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July 14, 2015

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

Re: Spring 2015 Semi-Annual Groundwater Monitoring Report
Delavan Spray Technologies Site
Bamberg, South Carolina
SCDHEC VCC Number 13-4762-RP
SCDHEC File Number 51778
AECOM Project Number 60314964

Dear Ms. Walker:

On behalf of United Technologies Corporation Aerospace Systems (UTAS), AECOM is providing you one (1) hard copy and one (1) electronic copy of the Spring 2015 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.

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

Spring 2015 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
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Greenville, South Carolina

July 14, 2015

SPRING 2015 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:


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July 14, 2015

Date

Reviewed by:


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July 14, 2015

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	6
4.1 Groundwater Flow	6
4.2 Groundwater Quality	6
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 Forms
B	Analytical Data ➤ Laboratory Reports – Accutest Southeast ➤ Data Assessment Reports

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>
1	Site Location Map
2	Site Layout Map
3	Shallow Potentiometric Map – April 2015
4	Deep Potentiometric Map – April 2015
5	PCE Detections in Shallow Groundwater – April 2015
6	TCE Detections in Shallow Groundwater – April 2015
7	cis-1,2-DCE Detections in Shallow Groundwater – April 2015
8	1,1-DCE Detections in Shallow Groundwater – April 2015
9	PCE Detections in Deeper Groundwater – April 2015
10	TCE Detections in Deeper Groundwater – April 2015
11	cis-1,2-DCE Detections in Deeper Groundwater – April 2015
12	1,1-DCE Detections in Deeper Groundwater – April 2015

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

1.0 INTRODUCTION

AECOM Technical Services, Inc. (AECOM) has prepared this *Spring 2015 Semi-Annual Groundwater Monitoring Report* on behalf of United Technologies Corporation (UTC) for the Delavan Spray Technologies Site (the Site) located at 4334 Main Highway (US Highway 301 South) in Bamberg, South Carolina (Figure 1). The spring 2015 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).

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

2.0 OVERVIEW OF THE SITE

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

2.1 Background

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

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

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

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

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

No additional VOC source areas were identified in soil as a result of the RI. However, following their review of the RI report, SCDHEC requested:

- additional soil assessment to delineate VOC impacts in the vicinity of the northern former degreaser,
- an additional shallow monitoring well toward the western corner of the property to delineate VOC impacts in the shallow aquifer, and
- an additional off-Site deeper aquifer monitoring well to delineate VOC impacts in the limestone aquifer down-gradient of the Site.

The additional assessment activities have been incorporated into the Post RI Work Plan (AECOM, June 2015), which was submitted to SCDHEC on June 29, 2015.

2.2 Geology

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

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

2.3 Hydrogeology

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

3.0 GROUNDWATER MONITORING PROCEDURES

Spring 2015 semi-annual sampling activities were completed by AECOM personnel between April 20, 2015 and April 22, 2015. Monitoring activities were conducted in accordance with the procedures described in the *Remedial Investigation Work Plan* (H&H, 2013) and the sampling plan presented in the correspondence titled *Spring 2015 Semi-Annual Groundwater Monitoring Schedule*, submitted from AECOM to SCDHEC on March 18, 2015. SCDHEC approved the sampling plan in subsequent correspondence to AECOM on March 26, 2015 and April 10, 2015.

Sampling activities included:

- Groundwater level measurements were collected from all 32 existing monitoring wells;
- Groundwater samples were collected from all 32 monitoring wells (Figure 2). All 32 samples were submitted for analysis of VOCs and six (6) samples were submitted for analysis of monitored natural attenuation parameters (MNA); and
- Collection of a composite sample from two drums of aqueous investigation-derived waste (IDW) for analysis of VOCs, semi-volatile organic compounds (SVOCs) and metals for IDW characterization purposes.

The depth to water in the monitoring wells was measured using an electronic water level meter on April 20, 2015, prior to purging any wells for groundwater sampling. The water levels were used to create potentiometric maps of the aquifer zones discussed in Section 4.1 below.

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

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

The groundwater samples were analyzed for VOCs by USEPA method 8260. Samples from monitoring wells MW-2, MW-4, MW-6, MW-7, MW-9D, and MW-11 were also analyzed for MNA parameters, which included: ethane, ethene, and methane by USEPA method RSK 147, chloride, nitrate, nitrite, and sulfate by USEPA method 9056, and total organic carbon by USEPA method 5310. The aqueous IDW sample was analyzed for VOCs by USEPA method 8260B, SVOCs by USEPA Method 8270D, and Metals by

USEPA methods 6010C and 7470B. Water samples were analyzed by Accutest Laboratories, located in Orlando, Florida, a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and state of South Carolina certified laboratory. Laboratory analytical data packages are provided in Appendix B.

4.0 RESULTS

4.1 Groundwater Flow

Water level measurements were collected on April 20, 2015 and are summarized on Table 1 along with their corresponding groundwater elevations. Groundwater elevations measured in wells completed in the shallow aquifer zone were used to create a water-table surface map (Figure 3). The April 2015 water levels within the shallow aquifer zone occur between approximately 133.6 to 142.2 feet in elevation. Although water levels were approximately three to seven feet higher than those measured during the fall 2014 groundwater monitoring event (October 2014), similar flow patterns were observed. The equal potential lines indicate groundwater flow beneath the northern portion of the Facility varies between northward and southward flow directions, with local groundwater highs at MW-4 and MW-5/MW-6. Groundwater levels appear depressed at MW-3, MW-8 and MW-18. This phenomenon was previously recognized in the RI Work Plan (H&H, 2013) and characterized as a “groundwater trough”, a feature that has been observed to extend to MW-9 during previous field investigation efforts. The variances in groundwater elevation and flow directions in this portion of the Site could be the result of preferential flow pathways resulting from higher permeability zones due to local facies changes or induced drainage from the sanitary sewer line or incised drainage ditch, which forms the northern boundary of the Facility. However, the primary horizontal groundwater flow direction is inferred to be toward the west, toward Halfmoon Branch, which is consistent with findings from prior investigations conducted at the Site.

Based on the April 2015 water level elevations within the deeper limestone aquifer zone, the potentiometric surface occurs between approximately 133.8 and 135.3 feet in elevation (Figure 4). Groundwater elevations in April 2015 were approximately two to three feet higher than those measured during the fall 2014 groundwater monitoring event (October 2014). From the equal potential lines, the inferred direction of horizontal groundwater flow is to the south-southwest and is consistent with regional topography, drainage and findings from prior investigations conducted at the Site.

4.2 Groundwater Quality

Groundwater quality indicator parameters, including pH, specific conductance, dissolved oxygen and oxidation-reduction potential 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.

Shallow Aquifer Zone

VOCs

In the 19 groundwater samples collected from shallow aquifer zone groundwater during the spring 2015 semi-annual monitoring, seven VOCs [1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), cis-1,2-DCE, PCE, toluene, TCE and xylene) were detected (Table 3). Four of these compounds, (PCE, TCE, cis-1,2-DCE, and 1,1-DCE) exceeded their respective MCLs in one or more samples of shallow groundwater.

PCE was the most frequently detected VOC in shallow aquifer zone groundwater samples (11 detections) and groundwater concentrations exceeded the MCL in shallow monitoring wells MW-1, MW-5, MW-8, MW-9, MW-10, MW-19, MW-20, and MW-21 (Figure 5). The highest concentrations were detected adjacent to the Former PCE UST at MW-21 [14,500 micrograms per liter ($\mu\text{g/L}$)] and at the northern-most Former PCE Degreaser (located in the Wickman Room) in MW-19 (4,170 $\mu\text{g/L}$). Elevated but lower concentrations of PCE were detected in shallow aquifer groundwater in MW-9 (1,760 $\mu\text{g/L}$) in the eastern-most Northern Wooded Area of Interest. Detected TCE concentrations that exceeded the MCL exhibit a similar pattern as PCE, but occur across a smaller footprint (Figure 6). TCE concentrations exceeded the MCL in four groundwater samples (MW-9, MW-10, MW-19, and MW-21), and the highest concentrations of TCE were detected at MW-21 (225 $\mu\text{g/L}$) and MW-9 (133 $\mu\text{g/L}$).

Cis-1,2-DCE was detected less frequently (7 detections) and exceeded the MCL in two monitoring wells (98.8 $\mu\text{g/L}$ at MW-10, and 351 $\mu\text{g/L}$ at MW-21) (Figure 7). The detections of cis-1,2-DCE in the shallow aquifer correspond to “hot-spots” of PCE and TCE.

1,1-DCE was detected in three shallow aquifer zone groundwater samples (Figure 8). The detected concentration of 1,1-DCE exceeded the MCL in the sample from MW-19 (15.6 $\mu\text{g/L}$), located near the northern-most Former PCE Degreaser.

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

MNA Parameters

Five shallow wells (MW-2, MW-4, MW-6, MW-7, and MW-11) were sampled for MNA parameters including TOC, chloride, nitrate, nitrite, sulfate, methane, ethane, and ethene and the results are summarized on Table 3.

The range of MNA parameter values detected in April 2015 samples and select indicator parameters are summarized in the inset table below, along with their optimal ranges for anaerobic biodegradation based

on USEPA guidance (1998). Based on this information, nitrate (except at MW-2), sulfate (except at MW-4 and MW-11), and methane concentrations are favorable for anaerobic degradation in the shallow aquifer zone. However, low pH and TOC levels, and limited areas with favorable dissolved oxygen concentrations, may inhibit natural degradation of chlorinated VOCs. Furthermore, although daughter products of PCE (i.e., TCE and cis-1,2-DCE) have been detected, ethane and ethene (the ultimate degradation end products) were not detected in the samples from the shallow aquifer groundwater, indicating the degradation is occurring but the pathway is not complete.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	3.51	5.09	4.15	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.31	7.79	3.8	<0.5 mg/L - Tolerated, suppresses the reductive pathway at higher concentrations >5 mg/L - Not tolerated; however, VC may be oxidized aerobically
ORP (mV)	-145.2	447.2	253.09	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely
Chloride (µg/L)	850	85,100	22,790	>2X background - Daughter product of organic chlorine
Nitrate (µg/L)	70	1,100	450	<1,000 µg/L - At higher concentrations may compete with reductive pathway
Nitrite (µg/L)	ND	ND	ND	
Sulfate (µg/L)	4,000	29,800	12,840	<20,000 µg/L - At higher concentrations may compete with reductive pathway
TOC (µg/L)	550	5,800	1,946	>20,000 µg/L - Carbon and energy source; drives dechlorination; can be natural or anthropogenic
Methane (µg/L)	0.99	461	231	<500 µg/L - VC oxidizes >500 µg/L - Ultimate reductive daughter product, VC Accumulates
Ethane (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene
Ethene (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene

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

Deeper Aquifer Zone

VOCs

Thirteen groundwater samples were collected from deeper aquifer zone groundwater during the spring 2015, monitoring event, resulting in five VOCs (1,1,1-TCA, 1,1-DCE, cis-1,2-DCE, PCE and TCE) that were detected in one or more samples (Table 3). Of these compounds, only PCE, TCE, and 1,1,-DCE exceeded their respective MCLs.

PCE was detected in six deeper aquifer zone groundwater samples (MW-3D, MW-12D, MW-13D, MW-14D, MW-21D, and MW-22D) and groundwater concentrations exceeded the MCL in all six of these samples (Figure 9). Detected PCE concentrations were highest in the deeper limestone aquifer down-gradient from the Former PCE Secondary Containment Area (316 M/M µg/L at MW-3D). PCE

concentrations exceeded the MCL in off-Site down-gradient wells MW-14D (69.7 µg/L) and MW-22D (107 µg/L), and the PCE plume is not fully delineated in the down-gradient (south/southwest) direction. TCE concentrations were detected in three samples from the deeper aquifer zone, but only one of the detected concentrations, 8.1 µg/L in the sample from MW-3D, exceeded the MCL (Figure 10). TCE was also detected in off-Site down-gradient wells MW-14D and MW-22D, but at low, estimated concentrations below the MCL.

Cis-1,2-DCE was detected in four samples from deeper aquifer zone groundwater during the spring 2015 monitoring event (MW-3D, MW-14D, MW-21D, and MW-22D), but none of the detected concentrations exceeded the MCL for cis-1,2-DCE (Figure 11). The detected concentration of 1,1-DCE (12.4 µg/L) in the sample from MW-3D exceeded the MCL and 1,1-DCE was detected below the MCL at on-Site wells MW-12D, MW-13D, and MW-21D and off-Site wells MW-14D and MW-22D (Figure 12).

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

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

MNA Parameters

Groundwater indicator parameters were collected at all deeper aquifer monitoring wells during groundwater sampling activities and are summarized on Table 2. One deeper aquifer monitoring well (MW-9D) was also sampled for MNA parameters, including: TOC, chloride, nitrate, nitrite, sulfate, methane, ethane, and ethene in accordance with the *RI Work Plan* (H&H, 2013) and the results are summarized on Table 3.

The range of MNA parameter values detected in April 2015 and select indicator parameters are summarized in the inset table below, along with their optimal ranges for anaerobic biodegradation based on USEPA guidance (1998). Based on this information, sulfate, nitrate, and methane concentrations are favorable for anaerobic degradation in the deeper aquifer zone. Measured pH values were also favorable in all deeper aquifer monitoring wells except MW-12D and MW-22D. However, TOC levels and limited areas with favorable dissolved oxygen concentrations and ORP levels, may inhibit degradation. Furthermore, although daughter products of PCE (i.e., TCE and cis-1,2-DCE) have been detected, ethane and ethene (the ultimate degradation end products) were not detected in the samples from the deeper aquifer groundwater, indicating the degradation is occurring but the pathway is not complete.

Analysis	Minimum	Maximum	Average	Optimal Range for Anaerobic Biodegradation Processes*
pH (S.U.)	6.96	11.08	7.89	5 < pH < 9 - Optimal range for reductive pathway 5 > pH > 9 - Outside optimal range for reductive pathway
Dissolved Oxygen (mg/L)	0.18	4.81	2.05	<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)	-262.1	212.3	-8.6	<50 millivolts (mV) - Reductive pathway possible <-100mV - Reductive pathway likely
Chloride (µg/L)	5,900	5,900	5,900	>2X background - Daughter product of organic chlorine
Nitrate (µg/L)	ND	ND	ND	<1,000 µg/L - At higher concentrations may compete with reductive pathway
Nitrite (µg/L)	ND	ND	ND	
Sulfate (µg/L)	1,400	1,400	1,400	<20,000 µg/L - At higher concentrations may compete with reductive pathway
TOC (µg/L)	470	470	470	>20,000 µg/L - Carbon and energy source; drives dechlorination; can be natural or anthropogenic
Methane (µg/L)	ND	ND	ND	<500 µg/L - VC oxidizes >500 µg/L - Ultimate reductive daughter product, VC Accumulates
Ethane (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene
Ethene (µg/L)	ND	ND	ND	>10 µg/L - Daughter product of VC/ethene

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

4.3 Investigation Derived Waste

Two drums of purge and decontamination water were generated as investigation-derived waste (IDW) during the semi-annual sampling activities and these are documented on the IDW management form in Appendix A. One composite IDW water samples was collected from the drum for analysis of VOCs by USEPA method 8260B, semi-volatile organic compounds (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 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. As fully described in the DARs, the results for benzoic acid were rejected:

- In analytical data package FA23825 - Non-detections of semi-volatile organic compound benzoic acid in samples associated with preparatory batch SL3648 (sample IDW) were qualified “/R/c” due to recovery in the associated laboratory control sample below the established criteria of 25-150% (153%). These qualifiers indicate the non-detections are biased low and should be rejected.

This rejected compound has not been used at the Site and therefore, these data flags should not have any impact on the semi-annual data. The remaining data associated with this sampling event is 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; however, these results were not tabulated as the information only pertains to the primary sample it is associated with. Primary sample results were marked with an “M/M” flag in Table 3 if the percent recovery in the associated matrix spike sample was outside the established criteria. The flags related to the MS/MSD results are defined in Table 6 and results associated with the MS/MSD samples are explained in the DARs included as Appendix B.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are submitted based on the evaluation of the fall 2014 semi-annual monitoring results and a limited comparison to RI sampling results:

- Groundwater levels in the shallow and deeper aquifer zones were two to seven feet higher than those measured during the fall 2014 semi-annual monitoring event (October 2014) and similar to those measured during the RI (March 2014). The shape of the potentiometric surfaces and groundwater flow patterns in both the shallow and deeper aquifer zones are similar to those observed in the fall 2014 monitoring event and previous investigations.
- Concentrations of VOCs in the shallow aquifer are delineated on-site, with no VOC constituents of concern (COC) detections in shallow off-site monitoring wells.
- With the exception of PCE, VOCs are delineated in deeper aquifer groundwater. PCE is the only VOC detected off-site in deeper aquifer groundwater and it is not completely delineated south-southwest of MW-22D.
- Detected concentrations of PCE in monitoring wells MW-9 (eastern-most Northern Wooded Area of Interest) and MW-19 (in the vicinity of the northern-most Former PCE Degreaser) were higher than those detected in the fall 2014 monitoring event. For example, PCE detected in MW-9 increased from 727 µg/L to 1,760 µg/L and PCE detected in MW-21 increased from 3,470 µg/L to 4,170 µg/L. PCE concentrations decreased compared to the fall 2014 monitoring event in monitoring wells MW-1 (785 µg/L to 447 µg/L), MW-8 (71.4 µg/L to 28.5 µg/L), and MW-10 (136 µg/L to 54.1 µg/L). Detected PCE concentrations in other wells, including MW-20 (in the vicinity of the southern-most Former PCE degreaser) and MW-21 (immediately down-gradient of the building) were similar to those detected during the fall 2014 semi-annual monitoring event.
- Detected concentrations of PCE degradation products (i.e., TCE and cis-1,2-DCE) were generally similar to or lower than those detected during the fall 2014 semi-annual groundwater monitoring event. Although VC was detected in one shallow well (MW-1) during the fall 2014 groundwater monitoring event, VC concentrations were not detected in any wells during the spring 2015 event.

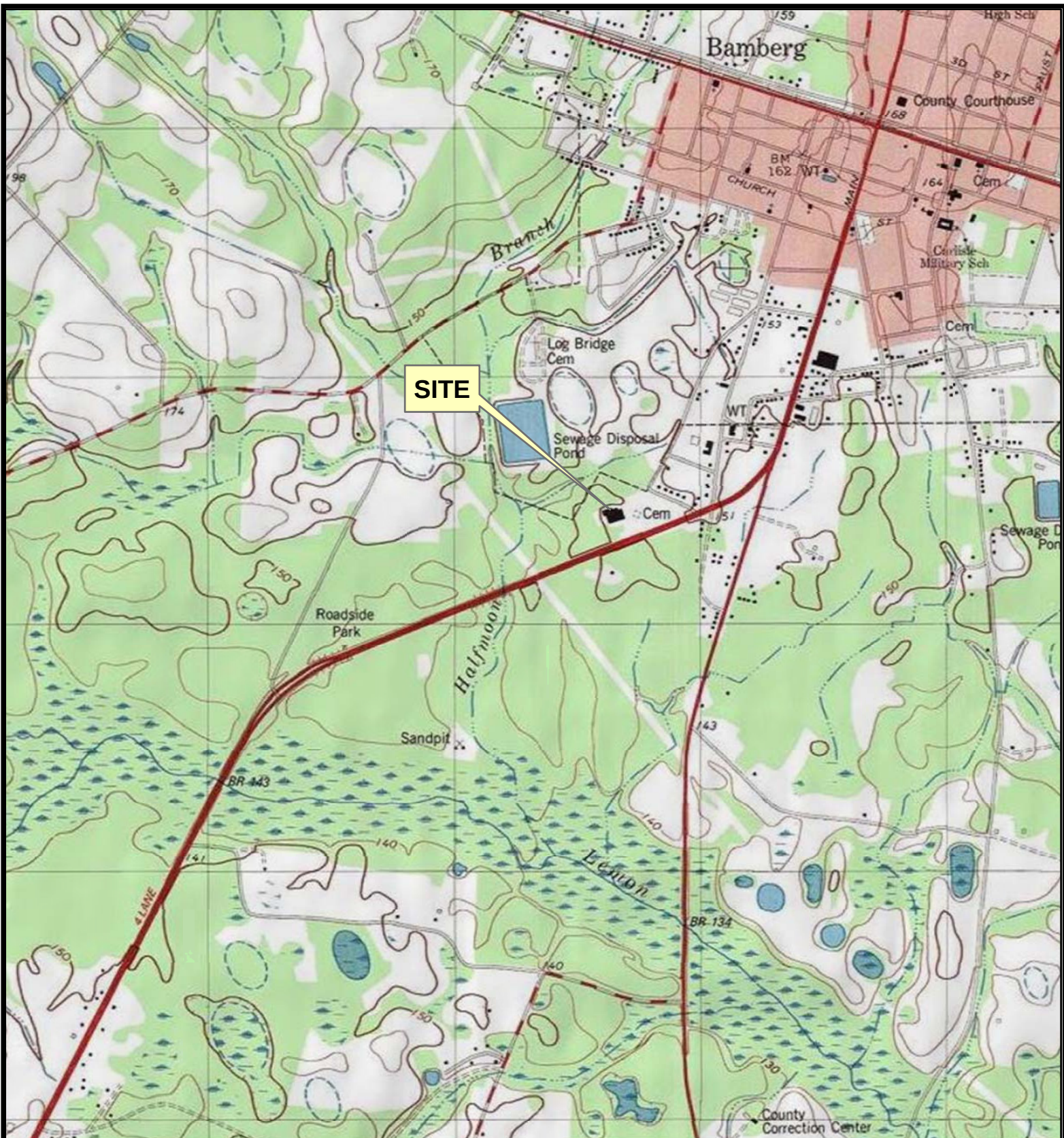
Based on the data collected and reviewed since the RI, water levels and groundwater VOC concentrations fluctuate over time in some areas of the Site. It is unclear yet whether there is a relationship between water levels and concentrations detected in groundwater, or if seasonal variability in VOC concentrations occurs at the Site. The creation of degradation daughter products (i.e., TCE, cis-1,2-DCE, and, at times, vinyl chloride) may be partially responsible for the observed decrease in PCE. The data, however, are insufficient to determine the cause of these observations at this time, but it is recommended that groundwater levels be evaluated in conjunction with groundwater VOC concentrations once sufficient data have been collected to establish trends.

In accordance with the monitoring requirement of the VCC, the next semi-annual sampling event is expected to occur in October 2015. A sampling schedule with a list of wells and analytes to be sampled will be provided to SCDHEC prior to the event and will be based on the results collected thus far.

6.0 REFERENCES

- AECOM, July 3, 2014. Remedial Investigation Report, United Technologies Corporation, Delavan Spray Technologies Site, 4334 Main Highway, Bamberg, South Carolina.
- AECOM, October 10, 2014. *September 2014 Progress Report, Delavan Spray Technologies Site, Bamberg, South Carolina.* Letter to Ms. Addie Walker, Bureau of Land and Waste Management, SCDHEC.
- H&H, August 29, 2003, Ground water assessment report, Delavan Spray Technologies Facility, Bamberg, South Carolina.
- H&H, December 5, 2012, Supplemental Site Assessment Report, Delavan Spray Technologies Site, Bamberg, South Carolina.
- H&H, August 1, 2013, Remedial Investigation Work Plan, Delavan Spray Technologies Site, Bamberg, South Carolina.
- SCDHEC, July 3, 2013. Voluntary Cleanup Contract 13-4762-RP.
- USEPA, 1998. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water.*

