

51778

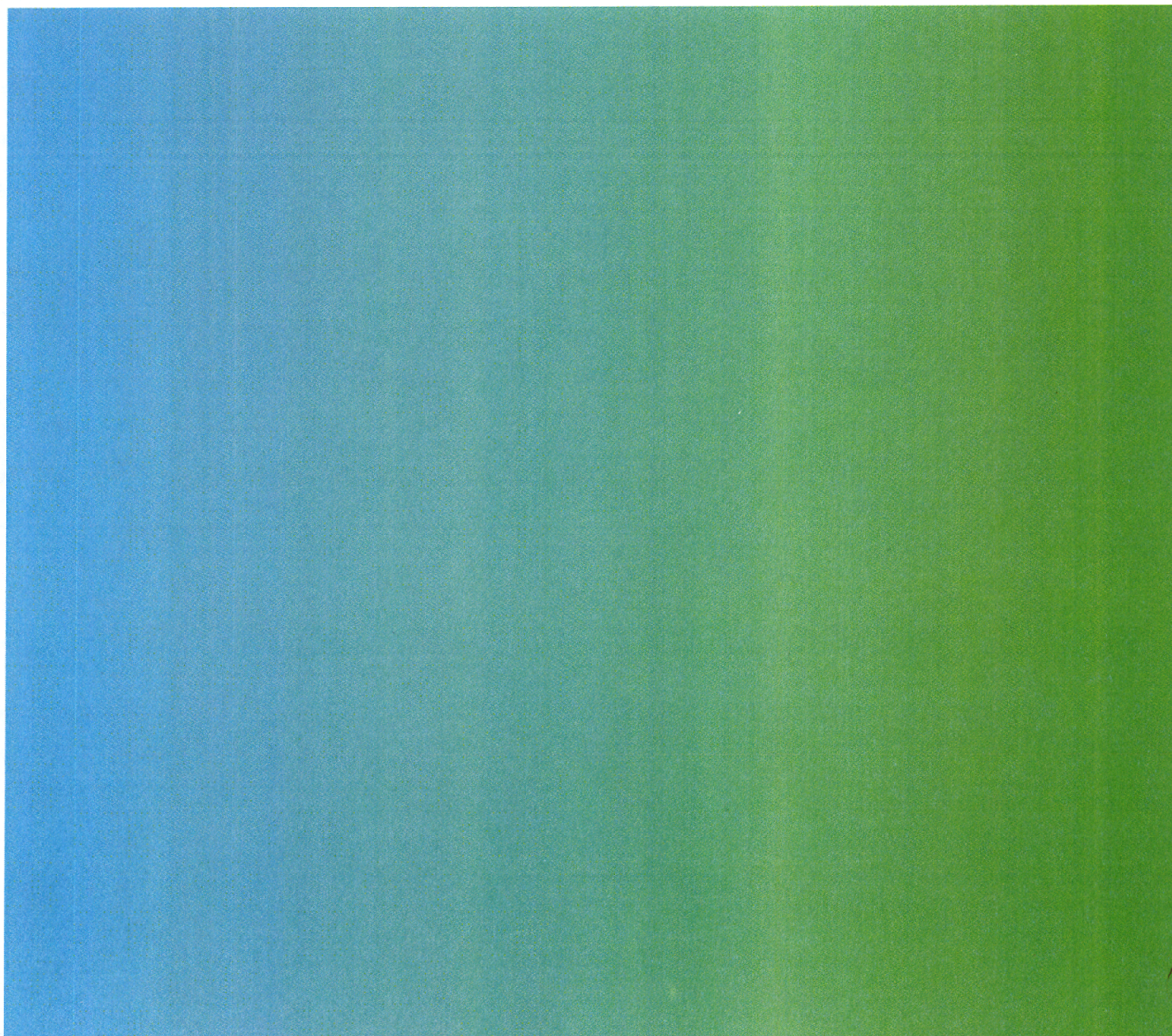
Fall 2016 Semi-Annual Groundwater Monitoring Report

RECEIVED

United Technologies Corporation
Delavan Spray Technologies Site
Bamberg, South Carolina
VCC 13-4762-RP
January 2017

JAN 20 2017

SITE ASSESSMENT,
REMEDICATION &
REVITALIZATION





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

864 234 3000 tel
864 234 3069 fax

January 19, 2017

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

Re: Fall 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 Fall 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
864-234-8925
walter.gerald@aecom.com

cc: Mr. Bill Penn – United Technologies Corporation
Ms. Evelyn Rogers, PE – AECOM
Project File 60314964

Fall 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.
10 Patewood Drive
Suite 500, Building 6
Greenville, South Carolina

January 19, 2017

FALL 2016 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

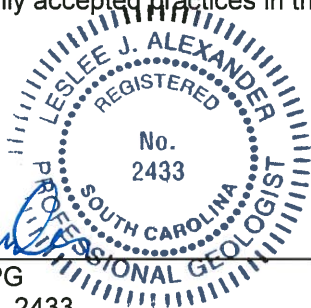
UNITED TECHNOLOGIES CORPORATION (UTC) DELAVAN SPRAY TECHNOLOGIES SITE BAMBERG, SOUTH CAROLINA

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.

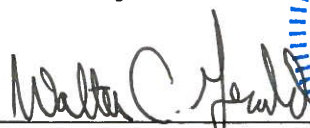
Prepared by:


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



January 19, 2017
Date

Reviewed by:


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



January 19, 2017
Date

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 OVERVIEW OF THE SITE	2
2.1 Background	2
2.2 Geology	3
2.3 Hydrogeology	3
3.0 GROUNDWATER MONITORING PROCEDURES	4
4.0 RESULTS	5
4.1 Groundwater Flow	5
4.2 Groundwater Quality	5
4.3 Investigation Derived Waste	10
4.4 Quality Assurance / Quality Control	10
5.0 CONCLUSIONS AND RECOMMENDATIONS	12
6.0 REFERENCES	14

LIST OF APPENDICES

<u>Appendix</u>	<u>Title</u>
A	Field Documentation ➤ Daily Tailgate Safety Meeting Logs ➤ Water Level Data Summary ➤ Equipment Calibration Logs ➤ Chain of Custody Forms ➤ Field Data Information Logs for Groundwater Sampling ➤ IDW Management Form ➤ Log Books
B	Analytical Data ➤ Laboratory Reports – Accutest Southeast ➤ Data Assessment Reports
C	Historic VOC Data
D	Trend Plots

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>
1	Site Location Map
2	Site Layout Map
3	Shallow Potentiometric Map – October 2016
4	Deep Potentiometric Map – October 2016
5	PCE Detections in Shallow Groundwater – October 2016
6	TCE Detections in Shallow Groundwater – October 2016
7	cis-1,2-DCE Detections in Shallow Groundwater – October 2016
8	1,1-DCE Detections in Shallow Groundwater – October 2016
9	1,1,1-TCA Detections in Shallow Groundwater – October 2016
10	PCE Detections in Deeper Groundwater – October 2016
11	TCE Detections in Deeper Groundwater – October 2016
12	cis-1,2-DCE Detections in Deeper Groundwater – October 2016
13	1,1-DCE Detections in Deeper Groundwater – October 2016
14	1,1,1-TCA Detections in Deeper Groundwater – October 2016

LIST OF TABLES

<u>Table</u>	<u>Title</u>
1	Groundwater Levels and Elevations
2	Groundwater Quality Indicator Parameters
3	Analytical Results for Groundwater Samples
4	Analytical Results for Investigation-Derived Waste Sample
5	QA/QC Sample Results
6	Definitions of Data Qualifiers
7	2017 Semi-Annual Sampling Plan

1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) has prepared this *Fall 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 fall 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 underground storage tank (UST), and soil VOC impacts are present at both of the former degreaser areas, former northern secondary containment area, and northeastern wooded area. No soil VOC impacts were identified in the northwestern wooded area, and no VOC groundwater impacts were identified at the former northern secondary containment area (H&H, 2012 and 2013).

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

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

Following the Post RI Report, SCDHEC requested a “work plan for delineation of the shallow and deep groundwater plumes.” The *Groundwater Delineation Work Plan*, which includes groundwater screening with temporary wells and permanent monitoring well installation, was submitted to SCDHEC on September 13, 2016. The work plan was approved by SCDHEC in correspondence dated October 31, 2016 and is expected to be implemented during the first quarter of 2017.

2.2 Geology

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

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

2.3 Hydrogeology

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

3.0 GROUNDWATER MONITORING PROCEDURES

Fall 2016 semi-annual sampling activities were completed by AECOM personnel between October 24, 2016 and October 26, 2016. Monitoring activities were conducted in accordance with the procedures described in the *RI Work Plan* (H&H, 2013) and the sampling plan presented in the *Post RI Report* (AECOM, 2016).

Sampling activities included:

- Groundwater level measurements were collected from all 35 existing monitoring wells;
- Groundwater samples were collected from 35 existing monitoring wells (Figure 2) using low-flow sampling techniques. Groundwater indicator parameters were collected from each well and all 35 samples were submitted for analysis of VOCs; and
- Collection of a composite sample from two drums of aqueous investigation-derived waste (IDW) for analysis of VOCs, semi-volatile organic compounds (SVOCs) and priority pollutant metals for IDW characterization purposes.

The depth to water in the monitoring wells was measured using an electronic water level meter on October 24, 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 (ORP), turbidity, and temperature were monitored during the groundwater purging process and recorded on the Field Data Logs for Groundwater Sampling, which are included in Appendix A. Samples were collected once the parameters had stabilized in accordance with the low-flow sampling procedure in the work plan.

Upon collection, all groundwater samples were labeled, preserved on ice and kept under chain-of-custody protocol until received at the subcontract analytical laboratory. Chain-of-custody forms are included in Appendix A.

All groundwater samples were analyzed for VOCs by USEPA Method 8260B. The aqueous IDW sample was analyzed for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270D, and priority pollutant metals by USEPA Methods 6010C and 7470B. Water samples were analyzed by Accutest Laboratories, located in Orlando, Florida, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and state of South Carolina certified laboratory. Laboratory analytical data packages are provided in Appendix B.

4.0 RESULTS

4.1 Groundwater Flow

Water level measurements were collected on October 24, 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 October 2016 water levels within the shallow aquifer zone occur between 132.59 and 141.55 feet in elevation. Shallow water levels were within one foot of those collected during the spring 2016 groundwater monitoring event (April 2016) and approximately 0.1 feet to 2.6 feet lower than those measured during the fall 2015 groundwater monitoring event (October 2015). Shallow flow patterns resulting from the fall 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, MW-5/MW-6, MW-10, and MW-17. Groundwater levels appear depressed at MW-3, MW-8 and MW-18. This phenomenon was previously recognized in the *RI Work Plan* (H&H, 2013) and characterized as a “groundwater trough”, a feature that has been observed to extend to MW-9 during previous field investigation efforts. The variances in groundwater elevation and flow directions in this portion of the Site could be the result of preferential flow pathways resulting from higher permeability zones due to local facies changes or induced drainage from the sanitary sewer line or incised drainage ditch, which forms the northern boundary of the Facility. However, the primary horizontal groundwater flow direction is inferred to be toward the west, toward Halfmoon Branch, which is consistent with findings from prior investigations conducted at the Site.

Based on the October 2016 water level elevations within the deeper limestone aquifer zone, the potentiometric surface occurs between 133.34 and 134.77 feet in elevation (Figure 4). Groundwater elevations in October 2016 were the same to 0.6 feet higher than those measured during the spring 2016 groundwater monitoring event (April 2016) and the same to 0.1 foot lower than those collected during the fall 2015 groundwater monitoring event (October 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 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 20 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, PCE, toluene, and TCE) were detected (Table 3). Five of these compounds, (PCE, TCE, cis-1,2-DCE, 1,1-DCE, and 1,1,1-TCA) 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 concentration was detected near the northern-most Former PCE Degreaser (located in the Wickman Room) in MW-19 (34,600 micrograms per liter [µg/L]). Elevated but lower concentrations of PCE were detected in shallow aquifer groundwater in MW-24 (1,340 µg/L) along the western property boundary, in MW-9 (685 µg/L) in the eastern-most Northern Wooded Area of Interest, and in MW-20 (503 µg/L) adjacent to the southern-most Former PCE Degreaser (located in the Pack and Stamp Room).

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 six shallow monitoring wells and exceeded the MCL in two groundwater samples, MW-9 (106 µg/L) and MW-10 (13.5 µg/L). Note – the detection limit for TCE in the sample from MW-19 was elevated due to the magnitude of the PCE concentration in the sample. The TCE concentration at this location may also be elevated.

Cis-1,2-DCE was detected less frequently (six detections) and exceeded the MCL in the sample from MW-10 (146 µg/L) (Figure 7). The detections of cis-1,2-DCE in the shallow aquifer generally correspond to “hot-spots” of PCE and TCE.

1,1-DCE was detected in one shallow aquifer zone groundwater sample (Figure 8). The detected concentration of 1,1-DCE exceeded the MCL in the sample from MW-10 (9 µg/L), located in the eastern-most Northern Wooded Area of Interest. Note – the detection limit for 1,1-DCE in the sample from MW-19 was elevated due to the magnitude of the PCE concentration in the sample. The 1,1-DCE concentration at this location may also be elevated.

1,1,1-TCA was detected in the sample from MW-19 at a concentration (245 µg/L) that exceeded the MCL (Figure 9). The detection of 1,1,1-TCA is located concurrent with the highest detection of PCE during this sampling event.

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

Indicator Parameters

Groundwater quality indicator parameters were monitored for all shallow monitoring wells during the groundwater purging process and recorded on the Field Data Logs for Groundwater Sampling, which are included in Appendix A. Select indicator parameters are summarized in the inset table below, along with their observed ranges and their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, dissolved oxygen is in the favorable range for the reductive pathway in approximately a third of the shallow sample locations (i.e., MW-4, MW-6, MW-11, MW-15, MW-16, and MW-21). However, low pH and elevated ORP levels may inhibit natural degradation of chlorinated VOCs.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	1.50	5.01	3.86	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.23	7.60	2.80	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
ORP (mV)	104.5	489.9	305.2	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely

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

Data Trends

As shown in the table of historic VOC results (Appendix C) and the trend plots (Appendix D), the VOC concentrations in many wells have decreased with time from their highest values. For instance, the PCE concentration in MW-9 has decreased from a maximum of 7,500 µg/L detected in December 2003 and has been trending between approximately 500 µg/L and 1,800 µg/L since May 2012, with a current concentration of 685 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 41.4 µg/L. The PCE concentration in MW-1, located adjacent to the Former PCE Secondary Containment Area, has decreased from a historic high of 15,000 µg/L in June 2003 to a low of 383 µg/L in October 2015, with a current concentration of 410 µg/L. In MW-3, located immediately downgradient of the Former PCE UST and the Former PCE Secondary Containment Area, the PCE concentration has decreased from a high of 391 µg/L in October 2010 to an estimated value of 0.92 J µg/L in April 2015, with a current value of 91.6 µg/L.

The VOC concentrations in groundwater from MW-21, located near the Former PCE UST, have been relatively stable with time since the well was installed (i.e., detected PCE concentrations of 13,200 µg/L to

16,300 µg/L between March 2014 and April 2016), but decreased to 181 µg/L during the October 2016 event. It is too soon to tell whether this is the beginning of a trend for this well or simply an anomaly.

Concentrations of PCE and 1,1,1-TCA in MW-19, located near the northern-most Former PCE Degreaser, have been increasing since October 2014. Other wells, such as MW-20 located near the southern-most Former PCE Degreaser, exhibit detected PCE concentration trends that fluctuate with groundwater elevation changes (i.e. the concentrations decrease when water levels are low and increase when water levels are higher). This may indicate residual VOCs in the vadose zone near former source areas.

Deeper Aquifer Zone

VOCs

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

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 10). 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 (331 µg/L at MW-3D). PCE concentrations exceeded the MCL in off-Site side-gradient well MW-14D (84.3 µg/L) and in off-Site down-gradient wells MW-22D (122 µg/L), MW-25D (125 µg/L), and MW-26D (75 µg/L).

TCE concentrations were detected in five samples from the deeper aquifer zone in fall 2016, but only one of the detected concentrations, 7.6 µg/L in the sample from MW-3D, exceeded the MCL (Figure 11). TCE was also detected in off-Site side-gradient well MW-14D and in off-Site down-gradient wells MW-22D, MW-25D, and MW-26D but at low, estimated concentrations below the MCL.

Cis-1,2-DCE was detected in five samples from deeper aquifer zone groundwater during the fall 2016 monitoring event (MW-3D, MW-14D, MW-22D, MW-25D, and MW-26D), but none of the detected concentrations exceeded the MCL for cis-1,2-DCE (Figure 12).

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). The detected concentration in MW-3D (8.8 µg/L) exceeded the MCL for 1,1-DCE and the detected concentration in MW-13D was equal to the MCL (7 µg/L) (Figure 13).

1,1,1-TCA was detected in two deeper limestone aquifer monitoring wells in October 2016, but at low, estimated concentrations below the MCL (Figure 14). Methylene chloride was detected in one sample (MW-25D) at a concentration that exceeded the MCL (6.1 µg/L).

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

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

Indicator Parameters

Groundwater quality indicator parameters were monitored for all shallow monitoring wells during the groundwater purging process and recorded on the Field Data Logs for Groundwater Sampling, which are included in Appendix A. Select indicator parameters are summarized in the inset table below, along with their observed ranges and their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, measured pH values were favorable in all deeper aquifer monitoring wells except MW-12D. However, limited areas with favorable dissolved oxygen concentrations (e.g., MW-9D and MW-21D) and favorable ORP levels (e.g., MW-9D, MW-12D, and MW-21D) may inhibit degradation.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	6.56	9.01	7.37	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.16	4.65	2.53	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
ORP (mV)	-118.3	215.8	67.9	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely

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

ND - not detected

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 331 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, with the exception of an increase to 140 µg/L in April 2016; the detected PCE

concentration in MW-12D in October 2016 was 69.2 µg/L. PCE concentrations in MW-13D have decreased from a maximum of 292 µg/L in April 2010 and have been relatively steady at less than 100 µg/L since May 2011, until a recent increase to 151 µg/L in April 2016 and to 298 µg/L in October 2016. The recent increases in PCE in the deeper, down-gradient monitoring wells may be a lagging response to increases observed in shallow monitoring wells near source areas after the elevated groundwater levels last year.

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

4.3 Investigation Derived Waste

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

4.4 Quality Assurance / Quality Control

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

Results of volatile organic compounds in samples MW-10D and MW-12D were qualified “//h” due to re-analysis of the samples outside of the method holding time (re-analyzed at 16 days; holding time is 14 days). These qualifiers indicate the results should be considered biased low. Results of chloroethane and methyl bromide in sample MW-3D were qualified “/M/M” due to high recovery in the associated matrix spike sample, above the established criteria of 40-160% (195 and 174%, respectively). These qualifiers indicate the results should be considered biased high.

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

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

Field Duplicates

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

Trip Blanks

Trip blank samples, designated with a “-C” suffix, were submitted daily for coolers containing an aqueous sample for the analysis of VOCs. The results of the trip blank samples are provided in Table 5. 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. As mentioned above, results of chloroethane and methyl bromide in sample MW-3D were qualified “/M/M” due to high recovery in the associated matrix spike sample.

5.0 CONCLUSIONS AND RECOMMENDATIONS

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

- Shallow water levels were within one foot of those collected during the spring 2016 groundwater monitoring event (April 2016) and approximately 0.1 feet to 2.6 feet lower than those measured during the fall 2015 groundwater monitoring event (October 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 spring 2016 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 10, PCE occurs in groundwater at similar concentrations above the MCL to the south / southwest of the site at monitoring well locations MW-22D and MW-25D, and at slightly lower concentrations at 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 the following monitoring wells were higher than those detected in the spring 2016 monitoring event:
 - o MW-19 and MW-20 (in the vicinity of the Former PCE Degreasers);
 - o MW-3D (down-gradient of the Former PCE UST);
 - o MW-13D (located down-gradient of the Site to the west);
 - o MW-21D (located immediately downgradient from the Former PCE UST);
 - o MW-24 (on the western Site boundary); and
 - o MW-22D, MW-25D, and MW-26D (located downgradient and off-Site to the south/southwest).

For example, the PCE concentration detected in MW-19 increased from 16,600 µg/L to 34,600 µg/L, which is a new maximum value for this well. The PCE concentration detected in MW-3D increased from 285 µg/L to 331 µg/L. In down-gradient wells MW-13D and MW-24, the detected PCE concentrations increased from 151 µg/L to 298 µg/L and from 1,160 µg/L to 1,340 µg/L, respectively. The detected concentration in down-gradient wells MW-22D, MW-25D, and MW-26D increased from 65.7 µg/L to 122 µg/L, 74.8 µg/L to 125 µg/L, and 62.6 µg/L to 75 µg/L,

respectively. These increases may be lagging results of the higher than normal water levels in 2015 and early 2016 and increased leaching of residual contaminants from the vadose zone.

- PCE concentrations decreased compared to the spring 2016 monitoring event in groundwater samples from monitoring wells MW-9 located in the Northern Wooded Areas of Interest (771 µg/L to 685 µg/L), MW-12D located down-gradient of the Site to the West (140 µg/L to 69.2 µg/L), and MW-21 located immediately down-gradient of the Former PCE UST (13,200 µg/L to 181 µg/L). The PCE concentrations also decreased in on-Site well MW-1 (468 µg/L to 410 µg/L).
- The detected concentrations of PCE degradations products (i.e., TCE and cis-1,2-DCE) were similar to those detected during the spring 2016 semi-annual groundwater monitoring event, with some exceptions. In MW-9 TCE remained essentially the same and cis-1,2-DCE decreased from 49.2 µg/L to 19.2 µg/L, and in MW-10 TCE decreased from 22.1 µg/L to 13.5 µg/L while cis-1,2-DCE increased from 90.6 µg/L to 146 µg/L. TCE decreased from 216 µg/L to 2.3 µg/L and cis-1,2-DCE decreased from 383 µg/L to 4.2 µg/L in MW-21. Cis-1,2-DCE decreased from 59.2 µg/L to 22.9 µg/L in MW-24. Minor decreases in TCE were also observed in MW-1, MW-8, and MW-24, and the cis-1,2-DCE in MW-1 decreased from 19.4 µg/L to 7 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.

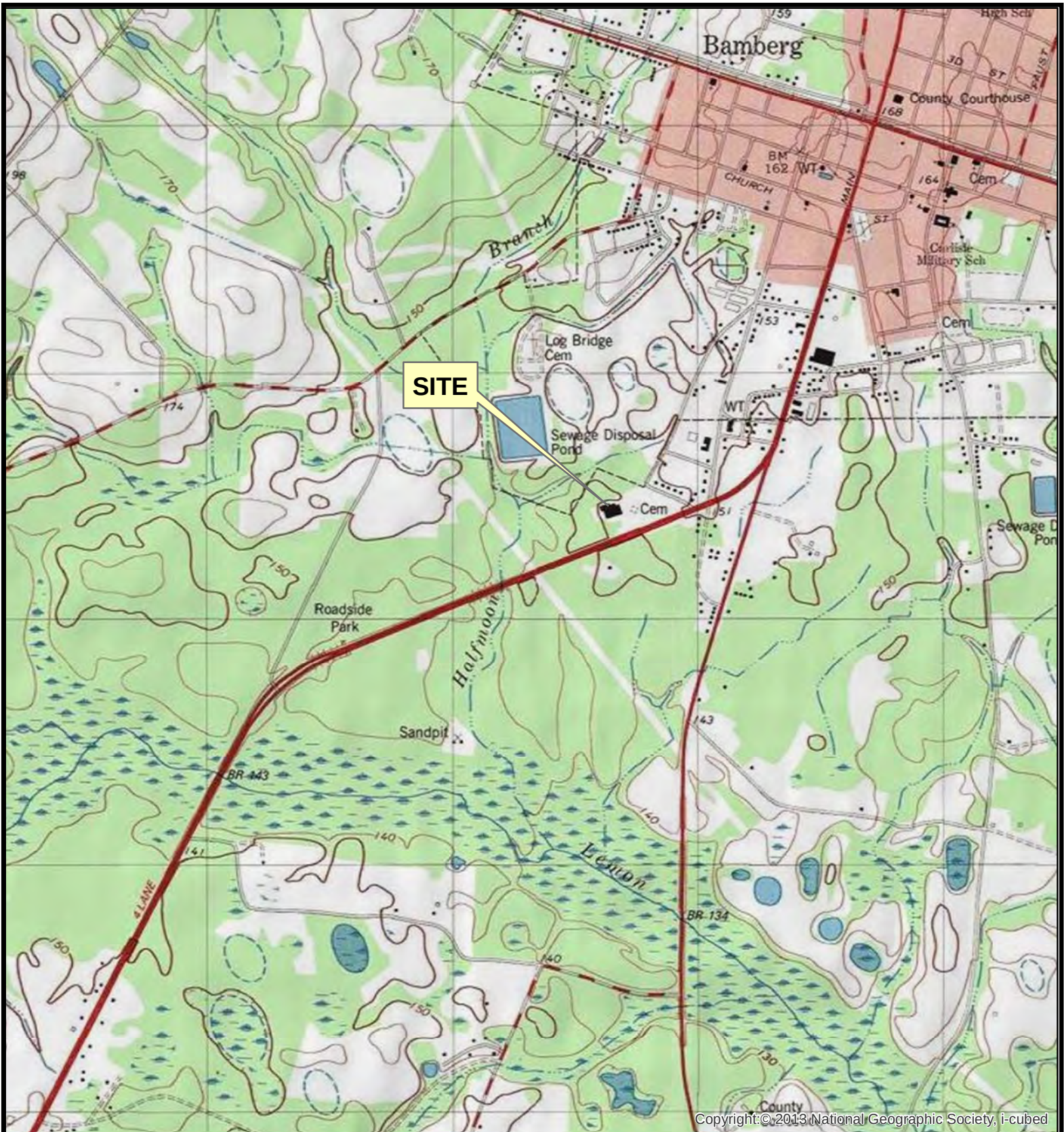
Data generated from recent semi-annual sampling events and the Post RI Assessment has shown that there are data gaps in the delineation of the shallow and deep groundwater plumes associated with the Site. The *Groundwater Delineation Work Plan* was submitted to SCDHEC on September 13, 2016 to address these data gaps. The work plan was approved by SCDHEC in correspondence dated October 31, 2016 and is expected to be implemented during the first quarter of 2017, pending access agreements with the off-Site property owners.

In accordance with the monitoring requirement of the VCC, the next semi-annual sampling event is scheduled to occur in April 2016. Select wells have been non-detect for Site COCs for the past two years or more (e.g. MW-3D1, MW-4, MW-6, MW-9D, MW-10D, MW-11, MW-15D, MW-15DI, MW-17, and MW-18). With the concurrence of SCDHEC, AECOM proposes to move these wells to an annual sampling frequency in accordance with the schedule in Table 7.

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.*
- AECOM, September 13, 2006. *Groundwater Delineation Work Plan, 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



