108	86	61-129
74-83-9	Methyl Bromide	25	24.5	98	59-143
74-87-3	Methyl Chloride	25	26.2	105	50-159
75-09-2	Methylene Chloride	25	29.4	118	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	103	82	66-122
100-42-5	Styrene	25	23.5	94	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	22.3	89	72-120
127-18-4	Tetrachloroethylene	25	24.6	98	76-135
108-88-3	Toluene	25	25.0	100	80-120
71-55-6	1,1,1-Trichloroethane	25	28.0	112	75-130
79-00-5	1,1,2-Trichloroethane	25	23.1	92	76-119
79-01-6	Trichloroethylene	25	26.3	105	81-126
75-01-4	Vinyl Chloride	25	30.5	122	69-159
1330-20-7	Xylene (total)	75	76.4	102	80-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5268-BS	J0975955.D	1	04/20/16	DP	n/a	n/a	VJ5268

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-6, FA33062-7, FA33062-8, FA33062-9, FA33062-10, FA33062-11, FA33062-12, FA33062-14, FA33062-15, FA33062-17

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33012-30MS	N0093978.D	10	04/17/16	RB	n/a	n/a	VN4253
FA33012-30MSD	N0093979.D	10	04/18/16	RB	n/a	n/a	VN4253
FA33012-30	N0093965.D	10	04/17/16	RB	n/a	n/a	VN4253

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-18

CAS No.	Compound	FA33012-30 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	1220	98	1250	1160	93	5	50-147/21
71-43-2	Benzene	ND	250	248	99	250	237	95	5	81-122/14
75-27-4	Bromodichloromethane	ND	250	262	105	250	248	99	5	79-123/19
75-25-2	Bromoform	ND	250	226	90	250	228	91	1	66-123/21
78-93-3	2-Butanone (MEK)	ND	1250	1140	91	1250	1200	96	5	56-143/18
75-15-0	Carbon Disulfide	ND	250	209	84	250	207	83	1	66-148/23
56-23-5	Carbon Tetrachloride	ND	250	245	98	250	240	96	2	76-136/23
108-90-7	Chlorobenzene	ND	250	238	95	250	234	94	2	82-124/14
75-00-3	Chloroethane	ND	250	287	115	250	285	114	1	62-144/20
67-66-3	Chloroform	ND	250	255	102	250	243	97	5	80-124/15
124-48-1	Dibromochloromethane	ND	250	240	96	250	236	94	2	78-122/19
75-34-3	1,1-Dichloroethane	ND	250	259	104	250	247	99	5	81-122/15
107-06-2	1,2-Dichloroethane	ND	250	263	105	250	247	99	6	75-125/14
75-35-4	1,1-Dichloroethylene	ND	250	259	104	250	254	102	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	250	229	92	250	221	88	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	250	260	104	250	249	100	4	76-127/17
78-87-5	1,2-Dichloropropane	ND	250	253	101	250	242	97	4	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	250	219	88	250	218	87	0	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	250	264	106	250	255	102	3	80-120/22
100-41-4	Ethylbenzene	ND	250	247	99	250	236	94	5	81-121/14
591-78-6	2-Hexanone	ND	1250	1060	85	1250	1060	85	0	61-129/18
74-83-9	Methyl Bromide	ND	250	255	102	250	251	100	2	59-143/19
74-87-3	Methyl Chloride	ND	250	221	88	250	235	94	6	50-159/19
75-09-2	Methylene Chloride	ND	250	269	108	250	257	103	5	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1250	1190	95	1250	1220	98	2	66-122/16
100-42-5	Styrene	ND	250	245	98	250	238	95	3	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	262	105	250	253	101	3	72-120/14
127-18-4	Tetrachloroethylene	ND	250	224	90	250	226	90	1	76-135/16
108-88-3	Toluene	ND	250	237	95	250	231	92	3	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	250	248	99	250	237	95	5	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	250	245	98	250	241	96	2	76-119/14
79-01-6	Trichloroethylene	279	250	532	101	250	508	92	5	81-126/15
75-01-4	Vinyl Chloride	ND	250	266	106	250	290	116	9	69-159/18
1330-20-7	Xylene (total)	ND	750	743	99	750	724	97	3	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33012-30MS	N0093978.D	10	04/17/16	RB	n/a	n/a	VN4253
FA33012-30MSD	N0093979.D	10	04/18/16	RB	n/a	n/a	VN4253
FA33012-30	N0093965.D	10	04/17/16	RB	n/a	n/a	VN4253

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-18

CAS No.	Surrogate Recoveries	MS	MSD	FA33012-30	Limits
1868-53-7	Dibromofluoromethane	102%	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	100%	102%	79-125%
2037-26-5	Toluene-D8	97%	97%	106%	85-112%
460-00-4	4-Bromofluorobenzene	99%	98%	109%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33062-17MS	J0975925.D	2.5	04/19/16	DP	n/a	n/a	VJ5266
FA33062-17MSD	J0975926.D	2.5	04/19/16	DP	n/a	n/a	VJ5266
FA33062-17 ^a	J0975917.D	2.5	04/19/16	DP	n/a	n/a	VJ5266

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-1, FA33062-2, FA33062-5, FA33062-6, FA33062-7, FA33062-8, FA33062-12, FA33062-13, FA33062-14, FA33062-15, FA33062-16

CAS No.	Compound	FA33062-17 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	285	91	313	280	90	2	50-147/21
71-43-2	Benzene	ND	62.5	69.8	112	62.5	68.4	109	2	81-122/14
75-27-4	Bromodichloromethane	ND	62.5	66.9	107	62.5	62.8	100	6	79-123/19
75-25-2	Bromoform	ND	62.5	55.7	89	62.5	52.0	83	7	66-123/21
78-93-3	2-Butanone (MEK)	ND	313	269	86	313	288	92	7	56-143/18
75-15-0	Carbon Disulfide	ND	62.5	70.6	113	62.5	60.0	96	16	66-148/23
56-23-5	Carbon Tetrachloride	ND	62.5	81.0	130	62.5	70.9	113	13	76-136/23
108-90-7	Chlorobenzene	ND	62.5	66.3	106	62.5	65.7	105	1	82-124/14
75-00-3	Chloroethane	ND	62.5	75.1	120	62.5	68.1	109	10	62-144/20
67-66-3	Chloroform	ND	62.5	69.1	111	62.5	68.3	109	1	80-124/15
124-48-1	Dibromochloromethane	ND	62.5	61.4	98	62.5	57.1	91	7	78-122/19
75-34-3	1,1-Dichloroethane	ND	62.5	72.5	116	62.5	71.7	115	1	81-122/15
107-06-2	1,2-Dichloroethane	ND	62.5	63.0	101	62.5	61.5	98	2	75-125/14
75-35-4	1,1-Dichloroethylene	ND	62.5	77.1	123	62.5	75.1	120	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	62.5	64.5	103	62.5	64.8	104	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	62.5	78.4	125	62.5	75.5	121	4	76-127/17
78-87-5	1,2-Dichloropropane	ND	62.5	64.6	103	62.5	63.1	101	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	62.5	57.7	92	62.5	55.0	88	5	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	62.5	59.4	95	62.5	58.0	93	2	80-120/22
100-41-4	Ethylbenzene	ND	62.5	69.0	110	62.5	69.3	111	0	81-121/14
591-78-6	2-Hexanone	ND	313	268	86	313	289	92	8	61-129/18
74-83-9	Methyl Bromide	ND	62.5	61.8	99	62.5	58.0	93	6	59-143/19
74-87-3	Methyl Chloride	ND	62.5	62.3	100	62.5	58.4	93	6	50-159/19
75-09-2	Methylene Chloride	ND	62.5	71.5	114	62.5	69.5	111	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	313	261	84	313	278	89	6	66-122/16
100-42-5	Styrene	ND	62.5	60.5	97	62.5	60.0	96	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	62.5	60.5	97	62.5	60.7	97	0	72-120/14
127-18-4	Tetrachloroethylene	8.9	62.5	68.7	96	62.5	67.4	94	2	76-135/16
108-88-3	Toluene	ND	62.5	64.8	104	62.5	65.2	104	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	62.5	71.4	114	62.5	69.4	111	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	62.5	62.5	100	62.5	62.9	101	1	76-119/14
79-01-6	Trichloroethylene	ND	62.5	70.0	112	62.5	70.8	113	1	81-126/15
75-01-4	Vinyl Chloride	ND	62.5	72.0	115	62.5	68.5	110	5	69-159/18
1330-20-7	Xylene (total)	ND	188	198	106	188	195	104	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33062-17MS	J0975925.D	2.5	04/19/16	DP	n/a	n/a	VJ5266
FA33062-17MSD	J0975926.D	2.5	04/19/16	DP	n/a	n/a	VJ5266
FA33062-17 ^a	J0975917.D	2.5	04/19/16	DP	n/a	n/a	VJ5266

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-1, FA33062-2, FA33062-5, FA33062-6, FA33062-7, FA33062-8, FA33062-12, FA33062-13, FA33062-14, FA33062-15, FA33062-16

CAS No.	Surrogate Recoveries	MS	MSD	FA33062-17	Limits
1868-53-7	Dibromofluoromethane	104%	103%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	97%	99%	79-125%
2037-26-5	Toluene-D8	95%	96%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	103%	83-118%

(a) Confirmation run.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33200-12MS	N0094056.D	5	04/20/16	RB	n/a	n/a	VN4260
FA33200-12MSD	N0094057.D	5	04/20/16	RB	n/a	n/a	VN4260
FA33200-12	N0094049.D	5	04/20/16	RB	n/a	n/a	VN4260

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-3, FA33062-4

CAS No.	Compound	FA33200-12 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	130 U		625	466	75	625	460	74	1	50-147/21
71-43-2	Benzene	48.7		125	165	93	125	162	91	2	81-122/14
75-27-4	Bromodichloromethane	5.0 U		125	121	97	125	119	95	2	79-123/19
75-25-2	Bromoform	5.0 U		125	94.1	75	125	93.8	75	0	66-123/21
78-93-3	2-Butanone (MEK)	25 U		625	478	76	625	486	78	2	56-143/18
75-15-0	Carbon Disulfide	10 U		125	100	80	125	99.9	80	0	66-148/23
56-23-5	Carbon Tetrachloride	5.0 U		125	123	98	125	124	99	1	76-136/23
108-90-7	Chlorobenzene	5.0 U		125	118	94	125	112	90	5	82-124/14
75-00-3	Chloroethane	10 U		125	146	117	125	139	111	5	62-144/20
67-66-3	Chloroform	5.0 U		125	123	98	125	121	97	2	80-124/15
124-48-1	Dibromochloromethane	5.0 U		125	106	85	125	106	85	0	78-122/19
75-34-3	1,1-Dichloroethane	5.0 U		125	122	98	125	122	98	0	81-122/15
107-06-2	1,2-Dichloroethane	5.0 U		125	125	100	125	122	98	2	75-125/14
75-35-4	1,1-Dichloroethylene	5.0 U		125	124	99	125	124	99	0	78-137/18
156-59-2	cis-1,2-Dichloroethylene	468		125	523	44* a	125	536	54* a	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	4.2	I	125	125	97	125	129	100	3	76-127/17
78-87-5	1,2-Dichloropropane	5.0 U		125	119	95	125	117	94	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	5.0 U		125	106	85	125	108	86	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	5.0 U		125	130	104	125	127	102	2	80-120/22
100-41-4	Ethylbenzene	5.0 U		125	119	95	125	115	92	3	81-121/14
591-78-6	2-Hexanone	50 U		625	470	75	625	465	74	1	61-129/18
74-83-9	Methyl Bromide	10 U		125	134	107	125	124	99	8	59-143/19
74-87-3	Methyl Chloride	10 U		125	127	102	125	115	92	10	50-159/19
75-09-2	Methylene Chloride	25 U		125	131	105	125	130	104	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	25 U		625	539	86	625	532	85	1	66-122/16
100-42-5	Styrene	5.0 U		125	117	94	125	113	90	3	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U		125	131	105	125	131	105	0	72-120/14
127-18-4	Tetrachloroethylene	19.9		125	133	90	125	130	88	2	76-135/16
108-88-3	Toluene	5.0 U		125	118	94	125	115	92	3	80-120/14
71-55-6	1,1,1-Trichloroethane	5.0 U		125	119	95	125	117	94	2	75-130/16
79-00-5	1,1,2-Trichloroethane	5.0 U		125	122	98	125	117	94	4	76-119/14
79-01-6	Trichloroethylene	93.6		125	203	88	125	201	86	1	81-126/15
75-01-4	Vinyl Chloride	61.4		125	180	95	125	180	95	0	69-159/18
1330-20-7	Xylene (total)	15 U		375	367	98	375	354	94	4	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33200-12MS	N0094056.D	5	04/20/16	RB	n/a	n/a	VN4260
FA33200-12MSD	N0094057.D	5	04/20/16	RB	n/a	n/a	VN4260
FA33200-12	N0094049.D	5	04/20/16	RB	n/a	n/a	VN4260

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-3, FA33062-4

CAS No.	Surrogate Recoveries	MS	MSD	FA33200-12	Limits
1868-53-7	Dibromofluoromethane	101%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	100%	106%	79-125%
2037-26-5	Toluene-D8	98%	97%	107%	85-112%
460-00-4	4-Bromofluorobenzene	95%	97%	111%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33062-11MS	J0975977.D	1	04/20/16	DP	n/a	n/a	VJ5268
FA33062-11MSD	J0975978.D	1	04/20/16	DP	n/a	n/a	VJ5268
FA33062-11	J0975959.D	1	04/20/16	DP	n/a	n/a	VJ5268

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-6, FA33062-7, FA33062-8, FA33062-9, FA33062-10, FA33062-11, FA33062-12, FA33062-14, FA33062-15, FA33062-17

CAS No.	Compound	FA33062-11 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	109	87	125	115	92	5	50-147/21
71-43-2	Benzene	ND	25	25.7	103	25	24.3	97	6	81-122/14
75-27-4	Bromodichloromethane	ND	25	24.4	98	25	22.1	88	10	79-123/19
75-25-2	Bromoform	ND	25	20.2	81	25	18.3	73	10	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	110	88	125	109	87	1	56-143/18
75-15-0	Carbon Disulfide	ND	25	26.4	106	25	24.0	96	10	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	28.1	112	25	28.2	113	0	76-136/23
108-90-7	Chlorobenzene	ND	25	23.7	95	25	23.0	92	3	82-124/14
75-00-3	Chloroethane	ND	25	32.3	129	25	30.3	121	6	62-144/20
67-66-3	Chloroform	ND	25	25.3	101	25	24.3	97	4	80-124/15
124-48-1	Dibromochloromethane	ND	25	22.2	89	25	20.6	82	7	78-122/19
75-34-3	1,1-Dichloroethane	ND	25	26.9	108	25	26.2	105	3	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	22.1	88	25	22.0	88	0	75-125/14
75-35-4	1,1-Dichloroethylene	1.8	25	28.5	107	25	28.9	108	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	24.6	98	25	23.6	94	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	28.2	113	25	27.0	108	4	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	23.2	93	25	23.0	92	1	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	25	20.9	84	25	19.8	79	5	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	22.8	91	25	21.1	84	8	80-120/22
100-41-4	Ethylbenzene	ND	25	24.5	98	25	24.0	96	2	81-121/14
591-78-6	2-Hexanone	ND	125	109	87	125	109	87	0	61-129/18
74-83-9	Methyl Bromide	ND	25	26.1	104	25	23.7	95	10	59-143/19
74-87-3	Methyl Chloride	ND	25	25.4	102	25	24.8	99	2	50-159/19
75-09-2	Methylene Chloride	ND	25	25.3	101	25	24.7	99	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	107	86	125	108	86	1	66-122/16
100-42-5	Styrene	ND	25	21.5	86	25	20.6	82	4	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	20.9	84	25	21.6	86	3	72-120/14
127-18-4	Tetrachloroethylene	85.8	25	99.3	54* a	25	96.2	42* a	3	76-135/16
108-88-3	Toluene	ND	25	23.6	94	25	23.1	92	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	25	25.9	104	25	25.1	100	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	21.9	88	25	22.1	88	1	76-119/14
79-01-6	Trichloroethylene	0.41	J	25	99	25	25.5	100	2	81-126/15
75-01-4	Vinyl Chloride	ND	25	29.9	120	25	28.3	113	5	69-159/18
1330-20-7	Xylene (total)	ND	75	70.4	94	75	67.5	90	4	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33062-11MS	J0975977.D	1	04/20/16	DP	n/a	n/a	VJ5268
FA33062-11MSD	J0975978.D	1	04/20/16	DP	n/a	n/a	VJ5268
FA33062-11	J0975959.D	1	04/20/16	DP	n/a	n/a	VJ5268

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33062-6, FA33062-7, FA33062-8, FA33062-9, FA33062-10, FA33062-11, FA33062-12, FA33062-14, FA33062-15, FA33062-17

CAS No.	Surrogate Recoveries	MS	MSD	FA33062-11	Limits
1868-53-7	Dibromofluoromethane	106%	102%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	100%	97%	79-125%
2037-26-5	Toluene-D8	97%	96%	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	100%	105%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries

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Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: FA33062

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1318-MB	FF33631.D	1	04/14/16	EG	n/a	n/a	GFF1318

The QC reported here applies to the following samples:

Method: RSKSOP-147/175

FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

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

Blank Spike/Blank Spike Duplicate Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1318-BS	FF33632.D	1	04/14/16	EG	n/a	n/a	GFF1318
GFF1318-BSD	FF33633.D	1	04/14/16	EG	n/a	n/a	GFF1318

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	113	105	112	104	1	62-139/30
74-84-0	Ethane	219	219	100	214	98	2	67-141/30
74-85-1	Ethene	290	296	102	291	100	2	68-141/30

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33057-1MS	FF33641.D	1	04/14/16	EG	n/a	n/a	GFF1318
FA33057-1 ^a	FF33634.D	1	04/14/16	EG	n/a	n/a	GFF1318

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

CAS No.	Compound	FA33057-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	1.6		108	88.2	80	62-139
74-84-0	Ethane	0.33	J	219	175	80	67-141
74-85-1	Ethene	1.0 U		290	235	81	68-141

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

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA33062
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33058-1DUP	FF33642.D	1	04/14/16	EG	n/a	n/a	GFF1318
FA33058-1 ^a	FF33635.D	1	04/14/16	EG	n/a	n/a	GFF1318

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

CAS No.	Compound	FA33058-1		Q	RPD	Limits
		ug/l	DUP ug/l			
74-82-8	Methane	141	136		4	30
74-84-0	Ethane	8.9	8.3		7	30
74-85-1	Ethene	1.4	1.3		7	30

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

* = Outside of Control Limits.