FIGURES



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

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

QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

AECOM

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

UTC Delavan Spray Technologies Site
Bamberg, South Carolina

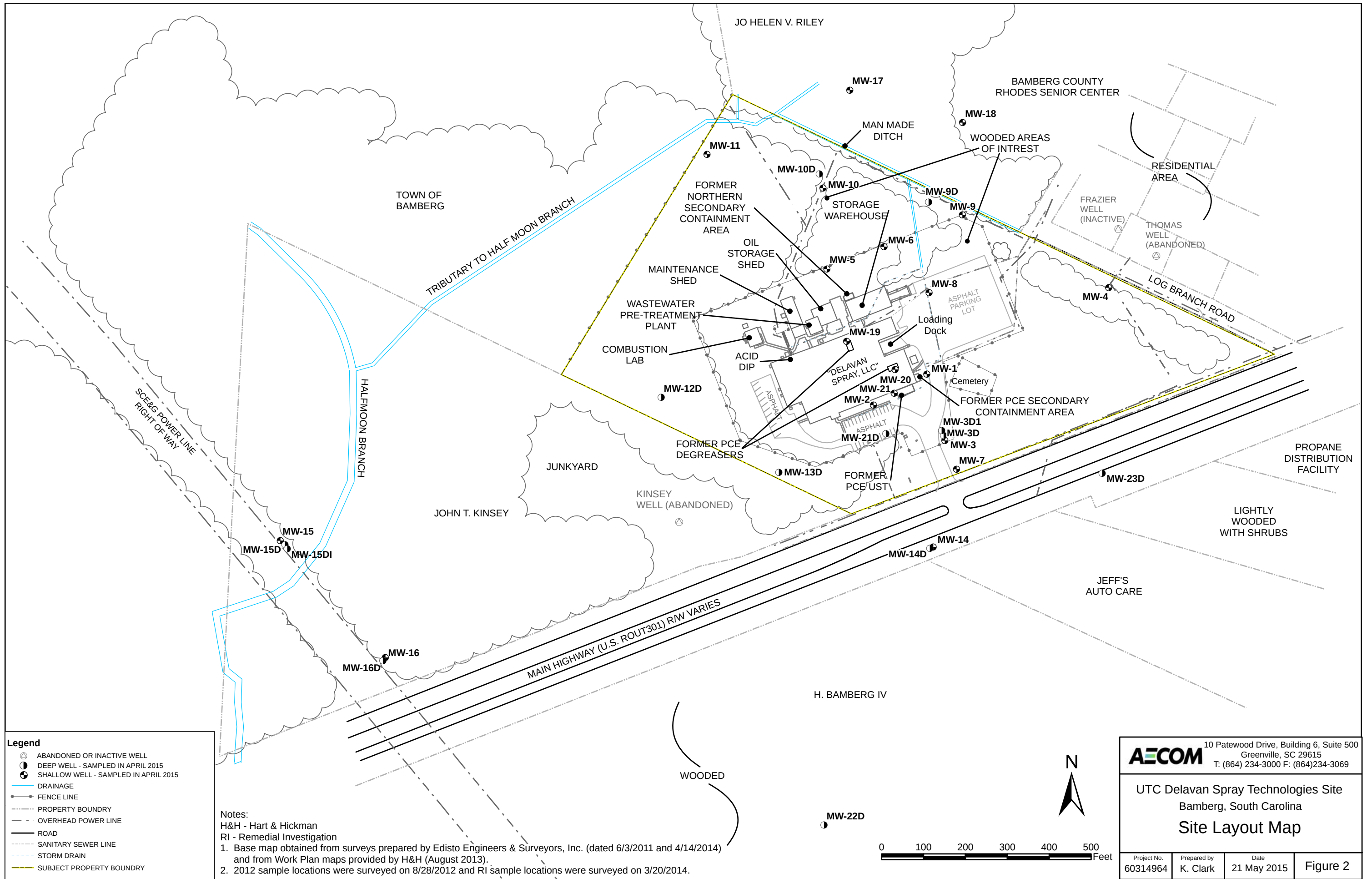
Site Location Map

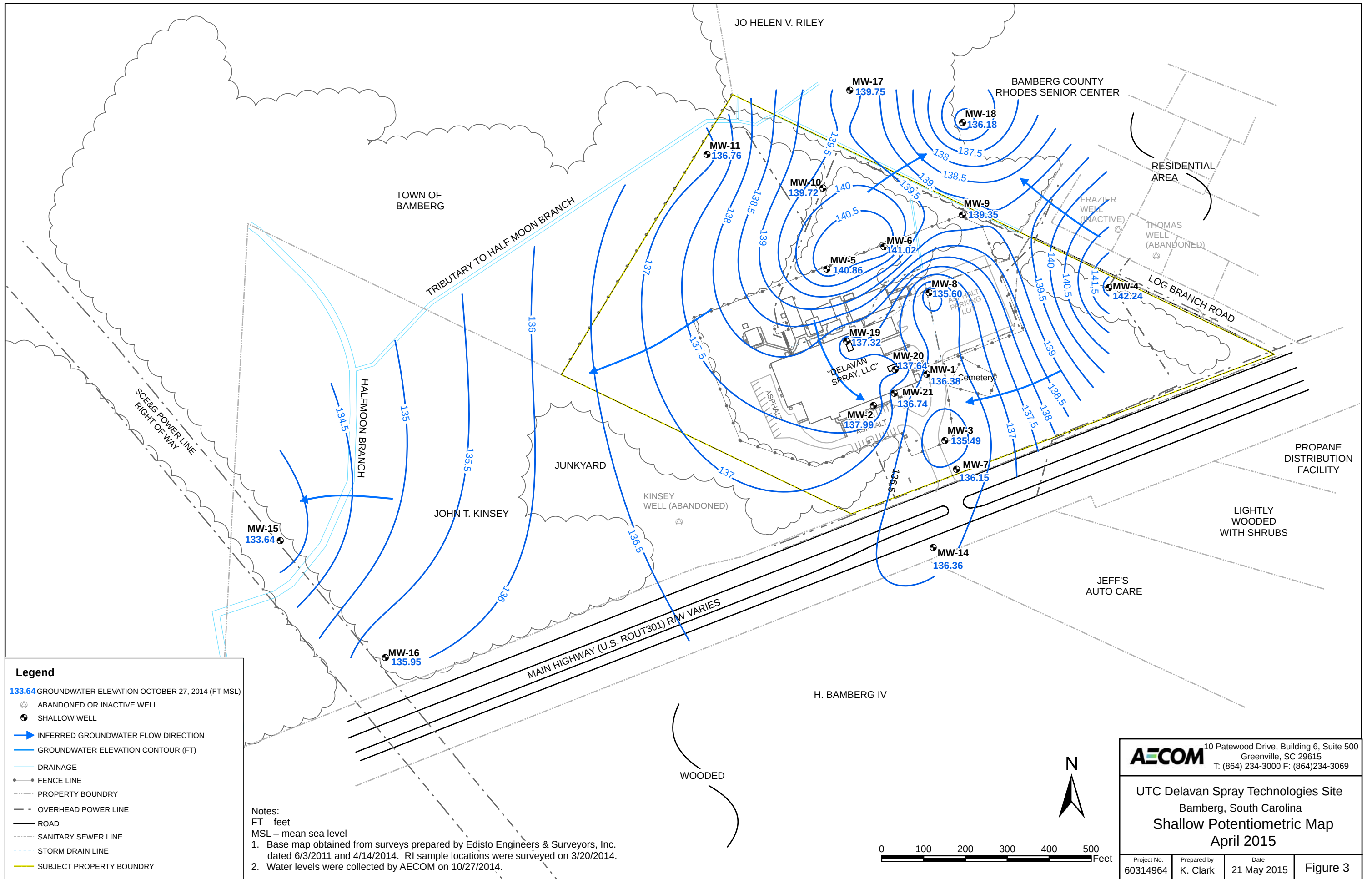
Project No.
60314964

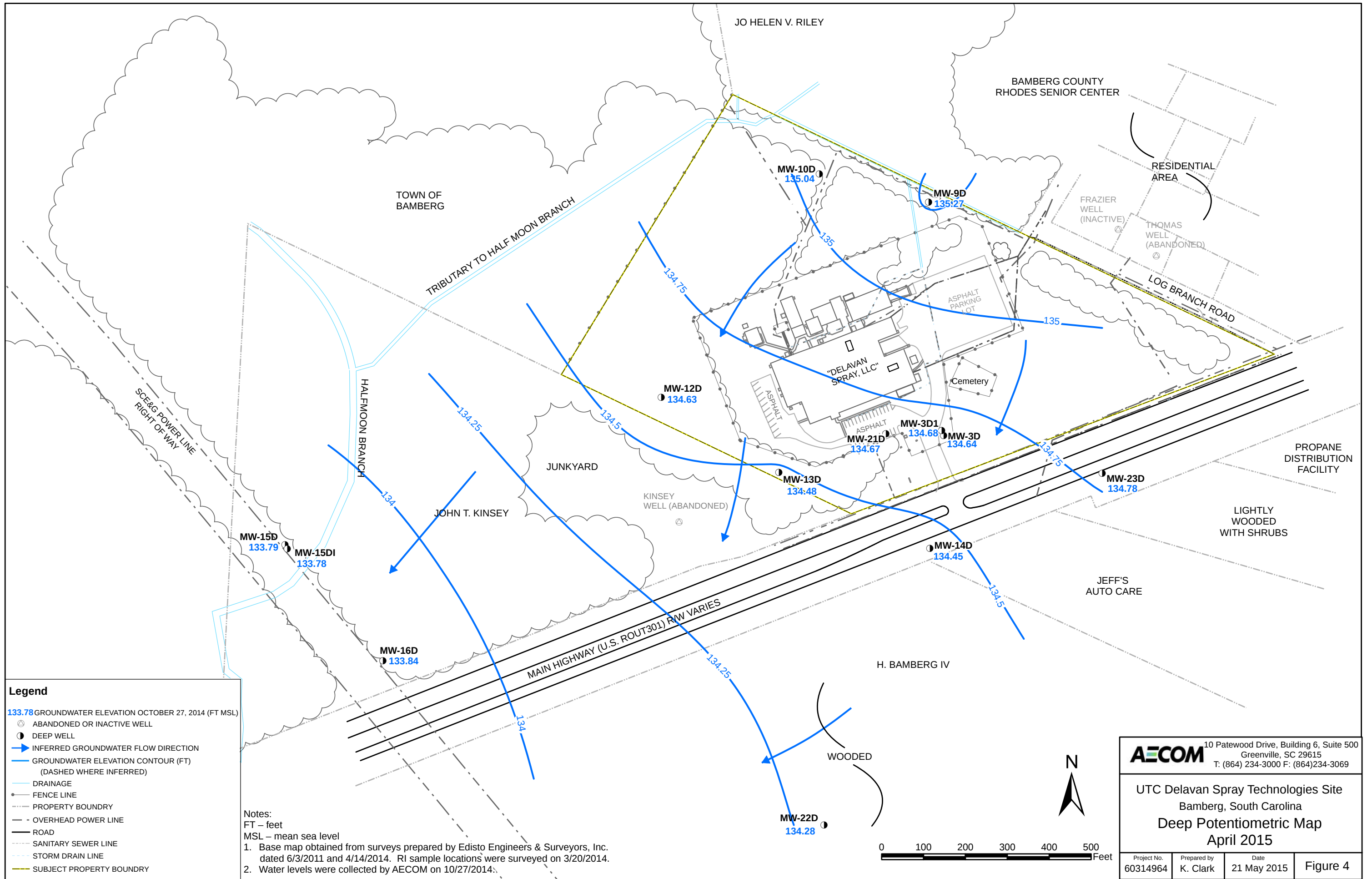
Prepared by
K. Clark

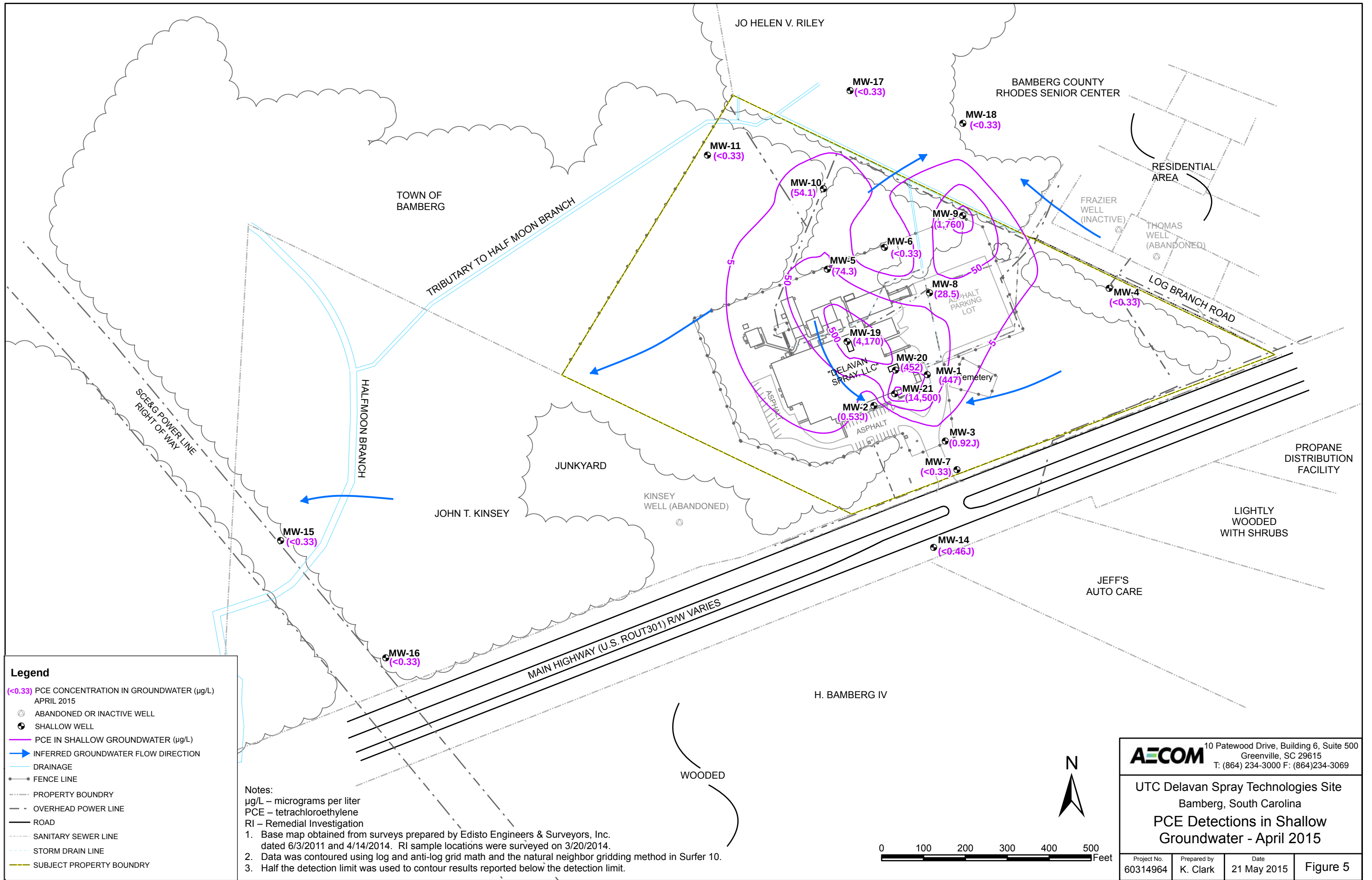
Date
21 May 2015

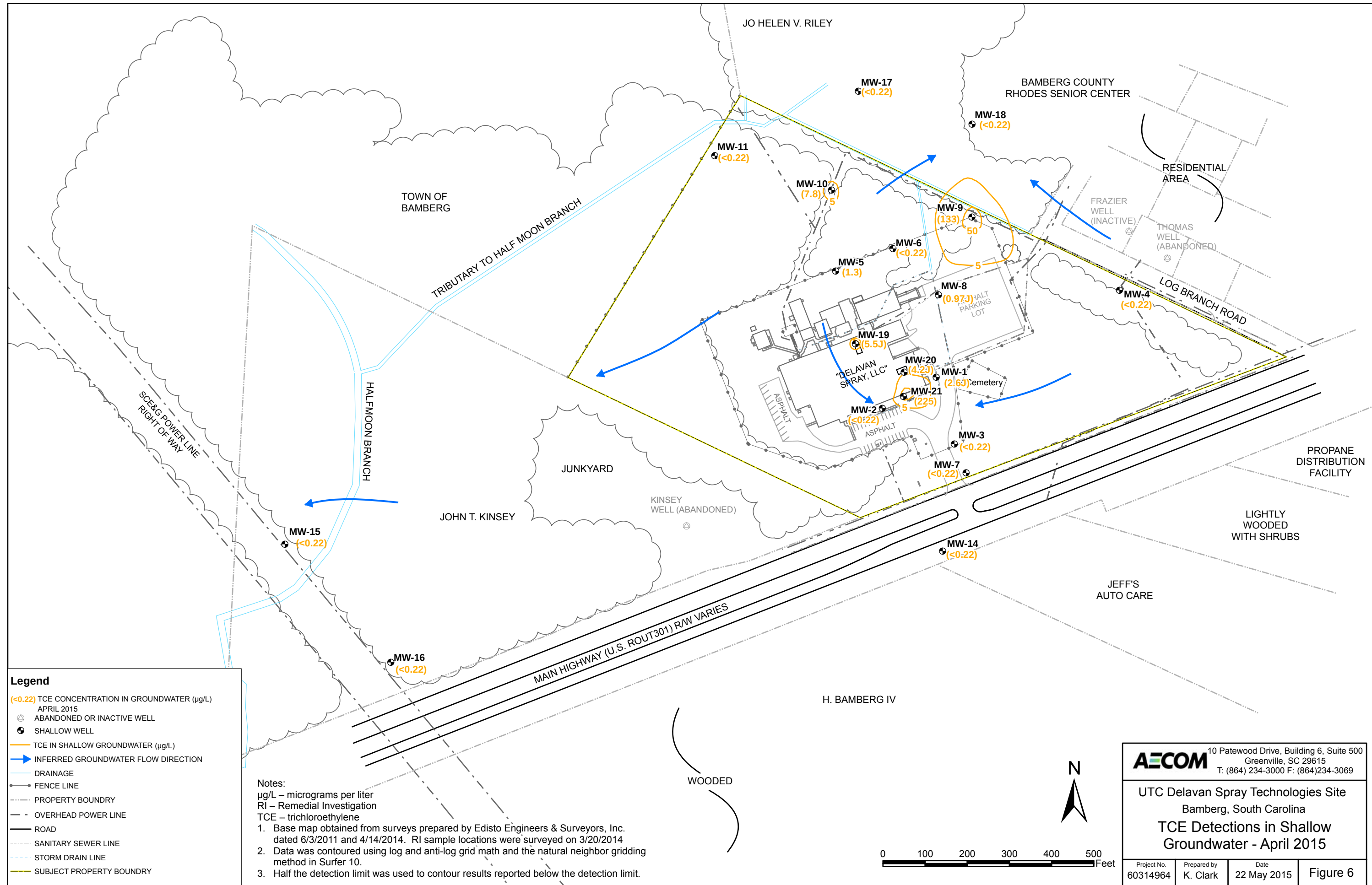
Figure 1

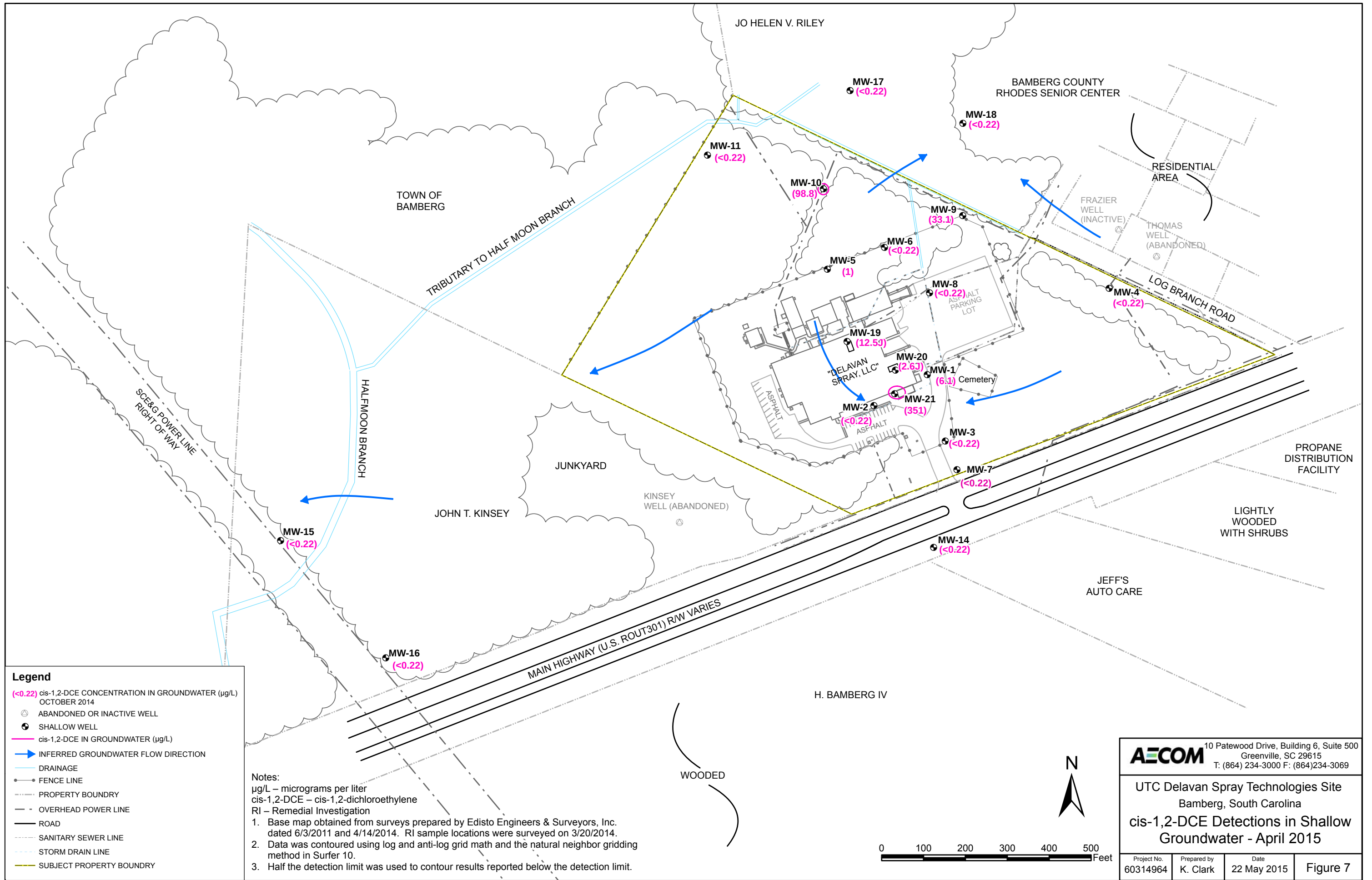


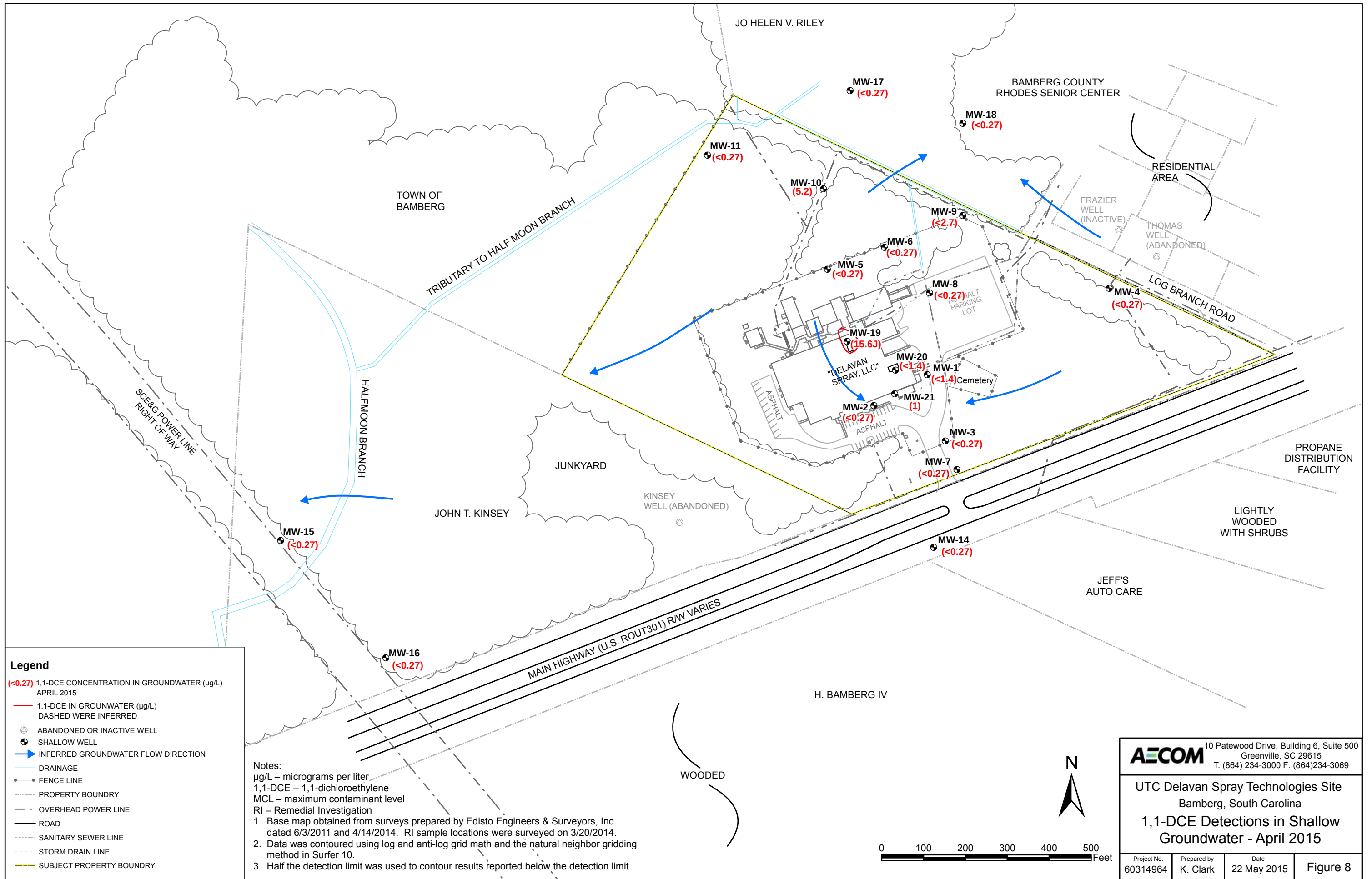


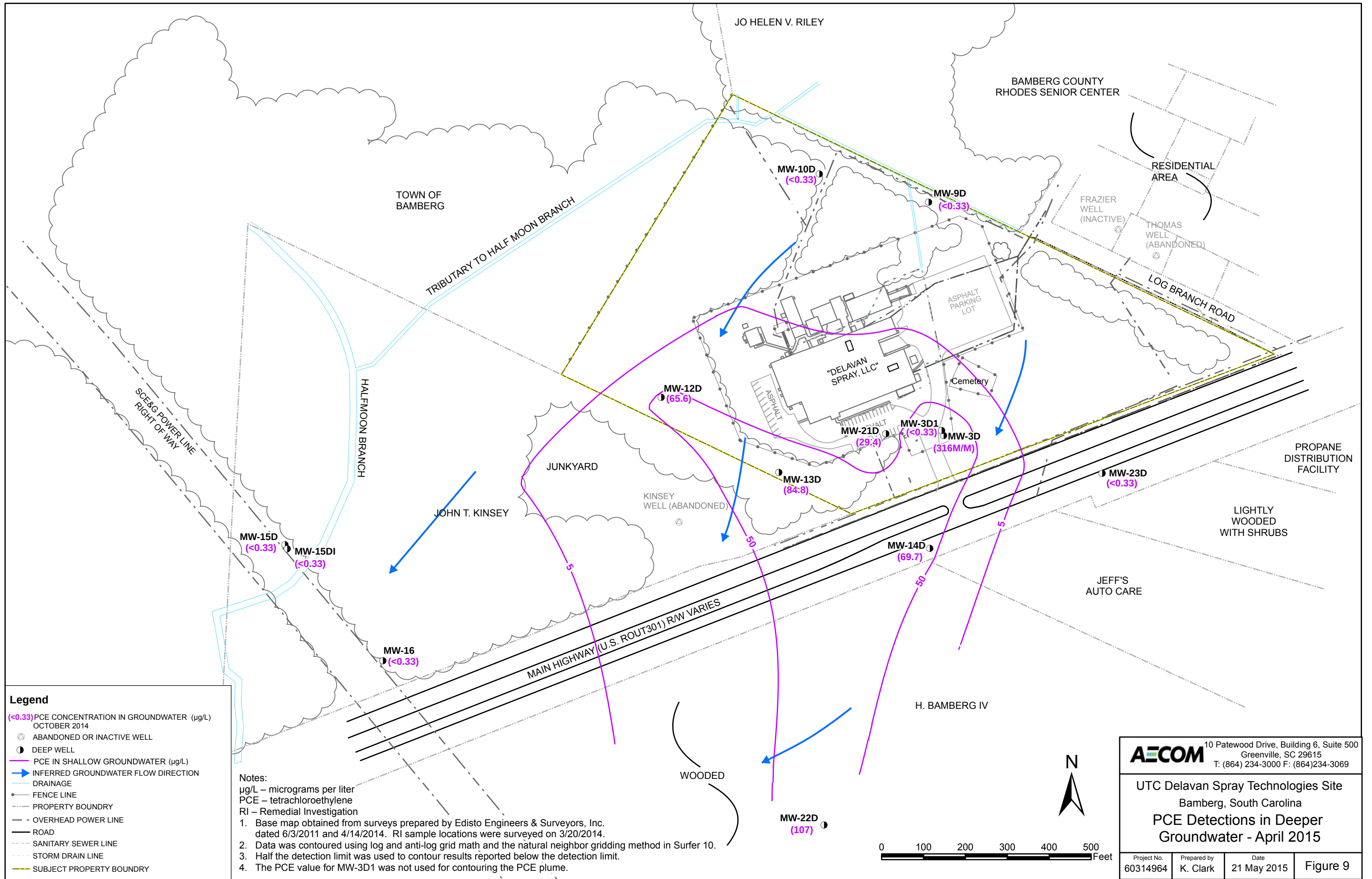


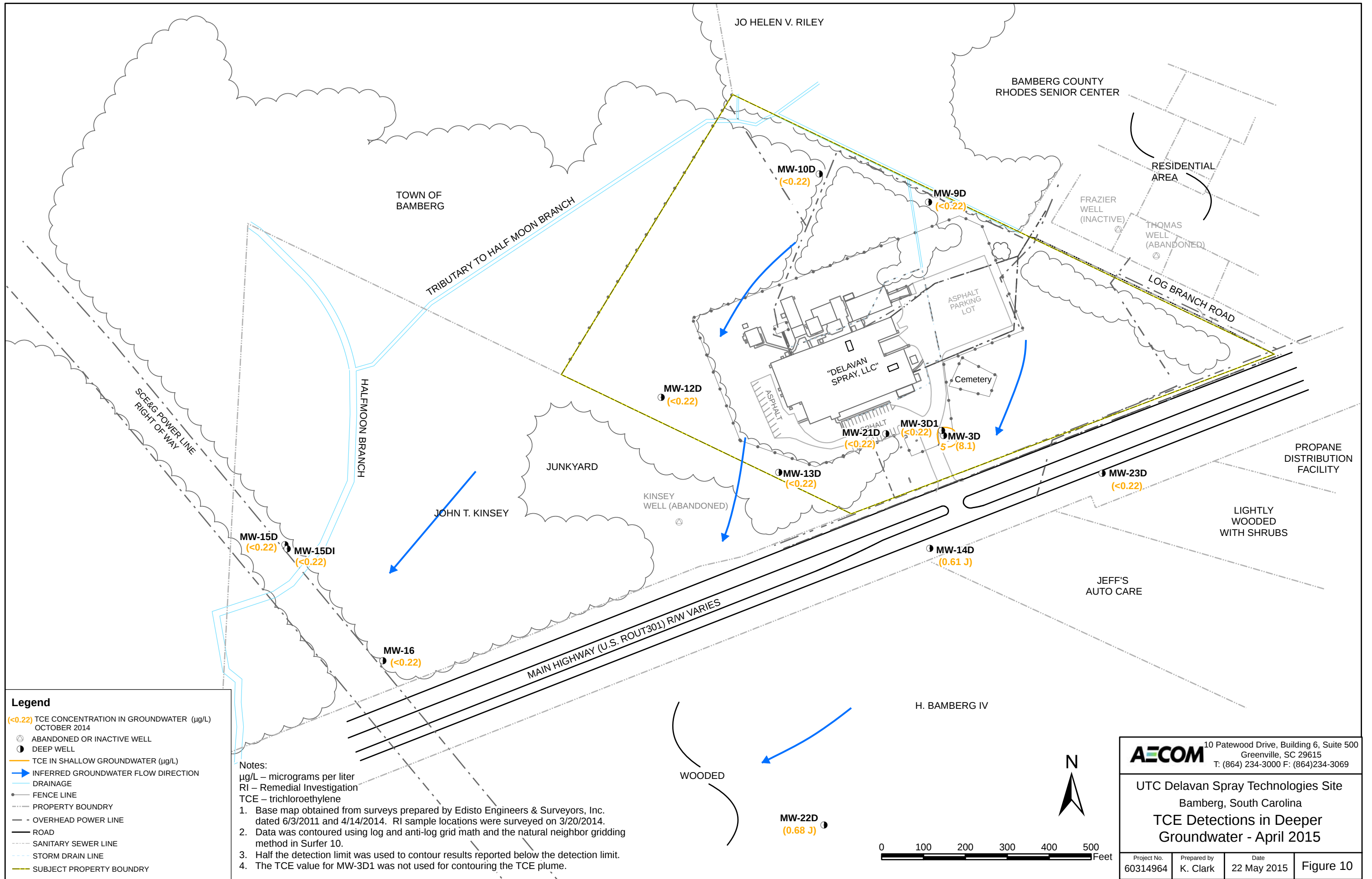


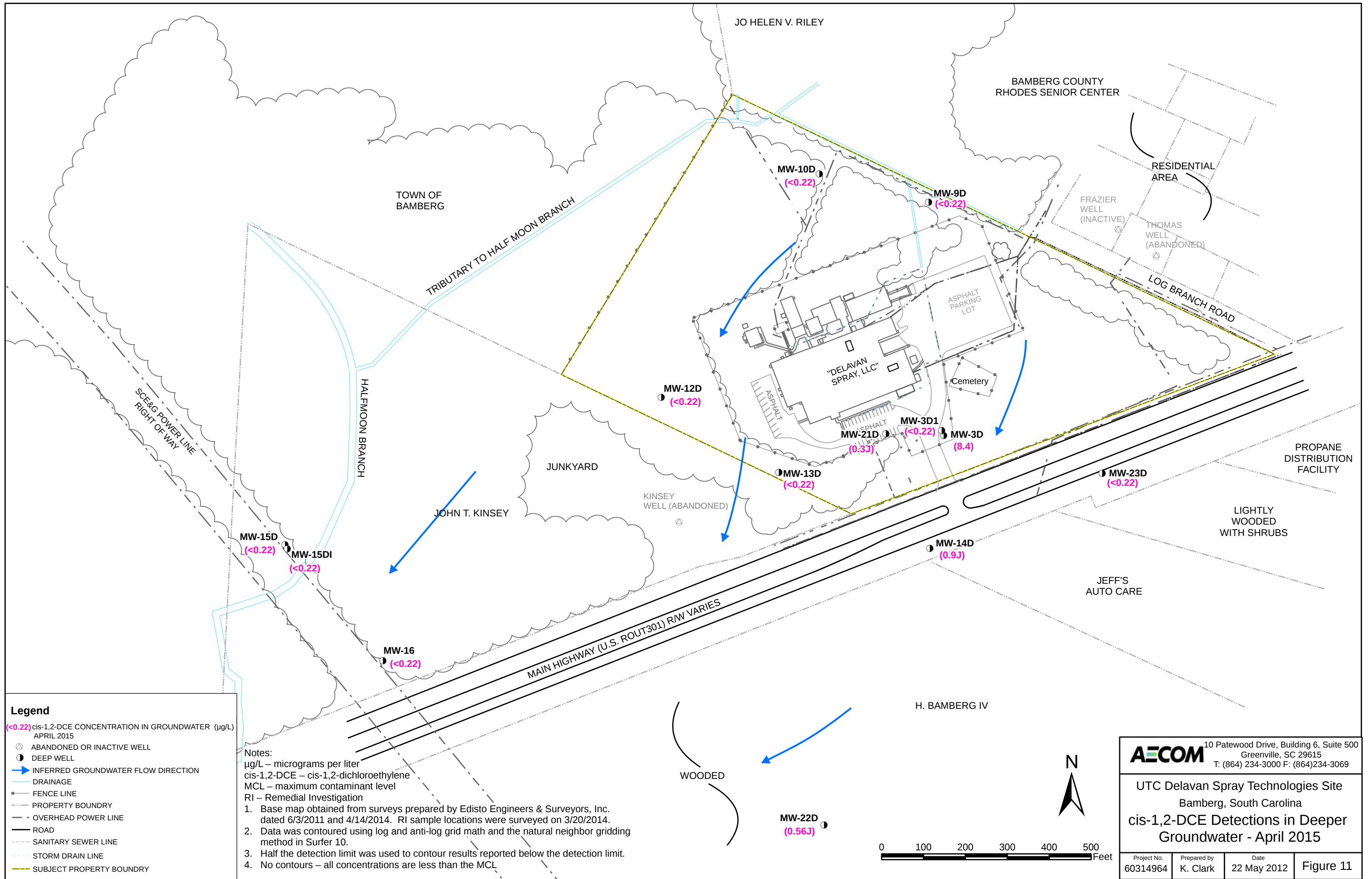


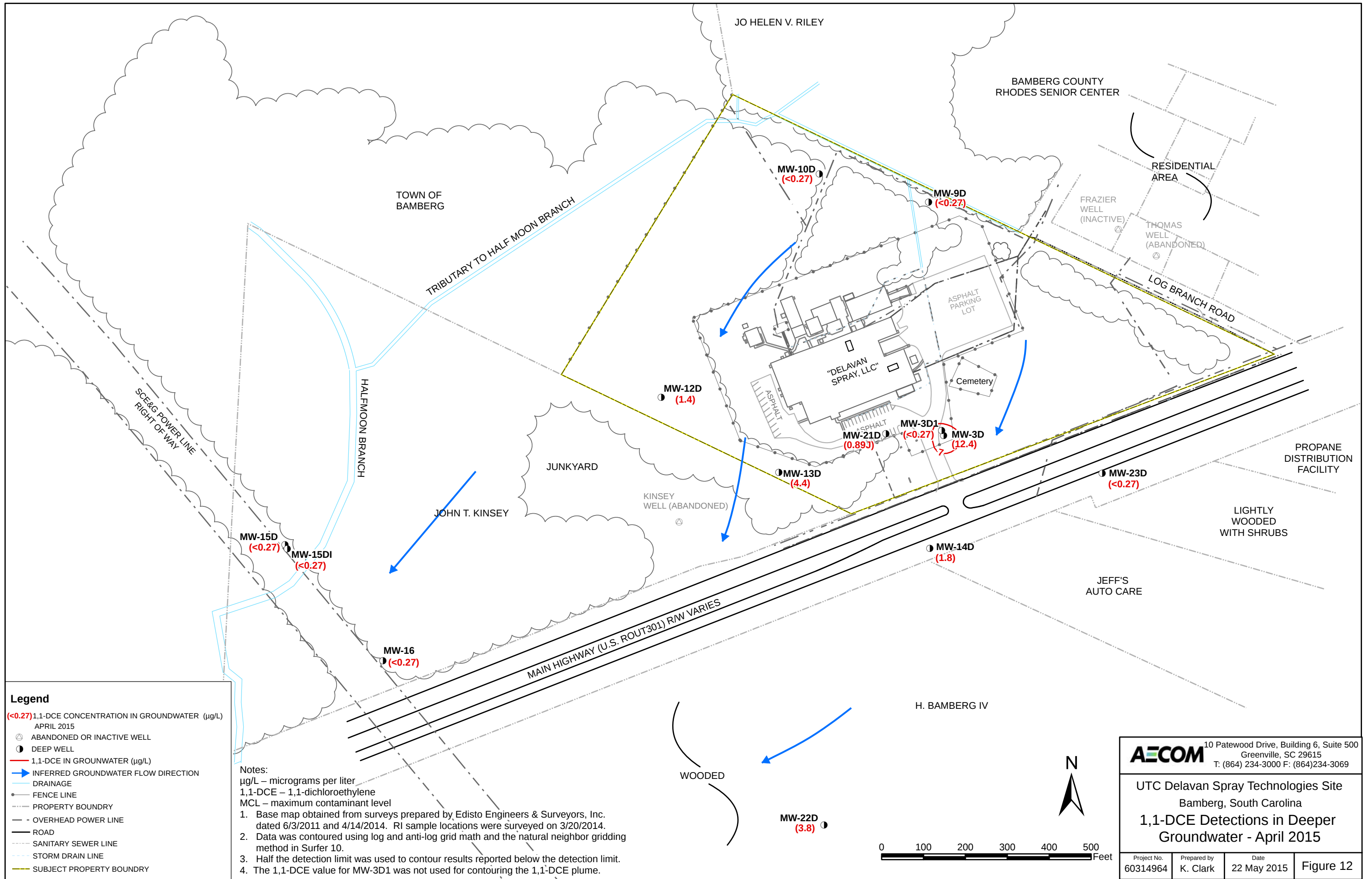












TABLES

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)	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		12/12/2005	
						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	Depth to Water	Elevation
MW-1	18	--	3-18	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	13.41	133.78
MW-2	18	--	3-18	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	12.99	134.64
MW-3	18	--	3-18	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	14.58	133.53
MW-3D	49	24	44-49	148.28	148.12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-3D1	85	65	75-85	148.12	147.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-4	14	--	4-14	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	11.81	135.22
MW-5	14	--	4-14	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	11.30	134.16
MW-6	14	--	4-14	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	8.29	134.93
MW-7	20	--	5-20	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	15.11	133.92
MW-8	20	--	5-20	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	12.81	132.85
MW-9	20	--	5-20	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	9.33	134.56
MW-9D	49	24	44-49	144.80	144.20	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-10	18	--	3-18	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	7.45	134.74
MW-10D	48	30	43-48	142.08	141.79	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-11	18	--	3-18	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	8.63	134.53
MW-12D	50	30	40-50	147.86	147.65	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-13D	50	30	40-50	146.41	146.23	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-14	20	--	5-20	147.05	146.90	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-14D	50	29	40-50	147.11	146.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15	19	--	4-19	136.13	135.73	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D	45	30	35-45	135.93	135.59	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D1	85	65	75-85	135.94	135.69	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16	19	--	4-19	138.74	138.30	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16D	45	29	35-45	138.70	138.38	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-17	28.4	--	13-28	142.07	141.66	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-18	26.4	--	11-26	145.68	145.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-19	20.15	--	5-20	148.47	148.22	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-20	15.15	--	5-15	148.50	148.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21	34.4	--	19-34	148.43	147.97	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21D	53.4	31.5	43-53	147.28	146.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-22D	48.4	36	38-48	146.42	145.96	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-23D	50.4	34	40-50	148.48	148.26	NI	NI	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)	Ground Surface Elevation	Top of Casing Elevation	3/28/2006		6/26/2006		10/6/2006		1/12/2007		1/8/2008		11/4/2009		4/29/2010		10/25/2010	
						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	Depth to Water	Elevation
MW-1	18	--	3-18	147.56	147.19	11.97	135.22	12.16	135.03	13.67	133.52	12.06	135.13	13.50	133.69	14.70	132.49	12.20	134.99	14.38	132.81
MW-2	18	--	3-18	147.81	147.63	10.59	137.04	10.44	137.19	13.13	134.50	10.63	137.00	11.63	136.00	14.15	133.48	11.50	136.13	13.70	133.93
MW-3	18	--	3-18	148.34	148.11	13.49	134.62	13.67	134.44	14.15	133.96	13.24	134.87	13.62	134.49	15.84	132.27	13.81	134.30	14.56	133.55
MW-3D	49	24	44-49	148.28	148.12	NI	NI	NI	NI	NI	NI	NI	NI	16.10	132.02	17.30	130.82	15.03	133.09	17.39	130.73
MW-3D1	85	65	75-85	148.12	147.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	17.11	130.82	14.86	133.07	17.32	130.61
MW-4	14	--	4-14	147.30	147.03	7.53	139.50	9.26	137.77	11.82	135.21	7.79	139.24	9.53	137.50	13.52	133.51	8.95	138.08	12.73	134.30
MW-5	14	--	4-14	145.34	145.46	6.74	138.72	8.74	136.72	11.57	133.89	7.33	138.13	9.09	136.37	12.70	132.76	9.50	135.96	12.31	133.15
MW-6	14	--	4-14	143.45	143.22	4.17	139.05	6.30	136.92	9.46	133.76	4.90	138.32	6.10	137.12	10.09	133.13	6.50	136.72	10.00	133.22
MW-7	20	--	5-20	149.25	149.03	13.91	135.12	14.22	134.81	14.99	134.04	13.23	135.80	14.20	134.83	15.93	133.10	14.30	134.73	15.33	133.70
MW-8	20	--	5-20	145.95	145.66	11.17	134.49	12.32	133.34	13.67	131.99	11.62	134.04	12.85	132.81	14.35	131.31	11.79	133.87	14.35	131.31
MW-9	20	--	5-20	144.11	143.89	6.91	136.98	8.98	134.91	11.60	132.29	7.41	136.48	8.17	135.72	11.54	132.35	6.81	137.08	11.65	132.24
MW-9D	49	24	44-49	144.48	144.20	NI	NI	NI	NI	NI	NI	NI	NI	11.82	132.38	12.89	131.31	10.58	133.62	12.99	131.21
MW-10	18	--	3-18	142.56	142.19	3.49	138.70	5.82	136.37	8.65	133.54	4.12	138.07	5.66	136.53	9.74	132.45	6.14	136.05	9.73	132.46
MW-10D	48	30	43-48	142.08	141.79	NI	NI	NI	NI	NI	NI	NI	NI	9.45	132.34	10.68	131.11	8.38	133.41	10.76	131.03
MW-11	18	--	3-18	143.77	143.16	6.84	136.32	8.01	135.15	9.26	133.90	7.30	135.86	7.89	135.27	10.01	133.15	8.15	135.01	9.98	133.18
MW-12D	50	30	40-50	147.86	147.65	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	16.69	130.96	14.62	133.03	16.92	130.73
MW-13D	50	30	40-50	146.41	146.23	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	15.55	130.68	13.33	132.90	15.65	130.58
MW-14	20	--	5-20	147.05	146.90	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	15.03	131.87	12.69	134.21	13.99	132.91
MW-14D	50	29	40-50	147.11	146.88	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	16.20	130.68	14.01	132.87	16.34	130.54
MW-15	18	--	4-19	136.13	135.73	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D	45	30	35-45	135.93	135.59	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-15D1	85	65	75-85	135.94	135.69	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16	19	--	4-19	138.74	138.30	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-16D	45	29	35-45	138.70	138.38	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-17	28.4	--	13-28	142.07	141.66	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-18	26.4	--	11-26	145.68	145.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-19	20.15	--	5-20	148.47	148.22	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-20	15.15	--	5-15	148.50	148.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21	34.4	--	19-34	148.43	147.97	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21D	53.4	31.5	43-53	147.28	146.92	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-22D	48.4	36	38-48	146.42	145.96	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-23D	50.4	34	40-50	148.48	148.26	NI	NI	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)	Ground Surface Elevation	Top of Casing Elevation	12/15/2010		5/23/2011		11/8/2011		5/8/2012		3/20/2014		10/27/2014		4/20/2015	
						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	147.56	147.19	15.17	132.02	13.29	133.90	14.88	132.31	13.05	134.14	11.02	136.17	13.53	133.66	10.81	136.38
MW-2	18	--	3-18	147.81	147.63	14.84	132.79	12.88	134.75	14.51	133.12	12.94	134.69	10.25	137.38	13.63	134.00	9.64	137.99
MW-3	18	--	3-18	148.34	148.11	15.84	132.27	14.01	134.10	15.65	132.46	13.93	134.18	12.15	135.96	14.16	133.95	12.62	135.49
MW-3D	49	24	44-49	148.28	148.12	17.36	130.76	16.75	131.37	17.45	130.67	16.22	131.90	13.74	134.38	16.07	132.05	13.48	134.64
MW-3D1	85	65	75-85	148.12	147.93	17.19	130.74	16.55	131.38	17.29	130.64	16.05	131.88	13.52	134.41	15.89	132.04	13.25	134.68
MW-4	14	--	4-14	147.30	147.03	13.49	133.54	11.37	135.66	Dry	NA	9.44	137.59	4.7	142.33	11.70	135.33	4.79	142.24
MW-5	14	--	4-14	145.34	145.46	13.51	131.95	11.05	134.41	13.45	132.01	8.97	136.49	4.76	140.70	11.43	134.03	4.60	140.86
MW-6	14	--	4-14	143.45	143.22	11.32	131.90	8.40	134.82	11.15	132.07	6.20	137.02	3.04	140.18	5.96	137.26	2.20	141.02
MW-7	20	--	5-20	149.25	149.03	15.89	133.14	14.65	134.38	15.73	133.30	14.39	134.64	11.87	137.16	14.73	134.30	12.88	136.15
MW-8	20	--	5-20	145.95	145.66	14.52	131.14	13.50	132.16	14.60	131.06	12.88	132.78	10.27	135.39	13.02	132.64	10.06	135.60
MW-9	20	--	5-20	144.11	143.89	12.55	131.34	9.20	134.69	12.60	131.29	6.25	137.64	4.87	139.02	9.78	134.11	4.54	139.35
MW-9D	49	24	44-49	144.48	144.20	12.98	131.22	12.26	131.94	13.12	131.08	11.78	132.42	9.15	135.05	11.64	132.56	8.93	135.27
MW-10	18	--	3-18	142.56	142.19	10.66	131.53	7.98	134.21	10.57	131.62	5.88	136.31	2.63	139.56	8.50	133.69	2.47	139.72
MW-10D	48	30	43-48	142.08	141.79	10.76	131.03	10.02	131.77	10.89	130.90	9.59	132.20	6.99	134.80	9.40	132.39	6.75	135.04
MW-11	18	--	3-18	143.77	143.16	10.92	132.24	9.11	134.05	10.82	132.34	8.39	134.77	6.39	136.77	8.96	134.20	6.40	136.76
MW-12D	50	30	40-50	147.86	147.65	16.87	130.78	16.18	131.47	16.99	130.66	15.69	131.96	13.28	134.37	15.55	132.10	13.02	134.63
MW-13D	50	30	40-50	146.41	146.23	15.61	130.62	14.99	131.24	15.71	130.52	14.44	131.79	12.02	134.21	14.29	131.94	11.75	134.48
MW-14	20	--	5-20	147.05	146.90	14.67	132.23	13.38	133.52	14.52	132.38	12.97	133.93	10.49	136.41	13.02	133.88	10.54	136.36
MW-14D	50	29	40-50	147.11	146.88	16.26	130.62	15.69	131.19	16.37	130.51	15.09	131.79	12.71	134.17	14.99	131.89	12.43	134.45
MW-15	18	--	4-19	136.13	135.73	NI	NI	5.44	130.29	6.68	129.05	3.77	131.96	1.71	134.02	4.49	131.24	2.09	133.64
MW-15D	45	30	35-45	135.93	135.59	NI	NI	4.55	131.04	5.23	130.36	4.15	131.44	1.92	133.67	3.79	131.80	1.80	133.79
MW-15D1	85	65	75-85	135.94	135.69	NI	NI	NI	NI	NI	NI	4.25	131.44	2.04	133.65	3.91	131.78	1.91	133.78
MW-16	19	--	4-19	138.74	138.30	NI	NI	6.40	131.90	8.15	130.15	5.26	133.04	2.54	135.76	6.68	131.62	2.35	135.95
MW-16D	45	29	35-45	138.70	138.38	NI	NI	7.49	130.89	8.30	130.08	7.05	131.33	4.79	133.59	6.76	131.62	4.54	133.84
MW-17	28.4	--	13-28	142.07	141.66	NI	NI	NI	NI	NI	NI	NI	NI	1.90	139.76	6.93	134.73	1.91	139.75
MW-18	26.4	--	11-26	145.68	145.41	NI	NI	NI	NI	NI	NI	NI	NI	9.07	136.34	12.48	132.93	9.23	136.18
MW-19	20.15	--	5-20	148.47	148.22	NI	NI	NI	NI	NI	NI	NI	NI	11.35	136.87	14.42	133.80	10.90	137.32
MW-20	15.15	--	5-15	148.50	148.19	NI	NI	NI	NI	NI	NI	NI	NI	11.11	137.08	14.30	133.89	10.55	137.64
MW-21	34.4	--	19-34	148.43	147.97	NI	NI	NI	NI	NI	NI	NI	NI	11.42	136.55	14.59	133.38	11.23	136.74
MW-21D	53.4	31.5	43-53	147.28	146.92	NI	NI	NI	NI	NI	NI	NI	NI	12.51	134.41	14.84	132.08	12.25	134.67
MW-22D	48.4	36	38-48	146.42	145.96	NI	NI	NI	NI	NI	NI	NI	NI	11.96	134.00	14.19	131.77	11.68	134.28
MW-23D	50.4	34	40-50	148.48	148.26	NI	NI	NI	NI	NI	NI	NI	NI	13.73	134.53	16.18	132.08	13.48	134.78