Copyright © 2013 National Geographic Society, i-cubed



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

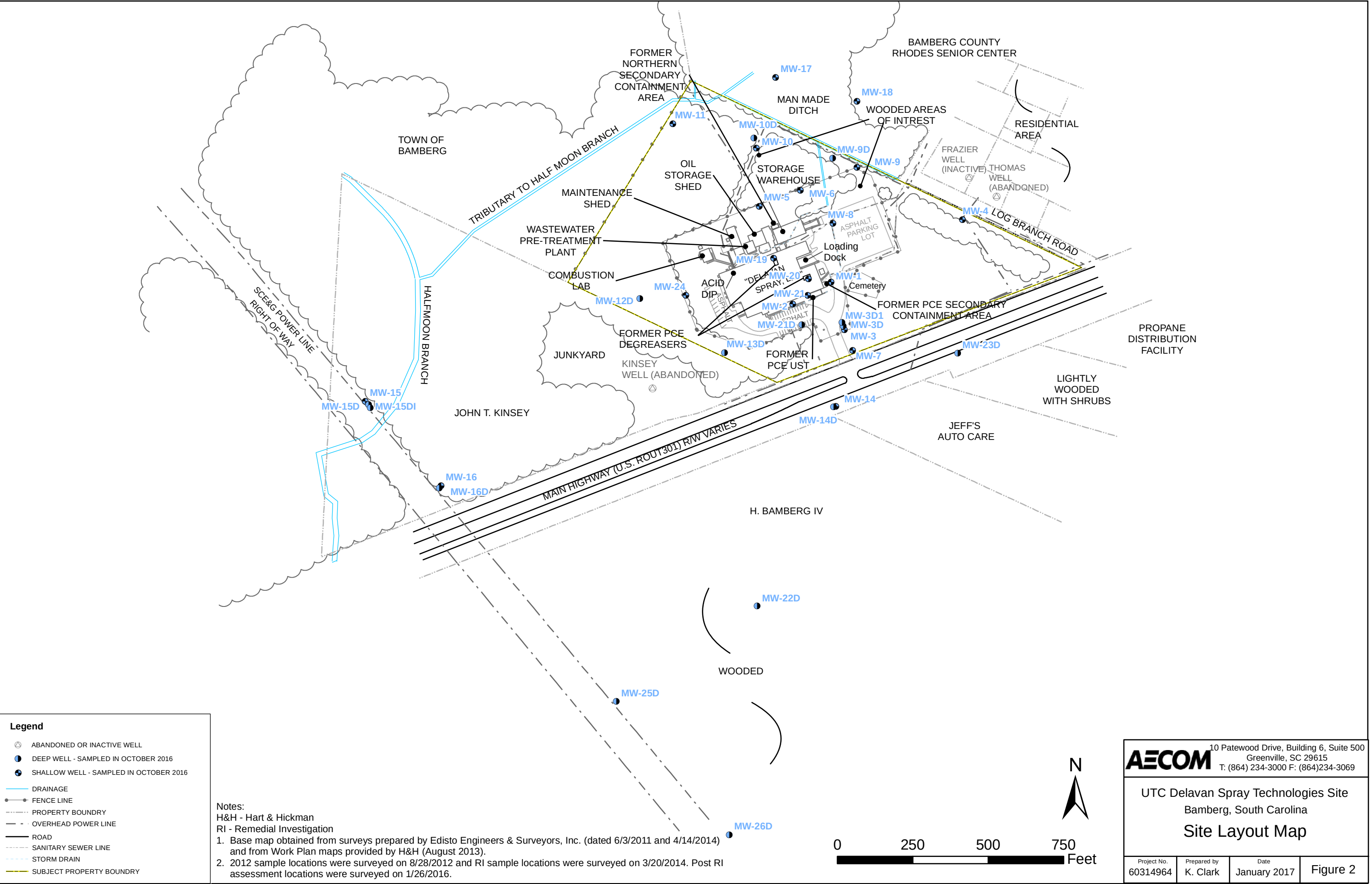
Site Location Map

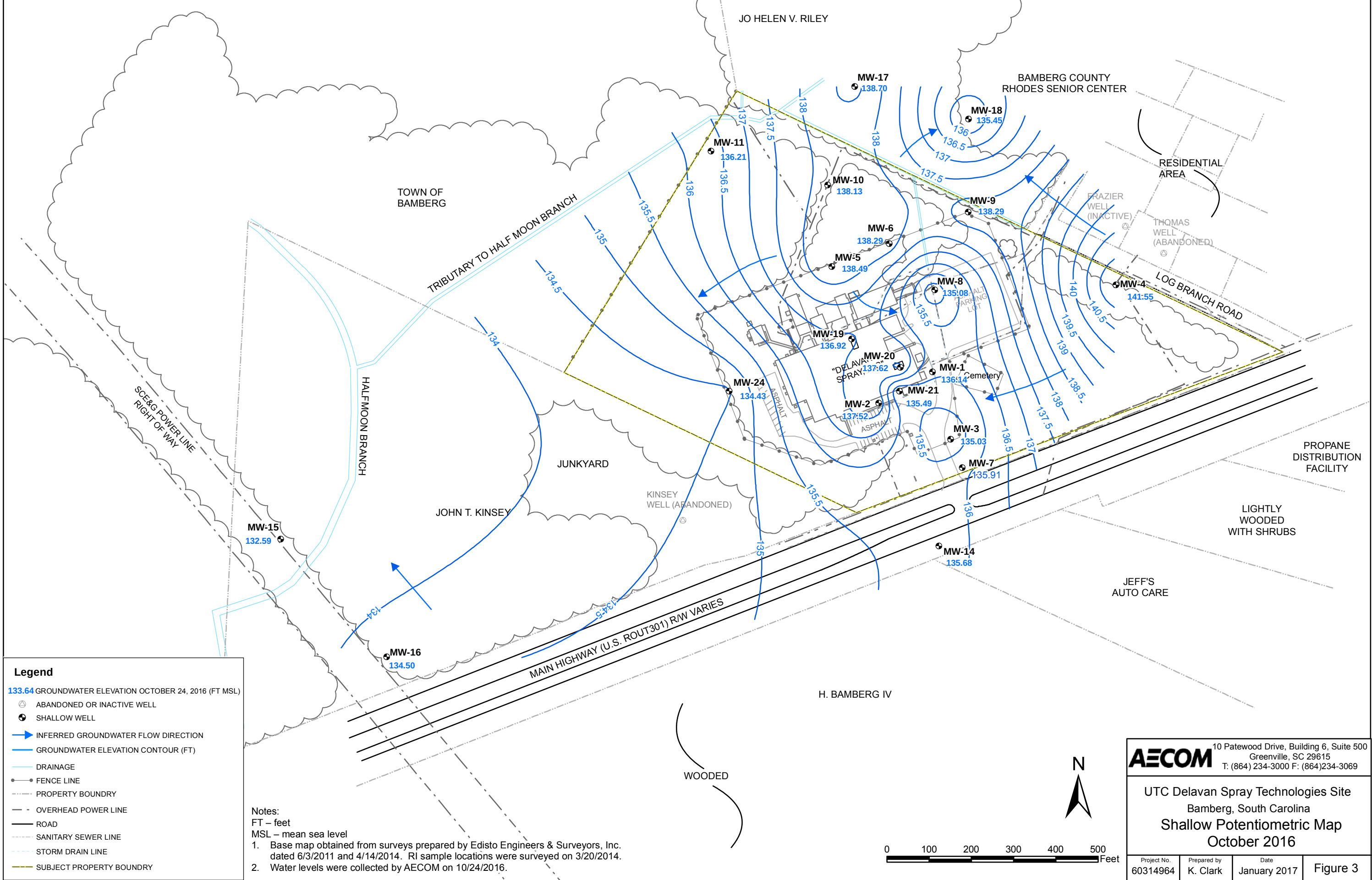
Project No.
60314964

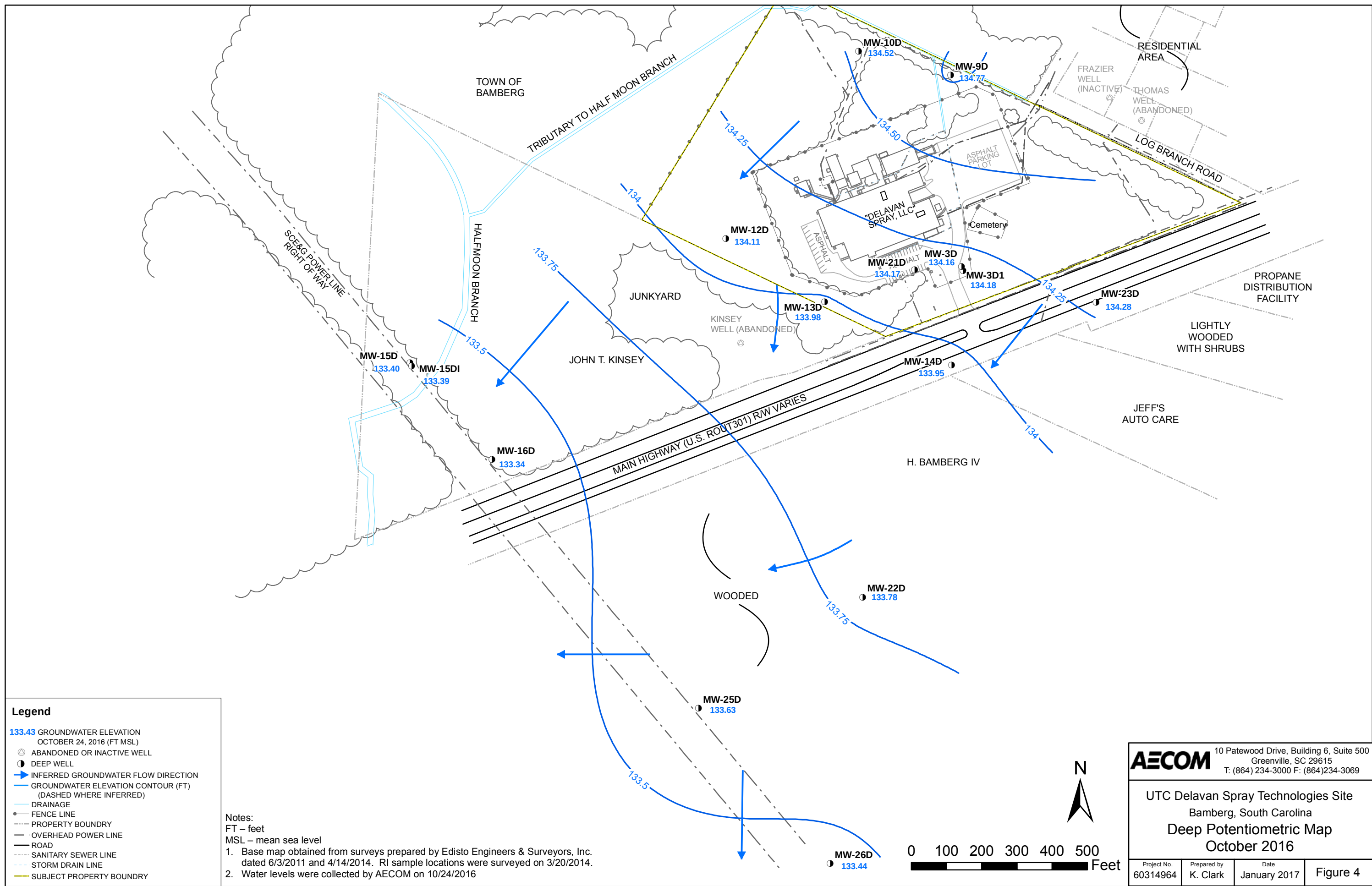
Prepared by
K. Clark

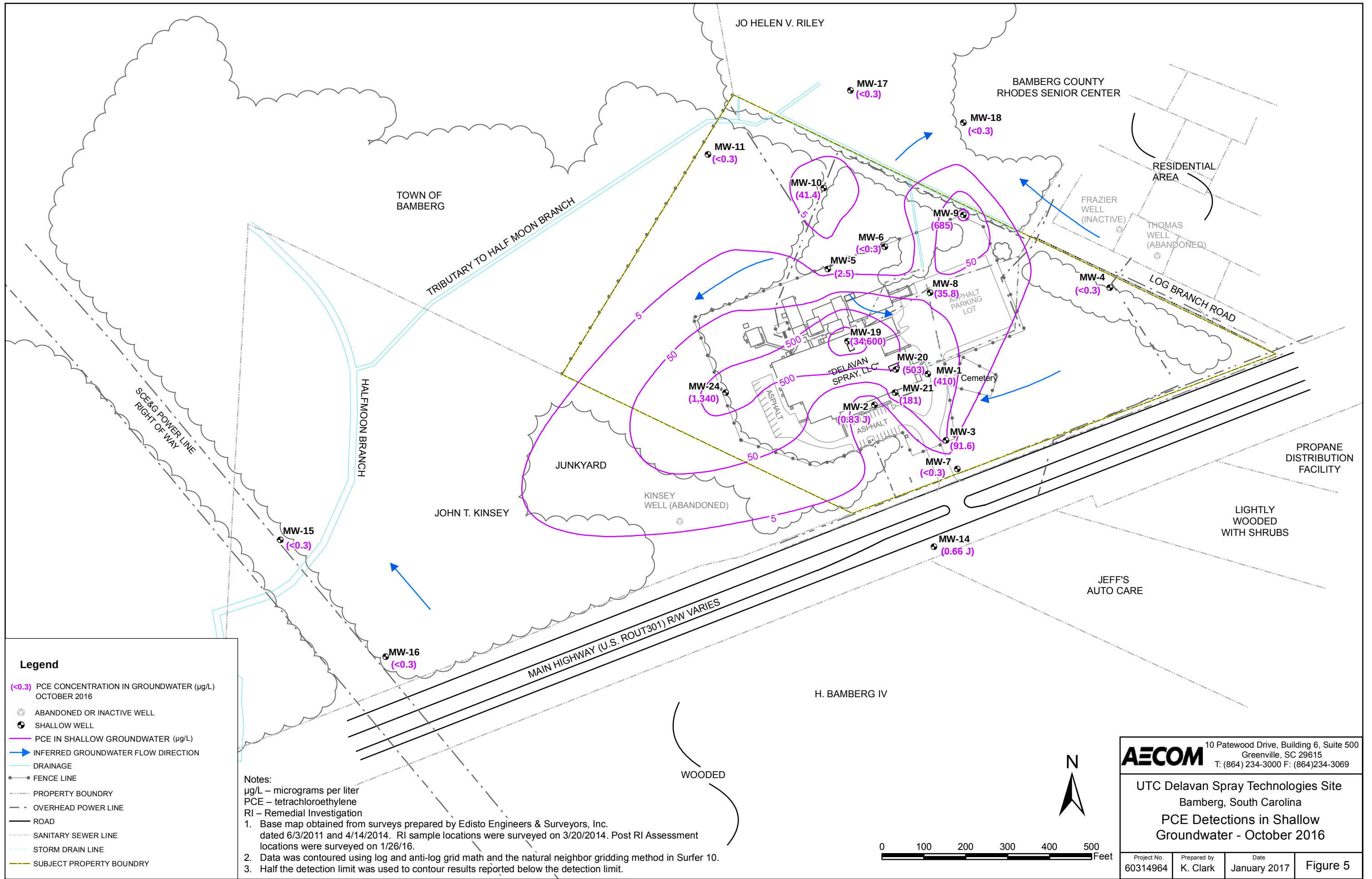
Date
January 2017

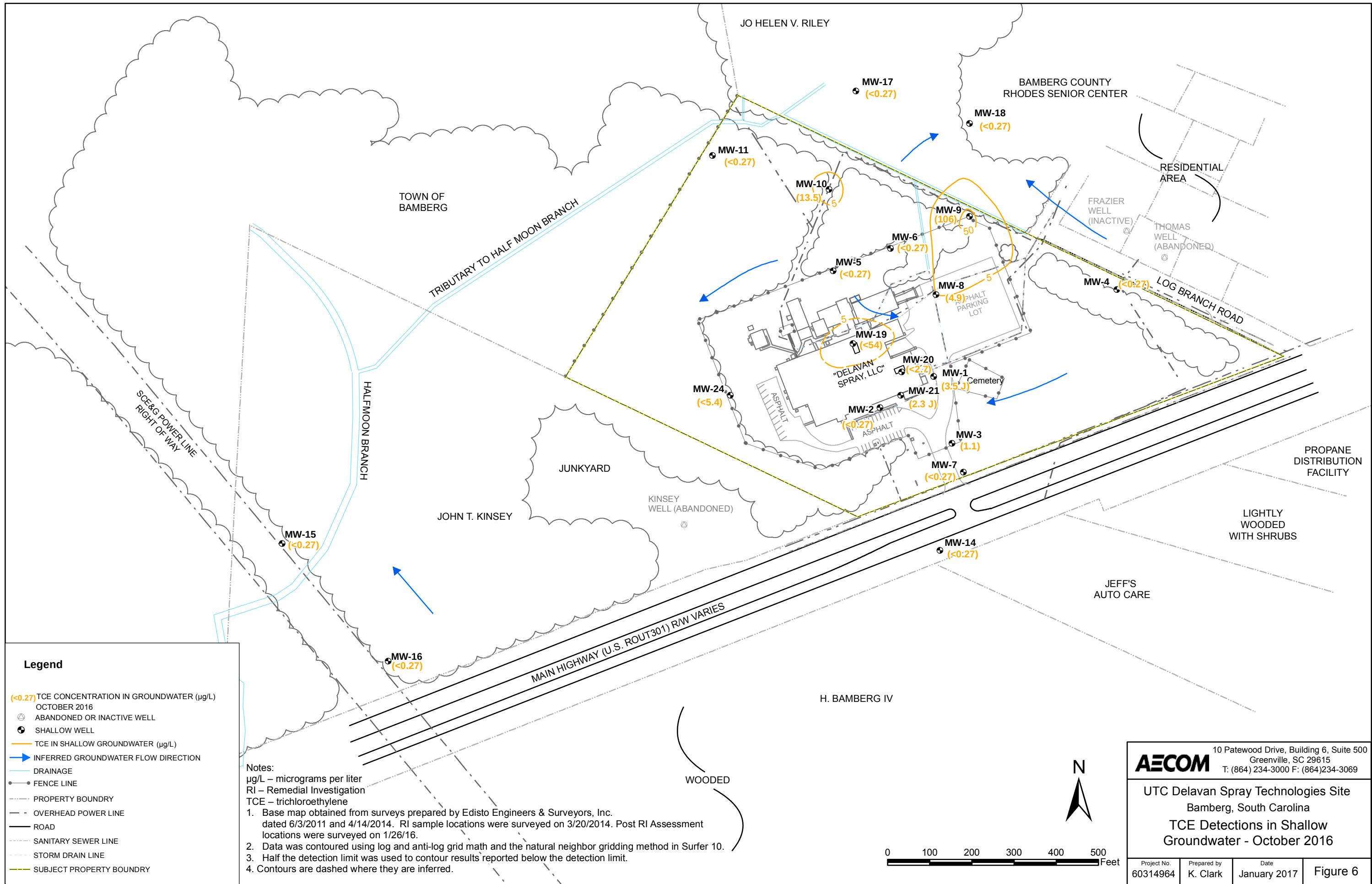
Figure 1

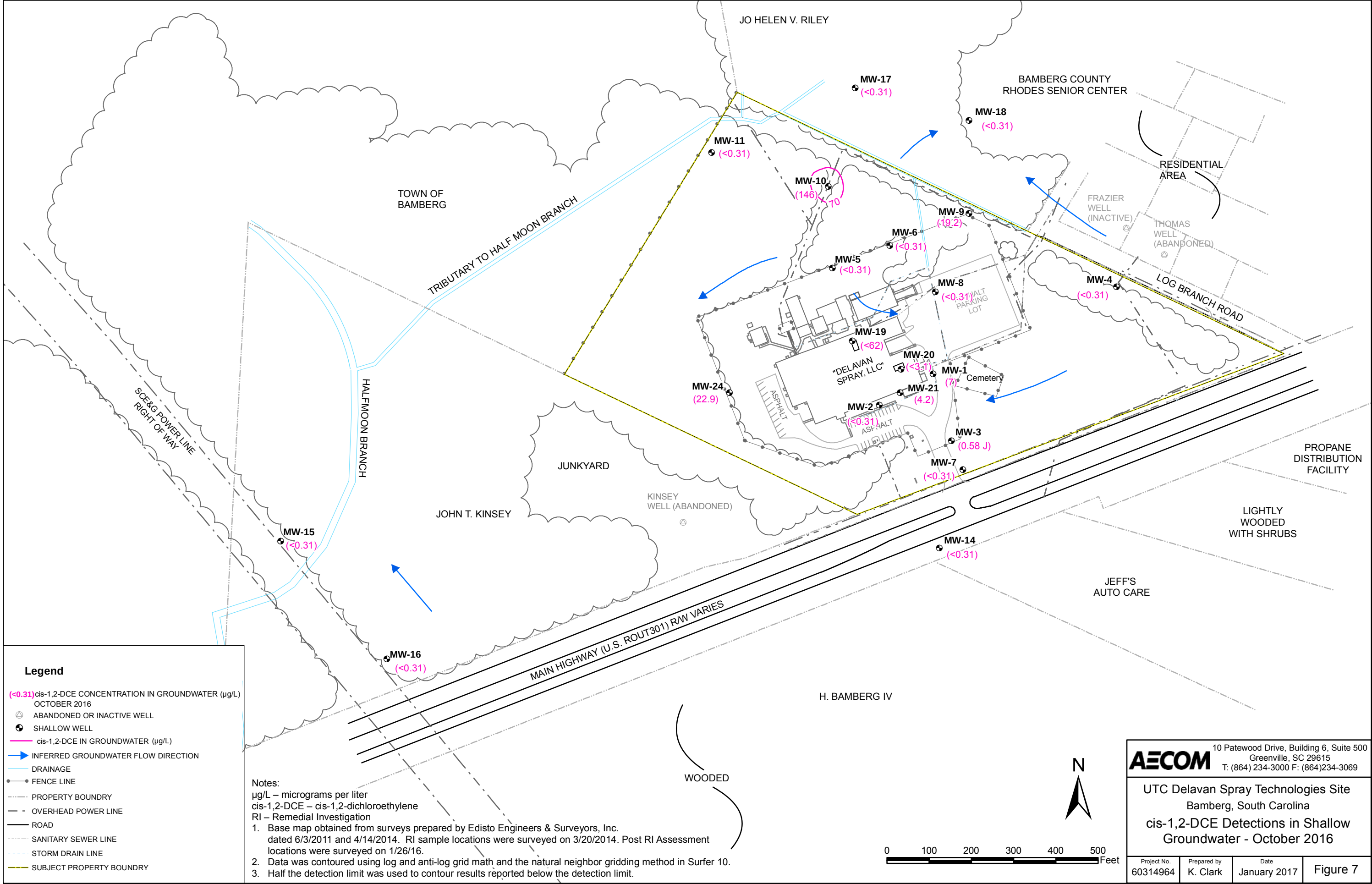


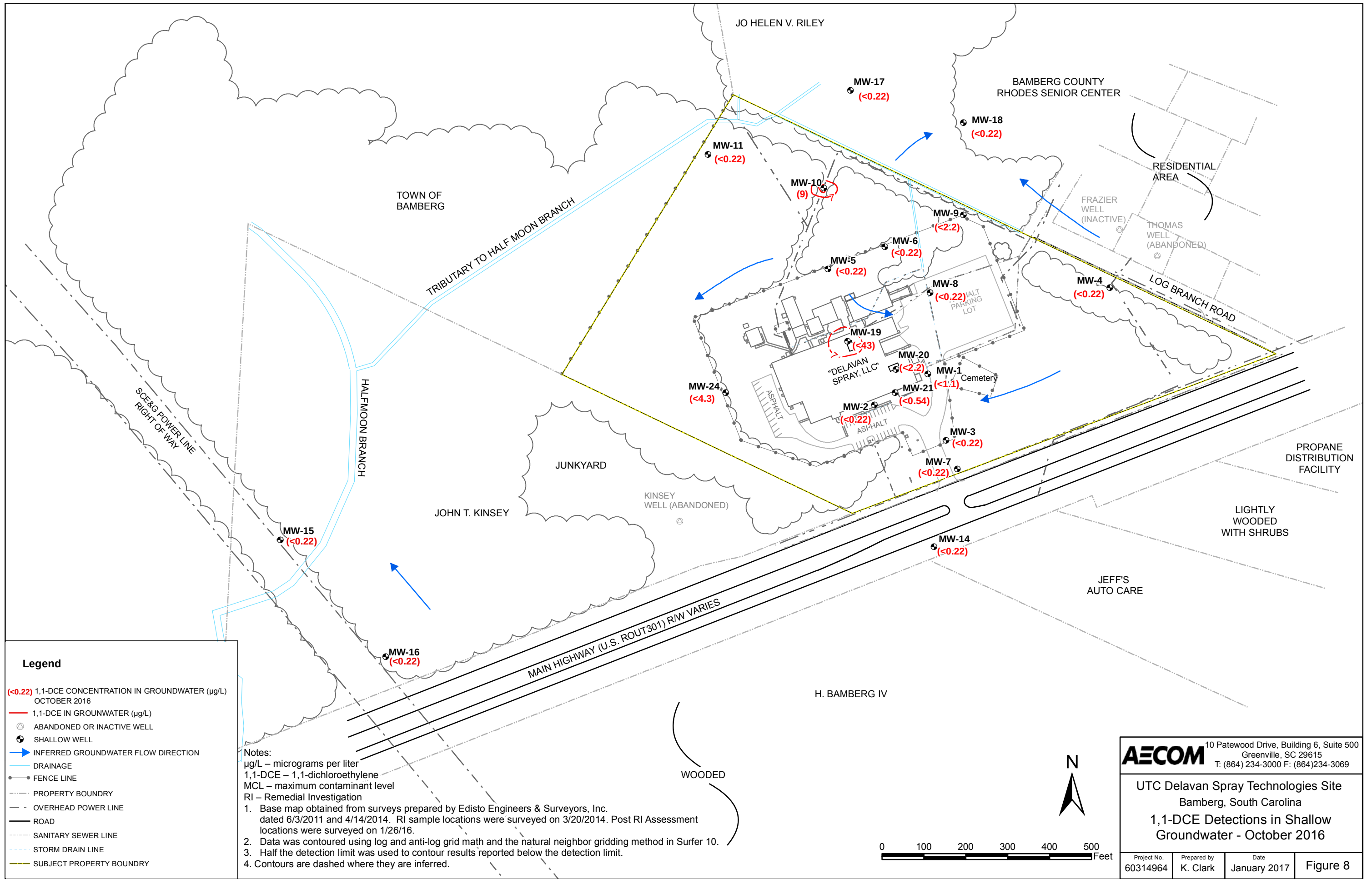


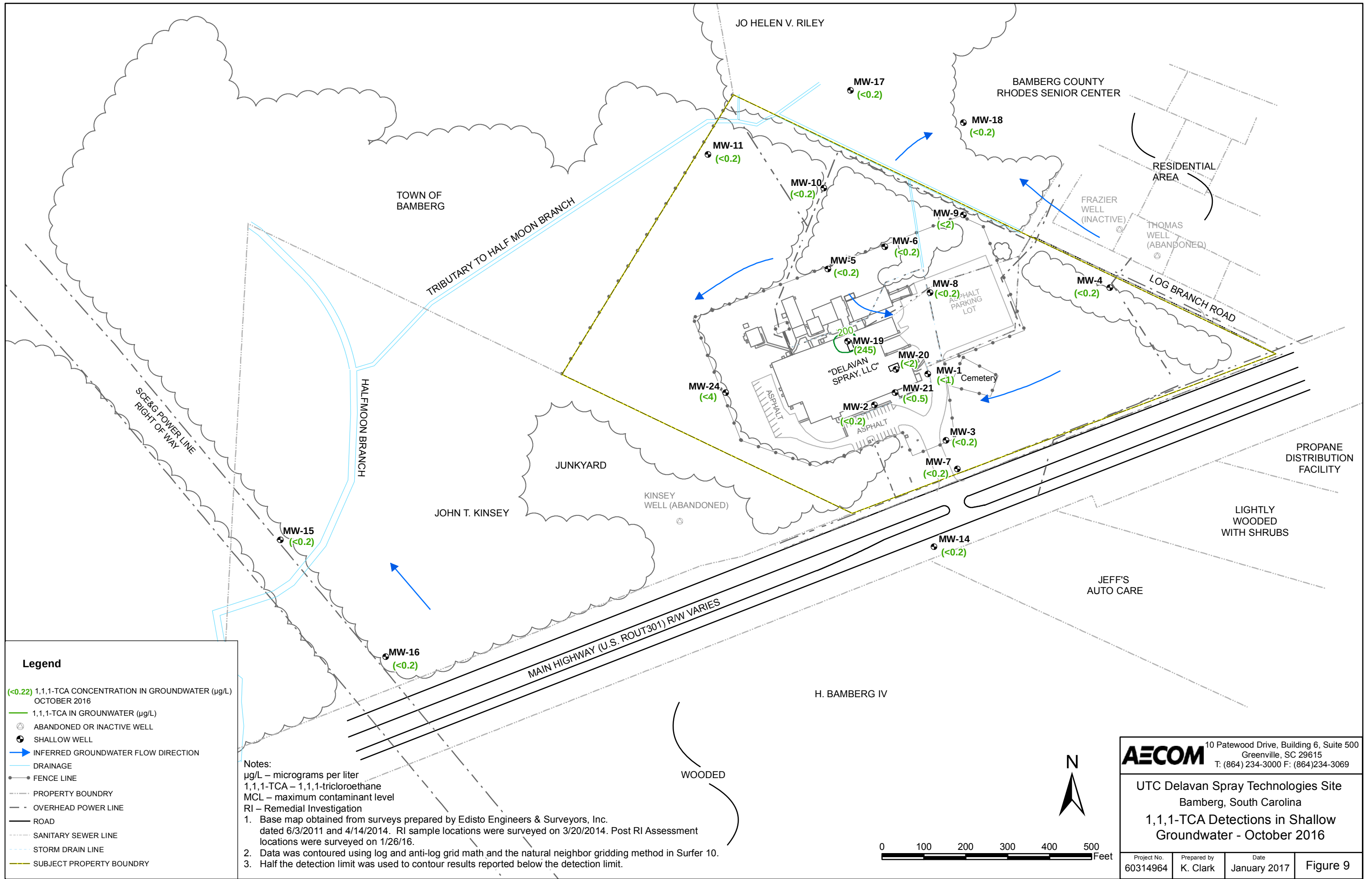


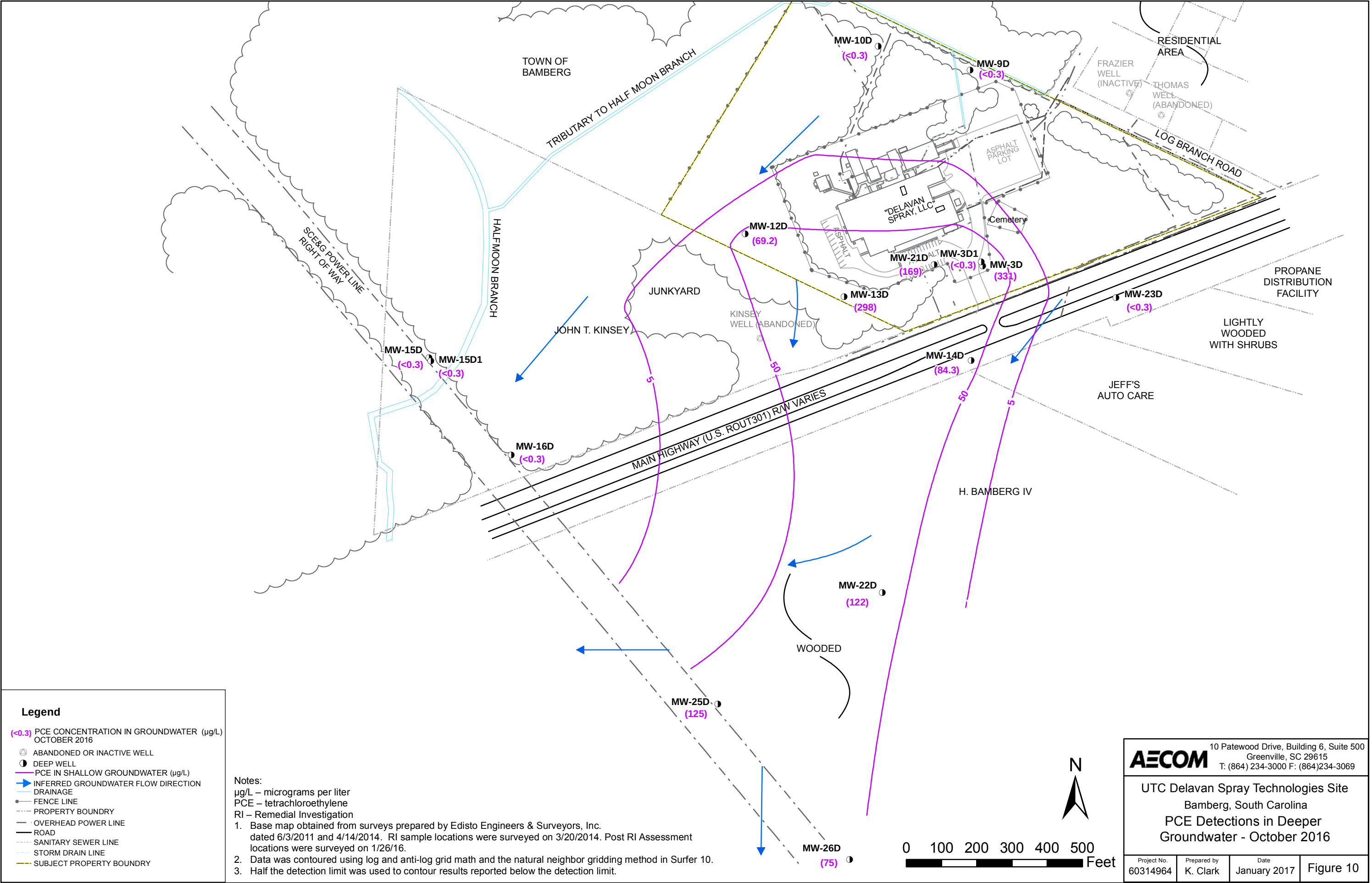


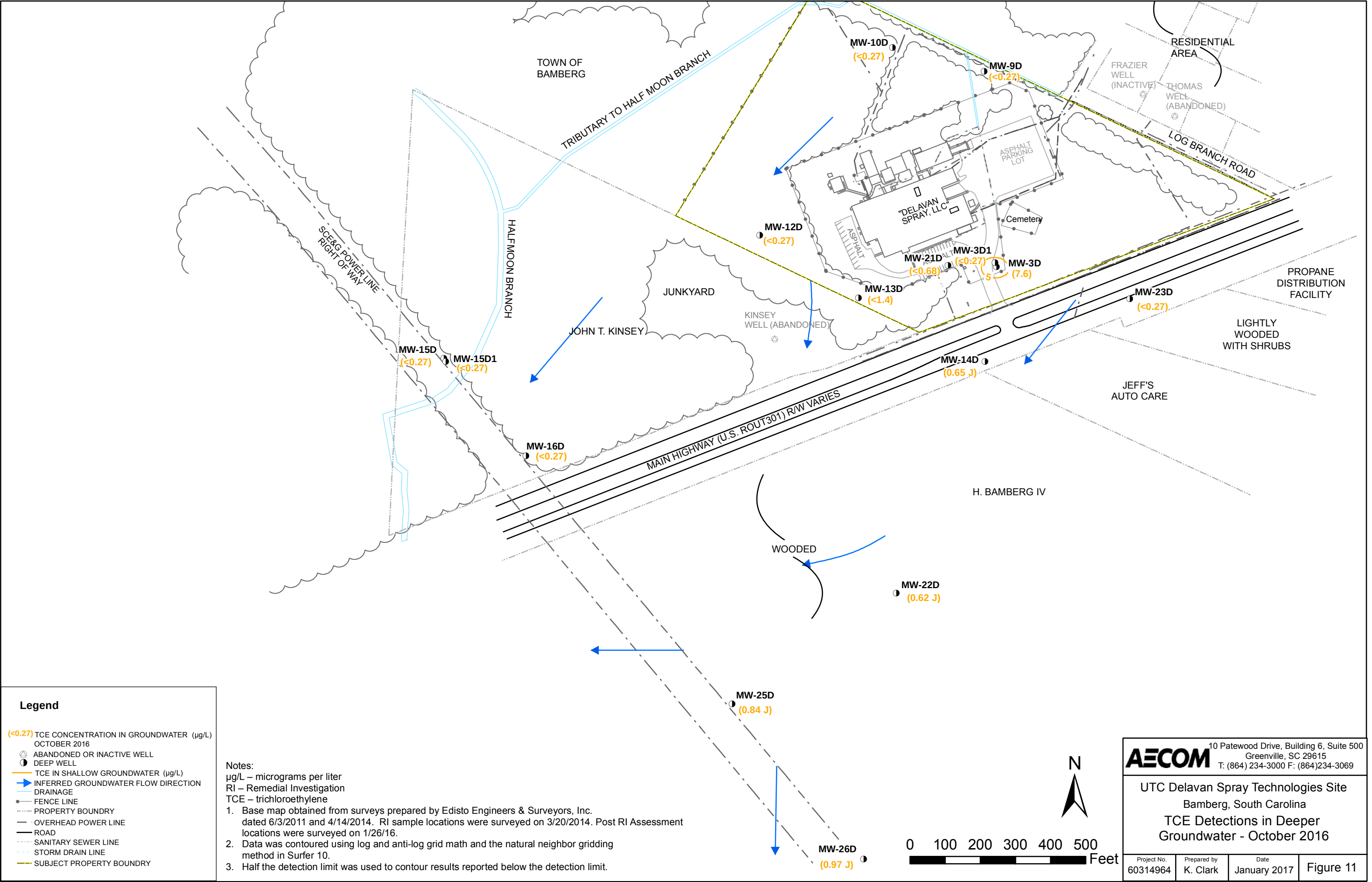


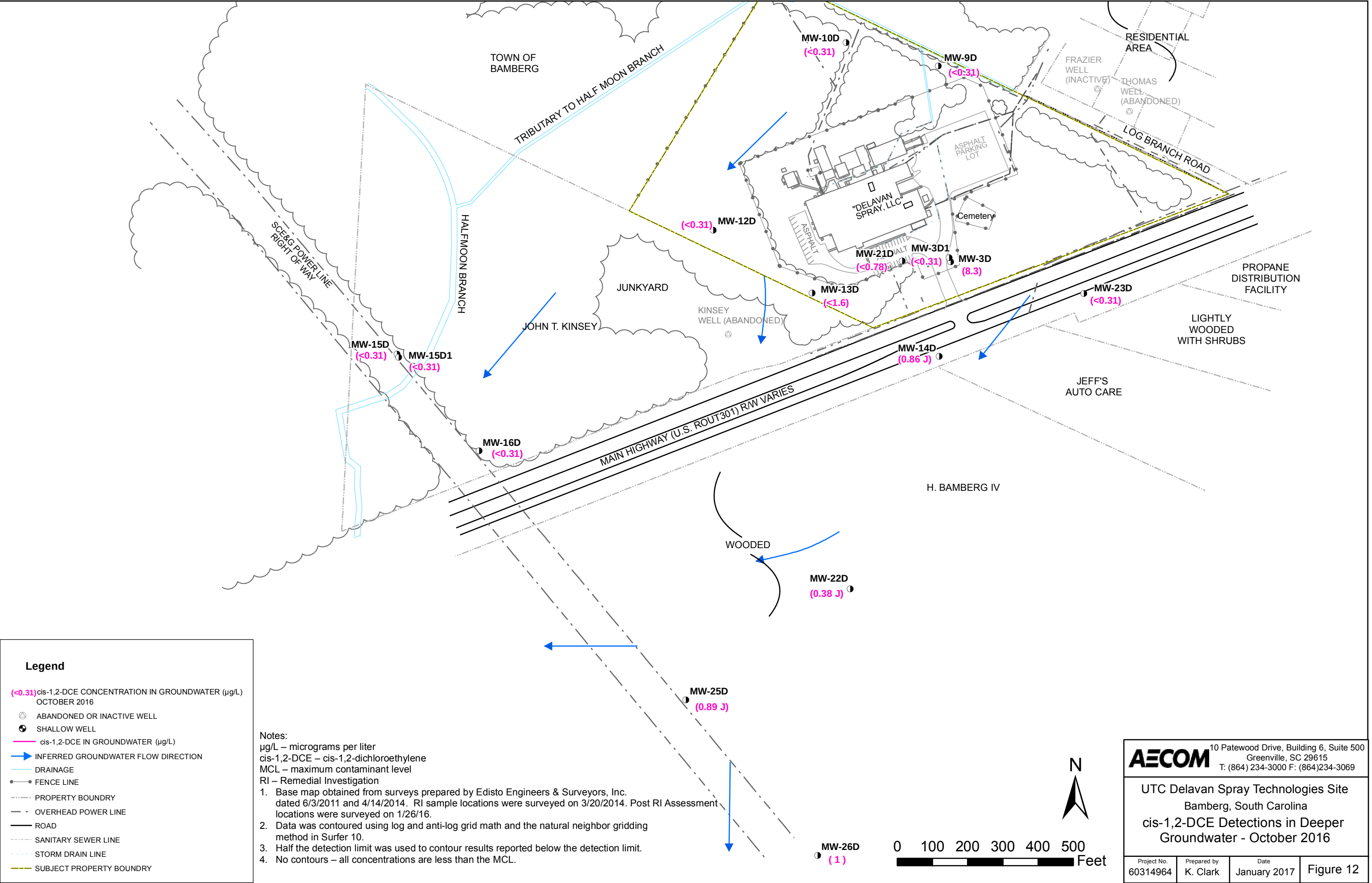


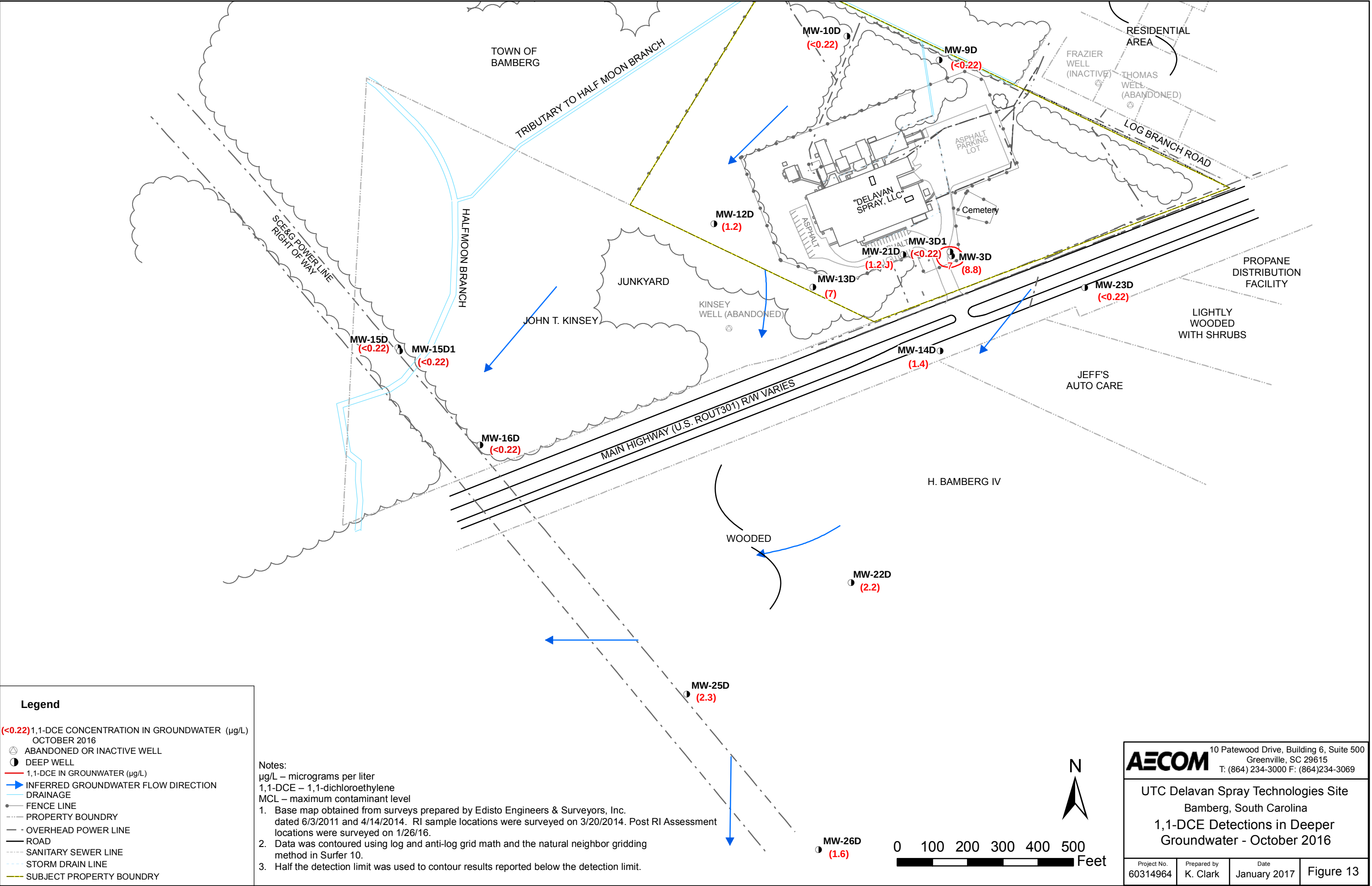


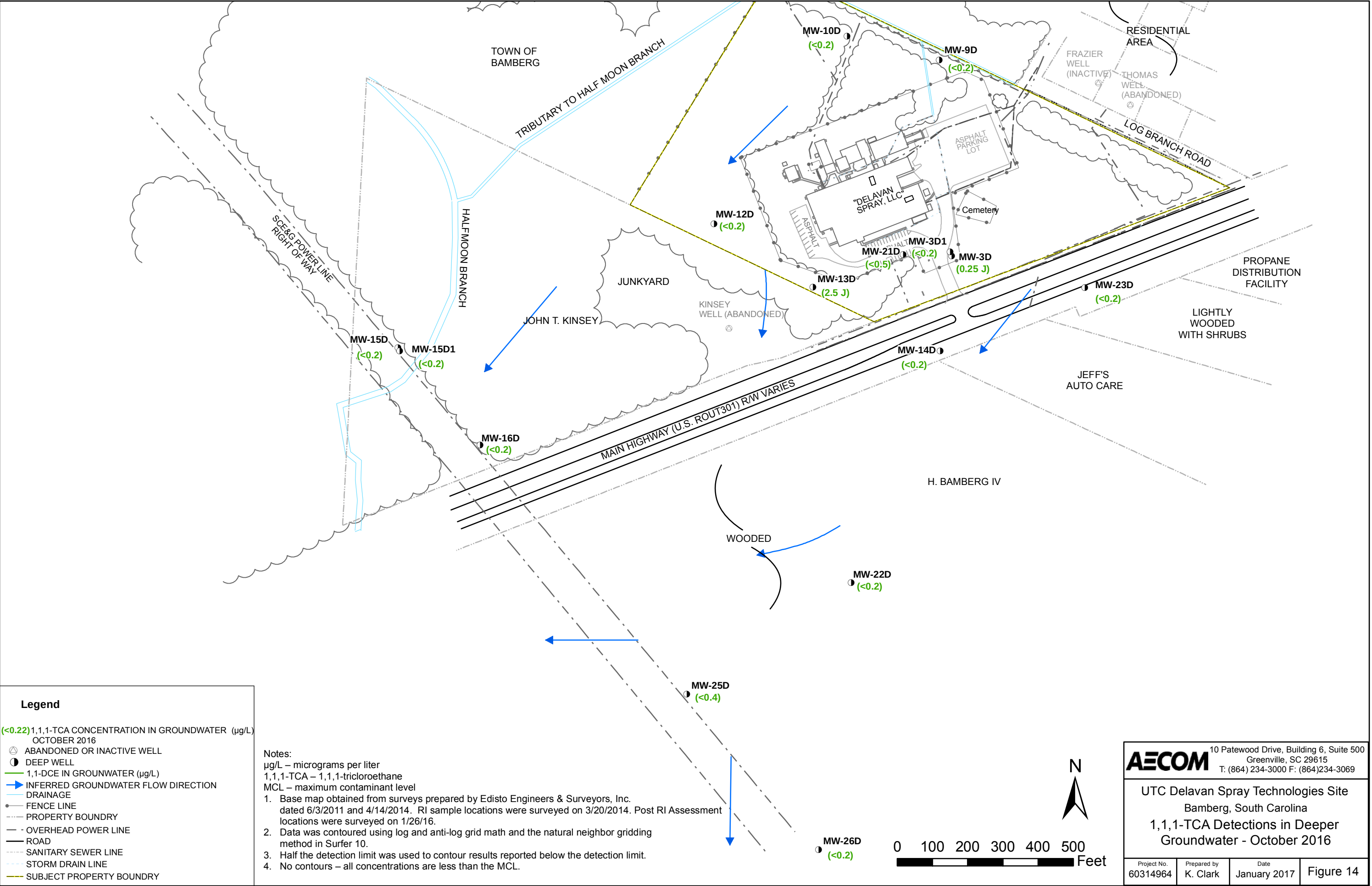












TABLES

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

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

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

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	4.18	0.030	24.63	5.19	3.21	326.1
MW-2	4.11	0.024	25.32	5.55	0.86	289.8
MW-3	3.80	0.023	24.34	1.25	5.37	327.5
MW-3D	6.73	0.233	21.36	1.44	3.14	229.6
MW-3D1	7.08	0.222	22.04	4.70	0.28	-32.1
MW-4	4.13	0.139	21.63	50.19	0.26	190.4
MW-5	3.61	0.020	21.78	1.29	7.26	322.6
MW-6	3.68	0.018	22.90	1.36	0.48	231.2
MW-7	4.16	0.013	25.41	0.91	7.60	360.1
MW-8	3.95	0.075	28.50	2.77	3.73	308.9
MW-9	4.05	0.027	20.45	4.28	2.31	380.1
MW-9D	7.55	0.187	19.22	0.00	0.16	-107.4
MW-10	3.93	0.024	21.10	3.72	0.85	198.7
MW-10D	7.63	0.196	19.72	3.07	3.96	107.1
MW-11	5.01	0.212	19.49	23.42	0.46	104.5
MW-12D	9.01	0.220	18.89	0.41	4.65	34.4
MW-13D	7.31	0.218	19.69	2.37	4.40	93.2
MW-14	3.75	0.023	22.83	7.61	5.79	304.9
MW-14D	6.56	0.237	20.87	5.41	0.50	215.8
MW-15	4.62	0.390	21.12	1.97	0.23	156.8
MW-15D	6.59	0.438	19.12	4.94	2.16	58.8
MW-15D1	7.23	0.205	19.14	1.98	0.16	-96.8
MW-16	3.85	0.026	19.50	6.81	0.35	220.2
MW-16D	6.99	0.282	18.33	2.60	4.18	167.8
MW-17	4.05	0.114	17.77	2.15	1.46	362.4
MW-18	4.06	0.040	20.60	0.00	3.10	394.4
MW-19	3.51	0.088	21.88	0.21	1.32	385.8
MW-20	4.07	0.037	21.32	2.99	4.86	392.4
MW-21	3.18	0.019	22.56	4.09	0.25	356.4
MW-21D	7.66	0.210	21.90	3.97	0.31	-118.3
MW-22D	7.93	0.229	18.32	2.76	3.05	50.5
MW-23D	7.41	0.276	20.83	0.00	1.89	137.3
MW-24	1.50	0.020	22.53	2.45	6.16	489.9
MW-25D	7.55	0.239	19.86	4.01	2.63	58.3
MW-26D	7.30	0.239	19.77	4.62	2.49	106.3

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 FA38215-5 10/25/16	MW-2 FA38215-1 10/25/16	MW-3 FA38215-9 10/26/16	MW-3D FA38215-11 10/26/16	MW-3D1 FA38215-14 10/26/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 1	< 0.2	< 0.2	0.25 J//	< 0.2
1,1,2,2-Tetrachloroethane	—	< 1.6	< 0.33	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	< 1.8	< 0.37	< 0.37	< 0.37	< 0.37
1,1-Dichloroethane	—	< 1.3	< 0.26	< 0.26	< 0.26	< 0.26
1,1-Dichloroethylene	7	< 1.1	< 0.22	< 0.22	8.8	< 0.22
1,2-Dichloroethane	5	< 1.4	< 0.28	< 0.28	< 0.28	< 0.28
1,2-Dichloropropane	5	< 1.7	< 0.34	< 0.34	< 0.34	< 0.34
2-Butanone (MEK)	—	< 13	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	—	< 10	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 7	< 1.4	< 1.4	< 1.4	< 1.4
Acetone	—	< 50	< 10	< 10	< 10	< 10
Benzene	5	< 1	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 1.2	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 2.3	< 0.46	< 0.46	< 0.46	< 0.46
Carbon Disulfide	—	< 1.2	< 0.23	< 0.23	< 0.23	< 0.23
Carbon Tetrachloride	5	< 1.5	< 0.3	< 0.3	< 0.3	< 0.3
Chlorobenzene	100	< 1	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 3.1	< 0.63	< 0.63	< 0.63 /M/M	< 0.63
Chloroform	80 ¹	< 1.5	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	7	< 0.31	0.58 J//	8.3	< 0.31
cis-1,3-Dichloropropene	—	< 1.3	< 0.26	< 0.26	< 0.26	< 0.26
Dibromochloromethane	80 ¹	< 1.3	< 0.26	< 0.26	< 0.26	< 0.26
Ethylbenzene	700	< 1.3	< 0.25	< 0.25	< 0.25	< 0.25
Methyl Bromide	—	< 2.5	< 0.5	< 0.5	< 0.5 /M/M	< 0.5
Methyl Chloride	—	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 10	< 2	< 2	< 2	< 2
Styrene	100	< 1.2	< 0.24	< 0.24	< 0.24	< 0.24
Tetrachloroethylene	5	410	0.83 J//	91.6	331	< 0.3
Toluene	1000	< 1	< 0.2	< 0.2	< 0.2	< 0.2
trans-1,2-Dichloroethylene	100	< 1.7	< 0.33	< 0.33	< 0.33	< 0.33
trans-1,3-Dichloropropene	—	< 1.2	< 0.25	< 0.25	< 0.25	< 0.25
Trichloroethylene	5	3.5 J//	< 0.27	1.1	7.6	< 0.27
Vinyl Chloride	2	< 1.6	< 0.31	< 0.31	< 0.31	< 0.31
Xylene (total)	10000	< 2.8	< 0.56	< 0.56	< 0.56	< 0.56

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-4 FA38215-19 10/26/16	MW-5 FA38215-7 10/26/16	MW-6 FA38215-4 10/25/16	MW-7 FA38215-21 10/26/16	MW-8 FA38120-1 10/24/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.2	< 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	< 0.22	< 0.22	< 0.22	< 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	< 0.31	< 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	< 0.3	2.5	< 0.3	< 0.3	35.8
Toluene	1000	0.42 J//	< 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	< 0.27	< 0.27	4.9
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

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-9 FA38215-13 10/26/16	MW-9D FA38215-12 10/26/16	MW-10 FA38120-17 10/25/16	MW-10D FA38120-15 10/25/16	MW-11 FA38120-6 10/25/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 2	< 0.2	< 0.2	< 0.2 //h	< 0.2
1,1,2,2-Tetrachloroethane	—	< 3.3	< 0.33	< 0.33	< 0.33 //h	< 0.33
1,1,2-Trichloroethane	5	< 3.7	< 0.37	< 0.37	< 0.37 //h	< 0.37
1,1-Dichloroethane	—	< 2.6	< 0.26	< 0.26	< 0.26 //h	< 0.26
1,1-Dichloroethylene	7	< 2.2	< 0.22	9	< 0.22 //h	< 0.22
1,2-Dichloroethane	5	< 2.8	< 0.28	< 0.28	< 0.28 //h	< 0.28
1,2-Dichloropropane	5	< 3.4	< 0.34	< 0.34	< 0.34 //h	< 0.34
2-Butanone (MEK)	—	< 26	< 2.6	< 2.6	< 2.6 //h	< 2.6
2-Hexanone	—	< 20	< 2	< 2	< 2 //h	< 2
4-Methyl-2-pentanone (MIBK)	—	< 14	< 1.4	< 1.4	< 1.4 //h	< 1.4
Acetone	—	< 100	< 10	< 10	< 10 //h	< 10
Benzene	5	< 2	< 0.2	< 0.2	< 0.2 //h	< 0.2
Bromodichloromethane	80 ¹	< 2.4	< 0.24	< 0.24	< 0.24 //h	< 0.24
Bromoform	80 ¹	< 4.6	< 0.46	< 0.46	< 0.46 //h	< 0.46
Carbon Disulfide	—	< 2.3	< 0.23	< 0.23	< 0.23 //h	< 0.23
Carbon Tetrachloride	5	< 3	< 0.3	< 0.3	< 0.3 //h	< 0.3
Chlorobenzene	100	< 2	< 0.2	< 0.2	< 0.2 //h	< 0.2
Chloroethane	—	< 6.3	< 0.63	< 0.63	< 0.63 //h	< 0.63
Chloroform	80 ¹	< 3	< 0.3	< 0.3	< 0.3 //h	< 0.3
cis-1,2-Dichloroethylene	70	19.2	< 0.31	146	< 0.31 //h	< 0.31
cis-1,3-Dichloropropene	—	< 2.6	< 0.26	< 0.26	< 0.26 //h	< 0.26
Dibromochloromethane	80 ¹	< 2.6	< 0.26	< 0.26	< 0.26 //h	< 0.26
Ethylbenzene	700	< 2.5	< 0.25	< 0.25	< 0.25 //h	< 0.25
Methyl Bromide	—	< 5	< 0.5	< 0.5	< 0.5 //h	< 0.5
Methyl Chloride	—	< 5	< 0.5	< 0.5	< 0.5 //h	< 0.5
Methylene Chloride	5	< 20	< 2	< 2	< 2 //h	< 2
Styrene	100	< 2.4	< 0.24	< 0.24	< 0.24 //h	< 0.24
Tetrachloroethylene	5	685	< 0.3	41.4	< 0.3 //h	< 0.3
Toluene	1000	< 2	< 0.2	7.2	< 0.2 //h	1
trans-1,2-Dichloroethylene	100	< 3.3	< 0.33	0.49 J//	< 0.33 //h	< 0.33
trans-1,3-Dichloropropene	—	< 2.5	< 0.25	< 0.25	< 0.25 //h	< 0.25
Trichloroethylene	5	106	< 0.27	13.5	< 0.27 //h	< 0.27
Vinyl Chloride	2	< 3.1	< 0.31	< 0.31	< 0.31 //h	< 0.31
Xylene (total)	10000	< 5.6	< 0.56	< 0.56	< 0.56 //h	< 0.56

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-12D FA38120-16 10/25/16	MW-13D FA38215-2 10/25/16	MW-14 FA38215-15 10/26/16	MW-14D FA38215-16 10/26/16	MW-15 FA38120-10 10/25/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.2 //h	2.5 J//	< 0.2	< 0.2	< 0.2
1,1,2,2-Tetrachloroethane	—	< 0.33 //h	< 1.6	< 0.33	< 0.33	< 0.33
1,1,2-Trichloroethane	5	< 0.37 //h	< 1.8	< 0.37	< 0.37	< 0.37
1,1-Dichloroethane	—	< 0.26 //h	< 1.3	< 0.26	< 0.26	< 0.26
1,1-Dichloroethylene	7	1.2 //h	7	< 0.22	1.4	< 0.22
1,2-Dichloroethane	5	< 0.28 //h	< 1.4	< 0.28	< 0.28	< 0.28
1,2-Dichloropropane	5	< 0.34 //h	< 1.7	< 0.34	< 0.34	< 0.34
2-Butanone (MEK)	—	< 2.6 //h	< 13	< 2.6	< 2.6	< 2.6
2-Hexanone	—	< 2 //h	< 10	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1.4 //h	< 7	< 1.4	< 1.4	< 1.4
Acetone	—	< 10 //h	< 50	< 10	< 10	< 10
Benzene	5	< 0.2 //h	< 1	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.24 //h	< 1.2	< 0.24	< 0.24	< 0.24
Bromoform	80 ¹	< 0.46 //h	< 2.3	< 0.46	< 0.46	< 0.46
Carbon Disulfide	—	< 0.23 //h	< 1.2	< 0.23	< 0.23	< 0.23
Carbon Tetrachloride	5	< 0.3 //h	< 1.5	< 0.3	< 0.3	< 0.3
Chlorobenzene	100	< 0.2 //h	< 1	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.63 //h	< 3.1	< 0.63	< 0.63	< 0.63
Chloroform	80 ¹	< 0.3 //h	< 1.5	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.31 //h	< 1.6	< 0.31	0.86 J//	< 0.31
cis-1,3-Dichloropropene	—	< 0.26 //h	< 1.3	< 0.26	< 0.26	< 0.26
Dibromochloromethane	80 ¹	< 0.26 //h	< 1.3	< 0.26	< 0.26	< 0.26
Ethylbenzene	700	< 0.25 //h	< 1.3	< 0.25	< 0.25	< 0.25
Methyl Bromide	—	< 0.5 //h	< 2.5	< 0.5	< 0.5	< 0.5
Methyl Chloride	—	< 0.5 //h	< 2.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2 //h	< 10	< 2	< 2	< 2
Styrene	100	< 0.24 //h	< 1.2	< 0.24	< 0.24	< 0.24
Tetrachloroethylene	5	69.2 //h	298	0.66 J//	84.3	< 0.3
Toluene	1000	< 0.2 //h	< 1	< 0.2	< 0.2	< 0.2
trans-1,2-Dichloroethylene	100	< 0.33 //h	< 1.7	< 0.33	< 0.33	< 0.33
trans-1,3-Dichloropropene	—	< 0.25 //h	< 1.2	< 0.25	< 0.25	< 0.25
Trichloroethylene	5	< 0.27 //h	< 1.4	< 0.27	0.65 J//	< 0.27
Vinyl Chloride	2	< 0.31 //h	< 1.6	< 0.31	< 0.31	< 0.31
Xylene (total)	10000	< 0.56 //h	< 2.8	< 0.56	< 0.56	< 0.56

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-15D FA38120-12 10/25/16	MW-15D1 FA38120-14 10/25/16	MW-16 FA38120-5 10/25/16	MW-16D FA38120-7 10/25/16	MW-17 FA38215-8 10/26/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.2	< 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	< 0.22	< 0.22	< 0.22	< 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	< 0.31	< 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	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Toluene	1000	< 0.2	< 0.2	0.48 J//	< 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	< 0.27	< 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

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-18 FA38215-10 10/26/16	MW-19 FA38120-2 10/24/16	MW-20 FA38120-3 10/24/16	MW-21 FA38215-3 10/25/16	MW-21D FA38215-6 10/25/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.2	245	< 2	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	—	< 0.33	< 65	< 3.3	< 0.82	< 0.82
1,1,2-Trichloroethane	5	< 0.37	< 73	< 3.7	< 0.92	< 0.92
1,1-Dichloroethane	—	< 0.26	< 51	< 2.6	< 0.64	< 0.64
1,1-Dichloroethylene	7	< 0.22	< 43	< 2.2	< 0.54	1.2 J//
1,2-Dichloroethane	5	< 0.28	< 57	< 2.8	< 0.71	< 0.71
1,2-Dichloropropane	5	< 0.34	< 69	< 3.4	< 0.86	< 0.86
2-Butanone (MEK)	—	< 2.6	< 510	< 26	< 6.4	< 6.4
2-Hexanone	—	< 2	< 400	< 20	< 5	< 5
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 280	< 14	< 3.5	< 3.5
Acetone	—	< 10	< 2000	< 100	< 25	< 25
Benzene	5	< 0.2	< 41	< 2	< 0.51	< 0.51
Bromodichloromethane	80 ¹	< 0.24	< 48	< 2.4	< 0.6	< 0.6
Bromoform	80 ¹	< 0.46	< 93	< 4.6	< 1.2	< 1.2
Carbon Disulfide	—	< 0.23	< 46	< 2.3	< 0.58	< 0.58
Carbon Tetrachloride	5	< 0.3	< 60	< 3	< 0.75	< 0.75
Chlorobenzene	100	< 0.2	< 40	< 2	< 0.5	< 0.5
Chloroethane	—	< 0.63	< 130	< 6.3	< 1.6	< 1.6
Chloroform	80 ¹	< 0.3	< 60	< 3	< 0.75	< 0.75
cis-1,2-Dichloroethylene	70	< 0.31	< 62	< 3.1	4.2	< 0.78
cis-1,3-Dichloropropene	—	< 0.26	< 53	< 2.6	< 0.66	< 0.66
Dibromochloromethane	80 ¹	< 0.26	< 52	< 2.6	< 0.65	< 0.65
Ethylbenzene	700	< 0.25	< 50	< 2.5	< 0.63	< 0.63
Methyl Bromide	—	< 0.5	< 100	< 5	< 1.3	< 1.3
Methyl Chloride	—	< 0.5	< 100	< 5	< 1.3	< 1.3
Methylene Chloride	5	< 2	< 400	< 20	< 5	< 5
Styrene	100	< 0.24	< 48	< 2.4	< 0.6	< 0.6
Tetrachloroethylene	5	< 0.3	34600	503	181	169
Toluene	1000	< 0.2	< 40	< 2	< 0.5	< 0.5
trans-1,2-Dichloroethylene	100	< 0.33	< 66	< 3.3	< 0.83	< 0.83
trans-1,3-Dichloropropene	—	< 0.25	< 49	< 2.5	< 0.62	< 0.62
Trichloroethylene	5	< 0.27	< 54	< 2.7	2.3 J//	< 0.68
Vinyl Chloride	2	< 0.31	< 63	< 3.1	< 0.79	< 0.79
Xylene (total)	10000	< 0.56	< 110	< 5.6	< 1.4	< 1.4

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-22D FA38120-8 10/25/16	MW-23D FA38215-18 10/26/16	MW-24 FA38120-4 10/24/16	MW-25D FA38120-11 10/25/16	MW-26D FA38120-13 10/25/16
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.2	< 0.2	< 4	< 0.4	< 0.2
1,1,2,2-Tetrachloroethane	—	< 0.33	< 0.33	< 6.5	< 0.65	< 0.33
1,1,2-Trichloroethane	5	< 0.37	< 0.37	< 7.3	< 0.73	< 0.37
1,1-Dichloroethane	—	< 0.26	< 0.26	< 5.1	< 0.51	< 0.26
1,1-Dichloroethylene	7	2.2	< 0.22	< 4.3	2.3	1.6
1,2-Dichloroethane	5	< 0.28	< 0.28	< 5.7	< 0.57	< 0.28
1,2-Dichloropropane	5	< 0.34	< 0.34	< 6.9	< 0.69	< 0.34
2-Butanone (MEK)	—	< 2.6	< 2.6	< 51	< 5.1	< 2.6
2-Hexanone	—	< 2	< 2	< 40	< 4	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1.4	< 1.4	< 28	< 2.8	< 1.4
Acetone	—	< 10	< 10	< 200	35.9 J//	< 10
Benzene	5	< 0.2	< 0.2	< 4.1	< 0.41	< 0.2
Bromodichloromethane	80 ¹	< 0.24	< 0.24	< 4.8	< 0.48	< 0.24
Bromoform	80 ¹	< 0.46	< 0.46	< 9.3	< 0.93	< 0.46
Carbon Disulfide	—	< 0.23	< 0.23	< 4.6	< 0.46	< 0.23
Carbon Tetrachloride	5	< 0.3	< 0.3	< 6	< 0.6	< 0.3
Chlorobenzene	100	< 0.2	< 0.2	< 4	< 0.4	< 0.2
Chloroethane	—	< 0.63	< 0.63	< 13	< 1.3	< 0.63
Chloroform	80 ¹	< 0.3	< 0.3	< 6	< 0.6	< 0.3
cis-1,2-Dichloroethylene	70	0.38 J//	< 0.31	22.9	0.89 J//	1
cis-1,3-Dichloropropene	—	< 0.26	< 0.26	< 5.3	< 0.53	< 0.26
Dibromochloromethane	80 ¹	< 0.26	< 0.26	< 5.2	< 0.52	< 0.26
Ethylbenzene	700	< 0.25	< 0.25	< 5	< 0.5	< 0.25
Methyl Bromide	—	< 0.5	< 0.5	< 10	< 1	< 0.5
Methyl Chloride	—	< 0.5	< 0.5	< 10	< 1	< 0.5
Methylene Chloride	5	< 2	< 2	< 40	6.1 J//	< 2
Styrene	100	< 0.24	< 0.24	< 4.8	< 0.48	< 0.24
Tetrachloroethylene	5	122	< 0.3	1340	125	75
Toluene	1000	< 0.2	< 0.2	< 4	< 0.4	< 0.2
trans-1,2-Dichloroethylene	100	< 0.33	< 0.33	< 6.6	< 0.66	< 0.33
trans-1,3-Dichloropropene	—	< 0.25	< 0.25	< 4.9	< 0.49	< 0.25
Trichloroethylene	5	0.62 J//	< 0.27	< 5.4	0.84 J//	0.97 J//
Vinyl Chloride	2	< 0.31	< 0.31	< 6.3	< 0.63	< 0.31
Xylene (total)	10000	< 0.56	< 0.56	< 11	< 1.1	< 0.56

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.

— - 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 FA38215-23 10/26/2016
Volatile Organic Compounds by Method 8260B (µg/L)		
1,1,1-Trichloroethane	—	1.4
1,1,1,2,2-Tetrachloroethane	—	< 0.33
1,1,2-Trichloroethane	—	< 0.37
1,1-Dichloroethane	—	< 0.26
1,1-Dichloroethylene	700	1
1,2-Dichloroethane	500	< 0.28
1,2-Dichloropropane	—	< 0.34
2-Butanone (MEK)	200,000	< 2.6
2-Hexanone	—	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1.4
Acetone	—	< 10
Benzene	500	< 0.2
Bromodichloromethane	—	< 0.24
Bromoform	—	< 0.46
Carbon Disulfide	—	< 0.23
Carbon Tetrachloride	500	< 0.3
Chlorobenzene	100,000	< 0.2
Chloroethane	—	< 0.63
Chloroform	6,000	< 0.3
cis-1,2-Dichloroethylene	—	11.6
cis-1,3-Dichloropropene	—	< 0.26
Dibromochloromethane	—	< 0.26
Ethylbenzene	—	< 0.25
Methyl Bromide	—	< 0.5
Methyl Chloride	—	< 0.5
Methylene Chloride	—	< 2
Styrene	—	< 0.24
Tetrachloroethylene	700	290
Toluene	—	< 0.2
trans-1,2-Dichloroethylene	—	< 0.33
trans-1,3-Dichloropropene	—	< 0.25
Trichloroethylene	500	2.5
Vinyl Chloride	200	< 0.31
Xylene (total)	—	< 0.56
Semivolatile Organic Compounds by Method 8270D (µg/L)		
1,2,4-Trichlorobenzene	—	< 0.47
1,2-Dichlorobenzene	—	< 0.47
1,3-Dichlorobenzene	—	< 0.47
1,4-Dichlorobenzene	7,500	< 0.47
2,4,5-Trichlorophenol	400,000	< 0.94
2,4,6-Trichlorophenol	2,000	< 0.81
2,4-Dichlorophenol	—	< 0.6
2,4-Dimethylphenol	—	< 0.66
2,4-Dinitrophenol	—	< 4.7
2,4-Dinitrotoluene	130	< 0.59
2,6-Dinitrotoluene	—	< 0.55
2-Chloronaphthalene	—	< 0.47
2-Chlorophenol	—	< 0.6
2-Methylnaphthalene	—	< 0.53
2-Methylphenol	200,000	< 0.55
2-Nitroaniline	—	< 0.66
2-Nitrophenol	—	< 0.58
3&4-Methylphenol	200,000	< 0.99
3,3'-Dichlorobenzidine	—	< 0.47
3-Nitroaniline	—	< 0.71
4,6-Dinitro-o-cresol	—	< 1.9
4-Bromophenyl Phenyl Ether	—	< 0.47
4-Chloro-3-methyl Phenol	—	< 0.7
4-Chloroaniline	—	< 0.67
4-Chlorophenyl Phenyl Ether	—	< 0.55
4-Nitroaniline	—	< 0.68
4-Nitrophenol	—	< 4.7
Acenaphthene	—	< 0.53
Acenaphthylene	—	< 0.54
Anthracene	—	< 0.58
Benzo(a)anthracene	—	< 0.47
Benzo(a)pyrene	—	< 0.47
Benzo(b)fluoranthene	—	< 0.51

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 FA38215-23 10/26/2016
Semivolatile Organic Compounds by Method 8270D (µg/L)		
Benzo(g,h,i)perylene	—	< 0.47
Benzo(k)fluoranthene	—	< 0.59
Benzoic Acid	—	< 9.4
Benzyl Alcohol	—	< 0.52
bis(2-Chloroethoxy)methane	—	< 0.64
bis(2-Chloroethyl)ether	—	< 0.65
bis(2-Chloroisopropyl)ether	—	< 0.65
bis(2-Ethylhexyl)phthalate	—	< 0.94
Butyl Benzyl Phthalate	—	< 0.94
Carbazole	—	< 0.53
Chrysene	—	< 0.5
Dibenzo(a,h)anthracene	—	< 0.72
Dibenzofuran	—	< 0.63
Diethyl Phthalate	—	< 0.94
Dimethyl Phthalate	—	< 0.94
Di-n-butyl Phthalate	—	< 0.94
Di-n-octyl Phthalate	—	< 0.94
Fluoranthene	—	< 0.47
Fluorene	—	< 0.61
Hexachlorobenzene	130	< 0.52
Hexachlorobutadiene	500	< 0.48
Hexachlorocyclopentadiene	—	< 0.94
Hexachloroethane	3,000	< 0.48
Indeno(1,2,3-cd)pyrene	—	< 0.47
Isophorone	—	< 0.63
Naphthalene	—	< 0.47
Nitrobenzene	2,000	< 0.62
N-Nitrosodi-n-propylamine	—	< 0.55
N-Nitrosodiphenylamine	—	< 0.66
Pentachlorophenol	100,000	< 4.7
Phenanthrene	—	< 0.56
Phenol	—	< 0.47
Pyrene	—	< 0.52
Metals by Method 6010C/7470B (µg/L)		
Antimony	—	< 1
Arsenic	5,000	< 1.3
Beryllium	—	< 0.2
Cadmium	1,000	< 0.2
Chromium	5,000	3.8 J//
Copper	—	< 1
Lead	5,000	< 1.1
Mercury	200	< 0.03
Nickel	—	0.4 J//
Selenium	1,000	< 2.9
Silver	5,000	< 0.7
Thallium	—	< 1.4
Zinc	—	10.8 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-4 FA38215-19 10/26/16	MW-4-A FA38215-20 10/26/16	Relative Percent Difference	MW-14D FA38215-16 10/26/16	MW-14D-A FA38215-17 10/26/16	Relative Percent Difference	MW-22D FA38120-8 10/25/16	MW-22D-A FA38120-9 10/25/16	Relative Percent Difference
Volatile Organic Compounds by USEPA Method 8260 (µg/L)									
1,1,1-Trichloroethane	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.4	NC
1,1,2,2-Tetrachloroethane	< 0.33	< 0.33	NC	< 0.33	< 0.33	NC	< 0.33	< 0.65	NC
1,1,2-Trichloroethane	< 0.37	< 0.37	NC	< 0.37	< 0.37	NC	< 0.37	< 0.73	NC
1,1-Dichloroethane	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 0.26	< 0.51	NC
1,1-Dichloroethylene	< 0.22	< 0.22	NC	1.4	1.1	24	2.2	1.6	J//
1,2-Dichloroethane	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 0.28	< 0.57	NC
1,2-Dichloropropane	< 0.34	< 0.34	NC	< 0.34	< 0.34	NC	< 0.34	< 0.69	NC
2-Butanone (MEK)	< 2.6	< 2.6	NC	< 2.6	< 2.6	NC	< 2.6	< 5.1	NC
2-Hexanone	< 2	< 2	NC	< 2	< 2	NC	< 2	< 4	NC
4-Methyl-2-pentanone (MIBK)	< 1.4	< 1.4	NC	< 1.4	< 1.4	NC	< 1.4	< 2.8	NC
Acetone	< 10	< 10	NC	< 10	< 10	NC	< 10	23.2	J//
Benzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.41	NC
Bromodichloromethane	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 0.24	< 0.48	NC
Bromoform	< 0.46	< 0.46	NC	< 0.46	< 0.46	NC	< 0.46	< 0.93	NC
Carbon Disulfide	< 0.23	< 0.23	NC	< 0.23	< 0.23	NC	< 0.23	< 0.46	NC
Carbon Tetrachloride	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.6	NC
Chlorobenzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.4	NC
Chloroethane	< 0.63	< 0.63	NC	< 0.63	< 0.63	NC	< 0.63	< 1.3	NC
Chloroform	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.6	NC
cis-1,2-Dichloroethylene	< 0.31	< 0.31	NC	0.86	0.65	J//	0.38	J//	< 0.62
cis-1,3-Dichloropropene	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 0.26	< 0.53	NC
Dibromochloromethane	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 0.26	< 0.52	NC
Ethylbenzene	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.5	NC
Methyl Bromide	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 1	NC
Methyl Chloride	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 1	NC
Methylene Chloride	< 2	< 2	NC	< 2	< 2	NC	< 2	6.4	J//
Styrene	< 0.24	< 0.24	NC	< 0.24	< 0.24	NC	< 0.24	< 0.48	NC
Tetrachloroethylene	< 0.3	< 0.3	NC	84.3	80.7	4	122	97.7	22
Toluene	0.42	0.3	J//	< 0.2	< 0.2	NC	< 0.2	< 0.4	NC
trans-1,2-Dichloroethylene	< 0.33	< 0.33	NC	< 0.33	< 0.33	NC	< 0.33	< 0.66	NC
trans-1,3-Dichloropropene	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.49	NC
Trichloroethylene	< 0.27	< 0.27	NC	0.65	0.52	J//	0.62	J//	< 0.54
Vinyl Chloride	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.31	< 0.63	NC
Xylene (total)	< 0.56	< 0.56	NC	< 0.56	< 0.56	NC	< 0.56	< 1.1	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 FA38120-18 10/25/16	TRIP BLANK FA38215-22 10/26/16
Volatile Organic Compounds by USEPA Method 8260 (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>
M	A matrix effect was present.