General Chemistry

QC Data Summaries



Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA33062
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP27778/GN70543	2.0	0.0	mg/l	50	51.1	102.2	90-110%
Nitrogen, Nitrate	GP27778/GN70543	0.10	0.0	mg/l	2.5	2.52	100.8	90-110%
Nitrogen, Nitrite	GP27778/GN70543	0.10	0.0	mg/l	2.5	2.70	108.0	90-110%
Sulfate	GP27778/GN70543	2.0	0.0	mg/l	50	51.2	102.4	90-110%
Total Organic Carbon	GP27783/GN70559	1.0	0.0	mg/l	15	15.2	101.3	90-110%

Associated Samples:

Batch GP27778: FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

Batch GP27783: FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

(*) Outside of QC limits

8.1

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA33062
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP27778/GN70543	FA33055-1	mg/l	1.8	50	52.0	100.4	90-110%
Nitrogen, Nitrate	GP27778/GN70543	FA33055-1	mg/l	0.38	2.5	2.8	96.8	90-110%
Nitrogen, Nitrite	GP27778/GN70543	FA33055-1	mg/l	0.050 U	2.5	2.6	104.0	90-110%
Sulfate	GP27778/GN70543	FA33055-1	mg/l	3.5	50	53.7	100.4	90-110%
Total Organic Carbon	GP27783/GN70559	FA33062-7	mg/l	0.78	15	15.7	99.5	90-110%

Associated Samples:

Batch GP27778: FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

Batch GP27783: FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA33062
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP27778/GN70543	FA33055-1	mg/l	1.8	50	51.9	0.2	20%
Nitrogen, Nitrate	GP27778/GN70543	FA33055-1	mg/l	0.38	2.5	2.8	0.0	20%
Nitrogen, Nitrite	GP27778/GN70543	FA33055-1	mg/l	0.050 U	2.5	2.6	0.0	20%
Sulfate	GP27778/GN70543	FA33055-1	mg/l	3.5	50	53.7	0.0	20%
Total Organic Carbon	GP27783/GN70559	FA33062-7	mg/l	0.78	15	15.9	1.3	20%

Associated Samples:

Batch GP27778: FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

Batch GP27783: FA33062-7, FA33062-9, FA33062-10, FA33062-12, FA33062-14, FA33062-15, FA33062-16, FA33062-17

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.3

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Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

SGS Accutest Job Number: FA33107

Sampling Date: 04/13/16

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: 82



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

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
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Test results relate only to samples analyzed.

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Sample Summary

United Technologies Corporation

Job No: FA33107

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA33107-1	04/13/16	08:30 RMJB	04/14/16	AQ	Ground Water	MW-16
FA33107-2	04/13/16	09:00 RMJB	04/14/16	AQ	Ground Water	MW-12D
FA33107-3	04/13/16	09:15 RMJB	04/14/16	AQ	Ground Water	MW-16D
FA33107-4	04/13/16	10:10 RMJB	04/14/16	AQ	Ground Water	MW-23D
FA33107-5	04/13/16	10:10 RMJB	04/14/16	AQ	Ground Water	MW-23D-A
FA33107-6	04/13/16	10:25 RMJB	04/14/16	AQ	Ground Water	MW-13D
FA33107-7	04/13/16	11:10 RMJB	04/14/16	AQ	Ground Water	MW-2
FA33107-8	04/13/16	12:02 RMJB	04/14/16	AQ	Ground Water	MW-14
FA33107-9	04/13/16	12:35 RMJB	04/14/16	AQ	Ground Water	MW-1
FA33107-10	04/13/16	12:42 RMJB	04/14/16	AQ	Ground Water	MW-14D
FA33107-11	04/13/16	13:40 RMJB	04/14/16	AQ	Ground Water	MW-7
FA33107-12	04/13/16	13:40 RMJB	04/14/16	AQ	Ground Water	MW-3
FA33107-13	04/13/16	14:22 RMJB	04/14/16	AQ	Ground Water	MW-3D



Sample Summary
(continued)

United Technologies Corporation

Job No: FA33107

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA33107-14	04/13/16	15:50 RMJB	04/14/16	AQ	Water	IDW-1
FA33107-15	04/13/16	00:00 RMJB	04/14/16	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job FA33107

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 4/26/2016 10:46:06 AM

14 Samples and 1 Trip Blank were collected on 04/13/2016 and were received at SGS Accutest Southeast (SASE) on 04/14/2016 properly preserved, at 3.1 Deg. C and intact. These Samples received an SASE job number of FA33107. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

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

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VC4577

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33107-14MS, FA33107-14MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for 1,2-Dichloropropane are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

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.

RPD(s) for MSD for 1,2-Dichloropropane are outside control limits for sample FA33107-14MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA33107-2 has surrogates outside control limits.

FA33107-2: Confirmation run for surrogate recoveries.

Matrix: AQ

Batch ID: VC4578

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33021-1MS, FA33021-1MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 1,2-Dichloropropane are outside control limits. Recovery is biased high. Analyte is non-detect in associated samples; therefore data is not adversely affected.

RPD(s) for MSD for 1,2-Dichloropropane, Bromodichloromethane are outside control limits for sample FA33021-1MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA33107-2, FA33107-4 have surrogates outside control limits.

FA33107-2: Confirmation run for surrogate recoveries.

FA33107-4 for Dibromofluoromethane: Outside control limits; however, sample is ND.

FA33107-2 for 1,2-Dichloropropane: Associated BS recovery outside control limits.

FA33107-3 for 1,2-Dichloropropane: Associated BS recovery outside control limits.

FA33107-4 for 1,2-Dichloropropane: Associated BS recovery outside control limits.

FA33107-7 for 1,2-Dichloropropane: Associated BS recovery outside control limits.

FA33107-12 for 1,2-Dichloropropane: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ

Batch ID: OP60097

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) FA33070-1MS, FA33070-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 4-Nitrophenol are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Tuesday, April 26, 2016

Page 1 of 2

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP30251

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) FA33140-1DUP, FA33140-1MS, FA33140-1MSD, FA33140-1PS, FA33140-1SDL, FA33140-1DUP were used as the QC samples for metals.

RPD(s) for Duplicate for Antimony are outside control limits for sample MP30251-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Arsenic, Chromium, Copper, Selenium, Zinc are outside control limits for sample MP30251-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP30273

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) FA33070-1DUP, FA33070-1MS, FA33070-1MSD, FA33070-1SDL 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: April 26, 2016

Summary of Hits

Page 1 of 2

Job Number: FA33107
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/13/16



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA33107-1 MW-16

No hits reported in this sample.

FA33107-2 MW-12D

1,1-Dichloroethylene	2.9	2.0	0.43	ug/l	SW846 8260B
Tetrachloroethylene	140	2.0	0.61	ug/l	SW846 8260B

FA33107-3 MW-16D

No hits reported in this sample.

FA33107-4 MW-23D

No hits reported in this sample.

FA33107-5 MW-23D-A

No hits reported in this sample.

FA33107-6 MW-13D

1,1-Dichloroethylene	5.4	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	151	2.0	0.61	ug/l	SW846 8260B
1,1,1-Trichloroethane	3.1	1.0	0.20	ug/l	SW846 8260B

FA33107-7 MW-2

Tetrachloroethylene	0.57 J	1.0	0.30	ug/l	SW846 8260B
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FA33107-8 MW-14

Tetrachloroethylene	0.90 J	1.0	0.30	ug/l	SW846 8260B
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FA33107-9 MW-1

cis-1,2-Dichloroethylene	19.4	5.0	1.6	ug/l	SW846 8260B
Tetrachloroethylene	468	5.0	1.5	ug/l	SW846 8260B
Trichloroethylene	6.2	5.0	1.4	ug/l	SW846 8260B

FA33107-10 MW-14D

1,1-Dichloroethylene	1.5	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.98 J	1.0	0.31	ug/l	SW846 8260B

Summary of Hits

Job Number: FA33107
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/13/16

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
---------------	------------------	--------------------	----	-----	-------	--------

Tetrachloroethylene		78.5	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene		0.73 J	1.0	0.27	ug/l	SW846 8260B

FA33107-11 MW-7

No hits reported in this sample.

FA33107-12 MW-3

cis-1,2-Dichloroethylene	0.68 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	98.0	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	1.2	1.0	0.27	ug/l	SW846 8260B

FA33107-13 MW-3D

1,1-Dichloroethylene	5.7	5.0	1.1	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	7.8	5.0	1.6	ug/l	SW846 8260B
Tetrachloroethylene	285	5.0	1.5	ug/l	SW846 8260B
Trichloroethylene	8.3	5.0	1.4	ug/l	SW846 8260B

FA33107-14 IDW-1

1,1-Dichloroethylene	0.80 J	2.5	0.54	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	9.4	2.5	0.78	ug/l	SW846 8260B
Tetrachloroethylene	273	5.0	1.5	ug/l	SW846 8260B
1,1,1-Trichloroethane	1.3 J	2.5	0.50	ug/l	SW846 8260B
Trichloroethylene	4.4	2.5	0.68	ug/l	SW846 8260B
Beryllium	0.20 J	4.0	0.20	ug/l	SW846 6010C
Cadmium	0.20 J	5.0	0.20	ug/l	SW846 6010C
Chromium	9.4 J	10	1.0	ug/l	SW846 6010C
Copper	1.3 J	25	1.0	ug/l	SW846 6010C
Nickel	1.9 J	40	0.40	ug/l	SW846 6010C
Zinc	15.2 J	20	4.4	ug/l	SW846 6010C

FA33107-15 TRIP BLANK

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-1	Date Received:	04/14/16
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	C0115048.D	1	04/18/16	EP	n/a	n/a	VC4577
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-1	Date Received:	04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	89%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-12D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-2	Date Received:	04/14/16
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	C0115074.D	2	04/19/16	EP	n/a	n/a	VC4578
Run #2 ^a	C0115049.D	1	04/18/16	EP	n/a	n/a	VC4577
Run #3 ^a	C0115073.D	1	04/19/16	EP	n/a	n/a	VC4578

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/l	
71-43-2	Benzene	ND	2.0	0.41	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.48	ug/l	
75-25-2	Bromoform	ND	2.0	0.93	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.1	ug/l	
75-15-0	Carbon Disulfide	ND	4.0	0.46	ug/l	
56-23-5	Carbon Tetrachloride	ND	2.0	0.60	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.40	ug/l	
75-00-3	Chloroethane	ND	4.0	1.3	ug/l	
67-66-3	Chloroform	ND	2.0	0.60	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.51	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.57	ug/l	
75-35-4	1,1-Dichloroethylene	2.9	2.0	0.43	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.62	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.66	ug/l	
78-87-5	1,2-Dichloropropane ^b	ND	2.0	0.69	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.53	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.49	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
74-83-9	Methyl Bromide	ND	4.0	1.0	ug/l	
74-87-3	Methyl Chloride	ND	4.0	1.0	ug/l	
75-09-2	Methylene Chloride	ND	10	4.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	10	2.8	ug/l	
100-42-5	Styrene	ND	2.0	0.48	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.65	ug/l	
127-18-4	Tetrachloroethylene	140	2.0	0.61	ug/l	
108-88-3	Toluene	ND	2.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-2	Date Received:	04/14/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.73	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.54	ug/l	
75-01-4	Vinyl Chloride	ND	2.0	0.63	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	113%	119% ^c	119% ^c	83-118%
17060-07-0	1,2-Dichloroethane-D4	117%	115%	115%	79-125%
2037-26-5	Toluene-D8	98%	101%	98%	85-112%
460-00-4	4-Bromofluorobenzene	91%	80% ^c	82% ^c	83-118%

- (a) Confirmation run for surrogate recoveries.
 (b) Associated BS recovery outside control limits.
 (c) Outside control limits due to matrix interference.

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

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

Report of Analysis

Client Sample ID:	MW-16D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-3	Date Received:	04/14/16
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	C0115070.D	1	04/19/16	EP	n/a	n/a	VC4578
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane ^a	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-16D	Date Sampled: 04/13/16
Lab Sample ID: FA33107-3	Date Received: 04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		83-118%
17060-07-0	1,2-Dichloroethane-D4	114%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	93%		83-118%

(a) Associated BS recovery outside control limits.

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

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

Report of Analysis

Client Sample ID:	MW-23D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-4	Date Received:	04/14/16
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	C0115071.D	1	04/19/16	EP	n/a	n/a	VC4578
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane ^a	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	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:	04/13/16
Lab Sample ID:	FA33107-4	Date Received:	04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	120% ^b		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	85%		83-118%

(a) Associated BS recovery outside control limits.

(b) Outside control limits; however, sample is ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23D-A	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-5	Date Received:	04/14/16
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	C0115044.D	1	04/18/16	EP	n/a	n/a	VC4577
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	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-A	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-5	Date Received:	04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	83%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-13D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-6	Date Received:	04/14/16
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	C0115052.D	1	04/18/16	EP	n/a	n/a	VC4577
Run #2	C0115075.D	2	04/19/16	EP	n/a	n/a	VC4578

	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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	5.4	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	151 ^a	2.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	3.1	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-13D	Date Sampled: 04/13/16
Lab Sample ID: FA33107-6	Date Received: 04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	117%	83-118%
17060-07-0	1,2-Dichloroethane-D4	118%	116%	79-125%
2037-26-5	Toluene-D8	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	91%	87%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-7	Date Received:	04/14/16
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	C0115072.D	1	04/19/16	EP	n/a	n/a	VC4578
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane ^a	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	0.57	1.0	0.30	ug/l	J
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2	Date Sampled: 04/13/16
Lab Sample ID: FA33107-7	Date Received: 04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		83-118%
17060-07-0	1,2-Dichloroethane-D4	114%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	93%		83-118%

(a) Associated BS recovery outside control limits.

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

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

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-8	Date Received:	04/14/16
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	C0115054.D	1	04/18/16	EP	n/a	n/a	VC4577
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	0.90	1.0	0.30	ug/l	J
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-14	Date Sampled: 04/13/16
Lab Sample ID: FA33107-8	Date Received: 04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		83-118%
17060-07-0	1,2-Dichloroethane-D4	119%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	91%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-9	Date Received:	04/14/16
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	C0115045.D	5	04/18/16	EP	n/a	n/a	VC4577
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	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	13	ug/l	
75-15-0	Carbon Disulfide	ND	10	1.2	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.1	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.3	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.4	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.1	ug/l	
156-59-2	cis-1,2-Dichloroethylene	19.4	5.0	1.6	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	10	2.5	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	7.0	ug/l	
100-42-5	Styrene	ND	5.0	1.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.6	ug/l	
127-18-4	Tetrachloroethylene	468	5.0	1.5	ug/l	
108-88-3	Toluene	ND	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/l	
79-01-6	Trichloroethylene	6.2	5.0	1.4	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1	Date Sampled: 04/13/16
Lab Sample ID: FA33107-9	Date Received: 04/14/16
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	1.6	ug/l	
1330-20-7	Xylene (total)	ND	15	2.8	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		83-118%
17060-07-0	1,2-Dichloroethane-D4	116%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	88%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-14D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-10	Date Received:	04/14/16
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	C0115055.D	1	04/18/16	EP	n/a	n/a	VC4577
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	1.5	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.98	1.0	0.31	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	78.5	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.73	1.0	0.27	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-10	Date Received:	04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		83-118%
17060-07-0	1,2-Dichloroethane-D4	116%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	88%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-11	Date Received:	04/14/16
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	C0115056.D	1	04/18/16	EP	n/a	n/a	VC4577
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	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-7	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-11	Date Received:	04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		83-118%
17060-07-0	1,2-Dichloroethane-D4	120%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	90%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-12	Date Received:	04/14/16
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	C0115076.D	1	04/19/16	EP	n/a	n/a	VC4578
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.68	1.0	0.31	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane ^a	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	98.0	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	1.2	1.0	0.27	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-3	Date Sampled: 04/13/16
Lab Sample ID: FA33107-12	Date Received: 04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		83-118%
17060-07-0	1,2-Dichloroethane-D4	117%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	92%		83-118%

(a) Associated BS recovery outside control limits.