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 surveyed by Edisto Engineers and Surveyors, Inc. on May 23, 2011 and March 20, 2014.
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	3.87	0.046	18.70	5.26	5.13	447.2
MW-2	4.14	0.034	18.79	1.96	6.52	409.1
MW-3	3.98	0.020	19.83	5.66	5.65	191.2
MW-3D	7.49	0.224	21.39	2.66	3.24	36.4
MW-3D1	7.60	0.221	20.76	1.94	0.18	-140.6
MW-4	5.09	0.176	15.96	48.52	1.17	-145.2
MW-5	4.11	0.020	18.20	3.41	7.46	189.4
MW-6	3.51	0.023	16.70	4.77	3.88	318.4
MW-7	4.32	0.020	19.59	5.28	7.79	350.7
MW-8	4.14	0.049	21.52	1.30	4.29	407.6
MW-9	4.20	0.033	18.41	2.49	2.55	175.9
MW-9D	7.49	0.209	17.71	1.94	0.25	-112.8
MW-10	4.13	0.027	16.70	2.05	2.50	304.2
MW-10D	7.60	0.202	18.43	1.96	4.45	210.5
MW-11	4.71	0.337	15.48	5.29	1.37	-77.0
MW-12D	9.65	0.236	18.30	3.83	4.81	-29.1
MW-13D	7.56	0.220	20.07	6.22	4.52	-26.8
MW-14	3.89	0.021	18.05	2.86	7.60	303.7
MW-14D	7.49	0.228	19.76	3.89	0.69	38.8
MW-15	4.37	0.208	18.59	14.29	0.39	-30.9
MW-15D	6.96	0.431	18.44	15.88	1.99	-8.0
MW-15D1	7.63	0.203	19.03	4.52	0.21	-262.1
MW-16	3.84	0.028	16.26	14.48	0.72	-66.8
MW-16D	7.22	0.295	17.34	0.89	3.88	40.6
MW-17	3.96	0.159	16.84	4.26	1.85	442.5
MW-18	4.17	0.048	16.12	0.71	4.44	412.6
MW-19	4.17	0.114	21.15	1.37	4.37	420.8
MW-20	3.94	0.040	21.13	0.03	4.24	442.4
MW-21	4.30	0.028	20.85	11.87	0.31	312.9
MW-21D	7.28	0.262	20.07	7.11	0.44	-82.8
MW-22D	11.08	0.322	17.28	1.75	3.08	12.0
MW-23D	7.20	0.282	20.17	3.78	1.63	212.3

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

1. The sample log for MW-21 was missing the last turbidity reading. The turbidity recorded on the table is the last reading recorded.

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 FA23750-3 04/20/15	MW-2 FA23750-7 04/21/15	MW-3 FA23750-14 04/21/15	MW-3D FA23750-16 04/21/15	MW-3D1 FA23825-3 04/21/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 1.3	< 0.26	< 0.26	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	—	< 1.1	< 0.22	< 0.22	< 0.22	< 0.22
1,1,2-Trichloroethane	5	< 1.6	< 0.31	< 0.31	< 0.31	< 0.31
1,1-Dichloroethane	—	< 1	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethylene	7	< 1.4	< 0.27	< 0.27	12.4	< 0.27
1,2-Dichloroethane	5	< 1	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	5	< 1.3	< 0.25	< 0.25	< 0.25	< 0.25
2-Butanone (MEK)	—	< 5.8	< 1.2	< 1.2	< 1.2	< 1.2
2-Hexanone	—	< 10	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 5	< 1	< 1	< 1	< 1
Acetone	—	< 50	< 10	< 10	< 10	< 10
Benzene	5	< 1	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 1.1	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	80 ¹	< 1.6	< 0.32	< 0.32	< 0.32	< 0.32
Carbon Disulfide	—	< 1.5	< 0.29	< 0.29	< 0.29	< 0.29
Carbon Tetrachloride	5	< 1.4	< 0.28	< 0.28	< 0.28	< 0.28
Chlorobenzene	100	< 1	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	80 ¹	< 1.5	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	6.1	< 0.22	< 0.22	8.4	< 0.22
cis-1,3-Dichloropropene	—	< 1.3	< 0.25	< 0.25	< 0.25	< 0.25
Dibromochloromethane	80 ¹	< 1	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	700	< 1	< 0.2	< 0.2	< 0.2	< 0.2
Methyl Bromide	—	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Chloride	—	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 10	< 2	< 2	< 2	< 2
Styrene	100	< 1.4	< 0.28	< 0.28	< 0.28	< 0.28
Tetrachloroethylene	5	447	0.53 J//	0.92 J//	316 /M/M	< 0.33
Toluene	1,000	< 2	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethylene	100	< 1	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,3-Dichloropropene	—	< 1.3	< 0.26	< 0.26	< 0.26	< 0.26
Trichloroethylene	5	2.6 J//	< 0.22	< 0.22	8.1	< 0.22
Vinyl Chloride	2	< 1.3	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	10,000	< 2.6	< 0.51	< 0.51	< 0.51	< 0.51
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	—	< 0.32	—	—	—
Ethene	—	—	< 0.43	—	—	—
Methane	—	—	< 0.16	—	—	—
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	—	1,500 J//	—	—	—
Nitrogen, Nitrate	10,000	—	1,100	—	—	—
Nitrogen, Nitrite	1,000	—	< 50	—	—	—
Sulfate	250,000 ²	—	4,800	—	—	—
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	—	690 J//	—	—	—

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-4 FA23750-10 04/21/15	MW-5 FA23750-13 04/21/15	MW-6 FA23750-9 04/21/15	MW-7 FA23750-12 04/21/15	MW-8 FA23825-1 04/21/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	—	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
1,1,2-Trichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,1-Dichloroethane	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethylene	7	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27
1,2-Dichloroethane	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	5	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
2-Butanone (MEK)	—	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	80 ¹	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Carbon Disulfide	—	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Carbon Tetrachloride	5	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.22	1	< 0.22	< 0.22	< 0.22
cis-1,3-Dichloropropene	—	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Dibromochloromethane	80 ¹	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	700	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
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	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Tetrachloroethylene	5	< 0.33	74.3	< 0.33	< 0.33	28.5
Toluene	1,000	0.54 J//	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethylene	100	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,3-Dichloropropene	—	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Trichloroethylene	5	< 0.22	1.3	< 0.22	< 0.22	0.97 J//
Vinyl Chloride	2	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	10,000	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	< 0.32	—	< 0.32	< 0.32	—
Ethene	—	< 0.43	—	< 0.43	< 0.43	—
Methane	—	461	—	< 0.16	< 0.16	—
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	25,200	—	850 J//	1,300 J//	—
Nitrogen, Nitrate	10,000	480	—	< 50	150	—
Nitrogen, Nitrite	1,000	< 50	—	< 50	< 50	—
Sulfate	250,000 ²	20,300	—	5,300	4,000	—
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	5,800	—	690 J//	550 J//	—

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-9 FA23825-17 04/22/15	MW-9D FA23750-8 04/21/15	MW-10 FA23825-14 04/22/15	MW-10D FA23825-12 04/22/15	MW-11 FA23750-6 04/21/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 2.6	< 0.26	< 0.26	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	—	< 2.2	< 0.22	< 0.22	< 0.22	< 0.22
1,1,2-Trichloroethane	5	< 3.1	< 0.31	< 0.31	< 0.31	< 0.31
1,1-Dichloroethane	—	< 2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethylene	7	< 2.7	< 0.27	5.2	< 0.27	< 0.27
1,2-Dichloroethane	5	< 2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	5	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25
2-Butanone (MEK)	—	< 12	< 1.2	< 1.2	< 1.2	< 1.2
2-Hexanone	—	< 20	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 10	< 1	< 1	< 1	< 1
Acetone	—	< 100	< 10	< 10	< 10	< 10
Benzene	5	< 2	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 2.2	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	80 ¹	< 3.2	< 0.32	< 0.32	< 0.32	< 0.32
Carbon Disulfide	—	< 2.9	< 0.29	< 0.29	< 0.29	< 0.29
Carbon Tetrachloride	5	< 2.8	< 0.28	< 0.28	< 0.28	< 0.28
Chlorobenzene	100	< 2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	80 ¹	< 3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	33.1	< 0.22	98.8	< 0.22	< 0.22
cis-1,3-Dichloropropene	—	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25
Dibromochloromethane	80 ¹	< 2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	700	< 2	< 0.2	< 0.2	< 0.2	< 0.2
Methyl Bromide	—	< 5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Chloride	—	< 5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 20	< 2	< 2	< 2	< 2
Styrene	100	< 2.8	< 0.28	< 0.28	< 0.28	< 0.28
Tetrachloroethylene	5	1,760	< 0.33	54.1	< 0.33	< 0.33
Toluene	1,000	< 4	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethylene	100	< 2.1	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,3-Dichloropropene	—	< 2.6	< 0.26	< 0.26	< 0.26	< 0.26
Trichloroethylene	5	133	< 0.22	7.8	< 0.22	< 0.22
Vinyl Chloride	2	< 2.5	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	10,000	< 5.1	< 0.51	< 0.51	< 0.51	< 0.51
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	—	< 0.32	—	—	< 0.32
Ethene	—	—	< 0.43	—	—	< 0.43
Methane	—	—	< 0.16	—	—	0.99
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	—	5,900	—	—	85,100
Nitrogen, Nitrate	10,000	—	< 50	—	—	70 J//
Nitrogen, Nitrite	1,000	—	< 50	—	—	< 50
Sulfate	250,000 ²	—	1,400 J//	—	—	29,800
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	—	470 J//	—	—	2,000

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 FA23825-5 04/21/15	MW-13D FA23825-19 04/22/15	MW-14 FA23750-2 04/20/15	MW-14D FA23750-4 04/20/15	MW-15 FA23825-13 04/22/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)						
1,1,1-Trichloroethane	200	< 0.26	1.5	< 0.26	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	—	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
1,1,2-Trichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,1-Dichloroethane	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethylene	7	1.4	4.4	< 0.27	1.8	< 0.27
1,2-Dichloroethane	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	5	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
2-Butanone (MEK)	—	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
2-Hexanone	—	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10	< 10
Benzene	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	80 ¹	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Carbon Disulfide	—	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Carbon Tetrachloride	5	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.22	< 0.22	< 0.22	0.9 J//	< 0.22
cis-1,3-Dichloropropene	—	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Dibromochloromethane	80 ¹	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	700	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
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	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Tetrachloroethylene	5	65.6	84.8	0.46 J//	69.7	< 0.33
Toluene	1,000	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethylene	100	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,3-Dichloropropene	—	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
Trichloroethylene	5	< 0.22	< 0.22	< 0.22	0.61 J//	< 0.22
Vinyl Chloride	2	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	10,000	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)						
Ethane	—	—	—	—	—	—
Ethene	—	—	—	—	—	—
Methane	—	—	—	—	—	—
Water Quality Parameters by USEPA Method 9056 (µg/L)						
Chloride	250,000 ²	—	—	—	—	—
Nitrogen, Nitrate	10,000	—	—	—	—	—
Nitrogen, Nitrite	1,000	—	—	—	—	—
Sulfate	250,000 ²	—	—	—	—	—
Total Organic Carbon by USEPA Method 5310 (µg/L)						
Total Organic Carbon	—	—	—	—	—	—

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 FA23825-15 04/22/15	MW-15D1 FA23825-16 04/22/15	MW-16 FA23825-9 04/22/15	MW-16D FA23825-11 04/22/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)					
1,1,1-Trichloroethane	200	< 0.26	< 0.26	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	—	< 0.22	< 0.22	< 0.22	< 0.22
1,1,2-Trichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31
1,1-Dichloroethane	—	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethylene	7	< 0.27	< 0.27	< 0.27	< 0.27
1,2-Dichloroethane	5	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	5	< 0.25	< 0.25	< 0.25	< 0.25
2-Butanone (MEK)	—	< 1.2	< 1.2	< 1.2	< 1.2
2-Hexanone	—	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10
Benzene	5	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	80 ¹	< 0.32	< 0.32	< 0.32	< 0.32
Carbon Disulfide	—	< 0.29	< 0.29	< 0.29	< 0.29
Carbon Tetrachloride	5	< 0.28	< 0.28	< 0.28	< 0.28
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	< 0.22	< 0.22	< 0.22	< 0.22
cis-1,3-Dichloropropene	—	< 0.25	< 0.25	< 0.25	< 0.25
Dibromochloromethane	80 ¹	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	700	< 0.2	< 0.2	< 0.2	< 0.2
Methyl Bromide	—	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2
Styrene	100	< 0.28	< 0.28	< 0.28	< 0.28
Tetrachloroethylene	5	< 0.33	< 0.33	< 0.33	< 0.33
Toluene	1,000	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethylene	100	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,3-Dichloropropene	—	< 0.26	< 0.26	< 0.26	< 0.26
Trichloroethylene	5	< 0.22	< 0.22	< 0.22	< 0.22
Vinyl Chloride	2	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	10,000	< 0.51	< 0.51	< 0.51	< 0.51
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)					
Ethane	—	—	—	—	—
Ethene	—	—	—	—	—
Methane	—	—	—	—	—
Water Quality Parameters by USEPA Method 9056 (µg/L)					
Chloride	250,000 ²	—	—	—	—
Nitrogen, Nitrate	10,000	—	—	—	—
Nitrogen, Nitrite	1,000	—	—	—	—
Sulfate	250,000 ²	—	—	—	—
Total Organic Carbon by USEPA Method 5310 (µg/L)					
Total Organic Carbon	—	—	—	—	—

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-17 FA23825-6 04/21/15	MW-18 FA23825-10 04/22/15	MW-19 FA23750-15 04/21/15	MW-20 FA23750-17 04/21/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)					
1,1,1-Trichloroethane	200	< 0.26	< 0.26	19.8 J//	< 1.3
1,1,2,2-Tetrachloroethane	—	< 0.22	< 0.22	< 4.5	< 1.1
1,1,2-Trichloroethane	5	< 0.31	< 0.31	< 6.3	< 1.6
1,1-Dichloroethane	—	< 0.2	< 0.2	< 4	< 1
1,1-Dichloroethylene	7	< 0.27	< 0.27	15.6 J//	< 1.4
1,2-Dichloroethane	5	< 0.2	< 0.2	< 4	< 1
1,2-Dichloropropane	5	< 0.25	< 0.25	< 5.1	< 1.3
2-Butanone (MEK)	—	< 1.2	< 1.2	< 23	< 5.8
2-Hexanone	—	< 2	< 2	< 40	< 10
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 20	< 5
Acetone	—	< 10	< 10	< 200	< 50
Benzene	5	< 0.2	< 0.2	< 4	< 1
Bromodichloromethane	80 ¹	< 0.22	< 0.22	< 4.3	< 1.1
Bromoform	80 ¹	< 0.32	< 0.32	< 6.5	< 1.6
Carbon Disulfide	—	< 0.29	< 0.29	< 5.9	< 1.5
Carbon Tetrachloride	5	< 0.28	< 0.28	< 5.6	< 1.4
Chlorobenzene	100	< 0.2	< 0.2	< 4	< 1
Chloroethane	—	< 0.5	< 0.5	< 10	< 2.5
Chloroform	80 ¹	< 0.3	< 0.3	< 6	< 1.5
cis-1,2-Dichloroethylene	70	< 0.22	< 0.22	12.5 J//	2.6 J//
cis-1,3-Dichloropropene	—	< 0.25	< 0.25	< 5	< 1.3
Dibromochloromethane	80 ¹	< 0.2	< 0.2	< 4	< 1
Ethylbenzene	700	< 0.2	< 0.2	< 4	< 1
Methyl Bromide	—	< 0.5	< 0.5	< 10	< 2.5
Methyl Chloride	—	< 0.5	< 0.5	< 10	< 2.5
Methylene Chloride	5	< 2	< 2	< 40	< 10
Styrene	100	< 0.28	< 0.28	< 5.6	< 1.4
Tetrachloroethylene	5	< 0.33	< 0.33	4,170	452
Toluene	1,000	< 0.4	< 0.4	< 8	< 2
trans-1,2-Dichloroethylene	100	< 0.21	< 0.21	< 4.2	< 1
trans-1,3-Dichloropropene	—	< 0.26	< 0.26	< 5.2	< 1.3
Trichloroethylene	5	< 0.22	< 0.22	5.5 J//	4.2 J//
Vinyl Chloride	2	< 0.25	< 0.25	< 5	< 1.3
Xylene (total)	10,000	< 0.51	< 0.51	< 10	< 2.6
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)					
Ethane	—	—	—	—	—
Ethene	—	—	—	—	—
Methane	—	—	—	—	—
Water Quality Parameters by USEPA Method 9056 (µg/L)					
Chloride	250,000 ²	—	—	—	—
Nitrogen, Nitrate	10,000	—	—	—	—
Nitrogen, Nitrite	1,000	—	—	—	—
Sulfate	250,000 ²	—	—	—	—
Total Organic Carbon by USEPA Method 5310 (µg/L)					
Total Organic Carbon	—	—	—	—	—

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

Sample ID Laboratory ID Date Collected	USEPA MCL	MW-21 FA23825-18 04/22/15	MW-21D FA23750-1 04/20/15	MW-22D FA23825-7 04/22/15	MW-23D FA23825-4 04/21/15
Volatile Organic Compounds by USEPA Method 8260 (µg/L)					
1,1,1-Trichloroethane	200	< 0.26	< 0.26	0.27 J//	< 0.26
1,1,2,2-Tetrachloroethane	—	< 0.22	< 0.22	< 0.22	< 0.22
1,1,2-Trichloroethane	5	< 0.31	< 0.31	< 0.31	< 0.31
1,1-Dichloroethane	—	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethylene	7	1	0.89 J//	3.8	< 0.27
1,2-Dichloroethane	5	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	5	< 0.25	< 0.25	< 0.25	< 0.25
2-Butanone (MEK)	—	< 1.2	< 1.2	< 1.2	< 1.2
2-Hexanone	—	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1	< 1	< 1
Acetone	—	< 10	< 10	< 10	< 10
Benzene	5	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	80 ¹	< 0.22	< 0.22	< 0.22	< 0.22
Bromoform	80 ¹	< 0.32	< 0.32	< 0.32	< 0.32
Carbon Disulfide	—	< 0.29	< 0.29	< 0.29	< 0.29
Carbon Tetrachloride	5	< 0.28	< 0.28	< 0.28	< 0.28
Chlorobenzene	100	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	—	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	80 ¹	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	70	351	0.3 J//	0.56 J//	< 0.22
cis-1,3-Dichloropropene	—	< 0.25	< 0.25	< 0.25	< 0.25
Dibromochloromethane	80 ¹	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	700	< 0.2	< 0.2	< 0.2	< 0.2
Methyl Bromide	—	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Chloride	—	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	< 2	< 2	< 2	< 2
Styrene	100	< 0.28	< 0.28	< 0.28	< 0.28
Tetrachloroethylene	5	14,500	29.4	107	< 0.33
Toluene	1,000	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethylene	100	< 0.21	< 0.21	< 0.21	< 0.21
trans-1,3-Dichloropropene	—	< 0.26	< 0.26	< 0.26	< 0.26
Trichloroethylene	5	225	< 0.22	0.68 J//	< 0.22
Vinyl Chloride	2	< 0.25	< 0.25	< 0.25	< 0.25
Xylene (total)	10,000	0.89 J//	< 0.51	< 0.51	< 0.51
Ethane, Ethene, and Methane by USEPA Method RSK 147 (µg/L)					
Ethane	—	—	—	—	—
Ethene	—	—	—	—	—
Methane	—	—	—	—	—
Water Quality Parameters by USEPA Method 9056 (µg/L)					
Chloride	250,000 ²	—	—	—	—
Nitrogen, Nitrate	10,000	—	—	—	—
Nitrogen, Nitrite	1,000	—	—	—	—
Sulfate	250,000 ²	—	—	—	—
Total Organic Carbon by USEPA Method 5310 (µg/L)					
Total Organic Carbon	—	—	—	—	—

Notes:

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

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

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

² Secondary Standard.

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

Bold font and shading indicate the concentration is detected.

Bold outline indicates the concentration exceeds the MCL.

South Carolina Department of Health and Environmental Control (SCDHEC) R.61-68 Water Classifications and

Standards (June 22, 2012) were also identified for the list of detected chemicals in groundwater. In each case,

however, they were the same values as the USEPA MCLs.

See Table 6 for explanation of data qualifiers.

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

Sample ID Laboratory ID Date Collected	USEPA Toxicity Characteristic	IDW-1 FA23825-21 4/22/2015
Volatile Organic Compounds by Method 8260B (µg/L)		
1,1,1-Trichloroethane	—	0.34 J//
1,1,2,2-Tetrachloroethane	—	< 0.22
1,1,2-Trichloroethane	—	< 0.31
1,1-Dichloroethane	—	< 0.2
1,1-Dichloroethylene	700	0.37 J//
1,2-Dichloroethane	500	< 0.2
1,2-Dichloropropane	—	< 0.25
2-Butanone (MEK)	200,000	< 1.2
2-Hexanone	—	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1
Acetone	—	< 10
Benzene	500	< 0.2
Bromodichloromethane	—	< 0.22
Bromoform	—	< 0.32
Carbon Disulfide	—	< 0.29
Carbon Tetrachloride	500	< 0.28
Chlorobenzene	100,000	< 0.2
Chloroethane	—	< 0.5
Chloroform	6,000	< 0.3
cis-1,2-Dichloroethylene	—	6.3
cis-1,3-Dichloropropene	—	< 0.25
Dibromochloromethane	—	< 0.2
Ethylbenzene	—	< 0.2
Methyl Bromide	—	< 0.5
Methyl Chloride	—	< 0.5
Methylene Chloride	—	< 2
Styrene	—	< 0.28
Tetrachloroethylene	700	131
Toluene	—	< 0.4
trans-1,2-Dichloroethylene	—	< 0.21
trans-1,3-Dichloropropene	—	< 0.26
Trichloroethylene	500	3.8
Vinyl Chloride	200	< 0.25
Xylene (total)	—	< 0.51
Semivolatile Organic Compounds by Method 8270D (µg/L)		
1,2,4-Trichlorobenzene	—	< 0.48
1,2-Dichlorobenzene	—	< 0.48
1,3-Dichlorobenzene	—	< 0.61
1,4-Dichlorobenzene	7,500	< 0.62
2,4,5-Trichlorophenol	400,000	< 0.65
2,4,6-Trichlorophenol	2,000	< 0.6
2,4-Dichlorophenol	—	< 0.48
2,4-Dimethylphenol	—	< 0.48
2,4-Dinitrophenol	—	< 4.8
2,4-Dinitrotoluene	130	< 0.56
2,6-Dinitrotoluene	—	< 0.66
2-Chloronaphthalene	—	< 0.48
2-Chlorophenol	—	< 0.48
2-Methylnaphthalene	—	< 0.48
2-Methylphenol	200,000	< 0.48
2-Nitroaniline	—	< 0.48
2-Nitrophenol	—	< 0.84
3&4-Methylphenol	200,000	< 0.96
3,3'-Dichlorobenzidine	—	< 0.5
3-Nitroaniline	—	< 0.51
4,6-Dinitro-o-cresol	—	< 2.1
4-Bromophenyl Phenyl Ether	—	< 0.61
4-Chloro-3-methyl Phenol	—	< 0.48
4-Chloroaniline	—	< 0.48
4-Chlorophenyl Phenyl Ether	—	< 0.55
4-Nitroaniline	—	< 0.95
4-Nitrophenol	—	< 4.8
Acenaphthene	—	< 0.48
Acenaphthylene	—	< 0.48
Anthracene	—	< 0.48
Benzo(a)anthracene	—	< 0.48
Benzo(a)pyrene	—	< 0.48
Benzo(b)fluoranthene	—	< 0.56

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 FA23825-21 4/22/2015
Semivolatile Organic Compounds by Method 8270D (µg/L)		
Benzo(g,h,i)perylene	—	< 0.63
Benzo(k)fluoranthene	—	< 0.66
Benzoic Acid	—	< 9.6 /R/c
Benzyl Alcohol	—	< 0.82
bis(2-Chloroethoxy)methane	—	< 0.61
bis(2-Chloroethyl)ether	—	< 0.66
bis(2-Chloroisopropyl)ether	—	< 0.48
bis(2-Ethylhexyl)phthalate	—	< 0.96
Butyl Benzyl Phthalate	—	< 0.96
Carbazole	—	< 0.48
Chrysene	—	< 0.49
Dibenzo(a,h)anthracene	—	< 0.65
Dibenzofuran	—	< 0.48
Diethyl Phthalate	—	< 1.4
Dimethyl Phthalate	—	< 0.96
Di-n-butyl Phthalate	—	< 0.96
Di-n-octyl Phthalate	—	< 0.96
Fluoranthene	—	< 0.48
Fluorene	—	< 0.48
Hexachlorobenzene	130	< 0.61
Hexachlorobutadiene	500	< 0.58
Hexachlorocyclopentadiene	—	< 0.96
Hexachloroethane	3,000	< 0.66
Indeno(1,2,3-cd)pyrene	—	< 0.61
Isophorone	—	< 0.49
Naphthalene	—	< 0.48
Nitrobenzene	2,000	< 0.5
N-Nitrosodi-n-propylamine	—	< 0.56
N-Nitrosodiphenylamine	—	< 0.57
Pentachlorophenol	100,000	< 4.8
Phenanthrene	—	< 0.49
Phenol	—	< 0.48
Pyrene	—	< 0.53
Metals by Method 6010C/7470B (µg/L)		
Aluminum	—	1,220
Antimony	—	< 1
Arsenic	5,000	< 1.3
Barium	100,000	74 J//
Beryllium	—	< 0.2
Cadmium	1,000	< 0.2
Calcium	—	28,000
Chromium	5,000	4.9 J//
Cobalt	—	0.3 J//
Copper	—	< 1
Iron	—	1,610
Lead	5,000	1.7 J//
Magnesium	—	832 J//
Manganese	—	19.6
Mercury	200	< 0.03
Nickel	—	0.6 J//
Potassium	—	4,550 J//
Selenium	1,000	< 2.9
Silver	5,000	< 0.7
Sodium	—	13,000
Thallium	—	< 1.4
Vanadium	—	1.8 J//
Zinc	—	36.2

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 FA23750-10 04/21/15	MW-4-A FA23750-11 04/21/15	Relative Percent Difference	MW-14D FA23750-4 04/20/15	MW-14D-A FA23750-5 04/20/15	Relative Percent Difference	MW-22D FA23825-7 04/22/15	MW-22D-A FA23825-8 04/22/15	Relative Percent Difference
Volatile Organic Compounds by USEPA Method 8260 (µg/L)									
1,1,1-Trichloroethane	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	0.27 J//	< 0.26	NC
1,1,2,2-Tetrachloroethane	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC
1,1,2-Trichloroethane	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC	< 0.31	< 0.31	NC
1,1-Dichloroethane	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
1,1-Dichloroethylene	< 0.27	< 0.27	NC	1.8	2	11	3.8	3.8	0
1,2-Dichloroethane	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
1,2-Dichloropropane	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC
2-Butanone (MEK)	< 1.2	< 1.2	NC	< 1.2	< 1.2	NC	< 1.2	< 1.2	NC
2-Hexanone	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC
4-Methyl-2-pentanone (MIBK)	< 1	< 1	NC	< 1	< 1	NC	< 1	< 1	NC
Acetone	< 10	< 10	NC	< 10	< 10	NC	< 10	< 10	NC
Benzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
Bromodichloromethane	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC	< 0.22	< 0.22	NC
Bromoform	< 0.32	< 0.32	NC	< 0.32	< 0.32	NC	< 0.32	< 0.32	NC
Carbon Disulfide	< 0.29	< 0.29	NC	< 0.29	< 0.29	NC	< 0.29	< 0.29	NC
Carbon Tetrachloride	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC
Chlorobenzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
Chloroethane	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC
Chloroform	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC	< 0.3	< 0.3	NC
cis-1,2-Dichloroethylene	< 0.22	< 0.22	NC	0.9 J//	0.91 J//	NC	0.56 J//	0.5 J//	NC
cis-1,3-Dichloropropene	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC
Dibromochloromethane	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
Ethylbenzene	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC	< 0.2	< 0.2	NC
Methyl Bromide	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC
Methyl Chloride	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC	< 0.5	< 0.5	NC
Methylene Chloride	< 2	< 2	NC	< 2	< 2	NC	< 2	< 2	NC
Styrene	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC	< 0.28	< 0.28	NC
Tetrachloroethylene	< 0.33	< 0.33	NC	69.7	77.1	10	107	103	3.8
Toluene	0.54 J//	0.93 J//	NC	< 0.4	< 0.4	NC	< 0.4	< 0.4	NC
trans-1,2-Dichloroethylene	< 0.21	< 0.21	NC	< 0.21	< 0.21	NC	< 0.21	< 0.21	NC
trans-1,3-Dichloropropene	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC	< 0.26	< 0.26	NC
Trichloroethylene	< 0.22	< 0.22	NC	0.61 J//	0.61 J//	NC	0.68 J//	0.59 J//	NC
Vinyl Chloride	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC	< 0.25	< 0.25	NC
Xylene (total)	< 0.51	< 0.51	NC	< 0.51	< 0.51	NC	< 0.51	< 0.51	NC

Notes:

-A - Indicates a field duplicate sample.

NC - Not Calculated

RPD - Relative Percent Difference

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

Bold font and shading indicate the concentration is detected

See Table 6 for explanation of data qualifiers.

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

Sample ID	MW-8-C	MW-14-C
Laboratory ID	FA23825-2	FA23750-18
Date Collected	04/21/15	04/20/15
<i>Volatile Organic Compounds by USEPA Method 8260 (µg/L)</i>		
1,1,1-Trichloroethane	< 0.26	< 0.26
1,1,2,2-Tetrachloroethane	< 0.22	< 0.22
1,1,2-Trichloroethane	< 0.31	< 0.31
1,1-Dichloroethane	< 0.2	< 0.2
1,1-Dichloroethylene	< 0.27	< 0.27
1,2-Dichloroethane	< 0.2	< 0.2
1,2-Dichloropropane	< 0.25	< 0.25
2-Butanone (MEK)	< 1.2	< 1.2
2-Hexanone	< 2	< 2
4-Methyl-2-pentanone (MIBK)	< 1	< 1
Acetone	< 10	< 10
Benzene	< 0.2	< 0.2
Bromodichloromethane	< 0.22	< 0.22
Bromoform	< 0.32	< 0.32
Carbon Disulfide	< 0.29	< 0.29
Carbon Tetrachloride	< 0.28	< 0.28
Chlorobenzene	< 0.2	< 0.2
Chloroethane	< 0.5	< 0.5
Chloroform	< 0.3	< 0.3
cis-1,2-Dichloroethylene	< 0.22	< 0.22
cis-1,3-Dichloropropene	< 0.25	< 0.25
Dibromochloromethane	< 0.2	< 0.2
Ethylbenzene	< 0.2	< 0.2
Methyl Bromide	< 0.5	< 0.5
Methyl Chloride	< 0.5	< 0.5
Methylene Chloride	< 2	< 2
Styrene	< 0.28	< 0.28
Tetrachloroethylene	< 0.33	< 0.33
Toluene	< 0.4	< 0.4
trans-1,2-Dichloroethylene	< 0.21	< 0.21
trans-1,3-Dichloropropene	< 0.26	< 0.26
Trichloroethylene	< 0.22	< 0.22
Vinyl Chloride	< 0.25	< 0.25
Xylene (total)	< 0.51	< 0.51

Notes:

-C - Indicates a trip blank.

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

Analysis Data Qualifiers

<u>Qualifier</u>	<u>Description</u>
c	Laboratory control recovery below the established criteria.
M	Matrix spike recovery exceeded established criteria.