Analysis Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
h	Holding time exceeded by less than two times.
M	Matrix spike recovery exceeded established criteria.

Table 7
2017 Semi-Annual Sampling Plan
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

Well Number	Northing	Easting	Date Installed	Classification	Screen Interval (ft bgs)	Spring 2017 Semi-Annual Sampling			Fall 2017 Semi-Annual Sampling		
						Field Water Quality Indicator Parameters	VOCs	MNA Parameters ¹	Field Water Quality Indicator Parameters	VOCs	MNA Parameters
Off-Site Background Areas											
MW-17	528054.31	1985785.06	3/4/2014	Shallow	13-28	-	-	-	X	X	-
MW-18	527976.58	1986054.35	3/3/2014	Shallow	11-26	-	-	-	X	X	-
On-Site Background Areas											
MW-4	527583.49	1986403.57	6/4/2003	Shallow	4-14	-	-	-	X	X	-
Wooded Areas of Interest											
MW-9	527756.57	1986053.98	12/29/2003	Shallow	5-20	X	X	-	X	X	-
MW-9D	527787.94	1985973.71	12/14/2007	Deep	44-49	-	-	-	X	X	-
MW-10	527820.72	1985721.19	12/30/2003	Shallow	3-18	X	X	-	X	X	-
MW-10D	527855.07	1985712.71	12/14/2007	Deep	43-48	-	-	-	X	X	-
MW-11	527901.23	1985444.60	12/30/2003	Shallow	3-18	-	-	-	X	X	-
Manufacturing Areas											
MW-1	527377.94	1985969.04	6/4/2003	Shallow	3-18	X	X	-	X	X	-
MW-2	527303.71	1985841.78	6/4/2003	Shallow	3-18	X	X	-	X	X	-
MW-3	527219.26	1986012.34	6/4/2003	Shallow	3-18	X	X	-	X	X	-
MW-3D	527231.99	1986009.14	12/13/2007	Deep	44-49	X	X	-	X	X	-
MW-3D1	527243.77	1986004.60	10/29/2009	Deep	75-85	-	-	-	X	X	-
MW-5	527628.44	1985730.62	6/4/2003	Shallow	4-14	X	X	-	X	X	-
MW-6	527681.37	1985867.15	6/4/2003	Shallow	4-14	-	-	-	X	X	-
MW-7	527150.98	1986039.96	12/30/2003	Shallow	5-20	X	X	-	X	X	-
MW-8	527572.13	1985974.43	12/29/2003	Shallow	5-20	X	X	-	X	X	-
MW-12D	527322.24	1985335.17	10/29/2009	Deep	40-50	X	X	-	X	X	-
MW-13D	527143.18	1985615.99	10/29/2009	Deep	40-50	X	X	-	X	X	-
MW-19	527456.18	1985777.81	3/1/2014	Shallow	5-20	X	X	-	X	X	-
MW-20	527388.72	1985893.51	3/2/2014	Shallow	5-15	X	X	-	X	X	-
MW-21	527332.46	1985891.49	2/25/2014	Shallow	19-34	X	X	-	X	X	-
MW-21D	527235.35	1985871.60	2/25/2014	Deep	43-53	X	X	-	X	X	-
MW-24	527332.95	1985487.59	12/3/2015	Shallow	6-21	X	X	-	X	X	-

Table 7
2017 Semi-Annual Sampling Plan
Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

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

Notes:

bgs = below ground surface NA = Not Applicable

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

APPENDIX A

FIELD DOCUMENTATION

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

AECOM

Tailgate Safety Meeting Log*

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

Meeting Leader <i>Justin Butler</i>	Signature <i>Justin Butler</i>
Date / Time <i>11/45 / 10/24/16</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions <i>Sunny 80's</i>	Project Number 60314964
Topic	Discussion (Circle one)
Today's Scope of Work (All tasks)	☒ yes / NA
Schedule / New Work / Scope Changes	☒ yes / NA
Reviewed Procedures, THA, etc.	☒ yes / NA
Emergency Action Plan & Procedures	☒ yes / NA
Communications Protocol	☒ yes / NA
Required PPE	☒ yes / NA
Required Monitoring / Instruments	☒ yes / NA
Site Control / Work Zones / Security	☒ yes / NA
Access / Egress / Slips, Trips, & Falls	☒ yes / NA
Smoking, Eating, & Drinking	☒ yes / NA
Washroom / Facilities Location	☒ yes / NA
Heat/Cold Stress	☒ yes / NA
Exclusion Areas Barricades / Cones	yes / ☒ NA
Required Permits, Passes, Keys, etc.	☒ yes / NA
Decon Procedures / IDW Mngmt	☒ yes / NA
Equipment Inspections / Safety Checklists	☒ yes / NA
Comments/Other: Cardinal Rules: Confined Space (☒) , GFCI (☒) , Elevated Work (☒) , Lockout/Tagout (☒) , and Machine Guarding (☒) . No loose/leather gloves near rotating equipment.	

Tailgate Meeting Attendees	
Printed Name	Signature
<i>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

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>[Signature]</i>
Date / Time <i>0730 / 10/25/16</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions <i>Clear 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>[Signature]</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>Randy Morgan</i>	Signature <i>Randy Morgan</i>
Date/Time <i>10/26/16 0800</i>	Project Name & Location UTC Delavan Spray Technologies Site Samburg, South Carolina
Weather Conditions <i>Clear/Cool 0745</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 <i>N/A</i> , GFCI <i>N/A</i> , Elevated Work <i>N/A</i> , Lockout/Tagout <i>N/A</i> , and Machine Guarding <i>N/A</i> . No loose/leather gloves near rotating equipment. <i>N/A</i>	
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

WATER LEVEL DATA SUMMARY

PROJECT: UTC Delavan Spray Technologies Site JOB NUMBER: 60314964

LOCATION: Bamberg, South Carolina DATE: 10/24/16

CLIENT: UTC MEASURED BY: R Morgan / J Butler

SURVEY DATUM: _____ MEASURING DEVICE: _____

MEASUREMENT POINT IDENTIFICATION	TOC ELEVATION (FT MSL)	DEPTH TO BOTTOM OF WELL (FT BTOC)	POINT OF MEASURE	DEPTH TO WATER (FT BTOC)	COMMENTS
MW-1				11.05	
MW-2				10.11	
MW-3				13.08	
MW-3D				13.96	
MW-3D1				13.75	
MW-4				5.48	
MW-5				6.97	
MW-6				4.93	
MW-7				13.12	
MW-8				10.58	
MW-9				5.60	
MW-9D				9.43	
MW-10				4.06	
MW-10D				7.27	
MW-11				6.95	
MW-12D				13.54	
MW-13D				12.25	
MW-14				11.22	
MW-14D				12.93	
MW-15				3.14	
MW-15D				2.19	
MW-15D1				2.30	
MW-16				3.80	
MW-16D				5.04	
MW-17				2.96	
MW-18				9.96	

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

WATER LEVEL DATA SUMMARY

PROJECT: UTC Delavan Spray Technologies Site

JOB NUMBER: 60314964

LOCATION: Bamberg, South Carolina

DATE: 10/24/16

CLIENT: UTC

MEASURED BY: R. Morgan / J Butler

SURVEY DATUM:

MEASURING DEVICE: _____

[illegible]

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

YSI 556 MPS / Water Quality Calibration Certificate

AECOMCal Standard Temp, LAB, C : 21-86 Temp, FIELD, C :

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

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

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

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

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

Dissolved Oxygen (Saturated Air)	Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) / (+/- 2%)
		22.88	96.3	8.29	
	Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane

☐ Yes ☒ No

Do Cap Color

☐ Black ☒ Blue ☐ YellowModel 556 S/N 08J101253 Cable 14A-35

Calibration referenced to the temperature of the calibration standards.

Turbidity	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
.02 NTU	50401	APR-17	0.02		(.0196 to .0204)
10 NTU	60661	JUN-18	10.00		(9.8 to 10.2)
1000 NTU	50403	APR-17	1019		(970 to 1031)

Model Micro TPW S/N 200711196Calibrated By Eric OlsonDate of Calibration 10-20-16Project Name UTC Project number 60314964.12Signed : [Signature]

YSI 556 MPS / Water Quality Calibration Certificate

AECOMCal Standard Temp, LAB, C : 22-17 Temp, FIELD, C :

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

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

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

PH 10.01	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
@ 25°C	7603017	3/18	10.00		(+/- 0.2 units)

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

Dissolved Oxygen (Saturated Air)	Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range (+/- 2%) / (+/- 2%)
		Temp, C	% Saturation	mg/L	
		21.9	96.5	8.44	
	Post-Cal, FIELD				

New DO Membrane
☐ Yes ☒ No

Do Cap Color

☐ Black ☒ Blue ☐ YellowModel 556 S/N 05C1520AV Cable 15215

Calibration referenced to the temperature of the calibration standards.

Turbidity	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
.02 NTU	OCT-16	4/001	0.02		(.0196 to .0204)
10 NTU	JUN-18	60661	9.98		(9.8 to 10.2)
1000 NTU	OCT-16	4/003	1005		(970 to 1031)

Model Micro TPW S/N 200704141Calibrated By Eric OlsonDate of Calibration 10-20-16Project Name UTC Project number 60314964-12Signed : [Signature]



Project Name: UTC Delavan
Project Number: 60314964.12
Calibrated By: Randy Murga
Signature: Randy Murga

YSI 556 SN: 0501520AH
Turbidimeter Model/SN: MicroTPW 20070441
Additional Equipment/SN: _____
Date: 10-24-16

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	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	758.9		0924	mmHg
Temperature (Saturated Air)	17.66	17.97	0924	c
Temperature (Calibration Solution)	18.89	18.65	0945	c
D.O.	11.50	9.46	0924	mg/L
PH 7	6.81	7.02	0932	SU
PH 4	3.90	4.00	0936	SU
PH 10	9.94	10.03	0940	SU
Specific Conductance	1.278	1.278	0928	mS/cm
ORP	251.2	237.5	0945	mV

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



Project Name: UTC Delavan
Project Number: 6034964.12
Calibrated By: Randy Morgan
Signature: Randy Morgan

YSI 556 SN: 08J101253
Turbidimeter Model/SN: MicroTPW 2007111916
Additional Equipment/SN: _____
Date: 10-24-2016

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	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.457	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	759.4		0920	mmHg
Temperature (Saturated Air)	17.69	18.75	0920	c
Temperature (Calibration Solution)	19.52	19.32	0944	c
D.O.	9.44	9.32	0920	mg/L
PH 7	6.71	7.02	0930	SU
PH 4	3.98	4.20	0932	SU
PH 10	9.90	10.03	0938	SU
Specific Conductance	1.270	1.278	0926	mS/cm
ORP	251.9	237.5	0944	mV

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



Project Name: UT Delavan
Project Number: 6034964.12
Calibrated By: Randy Mergo
Signature: Randy Mergo

YSI 556 SN: 08J701253
Turbidimeter Model/SN: MicroTPW 200711196
Additional Equipment/SN: _____
Date: 10-25-2016

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	9.665	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

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	764.7		0725	mmHg
Temperature (Saturated Air)	16.25	15.03	0725	c
Temperature (Calibration Solution)	17.46	16.92	0750	c
D.O.	9.56	10.14	0725	mg/L
PH 7	6.90	7.02	0734	SU
PH 4	3.96	4.00	0738	SU
PH 10	9.99	10.04	0742	SU
Specific Conductance	1.269	1.278	0729	mS/cm
ORP	248.5	237.5	0750	mV

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



Project Name: UTC Delavan Spray Technologies site
Project Number: 66319964
Calibrated By: Justin Butler
Signature: [Signature]

YSI 556 SN: 0501520 AU
Turbidimeter Model/SN: MicroTPW 200704141
Additional Equipment/SN: 20094
Date: 10/25/16

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	699
278	752	1413	722	2587	692
558	745	1703	714	2887	684
841	737	1995	707	3190	676

Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.968	32	7.305	37	6.727
18	9.457	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	764.2		0742	mmHg
Temperature (Saturated Air)	16.10	16.41	0754	c
Temperature (Calibration Solution)	17.49	17.04	0752	c
D.O.	8.60	9.87	0742	mg/L
PH 7	7.26	7.04	0746	SU
PH 4	3.94	4.00	0748	SU
PH 10	9.90	10.07	0750	SU
Specific Conductance	1.270	1.147	0744	mS/cm
ORP	231.8	244	0752	mV

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

Project Name: UTC DelavanYSI 556 SN: 085101253

Project Number: _____

Turbidimeter Model/SN: MicroTPW 200711196Calibrated By: Randy Morgan

Additional Equipment/SN: _____

Signature: Randy MorganDate: 10-26-16**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	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	9.467	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

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	766.7		0730	mmHg
Temperature (Saturated Air)	21.67	22.05	0730	c
Temperature (Calibration Solution)	21.37		0730	c
D.O.	8.06	8.82	0730	mg/L
PH 7	7.18	7.02	0738	SU
PH 4	3.99	4.00	0742	SU
PH 10	10.11	10.06	0746	SU
Specific Conductance	1.267	1.278	0734	mS/cm
ORP	212.9	237.5	0750	mV

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



Project Name: UTC Delavan
Project Number: 60314964
Calibrated By: Justin Butler
Signature: _____

YSI 556 SN: 0515207A
Turbidimeter Model/SN: MicroTPW 20070414
Additional Equipment/SN: _____
Date: 10-26-16

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	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	9.467	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

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barametric Pressure	766.0		0740	mmHg
Temperature (Saturated Air)	20.33	20.11	0752	c
Temperature (Calibration Solution)	15.40	15.15	0750	c
D.O.	8.12	9.09	0740	mg/L
PH 7	7.04	7.04	0744	SU
PH 4	3.95	4.00	0746	SU
PH 10	9.95	10.08	0748	SU
Specific Conductance	1.149	1.147	0742	mS/cm
ORP	248.9	244.0	0750	mV

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

Chain of Custody and Analytical Request

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

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

Client Name: UTC

Collected by: Randy Morgan / Justin Butler

Project Manager: Walter Gerald 864-234-8925

Sample ID		Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	VOC,s 8260B TCL	SVOC,s (8270D)	P/P Metals (6010C/7470B)	COMMENTS										Cooler ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
COMP	GRAB	Well																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
MW-8	24-Oct-2016	1552		X			Groundwater	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

Relinquished By (Signed) Randy Morgan Date 10-25-16 Time 1445

1.

2.

3.

Custody Transfers Prior to Receipt by Laboratory

Received by (signed) _____ Date _____ Time _____

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped: XXXX

Method of Shipment: Fed Ex Airbill #: 810977867657

Analytical Lab: Accutest Location: Orlando FLA

Lab Recipient: Date: Time:

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

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

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

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

Chain of Custody and Analytical Request

Page 2 of 2
Project Number: 60314964

Chain of Custody Number ⁽¹⁾:
LIMS Number:

[illegible]

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

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

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

AECOM**Chain of Custody and Analytical Request**Page 1 of 5
Project Number: 60314964
Chain of Custody Number ⁽¹⁾:
LIMS Number:

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

Client Name: UTC

Collected by: Randy Morgan / Justin Butler

Project Manager: Walter Gerald 864-234-8925

Sample Analysis Requested				Quality Assurance Samples	
COMMENTS				Cooler ID	
Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments COMP GRAB Well	Sample Information	
MW-2	25-Oct-2016	1515	X	Groundwater	
MW-13D	25-Oct-2016	1547	X		
MW-21	25-Oct-2016	1555	X		
MW-6	25-Oct-2016	1641	X		
MW-1	25-Oct-2016	1650	X		
MW-21D	25-Oct-2016	1740	X		
MW-5	26-Oct-2016	0842	X		
MW-17	26-Oct-2016	0845	X		
MW-3	26-Oct-2016	0927	X		
MW-18	26-Oct-2016	0935	X		
MW-3D	26-Oct-2016	1020	X		
MW-3D-ms	26-Oct-2016	1020	X		
MW-3D-msD	26-Oct-2016	1020	X		
MW-9D	26-Oct-2016	1025	X		
MW-9	26-Oct-2016	1115	X		

Custody Transfers Prior to Receipt by Laboratory

1. Randy Morgan Date 10/26/16 Time 1630
2. _____
3. _____

Received by (signed) Date Time

1. _____
2. _____
3. _____

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____

Method of Shipment: _____

Analytical Lab: _____

Lab Recipient: _____

Fed Ex

Accutest

Shipped: _____

Airbill #: _____

Location: _____

Date: _____

XXXX

Orlando FLA

Time: _____

810977867860

810977867860

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

TEL VOC, SVOC, BY 8260B - unpreserved vials - 7 day holding time - RM

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

Chain of Custody and Analytical Request

Page

2 of 2

Project Number: 60314964

Chain of Custody Number (1):

LIMS Number:

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

Client Name: UTC

Collected by: Randy Morgan / Justin Butler

Project Manager: Walter Gerald 864-234-8925

Project Manager: Walter Gerald 864-234-8925																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Randy Morgan	10-26-16	1630			
2. _____					
3. _____					

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	Shipped: XXXX	810977867880
Method of Shipment: Fed Ex	Airbill #: 810977867880	
Analytical Lab: Accutest	Location: Orlando FLA	
Lab Recipient:	Date:	Time:

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

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

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



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/25/16</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 _____ X Source			
Weather Conditions	<u>clear</u>		
Air Temperature	<u>70's</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.05</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>6.95</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>1.13</u> gal
3 Casing Volumes =	<u>3.39</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.4</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 Bailor	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW ☒ MODERATE _____ HIGH _____	
Comments/Observations		
Sample Time:	<u>1650</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

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

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

VOLUME PURGED (gallons)	FIELD ANALYSES									
	Initial	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	
TIME (Military)	<u>1605</u>	<u>1610</u>	<u>1615</u>	<u>1620</u>	<u>1625</u>	<u>1630</u>	<u>1635</u>	<u>1640</u>	<u>1645</u>	
Water Level (ft BTOC)	<u>11.48</u>	<u>11.75</u>	<u>12.06</u>	<u>12.38</u>	<u>12.70</u>	<u>12.86</u>	<u>13.03</u>	<u>13.20</u>	<u>13.37</u>	
pH (S.U.)	<u>4.36</u>	<u>4.21</u>	<u>4.32</u>	<u>4.41</u>	<u>4.30</u>	<u>4.20</u>	<u>4.22</u>	<u>4.19</u>	<u>4.18</u>	
Sp. Cond. (mS/cm)	<u>0.028</u>	<u>0.029</u>	<u>0.029</u>	<u>0.030</u>	<u>0.030</u>	<u>0.031</u>	<u>0.031</u>	<u>0.031</u>	<u>0.030</u>	
Water Temp. (°C)	<u>24.99</u>	<u>24.67</u>	<u>25.10</u>	<u>25.20</u>	<u>25.00</u>	<u>24.66</u>	<u>24.71</u>	<u>24.67</u>	<u>24.63</u>	
Turbidity (NTUs)	<u>50.70</u>	<u>12.24</u>	<u>10.98</u>	<u>10.41</u>	<u>5.04</u>	<u>5.12</u>	<u>5.07</u>	<u>5.29</u>	<u>5.19</u>	
DO - (mg/L)	<u>4.41</u>	<u>3.38</u>	<u>3.40</u>	<u>3.72</u>	<u>3.99</u>	<u>3.72</u>	<u>3.30</u>	<u>3.25</u>	<u>3.21</u>	
Salinity (ppt)	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	
ORP (mV)	<u>312.8</u>	<u>309.4</u>	<u>306.5</u>	<u>302.5</u>	<u>309.9</u>	<u>315.1</u>	<u>321.2</u>	<u>320.4</u>	<u>326.1</u>	

COMMENTS/OBSERVATIONS _____



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/25/16</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-2</u>		
☐ Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source			
Weather Conditions	<u>clear</u>		
Air Temperature	<u>70'S</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>10.11</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>7.89</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>1.29</u> gal
3 Casing Volumes =	<u>3.87</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.4</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>147.63</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.18</u>	1/100 ft
Land Surface Elevation	<u>147.81</u>	1/100 ft
Screened Interval	<u>3 - 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: 1515</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).

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	0.4	0.8	1.2	1.6	2.0	2.4				
TIME (Military)	1440	1445	1450	1455	1500	1505	1510				
Water Level (ft BTOC)	10.26	10.27	10.28	10.28	10.28	10.28	10.28				
pH (S.U.)	4.50	4.41	4.34	4.35	4.12	4.12	4.11				
Sp. Cond. (mS/cm)	0.023	0.024	0.024	0.024	0.024	0.024	0.024				
Water Temp. (°C)	24.75	25.05	25.21	25.27	25.29	25.28	25.32				
Turbidity (NTUs)	94.02	10.18	6.76	6.11	5.90	5.81	5.85				
DO - (mg/L)	1.11	0.70	0.76	0.71	0.68	0.75	0.86				
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01				
ORP (mV)	221.9	241.0	259.0	266.4	285.7	285.6	289.8				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 2 of 1

Date (mo/day/yr)	<u>Oct 26, 2016</u>		
Field Personnel	<u>Randy Morgan</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-3		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>clear/sunny</u>		
Air Temperature	<u>53</u>	° F	
Total Well Depth (TWD) =	<u>18.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>13.08</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>4.92</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	= <u>0.80</u>	gal
3 Casing Volumes =	<u>2.40</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>2.0</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>148.11</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.23</u>	1/100 ft
Land Surface Elevation	<u>148.34</u>	1/100 ft
Screened Interval	<u>3</u> - <u>18</u>	1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW _____ MODERATE _____ HIGH ☒	
Comments/Observations	<u>0927</u>	
Sample Time:	<u>0927</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>					
VOLUME PURGED (gallons)											
TIME (Military)	<u>0900</u>	<u>0905</u>	<u>0910</u>	<u>0915</u>	<u>0920</u>	<u>0925</u>					
Water Level (ft BTOC)	<u>13.37</u>	<u>13.39</u>	<u>13.40</u>	<u>13.41</u>	<u>13.43</u>	<u>13.45</u>					
pH (S.U.)	<u>3.00</u>	<u>3.77</u>	<u>3.87</u>	<u>3.78</u>	<u>3.89</u>	<u>3.80</u>					
Sp. Cond. (mS/cm)	<u>0.023</u>	<u>0.023</u>	<u>0.023</u>	<u>0.023</u>	<u>0.023</u>	<u>0.023</u>					
Water Temp. (°C)	<u>22.56</u>	<u>23.06</u>	<u>23.64</u>	<u>23.98</u>	<u>24.21</u>	<u>24.39</u>					
Turbidity (NTUs)	<u>6.91</u>	<u>10.49</u>	<u>10.98</u>	<u>10.40</u>	<u>1.18</u>	<u>1.25</u>					
DO - (mg/L)	<u>5.55</u>	<u>5.86</u>	<u>5.23</u>	<u>5.08</u>	<u>5.33</u>	<u>5.37</u>					
Salinity (ppt)	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>					
ORP (mV)	<u>391.8</u>	<u>354.9</u>	<u>342.5</u>	<u>337.1</u>	<u>326.3</u>	<u>327.5</u>					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	Oct 26, 2016
Field Personnel	Randy Morgan
Site Name	UTC Delavan Spray Technologies Site
AECOM Job #	60314964
Sample ID*	MW-3D
Upgradient ☐ Downgradient ☒ Sidegradient ☐ Source ☐	
Weather Conditions	clear / sunny
Air Temperature	55 ° F
Total Well Depth (TWD) =	49.00 1/100 ft
Depth to Ground Water (DGW) =	13.96 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	35.04 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	5.71 gal
3 Casing Volumes =	17.13 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	148.12	1/100 ft
Height of Riser (above land surface)	-0.16	1/100 ft
Land Surface Elevation	148.28	1/100 ft
Screened Interval	44 - 49	1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒	Type ☐
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☐ MODERATE ☐ HIGH ☒	
Comments/Observations		
Sample Time:	1020	
Sample Analytes:	VOC'S QLSO MS/MSD	
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).

VOLUME PURGED (gallons)	FIELD ANALYSES									
	Initial	1.40	1.80	1.20	1.60	2.0	2.4	2.8	3.20	
TIME (Military)	0938	0943	0948	0953	0958	1003	1008	1013	1018	
Water Level (ft BTOC)	14.09	14.10	14.10	14.10	14.10	14.10	14.10	14.10	14.10	
pH (S.U.)	6.43	6.20	6.15	6.21	6.34	6.47	6.61	6.66	6.73	
Sp. Cond. (mS/cm)	0.235	0.233	0.233	0.234	0.234	0.234	0.234	0.233	0.233	
Water Temp. (°C)	21.60	21.38	21.25	21.11	21.16	21.31	21.26	21.28	21.36	
Turbidity (NTUs)	2231	13.44	7.38	4.28	2.87	2.06	1.56	1.43	1.44	
DO - (mg/L)	3.00	3.14	3.07	3.08	3.09	3.08	3.10	3.05	3.14	
Salinity (ppt)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
ORP (mV)	328.1	332.0	325.4	309.7	286.5	267.3	248.7	234.1	229.6	

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 7

Date (mo/day/yr)	<u>Oct 26, 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-3D1</u>
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐	
Weather Conditions	<u>Clear/sunny</u>
Air Temperature	<u>64</u> °F
Total Well Depth (TWD) =	<u>85.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>13.75</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>71.25</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163	= <u>11.61</u> gal
3 Casing Volumes =	<u>34.84</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>147.93</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.19</u> 1/100 ft
Land Surface Elevation	<u>148.12</u> 1/100 ft
Screened Interval	<u>75 - 85</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒ Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☐ MODERATE ☐ HIGH ☒
Comments/Observations	<u>Sample Time: 1117</u> <u>Sample Analytes: VOC'S</u> <u>Hack Fe Kit: N/A mg/L</u>

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

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

	FIELD ANALYSES										
	Initial	1.80	1.20	1.60	2.0	2.40					
VOLUME PURGED (gallons)											
TIME (Military)	<u>1045</u>	<u>1055</u>	<u>1100</u>	<u>1105</u>	<u>1110</u>	<u>1115</u>					
Water Level (ft BTOW)	<u>13.95</u>	<u>13.96</u>	<u>13.97</u>	<u>13.97</u>	<u>13.92</u>	<u>13.92</u>					
pH (S.U.)	<u>7.08</u>	<u>7.13</u>	<u>7.11</u>	<u>7.08</u>	<u>7.09</u>	<u>7.08</u>					
Sp. Cond. (mS/cm)	<u>0.225</u>	<u>0.221</u>	<u>0.221</u>	<u>0.222</u>	<u>0.222</u>	<u>0.222</u>					
Water Temp. (°C)	<u>22.51</u>	<u>22.11</u>	<u>21.98</u>	<u>22.05</u>	<u>22.03</u>	<u>22.04</u>					
Turbidity (NTUs)	<u>435.6</u>	<u>31.45</u>	<u>10.69</u>	<u>7.01</u>	<u>5.10</u>	<u>4.70</u>					
DO - (mg/L)	<u>2.01</u>	<u>0.37</u>	<u>0.31</u>	<u>0.28</u>	<u>0.29</u>	<u>0.28</u>					
Salinity (ppt)	<u>0.11</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>					
ORP (mV)	<u>200.6</u>	<u>-2.1</u>	<u>-17.5</u>	<u>-25.4</u>	<u>-29.4</u>	<u>-32.1</u>					

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 26, 2016</u>		
Field Personnel	<u>Randy Nuygen</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-4		
☒ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source			
Weather Conditions	<u>Clear / Sunny</u>		
Air Temperature	<u>70</u>	° F	
Total Well Depth (TWD) =	<u>14.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>9.48</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>8.52</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	<u>= 1.38</u>	gal	
3 Casing Volumes =	<u>4.16</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>2.8</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	PVC		
Measuring Point Elevation	<u>147.03</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.27</u>	1/100 ft	
Land Surface Elevation	<u>147.30</u>	1/100 ft	
Screened Interval	<u>4 - 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	<u>Sample Time: 1418</u> <u>Sample Analytes: VOC'S</u> <u>Hack Fe Kit: N/A mg/L</u>		

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

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

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	4.0	8.0	1.20	1.60	2.0	2.4	2.8			
TIME (Military)	1340	1345	1350	1355	1400	1405	1410	1415			
Water Level (ft BTOC)	6.24	6.62	6.95	7.58	7.88	8.00	8.21	8.40			
pH (S.U.)	4.54	4.23	4.17	4.14	4.17	4.14	4.14	4.13			
Sp. Cond. (mS/cm)	0.133	0.133	0.140	0.152	0.150	0.148	0.141	0.139			
Water Temp. (°C)	21.69	21.65	21.64	21.75	21.66	21.62	21.62	21.63			
Turbidity (NTUs)	72.07	49.71	48.45	60.51	60.95	57.12	52.07	50.19			
DO - (mg/L)	0.57	0.63	0.48	0.32	0.29	0.28	0.27	0.26			
Salinity (ppt)	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.06			
ORP (mV)	245.7	245.1	241.4	209.5	197.7	195.2	192.1	190.4			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 26, 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-5</u>		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions <u>Clear / Sunny</u>			
Air Temperature	<u>45</u>	° F	
Total Well Depth (TWD) =	<u>14.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>6.97</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>7.03</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	<u>= 1.14</u>	gal	
3 Casing Volumes =	<u>3.43</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>2.40</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	<u>PVC</u>		
Measuring Point Elevation	<u>145.46</u>	1/100 ft	
Height of Riser (above land surface)	<u>0.12</u>	1/100 ft	
Land Surface Elevation	<u>145.34</u>	1/100 ft	
Screened Interval	<u>4</u> - <u>14</u>	1/100 ft	
Dedicated Pump or Bailer	YES <u> </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>X</u> MODERATE <u> </u> HIGH <u> </u>		
Comments/Observations	<u>Sample Time: 0842</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	1.40	1.80	1.20	1.60	2.0	2.40				
VOLUME PURGED (gallons)											
TIME (Military)	0810	0815	0820	0825	0830	0835	0840				
Water Level (ft BTOW)	7.58	7.79	7.95	8.03	8.10	8.10	8.15				
pH (S.U.)	2.68	4.03	4.04	3.88	3.72	3.63	3.61				
Sp. Cond. (mS/cm)	0.022	0.021	0.020	0.020	0.020	0.020	0.020				
Water Temp. (°C)	19.81	21.35	21.79	21.76	21.75	21.74	21.78				
Turbidity (NTUs)	2.29	1.48	1.08	1.33	0.95	1.00	1.29				
DO - (mg/L)	7.33	7.38	7.29	7.30	7.40	7.34	7.26				
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01				
ORP (mV)	379.3	289.6	292.5	304.2	312.6	319.0	322.6				

COMMENTS/OBSERVATIONS



DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 25, 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-6</u>
☒ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source	
Weather Conditions	<u>Clear/sunny</u>
Air Temperature	<u>75</u> ° F
Total Well Depth (TWD) =	<u>14.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>4.93</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>9.07</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163	= <u>1.47</u> gal
3 Casing Volumes =	<u>4.43</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>143.22</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.23</u> 1/100 ft
Land Surface Elevation	<u>143.45</u> 1/100 ft
Screened Interval	<u>4</u> - <u>14</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒ Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☐ MODERATE ☐ HIGH ☒
Comments/Observations	<u>Sample Time: 1641</u> <u>Sample Analytes: VOC'S</u> <u>Hack Fe Kit: 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	2.4	2.8			
VOLUME PURGED (gallons)											
TIME (Military)	1604	1609	1618	1619	1624	1629	1634	1639			
Water Level (ft BTOW)	5.29	5.54	5.72	5.82	5.85	6.88	5.90	5.92			
pH (S.U.)	4.92	4.50	4.17	3.92	3.85	3.74	3.63	3.68			
Sp. Cond. (mS/cm)	0.022	0.019	0.018	0.018	0.018	0.018	0.018	0.018			
Water Temp. (°C)	22.77	22.92	22.99	23.00	23.00	22.96	22.92	22.90			
Turbidity (NTUs)	8.75	1.28	2.05	0.29	0.11	0.01	0.91	1.36			
DO - (mg/L)	0.87	0.81	0.72	0.47	0.45	0.48	0.48	0.48			
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
ORP (mV)	158.8	172.9	194.1	205.3	211.4	219.7	226.4	231.2			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/26/16</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-7</u>
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____	
Weather Conditions	<u>clear</u>
Air Temperature	<u>70's</u> ° F
Total Well Depth (TWD) =	<u>20.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>13.12</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>6.88</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x <u>0.163</u> =	<u>1.12</u> gal
3 Casing Volumes =	<u>3.36</u> gal = Standard Evacuation Volume
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>
Total Volume of Water Removed	<u>1.50</u> gal

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>149.03</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.22</u>	1/100 ft
Land Surface Elevation	<u>149.25</u>	1/100 ft
Screened Interval	<u>5</u> - <u>20</u>	1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW ☒ MODERATE _____ HIGH _____	
Comments/Observations		
Sample Time:	<u>1435</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

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

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

	FIELD ANALYSES										
	Initial	0.25	0.50	0.75	1.00	1.25	1.50				
VOLUME PURGED (gallons)											
TIME (Military)	<u>1400</u>	<u>1405</u>	<u>1410</u>	<u>1415</u>	<u>1420</u>	<u>1425</u>	<u>1430</u>				
Water Level (ft BTOW)	<u>13.78</u>	<u>13.93</u>	<u>14.28</u>	<u>14.65</u>	<u>14.85</u>	<u>15.23</u>	<u>15.48</u>				
pH (S.U.)	<u>6.05</u>	<u>4.96</u>	<u>4.40</u>	<u>3.88</u>	<u>4.21</u>	<u>4.17</u>	<u>4.16</u>				
Sp. Cond. (mS/cm)	<u>0.025</u>	<u>0.017</u>	<u>0.014</u>	<u>0.013</u>	<u>0.012</u>	<u>0.013</u>	<u>0.013</u>				
Water Temp. (°C)	<u>24.38</u>	<u>24.57</u>	<u>25.01</u>	<u>25.31</u>	<u>25.33</u>	<u>25.35</u>	<u>25.41</u>				
Turbidity (NTUs)	<u>35.26</u>	<u>11.80</u>	<u>9.09</u>	<u>3.31</u>	<u>2.51</u>	<u>1.39</u>	<u>0.91</u>				
DO - (mg/L)	<u>7.30</u>	<u>7.80</u>	<u>7.65</u>	<u>7.68</u>	<u>7.62</u>	<u>7.65</u>	<u>7.60</u>				
Salinity (ppt)	<u>0.01</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>				
ORP (mV)	<u>238.7</u>	<u>294.9</u>	<u>323.7</u>	<u>355.0</u>	<u>354.0</u>	<u>357.6</u>	<u>360.1</u>				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 6 of 7

Date (mo/day/yr)	Oct 24, 2016		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-8		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	clear sunny		
Air Temperature	78 ° F		
Total Well Depth (TWD) =	20.00	1/100 ft	
Depth to Ground Water (DGW) =	10.58	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	9.42	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	1.53 gal
3 Casing Volumes =	4.60	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	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: 1552		
Sample Analytes:	VOC'S		
Hack Fe Kit:	0.12 mg/L		

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

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

VOLUME PURGED (gallons)	FIELD ANALYSES						
	Initial	1.40	1.80	1.20	1.60	2.0	2.4
TIME (Military)	1520	1525	1530	1535	1540	1545	1550
Water Level (ft BTOC)	10.83	11.11	11.26	11.36	11.45	11.52	11.53
pH (S.U.)	3.95	4.13	4.06	3.92	3.99	3.96	3.95
Sp. Cond. (mS/cm)	0.072	0.077	0.078	0.076	0.078	0.076	0.075
Water Temp. (°C)	28.75	28.79	28.75	28.70	28.64	28.60	28.50
Turbidity (NTUs)	2.50	3.67	4.49	4.42	5.31	3.04	2.77
DO - (mg/L)	3.64	4.13	3.87	3.99	3.81	3.70	3.73
Salinity (ppt)	0.03	0.03	0.04	0.03	0.03	0.03	0.03
ORP (mV)	253.6	262.3	274.8	284.8	293.8	303.6	308.9

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/26/16</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-9</u>		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>50.5</u>	° F	
Total Well Depth (TWD) =	<u>20.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>5.60</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>14.4</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>2.35</u> gal
3 Casing Volumes =	<u>7.05</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>2.45</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>143.89</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.22</u>	1/100 ft
Land Surface Elevation	<u>144.11</u>	1/100 ft
Screened Interval	<u>5</u> - <u>20</u>	1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW ☒ MODERATE _____ HIGH _____	
Comments/Observations		
Sample Time:	<u>1115</u>	
Sample Analytes:	<u>VOC'S</u> <u>MS/MSD</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	0.35	0.70	1.05	1.40	1.75	2.10	2.45		
VOLUME PURGED (gallons)										
TIME (Military)	1036	1041	1046	1051	1056	1101	1106	1111		
Water Level (ft BTOC)	6.28	6.45	6.61	6.71	6.71	6.86	6.90	6.94		
pH (S.U.)	4.76	3.94	3.91	3.93	4.04	4.07	4.04	4.05		
Sp. Cond. (mS/cm)	0.028	0.026	0.026	0.026	0.027	0.027	0.027	0.027		
Water Temp. (°C)	18.91	19.93	20.14	20.25	20.36	20.39	20.42	20.45		
Turbidity (NTUs)	8.58	6.01	5.78	5.69	5.80	4.78	4.50	4.28		
DO - (mg/L)	2.98	2.34	2.28	2.24	2.26	2.28	2.31	2.31		
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
ORP (mV)	263.2	323.0	349.1	370.9	375.3	371.3	381.4	380.1		

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/26/16</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-9D</u>
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐	
Weather Conditions	<u>Clear</u>
Air Temperature	<u>50's</u> °F
Total Well Depth (TWD) =	<u>49.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>9.43</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>39.57</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>6.45</u> gal
3 Casing Volumes =	<u>19.35</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>144.20</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.60</u> 1/100 ft
Land Surface Elevation	<u>144.80</u> 1/100 ft
Screened Interval	<u>44</u> - <u>49</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒ Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☐ MODERATE ☒ HIGH ☐
Comments/Observations	<u>Sample Time: 1025</u>
	<u>Sample Analytes: VOC'S</u>
	<u>Hack Fe Kit: NA</u> mg/L

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

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

	FIELD ANALYSES										
	Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8			
VOLUME PURGED (gallons)											
TIME (Military)	0947	0952	0957	1002	1007	1012	1017	1022			
Water Level (ft BTOC)	9.61	9.61	9.61	9.61	9.61	9.61	9.61	9.61			
pH (S.U.)	6.15	7.03	7.33	7.48	7.50	7.53	7.53	7.55			
Sp. Cond. (mS/cm)	0.183	0.188	0.188	0.188	0.188	0.187	0.187	0.187			
Water Temp. (°C)	19.01	19.19	19.22	19.21	19.20	19.23	19.22	19.22			
Turbidity (NTUs)	6.16	1.21	0.10	0.00	0.00	0.00	0.00	0.00			
DO - (mg/L)	2.77	0.38	0.23	0.20	0.20	0.18	0.18	0.16			
Salinity (ppt)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09			
ORP (mV)	161.0	-5.4	-63.7	-88.1	-92.5	-101.2	-104.5	-102.4			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>10/25/16</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-10</u> _____ Upgradient <u>X</u> Downgradient _____ Sidegradient _____ Source _____ Weather Conditions <u>clear</u> Air Temperature <u>70's</u> ° F Total Well Depth (TWD) = <u>18.00</u> 1/100 ft Depth to Ground Water (DGW) = <u>4.06</u> 1/100 ft Length of Water Column (LWC) = TWD - DGW = <u>13.94</u> 1/100 ft 1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.27</u> gal 3 Casing Volumes = <u>6.81</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>142.19</u> 1/100 ft Height of Riser (above land surface) <u>-0.37</u> 1/100 ft Land Surface Elevation <u>142.56</u> 1/100 ft Screened Interval <u>3</u> - <u>18</u> 1/100 ft Dedicated Pump or Bailer YES _____ NO <u>✓</u> Type _____ Steel Guard Pipe Around Casing YES <u>✓</u> NO _____ Locking Cap YES <u>✓</u> NO _____ Protective Post/Abutment YES _____ NO <u>✓</u> Well Integrity Satisfactory YES <u>✓</u> NO _____ Yield LOW _____ MODERATE <u>✓</u> HIGH _____ Comments/Observations _____ Sample Time: <u>1415</u> Sample Analytes: <u>VOC'S</u> Hack Fe Kit: <u>NA</u> mg/L
---	--

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

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

	FIELD ANALYSES							
	Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8
VOLUME PURGED (gallons)								
TIME (Military)	<u>1337</u>	<u>1342</u>	<u>1347</u>	<u>1352</u>	<u>1357</u>	<u>1402</u>	<u>1407</u>	<u>1412</u>
Water Level (ft BTOW)	<u>4.43</u>	<u>4.46</u>	<u>4.48</u>	<u>4.50</u>	<u>4.51</u>	<u>4.52</u>	<u>4.53</u>	<u>4.54</u>
pH (S.U.)	<u>5.00</u>	<u>4.69</u>	<u>4.02</u>	<u>4.05</u>	<u>4.03</u>	<u>3.92</u>	<u>3.94</u>	<u>3.93</u>
Sp. Cond. (mS/cm)	<u>0.041</u>	<u>0.037</u>	<u>0.033</u>	<u>0.028</u>	<u>0.026</u>	<u>0.025</u>	<u>0.024</u>	<u>0.024</u>
Water Temp. (°C)	<u>20.76</u>	<u>20.77</u>	<u>20.88</u>	<u>21.00</u>	<u>21.06</u>	<u>21.11</u>	<u>21.10</u>	<u>21.10</u>
Turbidity (NTUs)	<u>6.23</u>	<u>6.71</u>	<u>6.84</u>	<u>5.77</u>	<u>5.21</u>	<u>4.53</u>	<u>3.90</u>	<u>3.72</u>
DO - (mg/L)	<u>0.71</u>	<u>0.37</u>	<u>0.34</u>	<u>0.27</u>	<u>0.38</u>	<u>0.60</u>	<u>0.74</u>	<u>0.85</u>
Salinity (ppt)	<u>0.02</u>	<u>0.02</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>
ORP (mV)	<u>122.1</u>	<u>156.0</u>	<u>195.8</u>	<u>192.3</u>	<u>198.3</u>	<u>203.4</u>	<u>198.5</u>	<u>198.7</u>

COMMENTS/OBSERVATIONS _____



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>10/25/16</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>141.79</u> 1/100 ft
AECOM Job # <u>60314964</u>	Height of Riser (above land surface) <u>-0.29</u> 1/100 ft
Sample ID* <u>MW-10D</u>	Land Surface Elevation <u>142.08</u> 1/100 ft
<u> </u> Upgradient <u>X</u> Downgradient <u> </u> Sidegradient <u> </u> Source <u> </u>	Screened Interval <u>43</u> - <u>48</u> 1/100 ft
Weather Conditions <u>Clear</u>	Dedicated Pump or Bailer YES <u> </u> NO <u>✓</u> Type <u> </u>
Air Temperature <u>70.5</u> ° F	Steel Guard Pipe Around Casing YES <u>✓</u> NO <u> </u>
Total Well Depth (TWD) = <u>48.00</u> 1/100 ft	Locking Cap YES <u>✓</u> NO <u> </u>
Depth to Ground Water (DGW) = <u>7.27</u> 1/100 ft	Protective Post/Abutment YES <u> </u> NO <u>✓</u>
Length of Water Column (LWC) = TWD - DGW = <u>40.73</u> 1/100 ft	Well Integrity Satisfactory YES <u>✓</u> NO <u> </u>
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.64</u> gal	Yield LOW <u> </u> MODERATE <u>X</u> HIGH <u> </u>
3 Casing Volumes = <u>19.92</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>1330</u>
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>	Sample Analytes: <u>VOC'S</u>
Total Volume of Water Removed <u> </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).