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

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

Report of Analysis

Client Sample ID:	MW-3D	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-13	Date Received:	04/14/16
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	C0115046.D	5	04/18/16	EP	n/a	n/a	VC4577
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
66-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	13	ug/l	
75-15-0	Carbon Disulfide	ND	10	1.2	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.1	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.3	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.4	ug/l	
75-35-4	1,1-Dichloroethylene	5.7	5.0	1.1	ug/l	
156-59-2	cis-1,2-Dichloroethylene	7.8	5.0	1.6	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide	ND	10	2.5	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	7.0	ug/l	
100-42-5	Styrene	ND	5.0	1.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.6	ug/l	
127-18-4	Tetrachloroethylene	285	5.0	1.5	ug/l	
108-88-3	Toluene	ND	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/l	
79-01-6	Trichloroethylene	8.3	5.0	1.4	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3D	Date Sampled: 04/13/16
Lab Sample ID: FA33107-13	Date Received: 04/14/16
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	1.6	ug/l	
1330-20-7	Xylene (total)	ND	15	2.8	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	90%		83-118%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-14	Date Received:	04/14/16
Matrix:	AQ - 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	C0115047.D	2.5	04/18/16	EP	n/a	n/a	VC4577
Run #2	C0115059.D	5	04/18/16	EP	n/a	n/a	VC4577

	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	0.51	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.60	ug/l	
75-25-2	Bromoform	ND	2.5	1.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	13	6.4	ug/l	
75-15-0	Carbon Disulfide	ND	5.0	0.58	ug/l	
56-23-5	Carbon Tetrachloride	ND	2.5	0.75	ug/l	
108-90-7	Chlorobenzene	ND	2.5	0.50	ug/l	
75-00-3	Chloroethane	ND	5.0	1.6	ug/l	
67-66-3	Chloroform	ND	2.5	0.75	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.65	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.5	0.64	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	0.71	ug/l	
75-35-4	1,1-Dichloroethylene	0.80	2.5	0.54	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	9.4	2.5	0.78	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.5	0.83	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	0.86	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.66	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.62	ug/l	
100-41-4	Ethylbenzene	ND	2.5	0.63	ug/l	
591-78-6	2-Hexanone	ND	25	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	1.3	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	3.5	ug/l	
100-42-5	Styrene	ND	2.5	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.82	ug/l	
127-18-4	Tetrachloroethylene	273 ^a	5.0	1.5	ug/l	
108-88-3	Toluene	ND	2.5	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.3	2.5	0.50	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.92	ug/l	
79-01-6	Trichloroethylene	4.4	2.5	0.68	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-14	Date Received:	04/14/16
Matrix:	AQ - 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	0.79	ug/l	
1330-20-7	Xylene (total)	ND	7.5	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	113%	83-118%
17060-07-0	1,2-Dichloroethane-D4	116%	118%	79-125%
2037-26-5	Toluene-D8	98%	96%	85-112%
460-00-4	4-Bromofluorobenzene	88%	91%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-14	Date Received:	04/14/16
Matrix:	AQ - 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	X045895.D	1	04/22/16	NJ	04/15/16	OP60097	SX2035
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	0.74	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.64	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.63	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.70	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	0.58	ug/l	
	3&4-Methylphenol	ND	5.0	1.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.62	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	1.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.86	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.56	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.58	ug/l	
120-12-7	Anthracene	ND	5.0	0.61	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.50	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.50	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.54	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.63	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.56	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	5.0	0.50	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	1.0	ug/l	
86-74-8	Carbazole	ND	5.0	0.56	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.72	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.68	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.69	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:	04/13/16
Lab Sample ID:	FA33107-14	Date Received:	04/14/16
Matrix:	AQ - 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	0.58	ug/l	
218-01-9	Chrysene	ND	5.0	0.53	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.76	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.67	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	0.50	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	0.63	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.50	ug/l	
86-73-7	Fluorene	ND	5.0	0.65	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.55	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.51	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	1.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.51	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.50	ug/l	
78-59-1	Isophorone	ND	5.0	0.67	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.56	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.75	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.66	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	5.0	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.70	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.60	ug/l	
129-00-0	Pyrene	ND	5.0	0.55	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		14-67%
4165-62-2	Phenol-d5	26%		10-50%
118-79-6	2,4,6-Tribromophenol	71%		33-118%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-14	Date Received:	04/14/16
Matrix:	AQ - 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	72%		40-106%
1718-51-0	Terphenyl-d14	75%		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

4.14
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Report of Analysis

Client Sample ID: IDW-1	Date Sampled: 04/13/16
Lab Sample ID: FA33107-14	Date Received: 04/14/16
Matrix: AQ - 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	04/18/16	04/18/16	LM	SW846 6010C ¹
Arsenic	1.3 U	10	1.3	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Beryllium	0.20 J	4.0	0.20	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Cadmium	0.20 J	5.0	0.20	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Chromium	9.4 J	10	1.0	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Copper	1.3 J	25	1.0	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Lead	1.1 U	5.0	1.1	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Mercury	0.030 U	0.50	0.030	ug/l	1	04/25/16	04/25/16	JL	SW846 7470A ²
Nickel	1.9 J	40	0.40	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Selenium	2.9 U	10	2.9	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Silver	0.70 U	5.0	0.70	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Thallium	1.4 U	10	1.4	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹
Zinc	15.2 J	20	4.4	ug/l	1	04/18/16	04/18/16	LM	SW846 6010C ¹

(1) Instrument QC Batch: MA13098

(2) Instrument QC Batch: MA13109

(3) Prep QC Batch: MP30251

(4) Prep QC Batch: MP30273

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-15	Date Received:	04/14/16
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	C0115058.D	1	04/18/16	EP	n/a	n/a	VC4577
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	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	04/13/16
Lab Sample ID:	FA33107-15	Date Received:	04/14/16
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	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		83-118%
17060-07-0	1,2-Dichloroethane-D4	117%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	89%		83-118%

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

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

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

AECOM

Chain of Custody and Analytical Request

Page	1	of	1
Project Number:	60314964		
Custody Number ⁽¹⁾ :	PO# 67246		
LIMS Number:			

Project Name / Location:

UTC Delavan Spray Technologies Site, Bromberg SC

Sample Analysis Requested

Quality Assurance Samples

Client Name:

050

Collected by: Randy Morgan / Justin Butler

Project Manager: Walter Gerah 864-234-8925

[illegible]

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>	4/13/16	1600	<i>[Signature]</i> FX			Method of Shipment: <u>FEDX</u>	Airbill #: <u>910012346633</u>
<i>FX</i>			<i>[Signature]</i> 4/14/16 930			Analytical Lab: <u>Acutest</u>	Location: <u>Orlando, FL</u>
						Lab Recipient:	Date: _____ Time: _____

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

① 3.1

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

FA33107: Chain of Custody

Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA33107 CLIENT: Accom PROJECT: UTC
 DATE/TIME RECEIVED: 4/14/16 930 [MM/DD/YY 24:00] NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8100 1224 6633

COOLER INFORMATION

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

TRIP BLANK INFORMATION

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

MISC. INFORMATION

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

TEST STRIP LOT#s pH 0-3 230315

pH 10-12 219813A

OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR to .2
- ☐ OBSERVED TEMPS: 2.9
- ☐ CORRECTED TEMPS: 3.1 (USED FOR LIMS)

SAMPLE INFORMATION

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

[APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS]

TECHNICIAN SIGNATURE/DATE

[Signature] 4/14/16

REVIEWER SIGNATURE/DATE

[Signature] 4/14/16

NF 11/15

RECEIPTLOG040416.xls

FA33107: Chain of Custody

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FA33107: Chain of Custody
Page 3 of 3

GC/MS Volatiles

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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: FA33107**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4577-MB	C0115039.D	1	04/18/16	EP	n/a	n/a	VC4577

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

FA33107-1, FA33107-5, FA33107-6, FA33107-8, FA33107-9, FA33107-10, FA33107-11, FA33107-13, FA33107-14, FA33107-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

6.1.1

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Method Blank Summary

Page 2 of 2

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4577-MB	C0115039.D	1	04/18/16	EP	n/a	n/a	VC4577

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33107-1, FA33107-5, FA33107-6, FA33107-8, FA33107-9, FA33107-10, FA33107-11, FA33107-13, FA33107-14, FA33107-15

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	109% 83-118%
17060-07-0	1,2-Dichloroethane-D4	115% 79-125%
2037-26-5	Toluene-D8	96% 85-112%
460-00-4	4-Bromofluorobenzene	95% 83-118%

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

(a) No TICs detected.

Method Blank Summary

Page 1 of 2

Job Number: FA33107**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4578-MB	C0115068.D	1	04/19/16	EP	n/a	n/a	VC4578

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

FA33107-2, FA33107-3, FA33107-4, FA33107-6, FA33107-7, FA33107-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	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	1.4	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

Method Blank Summary

Job Number: FA33107
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4578-MB	C0115068.D	1	04/19/16	EP	n/a	n/a	VC4578

The QC reported here applies to the following samples: Method: SW846 8260B
FA33107-2, FA33107-3, FA33107-4, FA33107-6, FA33107-7, FA33107-12

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	110% 83-118%
17060-07-0	1,2-Dichloroethane-D4	112% 79-125%
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	95% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA33107**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4577-BS	C0115038.D	1	04/18/16	EP	n/a	n/a	VC4577

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

FA33107-1, FA33107-5, FA33107-6, FA33107-8, FA33107-9, FA33107-10, FA33107-11, FA33107-13, FA33107-14, FA33107-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	131	105	50-147
71-43-2	Benzene	25	25.9	104	81-122
75-27-4	Bromodichloromethane	25	29.5	118	79-123
75-25-2	Bromoform	25	22.4	90	66-123
78-93-3	2-Butanone (MEK)	125	136	109	56-143
75-15-0	Carbon Disulfide	25	25.9	104	66-148
56-23-5	Carbon Tetrachloride	25	31.6	126	76-136
108-90-7	Chlorobenzene	25	24.9	100	82-124
75-00-3	Chloroethane	25	28.2	113	62-144
67-66-3	Chloroform	25	25.6	102	80-124
124-48-1	Dibromochloromethane	25	25.2	101	78-122
75-34-3	1,1-Dichloroethane	25	26.5	106	81-122
107-06-2	1,2-Dichloroethane	25	27.0	108	75-125
75-35-4	1,1-Dichloroethylene	25	24.8	99	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.0	96	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.4	110	76-127
78-87-5	1,2-Dichloropropane	25	27.7	111	76-124
10061-01-5	cis-1,3-Dichloropropene	25	27.3	109	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.3	113	80-120
100-41-4	Ethylbenzene	25	25.5	102	81-121
591-78-6	2-Hexanone	125	136	109	61-129
74-83-9	Methyl Bromide	25	28.8	115	59-143
74-87-3	Methyl Chloride	25	23.4	94	50-159
75-09-2	Methylene Chloride	25	25.8	103	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	138	110	66-122
100-42-5	Styrene	25	23.4	94	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	27.0	108	72-120
127-18-4	Tetrachloroethylene	25	22.4	90	76-135
108-88-3	Toluene	25	25.4	102	80-120
71-55-6	1,1,1-Trichloroethane	25	26.5	106	75-130
79-00-5	1,1,2-Trichloroethane	25	26.2	105	76-119
79-01-6	Trichloroethylene	25	24.5	98	81-126
75-01-4	Vinyl Chloride	25	23.7	95	69-159
1330-20-7	Xylene (total)	75	76.9	103	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33107
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4577-BS	C0115038.D	1	04/18/16	EP	n/a	n/a	VC4577

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

FA33107-1, FA33107-5, FA33107-6, FA33107-8, FA33107-9, FA33107-10, FA33107-11, FA33107-13, FA33107-14, FA33107-15

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA33107**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4578-BS	C0115067.D	1	04/19/16	EP	n/a	n/a	VC4578

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

FA33107-2, FA33107-3, FA33107-4, FA33107-6, FA33107-7, FA33107-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	126	101	50-147
71-43-2	Benzene	25	25.1	100	81-122
75-27-4	Bromodichloromethane	25	29.7	119	79-123
75-25-2	Bromoform	25	22.1	88	66-123
78-93-3	2-Butanone (MEK)	125	123	98	56-143
75-15-0	Carbon Disulfide	25	25.6	102	66-148
56-23-5	Carbon Tetrachloride	25	31.3	125	76-136
108-90-7	Chlorobenzene	25	24.6	98	82-124
75-00-3	Chloroethane	25	23.9	96	62-144
67-66-3	Chloroform	25	25.6	102	80-124
124-48-1	Dibromochloromethane	25	24.7	99	78-122
75-34-3	1,1-Dichloroethane	25	25.7	103	81-122
107-06-2	1,2-Dichloroethane	25	26.2	105	75-125
75-35-4	1,1-Dichloroethylene	25	24.3	97	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.6	94	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.1	108	76-127
78-87-5	1,2-Dichloropropane	25	31.4	126*	76-124
10061-01-5	cis-1,3-Dichloropropene	25	27.0	108	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.6	114	80-120
100-41-4	Ethylbenzene	25	25.5	102	81-121
591-78-6	2-Hexanone	125	126	101	61-129
74-83-9	Methyl Bromide	25	26.8	107	59-143
74-87-3	Methyl Chloride	25	21.8	87	50-159
75-09-2	Methylene Chloride	25	25.3	101	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	125	100	66-122
100-42-5	Styrene	25	23.5	94	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.2	105	72-120
127-18-4	Tetrachloroethylene	25	22.7	91	76-135
108-88-3	Toluene	25	24.9	100	80-120
71-55-6	1,1,1-Trichloroethane	25	26.0	104	75-130
79-00-5	1,1,2-Trichloroethane	25	25.8	103	76-119
79-01-6	Trichloroethylene	25	24.4	98	81-126
75-01-4	Vinyl Chloride	25	22.1	88	69-159
1330-20-7	Xylene (total)	75	76.2	102	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33107
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4578-BS	C0115067.D	1	04/19/16	EP	n/a	n/a	VC4578

The QC reported here applies to the following samples: Method: SW846 8260B
FA33107-2, FA33107-3, FA33107-4, FA33107-6, FA33107-7, FA33107-12

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33107-14MS	C0115060.D	5	04/18/16	EP	n/a	n/a	VC4577
FA33107-14MSD	C0115061.D	5	04/18/16	EP	n/a	n/a	VC4577
FA33107-14	C0115047.D	2.5	04/18/16	EP	n/a	n/a	VC4577
FA33107-14	C0115059.D	5	04/18/16	EP	n/a	n/a	VC4577

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33107-1, FA33107-5, FA33107-6, FA33107-8, FA33107-9, FA33107-10, FA33107-11, FA33107-13, FA33107-14, FA33107-15

CAS No.	Compound	FA33107-14 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	96	625	622	100	4	50-147/21
71-43-2	Benzene	ND		125	106	125	133	106	1	81-122/14
75-27-4	Bromodichloromethane	ND		125	104	125	151	121	15	79-123/19
75-25-2	Bromoform	ND		125	87	125	111	89	2	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	98	625	626	100	2	56-143/18
75-15-0	Carbon Disulfide	ND		125	108	125	135	108	0	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	129	125	161	129	0	76-136/23
108-90-7	Chlorobenzene	ND		125	104	125	128	102	2	82-124/14
75-00-3	Chloroethane	ND		125	106	125	132	106	1	62-144/20
67-66-3	Chloroform	ND		125	109	125	137	110	1	80-124/15
124-48-1	Dibromochloromethane	ND		125	94	125	125	100	6	78-122/19
75-34-3	1,1-Dichloroethane	ND		125	106	125	135	108	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	106	125	140	112	5	75-125/14
75-35-4	1,1-Dichloroethylene	0.80	J	125	104	125	134	107	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	9.4		125	96	125	136	101	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	103	125	132	106	2	76-127/17
78-87-5	1,2-Dichloropropane	ND		125	103	125	168	134*	26*	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		125	93	125	129	103	11	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	99	125	128	102	3	80-120/22
100-41-4	Ethylbenzene	ND		125	105	125	130	104	1	81-121/14
591-78-6	2-Hexanone	ND		625	93	625	625	100	7	61-129/18
74-83-9	Methyl Bromide	ND		125	110	125	134	107	3	59-143/19
74-87-3	Methyl Chloride	ND		125	81	125	107	86	6	50-159/19
75-09-2	Methylene Chloride	ND		125	106	125	134	107	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	94	625	612	98	4	66-122/16
100-42-5	Styrene	ND		125	94	125	120	96	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	117	125	146	117	0	72-120/14
127-18-4	Tetrachloroethylene	273 ^b		125	65* ^a	125	379	60* ^a	2	76-135/16
108-88-3	Toluene	ND		125	101	125	128	102	2	80-120/14
71-55-6	1,1,1-Trichloroethane	1.3	J	125	109	125	139	110	1	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	107	125	138	110	3	76-119/14
79-01-6	Trichloroethylene	4.4		125	100	125	131	101	1	81-126/15
75-01-4	Vinyl Chloride	ND		125	90	125	114	91	2	69-159/18
1330-20-7	Xylene (total)	ND		375	99	375	379	101	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33107-14MS	C0115060.D	5	04/18/16	EP	n/a	n/a	VC4577
FA33107-14MSD	C0115061.D	5	04/18/16	EP	n/a	n/a	VC4577
FA33107-14	C0115047.D	2.5	04/18/16	EP	n/a	n/a	VC4577
FA33107-14	C0115059.D	5	04/18/16	EP	n/a	n/a	VC4577

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33107-1, FA33107-5, FA33107-6, FA33107-8, FA33107-9, FA33107-10, FA33107-11, FA33107-13, FA33107-14, FA33107-15

CAS No.	Surrogate Recoveries	MS	MSD	FA33107-14	FA33107-14	Limits
1868-53-7	Dibromofluoromethane	102%	103%	112%	113%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	116%	118%	79-125%
2037-26-5	Toluene-D8	95%	96%	98%	96%	85-112%
460-00-4	4-Bromofluorobenzene	93%	95%	88%	91%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33021-1MS	C0115088.D	1	04/19/16	EP	n/a	n/a	VC4578
FA33021-1MSD	C0115089.D	1	04/19/16	EP	n/a	n/a	VC4578
FA33021-1 ^a	C0115078.D	1	04/19/16	EP	n/a	n/a	VC4578
FA33021-1	C0115087.D	1	04/19/16	EP	n/a	n/a	VC4578

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33107-2, FA33107-3, FA33107-4, FA33107-6, FA33107-7, FA33107-12