APPENDIX A

FIELD DOCUMENTATION

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



Tailgate Safety Meeting Log*

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

Meeting Leader <i>Justin Butler</i>	Signature <i>Justin Butler</i>
Date / Time <i>4/20 1100</i>	Project Name & Location UTC Delavan Spray Technologies Site Bamberg, South Carolina
Weather Conditions <i>Clear</i>	Project Number 60314964

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



Tailgate Safety Meeting Log*

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

Meeting Leader <i>Justin Butler</i>	Signature <i>Justin Butler</i>
Date /Time <i>4/21 0700</i>	Project Name & Location UTC Delavan Spray Technologies Site Bamberg, South Carolina
Weather Conditions <i>Clear/cool</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>Justin Butler</i>
Date /Time <i>4/12 0700</i>	Project Name & Location UTC Delavan Spray Technologies Site Bamberg, South Carolina
Weather Conditions <i>clear / cool</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 (☒

Tailgate Meeting Attendees	
Printed Name	Signature
<i>Randy Morgan</i>	<i>Randy Morgan</i>

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

WATER LEVEL DATA SUMMARY

PROJECT: UTC Delavan Spray Technologies Site

JOB NUMBER: 60314964

LOCATION: Bamberg, South Carolina

DATE: 4/20/15

CLIENT: UTC

MEASURED BY: R. Morgan / J. Butler

SURVEY DATUM:

MEASURING DEVICE: Electronic Water Level Meter

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				10.81	
MW-2				9.64	
MW-3				12.62	
MW-3D				13.48	
MW-3D1				13.25	
MW-4				4.79	
MW-5				4.6	
MW-6				2.2	
MW-7				12.88	
MW-8				10.06	
MW-9				4.54	
MW-9D				8.93	
MW-10				2.47	
MW-10D				6.75	
MW-11				6.10	
MW-12D				13.02	
MW-13D				11.75	
MW-14				10.54	
MW-14D				12.43	
MW-15				2.09	
MW-15D				1.80	On 4-22-15 due to heavy rain, and could not cross the branch to access wells
MW-15D1				1.91	
MW-16				2.35	
MW-16D				4.54	
MW-17				1.91	
MW-18				9.23	

Notes:

BTOC - Below Top of Casing

MSL - Mean Sea Level

TOC - Top of Casing

LLMH - Lower Lip of Man Hole

MEASURING DEVICE: electronic water level meter

LLMH - Lower Lip of Man Hole

YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard

Temp, LAB, C : 21.22 Temp, FIELD, C :

Conductivity

1413 UMHO/CM
@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7405352	6/15	1.278		(+/- .5%)

PH 4.00

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
740972	9/15	4.00		(+/- 0.2 units)

PH 7.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7409179	9/16	7.01		(+/- 0.2 units)

PH 10.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7408054	7/16	10.01		(+/- 0.2 units)

ORP
ZOBELLS

231.0 MV @ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7410186	1/15	237.5		(+/- 20 MV)

Dissolved Oxygen
(Saturated Air)

Post-Cal, LAB

Temp, C

% Saturation

mg/L

22.23

97.3

8.48

Acceptable Range

Post-Cal, FIELD

Temp, C

% Saturation

mg/L

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

New DO Membrane

☐ Yes ☒ No

Do Cap Color

☐ Black ☒ Blue ☐ Yellow

Model

556

S/N

05D1437 AR

Cable

12550

Calibration referenced to the temperature of the calibration standards.

Turbidity

.02 NTU

10 NTU

1000 NTU

Lot #

Expiration

Post-Cal, LAB

Post-Cal, FIELD

Acceptable Range

41001

OCT-16

0.02

(.0196 to .0204)

40763

JUL-16

10.12

(9.8 to 10.2)

41003

OCT-16

1002

(970 to 1031)

Model

Micro TPW

S/N

200704141

Calibrated By

Eric Olson

Date of Calibration

4-17-15

Project Name

UTC

Project number

60314964

Signed :

[Signature]

Photo / Flame-Ionization Detector Calibration Certificate

AECOM

Cal Standard

PID

Isobutylene

Lot #	Expiration	Post-Cal Reading	Acceptable Range
1739066	OCT-17	100.1	98 - 102 ▼

100 ppm ▼

FID

Methane

Lot #	Expiration	Post-Cal Reading	Acceptable Range
	N/A		98 - 102 ▼

100 ppm ▼

Pump Flow mL/min

360

Acceptable Range

350 - 450 ▼

Model

Mini RAE 3K ▼

S/N

592-910624 ▼

Lamp

10-6 ▼

Project Name

UTC

Project #

60314964

Calibrated By

Eric Olson ▼

Date of Calibration

4-17-15

Signed: _____



YSI 556 MPS / Water Quality Calibration Certificate

AECOM

Cal Standard

Temp, LAB, C : 20.32 Temp, FIELD, C :

Conductivity

1413 UMHO/CM
@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7405352	6/15	1.278		(+/- .5%)

PH 4.00

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
740972	9/15	4.00		(+/- 0.2 units)

PH 7.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7409179	9/16	7.01		(+/- 0.2 units)

PH 10.01

@ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7408054	7/16	10.01		(+/- 0.2 units)

ORP
ZOBELLS

231.0 MV @ 25°C

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
7410186	1/15	237.5		(+/- 20 MV)

Dissolved Oxygen

(Saturated Air)

Post-Cal, LAB	Temp, C	% Saturation	mg/L	Acceptable Range
	21.19	97.3	8.65	(+/- 2%) / (+/- 2%)
Post-Cal, FIELD	Temp, C	% Saturation	mg/L	

New DO Membrane

☐ Yes ☒ No

Do Cap Color

☐ Black ☒ Blue ☐ Yellow

Model

556

S/N

09A130728

Cable

146-33

Calibration referenced to the temperature of the calibration standards.

Turbidity

.02 NTU

10 NTU

1000 NTU

Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
40701	JUL-16	0.02		(.0196 to .0204)
40763	JUL-16	9.97		(9.8 to 10.2)
40703	JUL-16	1004		(970 to 1031)

Model

Micro TPW

S/N

200703026

Calibrated By

Eric Olson

Date of Calibration

4-17-15

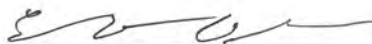
Project Name

VIC

Project number

60314964

Signed :



EQUIPMENT CALIBRATION DAILY LOG

Project Name: <u>UTC Delavan Spray Technologies</u>	Project Number: <u>60314964</u>
Model: <u>Mins Rae 3000</u>	Bulb: <u>10.6</u> meV

PID	Date: <u>4-20-15</u>	Recorded By: <u>Randy Moya</u>				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #: <u>592-90624</u>							
	Parameter	Standard	Exp. Date	Lot #		Time:	Time: <u>1531</u>	Time:
			<u>Oct 17</u>	<u>1739066</u>		Initials:	Initials: <u>RM</u>	Initials:
First Point Calibration	Vapor conc. (ppm)	0.0 (ambient air)	NA	NA	Value:	Value:	Value: <u>0.0</u>	Value:
Second Point Calibration	Vapor conc. (ppm)	<u>100.0</u> ppm (isobutylene)			Value:	Value:	Value: <u>100.3</u>	Value:

PID	Date: <u>4-21-15</u>	Recorded By: <u>Randy Moya</u>				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #: <u>592-90624</u>							
	Parameter	Standard	Exp. Date	Lot #		Time: <u>0720</u>	Time:	Time:
			<u>Oct 2017</u>	<u>1739066</u>		Initials: <u>RM</u>	Initials:	Initials:
First Point Calibration	Vapor conc. (ppm)	0.0 (ambient air)	NA	NA	Value:	Value:	Value: <u>0.0 ppm</u>	Value:
Second Point Calibration	Vapor conc. (ppm)	<u>100.0</u> ppm (isobutylene)			Value:	Value:	Value: <u>100.1 ppm</u>	Value:

PID	Date: <u>4-22-15</u>	Recorded By: <u>Randy Moya</u>				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #: <u>592-90624</u>							
	Parameter	Standard	Exp. Date	Lot #		Time: <u>0730</u>	Time:	Time:
			<u>Oct 2017</u>	<u>1739066</u>		Initials: <u>RM</u>	Initials:	Initials:
First Point Calibration	Vapor conc. (ppm)	0.0 (ambient air)	NA	NA	Value:	Value:	Value: <u>0.0 ppm</u>	Value:
Second Point Calibration	Vapor conc. (ppm)	<u>100.0</u> (isobutylene)			Value:	Value:	Value: <u>100.0 ppm</u>	Value:

PID	Date:	Recorded By:				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #:							
	Parameter	Standard	Exp. Date	Lot #		Time:	Time:	Time:
						Initials:	Initials:	Initials:

EQUIPMENT CALIBRATION DAILY LOG

Project Name: <u>UTC Delavan</u>	Project Number: <u>60314964</u>
Model: <u>M. RAE M. RAE 2000</u>	Bulb: <u>meV</u>

PID	Date: <u>4/20/15</u>	Recorded By: <u>Justin Butler</u>				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #: <u>110-011510</u>							
	Parameter	Standard	Exp. Date	Lot #				
					Time: <u>1526</u>	Time:	Time:	
					Initials: <u>JTB</u>	Initials:	Initials:	
First Point Calibration	Vapor conc. (ppm)	0.0 (ambient air)	NA	NA	Value: <u>0.00</u>	Value:	Value:	
Second Point Calibration	Vapor conc. (ppm)	<u>100.0</u> (isobutylene)	<u>Jan/18</u>	<u>1764782</u>	Value: <u>99.2</u>	Value:	Value:	

PID	Date:	Recorded By:				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #:							
	Parameter	Standard	Exp. Date	Lot #				
					Time: <u>0710</u>	Time:	Time:	
					Initials: <u>JTB</u>	Initials:	Initials:	
First Point Calibration	Vapor conc. (ppm)	0.0 (ambient air)	NA	NA	Value: <u>0.0</u>	Value:	Value:	
Second Point Calibration	Vapor conc. (ppm)	<u>100.0</u> (isobutylene)	<u>Jan/18</u>	<u>1764782</u>	Value: <u>99.6</u>	Value:	Value:	

PID	Date:	Recorded By:				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #:							
	Parameter	Standard	Exp. Date	Lot #				
					Time: <u>0710</u>	Time:	Time:	
					Initials: <u>JTB</u>	Initials:	Initials:	
First Point Calibration	Vapor conc. (ppm)	0.0 (ambient air)	NA	NA	Value: <u>0.0</u>	Value:	Value:	
Second Point Calibration	Vapor conc. (ppm)	<u>100.00</u> (isobutylene)	<u>Jan/18</u>	<u>1764782</u>	Value: <u>99.2</u>	Value:	Value:	

PID	Date:	Recorded By:				Morning Calibration	Evening Check	Additional Calib./Check (if necessary)
	Equipment ID #:							
	Parameter	Standard	Exp. Date	Lot #				
					Time:	Time:	Time:	
					Initials:	Initials:	Initials:	

Project Name: UTC Deblow site
 Project Number: 60314964
 Calibrated By: Randy Morgan
 Signature: Randy Morgan

YSI 556 SN: 0501437AR
 Turbidimeter Model/ISN: MicroTPW 200704141
 Additional Equipment/ISN:
 Date: 4-20-15

Operation Notes:

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

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

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

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

Table 2: Atmospheric Pressure / Altitude Table					
Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)
0	760	1126	730	2290	659
278	752	1413	722	2587	652
558	745	1703	714	2887	644
841	737	1995	707	3190	636

Table 3: DO% Saturation VS. Temperature									
Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	22	8.743	27	7.969	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	752.3		1532	mmHg
Temperature (Saturated Air)	22.18	22.39	1548	c
Temperature (Calibration Solution)	24.12	24.14	1532	c
D.O.	8.34	8.31	1532	mg/L
PH 7	7.14	7.02	1538	SU
PH 4	3.86	4.00	1541	SU
PH 10	9.79	10.00	1544	SU
Specific Conductance	1.288	1.278	1535	mS/cm
ORP	235.5	237.5	1548	mV

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

Project Name: UTC Delovon Spray Technologies
 Project Number: 100314964
 Calibrated By: Randy Morga
 Signature: Randy Morga

YSI 556 SN: 0501439 AR
 Turbidimeter Model/USN: MicroTPW 200704141
 Additional Equipment/USN: _____
 Date: April 21, 2015

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	7.055	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barometric Pressure	755.1		0700	mmHg
Temperature (Saturated Air)	15.06	15.01	0700	c
Temperature (Calibration Solution)	19.05	18.14	0718	c
D.O.	9.91	10.01	0700	mg/L
PH 7	7.09	7.02	0706	SU
PH 4	3.89	4.00	0710	SU
PH 10	9.80	10.01	0714	SU
Specific Conductance	1.266	1.278	0704	mS/cm
ORP	245.9	237.5	0718	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: Randy Morgan
 Signature: Randy Morgan

YSI 556 SN: 0501437AR
 Turbidimeter Model/SN: MicroTPW 200704141
 Additional Equipment/SN:
 Date: 4-22-15

Operation Notes:

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

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

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

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

Table 2: Atmospheric Pressure / Altitude Table					
Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)	Altitude feet (asl)	Pressure (mmHG)
0	760	1126	730	2290	659
278	752	1413	722	2587	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	9.655	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	256.1		0705	mmHg
Temperature (Saturated Air)	13.50	13.68	0705	c
Temperature (Calibration Solution)	17.36	17.29	0724	c
D.O.	10.50	10.34	0705	mg/L
PH 7	7.26	7.02	0713	SU
PH 4	4.25	4.00	0717	SU
PH 10	9.91	10.03	0720	SU
Specific Conductance	1.279	1.278	0709	mS/cm
ORP	2406	237.5	0724	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: Justin Butler

YSI 556 SN: 09A130728
 Turbidimeter Model/SN: MicroTPW 202703026
 Additional Equipment/USN: _____
 Date: 4/26/15

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	3180	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	6.520
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	752.9		1530	mmHg
Temperature (Saturated Air)	23.68	23.52	1545	°C
Temperature (Calibration Solution)	23.19	23.52	1542	°C
D.O.	8.05	8.42	1530	mg/L
PH 7	7.11	7.01	1534	SU
PH 4	3.86	4.00	1537	SU
PH 10	9.71	9.96	1539	SU
Specific Conductance	1.272	1.413	1532	mS/cm
ORP	237.6	231.0	1542	mV

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

Project Name: UTC Dekuon
 Project Number: 60314964
 Calibrated By: Justin Butler
 Signature: [Signature]

YSI 556 SN: 09A130728
 Turbidimeter Model/SN: MicroTPW 200703026
 Additional Equipment/SN: _____
 Date: 4/24/15

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	669
278	752	1413	722	2587	662
558	745	1703	714	2887	664
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	6.520
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	755.9		0713	mmHg
Temperature (Saturated Air)	14.77	14.91	0713	°C
Temperature (Calibration Solution)	17.07	16.98	0723	°C
D.O.	10.11	10.08	0713	mg/L
PH 7	7.10	7.04	0714	SU
PH 4	3.94	4.00	0719	SU
PH 10	9.92	10.07	0721	SU
Specific Conductance	1.100	1.147	0715	mS/cm
ORP	292.1	244.0	0723	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: [Signature]

YSI 556 SN: 09A130728
 Turbidimeter Model/SN: MicroTPW 200703026
 Additional Equipment/SN: _____
 Date: 4/22/15

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					
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5	4.00	7.07	10.19	896.00	257.00
10	4.00	7.06	10.16	1020.00	250.50
15	4.00	7.04	10.10	1147.00	244.00
20	4.00	7.02	10.05	1278.00	237.50
25	4.00	7.01	10.01	1413.00	231.00
30	4.00	6.99	9.96	1548.00	224.50

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

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

Table 3: DO% Saturation VS. Temperature									
Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO	Temp C	DO
15	10.084	20	9.092	25	8.263	30	7.559	35	6.950
16	9.870	21	8.915	26	8.113	31	7.430	36	6.837
17	9.665	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	6.520
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	757.8	[Blacked out]	0719	mmHg
Temperature (Saturated Air)	17.30 46.32 JTB	17.00	0738	C
Temperature (Calibration Solution)	15.66	14.58	0734	C
D.O.	8.35	9.45	0719	mg/L
PH 7	7.12	7.04	0726	SU
PH 4	3.86	4.00	0729	SU
PH 10	9.55	10.06	0732	SU
Specific Conductance	1.155	1.147	0723	mS/cm
ORP	245.2	244.0	0734	mV

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

Photo / Flame-Ionization Detector Calibration Certificate

AECOM

Cal Standard

PID
Isobutylene

Lot #	Expiration	Post-Cal Reading	Acceptable Range
1764782	JAN-18	99.9	98 - 102 ▼

100 ppm ▼

FID
Methane

Lot #	Expiration	Post-Cal Reading	Acceptable Range
	N/A		98 - 102 ▼

100 ppm ▼

Pump Flow mL/min	Acceptable Range
	350 - 450 ▼

Model
Lamp

MINIRAE 21C	▼
10-6	▼

S/N

110 - 011510 ▼

Project Name

UTC

Project #

60314964

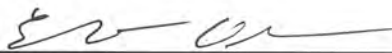
Calibrated By

Eric Olson ▼

Date of Calibration

4-17-15

Signed:



Chain of Custody and Analytical Request

AECOM PO# 56785ACM

Page 1 of 2
Project Number: 60314964
Chain of Custody Number (1): 10272014-01
LIMS Number:

Project Name / Location UTC Delavan Spray Technologies Site, Bamberg SC				Sample Analysis Requested										Quality Assurance Samples			
Client Name: UTC																	
Collected by: R. Morgan, J. Butler		Project Manager: Walter Guadalupe															
Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments	COMP	GRAB	Well	Sample Information	VOLs (B260B)	TOL (S310B)	Nitrate (N.M. 15 (G05))	Nitrite (N.M. 15 (G05))	Metals (G05)	SOLs (G05)	TPH (G05)	COMMENTS	Cooler ID	
MW-21D	20-Apr-2015	1630		X			Groundwater	X									
MW-14	20-Apr-2015	1705		X			"	X									
MW-14-c	20-Apr-2015	1705		X			"	X									
MW-1	20-Apr-2015	1725		X			"	X									
MW-14D	20-Apr-2015	1755		X			"	X									
MW-14D-a	20-Apr-2015	1755		X			"	X									
MW-11	21-Apr-2015	0823		X			"	X	X	X	X						
MW-2	21-Apr-2015	0825		X			"	X	X	X	X						
MW-9D	21-Apr-2015	0925		X			"	X	X	X	X						
MW-6	21-Apr-2015	0935		X			"	X	X	X	X						
MW-4	21-Apr-2015	1030		X			"	X	X	X	X						
MW-4-a	21-Apr-2015	1030		X			"	X									
MW-7	21-Apr-2015	1050		X			"	X	X	X	X						
MW-5	21-Apr-2015	1235		X			"	X									
MW-3	21-Apr-2015	1315		X			"	X									

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time	Delivered Directly to Lab:	Shipped:
Randy Morgan	4-21-15	1500				Method of Shipment: FedEx	Airbill #: 8066 1749 7440
						Analytical Lab: Accutest	Location: Orlando FL
						Lab Recipient:	Date: Time:

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

ALL VOLs by B260B - unpreserved vials - 7 day holding time
Nitrate/Nitrite - 48 hr holding time

AECOM chemist: Dori Cullum
604-234-9938 doria.cullum@aecom.com
52745\admin\project control\project forms\Blank COC

AECOM

Chain of Custody and Analytical Request

 Page 2 of 2
 Project Number: 60314964
 Chain of Custody Number ⁽¹⁾: 10272014-01
 LIMS Number:

Project Name / Location <u>UTC Delavan Spray Technologies Site, Bamberg SC</u>				Sample Analysis Requested										Quality Assurance Samples				
Client Name <u>UTC</u>																		
Collected by <u>R. Morgan, J. Butler</u>		Project Manager <u>Walter Curzel</u> <u>804-234-8925</u>												Cooler ID				
Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information										COMMENTS		
			COMP	GRAB	Well													
<u>MW-19</u>	<u>21-Apr-2015</u>	<u>1255</u>				<u>Groundwater</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>MW-30</u>	<u>21-Apr-2015</u>	<u>1400</u>				<u>"</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>MW-30-ms</u>	<u>21-Apr-2015</u>	<u>1400</u>				<u>"</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>MW-30-ms</u>	<u>21-Apr-2015</u>	<u>1400</u>				<u>"</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>MW-20</u>	<u>21-Apr-2015</u>	<u>1345</u>				<u>"</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>Randy Morgan</u> <u>4-21-15</u>																		

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
Relinquished By (Signed)	Date	Time		Received by (signed)	Date	Time	
<u>Randy Morgan</u>	<u>4-21-15</u>	<u>1500</u>					
1. _____				Delivered Directly to Lab:			
2. _____				Method of Shipment:	<u>FedEx</u>		
3. _____				Analytical Lab:	<u>Accutest</u>		
				Lab Recipient:			
				Shipped:			
				Airbill #:	<u>8066 17497440</u>		
				Location:	<u>Orlando FL</u>		
				Date:			
				Time:			

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

TEL VOCs by 82603 - unpreserved vials - 7 day holding time
 Nitrates/Nitrite - 48 hr holding time

AECOM chemist: Deri Coulton

804-234-8922 deri.coulton@aecom.com

52745 aecom/project control/project forms Blank C-01

AECOM

Chain of Custody and Analytical Request

Adcom PCH 56785ACM

Page 1 of 2

Project Number 00314929

Chain of Custody Number 10272014-01

1005 Number

Project Name - Location

UTC Delamora Spray Technologies Site, Bamberg SC

Client Name

UTC

Collected by

R. Morgan, J. Butler

Project Manager

Walter Curran B25

Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (hh:mm)	See Comments			Sample Information	Analysis Requested	Quality Assurance Samples	Number of
			COMP	GRAB	Full				
MW-8	21-Apr-2015	1450	X			Groundwater			
MW-8-c	21-Apr-2015	1450	X			"			
MW-3D1	21-Apr-2015	1502	X			"			
MW-230	21-Apr-2015	1655	X			"			
MW-12D	21-Apr-2015	1813	X			"			
MW-17	21-Apr-2015	1840	X			"			
MW-22D	22-Apr-2015	0900	X			"			
MW-22D-a	22-Apr-2015	0900	X			"			
MW-16	22-Apr-2015	0920	X			"			
MW-18	22-Apr-2015	1005	X			"			
MW-16D	22-Apr-2015	0958	X			"			
MW-10D	22-Apr-2015	1135	X			"			
MW-15	22-Apr-2015	1200	X			"			
MW-10	22-Apr-2015	1235	X			"			
MW-15D	22-Apr-2015	1240	X			"			

Custody Transfers Prior to Receipt by Laboratory

Sample Delivery Details / Laboratory Receipt

Received by (Signature) Randy May Date 4/22/15 Time 1640

Received by (signature) _____ Date _____ Time _____

Delivered Directly to Lab

Method of Shipment

FedEx

Analytical Lab

Accutest

Lab Receipt

Signature

Airbill #

Location

Date

826612497457

Ocala, FL

Time

AECOM chemist Deri Curran

B25-201-0122 deri.curran@aecom.com

1314 Industrial Blvd., Suite 100, Ocala, FL 34474

1.3 Chain of Custody Transfer - date collected & custody number (e.g. 05-15-2014-01)

ALL VOCs by 82603 - unpreserved vials - 7 day holding time
 ALL SVOCs by 82603 - unpreserved vials - 48 hr holding time

Chain of Custody and Analytical Request

AECOM PO# 56785ACM

Page 1 of 2

Project Number: 101324964

Chain of Custody Number: 10292014-01

LIMS Number:

Project Name: Location

UTC Delavan Spray Technologies Site, Conway SC

Client Name:

UTC

Collected by: R. Morgan, J. Butler

Project Manager: Walter Guard B24-2341-8425

Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	Site Contamination			Sample Information	Analytical Request										Quality Assurance Samples	
			COMP	CRAB	WEL												Crabapple	Crabapple
MW-15DI	22-Apr-2015	1317		X		Groundwater	X											
MW-9	22-Apr-2015	1400		X		"	X											
MW-9-MS	22-Apr-2015	1400		X		"	X											
MW-9-PDS	22-Apr-2015	1400		X		"	X											
MW-21	22-Apr-2015	1450		X		"	X											
MW-13D	22-Apr-2015	1522		X		"	X											
Potable-1	22-Apr-2015	1540		X		"	X											
IDW-1	22-Apr-2015	1555		X		"	X					X	X					

Randy Morgan
4-22-15

Custody Transfer Prior to Receipt by Laboratory

Released By (Signature): Randy Morgan
Date: 4-22-15
Time: 1640

Received by (signature) Date Time

-
-
-

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab

Method of Shipment:

Analytical Lab:

Lab Receipt:

Shipped

Arrival:

Location:

Date:

8266 1949 7451
Orlando, FL

Chain of Custody Number = date collected + custody number (e.g. 01-15-2004-01)

VOCs by 82603 - unpreserved vials - 7 day holding time
Metals by 82603 - unpreserved vials - 7 day holding time

AECOM chemist: Dori Cullum

844-234-5922

dori.cullum@aecom.com

AECOM is an equal opportunity employer. Minorities and women are encouraged to apply.



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) 4/20/15
Field Personnel J Butler
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-1
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions cloudy
Air Temperature 70's ° F
Total Well Depth (TWD) = 18.00 1/100 ft
Depth to Ground Water (DGW) = 10.81 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 7.19 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 1.17 gal
3 Casing Volumes = 3.51 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 2.1 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation _____ 1/100 ft
Height of Riser (above land surface) Flush 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval 3 - 18 1/100 ft
Dedicated Pump or Bailer YES ____ NO ☒ Type ____
Steel Guard Pipe Around Casing YES ☒ NO ____
Locking Cap YES ☒ NO ____
Protective Post/Abutment YES ____ NO ☒
Well Integrity Satisfactory YES ☒ NO ____
Yield LOW ☒ MODERATE ____ HIGH ____
Comments/Observations
Sample Time: 1725
Sample Analytes: VOC
Hook Fe Kit: mg/L TWD: 18.10

* - 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	0.3	0.6	0.9	1.2	1.5	1.8	2.1
VOLUME PURGED (gallons)								
TIME (Military)	1646	1651	1656	1701	1706	1711	1716	1721
Water Level (ft BTOC)	11.18	11.50	11.19	12.05	12.30	12.47	12.60	12.75
pH (S.U.)	4.93	2.97	3.35	3.63	3.79	3.84	3.85	3.87
Sp. Cond. (mS/cm)	0.047	0.046	0.046	0.046	0.046	0.046	0.046	0.046
Water Temp. (°C)	19.02	18.77	18.68	18.69	18.73	18.73	18.71	18.70
Turbidity (NTUs)	13.53	9.36	9.14	7.07	6.80	4.83	4.68	5.26
DO - (mg/L)	5.09	4.83	5.02	5.30	5.25	5.19	5.09	5.13
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
ORP (mV)	377.1	484.5	471.5	460.7	449.6	444.8	445.6	447.2

COMMENTS/OBSERVATIONS

Began purging at 1643 Purging rate: 240 ml/minBreathing Zone: 0.0 ppmWell Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) <u>4/21/15</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 _____ 1/100 ft
AECOM Job # <u>60314964</u>	Height of Riser (above land surface) <u>Flush</u> 1/100 ft
Sample ID* <u>MW-2</u>	Land Surface Elevation _____ 1/100 ft
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source	Screened Interval <u>3</u> - <u>18</u> 1/100 ft
Weather Conditions <u>Clear</u>	Dedicated Pump or Bailer YES ____ NO ☒ Type ____
Air Temperature <u>50's</u> ° F	Steel Guard Pipe Around Casing YES ☒ NO ____
Total Well Depth (TWD) = <u>18.00</u> 1/100 ft	Locking Cap YES ☒ NO ____
Depth to Ground Water (DGW) = <u>9.61</u> 1/100 ft	Protective Post/Abutment YES ____ NO ☒
Length of Water Column (LWC) = TWD - DGW = <u>8.36</u> 1/100 ft	Well Integrity Satisfactory YES ☒ NO ____
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>1.36</u> gal	Yield LOW ____ MODERATE ☒ HIGH ____
3 Casing Volumes = <u>4.08</u> gal = Standard Evacuation Volume	Comments/Observations
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>	Sample Time: <u>0825</u>
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>	Sample Analytes: <u>VOC/MNIA</u> TWP: <u>18.45</u>
Total Volume of Water Removed <u>32</u> gal	Hack Fe Kit: <u>0.08</u> mg/L

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

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

FIELD ANALYSES

VOLUME PURGED (gallons)	Initial	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2		
TIME (Military)	0740	0745	0750	0755	0800	0805	0810	0815	0820		
Water Level (ft BTOC)	9.65	9.65	9.67	9.65	9.67	9.67	9.67	9.68	9.68		
pH (S.U.)	4.82	4.36	4.32	4.28	4.24	4.22	4.17	4.16	4.14		
Sp. Cond. (mS/cm)	0.038	0.036	0.035	0.035	0.035	0.035	0.035	0.034	0.034		
Water Temp. (°C)	18.24	18.42	18.53	18.62	18.62	18.68	18.72	18.76	18.79		
Turbidity (NTUs)	13.94	16.67	11.65	6.10	4.92	3.33	5.39	2.53	1.96		
DO - (mg/L)	6.28	6.24	6.10	6.21	6.34	6.53	6.62	6.57	6.52		
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01		
ORP (mV)	320.4	347.5	371.1	385.3	394.1	399.3	403.7	407.2	409.1		

COMMENTS/OBSERVATIONS

Began purging at 0737 Purging rate: 320 ml/minBreathing Zone: 0.0 ppmWell Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 21, 2015
 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 72 ° F
 Total Well Depth (TWD) = 49.00 1/100 ft
 Depth to Ground Water (DGW) = 13.50 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 35.50 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 5.78 gal
 3 Casing Volumes = 17.35 gal = Standard Evacuation Volume
 Method of Sample Evacuation Purge with Peristaltic Pump
 Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
 Total Volume of Water Removed 2.0 gal

Casing Diameter 2.0 inches
 Casing Material PVC
 Measuring Point Elevation _____ 1/100 ft
 Height of Riser (above land surface) _____ 1/100 ft
 Land Surface Elevation _____ 1/100 ft
 Screened Interval 44 - 49 1/100 ft
 Dedicated Pump or Bailer YES _____ NO X Type _____
 Steel Guard Pipe Around Casing YES X NO _____
 Locking Cap YES X NO _____
 Protective Post/Abutment YES _____ NO X
 Well Integrity Satisfactory YES X NO _____
 Yield LOW _____ MODERATE _____ HIGH X
 Comments/Observations
 Sample Time: 1400
 Sample Analytes: VOC'S MS/MSD
 Hack Fe Kit: _____ mg/L TWD 48.08

* - 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)	1332	1337	1342	1347	1352	1357						
TIME (Military)	13.50	13.50	13.50	13.50	13.50	13.50						
Water Level (ft BTOW)	6.73	7.19	7.37	7.43	7.46	7.49						
pH (S.U.)	0.222	0.224	0.225	0.224	0.224	0.224						
Sp. Cond. (mS/cm)	21.35	21.56	21.50	21.46	21.47	21.39						
Water Temp. (°C)	43.66	15.68	4.71	5.10	2.50	2.66						
Turbidity (NTUs)	3.58	2.99	2.94	3.04	3.03	3.24						
DO - (mg/L)	0.11	0.11	0.11	0.11	0.11	0.11						
Salinity (ppt)	84.0	60.2	48.0	42.6	39.2	36.4						
ORP (mV)												

COMMENTS/OBSERVATIONS

Began purging at 1325 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 2.8 ppm

1327 empty flow thru cell due to muddy water

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) <u>April 24, 2015</u>		Casing Diameter <u>2.0</u> inches	
Field Personnel _____		Casing Material <u>PVC</u>	
Site Name <u>UTC Delavan Spray Technologies Site</u>		Measuring Point Elevation _____ 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) _____ 1/100 ft	
Sample ID* <u>MW-3D1</u>		Land Surface Elevation _____ 1/100 ft	
_____ Upgradient _____ Downgradient _____ Sidegradient _____ Source		Screened Interval <u>75 - 85</u> 1/100 ft	
Weather Conditions <u>clear / sunny</u>		Dedicated Pump or Bailor YES _____ NO <u>X</u> Type _____	
Air Temperature <u>74</u> ° F		Steel Guard Pipe Around Casing YES <u>X</u> NO _____	
Total Well Depth (TWD) = <u>85.00</u> 1/100 ft		Locking Cap YES <u>X</u> NO _____	
Depth to Ground Water (DGW) = <u>13.29</u> 1/100 ft		Protective Post/Abutment YES _____ NO <u>X</u>	
Length of Water Column (LWC) = TWD - DGW = <u>71.71</u> 1/100 ft		Well Integrity Satisfactory YES <u>X</u> NO _____	
1 Casing Volume (OCV)* = LWC x 0.163 = <u>11.68</u> gal		Yield LOW _____ MODERATE _____ HIGH <u>X</u>	
3 Casing Volumes = <u>35.04</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		<u>Sample Time: 1502</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		<u>Sample Analytes: VOC'S</u>	
Total Volume of Water Removed <u>2.80</u> gal		<u>Hack Fe Kit: _____ mg/L</u> <u>TWD 84.85</u>	

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

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

	FIELD ANALYSES							
	Initial	.40	.80	1.20	1.60	2.0	2.4	2.80
VOLUME PURGED (gallons)								
TIME (Military)	<u>1425</u>	<u>1430</u>	<u>1435</u>	<u>1440</u>	<u>1445</u>	<u>1450</u>	<u>1455</u>	<u>1500</u>
Water Level (ft BTOC)	<u>13.34</u>	<u>13.35</u>	<u>13.35</u>	<u>13.35</u>	<u>13.35</u>	<u>13.35</u>	<u>13.35</u>	<u>13.35</u>
pH (S.U.)	<u>7.60</u>	<u>7.60</u>	<u>7.59</u>	<u>7.58</u>	<u>7.58</u>	<u>7.60</u>	<u>7.59</u>	<u>7.60</u>
Sp. Cond. (mS/cm)	<u>0.220</u>	<u>0.220</u>	<u>0.220</u>	<u>0.220</u>	<u>0.221</u>	<u>0.221</u>	<u>0.221</u>	<u>0.221</u>
Water Temp. (°C)	<u>21.54</u>	<u>21.23</u>	<u>20.83</u>	<u>20.84</u>	<u>20.79</u>	<u>20.72</u>	<u>20.73</u>	<u>20.76</u>
Turbidity (NTUs)	<u>0.30</u>	<u>0.54</u>	<u>2.27</u>	<u>2.32</u>	<u>1.88</u>	<u>1.71</u>	<u>1.24</u>	<u>1.94</u>
DO - (mg/L)	<u>3.89</u>	<u>0.71</u>	<u>0.28</u>	<u>0.22</u>	<u>0.20</u>	<u>0.21</u>	<u>0.20</u>	<u>0.18</u>
Salinity (ppt)	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>	<u>0.10</u>
ORP (mV)	<u>-16.6</u>	<u>-55.8</u>	<u>-75.4</u>	<u>-103.6</u>	<u>-114.8</u>	<u>-127.4</u>	<u>-135.9</u>	<u>-140.6</u>

COMMENTS/OBSERVATIONS Began purging at 1422 Purging rate: 250 ml/min Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 21 2013

Field Personnel Randy Morgan

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-4

Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source ☐

Weather Conditions clear/sunny

Air Temperature 64 ° F

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

Depth to Ground Water (DGW) = 4.63 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 9.37 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.163 = 1.53 gal

3 Casing Volumes = 4.58 gal = Standard Evacuation Volume

Method of Sample Evacuation Purge with Peristaltic Pump

Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S

Total Volume of Water Removed 2.80 gal

Casing Diameter 2.0 inches

Casing Material PVC

Measuring Point Elevation _____ 1/100 ft

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

Land Surface Elevation _____ 1/100 ft

Screened Interval 4 - 14 1/100 ft

Dedicated Pump or Bailer YES ☐ NO ☒ Type _____

Steel Guard Pipe Around Casing YES ☒ NO ☐ Bolts broken off

Locking Cap YES ☒ NO ☐

Protective Post/Abutment YES ☐ NO ☒

Well Integrity Satisfactory YES ☒ NO ☐

Yield LOW ☐ MODERATE ☒ HIGH ☐

Comments/Observations

Sample Time: 1030 dup. VOC'S

Sample Analytes: VOC'S MNA = NO2, NO3, SO4, CHL, RSK MEA

Hack Fe Kit: 23.30 mg/L TWD 13.98

* - 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	1.35	1.70	1.05	1.40	1.75	2.10	2.45	2.80	
VOLUME PURGED (gallons)	0948	0953	0958	1003	1008	1013	1018	1023	1028	
TIME (Military)	4.91	5.08	5.35	5.58	5.78	5.94	6.07	6.18	6.33	
Water Level (ft BTOC)	5.96	5.48	5.03	5.14	5.13	5.11	5.11	5.11	5.09	
pH (S.U.)	0.187	0.187	0.187	0.187	0.184	0.182	0.180	0.178	0.176	
Sp. Cond. (mS/cm)	16.02	15.86	15.91	15.94	15.94	15.95	15.96	15.98	15.96	
Water Temp. (°C)	52.47	51.25	46.24	50.43	54.11	50.52	52.01	50.89	48.52	
Turbidity (NTUs) (cloudy)	2.82	0.61	0.51	0.83	1.04	1.25	1.26	1.24	1.17	
DO - (mg/L)	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	
Salinity (ppt)	-166.4	-169.7	-163.3	-169.9	-155.6	-147.9	-147.8	-147.2	-145.2	
ORP (mV)										

COMMENTS/OBSERVATIONS

Began purging at 0945 Purging rate: 225 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 24, 2015

Field Personnel Randy Morgan

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-5

☐ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source

Weather Conditions Clear/Sunny

Air Temperature 69 ° F

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

Depth to Ground Water (DGW) = 4.97 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 9.03 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.163 = 1.47 gal