VOLUME PURGED (gallons)	FIELD ANALYSES									
	Initial									
TIME (Military)	1300	1305	1310	1315	1320	1325				
Water Level (ft BTOC)	7.41	7.41	7.41	7.41	7.41	7.41				
pH (S.U.)	7.69	7.65	7.62	7.61	7.62	7.63				
Sp. Cond. (mS/cm)	0.197	0.196	0.196	0.196	0.196	0.196				
Water Temp. (°C)	20.30	19.69	19.71	19.72	19.72	19.72				
Turbidity (NTUs)	7.25	4.28	3.76	3.53	3.21	3.07				
DO - (mg/L)	6.95	4.23	4.05	4.02	3.99	3.96				
Salinity (ppt)	0.09	0.09	0.09	0.09	0.09	0.09				
ORP (mV)	119.7	114.5	113.1	109.6	108.8	107.1				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/25/16</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-11</u>		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>Clear</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>6.95</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>11.05</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>1.80</u>	gal	
3 Casing Volumes =	<u>5.40</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>2.00</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>143.16</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.61</u>	1/100 ft
Land Surface Elevation	<u>143.77</u>	1/100 ft
Screened Interval	<u>3 - 18</u>	1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW _____ MODERATE _____ HIGH ☒	
Comments/Observations		
Sample Time:	<u>0850</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>0.60</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)	<u>0824</u>	<u>0829</u>	<u>0834</u>	<u>0839</u>	<u>0844</u>	<u>0849</u>					
Water Level (ft BTOW)	<u>7.38</u>	<u>7.45</u>	<u>7.50</u>	<u>7.54</u>	<u>7.56</u>	<u>7.58</u>					
pH (S.U.)	<u>5.15</u>	<u>5.10</u>	<u>5.09</u>	<u>5.01</u>	<u>4.99</u>	<u>5.01</u>					
Sp. Cond. (mS/cm)	<u>0.226</u>	<u>0.217</u>	<u>0.218</u>	<u>0.219</u>	<u>0.215</u>	<u>0.212</u>					
Water Temp. (°C)	<u>18.14</u>	<u>18.84</u>	<u>19.22</u>	<u>19.38</u>	<u>19.43</u>	<u>19.49</u>					
Turbidity (NTUs)	<u>35.88</u>	<u>83.78</u>	<u>31.47</u>	<u>39.24</u>	<u>29.20</u>	<u>23.42</u>					
DO - (mg/L)	<u>3.64</u>	<u>0.43</u>	<u>0.52</u>	<u>0.44</u>	<u>0.40</u>	<u>0.46</u>					
Salinity (ppt)	<u>0.11</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>					
ORP (mV)	<u>120.6</u>	<u>94.2</u>	<u>92.0</u>	<u>90.9</u>	<u>100.1</u>	<u>104.5</u>					

COMMENTS/OBSERVATIONS _____



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	Oct 25, 2016		
Field Personnel	Randy Mergo		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-12D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	clear / sunny		
Air Temperature	71 ° F		
Total Well Depth (TWD) =	50.00	1/100 ft	
Depth to Ground Water (DGW) =	13.54	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	36.46	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	= 5.94	gal	
3 Casing Volumes =	17.82	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	6.0	gal	
Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation	147.65	1/100 ft	
Height of Riser (above land surface)	-0.21	1/100 ft	
Land Surface Elevation	147.86	1/100 ft	
Screened Interval	40 - 50	1/100 ft	
Dedicated Pump or Bailor	YES ☐ NO ☒	Type	
Steel Guard Pipe Around Casing	YES ☒ NO ☐		
Locking Cap	YES ☒ NO ☐		
Protective Post/Abutment	YES ☐ NO ☒		
Well Integrity Satisfactory	YES ☒ NO ☐		
Yield	LOW ☐ MODERATE ☒ HIGH ☐		
Comments/Observations	Sample Time: 1417		
	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									
	Initial	1.80	1.60	2.40	3.20	4.0	4.80	5.20	5.60	6.0
VOLUME PURGED (gallons)		1.80	1.60	2.40	3.20	4.0	4.80	5.20	5.60	6.0
TIME (Military)	1300	1310	1320	1330	1340	1350	1400	1405	1410	1415
Water Level (ft BTOC)	14.58	15.93	16.84	17.13	16.98	17.05	17.13	17.16	17.16	17.16
pH (S.U.)	11.58	10.65	10.51	10.15	9.70	9.31	9.08	9.00	9.02	9.01
Sp. Cond. (mS/cm)	0.905	0.779	0.605	0.328	0.246	0.225	0.221	0.220	0.220	0.220
Water Temp. (°C)	19.54	19.14	19.07	18.99	19.04	18.93	18.92	18.87	18.90	18.89
Turbidity (NTUs)	20.48	4.43	2.10	3.73	2.63	1.46	1.56	0.39	0.73	0.41
DO - (mg/L)	4.17	4.17	4.31	4.36	4.43	4.60	4.65	4.63	4.65	4.65
Salinity (ppt)	0.44	0.38	0.29	0.15	0.12	0.11	0.10	0.10	0.10	0.10
ORP (mV)	27.6	52.7	39.1	33.1	35.3	37.8	38.3	37.3	35.3	34.4

COMMENTS/OBSERVATIONS

take readings every 10 minutes until 5 gals removed
Ph and Conductivity are high stabilize after 5 gals

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>Oct 25 2016</u>		Casing Diameter <u>2.0</u> inches
Field Personnel <u>Randy Morge</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>clear / sunny</u>		Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>
Air Temperature <u>72</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>122.5</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒
Length of Water Column (LWC) = TWD - DGW = <u>37.75</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐
1 Casing Volume (OCV)* = LWC x 0.163 = <u>6.15</u> gal		Yield LOW ☐ MODERATE ☐ HIGH ☒
3 Casing Volumes = <u>18.45</u> gal = Standard Evacuation Volume		Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1547</u>
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC'S</u>
Total Volume of Water Removed <u>3.60</u> gal		Hack Fe Kit: <u>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	.80	1.60	2.40	2.80	3.20	3.60				
VOLUME PURGED (gallons)											
TIME (Military)	1500	1510	1520	1530	1535	1540	1545				
Water Level (ft BTOW)	12.34	12.34	12.34	12.34	12.34	12.34	12.34				
pH (S.U.)	9.32	7.91	7.37	7.32	7.31	7.32	7.31				
Sp. Cond. (mS/cm)	0.165	0.186	0.208	0.214	0.217	0.217	0.218				
Water Temp. (°C)	20.08	19.78	19.73	19.71	19.71	19.67	19.69				
Turbidity (NTUs)	39.14	15.33	7.01	4.96	3.31	2.72	2.37				
DO - (mg/L)	2.79	3.43	4.07	4.25	4.34	4.38	4.40				
Salinity (ppt)	0.08	0.09	0.10	0.10	0.10	0.10	0.10				
ORP (mV)	63.8	101.6	100.6	96.4	93.5	93.2	93.2				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 26, 2016</u>		
Field Personnel	<u>Randy M. [Signature]</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-14		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>Clear Sunny</u>		
Air Temperature	<u>68</u>	° F	
Total Well Depth (TWD) =	<u>20.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.22</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>8.78</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>1.43</u>	gal	
3 Casing Volumes =	<u>4.29</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>3.20</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	PVC		
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 _____	
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: 1227</u> <u>Sample Analytes: VOC'S</u> <u>Hack Fe Kit: N/A mg/L</u>		

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

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

	FIELD ANALYSES									
	Initial	<u>1.45</u>	<u>.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.30</u>	<u>2.60</u>	<u>2.90</u>	<u>3.20</u>
VOLUME PURGED (gallons)	<u>11.40</u>	<u>12.32</u>	<u>11.50</u>	<u>11.55</u>	<u>12.00</u>	<u>12.05</u>	<u>12.10</u>	<u>12.15</u>	<u>12.20</u>	<u>12.25</u>
TIME (Military)	<u>11.80</u>	<u>12.32</u>	<u>12.71</u>	<u>13.19</u>	<u>13.24</u>	<u>14.05</u>	<u>14.52</u>	<u>14.90</u>	<u>15.18</u>	<u>15.30</u>
Water Level (ft BTOC)	<u>4.36</u>	<u>4.05</u>	<u>4.00</u>	<u>3.94</u>	<u>3.98</u>	<u>3.95</u>	<u>3.88</u>	<u>3.64</u>	<u>3.82</u>	<u>3.75</u>
pH (S.U.)	<u>0.025</u>	<u>0.023</u>	<u>0.023</u>	<u>0.023</u>	<u>0.024</u>	<u>0.025</u>	<u>0.024</u>	<u>0.023</u>	<u>0.023</u>	<u>0.023</u>
Sp. Cond. (mS/cm)	<u>22.86</u>	<u>23.29</u>	<u>23.35</u>	<u>23.34</u>	<u>23.32</u>	<u>23.24</u>	<u>23.14</u>	<u>23.00</u>	<u>22.91</u>	<u>22.83</u>
Water Temp. (°C)	<u>6.90</u>	<u>6.48</u>	<u>6.24</u>	<u>6.11</u>	<u>6.10</u>	<u>6.20</u>	<u>6.62</u>	<u>6.85</u>	<u>6.84</u>	<u>7.61</u>
Turbidity (NTUs)	<u>6.27</u>	<u>6.11</u>	<u>6.13</u>	<u>6.05</u>	<u>5.91</u>	<u>5.81</u>	<u>5.89</u>	<u>5.90</u>	<u>5.90</u>	<u>5.79</u>
DO - (mg/L)	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>
Salinity (ppt)	<u>217.0</u>	<u>240.8</u>	<u>253.9</u>	<u>265.6</u>	<u>267.5</u>	<u>270.9</u>	<u>281.2</u>	<u>299.7</u>	<u>289.1</u>	<u>304.9</u>
ORP (mV)										

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 26, 2016</u>		
Field Personnel	<u>Randy Meyer</u>		
Site Name	<u>UTC Delavan Spray Technologies Site</u>		
AECOM Job #	<u>60314964</u>		
Sample ID*	<u>MW-14D</u>		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>Clear / sunny</u>		
Air Temperature _____ ° F	<u>70</u>		
Total Well Depth (TWD) = _____ 1/100 ft	<u>50.00</u>		
Depth to Ground Water (DGW) = _____ 1/100 ft	<u>12.93</u>		
Length of Water Column (LWC) = TWD - DGW = _____ 1/100 ft	<u>37.07</u>		
1 Casing Volume (OCV)* = LWC x _____ gal	<u>0.163 = 6.04</u>		
3 Casing Volumes = _____ gal = Standard Evacuation Volume	<u>18.12</u>		
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 _____ gal	<u>2.4</u>		
Casing Diameter _____ inches	<u>2.0</u>		
Casing Material _____	<u>PVC</u>		
Measuring Point Elevation _____ 1/100 ft	<u>146.88</u>		
Height of Riser (above land surface) _____ 1/100 ft	<u>-0.23</u>		
Land Surface Elevation _____ 1/100 ft	<u>147.11</u>		
Screened Interval _____ 1/100 ft	<u>40 - 50</u>		
Dedicated Pump or Bailer YES _____ NO ☒ Type _____			
Steel Guard Pipe Around Casing YES ☒ NO _____			
Locking Cap YES ☒ NO _____			
Protective Post/Abutment YES _____ NO ☒			
Well Integrity Satisfactory YES ☒ NO _____			
Yield LOW _____ MODERATE _____ HIGH ☒			
Comments/Observations	<u>1302</u>		
Sample Time: _____			
Sample Analytes: _____	<u>VOC's also dup</u>		
Hack Fe Kit: _____ mg/L	<u>N/A</u>		

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

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

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	.40	.80	1.20	1.60	2.0	2.4				
TIME (Military)	1235	1240	1245	1250	1300	1305	1310				
Water Level (ft BTOC)	13.08	13.06	13.06	13.06	13.06	13.06	13.06				
pH (S.U.)	7.74	6.42	6.26	6.23	6.36	6.47	6.56				
Sp. Cond. (mS/cm)	0.214	0.237	0.237	0.237	0.237	0.237	0.237				
Water Temp. (°C)	21.36	21.04	20.95	20.93	20.94	20.98	20.87				
Turbidity (NTUs)	70.13	20.09	13.61	11.63	7.93	7.82	5.41				
DO - (mg/L)	1.39	0.68	0.61	0.58	0.53	0.53	0.50				
Salinity (ppt)	0.10	0.10	0.10	0.10	0.10	0.10	0.10				
ORP (mV)	279.0	280.6	270.1	257.6	221.6	210.5	215.8				

COMMENTS/OBSERVATIONS _____

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>Oct 25, 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>135.73</u> 1/100 ft
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.40</u> 1/100 ft
Sample ID* <u>MW-15</u>		Land Surface Elevation <u>136.13</u> 1/100 ft
<u> </u> Upgradient <u>X</u> Downgradient <u> </u> Sidegradient <u> </u> Source <u> </u>		Screened Interval <u>4</u> - <u>19</u> 1/100 ft
Weather Conditions <u>clear / sunny</u>		Dedicated Pump or Bailer YES <u> </u> NO <u>X</u> Type <u> </u>
Air Temperature <u>63</u> ° F		Steel Guard Pipe Around Casing YES <u>X</u> NO <u> </u>
Total Well Depth (TWD) = <u>19.00</u> 1/100 ft		Locking Cap YES <u>X</u> NO <u> </u>
Depth to Ground Water (DGW) = <u>3.14</u> 1/100 ft		Protective Post/Abutment YES <u> </u> NO <u>X</u>
Length of Water Column (LWC) = TWD - DGW = <u>15.86</u> 1/100 ft		Well Integrity Satisfactory YES <u>X</u> NO <u> </u>
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.58</u> gal		Yield LOW <u> </u> MODERATE <u> </u> HIGH <u>X</u>
3 Casing Volumes = <u>7.75</u> gal = Standard Evacuation Volume		Comments/Observations <u>1045</u>
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1045</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>2.8</u> gal		Hack Fe Kit: <u>1.07</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) = $\pi \cdot r^2 \cdot h$ (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	2.8		
VOLUME PURGED (gallons)	1008	1013	1018	1023	1028	1033	1038	1043		
TIME (Military)	3.42	3.55	3.61	3.67	3.69	3.70	3.70	3.71		
Water Level (ft BTOW)	4.54	4.58	4.56	4.59	4.55	4.59	4.61	4.62		
pH (S.U.)	0.518	0.502	0.486	0.441	0.413	0.406	0.396	0.390		
Sp. Cond. (mS/cm)	19.99	20.65	20.77	20.94	21.03	21.02	21.04	21.12		
Water Temp. (°C)	148.2	33.31	35.43	32.72	17.61	8.30	7.77	7.97		
Turbidity (NTUs)	0.54	0.50	0.47	0.33	0.29	0.26	0.25	0.23		
DO - (mg/L)	0.25	0.24	0.23	0.21	0.20	0.19	0.19	0.18		
Salinity (ppt)	135.0	121.7	131.1	163.4	181.6	171.2	162.9	156.8		
ORP (mV)										

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 25, 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>Clear / Sunny</u>
Air Temperature	<u>64</u> ° F
Total Well Depth (TWD) =	<u>45.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>2.19</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>42.81</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>6.97</u> gal
3 Casing Volumes =	<u>20.93</u> gal = Standard Evacuation Volume
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>
Total Volume of Water Removed	<u>2.0</u> gal

Casing Diameter	<u>2.0</u> inches
Casing Material	<u>PVC</u>
Measuring Point Elevation	<u>135.59</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.34</u> 1/100 ft
Land Surface Elevation	<u>135.93</u> 1/100 ft
Screened Interval	<u>35</u> - <u>45</u> 1/100 ft
Dedicated Pump or 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>1117</u>
Sample Time:	<u>1100</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	1.40	1.80	1.20	1.60	2.0					
VOLUME PURGED (gallons)	1050	1053	1100	1105	1110	1115					
TIME (Military)	2.24	2.24	2.24	2.24	2.24	2.24					
Water Level (ft BTOC)	6.66	6.61	6.47	6.48	6.54	6.59					
pH (S.U.)	0.433	0.437	0.438	0.438	0.438	0.438					
Sp. Cond. (mS/cm)	19.52	19.29	19.22	19.20	19.13	19.12					
Water Temp. (°C)	10.21	9.97	6.31	3.84	2.07	4.94					
Turbidity (NTUs)	1.96	2.15	2.20	2.18	2.17	2.16					
DO - (mg/L)	0.21	0.21	0.21	0.21	0.21	0.21					
Salinity (ppt)	41.6	33.3	49.0	53.2	56.7	58.8					
ORP (mV)											

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 25, 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>Clear / Sunny</u>
Air Temperature	<u>64</u> °F
Total Well Depth (TWD) =	<u>85.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>2.30</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>82.70</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 =	<u>13.48</u> gal
3 Casing Volumes =	<u>40.44</u> gal = Standard Evacuation Volume
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>
Total Volume of Water Removed	<u>2.0</u> gal
Casing Diameter	<u>2.0</u> inches
Casing Material	<u>PVC</u>
Measuring Point Elevation	<u>135.69</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.25</u> 1/100 ft
Land Surface Elevation	<u>135.94</u> 1/100 ft
Screened Interval	<u>75</u> - <u>85</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒ Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☐ MODERATE ☐ HIGH ☒
Comments/Observations	
Sample Time:	<u>1152</u>
Sample Analytes:	<u>VOC'S</u>
Hack Fe Kit:	<u>MA</u> mg/L

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

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

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	1.00	1.20	1.60	2.0						
TIME (Military)	<u>1125</u>	<u>1135</u>	<u>1140</u>	<u>1145</u>	<u>1150</u>						
Water Level (ft BTOW)	<u>2.47</u>	<u>2.45</u>	<u>2.45</u>	<u>2.45</u>	<u>2.45</u>						
pH (S.U.)	<u>7.03</u>	<u>7.14</u>	<u>7.18</u>	<u>7.20</u>	<u>7.23</u>						
Sp. Cond. (mS/cm)	<u>0.207</u>	<u>0.202</u>	<u>0.203</u>	<u>0.204</u>	<u>0.205</u>						
Water Temp. (°C)	<u>19.09</u>	<u>19.07</u>	<u>19.08</u>	<u>19.07</u>	<u>19.14</u>						
Turbidity (NTUs)	<u>5.76</u>	<u>2.75</u>	<u>2.21</u>	<u>2.30</u>	<u>1.98</u>						
DO - (mg/L)	<u>0.30</u>	<u>0.13</u>	<u>0.14</u>	<u>0.15</u>	<u>0.16</u>						
Salinity (ppt)	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>						
ORP (mV)	<u>-30.3</u>	<u>-86.5</u>	<u>-92.4</u>	<u>-95.1</u>	<u>-96.8</u>						

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	Oct 25, 2016		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-16		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	Clear / Sunny		
Air Temperature	56	° F	
Total Well Depth (TWD) =	19.00	1/100 ft	
Depth to Ground Water (DGW) =	3.80	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	15.20	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	2.47 gal
3 Casing Volumes =	7.43	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	138.30	1/100 ft	
Height of Riser (above land surface)	-0.44	1/100 ft	
Land Surface Elevation	138.74	1/100 ft	
Screened Interval	4 - 19	1/100 ft	
Dedicated Pump or 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	0850		
Sample Time:	0850		
Sample Analytes:	VOC'S		
Hack Fe Kit	0.72	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	1.80	1.20	1.60	2.0	2.4
VOLUME PURGED (gallons)	08/8	0823	0825	0833	0835	0843	0848
TIME (Military)	4.18	4.28	4.38	4.40	4.46	4.49	4.51
Water Level (ft BTOC)	3.15	3.85	4.09	3.93	3.80	3.83	3.85
pH (S.U.)	0.027	0.026	0.026	0.026	0.026	0.026	0.026
Sp. Cond. (mS/cm)	18.37	19.41	19.48	19.50	19.53	19.57	19.50
Water Temp. (°C)	27.33	26.14	9.59	10.62	6.99	6.62	6.81
Turbidity (NTUs)	0.81	1.06	0.86	0.52	0.39	0.38	0.35
DO - (mg/L)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Salinity (ppt)	270.4	232.5	225.9	226.3	222.3	221.7	220.2
ORP (mV)							

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>Oct 25, 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-16D</u>
Upgradient ☒ Downgradient ☐ Sidegradient ☐ Source ☐	
Weather Conditions	<u>clear / sunny</u>
Air Temperature	<u>60</u> ° F
Total Well Depth (TWD) =	<u>45.00</u> 1/100 ft
Depth to Ground Water (DGW) =	<u>5.04</u> 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	<u>39.96</u> 1/100 ft
1 Casing Volume (OCV)* = LWC x	<u>0.163</u> = <u>6.51</u> gal
3 Casing Volumes =	<u>19.54</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>2.0</u> gal
Casing Diameter	<u>2.0</u> inches
Casing Material	<u>PVC</u>
Measuring Point Elevation	<u>138.38</u> 1/100 ft
Height of Riser (above land surface)	<u>-0.32</u> 1/100 ft
Land Surface Elevation	<u>138.70</u> 1/100 ft
Screened Interval	<u>35</u> - <u>45</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐ NO ☒ Type <u> </u>
Steel Guard Pipe Around Casing	YES ☒ NO ☐
Locking Cap	YES ☒ NO ☐
Protective Post/Abutment	YES ☐ NO ☒
Well Integrity Satisfactory	YES ☒ NO ☐
Yield	LOW ☐ MODERATE ☐ HIGH ☒
Comments/Observations	<u>Sample Time: 0935</u> <u>Sample Analytes: VOC'S</u> <u>Hack Fe Kit: 0.00 mg/L</u>

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

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

	FIELD ANALYSES										
	Initial	1.40	1.80	1.20	1.60	2.0					
VOLUME PURGED (gallons)	0908	0913	0918	0923	0928	0933					
TIME (Military)	5.12	5.12	5.12	5.13	5.13	5.13					
Water Level (ft BTOC)	6.08	6.64	6.83	6.91	6.96	6.99					
pH (S.U.)	0.277	0.282	0.282	0.282	0.282	0.282					
Sp. Cond. (mS/cm)	18.39	18.44	18.38	18.41	18.38	18.33					
Water Temp. (°C)	70.72	9.72	6.86	4.49	3.21	2.60					
Turbidity (NTUs)	4.52	4.27	4.22	4.22	4.21	4.18					
DO - (mg/L)	0.13	0.13	0.13	0.13	0.13	0.13					
Salinity (ppt)	206.7	179.9	171.7	169.0	168.1	167.8					
ORP (mV)											

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/26/16</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-17</u>		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>40'S</u>	° F	
Total Well Depth (TWD) =	<u>28.40</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>2.96</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>25.44</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>4.15</u> gal
3 Casing Volumes =	<u>12.45</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.4</u>	gal	

Casing Diameter	<u>2.0</u>	inches
Casing Material	<u>PVC</u>	
Measuring Point Elevation	<u>141.66</u>	1/100 ft
Height of Riser (above land surface)	<u>-0.05</u>	1/100 ft
Land Surface Elevation	<u>141.71</u>	1/100 ft
Screened Interval	<u>13 - 28</u>	1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW _____ MODERATE _____ HIGH ☒	
Comments/Observations		
Sample Time:	<u>0845</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>NA</u> mg/L	

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

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

	FIELD ANALYSES										
	Initial	0.4	0.8	1.2	1.6	2.0	2.4				
VOLUME PURGED (gallons)											
TIME (Military)	<u>0810</u>	<u>0815</u>	<u>0820</u>	<u>0825</u>	<u>0830</u>	<u>0835</u>	<u>0840</u>				
Water Level (ft BTOC)	<u>3.93</u>	<u>4.00</u>	<u>4.06</u>	<u>4.10</u>	<u>4.14</u>	<u>4.15</u>	<u>4.15</u>				
pH (S.U.)	<u>3.43</u>	<u>3.92</u>	<u>3.98</u>	<u>4.02</u>	<u>4.04</u>	<u>4.04</u>	<u>4.05</u>				
Sp. Cond. (mS/cm)	<u>0.113</u>	<u>0.113</u>	<u>0.113</u>	<u>0.113</u>	<u>0.114</u>	<u>0.114</u>	<u>0.114</u>				
Water Temp. (°C)	<u>16.80</u>	<u>17.48</u>	<u>17.59</u>	<u>17.67</u>	<u>17.69</u>	<u>17.72</u>	<u>17.77</u>				
Turbidity (NTUs)	<u>8.00</u>	<u>4.07</u>	<u>3.68</u>	<u>2.97</u>	<u>2.16</u>	<u>2.07</u>	<u>2.15</u>				
DO - (mg/L)	<u>2.78</u>	<u>1.53</u>	<u>1.51</u>	<u>1.51</u>	<u>1.47</u>	<u>1.45</u>	<u>1.46</u>				
Salinity (ppt)	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>	<u>0.05</u>				
ORP (mV)	<u>358.2</u>	<u>341.3</u>	<u>345.3</u>	<u>352.3</u>	<u>352.9</u>	<u>359.1</u>	<u>362.4</u>				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>10/26/16</u>	Casing Diameter <u>2.0</u> inches
Field Personnel <u>JB Mer</u>	Casing Material <u>PVC</u>
Site Name <u>UTC Delavan Spray Technologies Site</u>	Measuring Point Elevation <u>145.41</u> 1/100 ft
AECOM Job # <u>60314964</u>	Height of Riser (above land surface) <u>-0.05</u> 1/100 ft
Sample ID* <u>MW-18</u>	Land Surface Elevation <u>145.46</u> 1/100 ft
<u> </u> Upgradient <u>X</u> Downgradient <u> </u> Sidegradient <u> </u> Source <u> </u>	Screened Interval <u>11</u> - <u>26</u> 1/100 ft
Weather Conditions <u>clear</u>	Dedicated Pump or Bailer YES <u> </u> NO <u>✓</u> Type <u> </u>
Air Temperature <u>40.5</u> ° F	Steel Guard Pipe Around Casing YES <u>✓</u> NO <u> </u>
Total Well Depth (TWD) = <u>26.40</u> 1/100 ft	Locking Cap YES <u>✓</u> NO <u> </u>
Depth to Ground Water (DGW) = <u>9.96</u> 1/100 ft	Protective Post/Abutment YES <u> </u> NO <u>✓</u>
Length of Water Column (LWC) = TWD - DGW = <u>16.44</u> 1/100 ft	Well Integrity Satisfactory YES <u>✓</u> NO <u> </u>
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.68</u> gal	Yield LOW <u> </u> MODERATE <u> </u> HIGH <u>X</u>
3 Casing Volumes = <u>8.04</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>0935</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>2.80</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).

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	0.40	0.80	1.20	1.60	2.00	2.40	2.80			
TIME (Military)	0855	0900	0905	0910	0915	0920	0925	0930			
Water Level (ft BTOW)	10.22	10.22	10.22	10.22	10.22	10.22	10.22	10.22			
pH (S.U.)	3.67	4.02	4.05	3.95	3.95	4.05	4.04	4.06			
Sp. Cond. (mS/cm)	0.042	0.040	0.040	0.040	0.040	0.040	0.040	0.040			
Water Temp. (°C)	19.67	20.34	20.47	20.39	20.45	20.62	20.67	20.60			
Turbidity (NTUs)	1.94	0.97	0.13	0.00	0.00	0.00	0.00	0.00			
DO - (mg/L)	3.62	3.43	3.20	3.13	3.07	3.11	3.02	3.10			
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02			
ORP (mV)	373.4	372.4	374.9	386.8	390.4	389.0	390.0	394.4			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/24/16</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 _____ X Source			
Weather Conditions	<u>Clear</u>		
Air Temperature	<u>80.3</u>	° F	
Total Well Depth (TWD) =	<u>20.15</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>11.30</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>8.85</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x _____ 0.041 =	<u>0.36</u>	gal	
3 Casing Volumes =	<u>1.09</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>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 - 20</u>	1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____
Steel Guard Pipe Around Casing	YES ☒ NO _____	
Locking Cap	YES ☒ NO _____	
Protective Post/Abutment	YES _____ NO ☒	
Well Integrity Satisfactory	YES ☒ NO _____	
Yield	LOW ☒ MODERATE _____ HIGH _____	
Comments/Observations		
Sample Time:	<u>1555</u>	
Sample Analytes:	<u>VOC'S</u>	
Hack Fe Kit:	<u>0.04</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	0.4	0.8	1.2	1.6	2.0	2.4	2.8			
VOLUME PURGED (gallons)											
TIME (Military)	<u>1515</u>	<u>1520</u>	<u>1525</u>	<u>1530</u>	<u>1535</u>	<u>1540</u>	<u>1545</u>	<u>1550</u>			
Water Level (ft BTOW)	<u>12.40</u>	<u>12.59</u>	<u>12.67</u>	<u>12.70</u>	<u>12.70</u>	<u>12.71</u>	<u>12.71</u>	<u>12.71</u>			
pH (S.U.)	<u>4.02</u>	<u>4.15</u>	<u>4.16</u>	<u>4.13</u>	<u>4.08</u>	<u>3.54</u>	<u>3.54</u>	<u>3.51</u>			
Sp. Cond. (mS/cm)	<u>0.087</u>	<u>0.089</u>	<u>0.088</u>	<u>0.086</u>	<u>0.086</u>	<u>0.086</u>	<u>0.087</u>	<u>0.088</u>			
Water Temp. (°C)	<u>22.09</u>	<u>21.99</u>	<u>21.93</u>	<u>21.91</u>	<u>21.90</u>	<u>21.90</u>	<u>21.88</u>	<u>21.88</u>			
Turbidity (NTUs)	<u>6.97</u>	<u>9.13</u>	<u>6.11</u>	<u>2.41</u>	<u>1.00</u>	<u>335.943</u>	<u>0.36</u>	<u>0.21</u>			
DO - (mg/L)	<u>4.51</u>	<u>2.80</u>	<u>2.11</u>	<u>1.74</u>	<u>1.55</u>	<u>1.40</u>	<u>1.34</u>	<u>1.32</u>			
Salinity (ppt)	<u>0.04</u>	<u>0.04</u>	<u>0.04</u>	<u>0.04</u>	<u>0.04</u>	<u>0.04</u>	<u>0.04</u>	<u>0.04</u>			
ORP (mV)	<u>307.1</u>	<u>319.0</u>	<u>324.4</u>	<u>332.2</u>	<u>332.5</u>	<u>373.4</u>	<u>380.5</u>	<u>385.8</u>			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/24/16</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-20</u>		
Upgradient	Downgradient	Sidegradient	☒ Source
Weather Conditions <u>clear 80's</u>			
Air Temperature	<u>10.57 80's</u> ° F		
Total Well Depth (TWD) =	<u>15.15</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>4.58 10.57</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>4.58</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.041</u>	=	<u>0.19</u> gal
3 Casing Volumes =	<u>0.57</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	<u>Purge with Peristaltic Pump</u>		
Method of Sample Collection	<u>Peristaltic Pump Reverse Flow for VOC'S</u>		
Total Volume of Water Removed	<u>2.10</u>	gal	
Casing Diameter	<u>1.0</u>	inches	
Casing Material	<u>PVC</u>		
Measuring Point Elevation	<u>148.19</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.31</u>	1/100 ft	
Land Surface Elevation	<u>148.50</u>	1/100 ft	
Screened Interval	<u>5</u> - <u>15</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>1640</u>			
Sample Analytes: <u>VOC'S</u>			
Hack Fe Kit: <u>0.01</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	0.35	0.70	1.05	1.40	1.75	2.10				
VOLUME PURGED (gallons)											
TIME (Military)	1607	1612	1617	1622	1627	1632	1637				
Water Level (ft BTOC)	11.98	12.19	12.29	12.38	12.46	12.48	12.49				
pH (S.U.)	4.03	4.09	4.08	4.07	4.08	4.09	4.07				
Sp. Cond. (mS/cm)	0.043	0.040	0.039	0.038	0.038	0.037	0.037				
Water Temp. (°C)	21.67	21.42	21.35	21.34	21.33	21.32	21.32				
Turbidity (NTUs)	8.34	3.46	2.22	1.88	2.24	3.45	2.99				
DO - (mg/L)	6.11	5.15	5.06	4.89	4.86	4.85	4.86				
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02				
ORP (mV)	347.7	354.6	361.2	379.1	384.1	388.8	392.4				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>10/25/16</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>147.97</u> 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>-0.20</u> 1/100 ft	
Sample ID* <u>MW-21</u>		Land Surface Elevation <u>148.17</u> 1/100 ft	
☐ Upgradient ☐ Downgradient ☐ Sidegradient ☒ Source		Screened Interval <u>19</u> - <u>34</u> 1/100 ft	
Weather Conditions <u>clear</u>		Dedicated Pump or Bailor YES ☐ NO ☒ Type <u> </u>	
Air Temperature <u>70.5</u> ° F		Steel Guard Pipe Around Casing YES ☒ NO ☐	
Total Well Depth (TWD) = <u>34.40</u> 1/100 ft		Locking Cap YES ☒ NO ☐	
Depth to Ground Water (DGW) = <u>21.48</u> 1/100 ft		Protective Post/Abutment YES ☐ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>12.92</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ☐	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.1</u> gal		Yield LOW ☐ MODERATE ☒ HIGH ☒	
3 Casing Volumes = <u>6.3</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>1555</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>2.40</u> gal		Hack Fe Kit: <u>NA</u> mg/L	

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

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

	FIELD ANALYSES										
	Initial	0.40	0.80	1.20	1.60	2.00	2.40				
VOLUME PURGED (gallons)											
TIME (Military)	1522	1527	1532	1537	1542	1547	1552				
Water Level (ft BTOW)	13.45	13.86	13.95	14.02	14.09	14.11	14.13				
pH (S.U.)	4.14	3.80	3.66	3.22	3.15	3.16	3.18				
Sp. Cond. (mS/cm)	0.019	0.019	0.019	0.019	0.019	0.019	0.019				
Water Temp. (°C)	23.22	22.82	22.73	22.63	22.60	22.60	22.56				
Turbidity (NTUs)	68.55	7.85	4.80	3.99	3.65	3.71	4.09				
DO - (mg/L)	0.72	0.31	0.25	0.23	0.22	0.22	0.25				
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01				
ORP (mV)	294.7	324.2	331.8	349.7	354.9	361.0	356.4				

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 7

Date (mo/day/yr) <u>10/25/16</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>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	Screened Interval <u>43</u> - <u>53</u> 1/100 ft
Weather Conditions <u>Clear</u>	Dedicated Pump or Bailer YES ☐ NO ☒ Type <u> </u>
Air Temperature <u>76.5</u> ° F	Steel Guard Pipe Around Casing YES ☒ NO ☐
Total Well Depth (TWD) = <u>53.40</u> 1/100 ft	Locking Cap YES ☒ NO ☐
Depth to Ground Water (DGW) = <u>12.75</u> 1/100 ft	Protective Post/Abutment YES ☐ NO ☒
Length of Water Column (LWC) = TWD - DGW = <u>40.65</u> 1/100 ft	Well Integrity Satisfactory YES ☒ NO ☐
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.62</u> gal	Yield LOW ☐ MODERATE ☐ HIGH ☒
3 Casing Volumes = <u>19.86</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>1740</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>2.45</u> gal	Hack Fe Kit: <u>NA</u> mg/L

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

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

	FIELD ANALYSES										
	Initial	0.35	0.70	1.05	1.40	1.75	2.10	2.45			
VOLUME PURGED (gallons)	1700	1705	1710	1715	1720	1725	1730	1735			
TIME (Military)	12.33	12.83	12.83	12.83	12.83	12.83	12.83	12.83			
Water Level (ft BTOC)	10.38	10.37	9.36	8.26	7.81	7.69	7.67	7.66			
pH (S.U.)	0.287	0.299	0.224	0.212	0.214	0.211	0.210	0.210			
Sp. Cond. (mS/cm)	23.18	22.44	22.27	22.14	22.07	22.03	21.95	21.90			
Water Temp. (°C)	10.37	3.59	3.99	4.52	4.27	4.12	4.01	3.97			
Turbidity (NTUs)	3.03	2.51	1.33	0.47	0.34	0.31	0.30	0.31			
DO - (mg/L)	0.14	0.14	0.10	0.10	0.10	0.10	0.10	0.10			
Salinity (ppt)	138.4	115.4	118.1	-118.3	-138.8	-131.7	-124.0	-118.3			
ORP (mV)											

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr) <u>10/25/16</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
<u> </u> Upgradient <u>X</u> Downgradient <u> </u> Sidegradient <u> </u> Source <u> </u>	Screened Interval <u>38</u> - <u>48</u> 1/100 ft
Weather Conditions <u>Clear</u>	Dedicated Pump or Bailer YES <u> </u> NO <u>✓</u> Type <u> </u>
Air Temperature <u>60'S</u> ° F	Steel Guard Pipe Around Casing YES <u>✓</u> NO <u> </u>
Total Well Depth (TWD) = <u>48.40</u> 1/100 ft	Locking Cap YES <u>✓</u> NO <u> </u>
Depth to Ground Water (DGW) = <u>12.18</u> 1/100 ft	Protective Post/Abutment YES <u> </u> NO <u>✓</u>
Length of Water Column (LWC) = TWD - DGW = <u>36.22</u> 1/100 ft	Well Integrity Satisfactory YES <u>✓</u> NO <u> </u>
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>5.90</u> gal	Yield LOW <u> </u> MODERATE <u> </u> HIGH <u>✓</u>
3 Casing Volumes = <u>17.7</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>0955</u>
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>	Sample Analytes: <u>VOC'S</u> <u>Duplicate</u>
Total Volume of Water Removed <u>4.2</u> gal	Hack Fe Kit: <u>0.00</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	0.6	1.2	1.8	2.4	3.0	3.6	4.2			
VOLUME PURGED (gallons)											
TIME (Military)	0917	0922	0927	0932	0937	0942	0947	0952			
Water Level (ft BTOC)	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26			
pH (S.U.)	6.95	7.60	7.84	7.86	7.86	7.90	7.92	7.93			
Sp. Cond. (mS/cm)	0.226	0.228	0.228	0.229	0.229	0.229	0.229	0.229			
Water Temp. (°C)	17.29	18.04	18.11	18.15	18.20	18.16	18.27	18.32			
Turbidity (NTUs)	11.30	4.42	3.77	3.84	5.40	4.86	3.02	2.76			
DO - (mg/L)	4.38	2.92	2.91	3.05	3.10	3.05	3.08	3.05			
Salinity (ppt)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11			
ORP (mV)	-30.6	-26.4	-13.3	6.6	23.3	34.6	43.5	50.5			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	10/26/14		
Field Personnel	J B. Hax		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-23D		
Upgradient	X	Downgradient	
Sidegradient		Source	
Weather Conditions	Clear		
Air Temperature	70's ° F		
Total Well Depth (TWD) =	50.40	1/100 ft	
Depth to Ground Water (DGW) =	13.98	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	36.42	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	5.94	gal	
3 Casing Volumes =	17.82	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.8	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:	1340		
Sample Analytes:	VOC'S		
Hack Fe Kit:	NA mg/L		

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

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

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8			
TIME (Military)	1300	1305	1310	1315	1320	1325	1330	1335			
Water Level (ft BTOW)	14.10	14.12	14.14	14.15	14.15	14.15	14.15	14.15			
pH (S.U.)	6.92	7.23	7.33	7.40	7.40	7.38	7.38	7.41			
Sp. Cond. (mS/cm)	0.263	0.273	0.275	0.276	0.276	0.276	0.276	0.276			
Water Temp. (°C)	21.37	21.14	20.98	20.90	20.91	20.89	20.85	20.83			
Turbidity (NTUs)	9.81	4.77	1.30	0.71	0.41	0.00	0.00	0.00			
DO - (mg/L)	16.44	2.78	2.51	2.32	2.02	1.90	1.88	1.89			
Salinity (ppt)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13			
ORP (mV)	151.3	142.7	138.6	137.1	137.1	138.5	137.5	137.3			

COMMENTS/OBSERVATIONS



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 2

Date (mo/day/yr)	Oct 24, 2016		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-24		
_____ Upgradient ☒ Downgradient _____ Sidegradient _____ Source _____			
Weather Conditions	Clear / Sunny		
Air Temperature	78 ° F		
Total Well Depth (TWD) =	21.00	1/100 ft	
Depth to Ground Water (DGW) =	13.42	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	7.58	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163 =	1.23	gal	
3 Casing Volumes =	3.70	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	147.85	1/100 ft	
Height of Riser (above land surface)	-0.67	1/100 ft	
Land Surface Elevation	148.52	1/100 ft	
Screened Interval	6 - 21	1/100 ft	
Dedicated Pump or Bailer	YES _____ NO ☒	Type _____	
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: 1722		
	Sample Analytes: VOTC		
	Hack Fe Kit: 0.00 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).

VOLUME PURGED (gallons)	FIELD ANALYSES										
	Initial	1.40	1.80	1.20	1.60	2.0	2.4	2.8	3.2	3.6	4.0
TIME (Military)	1610	1615	1620	1625	1630	1635	1640	1645	1650	1655	1700
Water Level (ft BTOC)	13.70	13.70	13.63	13.63	13.63	13.64	13.68	13.70	13.71	13.73	13.73
pH (S.U.)	2.45	0.78	2.62	1.74	1.32	1.08	0.94	1.50	1.39	0.67	1.69
Sp. Cond. (mS/cm)	0.020	0.020	0.022	0.020	0.020	0.020	0.020	0.020	0.019	0.019	0.019
Water Temp. (°C)	23.46	23.11	22.98	22.95	22.93	22.84	22.79	22.75	22.67	22.62	22.60
Turbidity (NTUs)	26.41	17.18	15.03	13.57	10.39	8.46	7.04	4.15	3.76	2.28	2.11
DO - (mg/L)	6.15	6.67	6.35	6.74	6.63	7.15	6.99	6.39	6.17	6.49	6.57
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)	436.1	505.1	388.2	452.8	477.8	351.9	344.6	337.4	491.4	528.6	481.2

COMMENTS/OBSERVATIONS

Cleaned & checked
pH probe OK w/ 7.0 standard & 4.0 standard

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 2 of 2

Site Name <u>UTC Delavan Spray Technologies Site</u>	Date (mo/day/yr) <u>Oct 24, 2016</u>
AECOM Job # <u>60314964</u>	Field Personnel <u>Randy Murgan</u>
Sample ID* <u>MW-24</u>	Comments/Observations:

	FIELD ANALYSES									
VOLUME PURGED (gallons)	4.4	4.8	5.2	5.6						
TIME (Military)	1705	1710	1715	1720						
Water Level (ft BTOC)	13.73	13.73	13.73	13.73						
pH (S.U.)	1.23	1.38	1.43	1.50						
Sp. Cond. (mS/cm)	0.020	0.020	0.020	0.02						
Water Temp. (°C)	22.59	22.57	22.54	22.53						
Turbidity (NTUs)	2.30	2.73	1.82	2.45						
DO - (mg/L)	6.14	6.16	6.37	6.16						
Salinity (ppt)	0.01	0.01	0.01	0.01						
ORP (mV)	486.7	490.8	498.7	489.9						

	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>10/25/16</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>139.21</u> 1/100 ft
AECOM Job # <u>60314964</u>	Height of Riser (above land surface) <u>-0.09</u> 1/100 ft
Sample ID* <u>MW-25D</u>	Land Surface Elevation <u>139.30</u> 1/100 ft
<u> </u> Upgradient <u>X</u> Downgradient <u> </u> Sidegradient <u> </u> Source <u> </u>	Screened Interval <u>52</u> - <u>62</u> 1/100 ft
Weather Conditions <u>clear</u>	Dedicated Pump or Bailer YES <u> </u> NO <u>✓</u> Type <u> </u>
Air Temperature <u>60's</u> ° F	Steel Guard Pipe Around Casing YES <u>✓</u> NO <u> </u>
Total Well Depth (TWD) = <u>62.00</u> 1/100 ft	Locking Cap YES <u>✓</u> NO <u> </u>
Depth to Ground Water (DGW) = <u>5.58</u> 1/100 ft	Protective Post/Abutment YES <u> </u> NO <u>✓</u>
Length of Water Column (LWC) = TWD - DGW = <u>56.42</u> 1/100 ft	Well Integrity Satisfactory YES <u>✓</u> NO <u> </u>
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>9.19</u> gal	Yield LOW <u> </u> MODERATE <u> </u> HIGH <u>X</u>
3 Casing Volumes = <u>27.57</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>1100</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>2.75</u> gal	Hack Fe Kit: <u>0.08 mg/L</u>

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

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

	FIELD ANALYSES									
VOLUME PURGED (gallons)	Initial	<u>0.55</u>	<u>1.10</u>	<u>1.65</u>	<u>2.20</u>	<u>2.75</u>				
TIME (Military)	<u>1025</u>	<u>1030</u>	<u>1035</u>	<u>1040</u>	<u>1045</u>	<u>1055</u>				
Water Level (ft BTOW)	<u>5.68</u>	<u>5.68</u>	<u>5.68</u>	<u>5.68</u>	<u>5.68</u>	<u>5.68</u>				
pH (S.U.)	<u>7.59</u>	<u>7.57</u>	<u>7.56</u>	<u>7.57</u>	<u>7.56</u>	<u>7.55</u>				
Sp. Cond. (mS/cm)	<u>0.239</u>	<u>0.239</u>	<u>0.239</u>	<u>0.239</u>	<u>0.239</u>	<u>0.239</u>				
Water Temp. (°C)	<u>19.57</u>	<u>19.71</u>	<u>19.77</u>	<u>19.76</u>	<u>19.80</u>	<u>19.86</u>				
Turbidity (NTUs)	<u>6.92</u>	<u>5.49</u>	<u>4.27</u>	<u>4.50</u>	<u>4.62</u>	<u>4.01</u>				
DO - (mg/L)	<u>3.21</u>	<u>2.79</u>	<u>2.68</u>	<u>2.67</u>	<u>2.64</u>	<u>2.63</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>88.4</u>	<u>81.3</u>	<u>74.3</u>	<u>67.1</u>	<u>59.1</u>	<u>58.3</u>				
COMMENTS/OBSERVATIONS										



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 1

Date (mo/day/yr)	<u>10/25/16</u>		
Field Personnel	<u>J.B. Hester</u>		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-26D		
Upgradient	☒	Downgradient	☐
Sidegradient	☐	Source	☐
Weather Conditions	<u>clear</u>		
Air Temperature	<u>60's</u>	° F	
Total Well Depth (TWD) =	<u>48.00</u>	1/100 ft	
Depth to Ground Water (DGW) =	<u>10.20</u>	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	<u>37.8</u>	1/100 ft	
1 Casing Volume (OCV)* = LWC x	<u>0.163</u>	=	<u>6.16</u> gal
3 Casing Volumes =	<u>18.48</u>	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	<u>2.75</u>	gal	
Casing Diameter	<u>2.0</u>	inches	
Casing Material	PVC		
Measuring Point Elevation	<u>143.64</u>	1/100 ft	
Height of Riser (above land surface)	<u>-0.19</u>	1/100 ft	
Land Surface Elevation	<u>143.83</u>	1/100 ft	
Screened Interval	<u>38</u>	-	<u>48</u> 1/100 ft
Dedicated Pump or Bailer	YES ☐	NO ☒	Type <u> </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: 1150</u>		
	<u>Sample Analytes: VOC'S</u>		
	<u>Hack Fe Kit: NA</u> mg/L		

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

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

FIELD ANALYSES

VOLUME PURGED (gallons)	Initial	<u>0.55</u>	<u>1.10</u>	<u>1.65</u>	<u>2.20</u>	<u>2.75</u>				
TIME (Military)	<u>1120</u>	<u>1125</u>	<u>1130</u>	<u>1135</u>	<u>1140</u>	<u>1145</u>				
Water Level (ft BTOC)	<u>10.26</u>	<u>10.26</u>	<u>10.26</u>	<u>10.26</u>	<u>10.26</u>	<u>10.26</u>				
pH (S.U.)	<u>7.46</u>	<u>7.38</u>	<u>7.32</u>	<u>7.34</u>	<u>7.32</u>	<u>7.30</u>				
Sp. Cond. (mS/cm)	<u>0.240</u>	<u>0.240</u>	<u>0.239</u>	<u>0.239</u>	<u>0.239</u>	<u>0.239</u>				
Water Temp. (°C)	<u>20.13</u>	<u>19.90</u>	<u>19.82</u>	<u>19.80</u>	<u>19.78</u>	<u>19.77</u>				
Turbidity (NTUs)	<u>9.92</u>	<u>3.27</u>	<u>3.46</u>	<u>4.50</u>	<u>4.02</u>	<u>4.62</u>				
DO - (mg/L)	<u>3.00</u>	<u>2.59</u>	<u>2.52</u>	<u>2.51</u>	<u>2.50</u>	<u>2.49</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>102.5</u>	<u>98.4</u>	<u>99.0</u>	<u>98.8</u>	<u>100.5</u>	<u>106.3</u>				

COMMENTS/OBSERVATIONS

IDW MANAGEMENT FORM

PROJECT: UTC Delavan Spray Technologies Site RI

SITE NAME: Delavan Spray Technologies Site

LOCATION: Bamberg, South Carolina

PROJECT #: **60314964**

[illegible]

10/24/16

- 0800 at progress park to pick up hip waders
1030 met Randy in Orangeburg SC - mob to
UTC Bamberg
1110 arrived on site - wait for Kanisha Combs
to issue badges
1140 Kanisha issues badges - met with
Wesley w/ UTC - said no escort is required
inside bldg; showed us where to stage drums
1145 begin uncapping wells to equilibrate
and then collect water levels
1145 Health & Safety briefing
1430 complete water levels
Justin prepares to go inside bldg
to get water levels & sample MW-19 & MW-20
1515 begin to purge MW-19
1555 sampled MW-19
1607 begin to purge MW-20
1640 sampled MW-20
had some issues with pH going to an
off site well to check pH at MW-220
Randy will also come over and check his too.
1750 empty purge water
1800 Leave site

for Justin Butler

10-25-2016

- 0700 Leave Hotel, mob to site
0730 Arrive on site, begin calibration of
YSI 556 + turbidity meter
0800 finish calibrating - mob to MW-11
0820 begin to purge MW-11
0850 Sample MW-11
0910 begin to purge MW-220
0955 Sample MW-220, dup
1020 begin to purge MW-250
1100 Sample MW-250
1115 begin to purge MW-260
1150 Sample MW-260
1250 begin to purge MW-100
1330 Sample MW-100
1335 begin to purge MW-10
1415 Sample MW-10
1420 empty purge water
1435 begin MW-2 purging
1515 Sample MW-2
1520 begin to purge MW-21
1555 Sample MW-21
1600 begin to purge MW-1
1650 Sample MW-1
1655 begin to purge MW-210
1740 Sample MW-210
1745 empty purge water
1800 off site for Justin Butler

10-26-16

0700 leave hotel for site

0730 arrive on site, begin calibrating

YSI 556 + turbidity meter

0800 finish calibration mob to MW-17

0805 begin to purge MW-17

0845 sample MW-17

0850 begin to purge MW-18

0935 sample MW-18

0945 begin to purge MW-9D

1025 sample MW-9D

1030 begin to purge MW-9

1115 sample MW-9, MS/MSD

1130 leave site to pick up IDW batterware
at Hotel

1255 begin to purge MW-230

1340 sample MW-230

1355 begin to purge MW-7

1435 sample MW-7

1445 empty purge water

1455 sample IDW - composite of both
drums

1500 sign out - off site - end of event
return to Greenville / return equipment

for Justin Butler

4-13-16 "sampling event" on

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-100 where someone has dumped brush / limbs

1530 waiting for Justin to return with IDW bottlenecks

1550 Justin back on site collect a composite of IDW #1 & IDW #2
purge water - secure drums labeled.
pack cooler with samples for Fed Ex shipment in Columbia

1630 off site after returning badge, return equipment in Greenville

UTC Fall Sampling event 10/24/2016

0700 pick up equipment & leave for Orangeburg SC to meet Justin

0900 at the Orangeburg Exit off I-26 check motels for rooms - will need to check back later -

0920 calibrate both YSI 556 water quality meters while waiting on Justin to arrive also (sort out equipment)

1030 Justin arrives head to UTC Delavan Bamberg SC

1110 arrive on site waiting for Karisha to issue badges

1140 Karisha issues badges met with Wesley - free to go into bldg when we need to w/ out escort.

1145 begin w/ uncapping wells to equilibrate and then collect water levels (HLS)

1430 complete water levels / purchase ice
Justin prepares to go into bldg to get water levels and sample MW-19 & MW-20
Randy sets up in MW-8

1520 begin to micro purge MW-8

1552 Sampled MW-8 reverse flow

1610 at MW-24 begin to micro purge the pH starts out at 2.45 and

10-24-2016 UTC Delavan Fall Sampling
event

goes down - stop and clean meter
and check to the 7 & 4 standards
they are pretty close to each other
restart micro purging - the pH stays
very low removed 5.6 gals and
remains around 1.50

1722 sampled MW-24 reverse flow
Justin said he had problems inside
plant as well.

at MW-220 to see how pH is
at an off site well

Justin's meter 7.86

Randy's meter 5.38

will check w/ our equipment person
and will see how things are on 10-25-16

1750 empty purge water in 55 gal
steel drum inside a designated bldg
labeled drums w/ Non-Hazard
label and grease pencil

1800 turn in badges & sign out
off site to motel.

Randy Morgan

UTC Delavan Fall Sampling
event 10/25/16

0630 leave to find insect spray at
Wal-Mart or Lowes

0700 purchase insect spray for crew
0725 arrive on site begin to calibrate
XST 556 water quality meter

0730 Health & Safety Briefing / Sign in

0750 complete calibrating meter

0818 at MW-16 begin to micro purge

the pH is very close to ~~the~~ historical pH's

0850 sampled MW-16 reverse flow

0908 at MW-16D begin to micro purge

0935 sampled MW-16D reverse flow

0945 at creek begin to carry equipment
over to MW-15 cluster

1008 at MW-15 begin to micro purge

1045 sampled MW-15 reverse flow

1050 at MW-15D begin to micro purge

1117 sampled MW-15D reverse flow

1125 at MW-15D2 begin to micro purge

1152 sampled MW-15D2 reverse flow

1200 carry equipment back across creek
to the van

1215 empty purge water into 55 gal steel drum

1230 lunch / purchase additional ice to

ship samples out Fed Ex today.

10/25/2016 UTC Delavan Fall sampling
event

1300 at MW-120 begin to micro purge
ph is always high and then stabilizes
after removing ~ 5-6 gals of water
1417 sampled MW-120 reverse flow
1430 met w/ Justin got his samples
pack cooler and take to shipping
at UTC plant for FedEx to pick up
today.
1500 at MW-130 begin to micro purge
1547 sampled MW-130 reverse flow
1604 at MW-6 begin to micro purge
ph started in 4's & ended in 3's
this well is on site and we have had
problems w/ on site shallow wells.
1641 sampled MW-6
1650 empty purge water into 55 gal drum
1700 sign out and go to MW-17
well area to clear trees that had
fallen during recent hurricane on
the coast, block access to well
1800 off site - trees removed.

Randy Meyer

UTC Delavan Fall sampling 10-26-16
event

0700 leave for UTC Delavan
0730 arrive on site - begin to calibrate
YSI 556 water quality meter
0745 H + S briefing
0810 at MW-5 begin to micro purge
the ph in this well starts out in mid
4's and ends in mid 3's another
on site shallow well,
0842 sampled MW-5 reverse flow
0900 at MW-3 begin to micro purge
0927 sampled MW-3 reverse flow
0938 at MW-30 begin to micro purge
1020 sampled MW-30 reverse flow
1045 at MW-301 begin to micro purge
1117 sampled MW-301 reverse flow
empty purge water into drum
1140 at MW-14 begin to micro purge
1227 sampled MW-14 reverse flow
1235 at MW-140 begin to micro purge
1302 sampled MW-140 also dup reverse flow
empty purge water into drum
purchase ice to ship out samples
at end of day
1340 at MW-4 begin to micro purge
1418 sampled MW-4 reverse flow
also dup.

10/26/16 UTC Delavan Fall Sampling
Event

1425 empty remaining purge water
waiting for Justin to finish
prepare bottlenecks for IDW-1 sample
will composite IDW-1 & IDW-2
drums for one IDW-1 sample
used bailer to collect from each drum

1455 Collect IDW-1 Composite

Sample - secure drums - labeled
and photo taken

1500 Turn in badges & sign out
go off site to get samples
from Justin due to UTC is about
to have an evacuation drill and we
need to be off site.