CAS No.	Compound	FA33021-1 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 UQ ^b Q	125	129	103	125	107	86	19	50-147/21
71-43-2	Benzene	1.0 UQ ^b Q	25	26.8	107	25	26.0	104	3	81-122/14
75-27-4	Bromodichloromethane	1.0 U ^b	25	29.9	120	25	24.3	97	21*	79-123/19
75-25-2	Bromoform	1.0 U ^b	25	22.2	89	25	21.8	87	2	66-123/21
78-93-3	2-Butanone (MEK)	5.0 UQ ^b Q	125	130	104	125	123	98	6	56-143/18
75-15-0	Carbon Disulfide	2.0 UQ ^b Q	25	28.1	112	25	26.1	104	7	66-148/23
56-23-5	Carbon Tetrachloride	1.0 UQ ^b Q	25	32.5	130	25	30.7	123	6	76-136/23
108-90-7	Chlorobenzene	1.0 U ^b	25	24.9	100	25	24.4	98	2	82-124/14
75-00-3	Chloroethane	2.0 UQ ^b Q	25	26.3	105	25	29.6	118	12	62-144/20
67-66-3	Chloroform	1.0 UQ ^b Q	25	27.6	110	25	25.5	102	8	80-124/15
124-48-1	Dibromochloromethane	1.0 U ^b	25	23.0	92	25	22.9	92	0	78-122/19
75-34-3	1,1-Dichloroethane	1.0 UQ ^b Q	25	27.8	111	25	26.2	105	6	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U ^b	25	27.9	112	25	26.0	104	7	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 UQ ^b Q	25	26.0	104	25	25.2	101	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 UQ ^b Q	25	25.2	101	25	24.7	99	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 UQ ^b Q	25	27.1	108	25	26.0	104	4	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U ^b	25	30.1	120	25	25.6	102	16*	76-124/14
10061-01-5	cis-1,3-Dichloropropene	1.0 U ^b	25	20.9	84	25	22.2	89	6	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U ^b	25	23.1	92	25	23.2	93	0	80-120/22
100-41-4	Ethylbenzene	1.0 U ^b	25	25.9	104	25	24.9	100	4	81-121/14
591-78-6	2-Hexanone	10 U ^b	125	145	116	125	145	116	0	61-129/18
74-83-9	Methyl Bromide	2.0 UQ ^b Q	25	31.6	126	25	31.0	124	2	59-143/19
74-87-3	Methyl Chloride	2.0 UQ ^b Q	25	22.6	90	25	19.7	79	14	50-159/19
75-09-2	Methylene Chloride	5.0 UQ ^b Q	25	27.9	112	25	25.8	103	8	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U ^b	125	153	122	125	153	122	0	66-122/16
100-42-5	Styrene	1.0 U ^b	25	22.9	92	25	22.4	90	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U ^b	25	28.6	114	25	29.7	119	4	72-120/14
127-18-4	Tetrachloroethylene	1.0 U ^b	25	23.9	96	25	21.8	87	9	76-135/16
108-88-3	Toluene	1.0 U ^b	25	24.8	99	25	24.8	99	0	80-120/14
71-55-6	1,1,1-Trichloroethane	1.0 UQ ^b Q	25	28.5	114	25	27.1	108	5	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U ^b	25	26.6	106	25	26.0	104	2	76-119/14
79-01-6	Trichloroethylene	1.0 U ^b	25	26.2	105	25	25.0	100	5	81-126/15
75-01-4	Vinyl Chloride	1.0 UQ ^b Q	25	23.5	94	25	21.8	87	8	69-159/18
1330-20-7	Xylene (total)	3.0 U ^b	75	74.9	100	75	72.3	96	4	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33021-1MS	C0115088.D	1	04/19/16	EP	n/a	n/a	VC4578
FA33021-1MSD	C0115089.D	1	04/19/16	EP	n/a	n/a	VC4578
FA33021-1 ^a	C0115078.D	1	04/19/16	EP	n/a	n/a	VC4578
FA33021-1	C0115087.D	1	04/19/16	EP	n/a	n/a	VC4578

The QC reported here applies to the following samples:

Method: SW846 8260B

FA33107-2, FA33107-3, FA33107-4, FA33107-6, FA33107-7, FA33107-12

CAS No.	Surrogate Recoveries	MS	MSD	FA33021-1	FA33021-1	Limits
1868-53-7	Dibromofluoromethane	106%	103%	121%* ^c	120%* ^c	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	102%	119%	119%	79-125%
2037-26-5	Toluene-D8	95%	97%	98%	99%	85-112%
460-00-4	4-Bromofluorobenzene	87%	89%	83%	85%	83-118%

(a) Confirmation run for surrogate recoveries.

(b) Result is from Run #2.

(c) Outside control limits due to matrix interference.

* = Outside of Control Limits.

GC/MS Semi-volatiles

QC Data Summaries

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Includes the following where applicable:

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

Method Blank Summary

Page 1 of 3

Job Number: FA33107**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-MB	X045801.D	1	04/20/16	MV	04/15/16	OP60097	SX2034

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

FA33107-14

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	0.74	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.64	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.63	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.70	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	0.58	ug/l	
	3&4-Methylphenol	ND	5.0	1.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.62	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	1.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.86	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.56	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.58	ug/l	
120-12-7	Anthracene	ND	5.0	0.61	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.50	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.50	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.54	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.63	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.56	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	5.0	0.50	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	1.0	ug/l	
86-74-8	Carbazole	ND	5.0	0.56	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.72	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.68	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.69	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.50	ug/l	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	5.0	0.58	ug/l	
218-01-9	Chrysene	ND	5.0	0.53	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.76	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.67	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-MB	X045801.D	1	04/20/16	MV	04/15/16	OP60097	SX2034

The QC reported here applies to the following samples:

Method: SW846 8270D

FA33107-14

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	0.50	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	0.63	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.50	ug/l	
86-73-7	Fluorene	ND	5.0	0.65	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.55	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.51	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	1.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.51	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.50	ug/l	
78-59-1	Isophorone	ND	5.0	0.67	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.56	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.75	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.72	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.66	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	5.0	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.70	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.60	ug/l	
129-00-0	Pyrene	ND	5.0	0.55	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	49%	14-67%
4165-62-2	Phenol-d5	36%	10-50%

Method Blank Summary

Job Number: FA33107
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-MB	X045801.D	1	04/20/16	MV	04/15/16	OP60097	SX2034

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

FA33107-14

CAS No.	Surrogate Recoveries	Limits
118-79-6	2,4,6-Tribromophenol	73% 33-118%
4165-60-0	Nitrobenzene-d5	81% 42-108%
321-60-8	2-Fluorobiphenyl	77% 40-106%
1718-51-0	Terphenyl-d14	82% 39-121%

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

(a) No TICs detected.

Blank Spike Summary

Page 1 of 3

Job Number: FA33107**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-BS	X045800.D	1	04/20/16	MV	04/15/16	OP60097	SX2034

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

FA33107-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	30.8	31	10-69
59-50-7	4-Chloro-3-methyl Phenol	50	40.5	81	54-103
95-57-8	2-Chlorophenol	50	39.7	79	52-98
120-83-2	2,4-Dichlorophenol	50	43.0	86	53-103
105-67-9	2,4-Dimethylphenol	50	34.8	70	43-90
51-28-5	2,4-Dinitrophenol	100	82.9	83	44-112
534-52-1	4,6-Dinitro-o-cresol	100	92.9	93	66-121
95-48-7	2-Methylphenol	50	34.3	69	43-90
	3&4-Methylphenol	100	60.9	61	36-88
88-75-5	2-Nitrophenol	50	46.2	92	53-102
100-02-7	4-Nitrophenol	100	44.7	45	18-62
87-86-5	Pentachlorophenol	100	87.0	87	61-115
108-95-2	Phenol	50	20.4	41	19-56
95-95-4	2,4,5-Trichlorophenol	50	43.7	87	62-109
88-06-2	2,4,6-Trichlorophenol	50	43.3	87	59-107
83-32-9	Acenaphthene	50	42.8	86	61-107
208-96-8	Acenaphthylene	50	41.7	83	60-104
120-12-7	Anthracene	50	43.8	88	65-108
56-55-3	Benzo(a)anthracene	50	44.2	88	66-111
50-32-8	Benzo(a)pyrene	50	44.5	89	62-107
205-99-2	Benzo(b)fluoranthene	50	46.1	92	65-114
191-24-2	Benzo(g,h,i)perylene	50	45.2	90	66-116
207-08-9	Benzo(k)fluoranthene	50	43.7	87	65-114
100-51-6	Benzyl Alcohol	50	35.8	72	46-94
101-55-3	4-Bromophenyl Phenyl Ether	50	46.1	92	65-109
85-68-7	Butyl Benzyl Phthalate	50	46.0	92	65-112
86-74-8	Carbazole	50	43.3	87	59-113
106-47-8	4-Chloroaniline	50	37.3	75	49-105
111-91-1	bis(2-Chloroethoxy)methane	50	33.1	66	51-102
111-44-4	bis(2-Chloroethyl)ether	50	40.5	81	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	41.0	82	45-106
91-58-7	2-Chloronaphthalene	50	40.6	81	57-103
7005-72-3	4-Chlorophenyl Phenyl Ether	50	43.9	88	62-105
218-01-9	Chrysene	50	44.4	89	66-111
53-70-3	Dibenzo(a,h)anthracene	50	46.4	93	66-119
132-64-9	Dibenzofuran	50	41.0	82	61-106

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-BS	X045800.D	1	04/20/16	MV	04/15/16	OP60097	SX2034

The QC reported here applies to the following samples:

Method: SW846 8270D

FA33107-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	39.6	79	48-97
541-73-1	1,3-Dichlorobenzene	50	39.5	79	45-95
106-46-7	1,4-Dichlorobenzene	50	39.5	79	45-98
91-94-1	3,3'-Dichlorobenzidine	50	40.3	81	46-117
84-66-2	Diethyl Phthalate	50	43.5	87	64-108
131-11-3	Dimethyl Phthalate	50	43.2	86	63-106
84-74-2	Di-n-butyl Phthalate	50	45.7	91	65-107
117-84-0	Di-n-octyl Phthalate	50	44.7	89	62-118
121-14-2	2,4-Dinitrotoluene	50	48.3	97	61-110
606-20-2	2,6-Dinitrotoluene	50	45.1	90	63-108
117-81-7	bis(2-Ethylhexyl)phthalate	50	46.7	93	61-117
206-44-0	Fluoranthene	50	42.5	85	63-106
86-73-7	Fluorene	50	42.6	85	62-108
118-74-1	Hexachlorobenzene	50	43.9	88	63-108
87-68-3	Hexachlorobutadiene	50	43.7	87	42-102
77-47-4	Hexachlorocyclopentadiene	50	37.4	75	39-102
67-72-1	Hexachloroethane	50	38.4	77	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	58.6	117	64-119
78-59-1	Isophorone	50	39.6	79	43-87
91-57-6	2-Methylnaphthalene	50	41.1	82	51-102
91-20-3	Naphthalene	50	41.5	83	47-100
88-74-4	2-Nitroaniline	50	45.4	91	54-128
99-09-2	3-Nitroaniline	50	42.7	85	56-106
100-01-6	4-Nitroaniline	50	47.3	95	55-120
98-95-3	Nitrobenzene	50	41.6	83	50-104
621-64-7	N-Nitrosodi-n-propylamine	50	35.0	70	52-104
86-30-6	N-Nitrosodiphenylamine	50	43.9	88	64-108
85-01-8	Phenanthrene	50	42.7	85	66-110
129-00-0	Pyrene	50	45.0	90	64-113
120-82-1	1,2,4-Trichlorobenzene	50	41.6	83	45-97

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	54%	14-67%
4165-62-2	Phenol-d5	37%	10-50%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33107
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-BS	X045800.D	1	04/20/16	MV	04/15/16	OP60097	SX2034

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

FA33107-14

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	91%	33-118%
4165-60-0	Nitrobenzene-d5	86%	42-108%
321-60-8	2-Fluorobiphenyl	83%	40-106%
1718-51-0	Terphenyl-d14	91%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-MS	X045878.D	1	04/21/16	NJ	04/15/16	OP60097	SX2035
OP60097-MSD	X045879.D	1	04/22/16	NJ	04/15/16	OP60097	SX2035
FA33070-1	X045877.D	1	04/21/16	NJ	04/15/16	OP60097	SX2035

The QC reported here applies to the following samples:

Method: SW846 8270D

FA33107-14

CAS No.	Compound	FA33070-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	47 U		189	95.7	51	189	75.1	40	24	10-69/39
59-50-7	4-Chloro-3-methyl Phenol	4.7 U		94.3	79.8	85	94.3	75.3	80	6	54-103/23
95-57-8	2-Chlorophenol	4.7 U		94.3	78.3	83	94.3	74.1	79	6	52-98/25
120-83-2	2,4-Dichlorophenol	4.7 U		94.3	85.4	91	94.3	79.6	84	7	53-103/26
105-67-9	2,4-Dimethylphenol	4.7 U		94.3	63.2	67	94.3	58.2	62	8	43-90/27
51-28-5	2,4-Dinitrophenol	24 U		189	164	87	189	165	87	1	44-112/25
534-52-1	4,6-Dinitro-o-cresol	9.4 U		189	177	94	189	174	92	2	66-121/23
95-48-7	2-Methylphenol	4.7 U		94.3	68.7	73	94.3	64.4	68	6	43-90/28
	3&4-Methylphenol	4.7 U		189	129	68	189	118	63	9	36-88/28
88-75-5	2-Nitrophenol	4.7 U		94.3	88.6	94	94.3	83.9	89	5	53-102/29
100-02-7	4-Nitrophenol	24 U		189	132	70*	189	112	59	16	18-62/33
87-86-5	Pentachlorophenol	24 U		189	170	90	189	162	86	5	61-115/26
108-95-2	Phenol	4.7 U		94.3	48.1	51	94.3	41.4	44	15	19-56/35
95-95-4	2,4,5-Trichlorophenol	4.7 U		94.3	86.3	91	94.3	83.0	88	4	62-109/22
88-06-2	2,4,6-Trichlorophenol	4.7 U		94.3	86.2	91	94.3	80.5	85	7	59-107/23
83-32-9	Acenaphthene	4.7 U		94.3	83.3	88	94.3	76.7	81	8	61-107/22
208-96-8	Acenaphthylene	4.7 U		94.3	79.6	84	94.3	75.6	80	5	60-104/22
120-12-7	Anthracene	4.7 U		94.3	80.8	86	94.3	77.3	82	4	65-108/20
56-55-3	Benzo(a)anthracene	4.7 U		94.3	82.8	88	94.3	78.7	83	5	66-111/22
50-32-8	Benzo(a)pyrene	4.7 U		94.3	83.3	88	94.3	82.3	87	1	62-107/23
205-99-2	Benzo(b)fluoranthene	4.7 U		94.3	83.3	88	94.3	81.5	86	2	65-114/23
191-24-2	Benzo(g,h,i)perylene	4.7 U		94.3	87.8	93	94.3	82.3	87	6	66-116/23
207-08-9	Benzo(k)fluoranthene	4.7 U		94.3	83.0	88	94.3	79.7	84	4	65-114/24
100-51-6	Benzyl Alcohol	4.7 U		94.3	71.3	76	94.3	65.4	69	9	46-94/27
101-55-3	4-Bromophenyl Phenyl Ether	4.7 U		94.3	86.3	91	94.3	81.2	86	6	65-109/23
85-68-7	Butyl Benzyl Phthalate	4.7 U		94.3	80.6	85	94.3	79.9	85	1	65-112/24
86-74-8	Carbazole	4.7 U		94.3	78.4	83	94.3	75.6	80	4	59-113/21
106-47-8	4-Chloroaniline	4.7 U		94.3	65.8	70	94.3	63.8	68	3	49-105/27
111-91-1	bis(2-Chloroethoxy)methane	4.7 U		94.3	59.0	63	94.3	55.8	59	6	51-102/28
111-44-4	bis(2-Chloroethyl)ether	4.7 U		94.3	71.8	76	94.3	68.7	73	4	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	4.7 U		94.3	79.2	84	94.3	76.6	81	3	45-106/26
91-58-7	2-Chloronaphthalene	4.7 U		94.3	78.4	83	94.3	73.9	78	6	57-103/23
7005-72-3	4-Chlorophenyl Phenyl Ether	4.7 U		94.3	87.2	92	94.3	80.3	85	8	62-105/20
218-01-9	Chrysene	4.7 U		94.3	82.3	87	94.3	78.1	83	5	66-111/22
53-70-3	Dibenzo(a,h)anthracene	4.7 U		94.3	89.5	95	94.3	84.7	90	6	66-119/24
132-64-9	Dibenzofuran	4.7 U		94.3	77.4	82	94.3	73.8	78	5	61-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA33107

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-MS	X045878.D	1	04/21/16	NJ	04/15/16	OP60097	SX2035
OP60097-MSD	X045879.D	1	04/22/16	NJ	04/15/16	OP60097	SX2035
FA33070-1	X045877.D	1	04/21/16	NJ	04/15/16	OP60097	SX2035

The QC reported here applies to the following samples:

Method: SW846 8270D

FA33107-14

CAS No.	Compound	FA33070-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	4.7 U	94.3		77.5	82	94.3	74.5	79	4	48-97/24
541-73-1	1,3-Dichlorobenzene	4.7 U	94.3		76.8	81	94.3	73.0	77	5	45-95/25
106-46-7	1,4-Dichlorobenzene	4.7 U	94.3		77.0	82	94.3	73.3	78	5	45-98/25
91-94-1	3,3' -Dichlorobenzidine	4.7 U	94.3		72.2	77	94.3	72.7	77	1	46-117/29
84-66-2	Diethyl Phthalate	4.7 U	94.3		84.0	89	94.3	80.1	85	5	64-108/21
131-11-3	Dimethyl Phthalate	4.7 U	94.3		83.6	89	94.3	78.9	84	6	63-106/22
84-74-2	Di-n-butyl Phthalate	4.7 U	94.3		84.9	90	94.3	81.9	87	4	65-107/21
117-84-0	Di-n-octyl Phthalate	4.7 U	94.3		76.0	81	94.3	76.5	81	1	62-118/24
121-14-2	2,4-Dinitrotoluene	4.7 U	94.3		95.2	101	94.3	91.5	97	4	61-110/21
606-20-2	2,6-Dinitrotoluene	4.7 U	94.3		89.9	95	94.3	84.4	89	6	63-108/21
117-81-7	bis(2-Ethylhexyl)phthalate	4.7 U	94.3		83.0	88	94.3	80.0	85	4	61-117/23
206-44-0	Fluoranthene	4.7 U	94.3		82.1	87	94.3	76.4	81	7	63-106/21
86-73-7	Fluorene	4.7 U	94.3		82.5	87	94.3	77.0	82	7	62-108/20
118-74-1	Hexachlorobenzene	4.7 U	94.3		81.7	87	94.3	79.8	85	2	63-108/22
87-68-3	Hexachlorobutadiene	4.7 U	94.3		88.0	93	94.3	81.0	86	8	42-102/28
77-47-4	Hexachlorocyclopentadiene	4.7 U	94.3		72.0	76	94.3	65.0	69	10	39-102/29
67-72-1	Hexachloroethane	4.7 U	94.3		75.5	80	94.3	71.1	75	6	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	4.7 U	94.3		88.4	94	94.3	83.1	88	6	64-119/24
78-59-1	Isophorone	4.7 U	94.3		71.0	75	94.3	68.1	72	4	43-87/25
91-57-6	2-Methylnaphthalene	4.7 U	94.3		77.7	82	94.3	74.4	79	4	51-102/26
91-20-3	Naphthalene	4.7 U	94.3		79.0	84	94.3	74.2	79	6	47-100/29
88-74-4	2-Nitroaniline	4.7 U	94.3		83.9	89	94.3	81.6	86	3	54-128/24
99-09-2	3-Nitroaniline	4.7 U	94.3		78.1	83	94.3	77.4	82	1	56-106/27
100-01-6	4-Nitroaniline	4.7 U	94.3		87.8	93	94.3	83.9	89	5	55-120/24
98-95-3	Nitrobenzene	4.7 U	94.3		76.2	81	94.3	72.3	77	5	50-104/28
621-64-7	N-Nitrosodi-n-propylamine	4.7 U	94.3		65.3	69	94.3	61.4	65	6	52-104/25
86-30-6	N-Nitrosodiphenylamine	4.7 U	94.3		79.7	84	94.3	76.6	81	4	64-108/23
85-01-8	Phenanthrene	4.7 U	94.3		80.1	85	94.3	75.4	80	6	66-110/21
129-00-0	Pyrene	4.7 U	94.3		80.8	86	94.3	76.0	81	6	64-113/23
120-82-1	1,2,4-Trichlorobenzene	4.7 U	94.3		80.1	85	94.3	76.2	81	5	45-97/28

CAS No.	Surrogate Recoveries	MS	MSD	FA33070-1	Limits
367-12-4	2-Fluorophenol	64%	58%	41%	14-67%
4165-62-2	Phenol-d5	49%	41%	28%	10-50%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33107
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP60097-MS	X045878.D	1	04/21/16	NJ	04/15/16	OP60097	SX2035
OP60097-MSD	X045879.D	1	04/22/16	NJ	04/15/16	OP60097	SX2035
FA33070-1	X045877.D	1	04/21/16	NJ	04/15/16	OP60097	SX2035

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

FA33107-14

CAS No.	Surrogate Recoveries	MS	MSD	FA33070-1	Limits
118-79-6	2,4,6-Tribromophenol	94%	89%	72%	33-118%
4165-60-0	Nitrobenzene-d5	83%	79%	75%	42-108%
321-60-8	2-Fluorobiphenyl	85%	80%	76%	40-106%
1718-51-0	Terphenyl-d14	89%	82%	75%	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: FA33107
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30251
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/18/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1	-0.40	<6.0
Arsenic	10	1.3	1.3	-0.70	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2	-0.20	<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	0.60	<25
Iron	300	17	17		
Lead	5.0	1	1.1	0.60	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4	-0.30	<40
Potassium	10000	200	200		
Selenium	10	2.4	2.9	4.7	<10
Silver	10	.7	.7	-0.10	<10
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4	0.60	<10
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4	-0.10	<20

Associated samples MP30251: FA33107-14

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

8.1.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30251
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/18/16 04/18/16

Metal	FA33140-1 Original DUP		RPD	QC Limits	FA33140-1 Original MS		Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	0.0	1.0	200.0(a)	0-20	0.0	559	500	111.8	80-120
Arsenic	7.9	7.4	6.5	0-20	7.9	2240	2000	111.6	80-120
Barium	anr								
Beryllium	0.0	0.0	NC	0-20	0.0	56.4	50	112.8	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	53.4	50	106.8	80-120
Calcium									
Chromium	2.3	2.3	0.0	0-20	2.3	218	200	107.9	80-120
Cobalt									
Copper	3.2	3.5	9.0	0-20	3.2	288	250	113.9	80-120
Iron	anr								
Lead	0.0	0.0	NC	0-20	0.0	527	500	105.4	80-120
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	31.9	31.1	2.5	0-20	31.9	561	500	105.8	80-120
Potassium									
Selenium	5.8	5.2	10.9	0-20	5.8	2250	2000	112.2	80-120
Silver	0.0	0.0	NC	0-20	0.0	53.8	50	107.6	80-120
Sodium									
Strontium									
Thallium	0.0	0.0	NC	0-20	0.0	2070	2000	103.5	80-120
Tin									
Titanium									
Vanadium	anr								
Zinc	4.5	4.3	4.5	0-20	4.5	538	500	106.7	80-120

Associated samples MP30251: FA33107-14

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: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30251
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/18/16

Metal	FA33140-1 Original	MSD	Spike lot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	546	500	109.2	2.4	20
Arsenic	7.9	2180	2000	108.6	2.7	20
Barium	anr					
Beryllium	0.0	54.8	50	109.6	2.9	20
Cadmium	0.0	52.3	50	104.6	2.1	20
Calcium						
Chromium	2.3	213	200	105.4	2.3	20
Cobalt						
Copper	3.2	280	250	110.7	2.8	20
Iron	anr					
Lead	0.0	515	500	103.0	2.3	20
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	31.9	549	500	103.4	2.2	20
Potassium						
Selenium	5.8	2180	2000	108.7	3.2	20
Silver	0.0	52.3	50	104.6	2.8	20
Sodium						
Strontium						
Thallium	0.0	2020	2000	101.0	2.4	20
Tin						
Titanium						
Vanadium	anr					
Zinc	4.5	529	500	104.9	1.7	20

Associated samples MP30251: FA33107-14

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: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30251
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/18/16

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum			
Antimony	530	500	106.0 80-120
Arsenic	2090	2000	104.5 80-120
Barium	anr		
Beryllium	54.1	50	108.2 80-120
Cadmium	54.2	50	108.4 80-120
Calcium			
Chromium	215	200	107.5 80-120
Cobalt			
Copper	271	250	108.4 80-120
Iron	anr		
Lead	513	500	102.6 80-120
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	549	500	109.8 80-120
Potassium			
Selenium	2100	2000	105.0 80-120
Silver	49.1	50	98.2 80-120
Sodium			
Strontium			
Thallium	2080	2000	104.0 80-120
Tin			
Titanium			
Vanadium	anr		
Zinc	543	500	108.6 80-120

Associated samples MP30251: FA33107-14

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

8.1.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30251
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/18/16

Metal	FA33140-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	7.90	9.10	15.2 (a)	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	2.30	0.00	100.0(a)	0-10
Cobalt				
Copper	3.20	5.60	75.0 (a)	0-10
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	31.9	33.0	3.4	0-10
Potassium				
Selenium	5.80	17.9	208.6(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	anr			
Zinc	4.50	59.1	1213.3(a)	0-10

Associated samples MP30251: FA33107-14

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: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30251
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/18/16

Metal	Sample ml	Final ml	FA33140-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10			119.9	0.2	5	100	119.9	80-120
Arsenic	9.8	10	7.9	7.742	123.3	0.2	5	100	115.6	80-120
Barium										
Beryllium	9.8	10			54.6	0.2	2.5	50	109.2	80-120
Cadmium	9.8	10			54.1	0.2	2.5	50	108.2	80-120
Calcium										
Chromium	9.8	10	2.3	2.254	57.6	0.2	2.5	50	110.7	80-120
Cobalt										
Copper	9.8	10	3.2	3.136	118.4	0.2	5	100	115.3	80-120
Iron										
Lead	9.8	10			51.5	0.2	2.5	50	103.0	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10	31.9	31.262	136.3	0.2	5	100	105.0	80-120
Potassium										
Selenium	9.8	10	5.8	5.684	115.8	0.2	5	100	110.1	80-120
Silver	9.8	10			53.8	0.2	2.5	50	107.6	80-120
Sodium										
Strontium										
Thallium	9.8	10			100.1	0.2	5	100	100.1	80-120
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	4.5	4.41	283.7	0.2	12.5	250	111.7	80-120

Associated samples MP30251: FA33107-14

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA33107
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30273
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/25/16

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	0.054	<0.50

Associated samples MP30273: FA33107-14

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: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30273
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/25/16 04/25/16

Metal	FA33070-1 Original DUP		RPD	QC Limits	FA33070-1 Original MS		Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	3.0	3	100.0	80-120

Associated samples MP30273: FA33107-14

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

8.2.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30273
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/25/16

Metal	FA33070-1 Original MSD		Spike lot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.1	3	103.3	3.3	20

Associated samples MP30273: FA33107-14

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

8.2.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30273
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/25/16

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	3.1	3	103.3	80-120

Associated samples MP30273: FA33107-14

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: FA33107
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP30273
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/25/16

Metal	FA33070-1		%DIF	QC Limits
	Original	SDL 1:5		
Mercury	0.00	0.00	NC	0-10

Associated samples MP30273: FA33107-14

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

8.2.4

8

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 FA33062 were collected on April 11-12, 2016 for UTC - Delavan Spray Technologies located in Bamberg, South Carolina. The analytical data were validated according to the procedures outlined above. Where data flags have been applied to this data set, they are separated by a slash "/" and presented in the following format:

Laboratory Flag / Result Flags / Analysis Flags

- **Laboratory Flag:** This flag precedes the first slash and is added by the laboratory as a result of QC excursions from the analytical method. These flags are laboratory-specific and are described in the associated laboratory report.
- **Result Flags:** These are presented after the first slash and are added by AECOM based on data validation procedures and guidelines. They tell how and if the data should be used.
- **Analysis Flags:** These flags are presented after the second slash and are added by AECOM to inform the data user of any specific QA/QC problems that were encountered.

Any data requiring qualification as a result of the validation process were assigned data flags, as discussed below. The validation flags indicate how any QC excursions may have impacted the usability of the data.

Volatile Organic Compounds by Method 8260B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Total Organic Carbon by Method SM 5310B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Chloride, Nitrate, Nitrite, and Sulfate by Method 300.0/9056

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Dissolved Gases (Methane, Ethane, and Ethene) by Method RSK-175

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Data Summary and Usability

No QC excursions were encountered during the validation of this data set. Therefore, the data associated with this laboratory batch should be considered compliant and adequate for its intended use.

References

United States Environmental Protection Agency (USEPA), February 2007. *Test Methods for Evaluating Solid Waste (SW-846), Update IV.*

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Superfund Organic Data Review.* Publication #EPA540-R-014-002.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Inorganic Superfund Data Review.* Publication #USEPA540/R-013-001.

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 FA33107 were collected on April 13, 2016 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.

Total and TCLP Volatile Organic Compounds by Method 8260B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Total and TCLP Semivolatile Organic Compounds by Method 8270D

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.

PP and TCLP Metals by Methods 6010C/7470B/7471B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Data Summary and Usability

No QC excursions were encountered during the validation of this data set. Therefore, the data associated with this laboratory batch should be considered compliant and adequate for its intended use.

References

United States Environmental Protection Agency (USEPA), February 2007. *Test Methods for Evaluating Solid Waste (SW-846), Update IV*.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Superfund Organic Data Review*. Publication #EPA540-R-014-002.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Inorganic Superfund Data Review*. Publication #USEPA540/R-013-001.

**APPENDIX C
HISTORIC VOC DATA**

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MCL		ug/L	200	NS	7	5	80	NS	80	70	80	NS	5	1000	100	5	2	10000
MW-1	6/4/2003	ug/L	<50	<50	<50	NA	NA	NA	NA	<50	NA	140	15000	<250	<50	<50	<50	<150
MW-1	12/30/2003	ug/L	<800	<800	<800	NA	NA	NA	NA	<800	NA	<800	11000	<800	<800	<800	<800	<800
MW-1	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	10.1	NA	<1.00	5470	NA	<1.00	34.8	<1.00	NA
MW-1	6/1/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	10.1	NA	<1.00	5750	NA	<1.00	41.3	<1.00	NA
MW-1	9/20/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	9.6	NA	<1.00	3150	NA	<1.00	38.4	<1.00	NA
MW-1	12/12/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	11.4	NA	<1.00	4750	NA	<1.00	35.6	<1.00	NA
MW-1	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	11.9	NA	<1.00	6580	NA	<1.00	48.1	<1.00	NA
MW-1	6/26/2006	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	13	NA	<1.0	4100	NA	<1.0	32	<1.0	NA
MW-1	10/21/2006	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	17.9	NA	<1.0	9550	NA	<1.0	65.8	<1.0	NA
MW-1	1/12/2007	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	23.1	NA	<1.00	6790	NA	<1.00	85.6	<1.00	NA
MW-1	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	102	NA	<1.00	5390	NA	<1.00	83.7	<1.00	NA
MW-1	11/5/2009	ug/L	<1.00	<1.00	1.74	NA	NA	NA	NA	382	NA	<1.00	7680	NA	<1.00	108	<1.00	NA
MW-1	4/30/2010	ug/L	<5.00	<5.00	<5.00	NA	NA	NA	NA	184	NA	<5.00	5940	NA	<5.00	79.6	<5.00	NA
MW-1	10/25/2010	ug/L	<50.0	<50.0	<50.0	NA	NA	NA	NA	648	NA	<50.0	5690	NA	<50.0	99.5	<50.0	NA
MW-1	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	210	NA	<1.0	3000	<1.0	<1.0	28	<2.0	<10
MW-1	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	265	NA	<1.00	2320	NA	<1.00	35	<1.00	NA
MW-1	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	298	NA	<1.00	3120	NA	<1.00	41.4	<1.00	NA
MW-1	2/26/2014	ug/L	<6.7	<5.1	<5.1	<4.8	<5.2	<4	<6.2	110 /J/A	<7.2	69.3 J	1280 /J/A	<4	<6.9	11.5 J	<6.5	<13
MW-1	10/27/2014	ug/L	<6.7	<5.1	<5.1	<4.8	<5.2	<4	<6.2	131	<7.2	<40	785	<4	<6.9	18.6 J	10.9 J	<13
MW-1	4/20/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	6.1	<1	<10	447	<2	<1	2.6 J	<1.3	<2.6
MW-1	10/28/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	7.1	<1	<10	383	<2	<1	2.8 J	<1.3	<2.6
MW-1	4/13/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	19.4	<1.3	<10	468	<1	<1.7	6.2	<1.6	<2.8
MW-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-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-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

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-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-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-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-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-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

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-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
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-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
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	NA	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

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-10D	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	4.09	NA	<1.00	<1.00	<1.00	NA
MW-10D	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-10D	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-10D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-10D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-10D	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
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-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-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-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-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.													

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-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-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-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-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-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-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-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-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	<26	<28	<24	<23	<30	<31	<26	221	16600	<20	<33	<27	<31	<56
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-21	3/11/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	466	<72	765 J	16300	<40	<69	209	<65	<130
MW-21	10/28/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	733	<72	<400	14500	<40	<69	354	<65	<130
MW-21	4/22/2015	ug/L	<0.26	<0.2	1	<0.2	<0.22	<0.29	<0.3	351	<0.							