3 Casing Volumes = 4.41 gal = Standard Evacuation Volume

Method of Sample Evacuation Purge with Peristaltic Pump

Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S

Total Volume of Water Removed 2.80 gal

Casing Diameter 2.0 inches

Casing Material PVC

Measuring Point Elevation _____ 1/100 ft

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

Land Surface Elevation _____ 1/100 ft

Screened Interval 4 - 14 1/100 ft

Dedicated Pump or Bailer YES ☐ NO ☒ Type _____

Steel Guard Pipe Around Casing YES ☒ NO ☐

Locking Cap YES ☒ NO ☐

Protective Post/Abutment YES ☐ NO ☒

Well Integrity Satisfactory YES ☒ NO ☐

Yield LOW ☒ MODERATE ☐ HIGH ☒

Comments/Observations _____

Sample Time: 1235

Sample Analytes: VOC'S

Hack Fe Kit: — mg/L TWD 14.18

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.
Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

	FIELD ANALYSES							
	Initial	.40	.80	1.20	1.60	2.0	2.40	2.80
VOLUME PURGED (gallons)								
TIME (Military)	<u>1159</u>	<u>1204</u>	<u>1209</u>	<u>1214</u>	<u>1219</u>	<u>1223</u>	<u>1228</u>	<u>1233</u>
Water Level (ft BTOC)	<u>5.13</u>	<u>5.28</u>	<u>5.38</u>	<u>5.45</u>	<u>5.40</u>	<u>5.39</u>	<u>5.43</u>	<u>5.42</u>
pH (S.U.)	<u>4.72</u>	<u>4.28</u>	<u>4.07</u>	<u>4.03</u>	<u>4.13</u>	<u>4.13</u>	<u>4.12</u>	<u>4.11</u>
Sp. Cond. (mS/cm)	<u>0.022</u>	<u>0.020</u>	<u>0.020</u>	<u>0.020</u>	<u>0.020</u>	<u>0.020</u>	<u>0.020</u>	<u>0.020</u>
Water Temp. (°C)	<u>18.85</u>	<u>18.51</u>	<u>18.26</u>	<u>18.35</u>	<u>18.40</u>	<u>18.49</u>	<u>18.32</u>	<u>18.20</u>
Turbidity (NTUs)	<u>7.11</u>	<u>7.28</u>	<u>3.71</u>	<u>2.94</u>	<u>3.40</u>	<u>3.33</u>	<u>2.64</u>	<u>3.41</u>
DO - (mg/L)	<u>8.47</u>	<u>7.61</u>	<u>7.93</u>	<u>7.84</u>	<u>7.45</u>	<u>7.59</u>	<u>7.54</u>	<u>7.46</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>
ORP (mV)	<u>3.4</u>	<u>70.7</u>	<u>137.6</u>	<u>150.7</u>	<u>168.1</u>	<u>175.0</u>	<u>184.4</u>	<u>189.4</u>

COMMENTS/OBSERVATIONS

Began purging at 1156 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) 4/21/15
Field Personnel J Butler
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-6
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions clear
Air Temperature 60's ° F
Total Well Depth (TWD) = 14.00 1/100 ft
Depth to Ground Water (DGW) = 2.2 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 11.8 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 1.92 gal
3 Casing Volumes = 5.76 gal = Standard Evacuation Volume
Method of Sample Evacuation Purge with Peristaltic Pump
Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
Total Volume of Water Removed 3.6 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation _____ 1/100 ft
Height of Riser (above land surface) Flush 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval 4 - 14 1/100 ft
Dedicated Pump or Bailer YES ____ NO ☒ Type ____
Steel Guard Pipe Around Casing YES ☒ NO ____
Locking Cap YES ☒ NO ____
Protective Post/Abutment YES ____ NO ☒
Well Integrity Satisfactory YES ☒ NO ____
Yield LOW ____ MODERATE ____ HIGH X
Comments/Observations
Sample Time: 0935
Sample Analytes: VOC/MNA TWP: 3.92
Hack Fe Kit: 0.02 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	3.2	3.6
TIME (Military)	0849	0851	0859	0901	0909	0914	0919	0924	0929	0934
Water Level (ft BTOC)	2.90	2.95	3.00	3.02	3.04	3.05	3.05	3.07	3.08	3.08
pH (S.U.)	4.18	2.67	2.87	3.34	3.43	3.51	3.52	3.49	3.50	3.51
Sp. Cond. (mS/cm)	0.022	0.022	0.022	0.023	0.023	0.024	0.023	0.023	0.023	0.023
Water Temp. (°C)	16.69	16.49	16.59	16.63	16.68	16.67	16.65	16.66	16.68	16.70
Turbidity (NTUs)	17.89	9.26	9.83	6.01	5.15	5.19	4.70	4.86	4.56	4.77
DO - (mg/L)	5.20	4.21	4.06	3.98	3.93	3.80	3.89	3.85	3.89	3.88
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
ORP (mV)	377.5	418.9	468.1	444.8	431.5	378.9	354.8	330.6	322.7	318.4

COMMENTS/OBSERVATIONS Began purging at 0845 Purging rate: 310 ml/minBreathing Zone: 0.0 ppmWell Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/21/15		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-7		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions Clear			
Air Temperature	50's °F		
Total Well Depth (TWD) =	20.00	1/100 ft	
Depth to Ground Water (DGW) =	12.88	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	7.12	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	1.16 gal
3 Casing Volumes =	3.48	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	gal		

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Height of Riser (above land surface)	Flush	1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	5 - 20	1/100 ft
Dedicated Pump or Bailor	YES ☐ NO ☒	Type
Steel Guard Pipe Around Casing	YES ☒ NO ☐	
Locking Cap	YES ☒ NO ☐	
Protective Post/Abutment	YES ☐ NO ☒	
Well Integrity Satisfactory	YES ☒ NO ☐	
Yield	LOW ☒ MODERATE ☐ HIGH ☐	
Comments/Observations		
Sample Time: 1050		
Sample Analytes: VOC/MNA TWD: 19.86		
Hack Fe Kit: 0.01 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	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25
TIME (Military)	1002	1007	1012	1017	1022	1027	1032	1037	1042	1047
Water Level (ft BTWC)	13.33	13.70	14.25	14.68	14.95	15.14	15.42	15.56	15.78	15.88
pH (S.U.)	4.03	3.90	3.87	3.96	4.12	4.22	4.24	4.30	4.32	4.32
Sp. Cond. (mS/cm)	0.019	0.019	0.019	0.019	0.018	0.019	0.019	0.019	0.019	0.020
Water Temp. (°C)	18.70	18.54	18.60	18.78	18.95	19.08	19.22	19.39	19.51	19.59
Turbidity (NTUs)	5.83	5.60	4.70	3.75	3.49	3.82	2.48	2.95	4.72	5.28
DO - (mg/L)	7.59	8.73	8.97	7.93	7.45	7.32	7.66	7.90	7.74	7.79
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
ORP (mV)	357.0	369.8	376.2	370.0	358.4	353.9	353.6	350.0	348.1	350.7

COMMENTS/OBSERVATIONS Began purging at 1600 Purging rate: 200 ml/min Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/21/15		
Field Personnel	J. Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-8		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions clear			
Air Temperature	70's ° F		
Total Well Depth (TWD) =	20.00	1/100 ft	
Depth to Ground Water (DGW) =	10.06	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	9.94	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	= 1.62	gal
3 Casing Volumes =	4.86	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.10 gal		

Casing Diameter	2.0	inches
Casing Material	PVC	
Measuring Point Elevation		1/100 ft
Height of Riser (above land surface)	Flush	1/100 ft
Land Surface Elevation		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: 1450		
Sample Analytes: VOC		
Hach Fe Kit: 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	0.35	0.70	1.05	1.40	1.75	2.10
TIME (Military)	1417	1422	1427	1432	1437	1442	1447
Water Level (ft BTOC)	10.33	10.54	10.68	10.74	10.81	10.84	10.87
pH (S.U.)	4.25	4.01	4.11	4.13	4.13	4.13	4.14
Sp. Cond. (mS/cm)	0.042	0.040	0.044	0.046	0.048	0.049	0.049
Water Temp. (°C)	22.41	21.68	21.68	21.61	21.42	21.57	21.52
Turbidity (NTUs)	5.32	2.16	1.69	0.99	0.17	1.58	1.30
DO - (mg/L)	3.89	2.90	3.25	3.19	4.21	4.24	4.29
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02
ORP (mV)	390.7	412.1	402.7	406.8	407.4	406.9	407.6

COMMENTS/OBSERVATIONS Began purging at 1415 Purging rate: 280 ml/min Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/22/15		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-9		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	Clear		
Air Temperature	70's ° F		
Total Well Depth (TWD) =	20.00	1/100 ft	
Depth to Ground Water (DGW) =	4.54	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	15.46	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	2.52 gal
3 Casing Volumes =	7.56	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	3.15 gal		

Casing Diameter	2.0		inches
Casing Material	PVC		
Measuring Point Elevation	1/100 ft		
Height of Riser (above land surface)	Ftosh 1/100 ft		
Land Surface Elevation	1/100 ft		
Screened Interval	5	-	20 1/100 ft
Dedicated Pump or Bailor	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	X MODERATE	HIGH
Comments/Observations			
Sample Time:	1400		
Sample Analytes:	VOC MS/MSD VOC'S TWD: 19.73		
Hack-Fe-Kit:	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	0.35	0.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15
TIME (Military)	1311	1316	1321	1326	1331	1336	1341	1346	1351	1356
Water Level (ft BTOW)	5.02	5.18	5.33	5.38	5.43	5.48	5.51	5.53	5.53	5.57
pH (S.U.)	4.50	4.21	4.07	4.12	4.16	4.18	4.06	4.21	4.22	4.20
Sp. Cond. (mS/cm)	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
Water Temp. (°C)	20.28	18.76	18.15	18.01	18.47	18.59	17.96	18.37	18.38	18.41
Turbidity (NTUs)	9.35	4.02	4.45	4.00	2.96	5.18	6.00	6.26	4.71	2.49
DO - (mg/L)	3.49	2.89	2.83	2.88	2.77	2.74	2.86	2.59	2.57	2.55
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
ORP (mV)	332.6	343.4	348.1	338.5	365.6	208.9	196.0	179.6	174.1	175.9

COMMENTS/OBSERVATIONS

Began purging at 1308 Purging rate: 280 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) <u>April 21, 2015</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 _____ 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) _____ 1/100 ft	
Sample ID* <u>MW-9D</u>		Land Surface Elevation _____ 1/100 ft	
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source		Screened Interval <u>44</u> - <u>49</u> 1/100 ft	
Weather Conditions <u>clear / sunny</u>		Dedicated Pump or Bailer YES ____ NO <u>X</u> Type ____	
Air Temperature <u>58</u> ° F		Steel Guard Pipe Around Casing YES <u>X</u> NO ____	
Total Well Depth (TWD) = <u>49.00</u> 1/100 ft		Locking Cap YES ____ NO ____	
Depth to Ground Water (DGW) = <u>8.93</u> 1/100 ft		Protective Post/Abutment YES ____ NO <u>X</u>	
Length of Water Column (LWC) = TWD - DGW = <u>40.07</u> 1/100 ft		Well Integrity Satisfactory YES <u>X</u> NO ____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.53</u> gal		Yield LOW ____ MODERATE <u>X</u> HIGH ____	
3 Casing Volumes = <u>19.59</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		Sample Time: <u>0925</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC'S MNA = NO2, NO3, SO4, CHL, RSR, MEI</u>	
Total Volume of Water Removed <u>2.40</u> gal		Hack Fe Kit: <u>0.08</u> mg/L <u>TD 47.55</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	2.40
VOLUME PURGED (gallons)							
TIME (Military)	0853	0858	0903	0908	0913	0918	0923
Water Level (ft BTOC)	8.95	8.95	8.96	8.95	8.95	8.95	8.95
pH (S.U.)	6.65	7.03	7.24	7.38	7.44	7.47	7.49
Sp. Cond. (mS/cm)	0.209	0.209	0.209	0.209	0.209	0.209	0.209
Water Temp. (°C)	17.21	17.33	17.49	17.55	17.68	17.71	17.71
Turbidity (NTUs)	74.89	30.92	8.72	3.29	1.59	2.17	1.94
DO - (mg/L)	0.72	0.48	0.33	0.32	0.28	0.26	0.25
Salinity (ppt)	0.10	0.10	0.10	0.10	0.10	0.10	0.10
ORP (mV)	-64.8	-76.7	-88.3	-99.5	-105.4	-109.8	-112.8

COMMENTS/OBSERVATIONS Began purging at 0850 Purging rate: 250 ml/min Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/22/15		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-10		
_____ Upgradient _____ Downgradient _____ Sidegradient _____ Source			
Weather Conditions	Clear		
Air Temperature	70's ° F		
Total Well Depth (TWD) =	18.00		1/100 ft
Depth to Ground Water (DGW) =	2.47		1/100 ft
Length of Water Column (LWC) = TWD - DGW =	15.53		1/100 ft
1 Casing Volume (OCV)* = LWC x	0.163	=	2.53 gal
3 Casing Volumes =	7.59	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	3.40 gal		

Casing Diameter	2.0		inches
Casing Material	PVC		
Measuring Point Elevation	1/100 ft		
Height of Riser (above land surface)	Flush		1/100 ft
Land Surface Elevation	1/100 ft		
Screened Interval	3 - 18		1/100 ft
Dedicated Pump or Bailer	YES _____ NO ☒	Type	
Steel Guard Pipe Around Casing	YES ☒ NO _____		
Locking Cap	YES ☒ NO _____		
Protective Post/Abutment	YES _____ NO ☒		
Well Integrity Satisfactory	YES ☒ NO _____		
Yield	LOW ☒ MODERATE _____ HIGH _____		
Comments/Observations			
Sample Time:	12:35		
Sample Analytes:	VOC TWD: 18.30		
Hack Fe Kit:	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	0.35	0.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15	3.40
TIME (Military)	1144	1149	1154	1159	1204	1209	1214	1219	1224	1239	1234
Water Level (ft BTOC)	2.91	2.96	2.98	3.01	3.02	3.03	3.04	3.04	3.04	3.04	3.04
pH (S.U.)	5.89	4.57	4.35	4.26	4.14	4.14	4.08	4.09	4.12	4.14	4.13
Sp. Cond. (mS/cm)	0.031	0.029	0.028	0.028	0.028	0.028	0.027	0.027	0.027	0.027	0.027
Water Temp. (°C)	12.57	16.93	16.66	16.58	16.54	16.55	16.47	16.49	16.51	16.65	16.70
Turbidity (NTUs)	8.40	11.61	5.44	3.49	2.96	2.94	2.84	2.65	2.24	2.11	2.05
DO - (mg/L)	2.32	1.65	1.81	2.26	2.55	2.72	2.76	2.66	2.65	2.56	2.50
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)	286.5	323.8	347.0	359.0	367.3	368.2	359.4	343.2	320.3	307.7	304.2

COMMENTS/OBSERVATIONS

Began purging at 1141 Purging rate: 280 ml/min

Breathing Zone: 20 ppm

Well Head: 2.3 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/22/15		
Field Personnel	J. Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-10D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	Clear		
Air Temperature	60's	° F	
Total Well Depth (TWD) =	48.00	1/100 ft	
Depth to Ground Water (DGW) =	6.75	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	41.25	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	6.72 gal
3 Casing Volumes =	20.16	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		1/100 ft
Height of Riser (above land surface)	Flush	1/100 ft
Land Surface Elevation		1/100 ft
Screened Interval	43 - 48	1/100 ft
Dedicated Pump or Bailer	YES NO	Type
Steel Guard Pipe Around Casing	YES NO	
Locking Cap	YES NO	
Protective Post/Abutment	YES NO	
Well Integrity Satisfactory	YES NO	
Yield	LOW MODERATE X HIGH	
Comments/Observations		
Sample Time:	1135	
Sample Analytes:	VOC	
Hack Fe Kit:	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					
TIME (Military)	1105	1110	1115	1120	1125	1130					
Water Level (ft BTOC)	6.90	6.90	6.90	6.90	6.90	6.90					
pH (S.U.)	6.80	7.21	7.48	7.58	7.59	7.60					
Sp. Cond. (mS/cm)	0.201	0.202	0.202	0.202	0.202	0.202					
Water Temp. (°C)	18.66	18.37	18.30	18.35	18.35	18.43					
Turbidity (NTUs)	7.59	7.25	4.97	2.94	2.61	1.96					
DO - (mg/L)	5.47	4.70	4.46	4.40	4.35	4.45					
Salinity (ppt)	0.10	0.10	0.10	0.10	0.10	0.10					
ORP (mV)	210.2	238.3	228.7	222.1	215.0	210.5					

COMMENTS/OBSERVATIONS Began purging at 1100 Purging rate: 240 ml/min Breathing Zone: 0.00 ppm
Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 21, 2015

Field Personnel Randy M. Gagnier

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-11

Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source ☐

Weather Conditions clear/sunny

Air Temperature 57 °F

Total Well Depth (TWD) = 18.00 1/100 ft

Depth to Ground Water (DGW) = 6.49 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 11.51 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.163 = 1.87 gal

3 Casing Volumes = 5.62 gal = Standard Evacuation Volume

Method of Sample Evacuation Purge with Peristaltic Pump

Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S

Total Volume of Water Removed 2.80 gal

Casing Diameter 2.0 inches

Casing Material PVC

Measuring Point Elevation _____ 1/100 ft

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

Land Surface Elevation _____ 1/100 ft

Screened Interval 3 - 18 1/100 ft

Dedicated Pump or Bailer YES ☐ NO ☒ Type _____

Steel Guard Pipe Around Casing YES ☒ NO ☐

Locking Cap YES ☒ NO ☐

Protective Post/Abutment YES ☐ NO ☒

Well Integrity Satisfactory YES ☒ NO ☐

Yield LOW ☐ MODERATE ☐ HIGH ☒

Comments/Observations _____

Sample Time: 0823

Sample Analytes: VOC'S MNA = ND2, ND3, SD4, CHL, RSK MEE

Hack Fe Kit: 0.97 mg/L TWD 18.23

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

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

	FIELD ANALYSES							
	Initial	1.40	1.80	1.20	1.60	2.0	2.40	2.80
VOLUME PURGED (gallons)								
TIME (Military)	0745	0750	0755	0800	0805	0810	0815	0820
Water Level (ft BTOC)	6.68	6.75	6.83	6.83	6.84	6.84	6.86	6.87
pH (S.U.)	5.56	4.77	4.70	4.71	4.71	4.71	4.71	4.71
Sp. Cond. (mS/cm)	0.370	0.371	0.361	0.347	0.344	0.338	0.336	0.337
Water Temp. (°C)	15.43	15.47	15.46	15.42	15.44	15.48	15.48	15.48
Turbidity (NTUs)	97.06	87.30	35.26	16.52	8.16	5.83	5.41	5.29
DO - (mg/L)	4.53	0.48	0.52	1.09	1.18	1.29	1.35	1.37
Salinity (ppt)	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16
ORP (mV)	124.8	123.8	-25.6	-55.3	-66.8	-74.5	-75.7	-77.0

COMMENTS/OBSERVATIONS Began purging at 0742 Purging rate: 2.4 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 21, 2015

Field Personnel Randy Morgan

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-12D

☐ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source

Weather Conditions Clear Sunny

Air Temperature 76 °F

Total Well Depth (TWD) = 50.00 1/100 ft

Depth to Ground Water (DGW) = 13.05 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 36.95 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.163 = 6.02 gal

3 Casing Volumes = 18.06 gal = Standard Evacuation Volume

Method of Sample Evacuation Purge with Peristaltic Pump

Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S

Total Volume of Water Removed 7.60 gal

Casing Diameter 2.0 inches

Casing Material PVC

Measuring Point Elevation _____ 1/100 ft

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

Land Surface Elevation _____ 1/100 ft

Screened Interval 40 - 50 1/100 ft

Dedicated Pump or Bailer YES ☐ NO ☒ Type _____

Steel Guard Pipe Around Casing YES ☒ NO ☐

Locking Cap YES ☒ NO ☐

Protective Post/Abutment YES ☐ NO ☒

Well Integrity Satisfactory YES ☒ NO ☐

Yield LOW ☐ MODERATE ☐ HIGH ☒

Comments/Observations

Sample Time: 1813

Sample Analytes: VOC'S

Hack Fe Kit: _____ mg/L

TWD 49.97

* - 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 <u>*Turn Pump down</u>										
VOLUME PURGED (gallons)	Initial	1.0	2.0	3.0	4.0	4.4	4.8	5.20	5.60	6.0	6.40
TIME (Military)	1641	1651	1701	1711	1721	1726	1731	1736	1741	1746	1751
Water Level (ft BTOC)	1410	16.53	16.95	16.95	16.93	16.05	15.24	14.83	14.70	14.68	14.71
pH (S.U.)	12.10	11.94	11.55	10.78	10.17	10.28	10.19	10.00	9.91	9.81	9.61
Sp. Cond. (mS/cm)	1.675	1.371	0.654	0.322	0.259	0.267	0.260	0.249	0.244	0.240	0.235
Water Temp. (°C)	18.54	18.28	18.25	18.27	18.27	18.32	18.35	18.33	18.31	18.29	18.31
Turbidity (NTUs)	10.29	6.25	3.34	6.16	3.92	5.88	3.56	3.86	3.59	3.73	3.66
DO - (mg/L)	8.53	6.80	6.50	6.07	5.85	5.66	5.50	5.12	4.92	4.97	4.91
Salinity (ppt)	0.85	0.68	0.31	0.15	0.12	0.13	0.12	0.12	0.12	0.11	0.11
ORP (mV)	-137.9	-111.9	-97.3	-73.4	-53.9	-55.8	-53.6	-47.3	-42.6	-38.1	-30.7

COMMENTS/OBSERVATIONS

Began purging at 1654 Start @ 10 gpm
Purging rate: 250 ml/min Finish at 1751
Ph and Conductivity are high, stabilize after 5 gals

Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Site Name <u>UTC Delavan Spray Technologies Site, Bamberg, SC</u> AECOM Job # <u>60314964</u> Sample ID* <u>MW-12D</u>	Date (mo/day/yr) <u>April 21 2015</u> Field Personnel <u>Randy Margo</u> Comments/Observations: _____
--	---

FIELD ANALYSES							
VOLUME PURGED (gallons)	6.80	7.20	7.60				
TIME (Military)	1756+804	1801	1811				
Water Level (ft. BTOC)	14.76	14.82	14.82				
pH (S.U.)	9.56	9.61	9.65				
Sp. Cond. (mS/cm)	0.234	0.235	0.236				
Water Temp. (°C)	18.28	18.28	18.30				
Turbidity (NTUs)	3.65	5.16	3.83				
Dissolved Oxygen (mg/L)	4.83	4.81	4.81				
Salinity (ppt)	0.11	0.11	0.11				
ORP (mV)	-27.8	-28.3	-29.1				

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

COMMENTS/OBSERVATIONS _____



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	April 22, 2015		
Field Personnel	Randy Mergo		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-13D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions: clear / sunny			
Air Temperature	78 ° F		
Total Well Depth (TWD) =	50.00	1/100 ft	
Depth to Ground Water (DGW) =	11.86	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	38.14	1/100 ft	
1 Casing Volume (OCV)* = LWC x 0.163	= 6.21	gal	
3 Casing Volumes =	18.65	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	1/100 ft		
Height of Riser (above land surface)	1/100 ft		
Land Surface Elevation	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:	1522		
Sample Analytes:	VOC'S		
Hack Fe Kit:	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)	1449	1455	1500	1505	1510	1515	1520				
Water Level (ft BTOC)	11.88	11.88	11.88	11.88	11.88	11.88	11.88				
pH (S.U.)	8.03	7.82	7.73	7.65	7.62	7.60	7.56				
Sp. Cond. (mS/cm)	0.197	0.203	0.210	0.215	0.218	0.220	0.220				
Water Temp. (°C)	21.32	20.39	20.33	20.05	20.29	20.11	20.07				
Turbidity (NTUs)	252.3	35.01	15.17	12.44	7.74	6.35	6.22				
DO - (mg/L)	6.65	4.45	4.43	4.42	4.53	4.69	4.52				
Salinity (ppt)	0.09	0.10	0.10	0.10	0.10	0.10	0.10				
ORP (mV)	-81.9	-52.7	-45.7	-37.9	-33.3	-28.5	-26.8				

COMMENTS/OBSERVATIONS

Began purging at 1447 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.2 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 20, 2015
 Field Personnel Randy Morgan
 Site Name UTC Delavan Spray Technologies Site
 AECOM Job # 60314964
 Sample ID* MW-14
 _____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____
 Weather Conditions overcast
 Air Temperature 73 ° F
 Total Well Depth (TWD) = 20.00 1/100 ft
 Depth to Ground Water (DGW) = 10.56 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 9.44 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 1.53 gal
 3 Casing Volumes = 4.61 gal = Standard Evacuation Volume
 Method of Sample Evacuation Purge with Peristaltic Pump
 Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
 Total Volume of Water Removed 3.0 gal

Casing Diameter 2.0 inches
 Casing Material PVC
 Measuring Point Elevation _____ 1/100 ft
 Height of Riser (above land surface) _____ 1/100 ft
 Land Surface Elevation _____ 1/100 ft
 Screened Interval 5 - 20 1/100 ft
 Dedicated Pump or Bailer YES _____ NO X Type _____
 Steel Guard Pipe Around Casing YES X NO _____
 Locking Cap YES X NO _____
 Protective Post/Abutment YES _____ NO X
 Well Integrity Satisfactory YES X NO _____
 Yield LOW X MODERATE _____ HIGH _____
 Comments/Observations
 Sample Time: 1705
 Sample Analytes: VOC'S Sup VOC'S Km Trip Blank
 Hack Fe Kit: _____ mg/L TD 20.08 MW-14-C

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.
 Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

	FIELD ANALYSES										
	Initial	.30	.60	.90	1.20	1.50	1.80	2.10	2.40	2.70	3.0
VOLUME PURGED (gallons)											
TIME (Military)	1613	1618	1623	1628	1633	1638	1643	1648	1653	1658	1703
Water Level (ft BTOC)	10.92	11.10	11.51	11.68	12.00	12.26	12.58	12.83	13.13	13.30	13.42
pH (S.U.)	4.15	4.10	3.90	3.88	3.86	3.84	3.83	3.88	3.89	3.87	3.89
Sp. Cond. (mS/cm)	0.037	0.022	0.022	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.021
Water Temp. (°C)	19.88	18.64	18.42	18.28	18.18	18.12	18.04	18.01	18.04	18.09	18.05
Turbidity (NTUs)	4.91	3.46	6.09	4.36	5.54	4.06	3.82	3.42	4.34	3.01	2.86
DO - (mg/L)	7.90	7.72	7.88	7.81	7.63	7.57	7.48	7.51	7.45	7.52	7.60
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)	295.6	350.9	301.4	294.1	289.9	295.9	300.5	300.4	299.7	301.5	303.7

COMMENTS/OBSERVATIONS

Began purging at 1610 Purging rate: 175 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 20, 2015
Field Personnel Randy Morgan
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-14D
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions overcast
Air Temperature 73 ° F
Total Well Depth (TWD) = 50.00 1/100 ft
Depth to Ground Water (DGW) = 12.42 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 37.58 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 6.12 gal
3 Casing Volumes = 18.37 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 _____ 1/100 ft
Height of Riser (above land surface) _____ 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval 40 - 50 1/100 ft
Dedicated Pump or Bailer YES ____ NO X Type ____
Steel Guard Pipe Around Casing YES X NO ____
Locking Cap YES X NO ____
Protective Post/Abutment YES ____ NO X
Well Integrity Satisfactory YES X NO ____
Yield LOW ____ MODERATE ____ HIGH X
Comments/Observations
Sample Time: 1755
Sample Analytes: VOC'S dup VOC'S
Hack Fe Kit: mg/L TD 149.43

* - 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	.35	.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15
TIME (Military)	1708	1713	1718	1723	1728	1733	1738	1743	1748	1753
Water Level (ft BTOC)	12.42	12.42	12.42	12.42	12.42	12.42	12.42	12.42	12.42	12.42
pH (S.U.)	7.69	7.54	7.49	7.48	7.48	7.49	7.50	7.49	7.49	7.49
Sp. Cond. (mS/cm)	0.229	0.230	0.230	0.229	0.229	0.229	0.229	0.228	0.228	0.228
Water Temp. (°C)	19.23	19.23	19.27	19.25	19.27	19.27	19.27	19.28	19.25	19.26
Turbidity (NTUs)	874.1	17.61	10.27	9.91	8.03	7.23	7.48	4.94	3.12	3.89
DO - (mg/L)	2.89	1.31	0.91	0.85	0.85	0.82	0.92	0.79	0.68	0.69
Salinity (ppt)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
ORP (mV)	198.3	162.9	138.9	110.3	93.5	76.3	63.1	50.6	43.5	38.8

COMMENTS/OBSERVATIONS

Began purging at 1708 Purging rate: 200 ml/minBreathing Zone: 0.0 ppmWell Head: 1.4 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 22, 2015
 Field Personnel Randy Morgan
 Site Name UTC Delavan Spray Technologies Site
 AECOM Job # 60314964
 Sample ID* MW-15
 _____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____
 Weather Conditions clear / Sunny
 Air Temperature 70 ° F
 Total Well Depth (TWD) = 19.00 1/100 ft
 Depth to Ground Water (DGW) = 209 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 14.82 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 2.41 gal
 3 Casing Volumes = 7.24 gal = Standard Evacuation Volume
 Method of Sample Evacuation Purge with Peristaltic Pump
 Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
 Total Volume of Water Removed 4.0 gal

Casing Diameter 2.0 inches
 Casing Material PVC
 Measuring Point Elevation _____ 1/100 ft
 Height of Riser (above land surface) _____ 1/100 ft
 Land Surface Elevation _____ 1/100 ft
 Screened Interval 4 - 19 1/100 ft
 Dedicated Pump or Bailer YES _____ NO X Type _____
 Steel Guard Pipe Around Casing X YES X NO _____
 Locking Cap YES _____ NO _____
 Protective Post/Abutment YES _____ NO X
 Well Integrity Satisfactory YES X NO _____
 Yield LOW _____ MODERATE _____ HIGH X
 Comments/Observations
 Sample Time: 1200
 Sample Analytes: VOC'S
 Hack Fe Kit: _____ mg/L TWD 18.08

* - 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	2.8	3.2	3.6	4.0
TIME (Military)	1108	1113	1118	1123	1128	1133	1138	1143	1148	1153	1158
Water Level (ft BTOC)	2.14	2.37	2.40	2.42	2.43	2.43	2.44	2.48	2.50	2.52	2.52
pH (S.U.)	4.97	4.51	4.43	4.39	4.36	4.33	4.37	4.41	4.40	4.38	4.37
Sp. Cond. (mS/cm)	0.368	0.369	0.364	0.327	0.295	0.261	0.239	0.227	0.219	0.211	0.208
Water Temp. (°C)	17.70	17.76	18.02	18.10	18.11	18.53	18.54	18.51	18.43	18.44	18.59
Turbidity (NTUs)	64.19	38.63	36.41	40.97	32.43	21.21	19.17	16.48	15.52	14.38	14.29
DO - (mg/L)	2.05	0.37	0.53	0.66	0.66	0.66	0.71	0.63	0.55	0.45	0.39
Salinity (ppt)	0.18	0.18	0.17	0.16	0.14	0.12	0.11	0.11	0.11	0.10	0.10
ORP (mV)	-33.0	-31.2	-14.1	+19.5	+34.5	+34.1	+0.6	-14.5	-22.0	-28.0	-30.9

COMMENTS/OBSERVATIONS Began purging at 1105 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	April 23, 2013		
Field Personnel	Randy Moya		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-15D		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions: Clear / Sunny			
Air Temperature	74 °F		
Total Well Depth (TWD) =	45.00	1/100 ft	
Depth to Ground Water (DGW) =	1.80	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	43.20	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	7.04 gal
3 Casing Volumes =	21.12	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	2.4	gal	
Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Height of Riser (above land surface)		1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	35 - 45	1/100 ft	
Dedicated Pump or Bailer	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	MODERATE	HIGH
Comments/Observations	Sample Time: 1240 Sample Analytes: VOC'S Hack Fe Kit: — mg/L TWD 44.97		

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.
Volume (in gallons) = $\pi r^2 h (7.48)$, where r is the radius (ft) and h is the height (ft).

	FIELD ANALYSES						
	Initial	.40	.80	1.20	1.60	2.0	2.4
VOLUME PURGED (gallons)	1207	1212	1217	1222	1227	1232	1237
TIME (Military)	6.80	1.80	1.80	1.80	1.80	1.80	1.80
Water Level (ft BTOW)	6.51	6.23	6.85	6.90	6.92	6.95	6.96
pH (S.U.)	0.431	0.431	0.431	0.431	0.431	0.431	0.431
Sp. Cond. (mS/cm)	18.25	18.15	18.13	18.17	18.38	18.45	18.44
Water Temp. (°C)	52.39	35.04	25.23	20.94	16.69	16.65	15.88
Turbidity (NTUs)	2.34	2.07	1.99	2.08	2.07	2.05	1.99
DO - (mg/L)	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Salinity (ppt)	-38.3	-27.5	-19.9	-14.6	-11.6	-9.3	-8.0
ORP (mV)							

COMMENTS/OBSERVATIONS

Began purging at 1204 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	April 22, 2015		
Field Personnel	Randy Morgan		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-15D1		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions Clear/Sunny			
Air Temperature	74 °F		
Total Well Depth (TWD) =	85.00	1/100 ft	
Depth to Ground Water (DGW) =	1.91	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	83.09	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	=	13.54 gal
3 Casing Volumes =	40.63	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	1/100 ft		
Height of Riser (above land surface)	1/100 ft		
Land Surface Elevation	1/100 ft		
Screened Interval	75	-	85 1/100 ft
Dedicated Pump or Bailer	YES	NO	Type X
Steel Guard Pipe Around Casing	YES	NO	X
Locking Cap	YES	NO	X
Protective Post/Abutment	YES	NO	X
Well Integrity Satisfactory	YES	NO	X
Yield	LOW	MODERATE	HIGH X
Comments/Observations			
Sample Time:	1317		
Sample Analytes:	VOC'S		
Hack Fe Kit:	mg/L X TWD - 80.85 very soft		

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

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

	FIELD ANALYSES						
	Initial	.40	.80	1.20	1.60	2.0	2.4
VOLUME PURGED (gallons)	1245	1250	1255	1300	1305	1310	1315
TIME (Military)	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Water Level (ft BTOC)	7.50	7.55	7.58	7.60	7.62	7.62	7.63
pH (S.U.)	0.205	0.202	0.202	0.202	0.202	0.203	0.203
Sp. Cond. (mS/cm)	19.45	19.08	18.77	18.78	18.91	18.97	19.03
Water Temp. (°C)	128.8	29.47	10.31	8.90	4.55	4.47	4.52
Turbidity (NTUs)	2.16	0.49	0.30	0.22	0.21	0.21	0.21
DO - (mg/L)	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Salinity (ppt)	-2040	-2490	-2623	-267.2	-2664	-264.2	-2621
ORP (mV)							

COMMENTS/OBSERVATIONS

Began purging at 1242 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 22, 2015
 Field Personnel Randy Mayo
 Site Name UTC Delavan Spray Technologies Site
 AECOM Job # 60314964
 Sample ID* MW-16
 _____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____
 Weather Conditions Clear sunny
 Air Temperature 54 ° F
 Total Well Depth (TWD) = 19.00 1/100 ft
 Depth to Ground Water (DGW) = 3.49 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 16.51 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 2.69 gal
 3 Casing Volumes = 8.07 gal = Standard Evacuation Volume
 Method of Sample Evacuation Purge with Peristaltic Pump
 Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
 Total Volume of Water Removed 2-8 gal

Casing Diameter 2.0 inches
 Casing Material PVC
 Measuring Point Elevation _____ 1/100 ft
 Height of Riser (above land surface) _____ 1/100 ft
 Land Surface Elevation _____ 1/100 ft
 Screened Interval 4 - 19 1/100 ft
 Dedicated Pump or Bailer YES _____ NO X Type _____
 Steel Guard Pipe Around Casing YES X NO _____
 Locking Cap YES X NO _____
 Protective Post/Abutment YES _____ NO X
 Well Integrity Satisfactory YES X NO _____
 Yield LOW _____ MODERATE _____ HIGH X
 Comments/Observations
 Sample Time: 0920
 Sample Analytes: VOC'S
 Hack Fe Kit: _____ mg/L TWD 18.60 Very soft bottom

* - One casing volume (gallons) for a 0.5 inch well is 0.0102XLWC; for a 2 inch well is 0.163 X LWC; for a 4 inch well is 0.652 X LWC and for a 6 inch well is 1.468 X LWC.
 Volume (in gallons) = $\pi r^2 h$ (7.48), where r is the radius (ft) and h is the height (ft).