1530 leave Bamberg for Columbia
to relinquish samples to F&E EX

1640 relinquish samples to F&E EX

1645 leave Columbia for Greenville
to return equipment

1800 returned equipment

1845 at AFCom

Randy Meyer

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: FA38120

Sampling Dates: 10/24/16 - 10/25/16

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: **80**



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

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
AK, AR, GA, IA, KY, MA, NV, OK, OR, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of SGS Accutest.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	7
Section 4: Sample Results	10
4.1: FA38120-1: MW-8	11
4.2: FA38120-2: MW-19	13
4.3: FA38120-3: MW-20	15
4.4: FA38120-4: MW-24	17
4.5: FA38120-5: MW-16	19
4.6: FA38120-6: MW-11	21
4.7: FA38120-7: MW-16D	23
4.8: FA38120-8: MW-22D	25
4.9: FA38120-9: MW-22D-A	27
4.10: FA38120-10: MW-15	29
4.11: FA38120-11: MW-25D	31
4.12: FA38120-12: MW-15D	33
4.13: FA38120-13: MW-26D	35
4.14: FA38120-14: MW-15D1	37
4.15: FA38120-15: MW-10D	39
4.16: FA38120-16: MW-12D	41
4.17: FA38120-17: MW-10	43
4.18: FA38120-18: TRIP BLANK	45
Section 5: Misc. Forms	47
5.1: Chain of Custody	48
Section 6: GC/MS Volatiles - QC Data Summaries	52
6.1: Method Blank Summary	53
6.2: Blank Spike Summary	63
6.3: Matrix Spike/Matrix Spike Duplicate Summary	73



Sample Summary

United Technologies Corporation

Job No: FA38120

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA38120-1	10/24/16	15:52 RMJB	10/26/16	AQ	Ground Water	MW-8
FA38120-2	10/24/16	15:55 RMJB	10/26/16	AQ	Ground Water	MW-19
FA38120-3	10/24/16	16:40 RMJB	10/26/16	AQ	Ground Water	MW-20
FA38120-4	10/24/16	17:22 RMJB	10/26/16	AQ	Ground Water	MW-24
FA38120-5	10/25/16	08:50 RMJB	10/26/16	AQ	Ground Water	MW-16
FA38120-6	10/25/16	08:50 RMJB	10/26/16	AQ	Ground Water	MW-11
FA38120-7	10/25/16	09:35 RMJB	10/26/16	AQ	Ground Water	MW-16D
FA38120-8	10/25/16	09:55 RMJB	10/26/16	AQ	Ground Water	MW-22D
FA38120-9	10/25/16	09:55 RMJB	10/26/16	AQ	Ground Water	MW-22D-A
FA38120-10	10/25/16	10:45 RMJB	10/26/16	AQ	Ground Water	MW-15
FA38120-11	10/25/16	11:00 RMJB	10/26/16	AQ	Ground Water	MW-25D
FA38120-12	10/25/16	11:17 RMJB	10/26/16	AQ	Ground Water	MW-15D
FA38120-13	10/25/16	11:50 RMJB	10/26/16	AQ	Ground Water	MW-26D



Sample Summary
(continued)

United Technologies Corporation

Job No: FA38120

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

Sample Number	Collected		Matrix Code	Type	Client	
	Date	Time By	Received		Sample	ID
FA38120-14	10/25/16	11:52 RMJB	10/26/16	AQ	Ground Water	MW-15D1
FA38120-15	10/25/16	13:30 RMJB	10/26/16	AQ	Ground Water	MW-10D
FA38120-16	10/25/16	14:17 RMJB	10/26/16	AQ	Ground Water	MW-12D
FA38120-17	10/25/16	14:15 RMJB	10/26/16	AQ	Ground Water	MW-10
FA38120-18	10/25/16	00:00 RMJB	10/26/16	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job No: FA38120

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 11/10/2016 7:13:53 PM

17 Samples and 1 Trip Blank were collected on/between 10/24/2016 and 10/25/2016 and were received at SGS Accutest Southeast (SASE) on 10/26/2016 properly preserved, at 2.8 Deg. C and intact. These Samples received an SASE job number of FA38120. 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: VB4736

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38215-5MS, FA38215-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for cis-1,3-Dichloropropene, Styrene, trans-1,3-Dichloropropene are outside control limits. Recoveries are biased high. Analytes are non-detect in associated samples; therefore data is not adversely affected.

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.

FA38120-17 for cis-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38120-17 for Styrene: Associated BS recovery outside control limits.

FA38120-17 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38120-18 for cis-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38120-18 for Styrene: Associated BS recovery outside control limits.

FA38120-18 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

Matrix: AQ

Batch ID: VB4739

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38340-2MS, FA38340-2MSD were used as the QC samples indicated.

Matrix: AQ

Batch ID: VI1173

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38295-3MS, FA38295-3MSD were used as the QC samples indicated.

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

Matrix: AQ

Batch ID: VI1177

All method blanks for this batch meet method specific criteria.

The following samples were run outside of holding time for method SW846 8260B: FA38120-15, FA38120-16. Samples re-analyzed beyond hold time; reported results are considered minimum values.

VI1177-BS: No MS/MSD available for this run.

Matrix: AQ

Batch ID: VN4483

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38072-1MS, FA38072-1MSD were used as the QC samples indicated.

Matrix: AQ

Batch ID: VN4484

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA37972-34MS, FA37972-34MSD were used as the QC samples indicated.

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

Thursday, November 10, 2016

Page 1 of 2

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

Narrative prepared by:

Lovelie Metzgar, QA Officer (signature on file)

Date: November 10, 2016

Thursday, November 10, 2016

Page 2 of 2

Summary of Hits

Job Number: FA38120
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/24/16 thru 10/25/16



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA38120-1 MW-8						
Tetrachloroethylene		35.8	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene		4.9	1.0	0.27	ug/l	SW846 8260B
FA38120-2 MW-19						
Tetrachloroethylene		34600	500	150	ug/l	SW846 8260B
1,1,1-Trichloroethane		245	200	40	ug/l	SW846 8260B
FA38120-3 MW-20						
Tetrachloroethylene		503	10	3.0	ug/l	SW846 8260B
FA38120-4 MW-24						
cis-1,2-Dichloroethylene		22.9	20	6.2	ug/l	SW846 8260B
Tetrachloroethylene		1340	20	6.1	ug/l	SW846 8260B
FA38120-5 MW-16						
Toluene		0.48 J	1.0	0.20	ug/l	SW846 8260B
FA38120-6 MW-11						
Toluene		1.0	1.0	0.20	ug/l	SW846 8260B
FA38120-7 MW-16D						
No hits reported in this sample.						
FA38120-8 MW-22D						
1,1-Dichloroethylene		2.2	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		0.38 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene		122	2.0	0.61	ug/l	SW846 8260B
Trichloroethylene		0.62 J	1.0	0.27	ug/l	SW846 8260B
FA38120-9 MW-22D-A						
Acetone		23.2 J	50	20	ug/l	SW846 8260B
1,1-Dichloroethylene		1.6 J	2.0	0.43	ug/l	SW846 8260B
Methylene Chloride		6.4 J	10	4.0	ug/l	SW846 8260B
Tetrachloroethylene		97.7	2.0	0.61	ug/l	SW846 8260B

Summary of Hits

Job Number: FA38120
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/24/16 thru 10/25/16

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

FA38120-10 MW-15

No hits reported in this sample.

FA38120-11 MW-25D

Acetone	35.9 J	50	20	ug/l	SW846 8260B
1,1-Dichloroethylene	2.3	2.0	0.43	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.89 J	2.0	0.62	ug/l	SW846 8260B
Methylene Chloride	6.1 J	10	4.0	ug/l	SW846 8260B
Tetrachloroethylene	125	2.0	0.61	ug/l	SW846 8260B
Trichloroethylene	0.84 J	2.0	0.54	ug/l	SW846 8260B

FA38120-12 MW-15D

No hits reported in this sample.

FA38120-13 MW-26D

1,1-Dichloroethylene	1.6	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	1.0	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	75.0	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.97 J	1.0	0.27	ug/l	SW846 8260B

FA38120-14 MW-15D1

No hits reported in this sample.

FA38120-15 MW-10D

No hits reported in this sample.

FA38120-16 MW-12D

1,1-Dichloroethylene ^a	1.2	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	69.2	1.0	0.30	ug/l	SW846 8260B

FA38120-17 MW-10

1,1-Dichloroethylene	9.0	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	146	2.5	0.78	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	0.49 J	1.0	0.33	ug/l	SW846 8260B
Tetrachloroethylene	41.4	1.0	0.30	ug/l	SW846 8260B
Toluene	7.2	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene	13.5	1.0	0.27	ug/l	SW846 8260B

Summary of Hits

Job Number: FA38120
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/24/16 thru 10/25/16



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

FA38120-18 TRIP BLANK

No hits reported in this sample.

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/24/16
Lab Sample ID:	FA38120-1	Date Received:	10/26/16
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	N0098547.D	1	10/28/16	KM	n/a	n/a	VN4483
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	35.8	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	4.9	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:	10/24/16
Lab Sample ID:	FA38120-1	Date Received:	10/26/16
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	101%		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-19	Date Sampled:	10/24/16
Lab Sample ID:	FA38120-2	Date Received:	10/26/16
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	N0098548.D	200	10/28/16	KM	n/a	n/a	VN4483
Run #2	N0098586.D	500	10/31/16	KM	n/a	n/a	VN4484

	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	5000	2000	ug/l	
71-43-2	Benzene	ND	200	41	ug/l	
75-27-4	Bromodichloromethane	ND	200	48	ug/l	
75-25-2	Bromoform	ND	200	93	ug/l	
78-93-3	2-Butanone (MEK)	ND	1000	510	ug/l	
75-15-0	Carbon Disulfide	ND	400	46	ug/l	
56-23-5	Carbon Tetrachloride	ND	200	60	ug/l	
108-90-7	Chlorobenzene	ND	200	40	ug/l	
75-00-3	Chloroethane	ND	400	130	ug/l	
67-66-3	Chloroform	ND	200	60	ug/l	
124-48-1	Dibromochloromethane	ND	200	52	ug/l	
75-34-3	1,1-Dichloroethane	ND	200	51	ug/l	
107-06-2	1,2-Dichloroethane	ND	200	57	ug/l	
75-35-4	1,1-Dichloroethylene	ND	200	43	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	200	62	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	200	66	ug/l	
78-87-5	1,2-Dichloropropane	ND	200	69	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	200	53	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	200	49	ug/l	
100-41-4	Ethylbenzene	ND	200	50	ug/l	
591-78-6	2-Hexanone	ND	2000	400	ug/l	
74-83-9	Methyl Bromide	ND	400	100	ug/l	
74-87-3	Methyl Chloride	ND	400	100	ug/l	
75-09-2	Methylene Chloride	ND	1000	400	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1000	280	ug/l	
100-42-5	Styrene	ND	200	48	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	65	ug/l	
127-18-4	Tetrachloroethylene	34600 ^a	500	150	ug/l	
108-88-3	Toluene	ND	200	40	ug/l	
71-55-6	1,1,1-Trichloroethane	245	200	40	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	200	73	ug/l	
79-01-6	Trichloroethylene	ND	200	54	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-19	Date Sampled: 10/24/16
Lab Sample ID: FA38120-2	Date Received: 10/26/16
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	200	63	ug/l	
1330-20-7	Xylene (total)	ND	600	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	105%	79-125%
2037-26-5	Toluene-D8	102%	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	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-20	Date Sampled:	10/24/16
Lab Sample ID:	FA38120-3	Date Received:	10/26/16
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	N0098549.D	10	10/28/16	KM	n/a	n/a	VN4483
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	ND	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	503	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	ND	10	2.7	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20	Date Sampled: 10/24/16
Lab Sample ID: FA38120-3	Date Received: 10/26/16
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	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	101%		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:	10/24/16
Lab Sample ID:	FA38120-4	Date Received:	10/26/16
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	N0098550.D	20	10/28/16	KM	n/a	n/a	VN4483
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	4.1	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	9.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	51	ug/l	
75-15-0	Carbon Disulfide	ND	40	4.6	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	6.0	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	5.1	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	5.7	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	4.3	ug/l	
156-59-2	cis-1,2-Dichloroethylene	22.9	20	6.2	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	20	6.6	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	6.9	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.9	ug/l	
100-41-4	Ethylbenzene	ND	20	5.0	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
74-83-9	Methyl Bromide	ND	40	10	ug/l	
74-87-3	Methyl Chloride	ND	40	10	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	28	ug/l	
100-42-5	Styrene	ND	20	4.8	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.5	ug/l	
127-18-4	Tetrachloroethylene	1340	20	6.1	ug/l	
108-88-3	Toluene	ND	20	4.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	4.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	7.3	ug/l	
79-01-6	Trichloroethylene	ND	20	5.4	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:	10/24/16
Lab Sample ID:	FA38120-4	Date Received:	10/26/16
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	20	6.3	ug/l	
1330-20-7	Xylene (total)	ND	60	11	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	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	106%		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-16	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-5	Date Received:	10/26/16
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	N0098551.D	1	10/28/16	KM	n/a	n/a	VN4483
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	0.48	1.0	0.20	ug/l	J
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-16	Date Sampled: 10/25/16
Lab Sample ID: FA38120-5	Date Received: 10/26/16
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	105%		79-125%
2037-26-5	Toluene-D8	101%		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-11	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-6	Date Received:	10/26/16
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	N0098552.D	1	10/28/16	KM	n/a	n/a	VN4483
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	1.0	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-11	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-6	Date Received:	10/26/16
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	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	101%		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-16D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-7	Date Received:	10/26/16
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	N0098553.D	1	10/28/16	KM	n/a	n/a	VN4483
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-16D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-7	Date Received:	10/26/16
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	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	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-22D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-8	Date Received:	10/26/16
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	N0098554.D	1	10/28/16	KM	n/a	n/a	VN4483
Run #2	N0098587.D	2	10/31/16	KM	n/a	n/a	VN4484

	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	2.2	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.38	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	122 ^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	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	0.62	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:	10/25/16
Lab Sample ID:	FA38120-8	Date Received:	10/26/16
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%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	79-125%
2037-26-5	Toluene-D8	101%	101%	85-112%
460-00-4	4-Bromofluorobenzene	105%	104%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-9	Date Received:	10/26/16
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	B117737.D	2	11/07/16	SP	n/a	n/a	VB4739
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	23.2	50	20	ug/l	J
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	1.6	2.0	0.43	ug/l	J
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	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	6.4	10	4.0	ug/l	J
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	97.7	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	
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	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-9	Date Received:	10/26/16
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	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	Limits
1868-53-7	Dibromofluoromethane	106%		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	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-15	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-10	Date Received:	10/26/16
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	B117738.D	1	11/07/16	SP	n/a	n/a	VB4739
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-15	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-10	Date Received:	10/26/16
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	110%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-25D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-11	Date Received:	10/26/16
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	B117739.D	2	11/07/16	SP	n/a	n/a	VB4739
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	35.9	50	20	ug/l	J
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	2.3	2.0	0.43	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.89	2.0	0.62	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.66	ug/l	
78-87-5	1,2-Dichloropropane	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	6.1	10	4.0	ug/l	J
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	125	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	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.73	ug/l	
79-01-6	Trichloroethylene	0.84	2.0	0.54	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:	10/25/16
Lab Sample ID:	FA38120-11	Date Received:	10/26/16
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	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	Limits
1868-53-7	Dibromofluoromethane	107%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		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-15D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-12	Date Received:	10/26/16
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	B117740.D	1	11/07/16	SP	n/a	n/a	VB4739
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:	10/25/16
Lab Sample ID:	FA38120-12	Date Received:	10/26/16
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	106%		79-125%
2037-26-5	Toluene-D8	102%		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-26D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-13	Date Received:	10/26/16
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	B117741.D	1	11/07/16	SP	n/a	n/a	VB4739
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	1.6	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	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	75.0	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	0.97	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-26D	Date Sampled: 10/25/16
Lab Sample ID: FA38120-13	Date Received: 10/26/16
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	105%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	106%		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:	10/25/16
Lab Sample ID:	FA38120-14	Date Received:	10/26/16
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	B117742.D	1	11/07/16	SP	n/a	n/a	VB4739
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:	10/25/16
Lab Sample ID:	FA38120-14	Date Received:	10/26/16
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	110%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	106%		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-10D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-15	Date Received:	10/26/16
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 ^a	I43412.D	1	11/10/16	WV	n/a	n/a	VI1177
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-10D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-15	Date Received:	10/26/16
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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

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

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

Report of Analysis

Client Sample ID:	MW-12D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-16	Date Received:	10/26/16
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 ^a	I43413.D	1	11/10/16	WV	n/a	n/a	VI1177
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	1.2	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	69.2	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-12D	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-16	Date Received:	10/26/16
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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

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

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

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-17	Date Received:	10/26/16
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	B117665.D	1	11/03/16	WV	n/a	n/a	VB4736
Run #2	I43305.D	2.5	11/04/16	WV	n/a	n/a	VI1173

	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	9.0	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	146 ^a	2.5	0.78	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.49	1.0	0.33	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene ^b	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^b	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 ^b	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	41.4	1.0	0.30	ug/l	
108-88-3	Toluene	7.2	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	13.5	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: 10/25/16
Lab Sample ID: FA38120-17	Date Received: 10/26/16
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	105%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	113%	105%	79-125%
2037-26-5	Toluene-D8	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	104%	96%	83-118%

(a) Result is from Run# 2

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	10/25/16
Lab Sample ID:	FA38120-18	Date Received:	10/26/16
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	B117666.D	1	11/03/16	WV	n/a	n/a	VB4736
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 ^a	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	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 ^a	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:	10/25/16
Lab Sample ID:	FA38120-18	Date Received:	10/26/16
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	107%		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	106%		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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA38120

AECOM

Chain of Custody and Analytical Request

Page 7 of 12
 Project Number: 60314964
 Chain of Custody Number (1):
 LIMS Number:

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC				Sample Analysis Requested										Quality Assurance Samples			
Client Name: UTC																	
Collected by: Randy Morgan / Justin Butler				Project Manager: Walter Gerald 864-234-8925													
Sample ID	Date Collected (dd-mm-yy)	Time Collected (Military) (hh:mm)	See Comments	Sample Information	TCL VOC's (8260B)	SVOC's (8270D)	P/P Metals (6010C/7470B)									COMMENTS	Cooler ID
			COMP	GRAB	Well												
MW-8	24-Oct-2016	1552	X		Groundwater	X											1
MW-19	24-Oct-2016	1555	X			X											2
MW-20	24-Oct-2016	1640	X			X											3
MW-24	24-Oct-2016	1722	X			X											4
MW-16	25-Oct-2016	0850	X			X											5
MW-11	25-Oct-2016	0850	X			X											6
MW-16D	25-Oct-2016	0935	X			X											7
MW-22D	25-Oct-2016	0955	X			X											8
MW-22D-a	25-Oct-2016	0955	X			X											9
MW-15	25-Oct-2016	1045	X			X											10
MW-25D	25-Oct-2016	1100	X			X											11
MW-15D	25-Oct-2016	1117	X			X											12
MW-26D	25-Oct-2016	1150	X			X											13
MW-15D1	25-Oct-2016	1152	X			X											14
MW-10D	25-Oct-2016	1330	X			X											15

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:
Randy Morgan	10-25-16	1445	FX			Method of Shipment: Fed Ex	XXXX
						Analytical Lab: Accutest	Airbill #: 810977867557
						Lab Recipient:	Location: Orlando FLA
							Date: Time:

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

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

① 2.8

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

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

FA38120: Chain of Custody

Page 1 of 4

SGS

48 of 80
ACCUTEST
FA38120

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA38120 CLIENT: Accom PROJECT: 472
 DATE/TIME RECEIVED: 10/26/16 915 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8109 7786 7857

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 -0.4
☐ OBSERVED TEMPS: 3.2
☐ CORRECTED TEMPS: 2.8 (USED FOR LIMS)

SAMPLE INFORMATION

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

☐ RESIDUAL CHLORINE PRESENT LOT# _____
 (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE

[Signature] 10/27/16

REVIEWER SIGNATURE/DATE

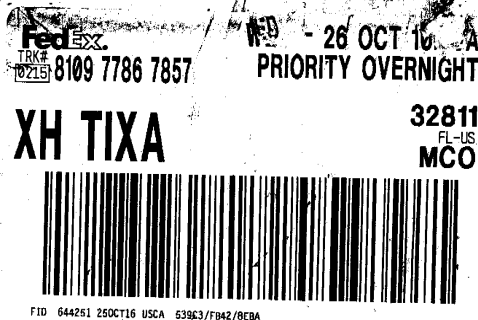
[Signature] 10-27-16

NF 02/16

receipt confirmation 020116.xls

FA38120: Chain of Custody

Page 3 of 4



FA38120: Chain of Custody
Page 4 of 4

GC/MS Volatiles

9

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4483-MB	N0098542.D	1	10/28/16	KM	n/a	n/a	VN4483

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

FA38120-1, FA38120-2, FA38120-3, FA38120-4, FA38120-5, FA38120-6, FA38120-7, FA38120-8

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	2.2	5.0	2.0	ug/l	J
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: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4483-MB	N0098542.D	1	10/28/16	KM	n/a	n/a	VN4483

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-1, FA38120-2, FA38120-3, FA38120-4, FA38120-5, FA38120-6, FA38120-7, FA38120-8

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

6.1.1
6

Method Blank Summary

Page 1 of 1

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4484-MB	N0098571.D	1	10/31/16	KM	n/a	n/a	VN4484

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-2, FA38120-8

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	

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

Method Blank Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-MB	B117657.D	1	11/03/16	WV	n/a	n/a	VB4736

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

FA38120-17, FA38120-18

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: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-MB	B117657.D	1	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-17, FA38120-18

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	93% 79-125%
2037-26-5	Toluene-D8	101% 85-112%
460-00-4	4-Bromofluorobenzene	101% 83-118%

Method Blank Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1173-MB	I43300.D	1	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-17

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 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	100% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4739-MB	B117722.D	1	11/07/16	SP	n/a	n/a	VB4739

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

FA38120-9, FA38120-10, FA38120-11, FA38120-12, FA38120-13, FA38120-14

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: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4739-MB	B117722.D	1	11/07/16	SP	n/a	n/a	VB4739

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-9, FA38120-10, FA38120-11, FA38120-12, FA38120-13, FA38120-14

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 83-118%
17060-07-0	1,2-Dichloroethane-D4	94% 79-125%
2037-26-5	Toluene-D8	98% 85-112%
460-00-4	4-Bromofluorobenzene	99% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1177-MB	I43410.D	1	11/10/16	WV	n/a	n/a	VI1177

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

FA38120-15, FA38120-16

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: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1177-MB	I43410.D	1	11/10/16	WV	n/a	n/a	VI1177

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-15, FA38120-16

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

Blank Spike Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4483-BS	N0098541.D	1	10/28/16	KM	n/a	n/a	VN4483

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

FA38120-1, FA38120-2, FA38120-3, FA38120-4, FA38120-5, FA38120-6, FA38120-7, FA38120-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	96.2	77	50-147
71-43-2	Benzene	25	27.1	108	81-122
75-27-4	Bromodichloromethane	25	26.7	107	79-123
75-25-2	Bromoform	25	24.0	96	66-123
78-93-3	2-Butanone (MEK)	125	99.2	79	56-143
75-15-0	Carbon Disulfide	25	22.8	91	66-148
56-23-5	Carbon Tetrachloride	25	26.4	106	76-136
108-90-7	Chlorobenzene	25	27.4	110	82-124
75-00-3	Chloroethane	25	31.1	124	62-144
67-66-3	Chloroform	25	26.6	106	80-124
124-48-1	Dibromochloromethane	25	26.9	108	78-122
75-34-3	1,1-Dichloroethane	25	28.1	112	81-122
107-06-2	1,2-Dichloroethane	25	25.4	102	75-125
75-35-4	1,1-Dichloroethylene	25	27.1	108	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.3	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.4	118	76-127
78-87-5	1,2-Dichloropropane	25	26.8	107	76-124
10061-01-5	cis-1,3-Dichloropropene	25	26.8	107	75-118
10061-02-6	trans-1,3-Dichloropropene	25	29.4	118	80-120
100-41-4	Ethylbenzene	25	27.2	109	81-121
591-78-6	2-Hexanone	125	94.7	76	61-129
74-83-9	Methyl Bromide	25	27.4	110	59-143
74-87-3	Methyl Chloride	25	26.9	108	50-159
75-09-2	Methylene Chloride	25	26.8	107	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	99.1	79	66-122
100-42-5	Styrene	25	27.0	108	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.1	104	72-120
127-18-4	Tetrachloroethylene	25	28.2	113	76-135
108-88-3	Toluene	25	27.4	110	80-120
71-55-6	1,1,1-Trichloroethane	25	25.6	102	75-130
79-00-5	1,1,2-Trichloroethane	25	27.7	111	76-119
79-01-6	Trichloroethylene	25	27.4	110	81-126
75-01-4	Vinyl Chloride	25	29.3	117	69-159
1330-20-7	Xylene (total)	75	81.8	109	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4483-BS	N0098541.D	1	10/28/16	KM	n/a	n/a	VN4483

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

FA38120-1, FA38120-2, FA38120-3, FA38120-4, FA38120-5, FA38120-6, FA38120-7, FA38120-8

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4484-BS	N0098569.D	1	10/31/16	KM	n/a	n/a	VN4484

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-2, FA38120-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	27.3	109	76-135

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-BS	B117656.D	1	11/03/16	WV	n/a	n/a	VB4736

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

FA38120-17, FA38120-18

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	29.6	118	81-122
75-27-4	Bromodichloromethane	25	28.3	113	79-123
75-25-2	Bromoform	25	27.1	108	66-123
78-93-3	2-Butanone (MEK)	125	130	104	56-143
75-15-0	Carbon Disulfide	25	29.9	120	66-148
56-23-5	Carbon Tetrachloride	25	28.6	114	76-136
108-90-7	Chlorobenzene	25	29.2	117	82-124
75-00-3	Chloroethane	25	27.7	111	62-144
67-66-3	Chloroform	25	27.1	108	80-124
124-48-1	Dibromochloromethane	25	28.6	114	78-122
75-34-3	1,1-Dichloroethane	25	30.2	121	81-122
107-06-2	1,2-Dichloroethane	25	26.0	104	75-125
75-35-4	1,1-Dichloroethylene	25	29.1	116	78-137
156-59-2	cis-1,2-Dichloroethylene	25	28.3	113	78-120
156-60-5	trans-1,2-Dichloroethylene	25	31.6	126	76-127
78-87-5	1,2-Dichloropropane	25	29.7	119	76-124
10061-01-5	cis-1,3-Dichloropropene	25	30.7	123*	75-118
10061-02-6	trans-1,3-Dichloropropene	25	31.6	126*	80-120
100-41-4	Ethylbenzene	25	29.6	118	81-121
591-78-6	2-Hexanone	125	129	103	61-129
74-83-9	Methyl Bromide	25	25.6	102	59-143
74-87-3	Methyl Chloride	25	28.5	114	50-159
75-09-2	Methylene Chloride	25	29.6	118	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	132	106	66-122
100-42-5	Styrene	25	30.1	120*	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.8	107	72-120
127-18-4	Tetrachloroethylene	25	30.8	123	76-135
108-88-3	Toluene	25	29.4	118	80-120
71-55-6	1,1,1-Trichloroethane	25	27.2	109	75-130
79-00-5	1,1,2-Trichloroethane	25	28.9	116	76-119
79-01-6	Trichloroethylene	25	30.5	122	81-126
75-01-4	Vinyl Chloride	25	28.8	115	69-159
1330-20-7	Xylene (total)	75	87.1	116	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-BS	B117656.D	1	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-17, FA38120-18

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1173-BS	I43299.D	1	11/04/16	WV	n/a	n/a	VI1173

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

FA38120-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	25.9	104	78-120

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4739-BS	B117721.D	1	11/07/16	SP	n/a	n/a	VB4739

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

FA38120-9, FA38120-10, FA38120-11, FA38120-12, FA38120-13, FA38120-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	116	93	50-147
71-43-2	Benzene	25	24.8	99	81-122
75-27-4	Bromodichloromethane	25	24.7	99	79-123
75-25-2	Bromoform	25	25.9	104	66-123
78-93-3	2-Butanone (MEK)	125	120	96	56-143
75-15-0	Carbon Disulfide	25	25.4	102	66-148
56-23-5	Carbon Tetrachloride	25	27.5	110	76-136
108-90-7	Chlorobenzene	25	23.5	94	82-124
75-00-3	Chloroethane	25	22.9	92	62-144
67-66-3	Chloroform	25	24.3	97	80-124
124-48-1	Dibromochloromethane	25	25.4	102	78-122
75-34-3	1,1-Dichloroethane	25	24.2	97	81-122
107-06-2	1,2-Dichloroethane	25	21.3	85	75-125
75-35-4	1,1-Dichloroethylene	25	23.5	94	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.5	98	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.8	103	76-127
78-87-5	1,2-Dichloropropane	25	23.8	95	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.2	101	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.5	102	80-120
100-41-4	Ethylbenzene	25	24.4	98	81-121
591-78-6	2-Hexanone	125	101	81	61-129
74-83-9	Methyl Bromide	25	23.4	94	59-143
74-87-3	Methyl Chloride	25	21.8	87	50-159
75-09-2	Methylene Chloride	25	22.2	89	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	99.7	80	66-122
100-42-5	Styrene	25	24.8	99	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	22.7	91	72-120
127-18-4	Tetrachloroethylene	25	26.0	104	76-135
108-88-3	Toluene	25	24.2	97	80-120
71-55-6	1,1,1-Trichloroethane	25	24.5	98	75-130
79-00-5	1,1,2-Trichloroethane	25	23.0	92	76-119
79-01-6	Trichloroethylene	25	25.3	101	81-126
75-01-4	Vinyl Chloride	25	23.2	93	69-159
1330-20-7	Xylene (total)	75	74.0	99	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4739-BS	B117721.D	1	11/07/16	SP	n/a	n/a	VB4739

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-9, FA38120-10, FA38120-11, FA38120-12, FA38120-13, FA38120-14

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	79-125%
2037-26-5	Toluene-D8	96%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA38120**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1177-BS ^a	I43411.D	1	11/10/16	WV	n/a	n/a	VI1177

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

FA38120-15, FA38120-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	117	94	50-147
71-43-2	Benzene	25	25.2	101	81-122
75-27-4	Bromodichloromethane	25	24.7	99	79-123
75-25-2	Bromoform	25	21.1	84	66-123
78-93-3	2-Butanone (MEK)	125	128	102	56-143
75-15-0	Carbon Disulfide	25	25.0	100	66-148
56-23-5	Carbon Tetrachloride	25	25.4	102	76-136
108-90-7	Chlorobenzene	25	24.8	99	82-124
75-00-3	Chloroethane	25	24.9	100	62-144
67-66-3	Chloroform	25	24.4	98	80-124
124-48-1	Dibromochloromethane	25	21.3	85	78-122
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	23.3	93	75-125
75-35-4	1,1-Dichloroethylene	25	26.1	104	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.3	97	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.7	111	76-127
78-87-5	1,2-Dichloropropane	25	24.9	100	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.1	100	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.5	98	80-120
100-41-4	Ethylbenzene	25	25.0	100	81-121
591-78-6	2-Hexanone	125	129	103	61-129
74-83-9	Methyl Bromide	25	25.1	100	59-143
74-87-3	Methyl Chloride	25	22.5	90	50-159
75-09-2	Methylene Chloride	25	24.7	99	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	122	98	66-122
100-42-5	Styrene	25	25.9	104	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	24.5	98	72-120
127-18-4	Tetrachloroethylene	25	23.9	96	76-135
108-88-3	Toluene	25	24.2	97	80-120
71-55-6	1,1,1-Trichloroethane	25	23.8	95	75-130
79-00-5	1,1,2-Trichloroethane	25	24.7	99	76-119
79-01-6	Trichloroethylene	25	24.8	99	81-126
75-01-4	Vinyl Chloride	25	24.6	98	69-159
1330-20-7	Xylene (total)	75	75.7	101	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1177-BS ^a	I43411.D	1	11/10/16	WV	n/a	n/a	VI1177

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-15, FA38120-16

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

(a) No MS/MSD available for this run.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38072-1MS	N0098563.D	1	10/28/16	KM	n/a	n/a	VN4483
FA38072-1MSD	N0098564.D	1	10/28/16	KM	n/a	n/a	VN4483
FA38072-1 ^a	N0098543.D	1	10/28/16	KM	n/a	n/a	VN4483

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-1, FA38120-2, FA38120-3, FA38120-4, FA38120-5, FA38120-6, FA38120-7, FA38120-8

CAS No.	Compound	FA38072-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U	125	115	92	125	104	83	10	50-147/21
71-43-2	Benzene	1.0 U	25	25.2	101	25	25.3	101	0	81-122/14
75-27-4	Bromodichloromethane	1.0 U	25	25.5	102	25	25.3	101	1	79-123/19
75-25-2	Bromoform	1.0 U	25	21.4	86	25	22.2	89	4	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	123	98	125	109	87	12	56-143/18
75-15-0	Carbon Disulfide	2.0 U	25	21.0	84	25	21.3	85	1	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	24.2	97	25	24.8	99	2	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	25.2	101	25	25.4	102	1	82-124/14
75-00-3	Chloroethane	2.0 U	25	32.1	128	25	34.7	139	8	62-144/20
67-66-3	Chloroform	1.0 U	25	25.0	100	25	24.7	99	1	80-124/15
124-48-1	Dibromochloromethane	1.0 U	25	24.4	98	25	24.7	99	1	78-122/19
75-34-3	1,1-Dichloroethane	1.0 U	25	26.1	104	25	26.2	105	0	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	24.6	98	25	24.4	98	1	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	25.1	100	25	25.2	101	0	78-137/18
156-59-2	cis-1,2-Dichloroethylene	7.2	25	30.7	94	25	31.3	96	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	2.5	25	29.6	108	25	29.6	108	0	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	24.7	99	25	24.9	100	1	76-124/14
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	24.6	98	25	24.3	97	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	26.5	106	25	26.8	107	1	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	25.3	101	25	25.5	102	1	81-121/14
591-78-6	2-Hexanone	10 U	125	110	88	125	99.5	80	10	61-129/18
74-83-9	Methyl Bromide	2.0 U	25	26.7	107	25	28.1	112	5	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	27.4	110	25	29.1	116	6	50-159/19
75-09-2	Methylene Chloride	5.0 U	25	25.1	100	25	25.1	100	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	114	91	125	103	82	10	66-122/16
100-42-5	Styrene	1.0 U	25	24.1	96	25	24.4	98	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	25.2	101	25	24.9	100	1	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	25.2	101	25	25.8	103	2	76-135/16
108-88-3	Toluene	1.0 U	25	25.3	101	25	25.6	102	1	80-120/14
71-55-6	1,1,1-Trichloroethane	1.0 U	25	23.4	94	25	23.8	95	2	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	26.0	104	25	25.9	104	0	76-119/14
79-01-6	Trichloroethylene	1.0 U	25	26.0	104	25	26.1	104	0	81-126/15
75-01-4	Vinyl Chloride	36.1	25	66.7	122	25	67.9	127	2	69-159/18
1330-20-7	Xylene (total)	3.0 U	75	74.8	100	75	76.4	102	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38072-1MS	N0098563.D	1	10/28/16	KM	n/a	n/a	VN4483
FA38072-1MSD	N0098564.D	1	10/28/16	KM	n/a	n/a	VN4483
FA38072-1 ^a	N0098543.D	1	10/28/16	KM	n/a	n/a	VN4483

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-1, FA38120-2, FA38120-3, FA38120-4, FA38120-5, FA38120-6, FA38120-7, FA38120-8

CAS No.	Surrogate Recoveries	MS	MSD	FA38072-1	Limits
1868-53-7	Dibromofluoromethane	102%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	102%	99%	79-125%
2037-26-5	Toluene-D8	101%	102%	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	101%	106%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37972-34MS	N0098594.D	50	10/31/16	KM	n/a	n/a	VN4484
FA37972-34MSD	N0098595.D	50	10/31/16	KM	n/a	n/a	VN4484
FA37972-34	N0098582.D	50	10/31/16	KM	n/a	n/a	VN4484

The QC reported here applies to the following samples: Method: SW846 8260B
FA38120-2, FA38120-8

CAS No.	Compound	FA37972-34 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	9010	E	1250	10100	87	1250	9760	60* a	3 76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA37972-34	Limits
1868-53-7	Dibromofluoromethane	102%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	101%	102%	79-125%
2037-26-5	Toluene-D8	101%	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	102%	106%	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: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-5MS	B117667.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5MSD	B117668.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5	B117659.D	5	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-17, FA38120-18

CAS No.	Compound	FA38215-5 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	684	109	625	684	109	0	50-147/21
71-43-2	Benzene	ND		125	128	102	125	126	101	2	81-122/14
75-27-4	Bromodichloromethane	ND		125	136	109	125	125	100	8	79-123/19
75-25-2	Bromoform	ND		125	120	96	125	107	86	11	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	613	98	625	613	98	0	56-143/18
75-15-0	Carbon Disulfide	ND		125	114	91	125	99.6	80	13	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	150	120	125	133	106	12	76-136/23
108-90-7	Chlorobenzene	ND		125	120	96	125	119	95	1	82-124/14
75-00-3	Chloroethane	ND		125	134	107	125	135	108	1	62-144/20
67-66-3	Chloroform	ND		125	135	108	125	128	102	5	80-124/15
124-48-1	Dibromochloromethane	ND		125	129	103	125	117	94	10	78-122/19
75-34-3	1,1-Dichloroethane	ND		125	140	112	125	135	108	4	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	138	110	125	130	104	6	75-125/14
75-35-4	1,1-Dichloroethylene	ND		125	144	115	125	143	114	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	7.0		125	129	98	125	130	98	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	153	122	125	143	114	7	76-127/17
78-87-5	1,2-Dichloropropane	ND		125	124	99	125	120	96	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		125	124	99	125	111	89	11	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	128	102	125	119	95	7	80-120/22
100-41-4	Ethylbenzene	ND		125	130	104	125	129	103	1	81-121/14
591-78-6	2-Hexanone	ND		625	560	90	625	592	95	6	61-129/18
74-83-9	Methyl Bromide	ND		125	130	104	125	124	99	5	59-143/19
74-87-3	Methyl Chloride	ND		125	124	99	125	132	106	6	50-159/19
75-09-2	Methylene Chloride	ND		125	143	114	125	138	110	4	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	602	96	625	624	100	4	66-122/16
100-42-5	Styrene	ND		125	129	103	125	129	103	0	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	110	88	125	114	91	4	72-120/14
127-18-4	Tetrachloroethylene	410		125	489	63* a	125	477	54* a	2	76-135/16
108-88-3	Toluene	ND		125	124	99	125	125	100	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		125	139	111	125	131	105	6	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	119	95	125	124	99	4	76-119/14
79-01-6	Trichloroethylene	3.5	J	125	141	110	125	133	104	6	81-126/15
75-01-4	Vinyl Chloride	ND		125	130	104	125	133	106	2	69-159/18
1330-20-7	Xylene (total)	ND		375	403	107	375	397	106	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-5MS	B117667.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5MSD	B117668.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5	B117659.D	5	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-17, FA38120-18

CAS No.	Surrogate Recoveries	MS	MSD	FA38215-5	Limits
1868-53-7	Dibromofluoromethane	108%	105%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	109%	103%	79-125%
2037-26-5	Toluene-D8	97%	98%	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	97%	104%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38295-3MS	I43316.D	100	11/04/16	WV	n/a	n/a	VI1173
FA38295-3MSD	I43317.D	100	11/04/16	WV	n/a	n/a	VI1173
FA38295-3 ^a	I43303.D	100	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-17

CAS No.	Compound	FA38295-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
156-59-2	cis-1,2-Dichloroethylene	6970	2500	9800	113	2500	10200	129* ^b	4	78-120/15

CAS No.	Surrogate Recoveries	MS	MSD	FA38295-3	Limits
1868-53-7	Dibromofluoromethane	102%	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	103%	100%	79-125%
2037-26-5	Toluene-D8	99%	100%	100%	85-112%
460-00-4	4-Bromofluorobenzene	97%	95%	96%	83-118%

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

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA38120

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38340-2MS	B117743.D	1	11/07/16	SP	n/a	n/a	VB4739
FA38340-2MSD	B117744.D	1	11/07/16	SP	n/a	n/a	VB4739
FA38340-2	B117725.D	1	11/07/16	SP	n/a	n/a	VB4739

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38120-9, FA38120-10, FA38120-11, FA38120-12, FA38120-13, FA38120-14

CAS No.	Compound	FA38340-2 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	107	86	125	109	87	2	50-147/21
71-43-2	Benzene	ND		25	23.8	95	25	23.6	94	1	81-122/14
75-27-4	Bromodichloromethane	ND		25	25.8	103	25	23.9	96	8	79-123/19
75-25-2	Bromoform	ND		25	25.3	101	25	22.0	88	14	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	107	86	125	112	90	5	56-143/18
75-15-0	Carbon Disulfide	ND		25	21.6	86	25	20.2	81	7	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	29.8	119	25	26.5	106	12	76-136/23
108-90-7	Chlorobenzene	ND		25	24.2	97	25	24.5	98	1	82-124/14
75-00-3	Chloroethane	ND		25	21.9	88	25	22.4	90	2	62-144/20
67-66-3	Chloroform	ND		25	25.3	101	25	24.5	98	3	80-124/15
124-48-1	Dibromochloromethane	ND		25	25.7	103	25	23.2	93	10	78-122/19
75-34-3	1,1-Dichloroethane	ND		25	25.1	100	25	24.8	99	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	24.0	96	25	23.2	93	3	75-125/14
75-35-4	1,1-Dichloroethylene	ND		25	25.6	102	25	24.6	98	4	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		25	23.8	95	25	23.4	94	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	26.6	106	25	26.5	106	0	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	23.1	92	25	23.0	92	0	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	23.8	95	25	21.9	88	8	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	26.0	104	25	23.4	94	11	80-120/22
100-41-4	Ethylbenzene	ND		25	25.2	101	25	24.7	99	2	81-121/14
591-78-6	2-Hexanone	ND		125	92.3	74	125	93.7	75	2	61-129/18
74-83-9	Methyl Bromide	ND		25	23.1	92	25	22.8	91	1	59-143/19
74-87-3	Methyl Chloride	ND		25	18.7	75	25	19.9	80	6	50-159/19
75-09-2	Methylene Chloride	ND		25	23.4	94	25	23.0	92	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	96.7	77	125	98.2	79	2	66-122/16
100-42-5	Styrene	ND		25	24.9	100	25	24.5	98	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	21.3	85	25	22.0	88	3	72-120/14
127-18-4	Tetrachloroethylene	ND		25	26.6	106	25	26.0	104	2	76-135/16
108-88-3	Toluene	ND		25	24.0	96	25	24.2	97	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		25	26.2	105	25	25.4	102	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	24.1	96	25	24.7	99	2	76-119/14
79-01-6	Trichloroethylene	ND		25	26.1	104	25	25.2	101	4	81-126/15
75-01-4	Vinyl Chloride	ND		25	21.2	85	25	22.4	90	6	69-159/18
1330-20-7	Xylene (total)	ND		75	78.0	104	75	76.8	102	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA38120
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38340-2MS	B117743.D	1	11/07/16	SP	n/a	n/a	VB4739
FA38340-2MSD	B117744.D	1	11/07/16	SP	n/a	n/a	VB4739
FA38340-2	B117725.D	1	11/07/16	SP	n/a	n/a	VB4739

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

FA38120-9, FA38120-10, FA38120-11, FA38120-12, FA38120-13, FA38120-14

CAS No.	Surrogate Recoveries	MS	MSD	FA38340-2	Limits
1868-53-7	Dibromofluoromethane	108%	104%	109%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	101%	103%	79-125%
2037-26-5	Toluene-D8	99%	99%	97%	85-112%
460-00-4	4-Bromofluorobenzene	102%	99%	103%	83-118%

* = Outside of Control Limits.

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

SGS Accutest Job Number: FA38215

Sampling Dates: 10/25/16 - 10/26/16

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: **114**



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

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
AK, AR, GA, IA, KY, MA, NV, OK, OR, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of SGS Accutest.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	6
Section 3: Summary of Hits	9
Section 4: Sample Results	12
4.1: FA38215-1: MW-2	13
4.2: FA38215-2: MW-13D	15
4.3: FA38215-3: MW-21	17
4.4: FA38215-4: MW-6	19
4.5: FA38215-5: MW-1	21
4.6: FA38215-6: MW-21D	23
4.7: FA38215-7: MW-5	25
4.8: FA38215-8: MW-17	27
4.9: FA38215-9: MW-3	29
4.10: FA38215-10: MW-18	31
4.11: FA38215-11: MW-3D	33
4.12: FA38215-12: MW-9D	35
4.13: FA38215-13: MW-9	37
4.14: FA38215-14: MW-3D1	39
4.15: FA38215-15: MW-14	41
4.16: FA38215-16: MW-14D	43
4.17: FA38215-17: MW-14D-A	45
4.18: FA38215-18: MW-23D	47
4.19: FA38215-19: MW-4	49
4.20: FA38215-20: MW-4-A	51
4.21: FA38215-21: MW-7	53
4.22: FA38215-22: TRIP BLANK	55
4.23: FA38215-23: IDW-1	57
Section 5: Misc. Forms	63
5.1: Chain of Custody	64
Section 6: GC/MS Volatiles - QC Data Summaries	68
6.1: Method Blank Summary	69
6.2: Blank Spike Summary	77
6.3: Matrix Spike/Matrix Spike Duplicate Summary	85
Section 7: GC/MS Semi-volatiles - QC Data Summaries	93
7.1: Method Blank Summary	94
7.2: Blank Spike Summary	97
7.3: Matrix Spike/Matrix Spike Duplicate Summary	100
Section 8: Metals Analysis - QC Data Summaries	103
8.1: Prep QC MP31085: Sb,As,Be,Cd,Cr,Cu,Pb,Ni,Se,Ag,Tl,Zn	104
8.2: Prep QC MP31095: Hg	110

Sample Summary

United Technologies Corporation

Job No: FA38215

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA38215-1	10/25/16	15:15 RM	10/27/16	AQ	Ground Water	MW-2
FA38215-2	10/25/16	15:47 RM	10/27/16	AQ	Ground Water	MW-13D
FA38215-3	10/25/16	15:55 RM	10/27/16	AQ	Ground Water	MW-21
FA38215-4	10/25/16	16:41 RM	10/27/16	AQ	Ground Water	MW-6
FA38215-5	10/25/16	16:50 RM	10/27/16	AQ	Ground Water	MW-1
FA38215-6	10/25/16	17:40 RM	10/27/16	AQ	Ground Water	MW-21D
FA38215-7	10/26/16	08:42 RM	10/27/16	AQ	Ground Water	MW-5
FA38215-8	10/26/16	08:45 RM	10/27/16	AQ	Ground Water	MW-17
FA38215-9	10/26/16	09:27 RM	10/27/16	AQ	Ground Water	MW-3
FA38215-10	10/26/16	09:35 RM	10/27/16	AQ	Ground Water	MW-18
FA38215-11	10/26/16	10:20 RM	10/27/16	AQ	Ground Water	MW-3D
FA38215-11D	10/26/16	10:20 RM	10/27/16	AQ	Water Dup/MSD	MW-3D
FA38215-11S	10/26/16	10:20 RM	10/27/16	AQ	Water Matrix Spike	MW-3D

Sample Summary

(continued)

United Technologies Corporation

Job No: FA38215

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA38215-12	10/26/16	10:25 RM	10/27/16	AQ	Ground Water	MW-9D
FA38215-13	10/26/16	11:15 RM	10/27/16	AQ	Ground Water	MW-9
FA38215-13D	10/26/16	11:15 RM	10/27/16	AQ	Water Dup/MSD	MW-9
FA38215-13S	10/26/16	11:15 RM	10/27/16	AQ	Water Matrix Spike	MW-9
FA38215-14	10/26/16	11:17 RM	10/27/16	AQ	Ground Water	MW-3D1
FA38215-15	10/26/16	12:27 RM	10/27/16	AQ	Ground Water	MW-14
FA38215-16	10/26/16	13:02 RM	10/27/16	AQ	Ground Water	MW-14D
FA38215-17	10/26/16	13:02 RM	10/27/16	AQ	Ground Water	MW-14D-A
FA38215-18	10/26/16	13:40 RM	10/27/16	AQ	Ground Water	MW-23D
FA38215-19	10/26/16	14:18 RM	10/27/16	AQ	Ground Water	MW-4
FA38215-20	10/26/16	14:18 RM	10/27/16	AQ	Ground Water	MW-4-A
FA38215-21	10/26/16	14:35 RM	10/27/16	AQ	Ground Water	MW-7
FA38215-22	10/26/16	00:00 RM	10/27/16	AQ	Trip Blank Water	TRIP BLANK



Sample Summary
(continued)

United Technologies Corporation

Job No: FA38215

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA38215-23	10/26/16	14:55 RM	10/27/16	AQ	Ground Water	IDW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job FA38215

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report 11/10/2016 11:31:47

22 Samples and 1 Trip Blank were collected on/between 10/25/2016 and 10/26/2016 and were received at SGS Accutest Southeast (SASE) on 10/27/2016 properly preserved, at 3.2 Deg. C and intact. These Samples received an SASE job number of FA38215. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results

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

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: V1A26

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38215-13MS, FA38215-13MSD were used as the QC samples indicated.

FA38215-22: Sample vial(s) contained significant headspace; reported results are considered minimum values.

Matrix: AQ

Batch ID: VB4736

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38215-5MS, FA38215-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for cis-1,3-Dichloropropene, Styrene, trans-1,3-Dichloropropene are outside control limits. Recoveries are biased high. Analytes are non-detect in associated samples; therefore data is not adversely affected.

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.

FA38215-4 for cis-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38215-4 for Styrene: Associated BS recovery outside control limits.

FA38215-4 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38215-5 for cis-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38215-5 for Styrene: Associated BS recovery outside control limits.

FA38215-5 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38215-6 for cis-1,3-Dichloropropene: Associated BS recovery outside control limits.

FA38215-6 for Styrene: Associated BS recovery outside control limits.

FA38215-6 for trans-1,3-Dichloropropene: Associated BS recovery outside control limits.

Matrix: AQ

Batch ID: VI1172

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38215-11MS, FA38215-11MSD were used as the QC samples indicated.

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

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethane, Chloroethane, Methyl Bromide, trans-1,2-Dichloroethylene are outside control limits. Probable cause is due to matrix interference.

FA38215-1 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA38215-2 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA38215-3 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

Matrix: AQ

Batch ID: VI1173

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA38295-3MS, FA38295-3MSD were used as the QC samples indicated.

Thursday, November 10, 2016

Page 1 of 3

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VI1173

Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, Benzene, Bromodichloromethane, Chlorobenzene, Chloroethane, Chloroform, cis-1,3-Dichloropropene, Ethylbenzene, Methyl Bromide, Styrene, Toluene, trans-1,2-Dichloroethylene, trans-1,3-Dichloropropene, Trichloroethylene, Xylene (total) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Benzene, Bromodichloromethane, Bromoform, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, cis-1,2-Dichloroethylene, cis-1,3-Dichloropropene, Ethylbenzene, Methyl Bromide, Methylene Chloride, Styrene, Toluene, trans-1,2-Dichloroethylene, trans-1,3-Dichloropropene, Trichloroethylene, Xylene (total) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 4-Methyl-2-pentanone (MIBK) are outside control limits for sample FA38295-3MSD. Probable cause is due to sample non-homogeneity.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ

Batch ID: OP62497

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) FA38267-1MS, FA38267-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for ,3'-Dichlorobenzidine, 4-Chloroaniline, Pentachlorophenol are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 3,3'-Dichlorobenzidine, 4-Chloroaniline, Pentachlorophenol are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

FA38215-23 for 2,4-Dinitrophenol: Associated CCV outside control limits.