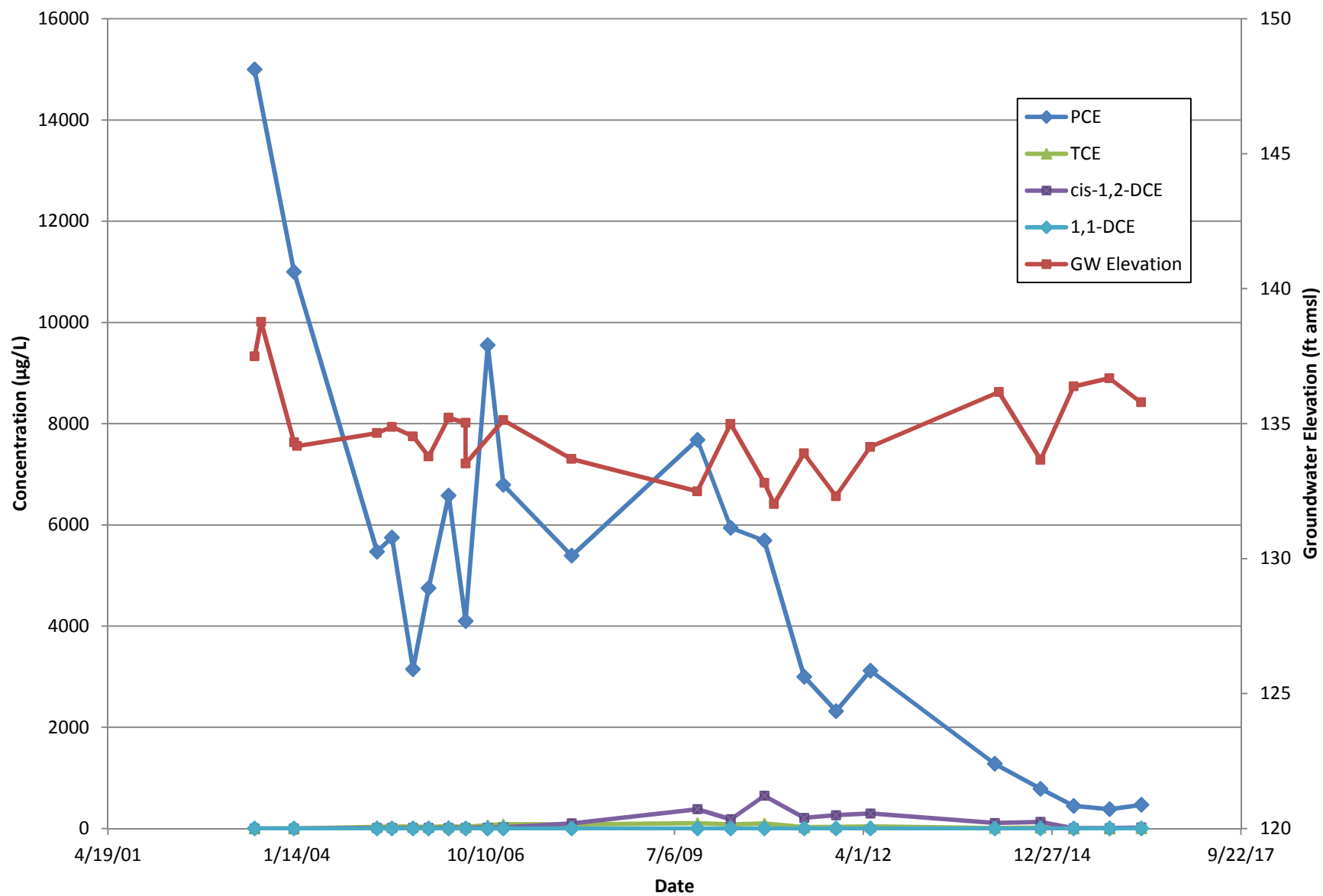
Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well No.	Sample Date	Units	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	Bromodichloro-methane	Carbon disulfide	Chloroform	cis-1,2-Dichloroethylene	Dibromochloro-methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-21D	3/11/2014	ug/L	<0.67	<0.51	1.5 J	<0.48	10.4	1.8 J	131	0.84 J	1.8 J	13.3	283	0.41 J	<0.69	<0.6	<0.65	<1.3
MW-21D	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	2	<0.2	<0.34	<0.3	<0.33	<0.66
MW-21D	4/20/2015	ug/L	<0.26	<0.2	0.89 J	<0.2	<0.22	<0.29	<0.3	0.3 J	<0.2	<2	29.4	<0.4	<0.21	<0.22	<0.25	<0.51
MW-21D	10/27/2015	ug/L	<0.26	<0.2	0.36 J	<0.2	<0.22	<0.29	<0.3	0.23 J	<0.2	2.2 J	90.8	<0.4	<0.21	<0.22	<0.25	<0.51
MW-21D	4/12/2016	ug/L	<0.2	<0.26	0.49	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	8.6	<0.2	<0.33	<0.27	<0.31	<0.56
MW-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-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-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-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-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
MWT-4	8/24/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	68.8	NA	<1.00	136000	8.79	2.03	477	<1.00	37
MWT-5	8/24/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.03	<1.00	<1.00	<1.00	<1.00	<3.00
SW-1	6/5/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	1	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
SW-1	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
SW-1	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
SW-1	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA

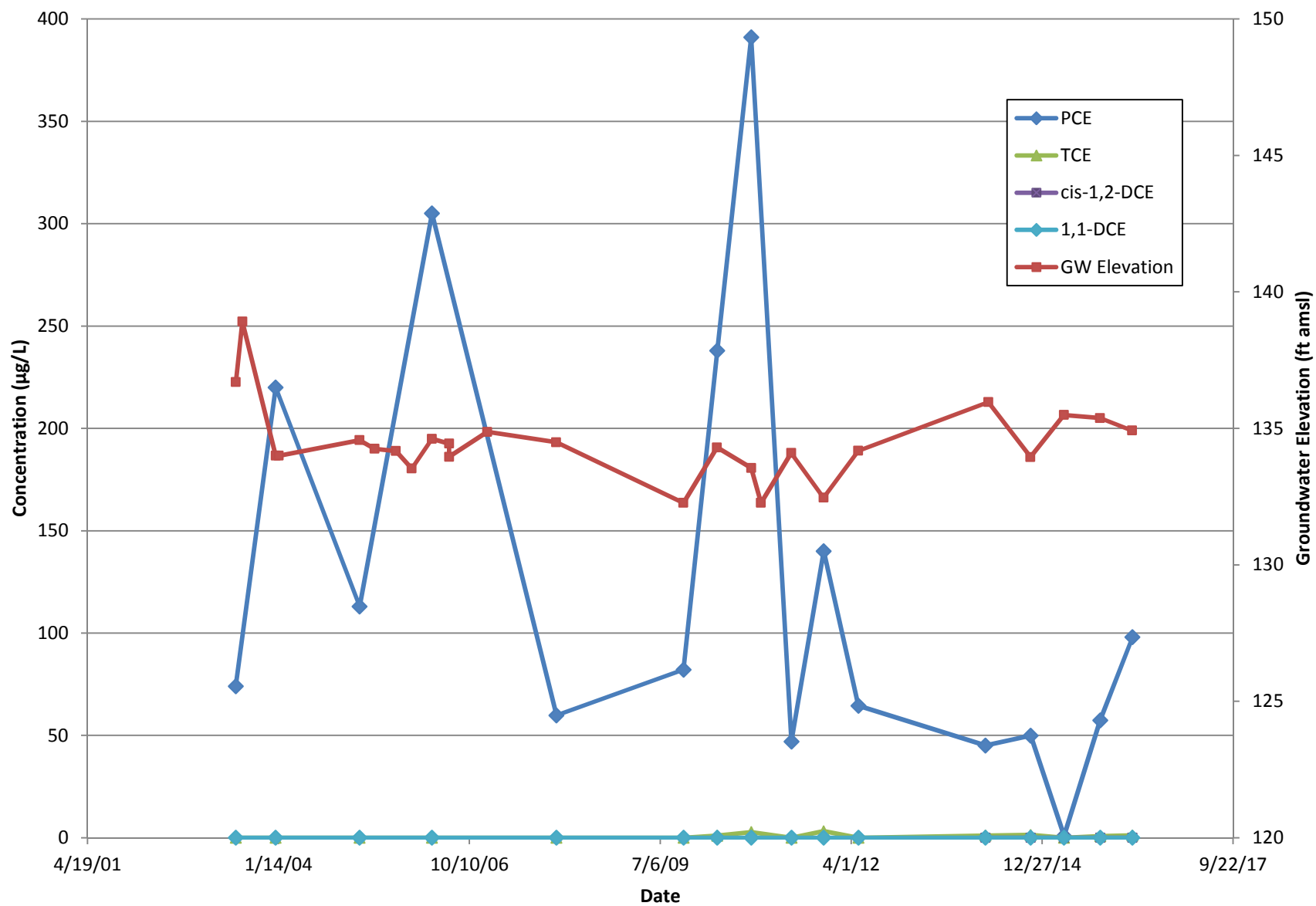
Notes:
NA - Not available
NS - Not sampled

APPENDIX D
TREND PLOTS

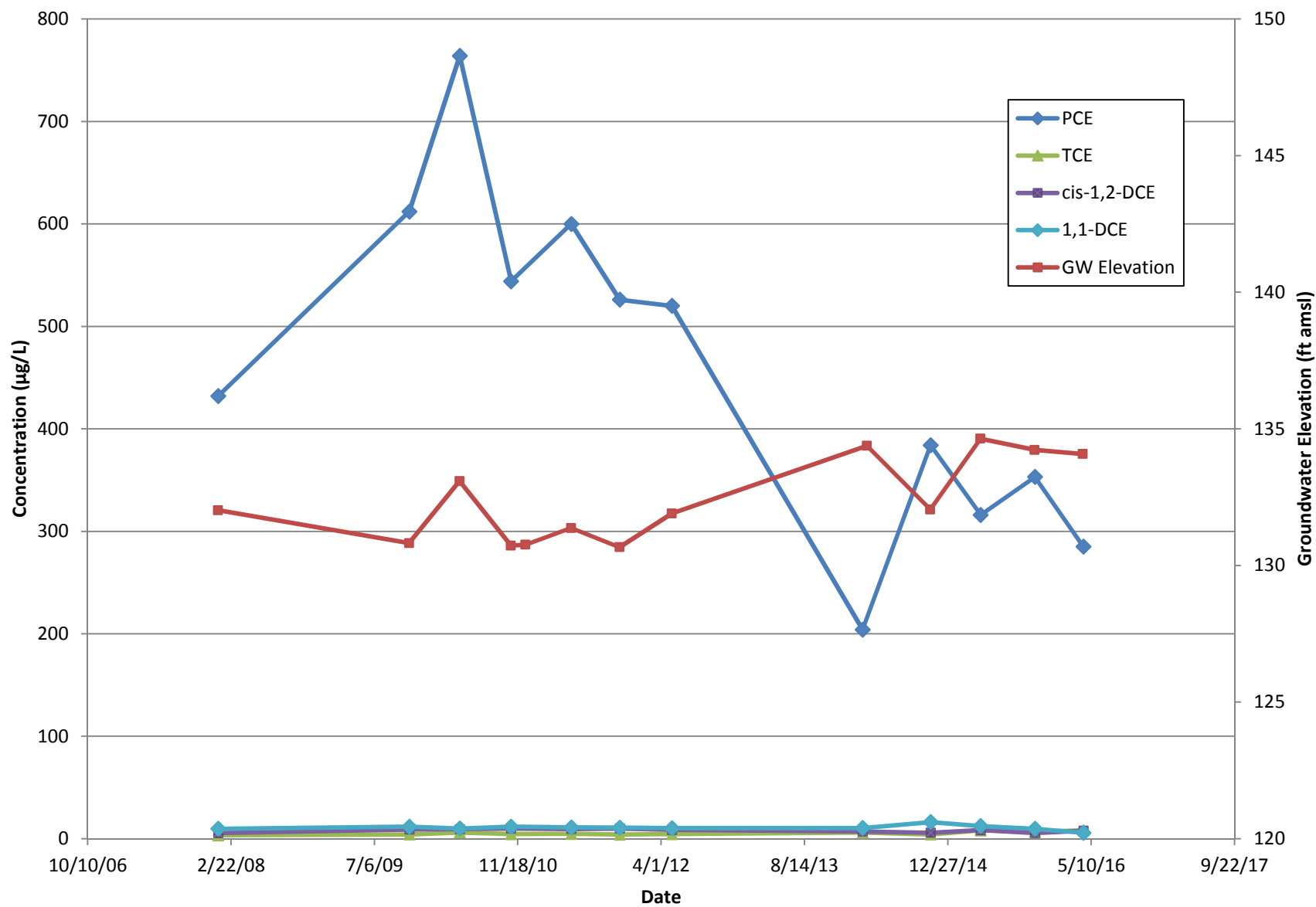
MW-1 Concentrations and Groundwater Elevation with Time



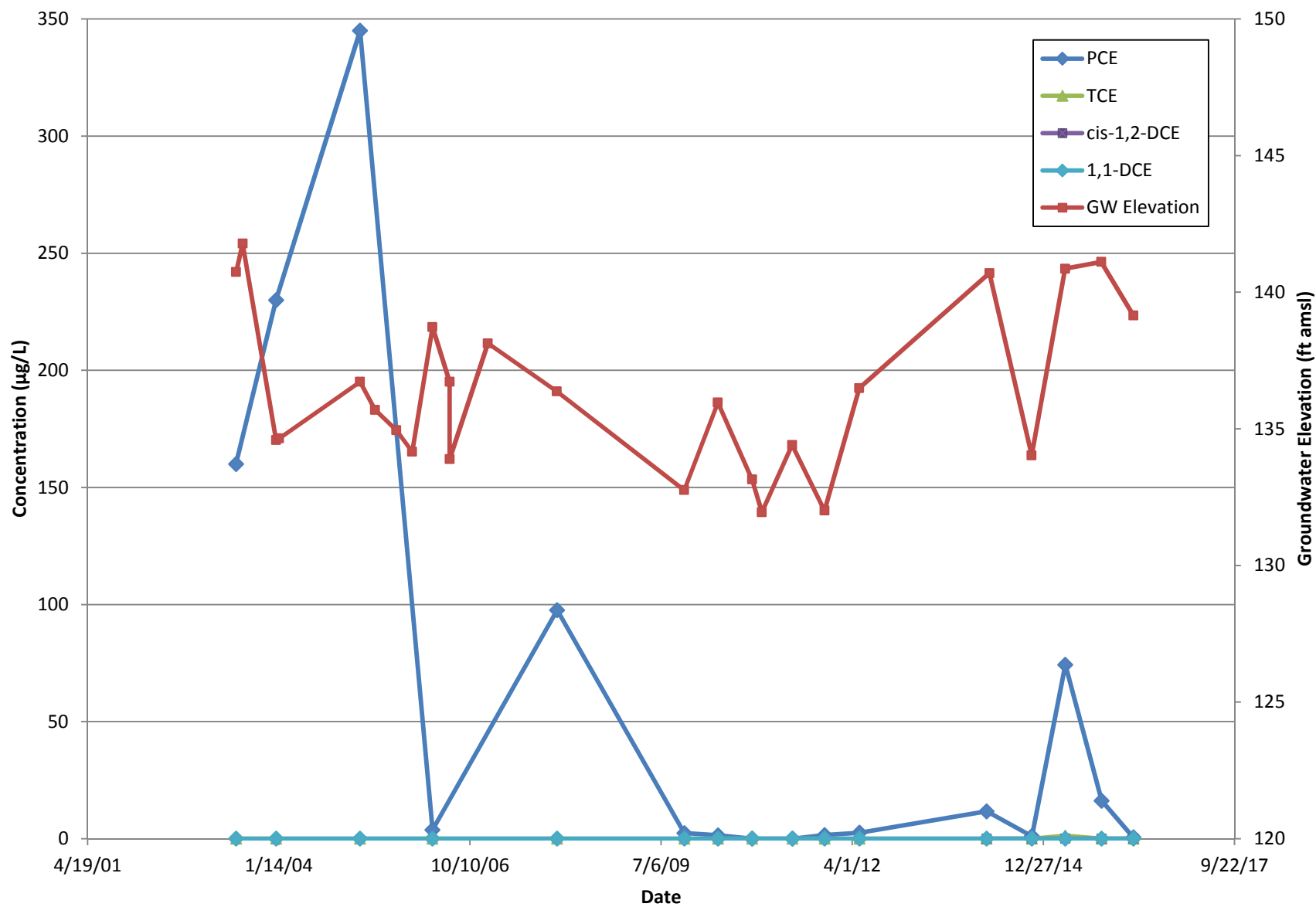
MW-3 Concentrations and Groundwater Elevation with Time



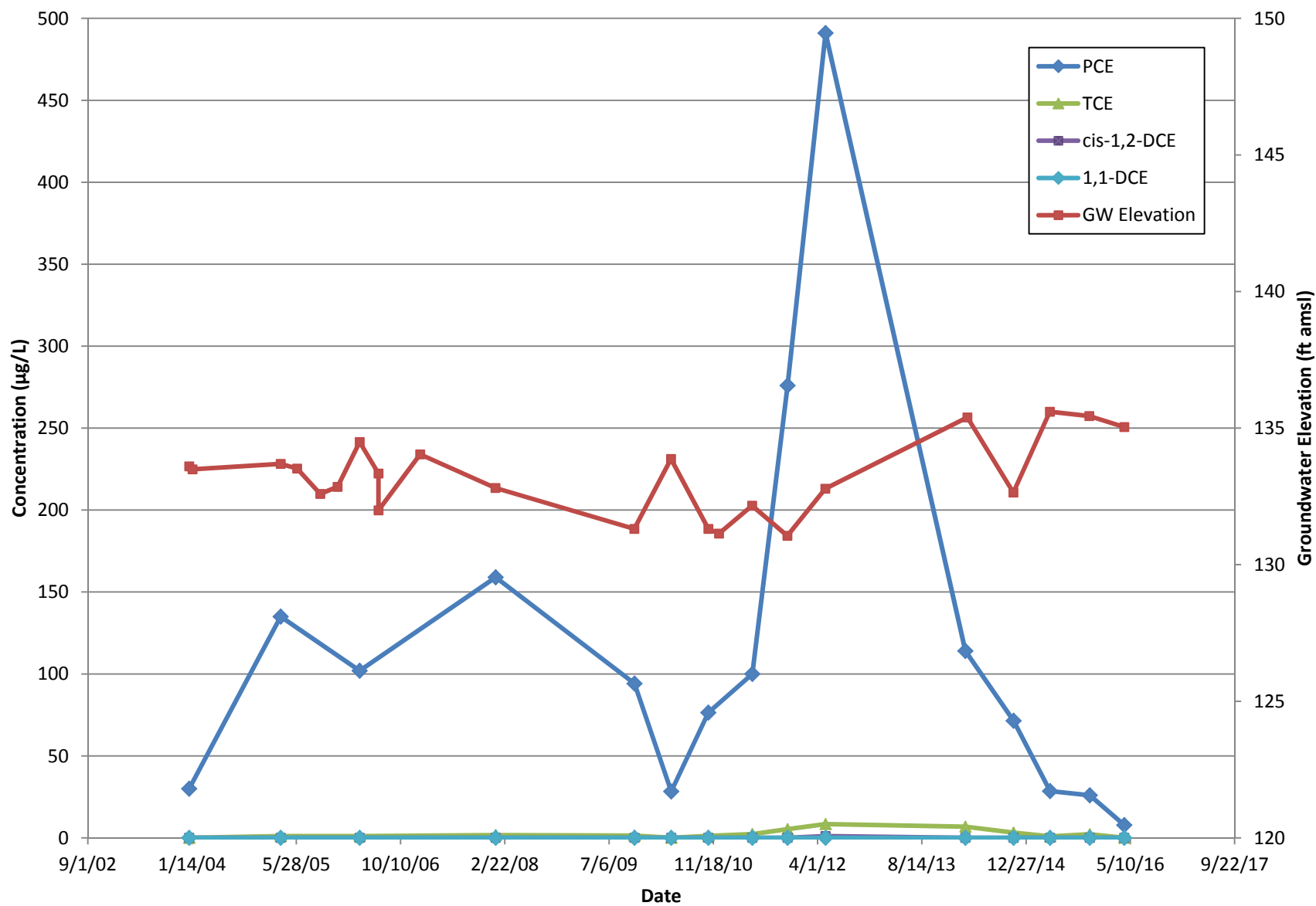
MW-3D Concentrations and Groundwater Elevation with Time