	FIELD ANALYSES										
VOLUME PURGED (gallons)	Initial	<u>1.40</u>	<u>1.80</u>	<u>1.20</u>	<u>1.60</u>	<u>2.0</u>	<u>2.4</u>	<u>2.8</u>			
TIME (Military)	<u>0843</u>	<u>0848</u>	<u>0853</u>	<u>0858</u>	<u>0903</u>	<u>0908</u>	<u>0913</u>	<u>0918</u>			
Water Level (ft BTOW)	<u>2.69</u>	<u>2.74</u>	<u>2.78</u>	<u>2.80</u>	<u>2.82</u>	<u>2.84</u>	<u>2.84</u>	<u>2.84</u>			
pH (S.U.)	<u>5.25</u>	<u>4.09</u>	<u>3.74</u>	<u>3.88</u>	<u>3.86</u>	<u>3.85</u>	<u>3.85</u>	<u>3.84</u>			
Sp. Cond. (mS/cm)	<u>0.030</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>			
Water Temp. (°C)	<u>15.60</u>	<u>15.71</u>	<u>15.93</u>	<u>16.06</u>	<u>16.16</u>	<u>16.19</u>	<u>16.22</u>	<u>16.26</u>			
Turbidity (NTUs)	<u>57.74</u>	<u>47.11</u>	<u>38.09</u>	<u>18.93</u>	<u>15.53</u>	<u>15.17</u>	<u>14.32</u>	<u>14.48</u>			
DO - (mg/L)	<u>3.87</u>	<u>0.48</u>	<u>0.28</u>	<u>0.36</u>	<u>0.23</u>	<u>0.23</u>	<u>0.71</u>	<u>0.72</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>			
ORP (mV)	<u>13.6</u>	<u>-25.6</u>	<u>-48.7</u>	<u>-48.2</u>	<u>-58.5</u>	<u>-61.0</u>	<u>-64.3</u>	<u>-66.8</u>			

COMMENTS/OBSERVATIONS Began purging at 0840 Purging rate: 250 ml/min Breathing Zone: 0.0 ppm
 Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) April 22, 2015

Field Personnel Randy Adigan

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-16D

☐ Upgradient ☐ Downgradient ☐ Sidegradient ☐ Source

Weather Conditions clear / sunny

Air Temperature 55 °F

Total Well Depth (TWD) = 45.00 1/100 ft

Depth to Ground Water (DGW) = 4.66 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 40.34 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.163 = 6.57 gal

3 Casing Volumes = 19.72 gal = Standard Evacuation Volume

Method of Sample Evacuation Purge with Peristaltic Pump

Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S

Total Volume of Water Removed 2.0 gal

Casing Diameter 2.0 inches

Casing Material PVC

Measuring Point Elevation _____ 1/100 ft

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

Land Surface Elevation _____ 1/100 ft

Screened Interval 35 - 45 1/100 ft

Dedicated Pump or Bailer YES ☐ NO ☒ Type _____

Steel Guard Pipe Around Casing YES ☒ NO ☐

Locking Cap YES ☒ NO ☐

Protective Post/Abutment YES ☐ NO ☒

Well Integrity Satisfactory YES ☒ NO ☐

Yield LOW ☐ MODERATE ☐ HIGH ☒

Comments/Observations

Sample Time: 0958

Sample Analytes: VOC'S

Hack Fe Kit: _____ mg/L TWD - 44.94

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

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

	FIELD ANALYSES					
VOLUME PURGED (gallons)	Initial	1.40	1.80	1.20	1.60	2.0
TIME (Military)	0931	0936	0941	0946	0951	0956
Water Level (ft BTOC)	4.66	4.66	4.66	4.66	4.66	4.66
pH (S.U.)	5.94	6.68	6.97	7.11	7.18	7.22
Sp. Cond. (mS/cm)	0.291	0.295	0.295	0.295	0.295	0.295
Water Temp. (°C)	16.77	17.08	17.18	17.26	17.32	17.34
Turbidity (NTUs)	24.54	3.21	2.86	1.89	2.35	0.89
DO - (mg/L)	4.76	4.03	3.91	3.94	3.89	3.88
Salinity (ppt)	0.14	0.14	0.14	0.14	0.14	0.14
ORP (mV)	-5.0	+17.6	+29.4	+36.2	+40.1	+40.6

COMMENTS/OBSERVATIONS

Began purging at 0928 Purging rate: 250 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) 4/21/15
Field Personnel J Butler
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-17
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions clear
Air Temperature 70's ° F
Total Well Depth (TWD) = 28.00 1/100 ft
Depth to Ground Water (DGW) = 1.91 1/100 ft
Length of Water Column (LWC) = TWD - DGW = _____ 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = _____ gal
3 Casing Volumes = _____ 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 _____ 1/100 ft
Height of Riser (above land surface) Flush 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval 13 - 28 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: 1840
Sample Analytes: VOL TWD: 28.31
Hack-Fe-Kit: 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)	1755	1800	1805	1810	1815	1820	1825	1830	1835	
Water Level (ft BTOC)	2.65	2.83	2.91	3.01	3.10	3.16	3.16	3.18	3.19	
pH (S.U.)	5.22	3.11	3.32	3.64	3.78	3.83	3.94	3.95	3.96	
Sp. Cond. (mS/cm)	0.158	0.158	0.158	0.159	0.159	0.160	0.160	0.159	0.159	
Water Temp. (°C)	17.69	17.26	17.05	16.96	16.89	16.90	16.89	16.86	16.84	
Turbidity (NTUs)	17.91	14.64	13.05	14.56	11.76	8.72	6.47	5.86	4.26	
DO - (mg/L)	2.27	2.82	1.65	1.65	1.87	1.97	1.89	1.82	1.85	
Salinity (ppt)	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	
ORP (mV)	348.2	460.5	456.5	445.9	443.5	444.5	443.1	443.1	442.5	

COMMENTS/OBSERVATIONS Began purging at 1752 Purging rate: 240 ml/min Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) <u>4/22/15</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 _____ 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>Flush</u> 1/100 ft	
Sample ID* <u>MW-18</u>		Land Surface Elevation _____ 1/100 ft	
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source		Screened Interval <u>11</u> - <u>26</u> 1/100 ft	
Weather Conditions <u>Clear</u>		Dedicated Pump or Bailer YES ____ NO ☒ Type ____	
Air Temperature <u>60.5</u> ° F		Steel Guard Pipe Around Casing YES ☒ NO ____	
Total Well Depth (TWD) = <u>26.00</u> 1/100 ft		Locking Cap YES ☒ NO ____	
Depth to Ground Water (DGW) = <u>9.23</u> 1/100 ft		Protective Post/Abutment YES ____ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>16.77</u> 1/100 ft		Well Integrity Satisfactory YES ____ NO ____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>2.73</u> gal		Yield LOW ☒ MODERATE ____ HIGH ☒	
3 Casing Volumes = <u>8.19</u> gal = Standard Evacuation Volume		Comments/Observations	
Method of Sample Evacuation <u>Purge with Peristaltic Pump</u>		<u>Sample Time: 1005</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		<u>Sample Analytes: VOL</u> <u>TWD: 26.24</u>	
Total Volume of Water Removed <u>2.1</u> gal		<u>Hack Fe Kit: 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	0.3	0.6	0.9	1.2	1.5	1.8	2.1
VOLUME PURGED (gallons)								
TIME (Military)	0927	0932	0937	0942	0947	0952	0957	1002
Water Level (ft BTOC)	9.40	9.40	9.41	9.42	9.43	9.44	9.45	9.46
pH (S.U.)	7.76	4.77	4.34	4.25	4.21	4.20	4.18	4.17
Sp. Cond. (mS/cm)	0.054	0.050	0.049	0.049	0.049	0.048	0.048	0.048
Water Temp. (°C)	16.07	15.91	15.92	15.91	15.97	16.02	16.06	16.12
Turbidity (NTUs)	10.44	4.42	3.25	1.55	1.34	0.80	0.99	0.71
DO - (mg/L)	4.99	4.23	4.58	4.72	4.51	4.42	4.52	4.44
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
ORP (mV)	288.1	351.5	370.6	381.3	390.0	399.0	408.2	412.6

COMMENTS/OBSERVATIONS Began purging at 0915 Purging rate: 240 ml/min Breathing Zone: 00 ppm
 Well Head: 00 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) 4/21/15

Field Personnel J. B. Baker

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-19

____ Upgradient ____ Downgradient ____ Sidegradient ____ Source

Weather Conditions Clear

Air Temperature 70's ° F

Total Well Depth (TWD) = 20.00 1/100 ft

Depth to Ground Water (DGW) = 10.90 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 9.1 1/100 ft

1 Casing Volume (OCV)* = LWC x 0.041 = 0.37 gal

3 Casing Volumes = 1.11 gal = Standard Evacuation Volume

Method of Sample Evacuation Purge with Peristaltic Pump

Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S

Total Volume of Water Removed 1.25 gal

Casing Diameter 1 inches

Casing Material PVC

Measuring Point Elevation _____ 1/100 ft

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

Land Surface Elevation _____ 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: 1255

Sample Analytes: VOC'S TWD: 20.03

Hack Fe Kit: 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	6.25	0.5	0.75	1.0	1.25				
VOLUME PURGED (gallons)										
TIME (Military)	1227	1232	1237	1242	1247	1252				
Water Level (ft BTOC)	11.55	11.87	11.94	12.01	12.06	12.06				
pH (S.U.)	4.41	4.24	4.23	4.19	4.16	4.17				
Sp. Cond. (mS/cm)	0.122	0.119	0.120	0.117	0.115	0.114				
Water Temp. (°C)	21.77	21.46	21.29	21.19	21.15	21.15				
Turbidity (NTUs)	98.07	32.30	10.51	5.95	3.21	1.37				
DO - (mg/L)	4.49	4.30	4.22	4.30	4.34	4.37				
Salinity (ppt)	0.06	0.06	0.06	0.05	0.05	0.05				
ORP (mV)	316.4	381.5	400.3	412.2	417.3	420.8				

COMMENTS/OBSERVATIONS

Began purging at 1225 Purging rate: 200 ml/minBreathing Zone: 30 ppmWell Head: 35.4 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/21/15		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-20		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions			
Air Temperature			
Total Well Depth (TWD) =	15.00	1/100 ft	
Depth to Ground Water (DGW) =	10.55	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	4.45	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.041	=	0.18 gal
3 Casing Volumes =	0.54	gal = Standard Evacuation Volume	
Method of Sample Evacuation	Purge with Peristaltic Pump		
Method of Sample Collection	Peristaltic Pump Reverse Flow for VOC'S		
Total Volume of Water Removed	0.75 gal		
Casing Diameter	1	inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Height of Riser (above land surface)	Flush	1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	5 - 15	1/100 ft	
Dedicated Pump or Bailer	YES	NO	Type
Steel Guard Pipe Around Casing	YES	NO	
Locking Cap	YES	NO	
Protective Post/Abutment	YES	NO	
Well Integrity Satisfactory	YES	NO	
Yield	LOW	MODERATE	HIGH
Comments/Observations			
Sample Time:	1345		
Sample Analytes:	VOC		
Hack Fe Kit:	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	0.15	0.30	0.45	0.60	0.75					
VOLUME PURGED (gallons)											
TIME (Military)	1316	1321	1326	1331	1336	1341					
Water Level (ft BTOC)	11.1	11.34	11.41	11.45	11.47	11.50					
pH (S.U.)	4.17	4.10	3.97	3.96	3.96	3.94					
Sp. Cond. (mS/cm)	0.039	0.041	0.041	0.040	0.040	0.040					
Water Temp. (°C)	21.41	21.19	21.14	21.14	21.15	21.13					
Turbidity (NTUs)	5.60	16.49	9.32	3.14	1.76	0.03					
DO - (mg/L)	4.76	4.99	4.45	4.31	4.18	4.24					
Salinity (ppt)	0.02	0.02	0.02	0.02	0.02	0.02					
ORP (mV)	403.9	415.6	426.4	435.9	436.5	442.4					

COMMENTS/OBSERVATIONS

Began purging at 1314 Purging rate: 120 ml/min

Breathing Zone: 8.5 ppm

Well Head: 9.8 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr)	4/22/15		
Field Personnel	J Butler		
Site Name	UTC Delavan Spray Technologies Site		
AECOM Job #	60314964		
Sample ID*	MW-21		
Upgradient	Downgradient	Sidegradient	Source
Weather Conditions	Clear		
Air Temperature	70's	° F	
Total Well Depth (TWD) =	34.00	1/100 ft	
Depth to Ground Water (DGW) =	11.23	1/100 ft	
Length of Water Column (LWC) = TWD - DGW =	22.77	1/100 ft	
1 Casing Volume (OCV)* = LWC x	0.163	= 3.71 gal	
3 Casing Volumes =	11.13	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		gal	

Casing Diameter	2.0	inches	
Casing Material	PVC		
Measuring Point Elevation		1/100 ft	
Height of Riser (above land surface)	Flush	1/100 ft	
Land Surface Elevation		1/100 ft	
Screened Interval	19 - 34	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:	1450		
Sample Analytes:	VOC		TWD: 13.83
Hack Fe Kit:		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)	1419	1424	1429	1434	1439	1444	1449			
Water Level (ft BTOC)	12.62	13.18	13.45	13.45	13.45	13.45	13.45			
pH (S.U.)	4.34	4.20	4.18	4.28	4.28	4.28	4.30			
Sp. Cond. (mS/cm)	0.028	0.028	0.028	0.028	0.028	0.028	0.028			
Water Temp. (°C)	20.54	20.52	20.49	20.73	20.71	20.75	20.85			
Turbidity (NTUs)	44.00	17.34	17.24	15.79	13.86	11.87	1			
DO - (mg/L)	1.47	0.36	0.32	0.48	0.38	0.32	0.31			
Salinity (ppt)	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
ORP (mV)	272.0	294.2	306.5	309.1	311.7	312.8	312.9			

COMMENTS/OBSERVATIONS Began purging at 1416 Purging rate: ml/min Breathing Zone: 0.0 ppm
Well Head: 15.5 ppm

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) <u>4/20/15</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 _____ 1/100 ft	
AECOM Job # <u>60314964</u>		Height of Riser (above land surface) <u>Flush</u> 1/100 ft	
Sample ID* <u>MW-21D</u>		Land Surface Elevation _____ 1/100 ft	
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source		Screened Interval <u>43</u> - <u>53</u> 1/100 ft	
Weather Conditions <u>cloudy</u>		Dedicated Pump or Bailer YES ____ NO ☒ Type ____	
Air Temperature <u>76.5</u> ° F		Steel Guard Pipe Around Casing YES ☒ NO ____	
Total Well Depth (TWD) = <u>53.00</u> 1/100 ft		Locking Cap YES ☒ NO ____	
Depth to Ground Water (DGW) = <u>12.25</u> 1/100 ft		Protective Post/Abutment YES ____ NO ☒	
Length of Water Column (LWC) = TWD - DGW = <u>40.75</u> 1/100 ft		Well Integrity Satisfactory YES ☒ NO ____	
1 Casing Volume (OCV)* = LWC x <u>0.163</u> = <u>6.64</u> gal		Yield LOW ____ MODERATE ____ HIGH ☒	
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>1630</u>	
Method of Sample Collection <u>Peristaltic Pump Reverse Flow for VOC'S</u>		Sample Analytes: <u>VOC</u>	
Total Volume of Water Removed <u>1.80</u> gal		Hack Kit: <u>mg/L</u> TWD: <u>53.25</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	0.30	0.50	0.75	1.00	1.50	1.80
VOLUME PURGED (gallons)		0.25	0.50	0.75	1.00	1.50	1.80
TIME (Military)	1558	1603	1608	1613	1618	1623	1628
Water Level (ft BTOC)	12.25	12.25	12.25	12.25	12.25	12.25	12.25
pH (S.U.)	9.55	7.93	7.34	7.24	7.26	7.27	7.28
Sp. Cond. (mS/cm)	0.283	0.259	0.262	0.262	0.262	0.262	0.262
Water Temp. (°C)	20.44	20.24	20.13	20.10	20.09	20.07	20.07
Turbidity (NTUs)	11.30	8.10	13.03	14.70	8.03	6.16	7.11
DO - (mg/L)	2.40	1.39	1.05	0.68	0.56	0.48	0.44
Salinity (ppt)	0.13	0.12	0.12	0.12	0.12	0.12	0.12
ORP (mV)	146.2	12.9	-80.0	-78.5	-82.0	-82.5	-82.8

COMMENTS/OBSERVATIONS

Began purging at 1555 Purging rate: 240 ml/min

Breathing Zone: 0.0 ppm

Well Head: 0.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page 1 of 2

Date (mo/day/yr) 4/22/15
Field Personnel J. Butler
Site Name UTC Delavan Spray Technologies Site
AECOM Job # 60314964
Sample ID* MW-22D
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions clear
Air Temperature 50's ° F
Total Well Depth (TWD) = 48.00 1/100 ft
Depth to Ground Water (DGW) = 11.68 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 36.32 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.163 = 5.92 gal
3 Casing Volumes = 17.76 gal = Standard Evacuation Volume
Method of Sample Evacuation Purge with Peristaltic Pump
Method of Sample Collection Peristaltic Pump Reverse Flow for VOC'S
Total Volume of Water Removed 39 gal

Casing Diameter 2.0 inches
Casing Material PVC
Measuring Point Elevation _____ 1/100 ft
Height of Riser (above land surface) Flush 1/100 ft
Land Surface Elevation _____ 1/100 ft
Screened Interval 38 - 48 1/100 ft
Dedicated Pump or Bailer YES ____ NO ☒ Type ____
Steel Guard Pipe Around Casing YES ☒ NO ____
Locking Cap YES ☒ NO ____
Protective Post/Abutment YES ____ NO ☒
Well Integrity Satisfactory YES ☒ NO ____
Yield LOW ____ MODERATE ____ HIGH ☒
Comments/Observations
Sample Time: 0960
Sample Analytes: VOC Duplicate VOC'S TWD: 48.34
Hack-Fe Kit: -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	2.7	3.0
TIME (Military)	0751	0756	0800	0806	0811	0816	0821	0826	0831	0836	0841
Water Level (ft BTOC)	11.78	11.78	11.78	11.78	11.78	11.78	11.78	11.78	11.78	11.78	11.78
pH (S.U.)	11.92	12.09	12.02	11.92	11.75	11.61	11.50	11.41	11.31	11.18	11.19
Sp. Cond. (mS/cm)	0.218	1.285	1.095	0.872	0.667	0.540	0.472	0.421	0.389	0.346	0.350
Water Temp. (°C)	15.61	16.37	16.75	16.68	16.76	16.86	16.90	16.95	17.00	17.07	17.16
Turbidity (NTUs)	5.22	2.10	3.13	3.71	4.79	4.21	4.01	3.91	3.75	3.07	2.81
DO - (mg/L)	3.15	1.11	1.08	1.41	1.94	2.31	2.61	2.64	2.85	2.96	3.04
Salinity (ppt)	0.62	0.64	0.54	0.42	0.32	0.26	0.23	0.20	0.19	0.17	0.17
ORP (mV)	102.4	56.9	34.6	21.7	16.9	14.6	13.4	13.1	13.4	14.6	13.1

COMMENTS/OBSERVATIONS Began purging at 0748 Purging rate: 240 ml/min Breathing Zone: 0.0 ppm
Well Head: 1.0 ppm



FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Site Name UTC Delavan Spray Technologies Site, Bamberg, SCAECOM Job # 60314964Sample ID* MW-22DDate (mo/day/yr) 4/22/15Field Personnel J Butler

Comments/Observations:

FIELD ANALYSES

VOLUME PURGED (gallons)	3.3	3.6	3.9				
TIME (Military)	0846	0851	0856				
Water Level (ft. BTOC)	11.78	11.78	11.78				
pH (S.U.)	11.09	11.09	11.08				
Sp. Cond. (mS/cm)	0.324	0.327	0.322				
Water Temp. (°C)	17.20	17.26	17.28				
Turbidity (NTUs)	2.01	1.90	1.75				
Dissolved Oxygen (mg/L)	3.07	3.07	3.08				
Salinity (ppt)	0.16	0.16	0.15				
ORP (mV)	14.0	12.3	12.0				

FIELD ANALYSES

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

COMMENTS/OBSERVATIONS _____

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr) 4/21/15
 Field Personnel J Butler
 Site Name UTC Delavan Spray Technologies Site
 AECOM Job # 60314964
 Sample ID* MW-23D
 _____ Upgradient _____ Downgradient _____ Sidegradient _____ Source _____
 Weather Conditions clear
 Air Temperature 70's ° F
 Total Well Depth (TWD) = 50.00 1/100 ft
 Depth to Ground Water (DGW) = 13.48 1/100 ft
 Length of Water Column (LWC) = TWD - DGW = 36.52 1/100 ft
 1 Casing Volume (OCV)* = LWC x 0.163 = 5.95 gal
 3 Casing Volumes = 17.85 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 _____ 1/100 ft
 Height of Riser (above land surface) Flush 1/100 ft
 Land Surface Elevation _____ 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: 1655
 Sample Analytes: VOC TWD: 50.35
 Hack Pk Kit: 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							
VOLUME PURGED (gallons)								
TIME (Military)	<u>1619</u>	<u>1624</u>	<u>1629</u>	<u>1634</u>	<u>1639</u>	<u>1644</u>	<u>1649</u>	<u>1654</u>
Water Level (ft BTOC)	<u>13.50</u>	<u>13.50</u>	<u>13.50</u>	<u>13.50</u>	<u>13.50</u>	<u>13.50</u>	<u>13.50</u>	<u>13.50</u>
pH (S.U.)	<u>6.72</u>	<u>7.08</u>	<u>7.20</u>	<u>7.10</u>	<u>7.20</u>	<u>7.19</u>	<u>7.20</u>	<u>7.20</u>
Sp. Cond. (mS/cm)	<u>0.152</u>	<u>0.269</u>	<u>0.215</u>	<u>0.280</u>	<u>0.281</u>	<u>0.282</u>	<u>0.282</u>	<u>0.282</u>
Water Temp. (°C)	<u>20.98</u>	<u>20.60</u>	<u>20.44</u>	<u>20.29</u>	<u>20.18</u>	<u>20.22</u>	<u>20.21</u>	<u>20.17</u>
Turbidity (NTUs)	<u>15.52</u>	<u>10.85</u>	<u>7.13</u>	<u>3.55</u>	<u>3.29</u>	<u>2.04</u>	<u>2.08</u>	<u>3.78</u>
DO - (mg/L)	<u>2.74</u>	<u>1.68</u>	<u>1.48</u>	<u>1.55</u>	<u>1.57</u>	<u>1.59</u>	<u>1.62</u>	<u>1.63</u>
Salinity (ppt)	<u>0.12</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>	<u>0.13</u>
ORP (mV)	<u>268.8</u>	<u>269.3</u>	<u>259.5</u>	<u>247.6</u>	<u>255.6</u>	<u>225.5</u>	<u>217.6</u>	<u>212.3</u>

COMMENTS/OBSERVATIONS Began purging at 1616 Purging rate: _____ ml/min Breathing Zone: 0.0 ppm
Well Head: 0.0 ppm

AECOM

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APPENDIX B

ANALYTICAL DATA

Laboratory Reports – Accutest Southeast
Data Assessment Reports



04/30/15

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

Accutest Job Number: FA23750

Sampling Dates: 04/20/15 - 04/21/15

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: **95**



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.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

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

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Test results relate only to samples analyzed.

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: FA23750-1: MW-21D	11
4.2: FA23750-2: MW-14	13
4.3: FA23750-3: MW-1	15
4.4: FA23750-4: MW-14D	17
4.5: FA23750-5: MW-14D-A	19
4.6: FA23750-6: MW-11	21
4.7: FA23750-7: MW-2	25
4.8: FA23750-8: MW-9D	29
4.9: FA23750-9: MW-6	33
4.10: FA23750-10: MW-4	37
4.11: FA23750-11: MW-4-A	41
4.12: FA23750-12: MW-7	43
4.13: FA23750-13: MW-5	47
4.14: FA23750-14: MW-3	49
4.15: FA23750-15: MW-19	51
4.16: FA23750-16: MW-3D	53
4.17: FA23750-17: MW-20	55
4.18: FA23750-18: MW-14-C	57
Section 5: Misc. Forms	59
5.1: Chain of Custody	60
Section 6: GC/MS Volatiles - QC Data Summaries	64
6.1: Method Blank Summary	65
6.2: Blank Spike Summary	72
6.3: Matrix Spike/Matrix Spike Duplicate Summary	79
Section 7: GC Volatiles - QC Data Summaries	86
7.1: Method Blank Summary	87
7.2: Blank Spike/Blank Spike Duplicate Summary	88
7.3: Matrix Spike Summary	89
7.4: Duplicate Summary	90
Section 8: General Chemistry - QC Data Summaries	91
8.1: Method Blank and Spike Results Summary	92
8.2: Duplicate Results Summary	93
8.3: Matrix Spike Results Summary	94
8.4: Matrix Spike Duplicate Results Summary	95

Sample Summary

United Technologies Corporation

Job No: FA23750

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23750-1	04/20/15	16:35 RMJB	04/22/15	AQ	Ground Water	MW-21D
FA23750-2	04/20/15	17:05 RMJB	04/22/15	AQ	Ground Water	MW-14
FA23750-3	04/20/15	17:25 RMJB	04/22/15	AQ	Ground Water	MW-1
FA23750-4	04/20/15	17:55 RMJB	04/22/15	AQ	Ground Water	MW-14D
FA23750-5	04/20/15	17:55 RMJB	04/22/15	AQ	Ground Water	MW-14D-A
FA23750-6	04/21/15	08:23 RMJB	04/22/15	AQ	Ground Water	MW-11
FA23750-7	04/21/15	08:25 RMJB	04/22/15	AQ	Ground Water	MW-2
FA23750-8	04/21/15	09:25 RMJB	04/22/15	AQ	Ground Water	MW-9D
FA23750-9	04/21/15	09:35 RMJB	04/22/15	AQ	Ground Water	MW-6
FA23750-10	04/21/15	10:30 RMJB	04/22/15	AQ	Ground Water	MW-4
FA23750-11	04/21/15	10:30 RMJB	04/22/15	AQ	Ground Water	MW-4-A
FA23750-12	04/21/15	10:50 RMJB	04/22/15	AQ	Ground Water	MW-7
FA23750-13	04/21/15	12:35 RMJB	04/22/15	AQ	Ground Water	MW-5



Sample Summary
(continued)

United Technologies Corporation

Job No: FA23750

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23750-14	04/21/15	13:15 RMJB	04/22/15	AQ	Ground Water	MW-3
FA23750-15	04/21/15	12:55 RMJB	04/22/15	AQ	Ground Water	MW-19
FA23750-16	04/21/15	14:00 RMJB	04/22/15	AQ	Ground Water	MW-3D
FA23750-16D	04/21/15	14:00 RMJB	04/22/15	AQ	Water Dup/MSD	MW-3D
FA23750-16S	04/21/15	14:00 RMJB	04/22/15	AQ	Water Matrix Spike	MW-3D
FA23750-17	04/21/15	13:45 RMJB	04/22/15	AQ	Ground Water	MW-20
FA23750-18	04/20/15	17:05 RMJB	04/22/15	AQ	Trip Blank Water	MW-14-C

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job No: FA23750

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 4/30/2015 2:49:03 PM

17 Samples and 1 Trip Blank were collected between 04/20/2015 and 04/21/2015 and were received at Accutest SE on 04/22/2015 properly preserved, at 2.8 Deg. C. These Samples received an Accutest job number of FA23750. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

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: VI697

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23750-1MS, FA23750-1MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene, 2-Hexanone, Acetone 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), Chloroform are outside control limits for sample FA23750-1MSD. Probable cause is due to sample non-homogeneity.

FA23750-1: Sample was not preserved to a pH < 2.

FA23750-2: Sample was not preserved to a pH < 2.

FA23750-4: Sample was not preserved to a pH < 2.

FA23750-5: Sample was not preserved to a pH < 2.

FA23750-6: Sample was not preserved to a pH < 2.

FA23750-7: Sample was not preserved to a pH < 2.

FA23750-8: Sample was not preserved to a pH < 2.

FA23750-9: Sample was not preserved to a pH < 2.

FA23750-10: Sample was not preserved to a pH < 2.

FA23750-18: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: VI698

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23750-16MS, FA23750-16MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for cis-1,3-Dichloropropene, Methyl Bromide, trans-1,3-Dichloropropene 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-Dichloroethylene, cis-1,3-Dichloropropene, Methyl Bromide are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

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

RPD(s) for MSD for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 4-Methyl-2-pentanone (MIBK), Toluene are outside control limits for sample FA23750-16MSD. Probable cause is due to sample non-homogeneity.

FA23750-3: Sample was not preserved to a pH < 2.

FA23750-11: Sample was not preserved to a pH < 2.

FA23750-12: Sample was not preserved to a pH < 2.

FA23750-13: Sample was not preserved to a pH < 2.

FA23750-15: Sample was not preserved to a pH < 2.

FA23750-16: Sample was not preserved to a pH < 2.

FA23750-17: Sample was not preserved to a pH < 2.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VI699

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23740-1MS, FA23740-1MSD were used as the QC samples indicated.

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

FA23750-13: Sample was not preserved to a pH < 2.

FA23750-14: Sample was not preserved to a pH < 2.

FA23750-15: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: VI701

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23685-11MS, FA23685-11MSD were used as the QC samples indicated.

FA23750-17: Sample was not preserved to a pH < 2.

Volatiles by GC By Method RSKSOP-147/175

Matrix: AQ

Batch ID: GFF1132

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23614-12MS, FA23750-6DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ

Batch ID: GP25860

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23750-7MS, FA23750-7MSD were used as the QC samples for Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate.

Wet Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ

Batch ID: GP25872

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23750-6DUP, FA23750-6MS were used as the QC samples for Total Organic Carbon.

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

Narrative prepared by:

Date: April 30, 2015

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA23750
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/20/15 thru 04/21/15



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

FA23750-1 MW-21D

1,1-Dichloroethylene ^a	0.89 J	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	0.30 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	29.4	1.0	0.33	ug/l	SW846 8260B

FA23750-2 MW-14

Tetrachloroethylene ^a	0.46 J	1.0	0.33	ug/l	SW846 8260B
----------------------------------	--------	-----	------	------	-------------

FA23750-3 MW-1

cis-1,2-Dichloroethylene ^a	6.1	5.0	1.1	ug/l	SW846 8260B
Tetrachloroethylene ^a	447	5.0	1.6	ug/l	SW846 8260B
Trichloroethylene ^a	2.6 J	5.0	1.1	ug/l	SW846 8260B

FA23750-4 MW-14D

1,1-Dichloroethylene ^a	1.8	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	0.90 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	69.7	1.0	0.33	ug/l	SW846 8260B
Trichloroethylene ^a	0.61 J	1.0	0.22	ug/l	SW846 8260B

FA23750-5 MW-14D-A

1,1-Dichloroethylene ^a	2.0	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	0.91 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	77.1	1.0	0.33	ug/l	SW846 8260B
Trichloroethylene ^a	0.61 J	1.0	0.22	ug/l	SW846 8260B

FA23750-6 MW-11

Methane	0.99	0.50	0.16	ug/l	RSKSOP-147/175
Chloride	85.1	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.070 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	29.8	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	2.0	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA23750-7 MW-2

Tetrachloroethylene ^a	0.53 J	1.0	0.33	ug/l	SW846 8260B
Chloride	1.5 J	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.1	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate	4.8	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon	0.69 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

Summary of Hits

Job Number: FA23750
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/20/15 thru 04/21/15

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA23750-8 MW-9D

Chloride		5.9	2.0	0.80	mg/l	EPA 300/SW846 9056A
Sulfate		1.4 J	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.47 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA23750-9 MW-6

Chloride		0.85 J	2.0	0.80	mg/l	EPA 300/SW846 9056A
Sulfate		5.3	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.69 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA23750-10 MW-4

Toluene ^a		0.54 J	1.0	0.40	ug/l	SW846 8260B
Methane		461	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		25.2	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		0.48	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate		20.3	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		5.8	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA23750-11 MW-4-A

Toluene ^a		0.93 J	1.0	0.40	ug/l	SW846 8260B
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FA23750-12 MW-7

Chloride		1.3 J	2.0	0.80	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		0.15	0.10	0.050	mg/l	EPA 300/SW846 9056A
Sulfate		4.0	2.0	0.60	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.55 J	1.0	0.23	mg/l	SM5310 B-11/SW9060A

FA23750-13 MW-5

cis-1,2-Dichloroethylene ^a		1.0	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a		74.3	2.0	0.65	ug/l	SW846 8260B
Trichloroethylene ^a		1.3	1.0	0.22	ug/l	SW846 8260B

FA23750-14 MW-3

Tetrachloroethylene ^a		0.92 J	1.0	0.33	ug/l	SW846 8260B
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Summary of Hits

Job Number: FA23750

Account: United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Collected: 04/20/15 thru 04/21/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA23750-15 MW-19

1,1-Dichloroethylene ^a	15.6 J	20	5.4	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	12.5 J	20	4.4	ug/l	SW846 8260B
Tetrachloroethylene ^a	4170	100	33	ug/l	SW846 8260B
1,1,1-Trichloroethane ^a	19.8 J	20	5.1	ug/l	SW846 8260B
Trichloroethylene ^a	5.5 J	20	4.3	ug/l	SW846 8260B

FA23750-16 MW-3D

1,1-Dichloroethylene ^a	12.4	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	8.4	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	316	5.0	1.6	ug/l	SW846 8260B
Trichloroethylene ^a	8.1	1.0	0.22	ug/l	SW846 8260B

FA23750-17 MW-20

cis-1,2-Dichloroethylene ^a	2.6 J	5.0	1.1	ug/l	SW846 8260B
Tetrachloroethylene ^a	452	20	6.5	ug/l	SW846 8260B
Trichloroethylene ^a	4.2 J	5.0	1.1	ug/l	SW846 8260B

FA23750-18 MW-14-C

No hits reported in this sample.