FA38215-23 for 4,6-Dinitro-o-cresol: Associated CCV outside control limits.

FA38215-23 for Pentachlorophenol: Associated CCV outside control limits.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP31085

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) FA38293-1DUP, FA38293-1MS, FA38293-1MSD, FA38293-1PS, FA38293-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Arsenic, Copper are outside control limits for sample MP31085-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Antimony, Arsenic, Chromium, Copper, Zinc are outside control limits for sample MP31085-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP31085-PS1 for Zinc: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP31095

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) FA38154-2FDUP, FA38154-2FMS, FA38154-2FMSD, FA38154-2FSIDL were used as the QC samples for metals.

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

Narrative prepared by:

Lovelie Metzgar, QA Officer (signature on file)

Date: November 10, 2016

Thursday, November 10, 2016

Page 3 of 3

Summary of Hits

Job Number: FA38215
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/25/16 thru 10/26/16



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

FA38215-1 MW-2

Tetrachloroethylene	0.83 J	1.0	0.30	ug/l	SW846 8260B
---------------------	--------	-----	------	------	-------------

FA38215-2 MW-13D

1,1-Dichloroethylene	7.0	5.0	1.1	ug/l	SW846 8260B
Tetrachloroethylene	298	5.0	1.5	ug/l	SW846 8260B
1,1,1-Trichloroethane	2.5 J	5.0	1.0	ug/l	SW846 8260B

FA38215-3 MW-21

cis-1,2-Dichloroethylene	4.2	2.5	0.78	ug/l	SW846 8260B
Tetrachloroethylene	181	2.5	0.76	ug/l	SW846 8260B
Trichloroethylene	2.3 J	2.5	0.68	ug/l	SW846 8260B

FA38215-4 MW-6

No hits reported in this sample.

FA38215-5 MW-1

cis-1,2-Dichloroethylene	7.0	5.0	1.6	ug/l	SW846 8260B
Tetrachloroethylene	410	5.0	1.5	ug/l	SW846 8260B
Trichloroethylene	3.5 J	5.0	1.4	ug/l	SW846 8260B

FA38215-6 MW-21D

1,1-Dichloroethylene	1.2 J	2.5	0.54	ug/l	SW846 8260B
Tetrachloroethylene	169	2.5	0.76	ug/l	SW846 8260B

FA38215-7 MW-5

Tetrachloroethylene	2.5	1.0	0.30	ug/l	SW846 8260B
---------------------	-----	-----	------	------	-------------

FA38215-8 MW-17

No hits reported in this sample.

FA38215-9 MW-3

cis-1,2-Dichloroethylene	0.58 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	91.6	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	1.1	1.0	0.27	ug/l	SW846 8260B

Summary of Hits

Job Number: FA38215
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/25/16 thru 10/26/16

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

FA38215-10 MW-18

No hits reported in this sample.

FA38215-11 MW-3D

1,1-Dichloroethylene	8.8	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	8.3	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	331	10	3.0	ug/l	SW846 8260B
1,1,1-Trichloroethane	0.25 J	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene	7.6	1.0	0.27	ug/l	SW846 8260B

FA38215-12 MW-9D

No hits reported in this sample.

FA38215-13 MW-9

cis-1,2-Dichloroethylene	19.2	10	3.1	ug/l	SW846 8260B
Tetrachloroethylene	685	10	3.0	ug/l	SW846 8260B
Trichloroethylene	106	10	2.7	ug/l	SW846 8260B

FA38215-14 MW-3D1

No hits reported in this sample.

FA38215-15 MW-14

Tetrachloroethylene	0.66 J	1.0	0.30	ug/l	SW846 8260B
---------------------	--------	-----	------	------	-------------

FA38215-16 MW-14D

1,1-Dichloroethylene	1.4	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.86 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	84.3	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.65 J	1.0	0.27	ug/l	SW846 8260B

FA38215-17 MW-14D-A

1,1-Dichloroethylene	1.1	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	0.65 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	80.7	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.52 J	1.0	0.27	ug/l	SW846 8260B

Summary of Hits

Job Number: FA38215
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 10/25/16 thru 10/26/16



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

FA38215-18 MW-23D

No hits reported in this sample.

FA38215-19 MW-4

Toluene	0.42 J	1.0	0.20	ug/l	SW846 8260B
---------	--------	-----	------	------	-------------

FA38215-20 MW-4-A

Toluene	0.30 J	1.0	0.20	ug/l	SW846 8260B
---------	--------	-----	------	------	-------------

FA38215-21 MW-7

No hits reported in this sample.

FA38215-22 TRIP BLANK

No hits reported in this sample.

FA38215-23 IDW-1

1,1-Dichloroethylene	1.0	1.0	0.22	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	11.6	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	290	5.0	1.5	ug/l	SW846 8260B
1,1,1-Trichloroethane	1.4	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene	2.5	1.0	0.27	ug/l	SW846 8260B
Chromium	3.8 J	10	1.0	ug/l	SW846 6010C
Nickel	0.40 J	40	0.40	ug/l	SW846 6010C
Zinc	10.8 J	20	4.4	ug/l	SW846 6010C



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-1	Date Received:	10/27/16
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	I43279.D	1	11/03/16	WV	n/a	n/a	VI1172
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 ^a	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	0.83	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:	10/25/16
Lab Sample ID:	FA38215-1	Date Received:	10/27/16
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	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	118%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	94%		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-13D	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-2	Date Received:	10/27/16
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	I43280.D	5	11/03/16	WV	n/a	n/a	VI1172
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	7.0	5.0	1.1	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.6	ug/l	
156-60-5	trans-1,2-Dichloroethylene ^a	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	298	5.0	1.5	ug/l	
108-88-3	Toluene	ND	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.5	5.0	1.0	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/l	
79-01-6	Trichloroethylene	ND	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-13D	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-2	Date Received:	10/27/16
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	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	121%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	94%		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-21	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-3	Date Received:	10/27/16
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	I43281.D	2.5	11/03/16	WV	n/a	n/a	VI1172
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	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	ND	2.5	0.54	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.2	2.5	0.78	ug/l	
156-60-5	trans-1,2-Dichloroethylene ^a	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	181	2.5	0.76	ug/l	
108-88-3	Toluene	ND	2.5	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.92	ug/l	
79-01-6	Trichloroethylene	2.3	2.5	0.68	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-21	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-3	Date Received:	10/27/16
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	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	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	121%		79-125%
2037-26-5	Toluene-D8	100%		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-6	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-4	Date Received:	10/27/16
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	B117658.D	1	11/03/16	WV	n/a	n/a	VB4736
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 ^a	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	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 ^a	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-6	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-4	Date Received:	10/27/16
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	99%		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	104%		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-1	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-5	Date Received:	10/27/16
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	B117659.D	5	11/03/16	WV	n/a	n/a	VB4736
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	7.0	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 ^a	ND	5.0	1.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	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 ^a	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	410	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	3.5	5.0	1.4	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-1	Date Sampled: 10/25/16
Lab Sample ID: FA38215-5	Date Received: 10/27/16
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	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	104%		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-21D	Date Sampled:	10/25/16
Lab Sample ID:	FA38215-6	Date Received:	10/27/16
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	B117660.D	2.5	11/03/16	WV	n/a	n/a	VB4736
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	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	1.2	2.5	0.54	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	ND	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 ^a	ND	2.5	0.66	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	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 ^a	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	169	2.5	0.76	ug/l	
108-88-3	Toluene	ND	2.5	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.92	ug/l	
79-01-6	Trichloroethylene	ND	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: MW-21D	Date Sampled: 10/25/16
Lab Sample ID: FA38215-6	Date Received: 10/27/16
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	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	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	105%		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-5	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-7	Date Received:	10/27/16
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	1A00639.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	2.5	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	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:	10/26/16
Lab Sample ID:	FA38215-7	Date Received:	10/27/16
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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-17	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-8	Date Received:	10/27/16
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	1A00640.D	1	11/07/16	AJ	n/a	n/a	V1A26
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-17	Date Sampled: 10/26/16
Lab Sample ID: FA38215-8	Date Received: 10/27/16
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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-9	Date Received:	10/27/16
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	1A00641.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	0.58	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	91.6	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-3	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-9	Date Received:	10/27/16
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	91%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-18	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-10	Date Received:	10/27/16
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	1A00642.D	1	11/07/16	AJ	n/a	n/a	V1A26
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-18	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-10	Date Received:	10/27/16
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	99%		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-3D	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-11	Date Received:	10/27/16
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	I43306.D	1	11/04/16	WV	n/a	n/a	VI1173
Run #2	I43278.D	10	11/03/16	WV	n/a	n/a	VI1172

	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	8.8	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	8.3	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	331 ^a	10	3.0	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	0.25	1.0	0.20	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	7.6	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-3D	Date Sampled: 10/26/16
Lab Sample ID: FA38215-11	Date Received: 10/27/16
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	97%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	117%	79-125%
2037-26-5	Toluene-D8	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-9D	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-12	Date Received:	10/27/16
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	1A00643.D	1	11/07/16	AJ	n/a	n/a	V1A26
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-9D	Date Sampled: 10/26/16
Lab Sample ID: FA38215-12	Date Received: 10/27/16
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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	99%		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:	10/26/16
Lab Sample ID:	FA38215-13	Date Received:	10/27/16
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	1A00644.D	10	11/07/16	AJ	n/a	n/a	V1A26
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	19.2	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	685	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	106	10	2.7	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-9	Date Sampled: 10/26/16
Lab Sample ID: FA38215-13	Date Received: 10/27/16
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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	93%		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-3D1	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-14	Date Received:	10/27/16
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	1A00645.D	1	11/07/16	AJ	n/a	n/a	V1A26
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-3D1	Date Sampled: 10/26/16
Lab Sample ID: FA38215-14	Date Received: 10/27/16
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	104%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	99%		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-14	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-15	Date Received:	10/27/16
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	1A00646.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	0.66	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:	10/26/16
Lab Sample ID:	FA38215-15	Date Received:	10/27/16
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	105%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	99%		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:	10/26/16
Lab Sample ID:	FA38215-16	Date Received:	10/27/16
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	1A00647.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	1.4	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.86	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	84.3	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	0.65	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: 10/26/16
Lab Sample ID: FA38215-16	Date Received: 10/27/16
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	107%		79-125%
2037-26-5	Toluene-D8	91%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-14D-A	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-17	Date Received:	10/27/16
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	1A00648.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	1.1	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.65	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	80.7	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	0.52	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-A	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-17	Date Received:	10/27/16
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	105%		79-125%
2037-26-5	Toluene-D8	91%		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-23D	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-18	Date Received:	10/27/16
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	1A00649.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-18	Date Received:	10/27/16
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	105%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-19	Date Received:	10/27/16
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	1A00650.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	0.42	1.0	0.20	ug/l	J
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-4	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-19	Date Received:	10/27/16
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	107%		79-125%
2037-26-5	Toluene-D8	95%		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-4-A	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-20	Date Received:	10/27/16
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	1A00651.D	1	11/07/16	AJ	n/a	n/a	V1A26
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	0.30	1.0	0.20	ug/l	J
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-4-A	Date Sampled: 10/26/16
Lab Sample ID: FA38215-20	Date Received: 10/27/16
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	108%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

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

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-21	Date Received:	10/27/16
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	1A00652.D	1	11/07/16	AJ	n/a	n/a	V1A26
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:	10/26/16
Lab Sample ID:	FA38215-21	Date Received:	10/27/16
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	108%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	99%		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:	TRIP BLANK	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-22	Date Received:	10/27/16
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 ^a	1A00653.D	1	11/07/16	AJ	n/a	n/a	V1A26
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:	10/26/16
Lab Sample ID:	FA38215-22	Date Received:	10/27/16
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	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Sample vial(s) contained significant headspace; reported results are considered minimum values.

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

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

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-23	Date Received:	10/27/16
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	1A00659.D	1	11/07/16	AJ	n/a	n/a	V1A26
Run #2	1A00654.D	5	11/07/16	AJ	n/a	n/a	V1A26

	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	1.0	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	11.6	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	290 ^a	5.0	1.5	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	1.4	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	2.5	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:	IDW-1	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-23	Date Received:	10/27/16
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	98%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	110%	79-125%
2037-26-5	Toluene-D8	87%	93%	85-112%
460-00-4	4-Bromofluorobenzene	101%	99%	83-118%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-23	Date Received:	10/27/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X050166.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.4	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	4.7	0.70	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.60	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.60	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.66	ug/l	
51-28-5	2,4-Dinitrophenol ^a	ND	24	4.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol ^a	ND	9.4	1.9	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.55	ug/l	
	3&4-Methylphenol	ND	4.7	0.99	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.58	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.7	ug/l	
87-86-5	Pentachlorophenol ^a	ND	24	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.47	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.94	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.81	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.53	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.54	ug/l	
120-12-7	Anthracene	ND	4.7	0.58	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.47	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.47	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.51	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.47	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.52	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	4.7	0.47	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	4.7	0.94	ug/l	
86-74-8	Carbazole	ND	4.7	0.53	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.67	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.64	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.65	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.65	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-23	Date Received:	10/27/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	4.7	0.55	ug/l	
218-01-9	Chrysene	ND	4.7	0.50	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.72	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.63	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.47	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.47	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.47	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	4.7	0.47	ug/l	
84-66-2	Diethyl Phthalate	ND	4.7	0.94	ug/l	
131-11-3	Dimethyl Phthalate	ND	4.7	0.94	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	4.7	0.94	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	4.7	0.94	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.59	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	0.94	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.47	ug/l	
86-73-7	Fluorene	ND	4.7	0.61	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.48	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.47	ug/l	
78-59-1	Isophorone	ND	4.7	0.63	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.53	ug/l	
91-20-3	Naphthalene	ND	4.7	0.47	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.66	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.71	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.68	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.62	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	4.7	0.55	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.66	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.56	ug/l	
129-00-0	Pyrene	ND	4.7	0.52	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.47	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	87%		33-118%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	10/26/16
Lab Sample ID:	FA38215-23	Date Received:	10/27/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		42-108%
321-60-8	2-Fluorobiphenyl	72%		40-106%
1718-51-0	Terphenyl-d14	76%		39-121%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IDW-1	Date Sampled: 10/26/16
Lab Sample ID: FA38215-23	Date Received: 10/27/16
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analized By	Method	Prep Method
Antimony	1.0 U	6.0	1.0	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Arsenic	1.3 U	10	1.3	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Beryllium	0.20 U	4.0	0.20	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Cadmium	0.20 U	5.0	0.20	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Chromium	3.8 J	10	1.0	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Copper	1.0 U	25	1.0	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Lead	1.1 U	5.0	1.1	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Mercury	0.030 U	0.50	0.030	ug/l	1	11/03/16	11/03/16 JL	SW846 7470A ²	SW846 7470A ⁴
Nickel	0.40 J	40	0.40	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Selenium	2.9 U	10	2.9	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Silver	0.70 U	5.0	0.70	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Thallium	1.4 U	10	1.4	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³
Zinc	10.8 J	20	4.4	ug/l	1	11/02/16	11/02/16 LM	SW846 6010C ¹	SW846 3010A ³

(1) Instrument QC Batch: MA13536

(2) Instrument QC Batch: MA13537

(3) Prep QC Batch: MP31085

(4) Prep QC Batch: MP31095

RL = Reporting Limit
MDL = Method Detection Limit

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA38215

AECOM

Chain of Custody and Analytical Request

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

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC					Sample Analysis Requested										Quality Assurance Samples		
Client Name: UTC					COMMENTS												Cooler ID
Collected by: Randy Morgan / Justin Butler Project Manager: Walter Gerald 864-234-8925																	
Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	VOC.s (8260B TCL)	SVOC.s (8270D)	P/P Metals (6010C/7470B)								
			COMP	GRAB	Well												
13 MW-9-ms	26-Oct-2016	1115		X		Groundwater	X										
13 MW-9-msD	26-Oct-2016	1115		X			X										
14 MW-301	26-Oct-2016	1117		X			X										
15 MW-14	26-Oct-2016	1227		X			X										
16 MW-14D	26-Oct-2016	1302		X			X										
17 MW-14D-a	26-Oct-2016	1302		X			X										
18 MW-23D	26-Oct-2016	1340		X			X										
9 MW-17	26-Oct-2016	1418		X			X										
10 MW-4-a	26-Oct-2016	1418		X			X										
11 MW-7	26-Oct-2016	1435		X			X										
12 Trip Blank	26-Oct-2016			X			X										
13 IDW-1	26-Oct-2016	1455	X	X			X	X	X								
Temp Blank																	

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:	Airbill #:	Location:
Randy Morgan	10-26-16	1630	J. Cullom	10-27-16	09:30	Method of Shipment: Fed Ex	XXXX	810977867880	Orlando FLA
FX			J. Cullom (A/E)	10-27-16		Analytical Lab: Accutest			
						Lab Recipient:	Date:	Time:	

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

FCL VOC.s BY 8260B - unpreserved vials - 7 day holding time RM

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

S2745\admin\project control\project forms\Blank COC

FA38215: Chain of Custody

Page 2 of 4

SGS

65 of 114
ACCUTEST
FA38215

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA38215 CLIENT: AECOM PROJECT: WTC DELAVAN
 DATE/TIME RECEIVED: 10-27-16 09:30 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8109 7786 7880

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 2 JARS FOR SAMPLE #9

TEMPERATURE INFORMATION

- ☐ IR THERM ID _____ CORR. FACTOR -0.4
☐ OBSERVED TEMPS: 3.6
☐ CORRECTED TEMPS: 3.2 (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 KE 10-28-16 REVIEWER SIGNATURE/DATE KD 10-28-16

NF 02/16

receipt confirmation 020116.xls

FA38215: Chain of Custody

Page 3 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: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1172-MB	I43259.D	1	11/03/16	WV	n/a	n/a	VI1172

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

FA38215-1, FA38215-2, FA38215-3, FA38215-11

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: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1172-MB	I43259.D	1	11/03/16	WV	n/a	n/a	VI1172

The QC reported here applies to the following samples: Method: SW846 8260B
FA38215-1, FA38215-2, FA38215-3, FA38215-11

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 83-118%
17060-07-0	1,2-Dichloroethane-D4	115% 79-125%
2037-26-5	Toluene-D8	101% 85-112%
460-00-4	4-Bromofluorobenzene	96% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-MB	B117657.D	1	11/03/16	WV	n/a	n/a	VB4736

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

FA38215-4, FA38215-5, FA38215-6

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: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-MB	B117657.D	1	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples: Method: SW846 8260B
FA38215-4, FA38215-5, FA38215-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	93% 79-125%
2037-26-5	Toluene-D8	101% 85-112%
460-00-4	4-Bromofluorobenzene	101% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1173-MB	I43300.D	1	11/04/16	WV	n/a	n/a	VI1173

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

FA38215-11

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	
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: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1173-MB	I43300.D	1	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples: Method: SW846 8260B
FA38215-11

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 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	100% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A26-MB	1A00638.D	1	11/07/16	AJ	n/a	n/a	V1A26

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

FA38215-7, FA38215-8, FA38215-9, FA38215-10, FA38215-12, FA38215-13, FA38215-14, FA38215-15, FA38215-16, FA38215-17, FA38215-18, FA38215-19, FA38215-20, FA38215-21, FA38215-22, FA38215-23

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: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A26-MB	1A00638.D	1	11/07/16	AJ	n/a	n/a	V1A26

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

FA38215-7, FA38215-8, FA38215-9, FA38215-10, FA38215-12, FA38215-13, FA38215-14, FA38215-15, FA38215-16, FA38215-17, FA38215-18, FA38215-19, FA38215-20, FA38215-21, FA38215-22, FA38215-23

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

Blank Spike Summary

Page 1 of 2

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1172-BS	I43261.D	1	11/03/16	WV	n/a	n/a	VI1172

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

FA38215-1, FA38215-2, FA38215-3, FA38215-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	183	146	50-147
71-43-2	Benzene	25	28.2	113	81-122
75-27-4	Bromodichloromethane	25	26.9	108	79-123
75-25-2	Bromoform	25	22.2	89	66-123
78-93-3	2-Butanone (MEK)	125	152	122	56-143
75-15-0	Carbon Disulfide	25	25.6	102	66-148
56-23-5	Carbon Tetrachloride	25	31.7	127	76-136
108-90-7	Chlorobenzene	25	27.0	108	82-124
75-00-3	Chloroethane	25	35.6	142	62-144
67-66-3	Chloroform	25	27.2	109	80-124
124-48-1	Dibromochloromethane	25	25.5	102	78-122
75-34-3	1,1-Dichloroethane	25	30.3	121	81-122
107-06-2	1,2-Dichloroethane	25	28.1	112	75-125
75-35-4	1,1-Dichloroethylene	25	30.3	121	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.1	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	32.3	129*	76-127
78-87-5	1,2-Dichloropropane	25	27.0	108	76-124
10061-01-5	cis-1,3-Dichloropropene	25	26.7	107	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.8	115	80-120
100-41-4	Ethylbenzene	25	27.4	110	81-121
591-78-6	2-Hexanone	125	144	115	61-129
74-83-9	Methyl Bromide	25	35.5	142	59-143
74-87-3	Methyl Chloride	25	28.5	114	50-159
75-09-2	Methylene Chloride	25	29.4	118	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	131	105	66-122
100-42-5	Styrene	25	26.8	107	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.2	105	72-120
127-18-4	Tetrachloroethylene	25	25.4	102	76-135
108-88-3	Toluene	25	26.6	106	80-120
71-55-6	1,1,1-Trichloroethane	25	27.6	110	75-130
79-00-5	1,1,2-Trichloroethane	25	26.5	106	76-119
79-01-6	Trichloroethylene	25	28.3	113	81-126
75-01-4	Vinyl Chloride	25	32.7	131	69-159
1330-20-7	Xylene (total)	75	85.0	113	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1172-BS	I43261.D	1	11/03/16	WV	n/a	n/a	VI1172

The QC reported here applies to the following samples: Method: SW846 8260B
FA38215-1, FA38215-2, FA38215-3, FA38215-11

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-BS	B117656.D	1	11/03/16	WV	n/a	n/a	VB4736

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

FA38215-4, FA38215-5, FA38215-6

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	29.6	118	81-122
75-27-4	Bromodichloromethane	25	28.3	113	79-123
75-25-2	Bromoform	25	27.1	108	66-123
78-93-3	2-Butanone (MEK)	125	130	104	56-143
75-15-0	Carbon Disulfide	25	29.9	120	66-148
56-23-5	Carbon Tetrachloride	25	28.6	114	76-136
108-90-7	Chlorobenzene	25	29.2	117	82-124
75-00-3	Chloroethane	25	27.7	111	62-144
67-66-3	Chloroform	25	27.1	108	80-124
124-48-1	Dibromochloromethane	25	28.6	114	78-122
75-34-3	1,1-Dichloroethane	25	30.2	121	81-122
107-06-2	1,2-Dichloroethane	25	26.0	104	75-125
75-35-4	1,1-Dichloroethylene	25	29.1	116	78-137
156-59-2	cis-1,2-Dichloroethylene	25	28.3	113	78-120
156-60-5	trans-1,2-Dichloroethylene	25	31.6	126	76-127
78-87-5	1,2-Dichloropropane	25	29.7	119	76-124
10061-01-5	cis-1,3-Dichloropropene	25	30.7	123*	75-118
10061-02-6	trans-1,3-Dichloropropene	25	31.6	126*	80-120
100-41-4	Ethylbenzene	25	29.6	118	81-121
591-78-6	2-Hexanone	125	129	103	61-129
74-83-9	Methyl Bromide	25	25.6	102	59-143
74-87-3	Methyl Chloride	25	28.5	114	50-159
75-09-2	Methylene Chloride	25	29.6	118	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	132	106	66-122
100-42-5	Styrene	25	30.1	120*	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.8	107	72-120
127-18-4	Tetrachloroethylene	25	30.8	123	76-135
108-88-3	Toluene	25	29.4	118	80-120
71-55-6	1,1,1-Trichloroethane	25	27.2	109	75-130
79-00-5	1,1,2-Trichloroethane	25	28.9	116	76-119
79-01-6	Trichloroethylene	25	30.5	122	81-126
75-01-4	Vinyl Chloride	25	28.8	115	69-159
1330-20-7	Xylene (total)	75	87.1	116	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4736-BS	B117656.D	1	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-4, FA38215-5, FA38215-6

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1173-BS	I43299.D	1	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	138	110	50-147
71-43-2	Benzene	25	26.0	104	81-122
75-27-4	Bromodichloromethane	25	26.5	106	79-123
75-25-2	Bromoform	25	24.3	97	66-123
78-93-3	2-Butanone (MEK)	125	125	100	56-143
75-15-0	Carbon Disulfide	25	27.2	109	66-148
56-23-5	Carbon Tetrachloride	25	27.1	108	76-136
108-90-7	Chlorobenzene	25	26.1	104	82-124
75-00-3	Chloroethane	25	24.3	97	62-144
67-66-3	Chloroform	25	25.6	102	80-124
124-48-1	Dibromochloromethane	25	23.0	92	78-122
75-34-3	1,1-Dichloroethane	25	27.5	110	81-122
107-06-2	1,2-Dichloroethane	25	24.4	98	75-125
75-35-4	1,1-Dichloroethylene	25	27.0	108	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.9	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.7	115	76-127
78-87-5	1,2-Dichloropropane	25	25.5	102	76-124
10061-01-5	cis-1,3-Dichloropropene	25	27.6	110	75-118
10061-02-6	trans-1,3-Dichloropropene	25	26.8	107	80-120
100-41-4	Ethylbenzene	25	26.1	104	81-121
591-78-6	2-Hexanone	125	120	96	61-129
74-83-9	Methyl Bromide	25	25.4	102	59-143
74-87-3	Methyl Chloride	25	24.1	96	50-159
75-09-2	Methylene Chloride	25	25.3	101	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	116	93	66-122
100-42-5	Styrene	25	27.8	111	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	24.4	98	72-120
108-88-3	Toluene	25	25.9	104	80-120
71-55-6	1,1,1-Trichloroethane	25	25.9	104	75-130
79-00-5	1,1,2-Trichloroethane	25	25.8	103	76-119
79-01-6	Trichloroethylene	25	26.2	105	81-126
75-01-4	Vinyl Chloride	25	25.2	101	69-159
1330-20-7	Xylene (total)	75	80.4	107	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI1173-BS	I43299.D	1	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples: Method: SW846 8260B
FA38215-11

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A26-BS	1A00637.D	1	11/07/16	AJ	n/a	n/a	V1A26

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

FA38215-7, FA38215-8, FA38215-9, FA38215-10, FA38215-12, FA38215-13, FA38215-14, FA38215-15, FA38215-16, FA38215-17, FA38215-18, FA38215-19, FA38215-20, FA38215-21, FA38215-22, FA38215-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	151	121	50-147
71-43-2	Benzene	25	25.4	102	81-122
75-27-4	Bromodichloromethane	25	24.6	98	79-123
75-25-2	Bromoform	25	23.1	92	66-123
78-93-3	2-Butanone (MEK)	125	124	99	56-143
75-15-0	Carbon Disulfide	25	26.1	104	66-148
56-23-5	Carbon Tetrachloride	25	27.4	110	76-136
108-90-7	Chlorobenzene	25	25.5	102	82-124
75-00-3	Chloroethane	25	26.5	106	62-144
67-66-3	Chloroform	25	24.7	99	80-124
124-48-1	Dibromochloromethane	25	24.1	96	78-122
75-34-3	1,1-Dichloroethane	25	26.8	107	81-122
107-06-2	1,2-Dichloroethane	25	23.7	95	75-125
75-35-4	1,1-Dichloroethylene	25	27.8	111	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.7	99	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.9	116	76-127
78-87-5	1,2-Dichloropropane	25	24.3	97	76-124
10061-01-5	cis-1,3-Dichloropropene	25	23.5	94	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.5	102	80-120
100-41-4	Ethylbenzene	25	24.3	97	81-121
591-78-6	2-Hexanone	125	117	94	61-129
74-83-9	Methyl Bromide	25	25.8	103	59-143
74-87-3	Methyl Chloride	25	24.0	96	50-159
75-09-2	Methylene Chloride	25	23.5	94	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	117	94	66-122
100-42-5	Styrene	25	24.7	99	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	24.1	96	72-120
127-18-4	Tetrachloroethylene	25	26.9	108	76-135
108-88-3	Toluene	25	24.9	100	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	26.2	105	81-126
75-01-4	Vinyl Chloride	25	26.4	106	69-159
1330-20-7	Xylene (total)	75	73.9	99	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A26-BS	1A00637.D	1	11/07/16	AJ	n/a	n/a	V1A26

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

FA38215-7, FA38215-8, FA38215-9, FA38215-10, FA38215-12, FA38215-13, FA38215-14, FA38215-15, FA38215-16, FA38215-17, FA38215-18, FA38215-19, FA38215-20, FA38215-21, FA38215-22, FA38215-23

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	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	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-11MS	I43276.D	10	11/03/16	WV	n/a	n/a	VI1172
FA38215-11MSD	I43277.D	10	11/03/16	WV	n/a	n/a	VI1172
FA38215-11	I43278.D	10	11/03/16	WV	n/a	n/a	VI1172

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-1, FA38215-2, FA38215-3, FA38215-11

CAS No.	Compound	FA38215-11 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1250	1430	114	1250	1410	113	50-147/21
71-43-2	Benzene	ND		250	297	119	250	294	118	81-122/14
75-27-4	Bromodichloromethane	ND		250	277	111	250	286	114	79-123/19
75-25-2	Bromoform	ND		250	207	83	250	214	86	66-123/21
78-93-3	2-Butanone (MEK)	ND		1250	1490	119	1250	1510	121	56-143/18
75-15-0	Carbon Disulfide	ND		250	242	97	250	236	94	66-148/23
56-23-5	Carbon Tetrachloride	ND		250	325	130	250	325	130	76-136/23
108-90-7	Chlorobenzene	ND		250	274	110	250	280	112	82-124/14
75-00-3	Chloroethane	ND		250	488	195*	250	425	170*	62-144/20
67-66-3	Chloroform	ND		250	289	116	250	283	113	80-124/15
124-48-1	Dibromochloromethane	ND		250	243	97	250	251	100	78-122/19
75-34-3	1,1-Dichloroethane	ND		250	328	131*	250	322	129*	81-122/15
107-06-2	1,2-Dichloroethane	ND		250	303	121	250	305	122	75-125/14
75-35-4	1,1-Dichloroethylene	7.2	J	250	335	131	250	329	129	78-137/18
156-59-2	cis-1,2-Dichloroethylene	6.8	J	250	280	109	250	275	107	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		250	353	141*	250	339	136*	76-127/17
78-87-5	1,2-Dichloropropane	ND		250	287	115	250	285	114	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		250	257	103	250	262	105	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		250	284	114	250	292	117	80-120/22
100-41-4	Ethylbenzene	ND		250	284	114	250	289	116	81-121/14
591-78-6	2-Hexanone	ND		1250	1450	116	1250	1470	118	61-129/18
74-83-9	Methyl Bromide	ND		250	435	174*	250	408	163*	59-143/19
74-87-3	Methyl Chloride	ND		250	309	124	250	301	120	50-159/19
75-09-2	Methylene Chloride	ND		250	320	128	250	314	126	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1250	1450	116	1250	1460	117	66-122/16
100-42-5	Styrene	ND		250	273	109	250	276	110	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	263	105	250	260	104	72-120/14
127-18-4	Tetrachloroethylene	331		250	573	97	250	590	104	76-135/16
108-88-3	Toluene	ND		250	274	110	250	280	112	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		250	287	115	250	286	114	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		250	270	108	250	276	110	76-119/14
79-01-6	Trichloroethylene	7.3	J	250	294	115	250	297	116	81-126/15
75-01-4	Vinyl Chloride	ND		250	393	157	250	378	151	69-159/18
1330-20-7	Xylene (total)	ND		750	857	114	750	883	118	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-11MS	I43276.D	10	11/03/16	WV	n/a	n/a	VI1172
FA38215-11MSD	I43277.D	10	11/03/16	WV	n/a	n/a	VI1172
FA38215-11	I43278.D	10	11/03/16	WV	n/a	n/a	VI1172

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-1, FA38215-2, FA38215-3, FA38215-11

CAS No.	Surrogate Recoveries	MS	MSD	FA38215-11	Limits
1868-53-7	Dibromofluoromethane	103%	102%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	114%	117%	79-125%
2037-26-5	Toluene-D8	101%	100%	100%	85-112%
460-00-4	4-Bromofluorobenzene	94%	92%	98%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-5MS	B117667.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5MSD	B117668.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5	B117659.D	5	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-4, FA38215-5, FA38215-6

CAS No.	Compound	FA38215-5 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	684	109	625	684	109	0	50-147/21
71-43-2	Benzene	ND		125	128	102	125	126	101	2	81-122/14
75-27-4	Bromodichloromethane	ND		125	136	109	125	125	100	8	79-123/19
75-25-2	Bromoform	ND		125	120	96	125	107	86	11	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	613	98	625	613	98	0	56-143/18
75-15-0	Carbon Disulfide	ND		125	114	91	125	99.6	80	13	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	150	120	125	133	106	12	76-136/23
108-90-7	Chlorobenzene	ND		125	120	96	125	119	95	1	82-124/14
75-00-3	Chloroethane	ND		125	134	107	125	135	108	1	62-144/20
67-66-3	Chloroform	ND		125	135	108	125	128	102	5	80-124/15
124-48-1	Dibromochloromethane	ND		125	129	103	125	117	94	10	78-122/19
75-34-3	1,1-Dichloroethane	ND		125	140	112	125	135	108	4	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	138	110	125	130	104	6	75-125/14
75-35-4	1,1-Dichloroethylene	ND		125	144	115	125	143	114	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	7.0		125	129	98	125	130	98	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	153	122	125	143	114	7	76-127/17
78-87-5	1,2-Dichloropropane	ND		125	124	99	125	120	96	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		125	124	99	125	111	89	11	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	128	102	125	119	95	7	80-120/22
100-41-4	Ethylbenzene	ND		125	130	104	125	129	103	1	81-121/14
591-78-6	2-Hexanone	ND		625	560	90	625	592	95	6	61-129/18
74-83-9	Methyl Bromide	ND		125	130	104	125	124	99	5	59-143/19
74-87-3	Methyl Chloride	ND		125	124	99	125	132	106	6	50-159/19
75-09-2	Methylene Chloride	ND		125	143	114	125	138	110	4	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	602	96	625	624	100	4	66-122/16
100-42-5	Styrene	ND		125	129	103	125	129	103	0	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	110	88	125	114	91	4	72-120/14
127-18-4	Tetrachloroethylene	410		125	489	63* a	125	477	54* a	2	76-135/16
108-88-3	Toluene	ND		125	124	99	125	125	100	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		125	139	111	125	131	105	6	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	119	95	125	124	99	4	76-119/14
79-01-6	Trichloroethylene	3.5	J	125	141	110	125	133	104	6	81-126/15
75-01-4	Vinyl Chloride	ND		125	130	104	125	133	106	2	69-159/18
1330-20-7	Xylene (total)	ND		375	403	107	375	397	106	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-5MS	B117667.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5MSD	B117668.D	5	11/03/16	WV	n/a	n/a	VB4736
FA38215-5	B117659.D	5	11/03/16	WV	n/a	n/a	VB4736

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-4, FA38215-5, FA38215-6

CAS No.	Surrogate Recoveries	MS	MSD	FA38215-5	Limits
1868-53-7	Dibromofluoromethane	108%	105%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	109%	103%	79-125%
2037-26-5	Toluene-D8	97%	98%	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	97%	104%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38295-3MS	I43316.D	100	11/04/16	WV	n/a	n/a	VI1173
FA38295-3MSD	I43317.D	100	11/04/16	WV	n/a	n/a	VI1173
FA38295-3 ^a	I43303.D	100	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-11

CAS No.	Compound	FA38295-3 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	2500 U		12500	13800	110	12500	16800	134	20	50-147/21
71-43-2	Benzene	100 U		2500	3200	128*	2500	3550	142*	10	81-122/14
75-27-4	Bromodichloromethane	100 U		2500	3340	134*	2500	3650	146*	9	79-123/19
75-25-2	Bromoform	100 U		2500	2800	112	2500	3170	127*	12	66-123/21
78-93-3	2-Butanone (MEK)	500 U		12500	15000	120	12500	17700	142	17	56-143/18
75-15-0	Carbon Disulfide	200 U		2500	3180	127	2500	3620	145	13	66-148/23
56-23-5	Carbon Tetrachloride	100 U		2500	3290	132	2500	3660	146*	11	76-136/23
108-90-7	Chlorobenzene	100 U		2500	3210	128*	2500	3530	141*	9	82-124/14
75-00-3	Chloroethane	200 U		2500	3870	155*	2500	4230	169*	9	62-144/20
67-66-3	Chloroform	100 U		2500	3230	129*	2500	3630	145*	12	80-124/15
124-48-1	Dibromochloromethane	100 U		2500	2760	110	2500	3060	122	10	78-122/19
75-34-3	1,1-Dichloroethane	100 U		2500	3380	135*	2500	3770	151*	11	81-122/15
107-06-2	1,2-Dichloroethane	100 U		2500	3210	128*	2500	3500	140*	9	75-125/14
75-35-4	1,1-Dichloroethylene	100 U		2500	3420	137	2500	3860	154*	12	78-137/18
156-59-2	cis-1,2-Dichloroethylene	6970		2500	9800	113	2500	10200	129* ^b	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	360		2500	4010	146*	2500	4420	162*	10	76-127/17
78-87-5	1,2-Dichloropropane	100 U		2500	3220	129*	2500	3520	141*	9	76-124/14
10061-01-5	cis-1,3-Dichloropropene	100 U		2500	3200	128*	2500	3480	139*	8	75-118/23
10061-02-6	trans-1,3-Dichloropropene	100 U		2500	3090	124*	2500	3360	134*	8	80-120/22
100-41-4	Ethylbenzene	100 U		2500	3210	128*	2500	3530	141*	9	81-121/14
591-78-6	2-Hexanone	1000 U		12500	13900	111	12500	16400	131*	17	61-129/18
74-83-9	Methyl Bromide	200 U		2500	3950	158*	2500	4120	165*	4	59-143/19
74-87-3	Methyl Chloride	200 U		2500	2980	119	2500	3370	135	12	50-159/19
75-09-2	Methylene Chloride	500 U		2500	3280	131	2500	3670	147*	11	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	500 U		12500	14300	114	12500	17200	138*	18*	66-122/16
100-42-5	Styrene	100 U		2500	3400	136*	2500	3720	149*	9	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	100 U		2500	3050	122*	2500	3360	134*	10	72-120/14
108-88-3	Toluene	100 U		2500	3160	126*	2500	3470	139*	9	80-120/14
71-55-6	1,1,1-Trichloroethane	100 U		2500	3160	126	2500	3530	141*	11	75-130/16
79-00-5	1,1,2-Trichloroethane	100 U		2500	3200	128*	2500	3470	139*	8	76-119/14
79-01-6	Trichloroethylene	100 U		2500	3190	128*	2500	3510	140*	10	81-126/15
75-01-4	Vinyl Chloride	268		2500	3580	132	2500	3990	149	11	69-159/18
1330-20-7	Xylene (total)	300 U		7500	9880	132*	7500	10900	145*	10	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38295-3MS	I43316.D	100	11/04/16	WV	n/a	n/a	VI1173
FA38295-3MSD	I43317.D	100	11/04/16	WV	n/a	n/a	VI1173
FA38295-3 ^a	I43303.D	100	11/04/16	WV	n/a	n/a	VI1173

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-11

CAS No.	Surrogate Recoveries	MS	MSD	FA38295-3	Limits
1868-53-7	Dibromofluoromethane	102%	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	103%	100%	79-125%
2037-26-5	Toluene-D8	99%	100%	100%	85-112%
460-00-4	4-Bromofluorobenzene	97%	95%	96%	83-118%

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

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-13MS	1A00660.D	10	11/07/16	AJ	n/a	n/a	V1A26
FA38215-13MSD	1A00661.D	10	11/07/16	AJ	n/a	n/a	V1A26
FA38215-13	1A00644.D	10	11/07/16	AJ	n/a	n/a	V1A26

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-7, FA38215-8, FA38215-9, FA38215-10, FA38215-12, FA38215-13, FA38215-14, FA38215-15, FA38215-16, FA38215-17, FA38215-18, FA38215-19, FA38215-20, FA38215-21, FA38215-22, FA38215-23

CAS No.	Compound	FA38215-13 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	1110	89	1250	1080	86	3	50-147/21
71-43-2	Benzene	ND	250	264	106	250	263	105	0	81-122/14
75-27-4	Bromodichloromethane	ND	250	248	99	250	246	98	1	79-123/19
75-25-2	Bromoform	ND	250	208	83	250	202	81	3	66-123/21
78-93-3	2-Butanone (MEK)	ND	1250	1200	96	1250	1160	93	3	56-143/18
75-15-0	Carbon Disulfide	ND	250	200	80	250	203	81	1	66-148/23
56-23-5	Carbon Tetrachloride	ND	250	278	111	250	280	112	1	76-136/23
108-90-7	Chlorobenzene	ND	250	264	106	250	263	105	0	82-124/14
75-00-3	Chloroethane	ND	250	263	105	250	264	106	0	62-144/20
67-66-3	Chloroform	ND	250	264	106	250	265	106	0	80-124/15
124-48-1	Dibromochloromethane	ND	250	227	91	250	225	90	1	78-122/19
75-34-3	1,1-Dichloroethane	ND	250	276	110	250	277	111	0	81-122/15
107-06-2	1,2-Dichloroethane	ND	250	266	106	250	261	104	2	75-125/14
75-35-4	1,1-Dichloroethylene	ND	250	287	115	250	290	116	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	19.2	250	273	102	250	276	103	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	250	297	119	250	301	120	1	76-127/17
78-87-5	1,2-Dichloropropane	ND	250	250	100	250	249	100	0	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND	250	206	82	250	205	82	0	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	250	244	98	250	242	97	1	80-120/22
100-41-4	Ethylbenzene	ND	250	252	101	250	253	101	0	81-121/14
591-78-6	2-Hexanone	ND	1250	1150	92	1250	1080	86	6	61-129/18
74-83-9	Methyl Bromide	ND	250	251	100	250	255	102	2	59-143/19
74-87-3	Methyl Chloride	ND	250	248	99	250	252	101	2	50-159/19
75-09-2	Methylene Chloride	ND	250	255	102	250	250	100	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1250	1160	93	1250	1130	90	3	66-122/16
100-42-5	Styrene	ND	250	256	102	250	256	102	0	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	248	99	250	245	98	1	72-120/14
127-18-4	Tetrachloroethylene	685	250	933	99	250	932	99	0	76-135/16
108-88-3	Toluene	ND	250	249	100	250	248	99	0	80-120/14
71-55-6	1,1,1-Trichloroethane	ND	250	274	110	250	273	109	0	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	250	257	103	250	254	102	1	76-119/14
79-01-6	Trichloroethylene	106	250	385	112	250	383	111	1	81-126/15
75-01-4	Vinyl Chloride	ND	250	270	108	250	274	110	1	69-159/18
1330-20-7	Xylene (total)	ND	750	767	102	750	769	103	0	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38215-13MS	1A00660.D	10	11/07/16	AJ	n/a	n/a	V1A26
FA38215-13MSD	1A00661.D	10	11/07/16	AJ	n/a	n/a	V1A26
FA38215-13	1A00644.D	10	11/07/16	AJ	n/a	n/a	V1A26

The QC reported here applies to the following samples:

Method: SW846 8260B

FA38215-7, FA38215-8, FA38215-9, FA38215-10, FA38215-12, FA38215-13, FA38215-14, FA38215-15, FA38215-16, FA38215-17, FA38215-18, FA38215-19, FA38215-20, FA38215-21, FA38215-22, FA38215-23

CAS No.	Surrogate Recoveries	MS	MSD	FA38215-13	Limits
1868-53-7	Dibromofluoromethane	104%	106%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	102%	79-125%
2037-26-5	Toluene-D8	94%	94%	93%	85-112%
460-00-4	4-Bromofluorobenzene	98%	100%	100%	83-118%

* = Outside of Control Limits.