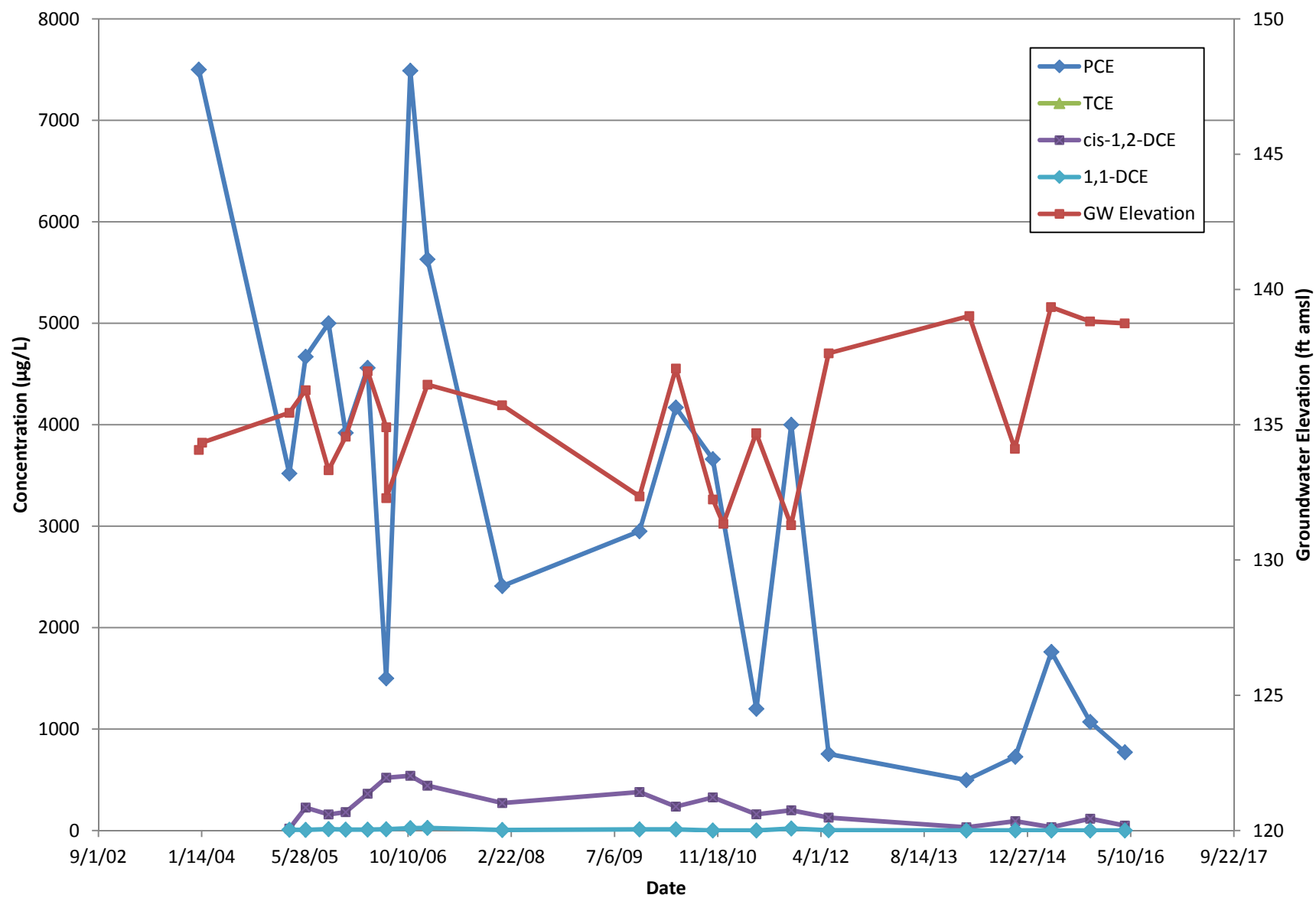
MW-5 Concentrations and Groundwater Elevation with Time



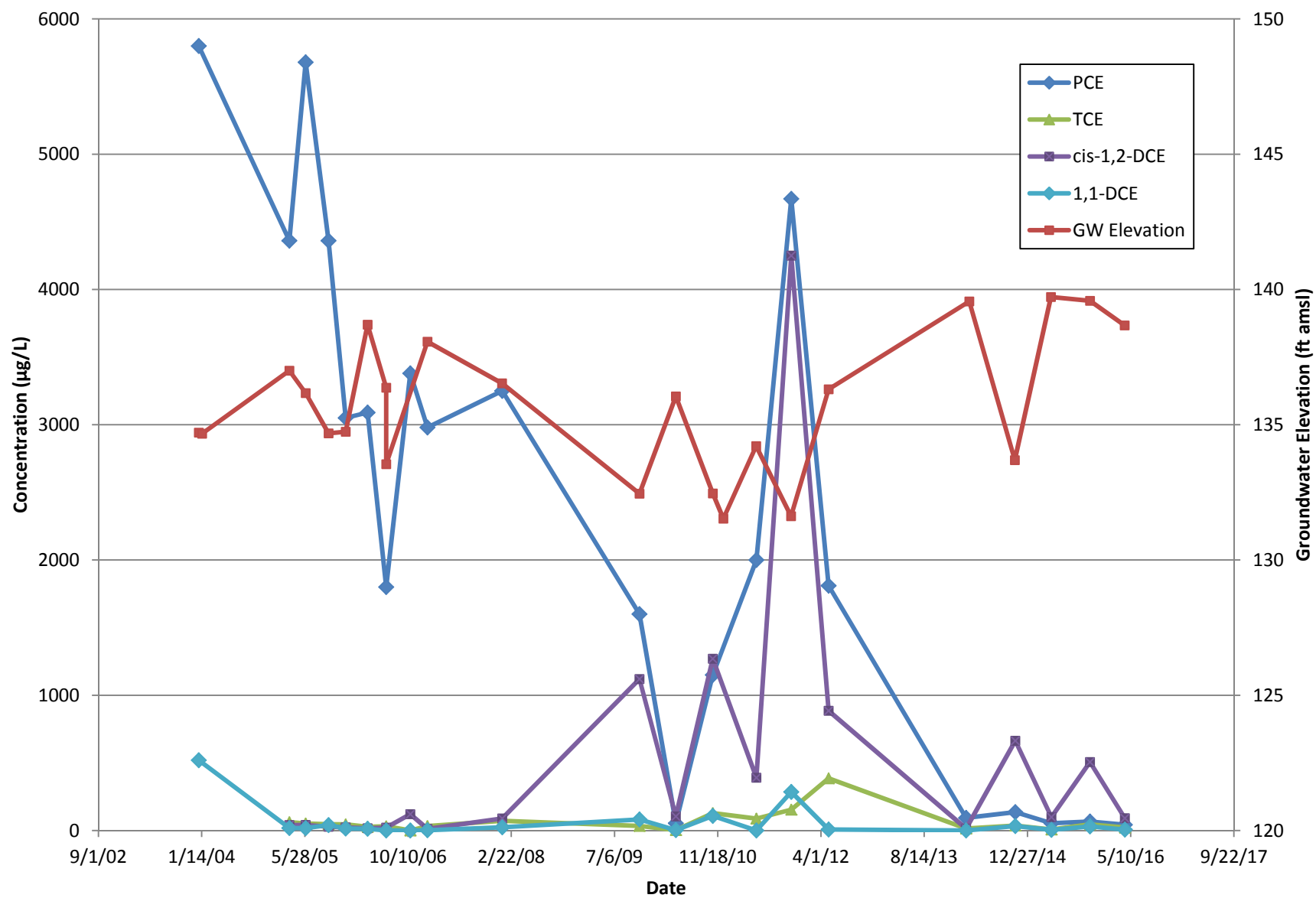
MW-8 Concentrations and Groundwater Elevation with Time



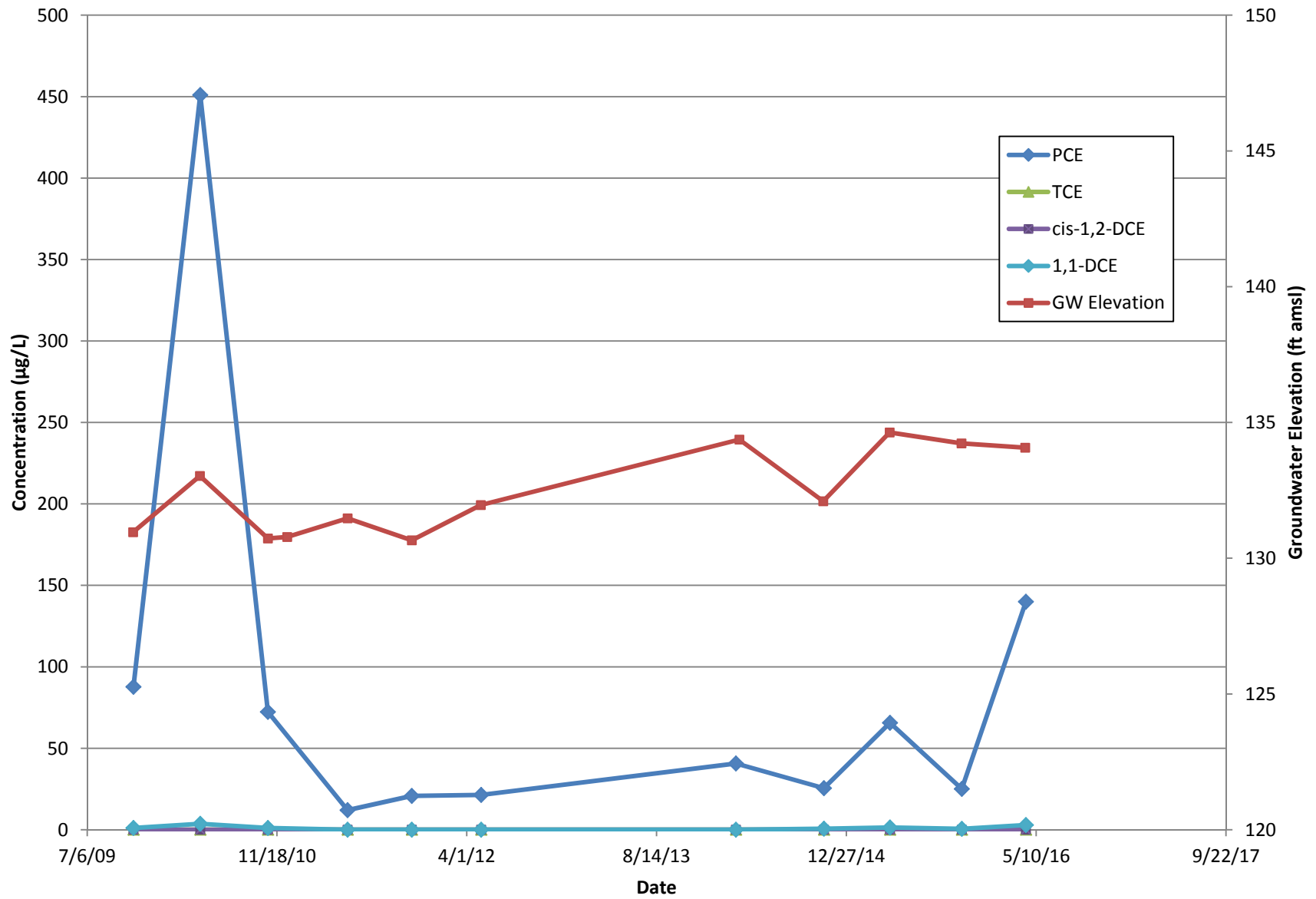
MW-9 Concentrations and Groundwater Elevation with Time



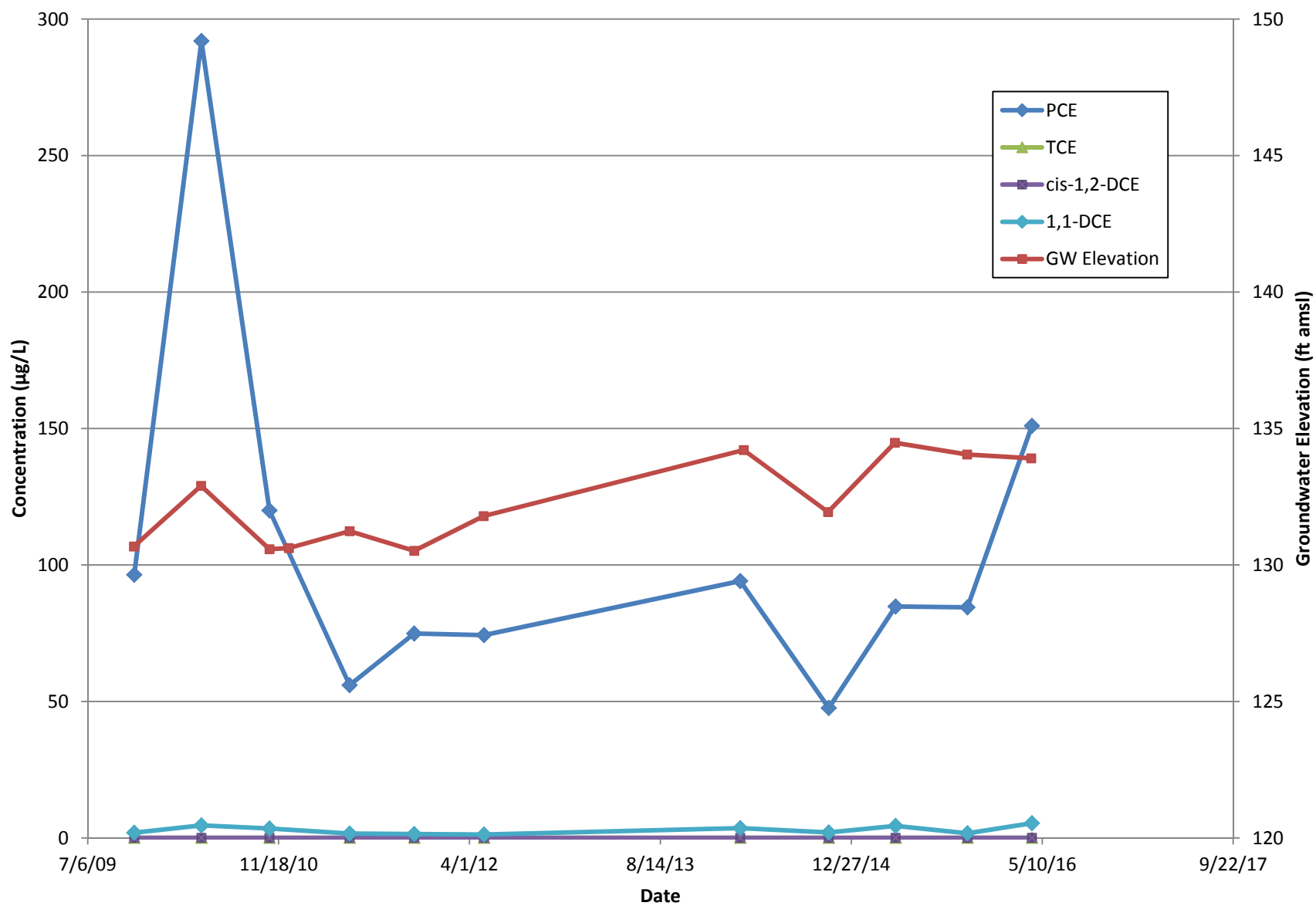
MW-10 Concentrations and Groundwater Elevation with Time