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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-21D	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-1	Date Received:	04/22/15
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	I29220.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	0.89	1.0	0.27	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.30	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	29.4	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-21D	Date Sampled: 04/20/15
Lab Sample ID: FA23750-1	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	95%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-2	Date Received:	04/22/15
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	I29221.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	0.46	1.0	0.33	ug/l	J
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-14	Date Sampled: 04/20/15
Lab Sample ID: FA23750-2	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-3	Date Received:	04/22/15
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	I29244.D	5	04/25/15	DP	n/a	n/a	VI698
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	1.1	ug/l	
75-25-2	Bromoform	ND	5.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	5.8	ug/l	
75-15-0	Carbon Disulfide	ND	10	1.5	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.4	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.4	ug/l	
156-59-2	cis-1,2-Dichloroethylene	6.1	5.0	1.1	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	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	1.3	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.0	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	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/l	
127-18-4	Tetrachloroethylene	447	5.0	1.6	ug/l	
108-88-3	Toluene	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.3	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.6	ug/l	
79-01-6	Trichloroethylene	2.6	5.0	1.1	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: 04/20/15
Lab Sample ID: FA23750-3	Date Received: 04/22/15
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	1.3	ug/l	
1330-20-7	Xylene (total)	ND	15	2.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	94%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-14D	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-4	Date Received:	04/22/15
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	I29223.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	1.8	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.90	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	69.7	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.61	1.0	0.22	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-14D	Date Sampled: 04/20/15
Lab Sample ID: FA23750-4	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	100%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-14D-A	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-5	Date Received:	04/22/15
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	I29224.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	2.0	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.91	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	77.1	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.61	1.0	0.22	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14D-A	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-5	Date Received:	04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	98%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-6	Date Received:	04/22/15
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	I29225.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-11	Date Sampled: 04/21/15
Lab Sample ID: FA23750-6	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	101%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-11	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-6	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF28652.D	1	04/23/15	EG	n/a	n/a	GFF1132
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.99	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-6	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	85.1	2.0	0.80	mg/l	1	04/22/15 13:21 VK	EPA 300/SW846	9056A
Nitrogen, Nitrate	0.070 J	0.10	0.050	mg/l	1	04/22/15 13:21 VK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/22/15 13:21 VK	EPA 300/SW846	9056A
Sulfate	29.8	2.0	0.60	mg/l	1	04/22/15 13:21 VK	EPA 300/SW846	9056A
Total Organic Carbon	2.0	1.0	0.23	mg/l	1	04/25/15 05:49 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-7	Date Received:	04/22/15
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	I29226.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	0.53	1.0	0.33	ug/l	J
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2	Date Sampled: 04/21/15
Lab Sample ID: FA23750-7	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	99%		83-118%

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

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-7	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF28655.D	1	04/23/15	EG	n/a	n/a	GFF1132
Run #2							

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

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

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

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

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-7	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	1.5 J	2.0	0.80	mg/l	1	04/22/15 12:17 VK	EPA 300/SW846	9056A
Nitrogen, Nitrate	1.1	0.10	0.050	mg/l	1	04/22/15 12:17 VK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/22/15 12:17 VK	EPA 300/SW846	9056A
Sulfate	4.8	2.0	0.60	mg/l	1	04/22/15 12:17 VK	EPA 300/SW846	9056A
Total Organic Carbon	0.69 J	1.0	0.23	mg/l	1	04/25/15 06:32 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-9D	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-8	Date Received:	04/22/15
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	I29227.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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-9D	Date Sampled: 04/21/15
Lab Sample ID: FA23750-8	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

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

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

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-9D	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-8	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF28656.D	1	04/23/15	EG	n/a	n/a	GFF1132
Run #2							

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

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

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates 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:	04/21/15
Lab Sample ID:	FA23750-8	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	5.9	2.0	0.80	mg/l	1	04/22/15 12:33 VK	EPA 300/SW846	9056A
Nitrogen, Nitrate	0.050 U	0.10	0.050	mg/l	1	04/22/15 12:33 VK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/22/15 12:33 VK	EPA 300/SW846	9056A
Sulfate	1.4 J	2.0	0.60	mg/l	1	04/22/15 12:33 VK	EPA 300/SW846	9056A
Total Organic Carbon	0.47 J	1.0	0.23	mg/l	1	04/25/15 06:46 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-9	Date Received:	04/22/15
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	I29228.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-6	Date Sampled: 04/21/15
Lab Sample ID: FA23750-9	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	101%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

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

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-6	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-9	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF28657.D	1	04/23/15	EG	n/a	n/a	GFF1132
Run #2							

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

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

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates 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:	04/21/15
Lab Sample ID:	FA23750-9	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	0.85 J	2.0	0.80	mg/l	1	04/22/15 13:37 VK	EPA 300/SW846	9056A
Nitrogen, Nitrate	0.050 U	0.10	0.050	mg/l	1	04/22/15 13:37 VK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/22/15 13:37 VK	EPA 300/SW846	9056A
Sulfate	5.3	2.0	0.60	mg/l	1	04/22/15 13:37 VK	EPA 300/SW846	9056A
Total Organic Carbon	0.69 J	1.0	0.23	mg/l	1	04/25/15 07:01 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-10	Date Received:	04/22/15
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	I29229.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	0.54	1.0	0.40	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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: 04/21/15
Lab Sample ID: FA23750-10	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	98%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-10	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF28660.D	1	04/23/15	EG	n/a	n/a	GFF1132
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	461	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	

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

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

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-10	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	25.2	2.0	0.80	mg/l	1	04/22/15 13:53 VK	EPA 300/SW846	9056A
Nitrogen, Nitrate	0.48	0.10	0.050	mg/l	1	04/22/15 13:53 VK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/22/15 13:53 VK	EPA 300/SW846	9056A
Sulfate	20.3	2.0	0.60	mg/l	1	04/22/15 13:53 VK	EPA 300/SW846	9056A
Total Organic Carbon	5.8	1.0	0.23	mg/l	1	04/25/15 07:16 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-4-A	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-11	Date Received:	04/22/15
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	I29245.D	1	04/25/15	DP	n/a	n/a	VI698
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	0.93	1.0	0.40	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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: 04/21/15
Lab Sample ID: FA23750-11	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	93%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-12	Date Received:	04/22/15
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	I29246.D	1	04/25/15	DP	n/a	n/a	VI698
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7	Date Sampled: 04/21/15
Lab Sample ID: FA23750-12	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	94%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

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

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-7	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-12	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF28661.D	1	04/23/15	EG	n/a	n/a	GFF1132
Run #2							

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

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

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

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

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-12	Date Received:	04/22/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	1.3 J	2.0	0.80	mg/l	1	04/22/15 14:10 VK	EPA 300/SW846	9056A
Nitrogen, Nitrate	0.15	0.10	0.050	mg/l	1	04/22/15 14:10 VK	EPA 300/SW846	9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	mg/l	1	04/22/15 14:10 VK	EPA 300/SW846	9056A
Sulfate	4.0	2.0	0.60	mg/l	1	04/22/15 14:10 VK	EPA 300/SW846	9056A
Total Organic Carbon	0.55 J	1.0	0.23	mg/l	1	04/25/15 07:32 FN	SM5310 B-11/SW9060A	

RL = Reporting Limit
MDL = Method Detection Limit

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

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-13	Date Received:	04/22/15
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	I29247.D	1	04/25/15	DP	n/a	n/a	VI698
Run #2 ^a	I29289.D	2	04/27/15	DP	n/a	n/a	VI699

	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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	74.3 ^b	2.0	0.65	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	1.3	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-13	Date Received:	04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	96%	79-125%
2037-26-5	Toluene-D8	100%	100%	85-112%
460-00-4	4-Bromofluorobenzene	99%	98%	83-118%

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

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-14	Date Received:	04/22/15
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	I29290.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	0.92	1.0	0.33	ug/l	J
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3	Date Sampled: 04/21/15
Lab Sample ID: FA23750-14	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	94%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-19	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-15	Date Received:	04/22/15
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	I29249.D	20	04/25/15	DP	n/a	n/a	VI698
Run #2 ^a	I29291.D	100	04/27/15	DP	n/a	n/a	VI699

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	4.0	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.3	ug/l	
75-25-2	Bromoform	ND	20	6.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	23	ug/l	
75-15-0	Carbon Disulfide	ND	40	5.9	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	5.6	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	10	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
124-48-1	Dibromochloromethane	ND	20	4.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	4.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	4.0	ug/l	
75-35-4	1,1-Dichloroethylene	15.6	20	5.4	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	12.5	20	4.4	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	20	4.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	5.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	5.2	ug/l	
100-41-4	Ethylbenzene	ND	20	4.0	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	20	ug/l	
100-42-5	Styrene	ND	20	5.6	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	4.5	ug/l	
127-18-4	Tetrachloroethylene	4170 ^b	100	33	ug/l	
108-88-3	Toluene	ND	20	8.0	ug/l	
71-55-6	1,1,1-Trichloroethane	19.8	20	5.1	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	20	6.3	ug/l	
79-01-6	Trichloroethylene	5.5	20	4.3	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-19	Date Sampled: 04/21/15
Lab Sample ID: FA23750-15	Date Received: 04/22/15
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	5.0	ug/l	
1330-20-7	Xylene (total)	ND	60	10	ug/l	

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

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

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3D	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-16	Date Received:	04/22/15
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	I29250.D	1	04/25/15	DP	n/a	n/a	VI698
Run #2	I29292.D	5	04/27/15	DP	n/a	n/a	VI699

	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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	12.4	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	8.4	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	316 ^b	5.0	1.6	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	8.1	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3D	Date Sampled: 04/21/15
Lab Sample ID: FA23750-16	Date Received: 04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	96%	96%	79-125%
2037-26-5	Toluene-D8	103%	100%	85-112%
460-00-4	4-Bromofluorobenzene	102%	98%	83-118%

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

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-20	Date Sampled:	04/21/15
Lab Sample ID:	FA23750-17	Date Received:	04/22/15
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	I29251.D	5	04/25/15	DP	n/a	n/a	VI698
Run #2 ^a	I29323.D	20	04/29/15	DP	n/a	n/a	VI701

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.1	ug/l	
75-25-2	Bromoform	ND	5.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	5.8	ug/l	
75-15-0	Carbon Disulfide	ND	10	1.5	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.4	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.4	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.6	5.0	1.1	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	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	1.3	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.0	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	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/l	
127-18-4	Tetrachloroethylene	452 ^b	20	6.5	ug/l	
108-88-3	Toluene	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.3	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.6	ug/l	
79-01-6	Trichloroethylene	4.2	5.0	1.1	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20	Date Sampled: 04/21/15
Lab Sample ID: FA23750-17	Date Received: 04/22/15
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	1.3	ug/l	
1330-20-7	Xylene (total)	ND	15	2.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	92%	79-125%
2037-26-5	Toluene-D8	102%	100%	85-112%
460-00-4	4-Bromofluorobenzene	102%	105%	83-118%

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

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14-C	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-18	Date Received:	04/22/15
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	I29230.D	1	04/24/15	DP	n/a	n/a	VI697
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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-C	Date Sampled:	04/20/15
Lab Sample ID:	FA23750-18	Date Received:	04/22/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	98%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

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

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA23750

AECOM PO# 56785ACM

AECOM

Chain of Custody and Analytical Request

Page 1 of 2

Project Number: 60314964

Chain of Custody Number (1): 10272014-0

LIMS Number:

Project Name / Location: UTC Delavan Spray Technologies Site, Bamberg SC			Sample Analysis Requested										Quality Assurance Samples	
Client Name: UTC			COMMENTS										Coiler ID	
Collected by: R. Morgan, J. Butler			Project Manager: Walter Curran											
Sample ID	Date Collected (dd-mm-yy)	Time Collected (Military) (hh:mm)	See Comments	Sample Information	VOLs (B260B)	TOL (S310B)	Nitrate (N100B)	Nitrite (N100B)	Nitrate+Nitrite (N100B)	NOx (S310B)	TPH (N100B)	TPH (N100B)		
MW-21D	20-Apr-2015	1630	X	Groundwater	X								1	
MW-14	20-Apr-2015	1705	X	"	X								2	
MW-14-c	20-Apr-2015	1705	X	"	X								18	
MW-1	20-Apr-2015	1725	X	"	X								3	
MW-14D	20-Apr-2015	1755	X	"	X								4	
MW-14D-a	20-Apr-2015	1755	X	"	X								5	
MW-11	21-Apr-2015	0823	X	"	X	X	X	X	X	X			6	
MW-2	21-Apr-2015	0825	X	"	X	X	X	X	X	X			7	
MW-9D	21-Apr-2015	0925	X	"	X	X	X	X	X	X			8	
MW-6	21-Apr-2015	0935	X	"	X	X	X	X	X	X			9	
MW-4	21-Apr-2015	1030	X	"	X	X	X	X	X	X			10	
MW-4-a	21-Apr-2015	1030	X	"	X								11	
MW-7	21-Apr-2015	1050	X	"	X	X	X	X	X	X			12	
MW-5	21-Apr-2015	1235	X	"	X								13	
MW-3	21-Apr-2015	1315	X	"	X								14	

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:	Date:	Time:
Randy Morgan	4-21-15	1500	FX	4-21-15	09:15	Method of Shipment: FedEx		8046 1749 7440	Orlando FL		
FX			J. Curran (AEC)	4-22-15		Analytical Lab: Accutest					
						Lab Recipient:					

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

TL VOCs by B260B - unpreserved vials - 7 day holding time
 Nitrate/Nitrite - 48 hr holding time

2.8

AECOM chemist: Dori Cullum
 844-234-8138 doria.cullum@aecom.com
 2243\admin\project control\project forms\Blank COC

FA23750: Chain of Custody

Page 1 of 4

FA 23750

AECOM P0456785ACM

AECOM

Chain of Custody and Analytical Request

Page 2 of 2
 Project Number: 60314964
 Chain of Custody Number⁽¹⁾: 10272014-01
 LIMS Number:

Project Name / Location: <u>UTC Delavan Spray Technologies Site, Bamberg SC</u>			Sample Analysis Requested										Quality Assurance Samples				
Client Name: <u>UTC</u>																	
Collected by: <u>R. Morgan, J. Butler</u>			Project Manager: <u>Walter Curran B234</u>														
Sample ID	Date Collected (dd-mm-yy)	Time Collected (Military) (hh:mm)	See Comments		Sample Information											COMMENTS	Cooler ID
			COMP	GRAB	Well												
<u>MW-19</u>	<u>21-Apr-2015</u>	<u>1255</u>	☒	☒		<u>Groundwater</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>15</u>
<u>MW-30</u>	<u>21-Apr-2015</u>	<u>1400</u>	☒	☒		<u>"</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>16</u>
<u>MW-30-m5</u>	<u>21-Apr-2015</u>	<u>1400</u>	☒	☒		<u>"</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>16</u>
<u>MW-30-m20</u>	<u>21-Apr-2015</u>	<u>1400</u>	☒	☒		<u>"</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>16</u>
<u>MW-20</u>	<u>21-Apr-2015</u>	<u>1345</u>	☒	☒		<u>"</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>17</u>
<u>Randy Morgan</u> <u>4-21-15</u>																	

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
Relinquished By (Signed): <u>Randy Morgan</u>	Date: <u>4-21-15</u>	Time: <u>1500</u>		Received by (signed): <u>EX</u>	Date: <u>04-13</u>	Time: <u>09:13</u>	Delivered Directly to Lab:
2. <u>fx</u>				3. <u>J. Curran (Alec)</u>	<u>4-22-15</u>		Method of Shipment: <u>FedEx</u>
							Analytical Lab: <u>Accutest</u>
							Lab Recipient:
							Shipped: <u>8066 17447440</u>
							Airbill #: <u>8066 17447440</u>
							Location: <u>Orlando FL</u>
							Date: <u></u> Time: <u></u>

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

IL VOCs by B2603 - unpreserved vials - 7 day holding time
 Nitrate/Nitrite - 48 hr holding time

AECOM chemist: Dori Cullum
 804-234-8922 doria.cullum@aecom.com
 S2745\data\project control\project forms\Blank COC

FA23750: Chain of Custody

Page 2 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 23750 CLIENT: ABCOM PROJECT: LTC DELAVAN
 DATE/TIME RECEIVED: 4-22-15 09:15 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8066 17297440

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 ? _____

pH PAPER LOT#s WIDE RANGE A036122

NARROW RANGE HC421754

OTHER (specify) 405-230010

SUMMARY OF COMMENTS: NO VIALS RECEIVED FOR SAMPLE DW-14C; RECEIVED 1 VIAL (TOC) BROKEN FOR SAMPLE #9

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR -0.2
- ☐ OBSERVED TEMPS: 3.0
- ☐ CORRECTED TEMPS: 2.8

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# _____

TECHNICIAN SIGNATURE/DATE KA-22-15

REVIEWER SIGNATURE/DATE Jey Ren 4-22-15

NF 10/14

receipt confirmation 102914.xls

FA23750: Chain of Custody

Page 3 of 4

Page 4 of 4

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 2

Job Number: FA23750**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI697-MB	I29212.D	1	04/24/15	DP	n/a	n/a	VI697

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

FA23750-1, FA23750-2, FA23750-4, FA23750-5, FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-18

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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

Method Blank Summary

Job Number: FA23750
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI697-MB	I29212.D	1	04/24/15	DP	n/a	n/a	VI697

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

FA23750-1, FA23750-2, FA23750-4, FA23750-5, FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-18

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

Method Blank Summary

Page 1 of 2

Job Number: FA23750**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI698-MB	I29243.D	1	04/25/15	DP	n/a	n/a	VI698

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

FA23750-3, FA23750-11, FA23750-12, FA23750-13, FA23750-15, FA23750-16, FA23750-17

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

Method Blank Summary

Job Number: FA23750
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI698-MB	I29243.D	1	04/25/15	DP	n/a	n/a	VI698

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

FA23750-3, FA23750-11, FA23750-12, FA23750-13, FA23750-15, FA23750-16, FA23750-17

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

Method Blank Summary

Page 1 of 2

Job Number: FA23750**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-MB	I29272.D	1	04/27/15	DP	n/a	n/a	VI699

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

FA23750-13, FA23750-14, FA23750-15, FA23750-16

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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

Method Blank Summary

Job Number: FA23750
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-MB	I29272.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples: Method: SW846 8260B
FA23750-13, FA23750-14, FA23750-15, FA23750-16

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 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%

Method Blank Summary

Page 1 of 1

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-MB	I29322.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-17

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	94% 79-125%
2037-26-5	Toluene-D8	99% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA23750**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI697-BS	I29210.D	1	04/24/15	DP	n/a	n/a	VI697

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

FA23750-1, FA23750-2, FA23750-4, FA23750-5, FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	110	88	50-147
71-43-2	Benzene	25	23.7	95	81-122
75-27-4	Bromodichloromethane	25	22.5	90	79-123
75-25-2	Bromoform	25	23.3	93	66-123
78-93-3	2-Butanone (MEK)	125	102	82	56-143
75-15-0	Carbon Disulfide	25	27.0	108	66-148
56-23-5	Carbon Tetrachloride	25	26.3	105	76-136
108-90-7	Chlorobenzene	25	26.6	106	82-124
75-00-3	Chloroethane	25	28.8	115	62-144
67-66-3	Chloroform	25	24.4	98	80-124
124-48-1	Dibromochloromethane	25	24.2	97	78-122
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	24.0	96	75-125
75-35-4	1,1-Dichloroethylene	25	32.0	128	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.8	103	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.6	102	76-127
78-87-5	1,2-Dichloropropane	25	23.1	92	76-124
10061-01-5	cis-1,3-Dichloropropene	25	20.6	82	75-118
10061-02-6	trans-1,3-Dichloropropene	25	22.9	92	80-120
100-41-4	Ethylbenzene	25	26.0	104	81-121
591-78-6	2-Hexanone	125	118	94	61-129
74-83-9	Methyl Bromide	25	30.1	120	59-143
74-87-3	Methyl Chloride	25	28.0	112	50-159
75-09-2	Methylene Chloride	25	26.1	104	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	122	98	66-122
100-42-5	Styrene	25	25.2	101	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	22.9	92	72-120
127-18-4	Tetrachloroethylene	25	26.4	106	76-135
108-88-3	Toluene	25	23.9	96	80-120
71-55-6	1,1,1-Trichloroethane	25	23.5	94	75-130
79-00-5	1,1,2-Trichloroethane	25	24.3	97	76-119
79-01-6	Trichloroethylene	25	24.0	96	81-126
75-01-4	Vinyl Chloride	25	30.8	123	69-159
1330-20-7	Xylene (total)	75	78.7	105	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI697-BS	I29210.D	1	04/24/15	DP	n/a	n/a	VI697

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-1, FA23750-2, FA23750-4, FA23750-5, FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-18

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	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	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA23750**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI698-BS	I29241.D	1	04/25/15	DP	n/a	n/a	VI698

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

FA23750-3, FA23750-11, FA23750-12, FA23750-13, FA23750-15, FA23750-16, FA23750-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	90.5	72	50-147
71-43-2	Benzene	25	22.2	89	81-122
75-27-4	Bromodichloromethane	25	20.8	83	79-123
75-25-2	Bromoform	25	21.3	85	66-123
78-93-3	2-Butanone (MEK)	125	89.0	71	56-143
75-15-0	Carbon Disulfide	25	25.7	103	66-148
56-23-5	Carbon Tetrachloride	25	25.1	100	76-136
108-90-7	Chlorobenzene	25	24.6	98	82-124
75-00-3	Chloroethane	25	27.6	110	62-144
67-66-3	Chloroform	25	22.4	90	80-124
124-48-1	Dibromochloromethane	25	22.2	89	78-122
75-34-3	1,1-Dichloroethane	25	24.1	96	81-122
107-06-2	1,2-Dichloroethane	25	22.3	89	75-125
75-35-4	1,1-Dichloroethylene	25	30.5	122	78-137
156-59-2	cis-1,2-Dichloroethylene	25	22.8	91	78-120
156-60-5	trans-1,2-Dichloroethylene	25	23.4	94	76-127
78-87-5	1,2-Dichloropropane	25	21.9	88	76-124
10061-01-5	cis-1,3-Dichloropropene	25	19.2	77	75-118
10061-02-6	trans-1,3-Dichloropropene	25	20.8	83	80-120
100-41-4	Ethylbenzene	25	23.9	96	81-121
591-78-6	2-Hexanone	125	102	82	61-129
74-83-9	Methyl Bromide	25	29.7	119	59-143
74-87-3	Methyl Chloride	25	26.7	107	50-159
75-09-2	Methylene Chloride	25	24.3	97	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	108	86	66-122
100-42-5	Styrene	25	23.1	92	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	21.0	84	72-120
127-18-4	Tetrachloroethylene	25	23.9	96	76-135
108-88-3	Toluene	25	22.4	90	80-120
71-55-6	1,1,1-Trichloroethane	25	22.0	88	75-130
79-00-5	1,1,2-Trichloroethane	25	22.8	91	76-119
79-01-6	Trichloroethylene	25	22.5	90	81-126
75-01-4	Vinyl Chloride	25	30.1	120	69-159
1330-20-7	Xylene (total)	75	73.0	97	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI698-BS	I29241.D	1	04/25/15	DP	n/a	n/a	VI698

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-3, FA23750-11, FA23750-12, FA23750-13, FA23750-15, FA23750-16, FA23750-17

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA23750**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-BS	I29270.D	1	04/27/15	DP	n/a	n/a	VI699

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

FA23750-13, FA23750-14, FA23750-15, FA23750-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	118	94	50-147
71-43-2	Benzene	25	23.8	95	81-122
75-27-4	Bromodichloromethane	25	22.5	90	79-123
75-25-2	Bromoform	25	21.8	87	66-123
78-93-3	2-Butanone (MEK)	125	104	83	56-143
75-15-0	Carbon Disulfide	25	27.4	110	66-148
56-23-5	Carbon Tetrachloride	25	24.8	99	76-136
108-90-7	Chlorobenzene	25	26.7	107	82-124
75-00-3	Chloroethane	25	25.9	104	62-144
67-66-3	Chloroform	25	24.3	97	80-124
124-48-1	Dibromochloromethane	25	23.5	94	78-122
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	24.2	97	75-125
75-35-4	1,1-Dichloroethylene	25	33.7	135	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.1	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.0	100	76-127
78-87-5	1,2-Dichloropropane	25	23.7	95	76-124
10061-01-5	cis-1,3-Dichloropropene	25	20.3	81	75-118
10061-02-6	trans-1,3-Dichloropropene	25	22.2	89	80-120
100-41-4	Ethylbenzene	25	26.0	104	81-121
591-78-6	2-Hexanone	125	120	96	61-129
74-83-9	Methyl Bromide	25	27.6	110	59-143
74-87-3	Methyl Chloride	25	23.9	96	50-159
75-09-2	Methylene Chloride	25	26.1	104	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	122	98	66-122
100-42-5	Styrene	25	25.2	101	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.0	92	72-120
127-18-4	Tetrachloroethylene	25	26.4	106	76-135
108-88-3	Toluene	25	24.1	96	80-120
71-55-6	1,1,1-Trichloroethane	25	22.8	91	75-130
79-00-5	1,1,2-Trichloroethane	25	24.7	99	76-119
79-01-6	Trichloroethylene	25	24.4	98	81-126
75-01-4	Vinyl Chloride	25	28.0	112	69-159
1330-20-7	Xylene (total)	75	78.7	105	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-BS	I29270.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-13, FA23750-14, FA23750-15, FA23750-16

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-BS	I29320.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	27.2	109	76-135

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23750-1MS	I29234.D	1	04/24/15	DP	n/a	n/a	VI697
FA23750-1MSD	I29235.D	1	04/24/15	DP	n/a	n/a	VI697
FA23750-1 ^a	I29220.D	1	04/24/15	DP	n/a	n/a	VI697

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-1, FA23750-2, FA23750-4, FA23750-5, FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-18

CAS No.	Compound	FA23750-1 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	169	135	125	188	150*	11	50-147/21
71-43-2	Benzene	ND		25	23.3	93	25	26.5	106	13	81-122/14
75-27-4	Bromodichloromethane	ND		25	21.9	88	25	24.9	100	13	79-123/19
75-25-2	Bromoform	ND		25	21.0	84	25	23.8	95	13	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	129	103	125	147	118	13	56-143/18
75-15-0	Carbon Disulfide	ND		25	26.2	105	25	28.3	113	8	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	24.0	96	25	27.6	110	14	76-136/23
108-90-7	Chlorobenzene	ND		25	25.8	103	25	29.5	118	13	82-124/14
75-00-3	Chloroethane	ND		25	27.9	112	25	29.3	117	5	62-144/20
67-66-3	Chloroform	ND		25	23.3	93	25	27.5	110	17*	80-124/15
124-48-1	Dibromochloromethane	ND		25	23.0	92	25	25.9	104	12	78-122/19
75-34-3	1,1-Dichloroethane	ND		25	25.2	101	25	28.5	114	12	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	24.4	98	25	27.7	111	13	75-125/14
75-35-4	1,1-Dichloroethylene	0.89	J	25	32.9	128	25	37.0	144*	12	78-137/18
156-59-2	cis-1,2-Dichloroethylene	0.30	J	25	25.5	101	25	29.2	116	14	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	24.3	97	25	28.0	112	14	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	23.4	94	25	26.5	106	12	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	19.1	76	25	22.1	88	15	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	21.1	84	25	24.2	97	14	80-120/22
100-41-4	Ethylbenzene	ND		25	25.0	100	25	28.5	114	13	81-121/14
591-78-6	2-Hexanone	ND		125	141	113	125	164	131*	15	61-129/18
74-83-9	Methyl Bromide	ND		25	28.8	115	25	30.4	122	5	59-143/19
74-87-3	Methyl Chloride	ND		25	25.9	104	25	27.7	111	7	50-159/19
75-09-2	Methylene Chloride	ND		25	25.5	102	25	29.0	116	13	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	125	100	125	148	118	17*	66-122/16
100-42-5	Styrene	ND		25	24.6	98	25	28.0	112	13	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.0	92	25	26.5	106	14	72-120/14
127-18-4	Tetrachloroethylene	29.4		25	48.5	76	25	51.6	89	6	76-135/16
108-88-3	Toluene	ND		25	23.5	94	25	26.4	106	12	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		25	22.1	88	25	25.7	103	15	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	25.3	101	25	28.3	113	11	76-119/14
79-01-6	Trichloroethylene	ND		25	24.0	96	25	27.4	110	13	81-126/15
75-01-4	Vinyl Chloride	ND		25	30.1	120	25	32.1	128	6	69-159/18
1330-20-7	Xylene (total)	ND		75	76.1	101	75	87.3	116	14	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23750-1MS	I29234.D	1	04/24/15	DP	n/a	n/a	VI697
FA23750-1MSD	I29235.D	1	04/24/15	DP	n/a	n/a	VI697
FA23750-1 ^a	I29220.D	1	04/24/15	DP	n/a	n/a	VI697

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-1, FA23750-2, FA23750-4, FA23750-5, FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-18

CAS No.	Surrogate Recoveries	MS	MSD	FA23750-1	Limits
1868-53-7	Dibromofluoromethane	101%	102%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	103%	95%	79-125%
2037-26-5	Toluene-D8	100%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	96%	96%	101%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23750-16MS	I29262.D	1	04/25/15	DP	n/a	n/a	VI698
FA23750-16MSD	I29263.D	1	04/25/15	DP	n/a	n/a	VI698
FA23750-16 ^a	I29250.D	1	04/25/15	DP	n/a	n/a	VI698

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-3, FA23750-11, FA23750-12, FA23750-13, FA23750-15, FA23750-16, FA23750-17

CAS No.	Compound	FA23750-16		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		125	144	115	125	149	119	3	50-147/21
71-43-2	Benzene	ND		25	21.8	87	25	24.0	96	10	81-122/14
75-27-4	Bromodichloromethane	ND		25	20.3	81	25	22.4	90	10	79-123/19
75-25-2	Bromoform	ND		25	18.4	74	25	20.5	82	11	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	114	91	125	130	104	13	56-143/18
75-15-0	Carbon Disulfide	ND		25	25.7	103	25	26.8	107	4	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	22.5	90	25	24.1	96	7	76-136/23
108-90-7	Chlorobenzene	ND		25	24.0	96	25	26.9	108	11	82-124/14
75-00-3	Chloroethane	ND		25	35.8	143	25	36.1	144	1	62-144/20
67-66-3	Chloroform	ND		25	22.5	90	25	24.3	97	8	80-124/15
124-48-1	Dibromochloromethane	ND		25	20.5	82	25	23.6	94	14	78-122/19
75-34-3	1,1-Dichloroethane	ND		25	24.0	96	25	25.7	103	7	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	22.2	89	25	24.5	98	10	75-125/14
75-35-4	1,1-Dichloroethylene	12.4		25	45.3	132	25	46.9	138*	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	8.4		25	33.0	98	25	35.7	109	8	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	23.2	93	25	24.1	96	4	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	21.2	85	25	24.0	96	12	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	16.2	65*	25	18.2	73*	12	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	17.7	71*	25	20.9	84	17	80-120/22
100-41-4	Ethylbenzene	ND		25	23.0	92	25	26.3	105	13	81-121/14
591-78-6	2-Hexanone	ND		125	125	100	125	140	112	11	61-129/18
74-83-9	Methyl Bromide	ND		25	36.8	147*	25	40.1	160*	9	59-143/19
74-87-3	Methyl Chloride	ND		25	30.6	122	25	32.5	130	6	50-159/19
75-09-2	Methylene Chloride	ND		25	24.4	98	25	25.7	103	5	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	119	95	125	141	113	17*	66-122/16
100-42-5	Styrene	ND		25	22.7	91	25	24.9	100	9	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	20.7	83	25	24.5	98	17*	72-120/14
127-18-4	Tetrachloroethylene	410	E	25	489	316* ^b	25	552	568* ^b	12	76-135/16
108-88-3	Toluene	ND		25	21.7	87	25	25.1	100	15*	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		25	21.3	85	25	22.7	91	6	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	22.2	89	25	26.6	106	18*	76-119/14
79-01-6	Trichloroethylene	8.1		25	31.7	94	25	34.5	106	8	81-126/15
75-01-4	Vinyl Chloride	ND		25	36.7	147	25	37.5	150	2	69-159/18
1330-20-7	Xylene (total)	ND		75	70.5	94	75	79.7	106	12	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23750-16MS	I29262.D	1	04/25/15	DP	n/a	n/a	VI698
FA23750-16MSD	I29263.D	1	04/25/15	DP	n/a	n/a	VI698
FA23750-16 ^a	I29250.D	1	04/25/15	DP	n/a	n/a	VI698

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-3, FA23750-11, FA23750-12, FA23750-13, FA23750-15, FA23750-16, FA23750-17

CAS No.	Surrogate Recoveries	MS	MSD	FA23750-16	Limits
1868-53-7	Dibromofluoromethane	103%	101%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	100%	96%	79-125%
2037-26-5	Toluene-D8	100%	104%	103%	85-112%
460-00-4	4-Bromofluorobenzene	95%	96%	102%	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: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23740-1MS	I29293.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1MSD	I29294.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1 ^a	I29276.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-13, FA23750-14, FA23750-15, FA23750-16

CAS No.	Compound	FA23740-1 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	84.6	68	125	88.9	71	5	50-147/21
71-43-2	Benzene	1.0 U	25	24.4	98	25	23.7	95	3	81-122/14
75-27-4	Bromodichloromethane	1.0 U	25	22.7	91	25	21.1	84	7	79-123/19
75-25-2	Bromoform	1.0 U	25	23.0	92	25	21.8	87	5	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	92.4	74	125	96.3	77	4	56-143/18
75-15-0	Carbon Disulfide	2.0 U	25	30.1	120	25	26.6	106	12	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	23.8	95	25	22.9	92	4	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	27.2	109	25	26.4	106	3	82-124/14
75-00-3	Chloroethane	2.0 U	25	27.1	108	25	26.1	104	4	62-144/20
67-66-3	Chloroform	1.0 U	25	24.5	98	25	23.9	96	2	80-124/15
124-48-1	Dibromochloromethane	1.0 U	25	22.9	92	25	22.5	90	2	78-122/19
75-34-3	1,1-Dichloroethane	1.0 U	25	26.1	104	25	25.9	104	1	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	24.3	97	25	24.1	96	1	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	36.7	147*	25	39.2	157*	7	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	26.3	105	25	24.9	100	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.4	25	26.3	100	25	26.4	100	0	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	24.1	96	25	23.7	95	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	20.5	82	25	18.9	76	8	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	22.0	88	25	20.6	82	7	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	25.9	104	25	25.6	102	1	81-121/14
591-78-6	2-Hexanone	10 U	125	106	85	125	111	89	5	61-129/18
74-83-9	Methyl Bromide	2.0 U	25	29.2	117	25	27.7	111	5	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	24.6	98	25	24.5	98	0	50-159/19
75-09-2	Methylene Chloride	5.0 U	25	26.2	105	25	26.1	104	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	121	97	125	124	99	2	66-122/16
100-42-5	Styrene	1.0 U	25	25.4	102	25	25.1	100	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	23.7	95	25	23.6	94	0	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	26.4	106	25	25.6	102	3	76-135/16
108-88-3	Toluene	1.0 U	25	24.4	98	25	24.1	96	1	80-120/14
71-55-6	1,1,1-Trichloroethane	1.0 U	25	22.4	90	25	22.4	90	0	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	25.3	101	25	25.0	100	1	76-119/14
79-01-6	Trichloroethylene	1.0 U	25	24.8	99	25	23.9	96	4	81-126/15
75-01-4	Vinyl Chloride	12.1	25	40.7	114	25	39.6	110	3	69-159/18
1330-20-7	Xylene (total)	3.0 U	75	79.0	105	75	77.5	103	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23740-1MS	I29293.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1MSD	I29294.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1 ^a	I29276.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-13, FA23750-14, FA23750-15, FA23750-16

CAS No.	Surrogate Recoveries	MS	MSD	FA23740-1	Limits
1868-53-7	Dibromofluoromethane	101%	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	99%	94%	79-125%
2037-26-5	Toluene-D8	100%	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	101%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23685-11MS	I29333.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11MSD	I29334.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11	I29332.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23750-17

CAS No.	Compound	FA23685-11 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	ND	25		23.4	94	25	22.3	89	5	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA23685-11	Limits
1868-53-7	Dibromofluoromethane	98%	100%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	101%	97%	79-125%
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	103%	106%	107%	83-118%

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: FA23750
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1132-MB	FF28638.D	1	04/23/15	EG	n/a	n/a	GFF1132

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

FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

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

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7

Blank Spike/Blank Spike Duplicate Summary

Job Number: FA23750
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1132-BS	FF28639.D	1	04/23/15	EG	n/a	n/a	GFF1132
GFF1132-BSD	FF28640.D	1	04/23/15	EG	n/a	n/a	GFF1132

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

FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	124	115	126	117	2	62-139/30
74-84-0	Ethane	219	258	118	263	120	2	67-141/30
74-85-1	Ethene	290	347	120	354	122	2	68-141/30

* = Outside of Control Limits.

Matrix Spike Summary

Page 1 of 1

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23614-12MS	FF28653.D	1	04/23/15	EG	n/a	n/a	GFF1132
FA23614-12	FF28650.D	1	04/23/15	EG	n/a	n/a	GFF1132

The QC reported here applies to the following samples:

Method: RKSOP-147/175

FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

CAS No.	Compound	FA23614-12 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	0.50 U	108	135	125	62-139
74-84-0	Ethane	1.0 U	219	279	127	67-141
74-85-1	Ethene	1.0 U	290	376	130	68-141

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 1

Job Number: FA23750

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23750-6DUP	FF28654.D	1	04/23/15	EG	n/a	n/a	GFF1132
FA23750-6	FF28652.D	1	04/23/15	EG	n/a	n/a	GFF1132

The QC reported here applies to the following samples:

Method: RKSOP-147/175

FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

CAS No.	Compound	FA23750-6		Q	RPD	Limits
		ug/l	DUP ug/l			
74-82-8	Methane	0.99	1.2		19	30
74-84-0	Ethane	ND	ND		nc	30
74-85-1	Ethene	ND	ND		nc	30

* = Outside of Control Limits.