GC/MS Semi-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 3

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-MB	X050160.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

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

FA38215-23

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: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-MB	X050160.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

The QC reported here applies to the following samples:

Method: SW846 8270D

FA38215-23

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	51% 14-67%
4165-62-2	Phenol-d5	40% 10-50%

Method Blank Summary

Job Number: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-MB	X050160.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

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

FA38215-23

CAS No.	Surrogate Recoveries	Limits
118-79-6	2,4,6-Tribromophenol	80% 33-118%
4165-60-0	Nitrobenzene-d5	70% 42-108%
321-60-8	2-Fluorobiphenyl	71% 40-106%
1718-51-0	Terphenyl-d14	75% 39-121%

Blank Spike Summary

Page 1 of 3

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-BS	X050159.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

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

FA38215-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	27.5	28	10-69
59-50-7	4-Chloro-3-methyl Phenol	50	37.8	76	54-103
95-57-8	2-Chlorophenol	50	37.9	76	52-98
120-83-2	2,4-Dichlorophenol	50	40.0	80	53-103
105-67-9	2,4-Dimethylphenol	50	33.4	67	43-90
51-28-5	2,4-Dinitrophenol	100	99.6	100	44-112
534-52-1	4,6-Dinitro-o-cresol	100	94.5	95	66-121
95-48-7	2-Methylphenol	50	33.0	66	43-90
	3&4-Methylphenol	100	61.6	62	36-88
88-75-5	2-Nitrophenol	50	40.6	81	53-102
100-02-7	4-Nitrophenol	100	38.7	39	18-62
87-86-5	Pentachlorophenol	100	112	112	61-115
108-95-2	Phenol	50	18.2	36	19-56
95-95-4	2,4,5-Trichlorophenol	50	44.3	89	62-109
88-06-2	2,4,6-Trichlorophenol	50	42.5	85	59-107
83-32-9	Acenaphthene	50	38.7	77	61-107
208-96-8	Acenaphthylene	50	40.3	81	60-104
120-12-7	Anthracene	50	41.6	83	65-108
56-55-3	Benzo(a)anthracene	50	42.4	85	66-111
50-32-8	Benzo(a)pyrene	50	42.3	85	62-107
205-99-2	Benzo(b)fluoranthene	50	42.2	84	65-114
191-24-2	Benzo(g,h,i)perylene	50	45.1	90	66-116
207-08-9	Benzo(k)fluoranthene	50	41.5	83	65-114
100-51-6	Benzyl Alcohol	50	42.4	85	46-94
101-55-3	4-Bromophenyl Phenyl Ether	50	42.9	86	65-109
85-68-7	Butyl Benzyl Phthalate	50	41.0	82	65-112
86-74-8	Carbazole	50	45.5	91	59-113
106-47-8	4-Chloroaniline	50	43.4	87	49-105
111-91-1	bis(2-Chloroethoxy)methane	50	36.2	72	51-102
111-44-4	bis(2-Chloroethyl)ether	50	38.0	76	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	39.7	79	45-106
91-58-7	2-Chloronaphthalene	50	40.1	80	57-103
7005-72-3	4-Chlorophenyl Phenyl Ether	50	41.0	82	62-105
218-01-9	Chrysene	50	43.4	87	66-111
53-70-3	Dibenzo(a,h)anthracene	50	45.8	92	66-119
132-64-9	Dibenzofuran	50	45.2	90	61-106

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: FA38215**Account:** UTC United Technologies Corporation**Project:** AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-BS	X050159.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

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

FA38215-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	31.1	62	48-97
541-73-1	1,3-Dichlorobenzene	50	29.0	58	45-95
106-46-7	1,4-Dichlorobenzene	50	29.7	59	45-98
91-94-1	3,3'-Dichlorobenzidine	50	44.2	88	46-117
84-66-2	Diethyl Phthalate	50	39.9	80	64-108
131-11-3	Dimethyl Phthalate	50	41.1	82	63-106
84-74-2	Di-n-butyl Phthalate	50	41.8	84	65-107
117-84-0	Di-n-octyl Phthalate	50	40.4	81	62-118
121-14-2	2,4-Dinitrotoluene	50	42.0	84	61-110
606-20-2	2,6-Dinitrotoluene	50	40.9	82	63-108
117-81-7	bis(2-Ethylhexyl)phthalate	50	42.4	85	61-117
206-44-0	Fluoranthene	50	40.7	81	63-106
86-73-7	Fluorene	50	41.3	83	62-108
118-74-1	Hexachlorobenzene	50	42.7	85	63-108
87-68-3	Hexachlorobutadiene	50	31.6	63	42-102
77-47-4	Hexachlorocyclopentadiene	50	37.9	76	39-102
67-72-1	Hexachloroethane	50	27.3	55	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	47.4	95	64-119
78-59-1	Isophorone	50	38.4	77	43-87
91-57-6	2-Methylnaphthalene	50	42.7	85	51-102
91-20-3	Naphthalene	50	36.4	73	47-100
88-74-4	2-Nitroaniline	50	44.8	90	54-128
99-09-2	3-Nitroaniline	50	44.8	90	56-106
100-01-6	4-Nitroaniline	50	45.1	90	55-120
98-95-3	Nitrobenzene	50	38.0	76	50-104
621-64-7	N-Nitrosodi-n-propylamine	50	37.7	75	52-104
86-30-6	N-Nitrosodiphenylamine	50	42.1	84	64-108
85-01-8	Phenanthrene	50	41.4	83	66-110
129-00-0	Pyrene	50	42.8	86	64-113
120-82-1	1,2,4-Trichlorobenzene	50	33.5	67	45-97

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	14-67%
4165-62-2	Phenol-d5	35%	10-50%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-BS	X050159.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

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

FA38215-23

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	84%	33-118%
4165-60-0	Nitrobenzene-d5	71%	42-108%
321-60-8	2-Fluorobiphenyl	75%	40-106%
1718-51-0	Terphenyl-d14	82%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-MS	X050162.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
OP62497-MSD	X050163.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
FA38267-1	X050161.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

The QC reported here applies to the following samples:

Method: SW846 8270D

FA38215-23

CAS No.	Compound	FA38267-1 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	48 U	192	101	53	192	108	56	7	10-69/39
59-50-7	4-Chloro-3-methyl Phenol	4.8 U	96.2	71.9	75	96.2	77.8	81	8	54-103/23
95-57-8	2-Chlorophenol	4.8 U	96.2	68.1	71	96.2	73.1	76	7	52-98/25
120-83-2	2,4-Dichlorophenol	4.8 U	96.2	77.4	80	96.2	80.7	84	4	53-103/26
105-67-9	2,4-Dimethylphenol	4.8 U	96.2	66.5	69	96.2	70.0	73	5	43-90/27
51-28-5	2,4-Dinitrophenol	24 U	192	204	106	192	219	114*	7	44-112/25
534-52-1	4,6-Dinitro-o-cresol	9.5 U	192	188	98	192	198	103	5	66-121/23
95-48-7	2-Methylphenol	4.8 U	96.2	65.2	68	96.2	69.1	72	6	43-90/28
	3&4-Methylphenol	4.8 U	192	127	66	192	132	69	4	36-88/28
88-75-5	2-Nitrophenol	4.8 U	96.2	76.0	79	96.2	81.8	85	7	53-102/29
100-02-7	4-Nitrophenol	24 U	192	98.7	51	192	103	54	4	18-62/33
87-86-5	Pentachlorophenol	24 U	192	230	120*	192	242	126*	5	61-115/26
108-95-2	Phenol	4.8 U	96.2	45.8	48	96.2	47.3	49	3	19-56/35
95-95-4	2,4,5-Trichlorophenol	4.8 U	96.2	86.6	90	96.2	91.2	95	5	62-109/22
88-06-2	2,4,6-Trichlorophenol	4.8 U	96.2	82.9	86	96.2	85.3	89	3	59-107/23
83-32-9	Acenaphthene	4.8 U	96.2	76.0	79	96.2	79.5	83	5	61-107/22
208-96-8	Acenaphthylene	4.8 U	96.2	78.4	82	96.2	81.4	85	4	60-104/22
120-12-7	Anthracene	4.8 U	96.2	79.9	83	96.2	84.0	87	5	65-108/20
56-55-3	Benzo(a)anthracene	4.8 U	96.2	81.2	84	96.2	85.8	89	6	66-111/22
50-32-8	Benzo(a)pyrene	4.8 U	96.2	81.9	85	96.2	85.8	89	5	62-107/23
205-99-2	Benzo(b)fluoranthene	4.8 U	96.2	83.3	87	96.2	85.6	89	3	65-114/23
191-24-2	Benzo(g,h,i)perylene	4.8 U	96.2	86.6	90	96.2	88.7	92	2	66-116/23
207-08-9	Benzo(k)fluoranthene	4.8 U	96.2	79.2	82	96.2	83.4	87	5	65-114/24
100-51-6	Benzyl Alcohol	4.8 U	96.2	86.9	90	96.2	90.0	94	4	46-94/27
101-55-3	4-Bromophenyl Phenyl Ether	4.8 U	96.2	83.4	87	96.2	88.6	92	6	65-109/23
85-68-7	Butyl Benzyl Phthalate	4.8 U	96.2	76.8	80	96.2	82.6	86	7	65-112/24
86-74-8	Carbazole	4.8 U	96.2	86.0	89	96.2	90.8	94	5	59-113/21
106-47-8	4-Chloroaniline	4.8 U	96.2	44.8	47*	96.2	44.8	47*	0	49-105/27
111-91-1	bis(2-Chloroethoxy)methane	4.8 U	96.2	67.0	70	96.2	72.5	75	8	51-102/28
111-44-4	bis(2-Chloroethyl)ether	4.8 U	96.2	65.0	68	96.2	69.9	73	7	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	4.8 U	96.2	68.1	71	96.2	73.2	76	7	45-106/26
91-58-7	2-Chloronaphthalene	4.8 U	96.2	78.7	82	96.2	82.1	85	4	57-103/23
7005-72-3	4-Chlorophenyl Phenyl Ether	4.8 U	96.2	80.8	84	96.2	81.8	85	1	62-105/20
218-01-9	Chrysene	4.8 U	96.2	82.3	86	96.2	87.0	90	6	66-111/22
53-70-3	Dibenzo(a,h)anthracene	4.8 U	96.2	88.6	92	96.2	92.4	96	4	66-119/24
132-64-9	Dibenzofuran	4.8 U	96.2	86.5	90	96.2	88.1	92	2	61-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA38215

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-MS	X050162.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
OP62497-MSD	X050163.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
FA38267-1	X050161.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

The QC reported here applies to the following samples:

Method: SW846 8270D

FA38215-23

CAS No.	Compound	FA38267-1 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	4.8 U	96.2	67.0	70	96.2	70.7	74	5	48-97/24
541-73-1	1,3-Dichlorobenzene	4.8 U	96.2	65.1	68	96.2	68.9	72	6	45-95/25
106-46-7	1,4-Dichlorobenzene	4.8 U	96.2	65.1	68	96.2	70.4	73	8	45-98/25
91-94-1	3,3'-Dichlorobenzidine	4.8 U	96.2	ND	0*	96.2	ND	0*	nc	46-117/29
84-66-2	Diethyl Phthalate	4.8 U	96.2	75.9	79	96.2	78.5	82	3	64-108/21
131-11-3	Dimethyl Phthalate	4.8 U	96.2	77.4	80	96.2	79.0	82	2	63-106/22
84-74-2	Di-n-butyl Phthalate	4.8 U	96.2	79.1	82	96.2	84.1	87	6	65-107/21
117-84-0	Di-n-octyl Phthalate	4.8 U	96.2	77.8	81	96.2	82.0	85	5	62-118/24
121-14-2	2,4-Dinitrotoluene	4.8 U	96.2	79.5	83	96.2	83.0	86	4	61-110/21
606-20-2	2,6-Dinitrotoluene	4.8 U	96.2	79.1	82	96.2	80.9	84	2	63-108/21
117-81-7	bis(2-Ethylhexyl)phthalate	4.8 U	96.2	80.1	83	96.2	85.0	88	6	61-117/23
206-44-0	Fluoranthene	4.8 U	96.2	77.8	81	96.2	80.8	84	4	63-106/21
86-73-7	Fluorene	4.8 U	96.2	79.2	82	96.2	81.2	84	2	62-108/20
118-74-1	Hexachlorobenzene	4.8 U	96.2	84.3	88	96.2	89.8	93	6	63-108/22
87-68-3	Hexachlorobutadiene	4.8 U	96.2	72.6	76	96.2	78.2	81	7	42-102/28
77-47-4	Hexachlorocyclopentadiene	4.8 U	96.2	83.5	87	96.2	87.9	91	5	39-102/29
67-72-1	Hexachloroethane	4.8 U	96.2	64.4	67	96.2	69.9	73	8	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	4.8 U	96.2	91.4	95	96.2	96.5	100	5	64-119/24
78-59-1	Isophorone	4.8 U	96.2	71.6	74	96.2	76.6	80	7	43-87/25
91-57-6	2-Methylnaphthalene	4.8 U	96.2	80.2	83	96.2	83.8	87	4	51-102/26
91-20-3	Naphthalene	4.8 U	96.2	72.5	75	96.2	77.5	81	7	47-100/29
88-74-4	2-Nitroaniline	4.8 U	96.2	84.5	88	96.2	86.9	90	3	54-128/24
99-09-2	3-Nitroaniline	4.8 U	96.2	55.6	58	96.2	54.9	57	1	56-106/27
100-01-6	4-Nitroaniline	4.8 U	96.2	61.4	64	96.2	59.6	62	3	55-120/24
98-95-3	Nitrobenzene	4.8 U	96.2	69.7	72	96.2	73.9	77	6	50-104/28
621-64-7	N-Nitrosodi-n-propylamine	4.8 U	96.2	67.5	70	96.2	72.3	75	7	52-104/25
86-30-6	N-Nitrosodiphenylamine	4.8 U	96.2	84.5	88	96.2	88.3	92	4	64-108/23
85-01-8	Phenanthrene	4.8 U	96.2	81.7	85	96.2	85.6	89	5	66-110/21
129-00-0	Pyrene	4.8 U	96.2	82.9	86	96.2	86.7	90	4	64-113/23
120-82-1	1,2,4-Trichlorobenzene	4.8 U	96.2	70.3	73	96.2	76.2	79	8	45-97/28

CAS No.	Surrogate Recoveries	MS	MSD	FA38267-1	Limits
367-12-4	2-Fluorophenol	53%	56%	37%	14-67%
4165-62-2	Phenol-d5	45%	46%	26%	10-50%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA38215
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP62497-MS	X050162.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
OP62497-MSD	X050163.D	1	11/02/16	MV	11/02/16	OP62497	SX2159
FA38267-1	X050161.D	1	11/02/16	MV	11/02/16	OP62497	SX2159

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

FA38215-23

CAS No.	Surrogate Recoveries	MS	MSD	FA38267-1	Limits
118-79-6	2,4,6-Tribromophenol	87%	93%	83%	33-118%
4165-60-0	Nitrobenzene-d5	66%	71%	64%	42-108%
321-60-8	2-Fluorobiphenyl	77%	79%	71%	40-106%
1718-51-0	Terphenyl-d14	82%	85%	64%	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: FA38215
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31085
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/02/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1	1.4	<6.0
Arsenic	10	1.3	1.3	0.50	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2	-0.10	<4.0
Cadmium	5.0	.2	.2	0.0	<5.0
Calcium	1000	50	50		
Chromium	10	1	1	0.50	<10
Cobalt	50	.2	.2		
Copper	25	1	1	-0.40	<25
Iron	300	17	17		
Lead	5.0	1	1.1	-0.40	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4	-0.30	<40
Potassium	10000	200	200		
Selenium	10	2.4	2.9	0.80	<10
Silver	10	.7	.7	-0.20	<10
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4	-0.90	<10
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4	0.60	<20

Associated samples MP31085: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31085
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

11/02/16

11/02/16

Metal	FA38293-1 Original DUP		RPD	QC Limits	FA38293-1 Original MS		Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr								
Antimony	1.2	1.3	8.0	0-20	1.2	526	500	105.0	80-120
Arsenic	1.3	0.0	200.0(a)	0-20	1.3	2080	2000	103.9	80-120
Barium	anr								
Beryllium	0.0	0.0	NC	0-20	0.0	54.8	50	109.6	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	52.1	50	104.2	80-120
Calcium	anr								
Chromium	2.9	3.0	3.4	0-20	2.9	211	200	104.1	80-120
Cobalt	anr								
Copper	2.1	1.5	33.3 (a)	0-20	2.1	268	250	106.4	80-120
Iron	anr								
Lead	0.0	0.0	NC	0-20	0.0	507	500	101.4	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	2.6	2.3	12.2	0-20	2.6	535	500	106.5	80-120
Potassium	anr								
Selenium	0.0	0.0	NC	0-20	0.0	2080	2000	104.0	80-120
Silver	0.0	0.0	NC	0-20	0.0	46.0	50	92.0	80-120
Sodium	anr								
Strontium									
Thallium	0.0	0.0	NC	0-20	0.0	2050	2000	102.5	80-120
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	27.3	26.8	1.8	0-20	27.3	545	500	103.5	80-120

Associated samples MP31085: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31085
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/02/16

Metal	FA38293-1 Original MSD		Spikelet MPFLICP2 % Rec		MSD RPD	QC Limit
Aluminum	anr					
Antimony	1.2	520	500	103.8	1.1	20
Arsenic	1.3	2060	2000	102.9	1.0	20
Barium	anr					
Beryllium	0.0	54.2	50	108.4	1.1	20
Cadmium	0.0	51.4	50	102.8	1.4	20
Calcium	anr					
Chromium	2.9	207	200	102.1	1.9	20
Cobalt	anr					
Copper	2.1	264	250	104.8	1.5	20
Iron	anr					
Lead	0.0	500	500	100.0	1.4	20
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	2.6	529	500	105.3	1.1	20
Potassium	anr					
Selenium	0.0	2060	2000	103.0	1.0	20
Silver	0.0	45.3	50	90.6	1.5	20
Sodium	anr					
Strontium						
Thallium	0.0	2020	2000	101.0	1.5	20
Tin	anr					
Titanium						
Vanadium	anr					
Zinc	27.3	538	500	102.1	1.3	20

Associated samples MP31085: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31085
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/02/16

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum	anr		
Antimony	529	500	105.8 80-120
Arsenic	2100	2000	105.0 80-120
Barium	anr		
Beryllium	54.9	50	109.8 80-120
Cadmium	53.0	50	106.0 80-120
Calcium	anr		
Chromium	211	200	105.5 80-120
Cobalt	anr		
Copper	270	250	108.0 80-120
Iron	anr		
Lead	507	500	101.4 80-120
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	543	500	108.6 80-120
Potassium	anr		
Selenium	2110	2000	105.5 80-120
Silver	46.3	50	92.6 80-120
Sodium	anr		
Strontium			
Thallium	2050	2000	102.5 80-120
Tin	anr		
Titanium			
Vanadium	anr		
Zinc	528	500	105.6 80-120

Associated samples MP31085: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31085
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/02/16

Metal	FA38293-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	1.20	0.00	100.0(a)	0-10
Arsenic	1.30	0.00	100.0(a)	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	2.90	0.00	100.0(a)	0-10
Cobalt	anr			
Copper	2.10	7.80	271.4(a)	0-10
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	2.60	2.50	3.8	0-10
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	27.3	49.5	81.3 (a)	0-10

Associated samples MP31085: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31085
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

11/02/16

Metal	Sample ml	Final ml	FA38293-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10	1.2	1.176	119.7	0.2	5	100	118.5	80-120
Arsenic	9.8	10	1.3	1.274	115.8	0.2	5	100	114.5	80-120
Barium										
Beryllium	9.8	10			57.4	0.2	2.5	50	114.8	80-120
Cadmium	9.8	10			57.4	0.2	2.5	50	114.8	80-120
Calcium										
Chromium	9.8	10	2.9	2.842	59.3	0.2	2.5	50	112.9	80-120
Cobalt										
Copper	9.8	10	2.1	2.058	115.7	0.2	5	100	113.6	80-120
Iron										
Lead	9.8	10			52	0.2	2.5	50	104.0	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10	2.6	2.548	118.8	0.2	5	100	116.3	80-120
Potassium										
Selenium	9.8	10			111.5	0.2	5	100	111.5	80-120
Silver	9.8	10			45.3	0.2	2.5	50	90.6	80-120
Sodium										
Strontium										
Thallium	9.8	10			108	0.2	5	100	108.0	80-120
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	27.3	26.754	327.1	0.2	12.5	250	120.1*(a)	80-120

Associated samples MP31085: FA38215-23

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

(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA38215
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31095
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 11/03/16

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.028	<0.50

Associated samples MP31095: FA38215-23

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

8.2.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31095
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/03/16 11/03/16

Metal	FA38154-2F Original DUP		RPD	QC Limits	FA38154-2F Original MS		Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	2.9	3	96.7	80-120

Associated samples MP31095: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31095
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/03/16

Metal	FA38154-2F Original MSD	Spike lot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.9	3	96.7	0.0
					20

Associated samples MP31095: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31095
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/03/16

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	3.2	3	106.7	80-120

Associated samples MP31095: FA38215-23

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: FA38215
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP31095
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 11/03/16

Metal	FA38154-2F		%DIF	QC Limits
	Original	SDL 1:5		
Mercury	0.00	0.00	NC	0-10

Associated samples MP31095: FA38215-23

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 FA38120 were collected on October 24-25, 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 volatile organic compounds in samples MW-10D and MW-12D were qualified “//h” due to re-analysis of the samples outside of the method holding time (re-analyzed at 16 days; holding time is 14 days). These qualifiers indicate the results should be considered biased low.

Data Summary and Usability

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

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 FA38215 were collected on October 25-26, 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 chloroethane and methyl bromide in sample MW-3D were qualified “/M/M” due to high recovery in the associated matrix spike sample, above the established criteria of 40-160% (195 and 174%, respectively). These qualifiers indicate the results should be considered biased high.

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 Metals by Methods 6010C/7470B

Results of the validation process indicate that the data analyzed for this method are acceptable for their intended use and no data flags are required.

Data Summary and Usability

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

References

United States Environmental Protection Agency (USEPA), February 2007. *Test Methods for Evaluating Solid Waste (SW-846), Update IV*.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Superfund Organic Data Review*. Publication #EPA540-R-014-002.

United States Environmental Protection Agency (USEPA), August 2014. *USEPA National Functional Guidelines for Inorganic Superfund Data Review*. Publication #USEPA540/R-013-001.

APPENDIX C
HISTORIC VOC DATA

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MCL		ug/L	200	NS	7	5	80	NS	80	70	80	NS	5	1000	100	5	2	10000
MW-1	6/4/2003	ug/L	<50	<50	<50	NA	NA	NA	NA	<50	NA	140	15000	<250	<50	<50	<50	<150
MW-1	12/30/2003	ug/L	<800	<800	<800	NA	NA	NA	NA	<800	NA	<800	11000	<800	<800	<800	<800	<800
MW-1	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	10.1	NA	<1.00	5470	NA	<1.00	34.8	<1.00	NA
MW-1	6/1/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	10.1	NA	<1.00	5750	NA	<1.00	41.3	<1.00	NA
MW-1	9/20/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	9.6	NA	<1.00	3150	NA	<1.00	38.4	<1.00	NA
MW-1	12/12/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	11.4	NA	<1.00	4750	NA	<1.00	35.6	<1.00	NA
MW-1	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	11.9	NA	<1.00	6580	NA	<1.00	48.1	<1.00	NA
MW-1	6/26/2006	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	13	NA	<1.0	4100	NA	<1.0	32	<1.0	NA
MW-1	10/21/2006	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	17.9	NA	<1.0	9550	NA	<1.0	65.8	<1.0	NA
MW-1	1/12/2007	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	23.1	NA	<1.00	6790	NA	<1.00	85.6	<1.00	NA
MW-1	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	102	NA	<1.00	5390	NA	<1.00	83.7	<1.00	NA
MW-1	11/5/2009	ug/L	<1.00	<1.00	1.74	NA	NA	NA	NA	382	NA	<1.00	7680	NA	<1.00	108	<1.00	NA
MW-1	4/30/2010	ug/L	<5.00	<5.00	<5.00	NA	NA	NA	NA	184	NA	<5.00	5940	NA	<5.00	79.6	<5.00	NA
MW-1	10/25/2010	ug/L	<50.0	<50.0	<50.0	NA	NA	NA	NA	648	NA	<50.0	5690	NA	<50.0	99.5	<50.0	NA
MW-1	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	210	NA	<1.0	3000	<1.0	<1.0	28	<2.0	<10
MW-1	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	265	NA	<1.00	2320	NA	<1.00	35	<1.00	NA
MW-1	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	298	NA	<1.00	3120	NA	<1.00	41.4	<1.00	NA
MW-1	2/26/2014	ug/L	<6.7	<5.1	<5.1	<4.8	<5.2	<4	<6.2	110 J/A	<7.2	69.3 J	1280 J/A	<4	<6.9	11.5 J	<6.5	<13
MW-1	10/27/2014	ug/L	<6.7	<5.1	<5.1	<4.8	<5.2	<4	<6.2	131	<7.2	<40	785	<4	<6.9	18.6 J	10.9 J	<13
MW-1	4/20/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	6.1	<1	<10	447	<2	<1	2.6 J	<1.3	<2.6
MW-1	10/28/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	7.1	<1	<10	383	<2	<1	2.8 J	<1.3	<2.6
MW-1	4/13/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	19.4	<1.3	<10	468	<1	<1.7	6.2	<1.6	<2.8
MW-1	10/25/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	7	<1.3	<10	410	<1	<1.7	3.5 J	<1.6	<2.8
MW-2	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
MW-2	12/30/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	4.5	<2	<2	<2	<2	<4
MW-2	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	4.3	NA	<1.00	<1.00	<1.00	NA
MW-2	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.21	NA	<1.00	<1.00	<1.00	NA
MW-2	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	2.5	NA	<1.00	<1.00	<1.00	NA
MW-2	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.17	NA	<1.00	<1.00	<1.00	NA
MW-2	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.27	NA	<1.00	<1.00	<1.00	NA
MW-2	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1	NA	<1.00	<1.00	<1.00	NA
MW-2	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-2	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.86	NA	<1.00	<1.00	<1.00	NA
MW-2	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	6.55	NA	<1.00	<1.00	<1.00	NA
MW-2	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	1.6	<0.2	<0.34	<0.3	<0.33	<0.66
MW-2	10/27/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	1.2	<0.2	<0.34	<0.3	<0.33	<0.66
MW-2	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.53 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-2	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.85 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-2	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.57	<0.2	<0.33	<0.27	<0.31	<0.56
MW-2	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.83 J	<0.2	<0.33	<0.27	<0.31	<0.56
MW-3	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	74	<5.0	<1.0	<1.0	<1.0	<3.0
MW-3	12/30/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	220	<2	<2	<2	<2	<4
MW-3	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	113	NA	<1.00	<1.00	<1.00	NA
MW-3	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	305	NA	<1.00	<1.00	<1.00	NA
MW-3	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	59.8	NA	<1.00	<1.00	<1.00	NA
MW-3	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	82.1	NA	<1.00	<1.00	<1.00	NA
MW-3	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	238	NA	<1.00	1.03	<1.00	NA
MW-3	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	391	NA	<1.00	2.79	<1.00	NA
MW-3	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	47	<1.0	<1.0	<1.0	<2.0	<10
MW-3	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	140	NA	<1.00	3.23	<1.00	NA
MW-3	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	64.5	NA	<1.00	<1.00	<1.00	NA
MW-3	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	45.1	<0.2	<0.34	1.1	<0.33	<0.66
MW-3	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	49.9	<0.2	<0.34	1.4	<0.33	<0.66
MW-3	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.92 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-3	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	0.24 J	<0.2	<2	57.4	<0.4	<0.21	0.79 J	<0.25	<0.51
MW-3	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	0.68	<0.26	<2	98	<0.2	<0.33	1.2	<0.31	<0.56
MW-3	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	0.58 J	<0.26	<2	91.6	<0.2	<0.33	1.1	<0.31	<0.56

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

Well No.	Sample Date	Units	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	Bromodichloro-methane	Carbon disulfide	Chloroform	cis-1,2-Dichloroethylene	Dibromochloro-methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-3D	1/9/2008	ug/L	<1.00	<1.00	9.68	NA	NA	NA	NA	5.52	NA	<1.00	432	NA	<1.00	3.33	<1.00	NA
MW-3D	11/5/2009	ug/L	<1.00	<1.00	11.8	NA	NA	NA	NA	8.92	NA	<1.00	612	NA	<1.00	4.11	<1.00	NA
MW-3D	4/30/2010	ug/L	<1.00	<1.00	9.92	NA	NA	NA	NA	9.33	NA	<1.00	764	NA	<1.00	6.1	<1.00	NA
MW-3D	10/26/2010	ug/L	<1.00	<1.00	11.7	NA	NA	NA	NA	9.98	NA	<1.00	544	NA	<1.00	4.51	<1.00	NA
MW-3D	5/24/2011	ug/L	<1.0	<1.0	11	NA	NA	NA	NA	9.4	NA	<1.0	600	<1.0	<1.0	4.7	<2.0	<10
MW-3D	11/9/2011	ug/L	<1.00	<1.00	10.8	NA	NA	NA	NA	9.93	NA	<1.00	526	NA	<1.00	4.01	<1.00	NA
MW-3D	5/9/2012	ug/L	<1.00	<1.00	10.3	NA	NA	NA	NA	8.58	NA	<1.00	520	NA	<1.00	4.48	<1.00	NA
MW-3D	3/5/2014	ug/L	<0.34	<0.26	10.4	<0.24	<0.26	<0.2	<0.31	7	<0.36	<2	204	<0.2	<0.34	6	<0.33	<0.66
MW-3D	10/28/2014	ug/L	0.58 J	<0.26	16.2	<0.24	<0.26	<0.2	<0.31	5.9	<0.36	<2	384	<0.2	<0.34	4.2	<0.33	<0.66
MW-3D	4/21/2015	ug/L	<0.26	<0.2	12.4	<0.2	<0.22	<0.29	<0.3	8.4	<0.2	<2	316 /M/M	<0.4	<0.21	8.1	<0.25	<0.51
MW-3D	10/27/2015	ug/L	<1.3	<1	9.7	<1	<1.1	<1.5	<1.5	5.6	<1	<10	353	<2	<1	6.7	<1.3	<2.6
MW-3D	4/13/2016	ug/L	<1	<1.3	5.7	<1.4	<1.2	<1.2	<1.5	7.8	<1.3	<10	285	<1	<1.7	8.3	<1.6	<2.8
MW-3D	10/26/2016	ug/L	0.25 J	<0.26	8.8	<0.28	<0.24	<0.23	<0.3	8.3	<0.26	<2	331	<0.2	<0.33	7.6	<0.31	<0.56
MW-3D1	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-3D1	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-3D1	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-3D1	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-3D1	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-3D1	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-3D1	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-4	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
MW-4	12/30/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	<4
MW-4	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	11/5/2009	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	10/25/2010	ug/L	<10.0	<10.0	<10.0	NA	NA	NA	NA	<10.0	NA	<10.0	<10.0	NA	<10.0	<10.0	<10.0	NA
MW-4	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-4	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-4	3/12/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-4	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	0.54 J	<0.21	<0.22	<0.25	<0.51
MW-4	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-4	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	0.42 J	<0.33	<0.27	<0.31	<0.56
MW-5	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	NA	<5.0	<1.0	<1.0	<1.0	<3.0
MW-5	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	230	<2	<2	<2	<2	<4
MW-5	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	345	NA	<1.00	<1.00	<1.00	NA
MW-5	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	3.79	NA	<1.00	<1.00	<1.00	NA
MW-5	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	97.6	NA	<1.00	<1.00	<1.00	NA
MW-5	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	2.42	NA	<1.00	<1.00	<1.00	NA
MW-5	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.46	NA	<1.00	<1.00	<1.00	NA
MW-5	10/26/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-5	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-5	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	1.55	NA	<1.00	<1.00	<1.00	NA
MW-5	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	2.57	NA	<1.00	<1.00	<1.00	NA
MW-5	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	11.7	<0.2	<0.34	<0.3	<0.33	<0.66
MW-5	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	1.1	<0.2	<0.34	<0.3	<0.33	<0.66
MW-5	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	1	<0.2	<2	74.3	<0.4	<0.21	1.3	<0.25	<0.51
MW-5	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	16.2	<0.4	<0.21	<0.22	<0.25	<0.51
MW-5	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.53	<0.2	<0.33	<0.27	<0.31	<0.56
MW-5	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	2.5	<0.2	<0.33	<0.27	<0.31	<0.56
MW-6	6/4/2003	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<3.0
MW-6	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	<4
MW-6	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-6	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-6	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	0.59 J	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-6	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-6	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-6	10/25/2016	ug/L	&															

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-7	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	5.3
MW-7	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-7	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-7	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-7	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-7	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	1.4	<0.4	<0.21	<0.22	<0.25	<0.51
MW-7	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-7	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-8	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	30	1.9J	<2	<2	<2	4.7
MW-8	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	135	NA	<1.00	1.1	<1.00	NA
MW-8	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	102	NA	<1.00	1.1	<1.00	NA
MW-8	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	159	NA	<1.00	1.66	<1.00	NA
MW-8	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	94.1	NA	<1.00	1.38	<1.00	NA
MW-8	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	28.3	NA	<1.00	<1.00	<1.00	NA
MW-8	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	76.4	NA	<1.00	1.22	<1.00	NA
MW-8	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	100	<1.0	<1.0	2.3	<2.0	<10
MW-8	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	276	NA	<1.00	5.31	<1.00	NA
MW-8	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	1.11	NA	<1.00	491	NA	<1.00	8.42	<1.00	NA
MW-8	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	114	<0.2	<0.34	6.8	<0.33	<0.66
MW-8	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	71.4	<0.2	<0.34	3.2	<0.33	<0.66
MW-8	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	28.5	<0.4	<0.21	0.97 J	<0.25	<0.51
MW-8	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	26	<0.4	<0.21	2.2	<0.25	<0.51
MW-8	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	7.8	<0.2	<0.33	<0.27	<0.31	<0.56
MW-8	10/24/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	35.8	<0.2	<0.33	4.9	<0.31	<0.56
MWT-1/MW-9	12/31/2003	ug/L	<800	<800	<800	NA	NA	NA	NA	<800	NA	<800	7500	<800	<800	<800	<800	<2,000
MWT-1/MW-9	3/14/2005	ug/L	<1.00	<1.00	7.3	NA	NA	NA	NA	19.1	NA	<1.00	3520	NA	<1.00	76	<1.00	NA
MWT-1/MW-9	6/1/2005	ug/L	<1.00	<1.00	6.7	NA	NA	NA	NA	226	NA	<1.00	4670	NA	1.4	280	<1.00	NA
MWT-1/MW-9	9/20/2005	ug/L	1.28	<1.00	13.6	NA	NA	NA	NA	158	NA	<1.00	5000	NA	1.9	295	<1.00	NA
MWT-1/MW-9	12/12/2005	ug/L	2.05	<1.00	8.94	NA	NA	NA	NA	182	NA	<1.00	3920	NA	1.37	286	<1.00	NA
MWT-1/MW-9	3/28/2006	ug/L	<1.00	<1.00	8.51	NA	NA	NA	NA	362	NA	<1.00	4560	NA	1.57	372	<1.00	NA
MWT-1/MW-9	6/26/2006	ug/L	<1.0	<1.0	12	NA	NA	NA	NA	520	NA	<1.0	1500	NA	1.7	330	<1.0	NA
MWT-1/MW-9	10/21/2006	ug/L	<1.0	<1.0	23.5	NA	NA	NA	NA	540	NA	<1.0	7490	NA	<1.0	504	<1.0	NA
MWT-1/MW-9	1/12/2007	ug/L	<1.00	<1.00	25.3	NA	NA	NA	NA	442	NA	<1.00	5630	NA	1.97	626	<1.00	NA
MWT-1/MW-9	1/9/2008	ug/L	1.08	<1.00	5.01	NA	NA	NA	NA	271	NA	<1.00	2410	NA	1.39	297	8.73	NA
MWT-1/MW-9	11/4/2009	ug/L	<1.00	<1.00	11.6	NA	NA	NA	NA	379	NA	<1.00	2950	NA	2.21	559	<1.00	NA
MWT-1/MW-9	4/29/2010	ug/L	<1.00	<1.00	11.1	NA	NA	NA	NA	236	NA	<1.00	4170	NA	3.41	320	4.79	NA
MWT-1/MW-9	10/25/2010	ug/L	<20.0	<20.0	<20.0	NA	NA	NA	NA	326	NA	<20.0	3660	NA	<20.0	579	<20.0	NA
MWT-1/MW-9	5/24/2011	ug/L	<10	<10	<10	NA	NA	NA	NA	160	NA	<10	1200	<10	<10	380	<20	<100
MWT-1/MW-9	11/9/2011	ug/L	1.2	<1.00	19.7	NA	NA	NA	NA	200	NA	<1.00	4000	NA	1.47	450	<1.00	NA
MWT-1/MW-9	5/8/2012	ug/L	<1.00	<1.00	2.92	NA	NA	NA	NA	127	NA	<1.00	755	NA	1.09	258	<1.00	NA
MW-9	3/6/2014	ug/L	<1.7	<1.3	<1.3	<1.2	<1.3	<1	<1.6	31.5	<1.8	<10	498	<1	<1.7	55.3	<1.6	<3.3
MW-9	10/29/2014	ug/L	<0.34	<0.26	2.2	<0.24	<0.26	<0.2	<0.31	92.2	<0.36	<2	727 /M/m	<0.2	0.59 J	159	<0.33	<0.66
MW-9	4/22/2015	ug/L	<2.6	<2	<2.7	<2	<2.2	<2.9	<3	33.1	<2	<20	1760	<4	<2.1	133	<2.5	<5.1
MW-9	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	116	<0.2	<2	1070	<0.4	1.1	172 /M/M	<0.25	<0.51
MW-9	4/12/2016	ug/L	<2	<2.6	<2.2	<2.8	<2.4	<2.3	<3	49.2	<2.6	<20	771	<2	<3.3	115	<3.1	<5.6
MW-9	10/26/2016	ug/L	<2	<2.6	<2.2	<2.8	<2.4	<2.3	<3	19.2	<2.6	<20	685	<2	<3.3	106	<3.1	<5.6
MW-9D	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-9D	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-9D	3/6/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-9D	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-9D	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-9D	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MWT-2/MW-10	12/31/2003	ug/L	<200	<200	520	NA	NA	NA	NA	<200	NA	<200	5800	<200	<200	<200	<200	<400
MWT-2/MW-10	3/14/2005	ug/L	26.4	<1.00	18.6	NA	NA	NA	NA	40.1	NA	<1.00	4360	NA	1	62.3	<1.00	NA
MWT-2/MW-10	6/1/2005	ug/L	12.7	1.7	17.5	NA	NA	NA	NA	40.8	NA	<1.00	5680	NA	<1.00	52	<1.00	NA
MWT-2/MW-10	9/20/2005	ug/L	9.03	<1.00	40	NA	NA	NA	NA	27.8	NA	<1.00	4360	NA	<1.00	46.2	<1.00	NA
MWT-2/MW-10	12/12/2005	ug/L	11.7	<1.00	14.4	NA	NA	NA	NA	23.2	NA	<1.00	3050	NA	<1.00	45.2	<1.00	NA
MWT-2/MW-10	3/28/2006	ug/L	6.1	<1.00	13.4	NA	NA	NA	NA	16.8	NA	<1.00	3090	NA	<1.00	27.4	<1.00	NA
MWT-2/MW-10	6/26/2006	ug/L	<20	<20	<20	NA	NA	NA	NA	21	NA	<20	1800	NA	<20	31	<20	NA
MWT-2/MW-10	10/21/2006	ug/L	<100	<100	<100	NA	NA	NA	NA	121	NA	<100	3380	NA	<100	<100	114	NA
MWT-2/MW-10	1/12/2007	ug/L	1.22	<1.00	2.08	NA	NA	NA	NA	12.4	NA	<1.00	2980	NA	<1.00	32.7	<1.00	NA
MWT-2/MW-10	1/9/2008	ug/L	10.9	<1.00	24.1	NA	NA	NA	NA	89.1	NA	<1.00	3250	NA	<1.00	71.9	<1.00	NA
MWT-2/MW-10	11/4/2009	ug/L	1.49	1.56	82.2	NA	NA	NA	NA	1120	NA	<1.00	1600	NA	1.22	33.9	<1.00	NA
MWT-2/MW-10	4/29/2010	ug/L	<1.00	<1.00	2.85	NA	NA	NA	NA	104	NA	<1.00	53.8	NA	<1.00	3.22	<1.00	NA
MWT-2/MW-10	10/25/2010	ug/L	<10.0	<10.0	108	NA	NA	NA	NA	1270	NA	<10.0	1150	NA	<10.0	129	<10.0	NA
MWT-2/MW-10	5/24/2011	ug/L	<20	<20	<20	NA	NA	NA	NA	390	NA	<20	2000	<20	<20	88	<40.0	<200
MWT-2/MW-10	11/9/2011	ug/L	<5.00	8.8	285	NA	NA	NA	NA	4250	NA	<5.00	4670	NA	<5.00	154	<5.00	NA
MWT-2/MW-10	5/8/2012	ug/L	3.7	<1.00	7.83	NA	NA	NA	NA	885	NA	<1.00	1810	NA	17.1	386	<1.00	NA
MW-10	3/5/2014	ug/L	<0.34	<0.26	0.36 J	<0.24	<0.26	<0.2	<0.31	13.9	<0.36	<2	93.2	<0.2	<0.34	15.1	<0.33	<0.66
MW-10	10/29/2014	ug/L	<0.34	0.37 J	32.7	<0.24	<0.26	<0.2	<0.31	664	<0.36	<2	136	2.6	0.51 J	36.9	<0.33	<0.66
MW-10	4/22/2015	ug/L	<0.26	<0.2	5.2	<0.2	<0.22	<0.29	<0.3	98.8	<0.2	<2	54.1	<0.4	<0.21	7.8	<0.25	<0.51
MW-10	10/26/2015	ug/L	<0.26	0.49 J	30.3	0.22 J	<0.22	<0.29	<0.3	506	<0.2	<2	66.4	1.1	0.25 J	45.2	0.5 J	<0.51
MW-10	4/12/2016	ug/L	<0.2	<0.26	6.7	<0.28	<0.24	<0.23	<0.3	90.8	<0.26	<2	43.3	1.2	<0.33	22.1	<0.31	<0.56
MW-10	10/25/2016	ug/L	<0.2	<0.26	9	<0.28	<0.24	<0.23	<0.3	146	<0.26	<2	41.4	7.2	0.49 J	13.5	<0.31	<0.56
MW-10D	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	4.09	NA	<1.00	<1.00	<1.00	NA
MW-10D	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-10D	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-10D	3/5/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-10D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-10D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-10D	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-10D	10/25/2016	ug/L	<0.2 //h	<0.26 //h	<0.22 //h	<0.28 //h	<0.24 //h	<0.23 //h	<0.3 //h	<0.31 //h	<0.26 //h	<2 //h	<0.3 //h	<0.2 //h	<0.33 //h	<0.27 //h	<0.31 //h	<0.56 //h
MWT-3/MW-11	12/31/2003	ug/L	<2	<2	<2	NA	NA	NA	NA	<2	NA	<2	<2	<2	<2	<2	<2	<4
MWT-3/MW-11	3/14/2005	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	3/28/2006	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	1/9/2008	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	11/4/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	4/29/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	5/24/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MWT-3/MW-11	11/9/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MWT-3/MW-11	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-11	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-11	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-11	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	4.2	<0.21	<0.22	<0.25	<0.51
MW-11	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	1	<0.33	<0.27	<0.31	<0.56
MW-12D	11/5/2009	ug/L	<1.00	<1.00	1.11	NA	NA	NA	NA	<1.00	NA	<1.00	87.7	NA	<1.00	<1.00	<1.00	NA
MW-12D	4/30/2010	ug/L	1.13	<1.00	3.67	NA	NA	NA	NA	<1.00	NA	<1.00	451	NA	<1.00	<1.00	<1.00	NA
MW-12D	10/25/2010	ug/L	<1.00	<1.00	1.07	NA	NA	NA	NA	<1.00	NA	<1.00	72.3	NA	<1.00	<1.00	<1.00	NA
MW-12D	5/23/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	12	<1.0	<1.0	<1.0	<2.0	<10
MW-12D	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	20.8	NA	<1.00	<1.00	<1.00	NA
MW-12D	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	21.4	NA	<1.00	<1.00	<1.00	NA
MW-12D	3/11/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	40.7	<0.2	<0.34	<0.3	<0.33	<0.66
MW-12D	10/29/2014	ug/L	<0.34	<0.26	0.64 J	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	25.5	<0.2	<0.34	<0.3	<0.33	<0.66
MW-12D	4/21/2015	ug/L	<0.26	<0.2	1.4	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	65.6	<0.4	<0.21	<0.22	<0.25	<0.51
MW-12D	10/27/2015	ug/L	<0.26	<0.2	0.54 J	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	25.1	<0.4	<0.21	<0.22	<0.25	<0.51
MW-12D	4/13/2016	ug/L	<0.4	<0.51	2.9	<0.57	<0.48	<0.46	<0.6	<0.62	<0.52	<4	140	<0.4	<0.66	<0.54	<0.63	<1.1
MW-12D	10/25/2016	ug/L	<0.2 //h	<0.26 //h	1.2 //h	<0.28 //h	<0.24 //h	<0.23 //h	<0.3 //h	<0.31 //h	<0.26 //h	<2 //h	69.2 //h	<0.2 //h	<0.33 //h	<0.27 //h	<0.31 //h	<0.56 //h
MW-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	&										

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

Well No.	Sample Date	Units	1,1,1- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethylene	1,2- Dichloroethane	Bromodichloro- methane	Carbon disulfide	Chloroform	cis-1,2- Dichloroethylene	Dibromochloro- methane	Methylene Chloride	Tetrachloroethylene	Toluene	trans-1,2- Dichloroethylene	Trichloroethylene	Vinyl Chloride	Xylene (total)
MW-14	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	10/25/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	5/23/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-14	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-14	2/26/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-14	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-14	4/20/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.46 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-14	10/28/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	0.72 J	<0.4	<0.21	<0.22	<0.25	<0.51
MW-14	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.9	<0.2	<0.33	<0.27	<0.31	<0.56
MW-14	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	0.66 J	<0.2	<0.33	<0.27	<0.31	<0.56
MW-14D	11/5/2009	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	18.7	NA	<1.00	<1.00	<1.00	NA
MW-14D	4/30/2010	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	74.8	NA	<1.00	<1.00	<1.00	NA
MW-14D	10/25/2010	ug/L	<1.00	<1.00	1.12	NA	NA	NA	NA	<1.00	NA	<1.00	85.3	NA	<1.00	<1.00	<1.00	NA
MW-14D	5/23/2011	ug/L	<1.0	<1.0	1.4	NA	NA	NA	NA	<1.0	NA	<1.0	92	<1.0	<1.0	<1.0	<2.0	<10
MW-14D	11/8/2011	ug/L	<1.00	<1.00	1.11	NA	NA	NA	NA	<1.00	NA	<1.00	77.3	NA	<1.00	<1.00	<1.00	NA
MW-14D	5/9/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	82.1	NA	<1.00	<1.00	<1.00	NA
MW-14D	2/26/2014	ug/L	<0.34	<0.26	1.6	<0.24	<0.26	<0.2	<0.31	0.95 J	<0.36	<2	81.5	<0.2	<0.34	0.56 J	<0.33	<0.66
MW-14D	10/28/2014	ug/L	<0.34	<0.26	1.2	<0.24	<0.26	<0.2	<0.31	0.65 J	<0.36	<2	79.3	<0.2	<0.34	0.56 J	<0.33	<0.66
MW-14D	4/20/2015	ug/L	<0.26	<0.2	1.8	<0.2	<0.22	<0.29	<0.3	0.9 J	<0.2	<2	69.7	<0.4	<0.21	0.61 J	<0.25	<0.51
MW-14D	10/28/2015	ug/L	<0.26	<0.2	1	<0.2	<0.22	<0.29	<0.3	0.34 J	<0.2	<2	53.1	<0.4	<0.21	<0.22	<0.25	<0.51
MW-14D	4/13/2016	ug/L	<0.2	<0.26	1.5	<0.28	<0.24	<0.23	<0.3	0.98	<0.26	<2	78.5	<0.2	<0.33	0.73	<0.31	<0.56
MW-14D	10/26/2016	ug/L	<0.2	<0.26	1.4	<0.28	<0.24	<0.23	<0.3	0.86 J	<0.26	<2	84.3	<0.2	<0.33	0.65 J	<0.31	<0.56
MW-15	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-15	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-15	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-15D	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-15D	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15D	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	0.24 J	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D1	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-15D1	2/25/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D1	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-15D1	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D1	10/26/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-15D1	4/11/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-15D1	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-16	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-16	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-16	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16	3/6/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-16	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	0.48 J	<0.33	<0.27	<0.31	<0.56

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-16D	5/25/2011	ug/L	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<10
MW-16D	6/28/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<3.00
MW-16D	11/8/2011	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16D	5/8/2012	ug/L	<1.00	<1.00	<1.00	NA	NA	NA	NA	<1.00	NA	<1.00	<1.00	NA	<1.00	<1.00	<1.00	NA
MW-16D	3/6/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16D	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-16D	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16D	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-16D	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-16D	10/25/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-17	3/10/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-17	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-17	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-17	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-17	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-18	3/10/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-18	10/29/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-18	4/22/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-18	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-18	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-19	3/6/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	<65	<72	639 J	14000	<40	<69	<60	<65	<130
MW-19	10/28/2014	ug/L	16 J	<5.1	12 J	<4.8	<5.2	<4	<6.2	<6.5	<7.2	<40	3470	<4	<6.9	<6	<6.5	<13
MW-19	4/21/2015	ug/L	19.8 J	<4	15.6 J	<4	<4.3	<5.9	<6	12.5 J	<4	<40	4170	<8	<4.2	5.5 J	<5	<10
MW-19	10/28/2015	ug/L	34.6	<5	21.6 J	<5	<5.4	<7.4	<7.5	<5.5	<5	<50	8040	<10	<5.2	<5.4	<6.3	<13
MW-19	4/12/2016	ug/L	97.5	<26	39.1	<28	<24	<23	<30	<31	<26	221	16600	<20	<33	<27	<31	<56
MW-19	10/24/2016	ug/L	245	<51	<43	<57	<48	<46	<60	<62	<52	<400	34600	<40	<66	<54	<63	<110
MW-20	3/6/2014	ug/L	<3.4	<2.6	<2.5	<2.4	<2.6	<2	<3.1	4 J	<3.6	<20	648	<2	<3.4	5 J	<3.3	<6.6
MW-20	10/28/2014	ug/L	<1.7	<1.3	<1.3	<1.2	<1.3	<1	<1.6	<1.6	<1.8	<10	428	<1	<1.7	2.7 J	<1.6	<3.3
MW-20	4/21/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	2.6 J	<1	<10	452	<2	<1	4.2 J	<1.3	<2.6
MW-20	10/28/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	<1.1	<1	11.1 J	623	<2	<1	4.6 J	<1.3	<2.6
MW-20	4/12/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	0.72	<0.26	<2	480	<0.2	<0.33	3.2	<0.31	<0.56
MW-20	10/24/2016	ug/L	<2	<2.6	<2.2	<2.8	<2.4	<2.3	<3	<3.1	<2.6	<20	503	<2	<3.3	<2.7	<3.1	<5.6
MW-21	3/11/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	466	<72	765 J	16300	<40	<69	209	<65	<130
MW-21	10/28/2014	ug/L	<67	<51	<51	<48	<52	<40	<62	733	<72	<400	14500	<40	<69	354	<65	<130
MW-21	4/22/2015	ug/L	<0.26	<0.2	1	<0.2	<0.22	<0.29	<0.3	351	<0.2	<2	14500	<0.4	<0.21	225	<0.25	0.89 J
MW-21	10/28/2015	ug/L	<13	<10	<14	<10	<11	<15	<15	339	<10	<100	14600	<20	<10	180	<13	<26
MW-21	4/12/2016	ug/L	<10	<13	<11	<14	<12	<12	<15	383	<13	<100	13200	<10	<17	216	<16	<28
MW-21	10/25/2016	ug/L	<0.5	<0.64	<0.54	<0.71	<0.6	<0.58	<0.75	4.2	<0.65	<5	181	<0.5	<0.83	2.3 J	<0.79	<1.4

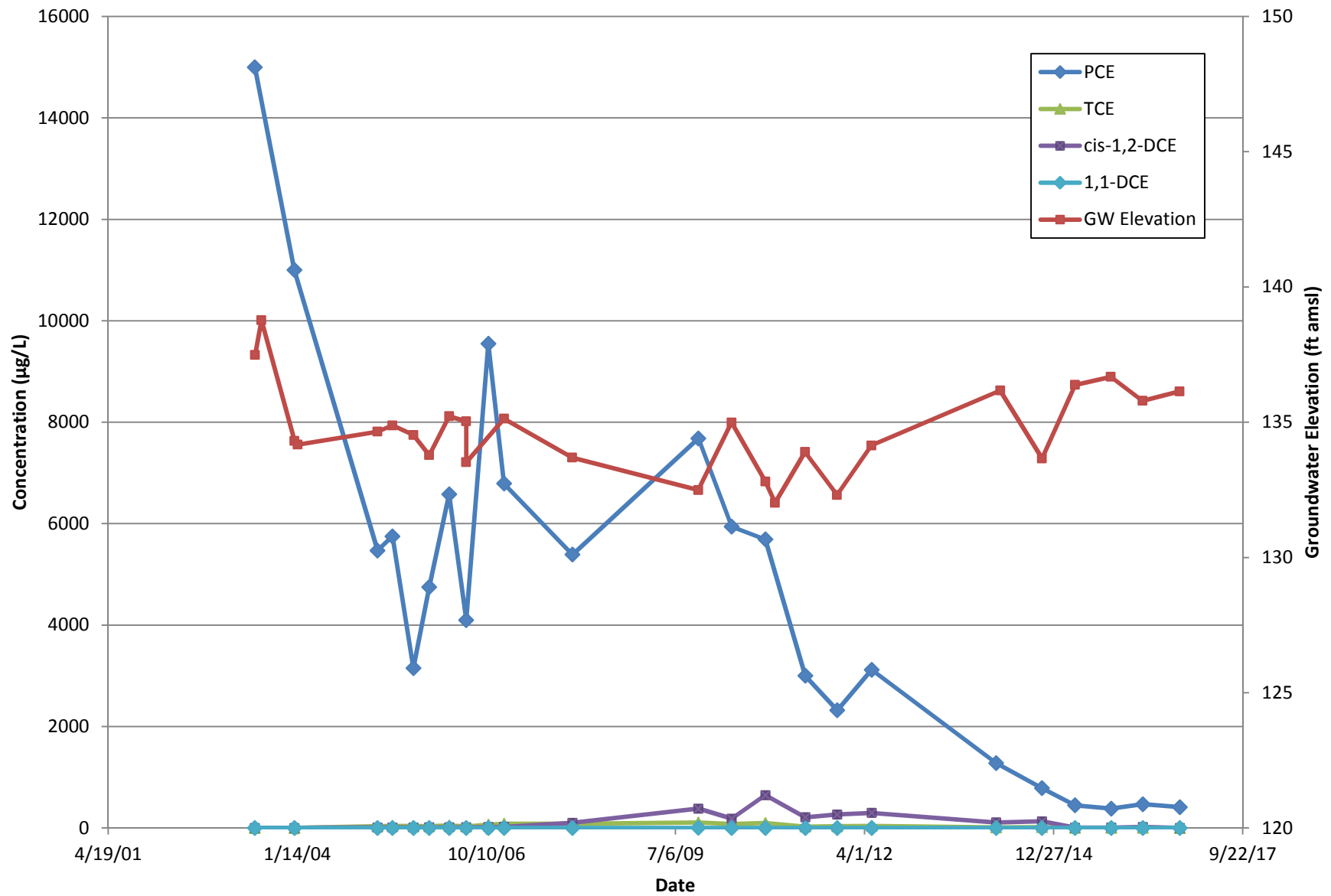
Appendix C
Historic VOC Data
UTC Delavan Spray Technologies Site
Bamberg, South Carolina
AECOM Project No. 60314964

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-21D	10/25/2016	ug/L	<0.5	<0.64	1.2 J	<0.71	<0.6	<0.58	<0.75	<0.78	<0.65	<5	169	<0.5	<0.83	<0.68	<0.79	<1.4
MW-22D	3/11/2014	ug/L	<0.34	<0.26	2.5	<0.24	7.2	<0.2	180	0.35 J	0.68 J	<2	99.8	<0.2	<0.34	0.33 J	<0.33	<0.66
MW-22D	10/28/2014	ug/L	<0.34	<0.26	3.7	<0.24	<0.26	<0.2	<0.31	0.41 J	<0.36	<2	149	<0.2	<0.34	0.86 J	<0.33	<0.66
MW-22D	4/22/2015	ug/L	0.27 J	<0.2	3.8	<0.2	<0.22	<0.29	<0.3	0.56 J	<0.2	<2	107	<0.4	<0.21	0.68 J	<0.25	<0.51
MW-22D	10/27/2015	ug/L	0.38 J	<0.2	2.9	<0.2	<0.22	<0.29	<0.3	0.4 J	<0.2	<2	156	<0.4	<0.21	0.44 J	<0.25	<0.51
MW-22D	4/12/2016	ug/L	<0.2	<0.26	1.5	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	65.7	<0.2	<0.33	0.35	<0.31	<0.56
MW-22D	10/25/2016	ug/L	<0.2	<0.26	2.2	<0.28	<0.24	<0.23	<0.3	0.38 J	<0.26	<2	122	<0.2	<0.33	0.62 J	<0.31	<0.56
MW-23D	3/12/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-23D	10/28/2014	ug/L	<0.34	<0.26	<0.25	<0.24	<0.26	<0.2	<0.31	<0.33	<0.36	<2	<0.26	<0.2	<0.34	<0.3	<0.33	<0.66
MW-23D	4/21/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-23D	10/27/2015	ug/L	<0.26	<0.2	<0.27	<0.2	<0.22	<0.29	<0.3	<0.22	<0.2	<2	<0.33	<0.4	<0.21	<0.22	<0.25	<0.51
MW-23D	4/13/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-23D	10/26/2016	ug/L	<0.2	<0.26	<0.22	<0.28	<0.24	<0.23	<0.3	<0.31	<0.26	<2	<0.3	<0.2	<0.33	<0.27	<0.31	<0.56
MW-24	12/4/2015	ug/L	<1.3	<1	<1.4	<1	<1.1	<1.5	<1.5	2.9	<1	<10	344	<2	<1	<1.1	<1.3	<2.6
MW-24	4/12/2016	ug/L	<1	<1.3	<1.1	<1.4	<1.2	<1.2	<1.5	59.2	<1.3	<10	1160	<1	<1.7	6.1	<1.6	<2.8
MW-24	10/24/2016	ug/L	<4	<5.1	<4.3	<5.7	<4.8	<4.6	<6	22.9	<5.2	<40	1340	<4	<6.6	<5.4	<6.3	<11
MW-25D	12/4/2015	ug/L	<0.26	<0.2	3.4	<0.2	<0.22	<0.29	<0.3	1.3	<0.2	<2	129	<0.4	<0.21	0.95	<0.25	<0.51
MW-25D	4/12/2016	ug/L	<0.2	<0.26	3.4	<0.28	<0.24	<0.23	<0.3	1.1	<0.26	<2	74.8	<0.2	<0.33	0.96	<0.31	<0.56
MW-25D	10/25/2016	ug/L	<0.4	<0.51	2.3	<0.57	<0.48	<0.46	<0.6	0.89 J	<0.52	6.1 J	125	<0.4	<0.66	0.84 J	<0.63	<1.1
MW-26D	12/4/2015	ug/L	<0.26	<0.2	1.9	<0.2	<0.22	<0.29	<0.3	1.1	<0.2	<2	98.1	<0.4	<0.21	1.1	<0.25	<0.51
MW-26D	4/12/2016	ug/L	<0.2	<0.26	1.8	<0.28	<0.24	<0.23	<0.3	0.93	<0.26	<2	62.6	<0.2	<0.33	1.1	<0.31	<0.56
MW-26D	10/25/2016	ug/L	<0.2	<0.26	1.6	<0.28	<0.24	<0.23	<0.3	1	<0.26	<2	75	<0.2	<0.33	0.97 J	<0.31	<0.56
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