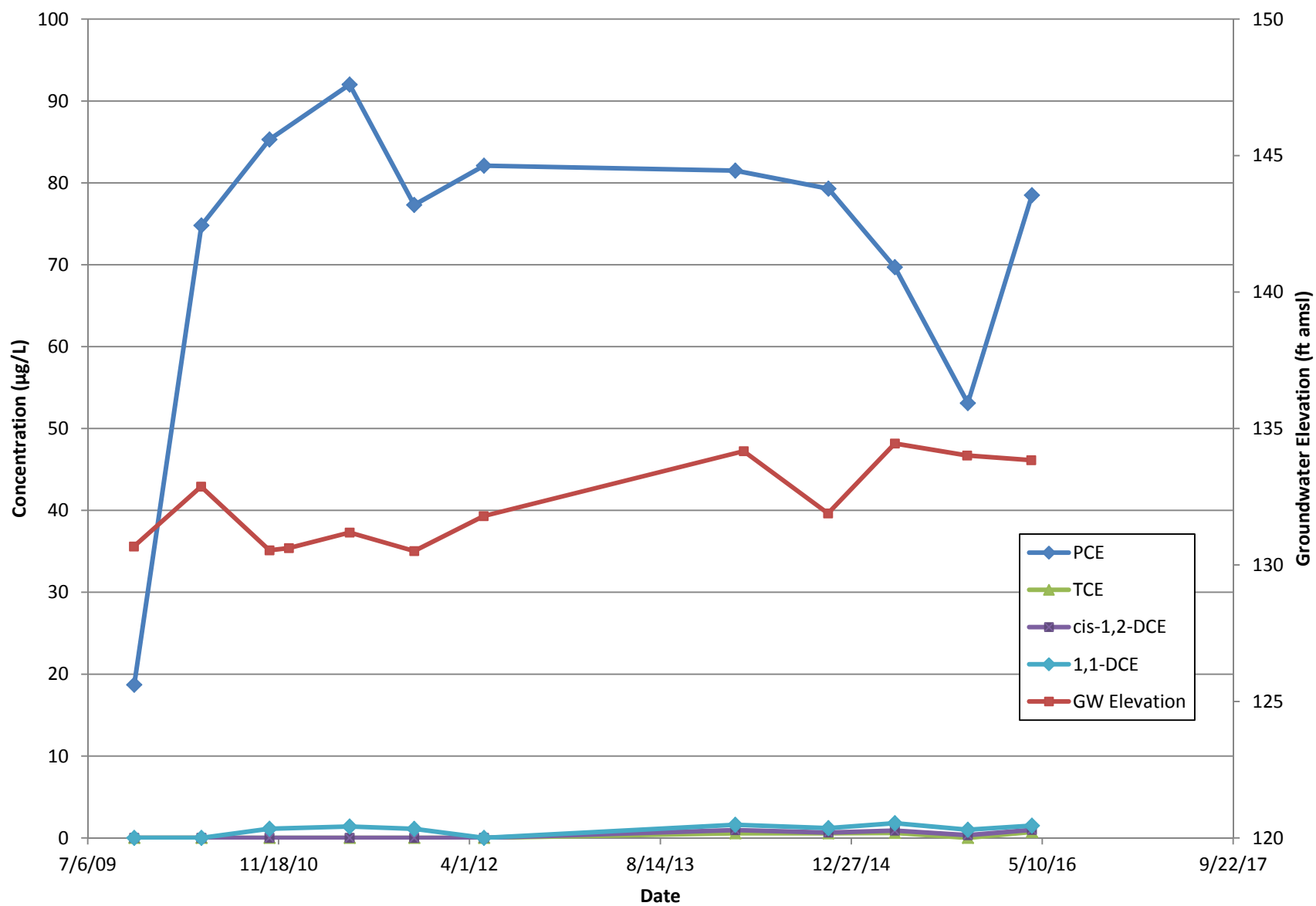
MW-12D Concentrations and Groundwater Elevation with Time



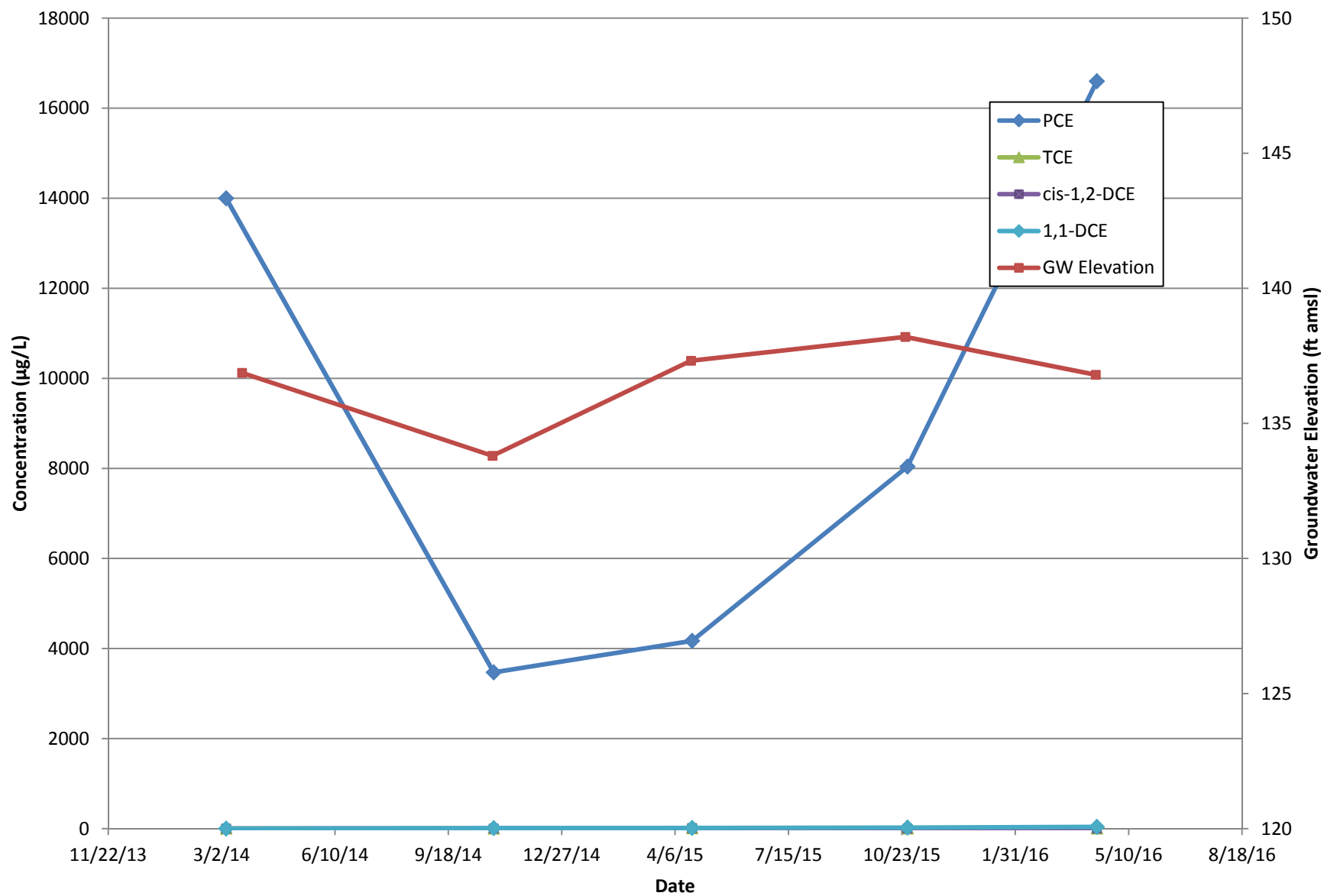
MW-13D Concentrations and Groundwater Elevation with Time



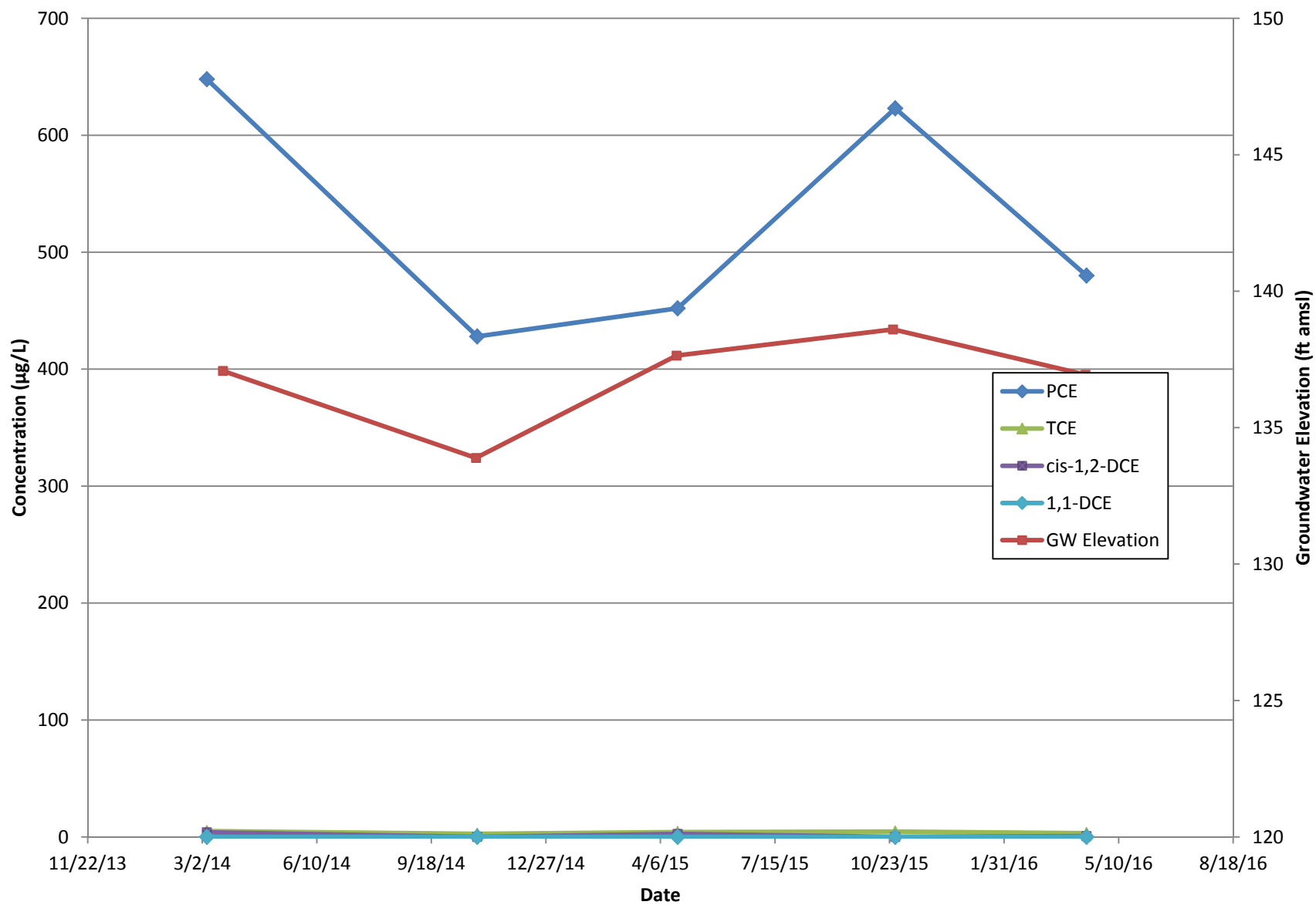
MW-14D Concentrations and Groundwater Elevation with Time



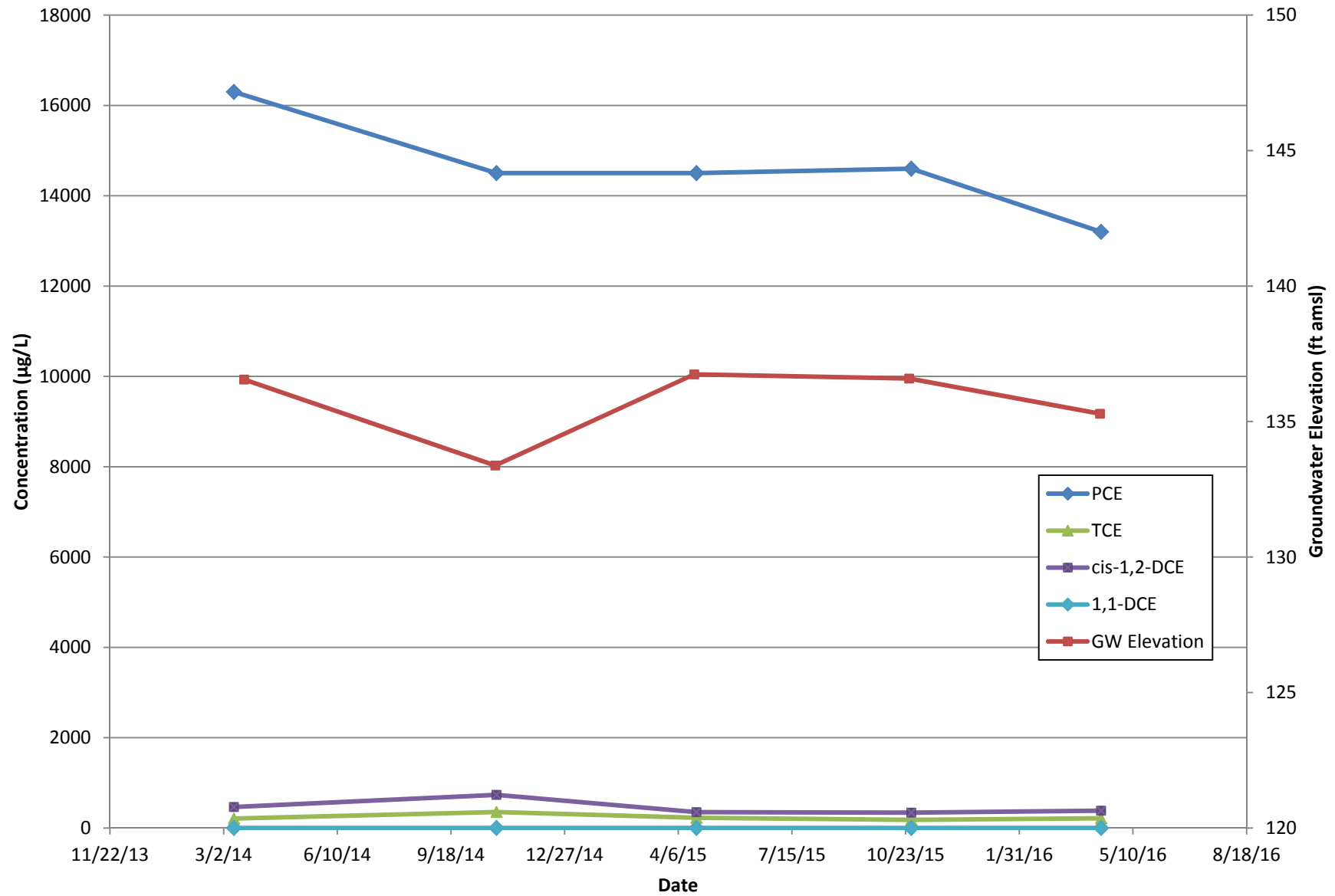
MW-19 Concentrations and Groundwater Elevation with Time



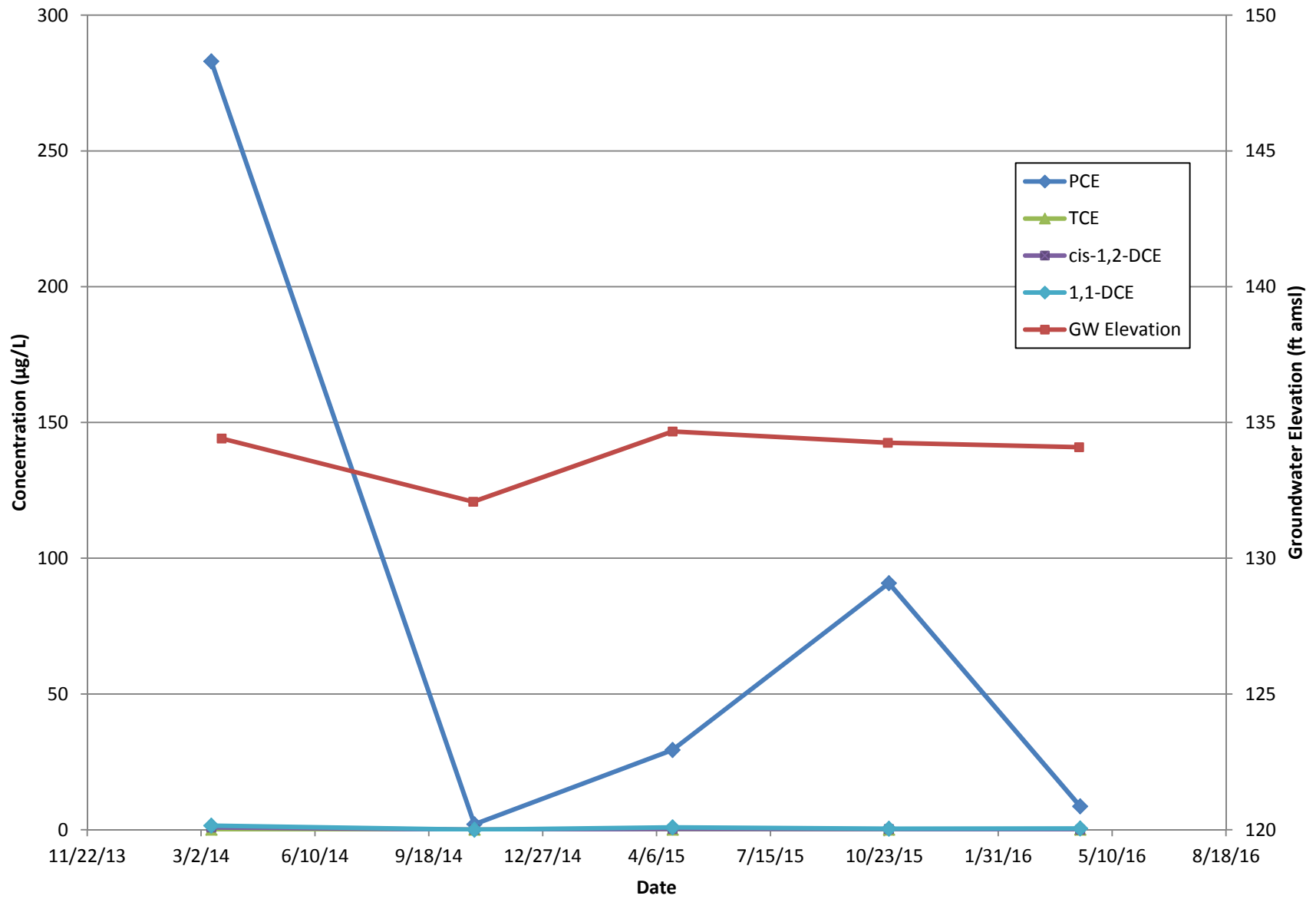
MW-20 Concentrations and Groundwater Elevation with Time



MW-21 Concentrations and Groundwater Elevation with Time



MW-21D Concentrations and Groundwater Elevation with Time



MW-22D Concentrations and Groundwater Elevation with Time