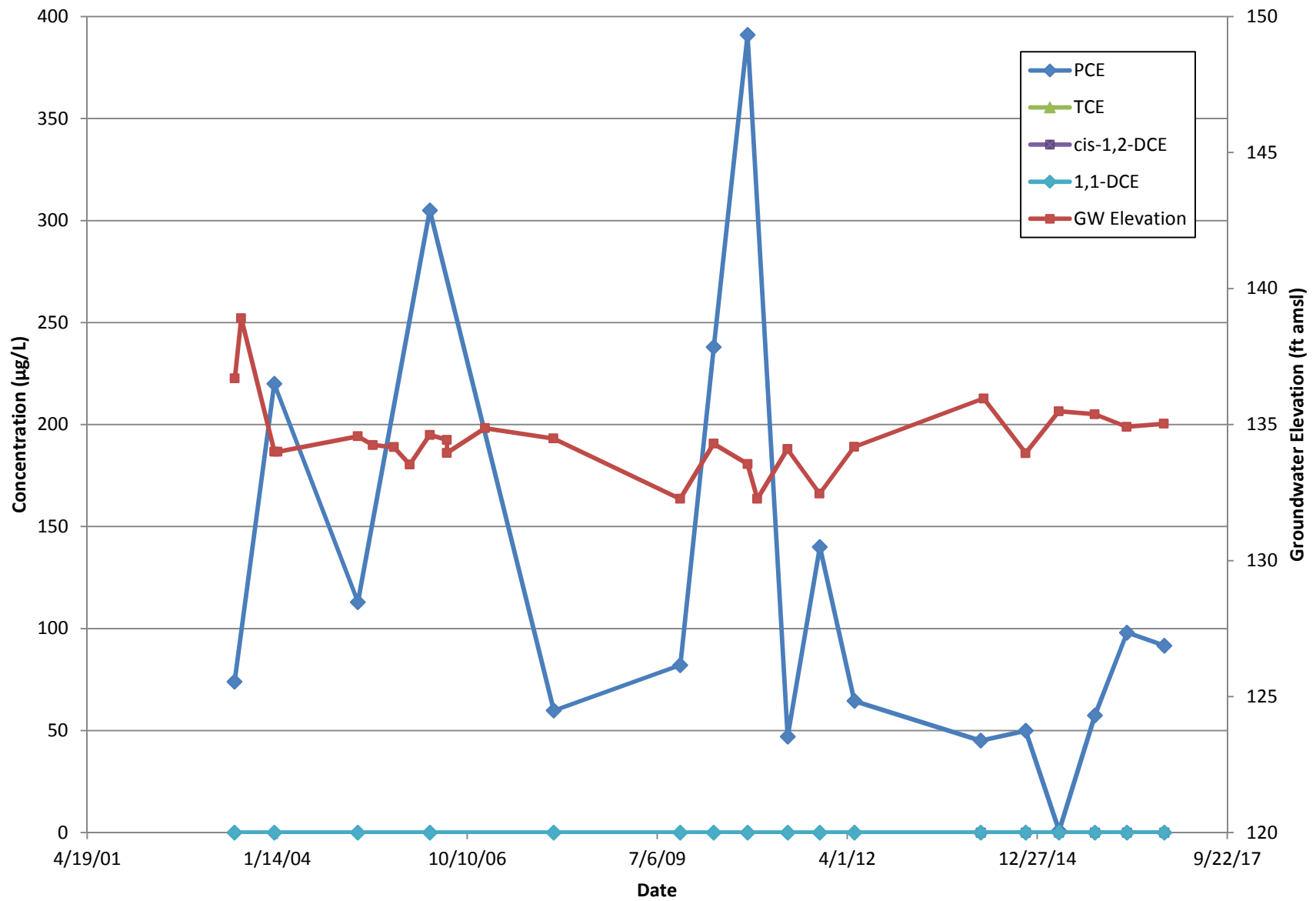
Notes:
NA - Not available
NS - Not sampled

APPENDIX D
TREND PLOTS

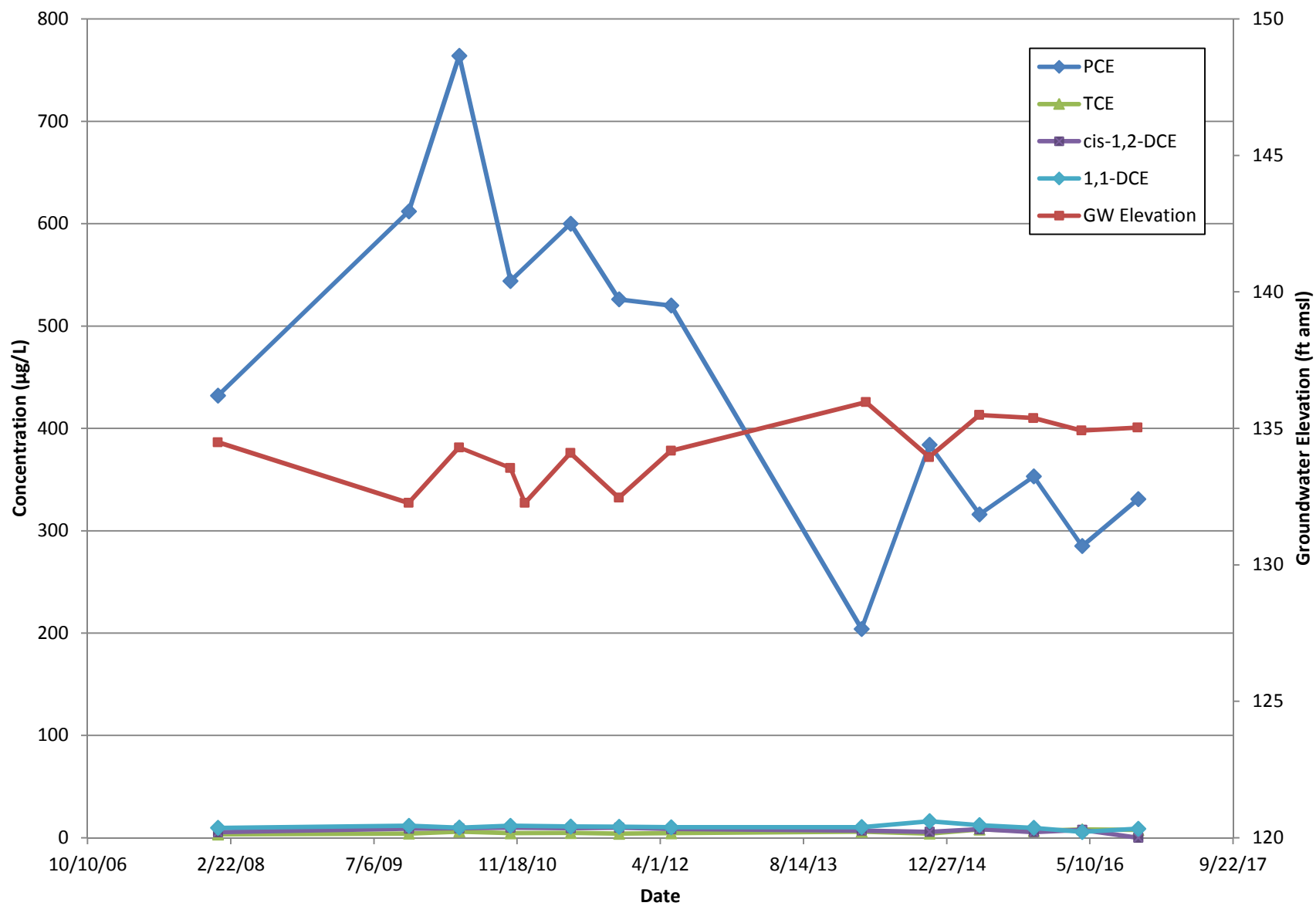
MW-1 Concentrations and Groundwater Elevation with Time



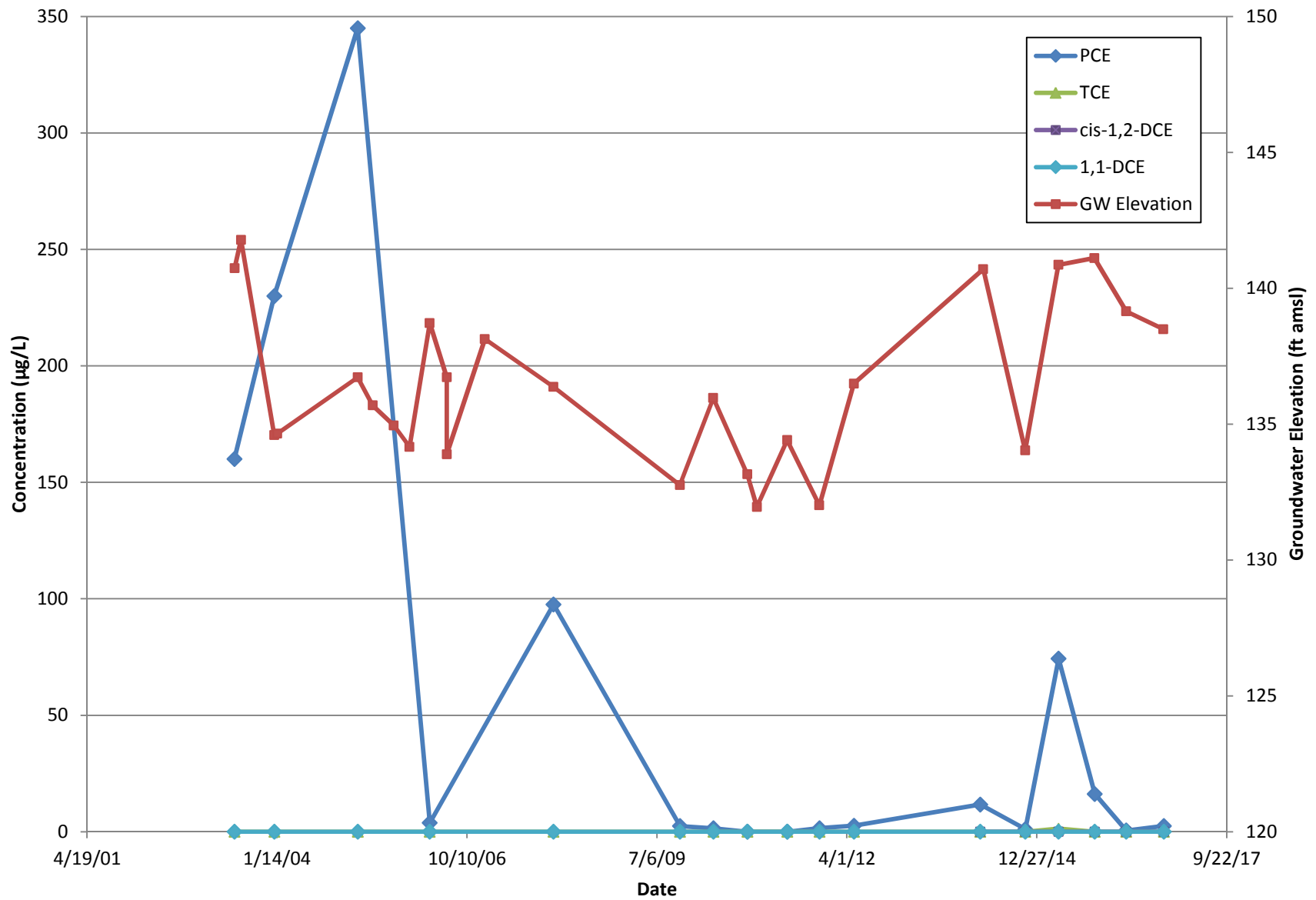
MW-3 Concentrations and Groundwater Elevation with Time



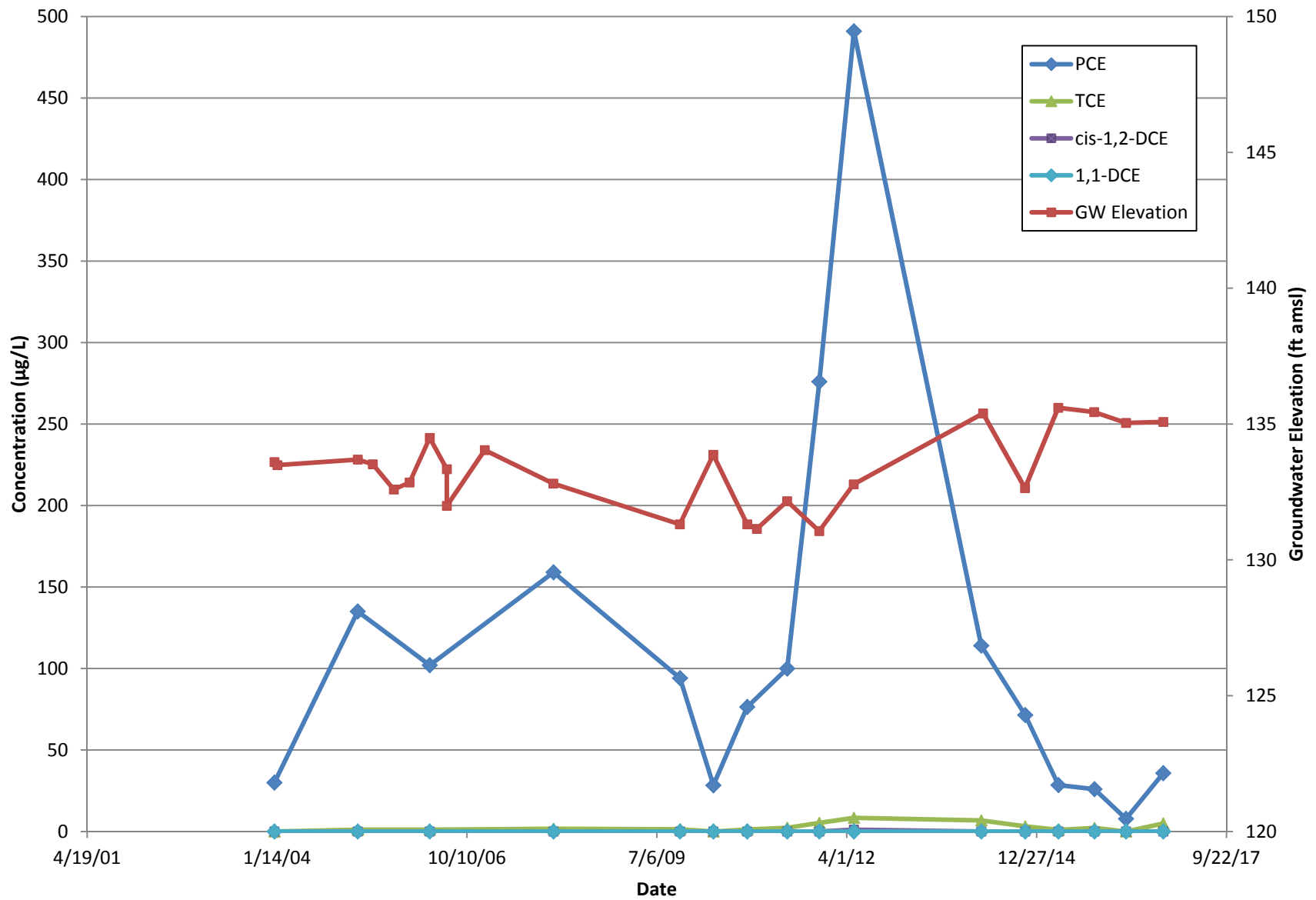
MW-3D Concentrations and Groundwater Elevation with Time



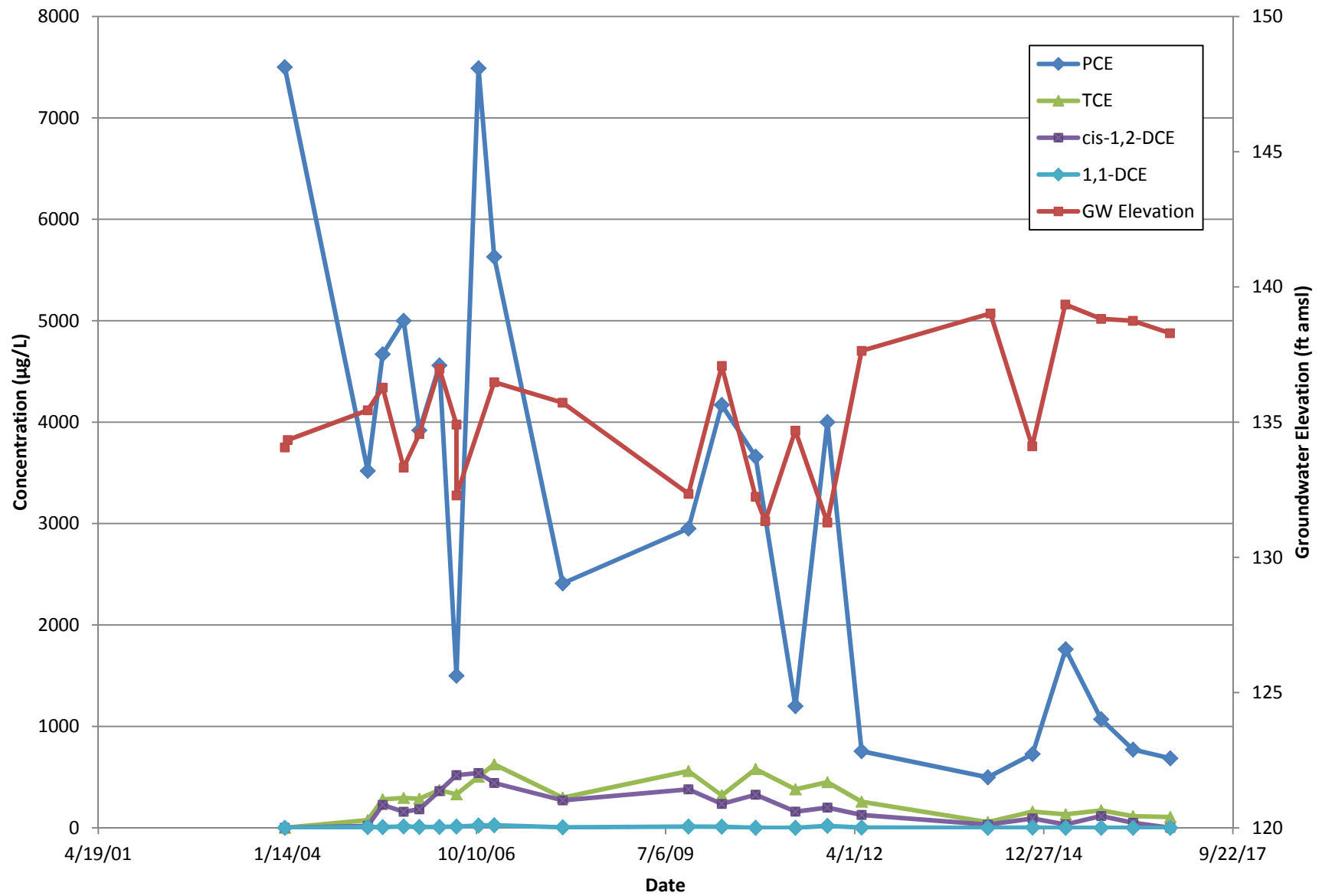
MW-5 Concentrations and Groundwater Elevation with Time



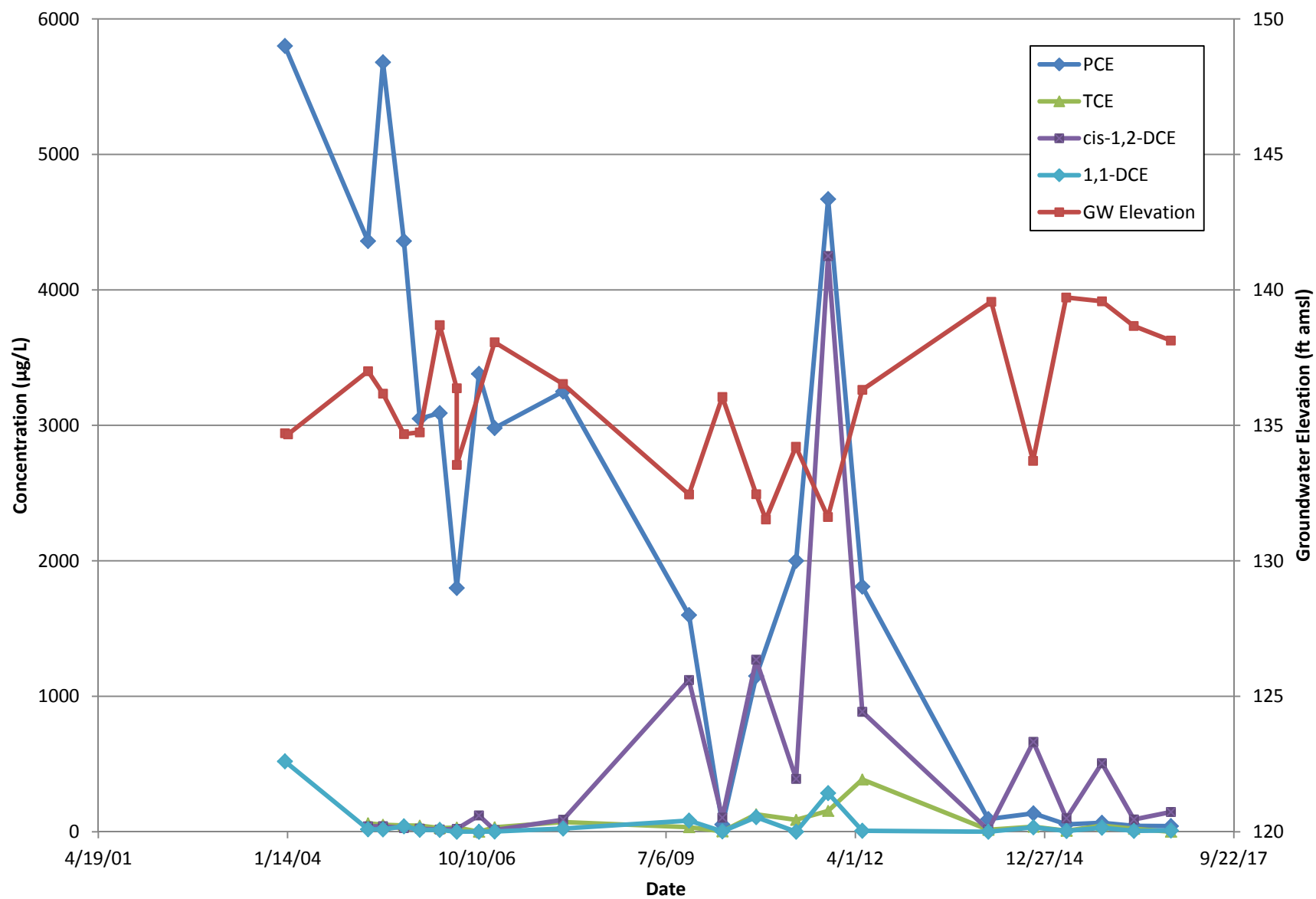
MW-8 Concentrations and Groundwater Elevation with Time



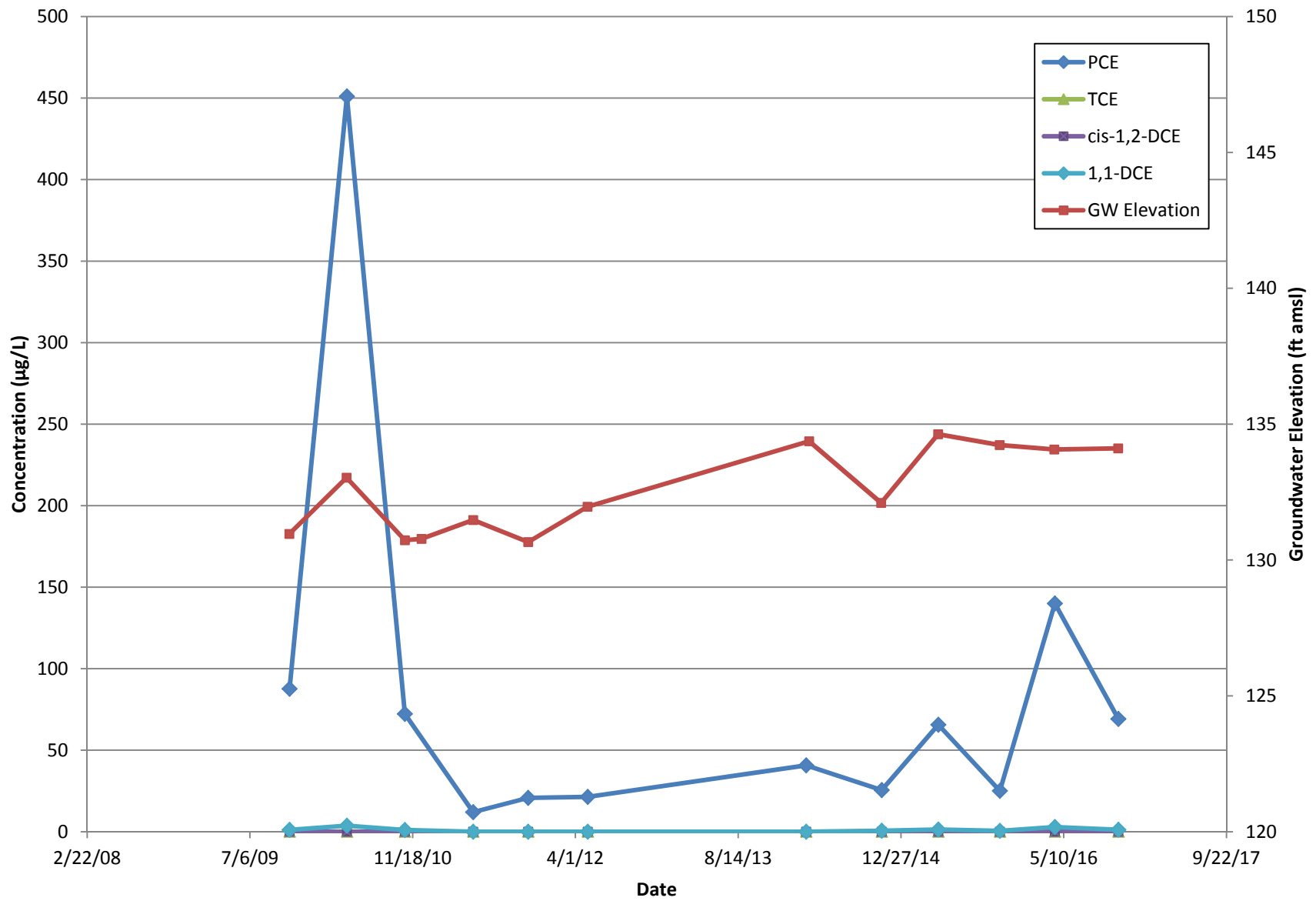
MW-9 Concentrations and Groundwater Elevation with Time



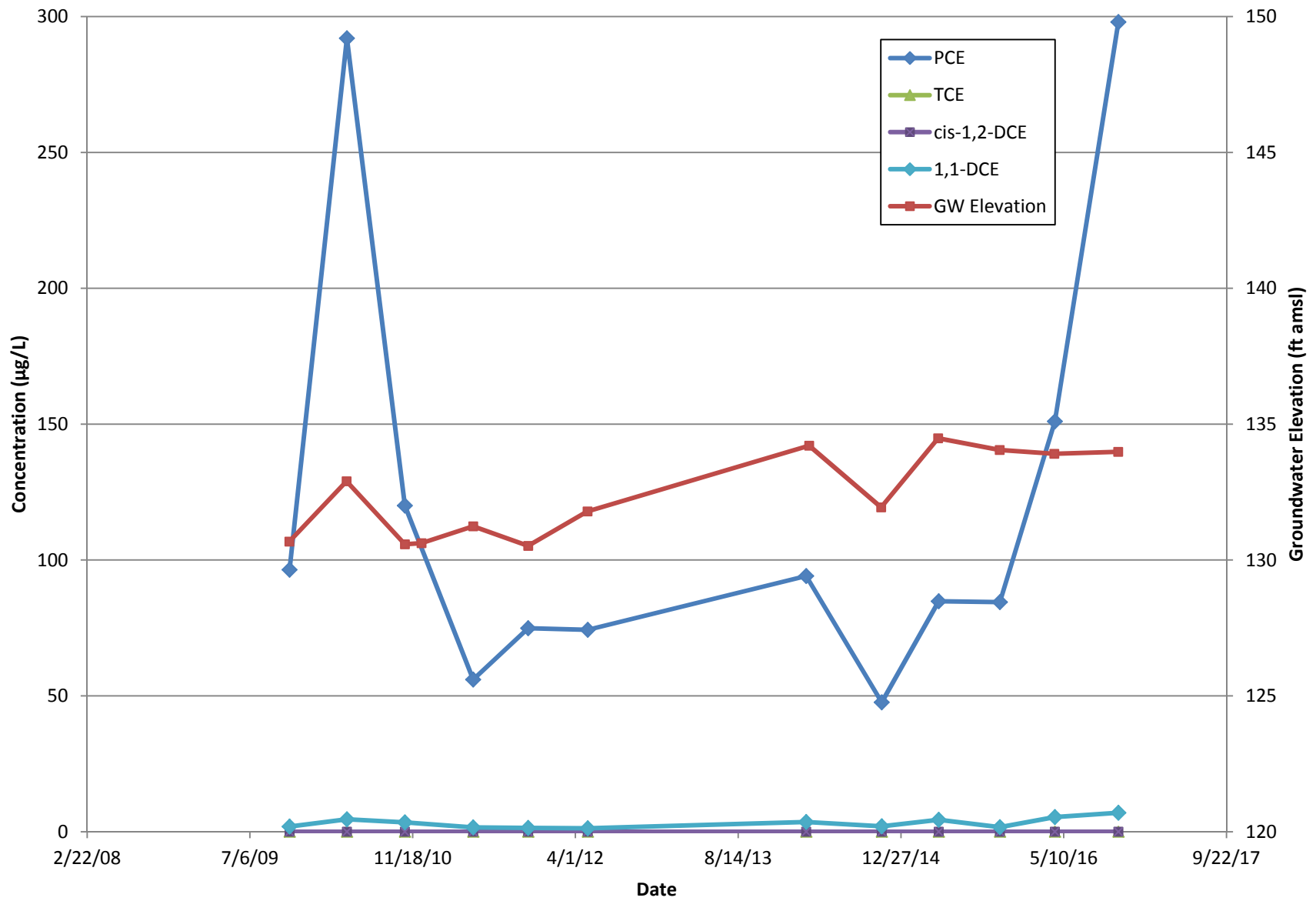
MW-10 Concentrations and Groundwater Elevation with Time



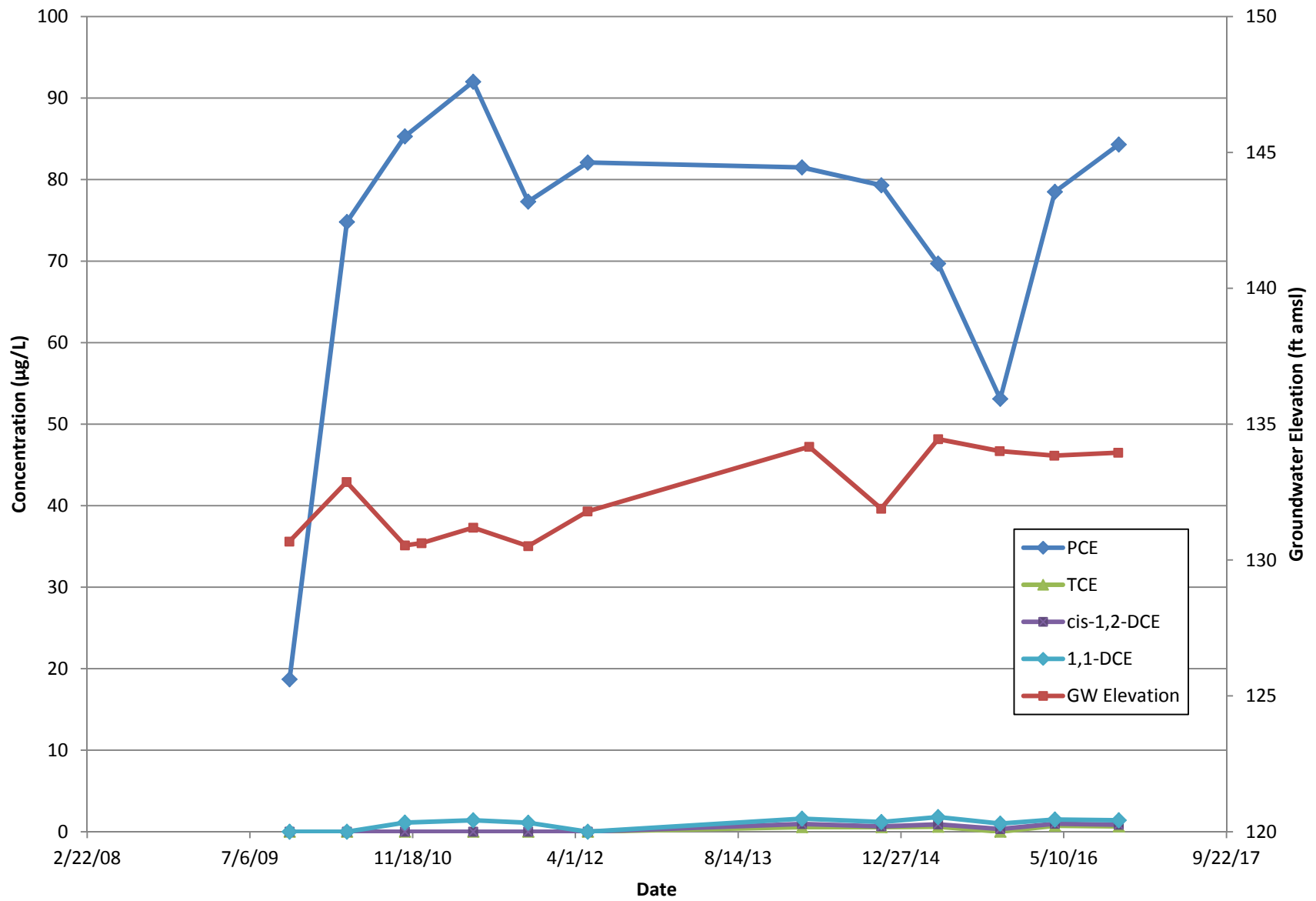
MW-12D Concentrations and Groundwater Elevation with Time



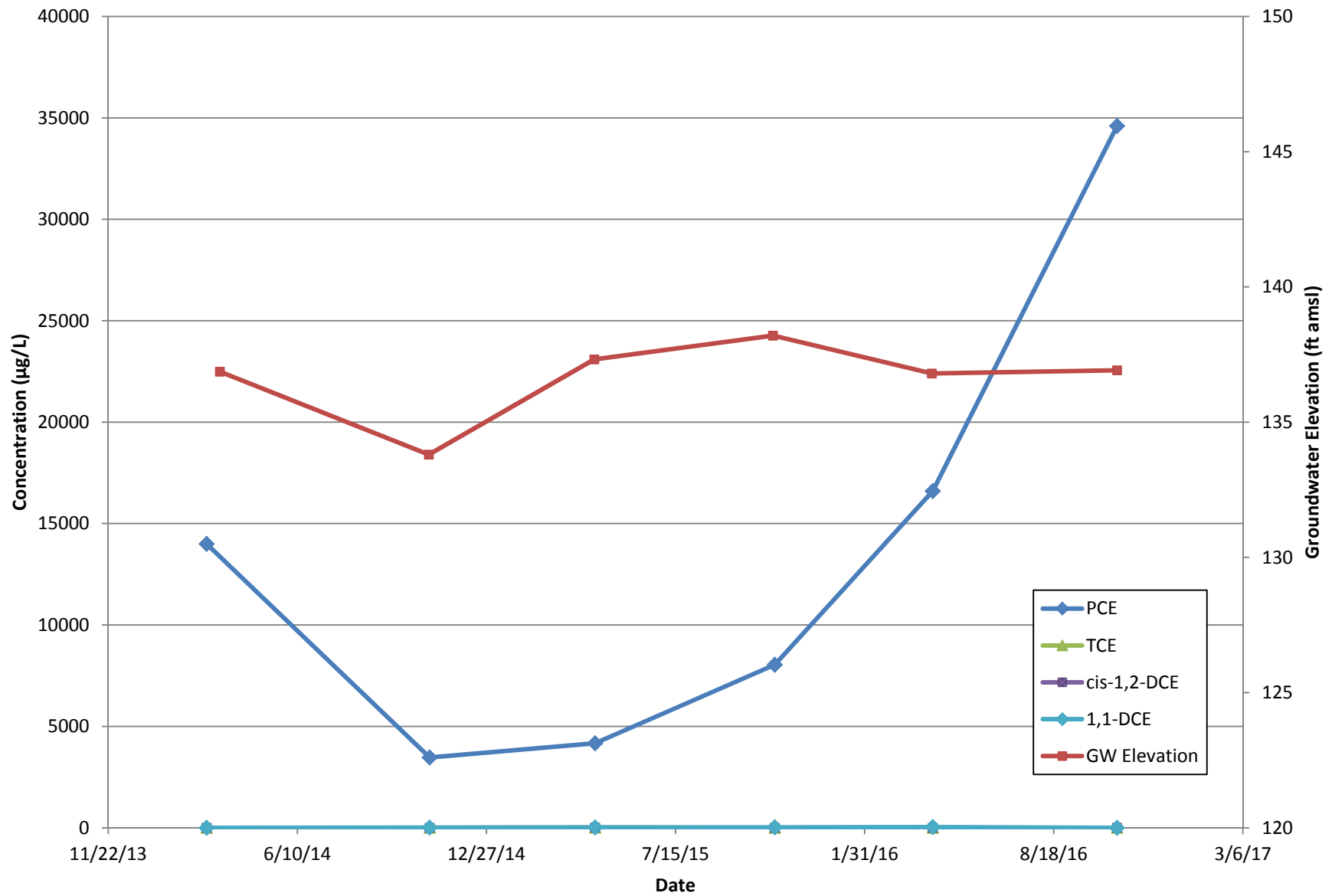
MW-13D Concentrations and Groundwater Elevation with Time



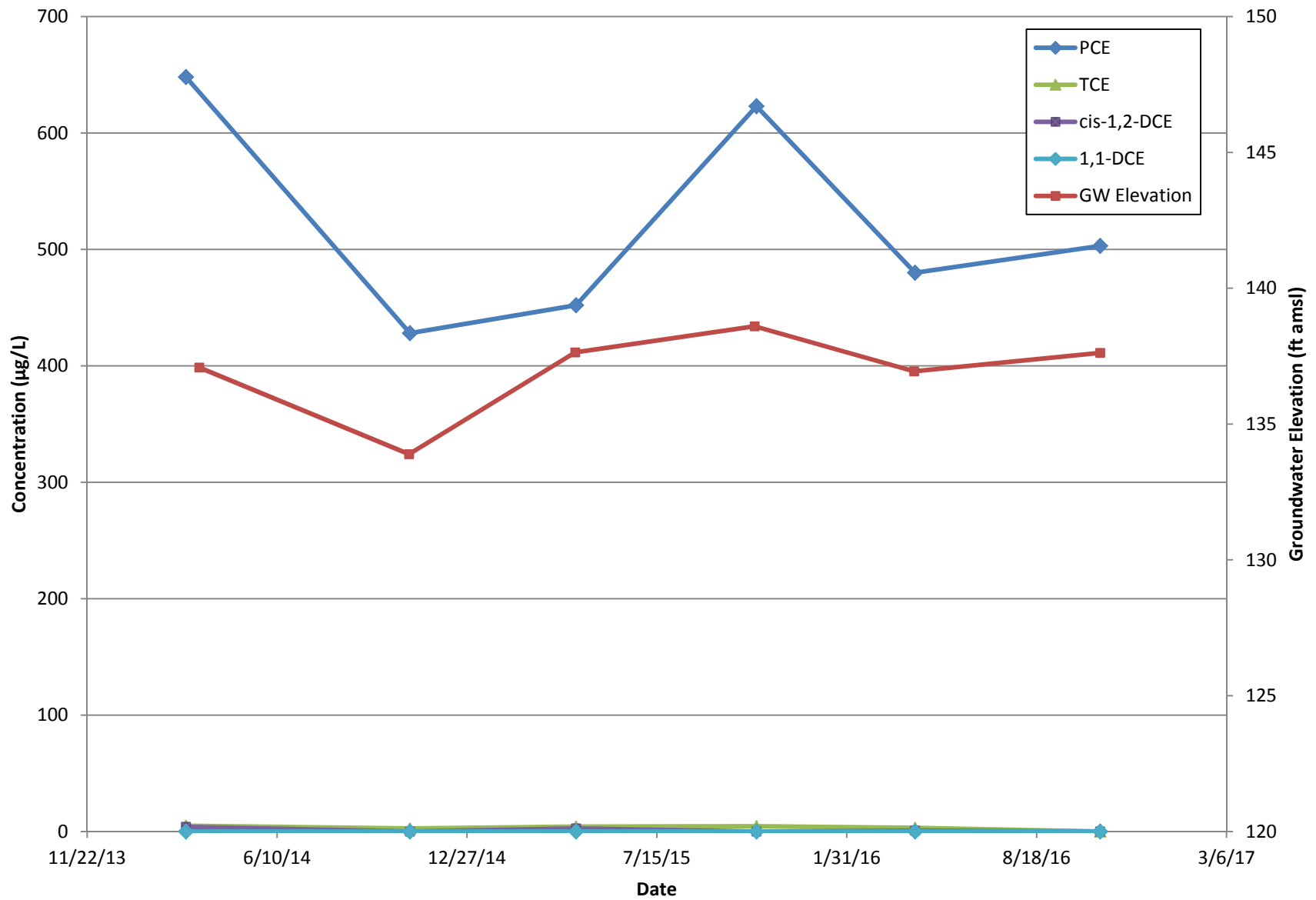
MW-14D Concentrations and Groundwater Elevation with Time



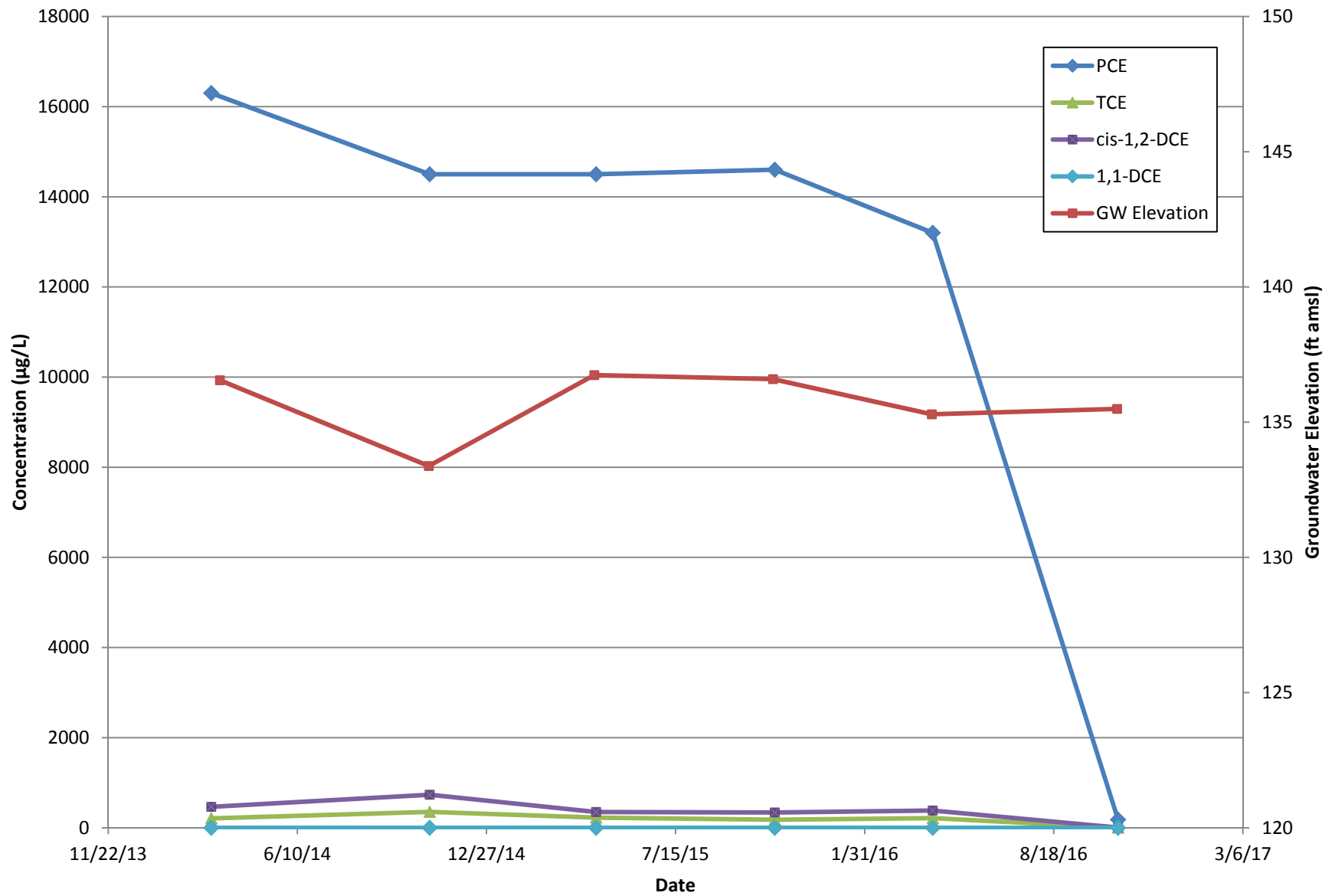
MW-19 Concentrations and Groundwater Elevation with Time



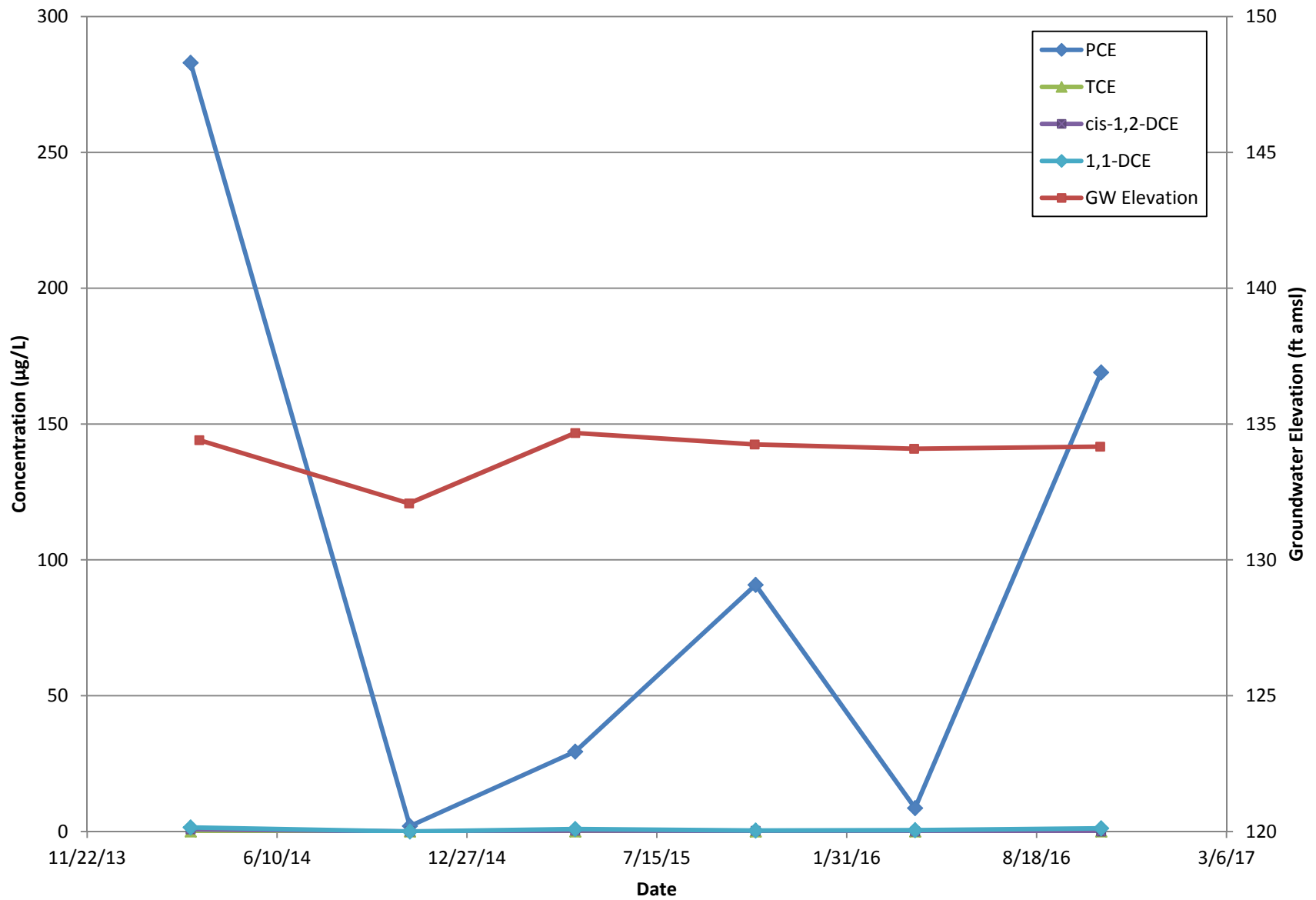
MW-20 Concentrations and Groundwater Elevation with Time



MW-21 Concentrations and Groundwater Elevation with Time



MW-21D Concentrations and Groundwater Elevation with Time



MW-22D Concentrations and Groundwater Elevation with Time