General Chemistry

QC Data Summaries

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Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA23750
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP25860/GN66032	2.0	0.0	mg/l	50	50.4	100.8	90-110%
Nitrogen, Nitrate	GP25860/GN66032	0.10	0.0	mg/l	2.5	2.52	100.8	90-110%
Nitrogen, Nitrite	GP25860/GN66032	0.10	0.0	mg/l	2.5	2.38	95.2	90-110%
Sulfate	GP25860/GN66032	2.0	0.0	mg/l	50	48.6	97.2	90-110%
Total Organic Carbon	GP25872/GN66066	1.0	0.0	mg/l	15	15.5	103.3	90-110%

Associated Samples:

Batch GP25860: FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

Batch GP25872: FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

(*) Outside of QC limits

8.1

8

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA23750
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Total Organic Carbon	GP25872/GN66066	FA23750-6	mg/l	2.0	1.9	5.1	0-20%

Associated Samples:

Batch GP25872: FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA23750
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP25860/GN66032	FA23750-7	mg/l	1.5	50	52.4	101.8	90-110%
Nitrogen, Nitrate	GP25860/GN66032	FA23750-7	mg/l	1.1	2.5	3.4	92.0	90-110%
Nitrogen, Nitrite	GP25860/GN66032	FA23750-7	mg/l	0.050 U	2.5	2.3	92.0	90-110%
Sulfate	GP25860/GN66032	FA23750-7	mg/l	4.8	50	54.5	99.4	90-110%
Total Organic Carbon	GP25872/GN66066	FA23750-6	mg/l	2.0	15	17.3	102.0	90-110%

Associated Samples:

Batch GP25860: FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

Batch GP25872: FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.3

8

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA23750
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP25860/GN66032	FA23750-7	mg/l	1.5	50	53.2	1.5	20%
Nitrogen, Nitrate	GP25860/GN66032	FA23750-7	mg/l	1.1	2.5	3.5	2.9	20%
Nitrogen, Nitrite	GP25860/GN66032	FA23750-7	mg/l	0.050 U	2.5	2.3	0.0	20%
Sulfate	GP25860/GN66032	FA23750-7	mg/l	4.8	50	55.1	1.1	20%

Associated Samples:

Batch GP25860: FA23750-6, FA23750-7, FA23750-8, FA23750-9, FA23750-10, FA23750-12

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.4

8



05/06/15

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

Accutest Job Number: FA23825

Sampling Dates: 04/21/15 - 04/22/15

Report to:

AECOM Environment

doria.cullom@aecom.com

ATTN: Doria Cullom

Total number of pages in report: **108**



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.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

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

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
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	8
Section 4: Sample Results	11
4.1: FA23825-1: MW-8	12
4.2: FA23825-2: MW-8-C	14
4.3: FA23825-3: MW-3D1	16
4.4: FA23825-4: MW-23D	18
4.5: FA23825-5: MW-12D	20
4.6: FA23825-6: MW-17	22
4.7: FA23825-7: MW-22D	24
4.8: FA23825-8: MW-22D-A	26
4.9: FA23825-9: MW-16	28
4.10: FA23825-10: MW-18	30
4.11: FA23825-11: MW-16D	32
4.12: FA23825-12: MW-10D	34
4.13: FA23825-13: MW-15	36
4.14: FA23825-14: MW-10	38
4.15: FA23825-15: MW-15D	40
4.16: FA23825-16: MW-15D1	42
4.17: FA23825-17: MW-9	44
4.18: FA23825-18: MW-21	46
4.19: FA23825-19: MW-13D	48
4.20: FA23825-21: IDW-1	50
Section 5: Misc. Forms	56
5.1: Chain of Custody	57
Section 6: GC/MS Volatiles - QC Data Summaries	62
6.1: Method Blank Summary	63
6.2: Blank Spike Summary	71
6.3: Matrix Spike/Matrix Spike Duplicate Summary	79
Section 7: GC/MS Semi-volatiles - QC Data Summaries	87
7.1: Method Blank Summary	88
7.2: Blank Spike Summary	91
7.3: Matrix Spike/Matrix Spike Duplicate Summary	94
Section 8: Metals Analysis - QC Data Summaries	97
8.1: Prep QC MP28857: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na, Tl,V,Zn	98
8.2: Prep QC MP28860: Hg	104

Sample Summary

United Technologies Corporation

Job No: FA23825

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23825-1	04/21/15	14:50 RMJB	04/23/15	AQ	Ground Water	MW-8
FA23825-2	04/21/15	14:50 RMJB	04/23/15	AQ	Trip Blank Water	MW-8-C
FA23825-3	04/21/15	15:02 RMJB	04/23/15	AQ	Ground Water	MW-3D1
FA23825-4	04/21/15	16:55 RMJB	04/23/15	AQ	Ground Water	MW-23D
FA23825-5	04/21/15	18:13 RMJB	04/23/15	AQ	Ground Water	MW-12D
FA23825-6	04/21/15	18:40 RMJB	04/23/15	AQ	Ground Water	MW-17
FA23825-7	04/22/15	09:00 RMJB	04/23/15	AQ	Ground Water	MW-22D
FA23825-8	04/22/15	09:00 RMJB	04/23/15	AQ	Ground Water	MW-22D-A
FA23825-9	04/22/15	09:20 RMJB	04/23/15	AQ	Ground Water	MW-16
FA23825-10	04/22/15	10:05 RMJB	04/23/15	AQ	Ground Water	MW-18
FA23825-11	04/22/15	09:58 RMJB	04/23/15	AQ	Ground Water	MW-16D
FA23825-12	04/22/15	11:35 RMJB	04/23/15	AQ	Ground Water	MW-10D
FA23825-13	04/22/15	12:00 RMJB	04/23/15	AQ	Ground Water	MW-15

Sample Summary

(continued)

United Technologies Corporation

Job No: FA23825

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

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23825-14	04/22/15	12:35 RMJB	04/23/15	AQ	Ground Water	MW-10
FA23825-15	04/22/15	12:40 RMJB	04/23/15	AQ	Ground Water	MW-15D
FA23825-16	04/22/15	13:17 RMJB	04/23/15	AQ	Ground Water	MW-15D1
FA23825-17	04/22/15	14:00 RMJB	04/23/15	AQ	Ground Water	MW-9
FA23825-17D	04/22/15	14:00 RMJB	04/23/15	AQ	Water Dup/MSD	MW-9
FA23825-17S	04/22/15	14:00 RMJB	04/23/15	AQ	Water Matrix Spike	MW-9
FA23825-18	04/22/15	14:50 RMJB	04/23/15	AQ	Ground Water	MW-21
FA23825-19	04/22/15	15:22 RMJB	04/23/15	AQ	Ground Water	MW-13D
FA23825-20	04/22/15	15:40 RMJB	04/23/15	AQ	Ground Water	POTABLE-1
FA23825-21	04/22/15	15:55 RMJB	04/23/15	AQ	Ground Water	IDW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation

Job No: FA23825

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Report Date 5/6/2015 8:16:13 AM

19 Samples and 1 Trip Blank were collected between 04/21/2015 and 04/22/2015 and were received at Accutest SE on 04/23/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA23825. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

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.

Sample FA23825-20: Analysis cancelled per client's request.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VB4263

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23614-4MS, FA23614-4MSD were used as the QC samples indicated.

Sample(s) FA23614-4MSD has surrogates outside control limits. Probable cause is due to matrix interference.

FA23825-7: Sample was not preserved to a pH < 2.

FA23825-8: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: VB4265

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23825-17MS, FA23825-17MSD were used as the QC samples indicated.

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

Matrix Spike Recovery(s) for 1,1,2-Trichloroethane, 1,1-Dichloroethane, Ethylbenzene, Styrene, Toluene, trans-1,2-Dichloroethylene, trans-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference.

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

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.

FA23825-9: Sample was not preserved to a pH < 2.

FA23825-10: Sample was not preserved to a pH < 2.

FA23825-11: Sample was not preserved to a pH < 2.

FA23825-12: Sample was not preserved to a pH < 2.

FA23825-13: Sample was not preserved to a pH < 2.

FA23825-14: Sample was not preserved to a pH < 2.

FA23825-15: Sample was not preserved to a pH < 2.

FA23825-16: Sample was not preserved to a pH < 2.

FA23825-17: Sample was not preserved to a pH < 2.

FA23825-19: Sample was not preserved to a pH < 2.

FA23825-21: Sample was not preserved to a pH < 2.

FA23825-9 for Acetone: Associated BS recovery outside control limits.

FA23825-10 for Acetone: Associated BS recovery outside control limits.

FA23825-11 for Acetone: Associated BS recovery outside control limits.

FA23825-12 for Acetone: Associated BS recovery outside control limits.

FA23825-13 for Acetone: Associated BS recovery outside control limits.

FA23825-14 for Acetone: Associated BS recovery outside control limits.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VB4265

FA23825-15 for Acetone: Associated BS recovery outside control limits.

FA23825-16 for Acetone: Associated BS recovery outside control limits.

FA23825-17 for Acetone: Associated BS recovery outside control limits.

FA23825-19 for Acetone: Associated BS recovery outside control limits.

FA23825-21 for Acetone: Associated BS recovery outside control limits.

Matrix: AQ

Batch ID: VB4266

All method blanks for this batch meet method specific criteria.

Sample(s) FA23917-1MS, FA23917-1MSD were used as the QC samples indicated.

FA23825-18: Sample was not preserved to a pH < 2; reported results are considered minimum values.

Matrix: AQ

Batch ID: VI699

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA23740-1MS, FA23740-1MSD were used as the QC samples indicated.

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

FA23825-1: Sample was not preserved to a pH < 2.

FA23825-8: Sample was not preserved to a pH < 2.

FA23825-7: Sample was not preserved to a pH < 2.

FA23825-6: Sample was not preserved to a pH < 2.

FA23825-5: Sample was not preserved to a pH < 2.

FA23825-4: Sample was not preserved to a pH < 2.

FA23825-3: Sample was not preserved to a pH < 2.

Matrix: AQ

Batch ID: VI703

All method blanks for this batch meet method specific criteria.

Sample(s) JB92658-2MS, JB92658-2MSD were used as the QC samples indicated.

FA23825-19: Sample was not preserved to a pH < 2; reported results are considered minimum values.

FA23825-21: Sample was not preserved to a pH < 2; reported results are considered minimum values.

Matrix: AQ

Batch ID: VI704

All method blanks for this batch meet method specific criteria.

Sample(s) FA23911-1MS, FA23911-1MSD were used as the QC samples indicated.

FA23825-17: Sample was not preserved to a pH < 2; reported results are considered minimum values.

FA23825-18: Sample was not preserved to a pH < 2; reported results are considered minimum values.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ

Batch ID: OP55904

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) FA23848-1MS, FA23848-1MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ

Batch ID: MP28857

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) FA23848-1DUP, FA23848-1MS, FA23848-1MSD, FA23848-1PS, FA23848-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Nickel are outside control limits for sample MP28857-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Cobalt, Iron, Nickel, Sodium, Zinc are outside control limits for sample MP28857-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: AQ

Batch ID: MP28860

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) FA23825-21DUP, FA23825-21MS, FA23825-21MSD, FA23825-21SDL were used as the QC samples for metals.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE 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: May 6, 2015

Summary of Hits

Job Number: FA23825
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/21/15 thru 04/22/15

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

FA23825-1 MW-8

Tetrachloroethylene ^a	28.5	1.0	0.33	ug/l	SW846 8260B
Trichloroethylene ^a	0.97 J	1.0	0.22	ug/l	SW846 8260B

FA23825-2 MW-8-C

No hits reported in this sample.

FA23825-3 MW-3D1

No hits reported in this sample.

FA23825-4 MW-23D

No hits reported in this sample.

FA23825-5 MW-12D

1,1-Dichloroethylene ^a	1.4	1.0	0.27	ug/l	SW846 8260B
Tetrachloroethylene ^a	65.6	1.0	0.33	ug/l	SW846 8260B

FA23825-6 MW-17

No hits reported in this sample.

FA23825-7 MW-22D

1,1-Dichloroethylene ^a	3.8	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	0.56 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	107	2.0	0.65	ug/l	SW846 8260B
1,1,1-Trichloroethane ^a	0.27 J	1.0	0.26	ug/l	SW846 8260B
Trichloroethylene ^a	0.68 J	1.0	0.22	ug/l	SW846 8260B

FA23825-8 MW-22D-A

1,1-Dichloroethylene ^a	3.8	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	0.50 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	103	2.0	0.65	ug/l	SW846 8260B
Trichloroethylene ^a	0.59 J	1.0	0.22	ug/l	SW846 8260B

FA23825-9 MW-16

No hits reported in this sample.

Summary of Hits

Job Number: FA23825
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/21/15 thru 04/22/15

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

FA23825-10 MW-18

No hits reported in this sample.

FA23825-11 MW-16D

No hits reported in this sample.

FA23825-12 MW-10D

No hits reported in this sample.

FA23825-13 MW-15

No hits reported in this sample.

FA23825-14 MW-10

1,1-Dichloroethylene ^a	5.2	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	98.8	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^a	54.1	1.0	0.33	ug/l	SW846 8260B
Trichloroethylene ^a	7.8	1.0	0.22	ug/l	SW846 8260B

FA23825-15 MW-15D

No hits reported in this sample.

FA23825-16 MW-15D1

No hits reported in this sample.

FA23825-17 MW-9

cis-1,2-Dichloroethylene ^a	33.1	10	2.2	ug/l	SW846 8260B
Tetrachloroethylene ^b	1760	20	6.5	ug/l	SW846 8260B
Trichloroethylene ^a	133	10	2.2	ug/l	SW846 8260B

FA23825-18 MW-21

1,1-Dichloroethylene	1.0	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^b	351	100	22	ug/l	SW846 8260B
Tetrachloroethylene ^b	14500	200	65	ug/l	SW846 8260B
Trichloroethylene ^b	225	100	22	ug/l	SW846 8260B
Xylene (total)	0.89 J	3.0	0.51	ug/l	SW846 8260B

Summary of Hits

Job Number: FA23825
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 04/21/15 thru 04/22/15

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

FA23825-19 MW-13D

1,1-Dichloroethylene ^a	4.4	1.0	0.27	ug/l	SW846 8260B
Tetrachloroethylene ^b	84.8	2.0	0.65	ug/l	SW846 8260B
1,1,1-Trichloroethane ^a	1.5	1.0	0.26	ug/l	SW846 8260B

FA23825-21 IDW-1

1,1-Dichloroethylene ^a	0.37 J	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene ^a	6.3	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene ^b	131	2.0	0.65	ug/l	SW846 8260B
1,1,1-Trichloroethane ^a	0.34 J	1.0	0.26	ug/l	SW846 8260B
Trichloroethylene ^a	3.8	1.0	0.22	ug/l	SW846 8260B
Aluminum	1220	200	14	ug/l	SW846 6010C
Barium	74.0 J	200	1.0	ug/l	SW846 6010C
Calcium	28000	1000	50	ug/l	SW846 6010C
Chromium	4.9 J	10	1.0	ug/l	SW846 6010C
Cobalt	0.30 J	50	0.20	ug/l	SW846 6010C
Iron	1610	300	17	ug/l	SW846 6010C
Lead	1.7 J	5.0	1.1	ug/l	SW846 6010C
Magnesium	832 J	5000	35	ug/l	SW846 6010C
Manganese	19.6	15	1.0	ug/l	SW846 6010C
Nickel	0.60 J	40	0.40	ug/l	SW846 6010C
Potassium	4550 J	10000	200	ug/l	SW846 6010C
Sodium	13000	10000	500	ug/l	SW846 6010C
Vanadium	1.8 J	50	0.60	ug/l	SW846 6010C
Zinc	36.2	20	4.4	ug/l	SW846 6010C

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

(b) Sample was not preserved to a pH < 2; reported results are considered minimum values.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-1	Date Received:	04/23/15
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	I29281.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	28.5	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.97	1.0	0.22	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-8	Date Sampled: 04/21/15
Lab Sample ID: FA23825-1	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	95%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-8-C	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-2	Date Received:	04/23/15
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	I29282.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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-8-C	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-2	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	94%		79-125%
2037-26-5	Toluene-D8	100%		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-3D1	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-3	Date Received:	04/23/15
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	I29283.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3D1	Date Sampled: 04/21/15
Lab Sample ID: FA23825-3	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

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

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

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

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

Report of Analysis

Client Sample ID:	MW-23D	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-4	Date Received:	04/23/15
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	I29284.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23D	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-4	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	95%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-12D	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-5	Date Received:	04/23/15
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	I29285.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	1.4	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	65.6	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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: 04/21/15
Lab Sample ID: FA23825-5	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	95%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-17	Date Sampled:	04/21/15
Lab Sample ID:	FA23825-6	Date Received:	04/23/15
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	I29286.D	1	04/27/15	DP	n/a	n/a	VI699
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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-17	Date Sampled: 04/21/15
Lab Sample ID: FA23825-6	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	96%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

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

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

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

Report of Analysis

Client Sample ID:	MW-22D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-7	Date Received:	04/23/15
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	I29287.D	1	04/27/15	DP	n/a	n/a	VI699
Run #2 ^a	B105177.D	2	04/28/15	DP	n/a	n/a	VB4263

	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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	3.8	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.56	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	107 ^b	2.0	0.65	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	0.27	1.0	0.26	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.68	1.0	0.22	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22D	
Lab Sample ID: FA23825-7	Date Sampled: 04/22/15
Matrix: AQ - Ground Water	Date Received: 04/23/15
Method: SW846 8260B	Percent Solids: n/a
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	104%	79-125%
2037-26-5	Toluene-D8	102%	96%	85-112%
460-00-4	4-Bromofluorobenzene	98%	93%	83-118%

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

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22D-A	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-8	Date Received:	04/23/15
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	I29288.D	1	04/27/15	DP	n/a	n/a	VI699
Run #2 ^a	B105178.D	2	04/28/15	DP	n/a	n/a	VB4263

	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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	3.8	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	103 ^b	2.0	0.65	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.59	1.0	0.22	ug/l	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22D-A	Date Sampled: 04/22/15
Lab Sample ID: FA23825-8	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	106%	79-125%
2037-26-5	Toluene-D8	102%	97%	85-112%
460-00-4	4-Bromofluorobenzene	98%	91%	83-118%

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

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-9	Date Received:	04/23/15
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	B105235.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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: 04/22/15
Lab Sample ID: FA23825-9	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	98%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Sample was not preserved to a pH < 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:	MW-18	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-10	Date Received:	04/23/15
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	B105236.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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:	04/22/15
Lab Sample ID:	FA23825-10	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

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

(a) Sample was not preserved to a pH < 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:	MW-16D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-11	Date Received:	04/23/15
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	B105237.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-11	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Sample was not preserved to a pH < 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:	MW-10D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-12	Date Received:	04/23/15
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	B105238.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	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: 04/22/15
Lab Sample ID: FA23825-12	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	111%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Sample was not preserved to a pH < 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:	MW-15	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-13	Date Received:	04/23/15
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	B105239.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-15	Date Sampled: 04/22/15
Lab Sample ID: FA23825-13	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	105%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Sample was not preserved to a pH < 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:	MW-10	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-14	Date Received:	04/23/15
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	B105240.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	5.2	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	98.8	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	54.1	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	7.8	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-10	Date Sampled: 04/22/15
Lab Sample ID: FA23825-14	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

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

(a) Sample was not preserved to a pH < 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:	MW-15D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-15	Date Received:	04/23/15
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	B105241.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-15	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	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	113%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Sample was not preserved to a pH < 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:	MW-15D1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-16	Date Received:	04/23/15
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	B105242.D	1	04/29/15	DP	n/a	n/a	VB4265
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 ^b	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15D1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-16	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		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	98%		83-118%

(a) Sample was not preserved to a pH < 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:	MW-9	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-17	Date Received:	04/23/15
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	B105243.D	10	04/29/15	DP	n/a	n/a	VB4265
Run #2 ^b	I29423.D	20	05/01/15	DP	n/a	n/a	VI704

	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 ^c	ND	250	100	ug/l	
71-43-2	Benzene	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.2	ug/l	
75-25-2	Bromoform	ND	10	3.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	12	ug/l	
75-15-0	Carbon Disulfide	ND	20	2.9	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	2.8	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	5.0	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.7	ug/l	
156-59-2	cis-1,2-Dichloroethylene	33.1	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.6	ug/l	
100-41-4	Ethylbenzene	ND	10	2.0	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	10	ug/l	
100-42-5	Styrene	ND	10	2.8	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.2	ug/l	
127-18-4	Tetrachloroethylene	1760 ^d	20	6.5	ug/l	
108-88-3	Toluene	ND	10	4.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.6	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	3.1	ug/l	
79-01-6	Trichloroethylene	133	10	2.2	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-9	Date Sampled: 04/22/15
Lab Sample ID: FA23825-17	Date Received: 04/23/15
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	2.5	ug/l	
1330-20-7	Xylene (total)	ND	30	5.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	95%	79-125%
2037-26-5	Toluene-D8	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	106%	83-118%

- (a) Sample was not preserved to a pH < 2.
 (b) Sample was not preserved to a pH < 2; reported results are considered minimum values.
 (c) Associated BS recovery outside control limits.
 (d) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-18	Date Received:	04/23/15
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	B105244.D	1	04/29/15	DP	n/a	n/a	VB4265
Run #2 ^a	B105277.D	100	04/30/15	DP	n/a	n/a	VB4266
Run #3 ^a	I29424.D	200	05/01/15	DP	n/a	n/a	VI704

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	1.0	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	351 ^b	100	22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	14500 ^c	200	65	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	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-21	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-18	Date Received:	04/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	225 ^b	100	22	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	0.89	3.0	0.51	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	102%	103%	92%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	93%	79-125%
2037-26-5	Toluene-D8	100%	102%	99%	85-112%
460-00-4	4-Bromofluorobenzene	95%	105%	104%	83-118%

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.

(b) Result is from Run# 2

(c) Result is from Run# 3

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13D	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-19	Date Received:	04/23/15
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	B105245.D	1	04/29/15	DP	n/a	n/a	VB4265
Run #2 ^b	I29392.D	2	04/30/15	DP	n/a	n/a	VI703

	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 ^c	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	4.4	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	84.8 ^d	2.0	0.65	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	1.5	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-13D	Date Sampled: 04/22/15
Lab Sample ID: FA23825-19	Date Received: 04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	92%	83-118%
17060-07-0	1,2-Dichloroethane-D4	116%	92%	79-125%
2037-26-5	Toluene-D8	97%	101%	85-112%
460-00-4	4-Bromofluorobenzene	106%	105%	83-118%

- (a) Sample was not preserved to a pH < 2.
 (b) Sample was not preserved to a pH < 2; reported results are considered minimum values.
 (c) Associated BS recovery outside control limits.
 (d) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-21	Date Received:	04/23/15
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	B105247.D	1	04/29/15	DP	n/a	n/a	VB4265
Run #2 ^b	I29393.D	2	04/30/15	DP	n/a	n/a	VI703

	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 ^c	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	0.37	1.0	0.27	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	6.3	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	131 ^d	2.0	0.65	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	0.34	1.0	0.26	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	3.8	1.0	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-21	Date Received:	04/23/15
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	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	92%	79-125%
2037-26-5	Toluene-D8	105%	99%	85-112%
460-00-4	4-Bromofluorobenzene	101%	105%	83-118%

- (a) Sample was not preserved to a pH < 2.
 (b) Sample was not preserved to a pH < 2; reported results are considered minimum values.
 (c) Associated BS recovery outside control limits.
 (d) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-21	Date Received:	04/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0682108.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
Run #2							

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

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	4.8	0.48	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.48	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.48	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	4.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	2.1	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.48	ug/l	
	3&4-Methylphenol	ND	4.8	0.96	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.84	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.48	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.65	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.60	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.48	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.48	ug/l	
120-12-7	Anthracene	ND	4.8	0.48	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.48	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.48	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.56	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.63	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.82	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	4.8	0.61	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	4.8	0.96	ug/l	
86-74-8	Carbazole	ND	4.8	0.48	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.61	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.66	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.48	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.48	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-21	Date Received:	04/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270D SW846 3510C		
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	4.8	0.55	ug/l	
218-01-9	Chrysene	ND	4.8	0.49	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.65	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.48	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.61	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.62	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	4.8	0.50	ug/l	
84-66-2	Diethyl Phthalate	ND	4.8	1.4	ug/l	
131-11-3	Dimethyl Phthalate	ND	4.8	0.96	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	4.8	0.96	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.56	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.66	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	0.96	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.48	ug/l	
86-73-7	Fluorene	ND	4.8	0.48	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.61	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.58	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.96	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.66	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.61	ug/l	
78-59-1	Isophorone	ND	4.8	0.49	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.48	ug/l	
91-20-3	Naphthalene	ND	4.8	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.48	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.51	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.95	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.50	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	4.8	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.57	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.49	ug/l	
129-00-0	Pyrene	ND	4.8	0.53	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		14-67%
4165-62-2	Phenol-d5	23%		10-50%
118-79-6	2,4,6-Tribromophenol	90%		33-118%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IDW-1	Date Sampled:	04/22/15
Lab Sample ID:	FA23825-21	Date Received:	04/23/15
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	71%		42-108%
321-60-8	2-Fluorobiphenyl	76%		40-106%
1718-51-0	Terphenyl-d14	77%		39-121%

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

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

Report of Analysis

Client Sample ID: IDW-1	Date Sampled: 04/22/15
Lab Sample ID: FA23825-21	Date Received: 04/23/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC	

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	1220	200	14	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Antimony	1.0 U	6.0	1.0	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Arsenic	1.3 U	10	1.3	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Barium	74.0 J	200	1.0	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Beryllium	0.20 U	4.0	0.20	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Cadmium	0.20 U	5.0	0.20	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Calcium	28000	1000	50	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Chromium	4.9 J	10	1.0	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Cobalt	0.30 J	50	0.20	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Copper	1.0 U	25	1.0	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Iron	1610	300	17	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Lead	1.7 J	5.0	1.1	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Magnesium	832 J	5000	35	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Manganese	19.6	15	1.0	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Mercury	0.030 U	0.50	0.030	ug/l	1	04/29/15	04/29/15 JL	SW846 7470A ²	SW846 7470A ⁴
Nickel	0.60 J	40	0.40	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Potassium	4550 J	10000	200	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Selenium	2.9 U	10	2.9	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Silver	0.70 U	5.0	0.70	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Sodium	13000	10000	500	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Thallium	1.4 U	10	1.4	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Vanadium	1.8 J	50	0.60	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³
Zinc	36.2	20	4.4	ug/l	1	04/28/15	04/28/15 LM	SW846 6010C ¹	SW846 3010A ³

(1) Instrument QC Batch: MA12363

(2) Instrument QC Batch: MA12365

(3) Prep QC Batch: MP28857

(4) Prep QC Batch: MP28860

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

FA23825

AECOM PO# 56785ACM

AECOM

Chain of Custody and Analytical Request

Page 1 of 2

Project Number: 60314964

Chain of Custody Number (01): 10272014-01

LIMS Number:

Project Name / Location:

UTC Delavan Spray Technologies Site, Bamberg SC

Client Name:

UTC

Collected by: R. Morgan, J. Butler

Project Manager: Walter Curran 804-234-BA25

Sample ID	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	See Comments			Sample Information	Sample Analysis Requested										Quality Assurance Samples	Cooler ID
			COMP	GRAB	Well		Metals (8260B)	TOC (5310D)	Nitrate (2107)	Nitrite (2107)	Ammonia (2107)	Ammonium (2107)	Ammonia (2107)	Ammonium (2107)	Ammonia (2107)	Ammonium (2107)		
MW-8	21-Apr-2015	1450	X			Groundwater	X											1
MW-8-c	21-Apr-2015	1450	X			"	X										Trp Bank	2
MW-3D1	21-Apr-2015	1502	X			"	X											3
MW-23D	21-Apr-2015	1655	X			"	X											4
MW-12D	21-Apr-2015	1813	X			"	X											5
MW-17	21-Apr-2015	1840	X			"	X											6
MW-22D	22-Apr-2015	0900	X			"	X											7
MW-22D-a	22-Apr-2015	0900	X			"	X											8
MW-16	22-Apr-2015	0920	X			"	X											9
MW-18	22-Apr-2015	1005	X			"	X											10
MW-16D	22-Apr-2015	0958	X			"	X											11
MW-10D	22-Apr-2015	1135	X			"	X											12
MW-15	22-Apr-2015	1200	X			"	X											13
MW-10	22-Apr-2015	1235	X			"	X											14
MW-15D	22-Apr-2015	1240	X			"	X											15

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signature) Date Time

1. Randy Morgan 4/22/15 14:28-15 430

Received by (signature) Date Time

2. F. Curran

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:

Method of Shipment:

Analytical Lab: Accutest

Lab Recipient:

Shipped:

Airbill #:

Location:

Date:

Time:

806617497457
Orlando FL

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

RL VOCs by 8260B - unpreserved vials - 7 day holding time
 Nitrate/Nitrite - 48 hr holding time

AECOM chemist: Dori Cullum 28
 804-234-8922 doria.cullum@aecom.com
 52745\admin\project control\project forms\blank COC

FA23825: Chain of Custody

Page 1 of 5

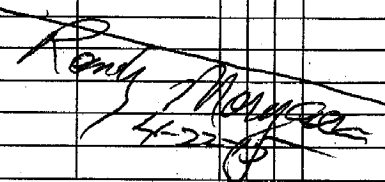
FA23825

AECOM Proj# 56785ACM

AECOM

Chain of Custody and Analytical Request

Page 2 of 2
 Project Number: 60314964
 Chain of Custody Number (1): 10292014-01
 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: R. Morgan, J. Butler			Project Manager: Walter Leland B234-8225														
Sample ID	Date Collected (dd-mm-yyy)	Time Collected (Military) (hhmm)	See Comments			Sample Information											
			COMP	GRAB	Well												
MW-15D1	22-Apr-2015	1317				Groundwater	X										
MW-9	22-Apr-2015	1400				"	X										
MW-9-MS	22-Apr-2015	1400				"	X										
MW-9-MSD	22-Apr-2015	1400				"	X										
MW-21	22-Apr-2015	1459				"	X										
MW-13D	22-Apr-2015	1522				"	X										
Portable-1	22-Apr-2015	1540				"	X										
IDW-1	22-Apr-2015	1555				"	X										
 Randy Morgan 4-22-15																	
Custody Transfers Prior to Receipt by Laboratory																	
Relinquished By (Signed)			Date			Time			Received by (signed)			Date			Time		
1. Randy Morgan			4-22-15			230			1. F.P.								
2. J. Butler			4-22-15			230			2. RW								
3.									3.								
Sample Delivery Details / Laboratory Receipt																	
Delivered Directly to Lab:									Shipped:								
Method of Shipment: FedEx									Airbill #: 8066 1447457								
Analytical Lab: Accutest									Location: Orlando FL								
Lab Recipient:									Date:								
									Time:								

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

10 VOCs by B2603 - unpreserved vials - 7 day holding time
 Nitrate/Nitrite - 48 hr holding time

AECOM chemist: Dori Callum
 B234-8225 doria.callum@aecom.com
 32743\admin\project control\project forms\Blank COC

FA23825: Chain of Custody

Page 2 of 5

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA23825 CLIENT: AECOM PROJECT: UTC Delaware
 DATE/TIME RECEIVED: 04-23-15 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8066 1749 7451

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 ? _____

pH PAPER LOT#s WIDE RANGE A036122

NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR -0.2
- ☐ OBSERVED TEMPS: 3.0
- ☐ CORRECTED TEMPS: 2.8

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] 04-24-15

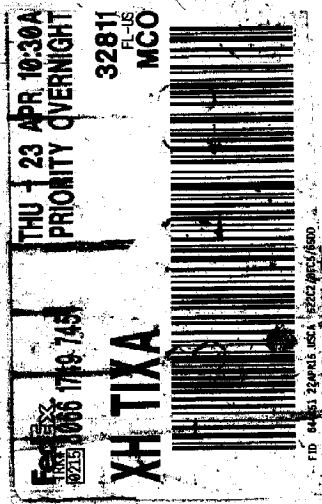
REVIEWER SIGNATURE/DATE [Signature] 04-24-15

NF 10/14

receipt confirmation 102914.xls

FA23825: Chain of Custody

Page 3 of 5



FA23825: Chain of Custody
Page 4 of 5

Job Change

FA23825

Requested Date:	4/24/2015	Received Date:	4/23/2015
Account Name:	United Technologies	Due Date:	5/7/2015
Project	AECOMSCG: Delavan Spray Technologies;	Deliverable:	COMMBN
CSR:	HeatherW	TAT (Days):	14

=====

Sample #: FA23825-20

Change:

Per clients request via email, please cancel all analysis on this sample

POTABLE-1

=====

Above Changes Per: Doria Cullom- AECOM

Date/Time: 4/24/2015 1:51:01 PM

FA23825: Chain of Custody

Page 5 of 5

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

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: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-MB	I29272.D	1	04/27/15	DP	n/a	n/a	VI699

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

FA23825-1, FA23825-2, FA23825-3, FA23825-4, FA23825-5, FA23825-6, FA23825-7, FA23825-8

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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

Method Blank Summary

Job Number: FA23825
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-MB	I29272.D	1	04/27/15	DP	n/a	n/a	VI699

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

FA23825-1, FA23825-2, FA23825-3, FA23825-4, FA23825-5, FA23825-6, FA23825-7, FA23825-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 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%

Method Blank Summary

Job Number: FA23825
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4263-MB	B105171.D	1	04/28/15	DP	n/a	n/a	VB4263

The QC reported here applies to the following samples: Method: SW846 8260B
FA23825-7, FA23825-8

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	94% 83-118%
17060-07-0	1,2-Dichloroethane-D4	89% 79-125%
2037-26-5	Toluene-D8	102% 85-112%
460-00-4	4-Bromofluorobenzene	103% 83-118%

Method Blank Summary

Page 1 of 2

Job Number: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4265-MB	B105234.D	1	04/29/15	DP	n/a	n/a	VB4265

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

FA23825-9, FA23825-10, FA23825-11, FA23825-12, FA23825-13, FA23825-14, FA23825-15, FA23825-16, FA23825-17, FA23825-18, FA23825-19, FA23825-21

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	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	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	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.51	ug/l	

Method Blank Summary

Job Number: FA23825
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4265-MB	B105234.D	1	04/29/15	DP	n/a	n/a	VB4265

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

FA23825-9, FA23825-10, FA23825-11, FA23825-12, FA23825-13, FA23825-14, FA23825-15, FA23825-16, FA23825-17, FA23825-18, FA23825-19, FA23825-21

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	94% 83-118%
17060-07-0	1,2-Dichloroethane-D4	94% 79-125%
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	100% 83-118%

Method Blank Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI703-MB	I29374.D	1	04/30/15	DP	n/a	n/a	VI703

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-19, FA23825-21

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	92% 83-118%
17060-07-0	1,2-Dichloroethane-D4	93% 79-125%
2037-26-5	Toluene-D8	102% 85-112%
460-00-4	4-Bromofluorobenzene	106% 83-118%

6.1.4

6

Method Blank Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4266-MB	B105257.D	1	04/30/15	DP	n/a	n/a	VB4266

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-18

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	95% 79-125%
2037-26-5	Toluene-D8	101% 85-112%
460-00-4	4-Bromofluorobenzene	103% 83-118%

Method Blank Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI704-MB	I29405.D	1	05/01/15	DP	n/a	n/a	VI704

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-17, FA23825-18

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	94% 83-118%
17060-07-0	1,2-Dichloroethane-D4	93% 79-125%
2037-26-5	Toluene-D8	103% 85-112%
460-00-4	4-Bromofluorobenzene	107% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-BS	I29270.D	1	04/27/15	DP	n/a	n/a	VI699

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

FA23825-1, FA23825-2, FA23825-3, FA23825-4, FA23825-5, FA23825-6, FA23825-7, FA23825-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	118	94	50-147
71-43-2	Benzene	25	23.8	95	81-122
75-27-4	Bromodichloromethane	25	22.5	90	79-123
75-25-2	Bromoform	25	21.8	87	66-123
78-93-3	2-Butanone (MEK)	125	104	83	56-143
75-15-0	Carbon Disulfide	25	27.4	110	66-148
56-23-5	Carbon Tetrachloride	25	24.8	99	76-136
108-90-7	Chlorobenzene	25	26.7	107	82-124
75-00-3	Chloroethane	25	25.9	104	62-144
67-66-3	Chloroform	25	24.3	97	80-124
124-48-1	Dibromochloromethane	25	23.5	94	78-122
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	24.2	97	75-125
75-35-4	1,1-Dichloroethylene	25	33.7	135	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.1	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.0	100	76-127
78-87-5	1,2-Dichloropropane	25	23.7	95	76-124
10061-01-5	cis-1,3-Dichloropropene	25	20.3	81	75-118
10061-02-6	trans-1,3-Dichloropropene	25	22.2	89	80-120
100-41-4	Ethylbenzene	25	26.0	104	81-121
591-78-6	2-Hexanone	125	120	96	61-129
74-83-9	Methyl Bromide	25	27.6	110	59-143
74-87-3	Methyl Chloride	25	23.9	96	50-159
75-09-2	Methylene Chloride	25	26.1	104	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	122	98	66-122
100-42-5	Styrene	25	25.2	101	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.0	92	72-120
127-18-4	Tetrachloroethylene	25	26.4	106	76-135
108-88-3	Toluene	25	24.1	96	80-120
71-55-6	1,1,1-Trichloroethane	25	22.8	91	75-130
79-00-5	1,1,2-Trichloroethane	25	24.7	99	76-119
79-01-6	Trichloroethylene	25	24.4	98	81-126
75-01-4	Vinyl Chloride	25	28.0	112	69-159
1330-20-7	Xylene (total)	75	78.7	105	80-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI699-BS	I29270.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-1, FA23825-2, FA23825-3, FA23825-4, FA23825-5, FA23825-6, FA23825-7, FA23825-8

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4263-BS	B105169.D	1	04/28/15	DP	n/a	n/a	VB4263

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-7, FA23825-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	23.3	93	76-135

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	79-125%
2037-26-5	Toluene-D8	105%	85-112%
460-00-4	4-Bromofluorobenzene	95%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4265-BS	B105232.D	1	04/29/15	DP	n/a	n/a	VB4265

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

FA23825-9, FA23825-10, FA23825-11, FA23825-12, FA23825-13, FA23825-14, FA23825-15, FA23825-16, FA23825-17, FA23825-18, FA23825-19, FA23825-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	247	198*	50-147
71-43-2	Benzene	25	24.0	96	81-122
75-27-4	Bromodichloromethane	25	24.3	97	79-123
75-25-2	Bromoform	25	24.4	98	66-123
78-93-3	2-Butanone (MEK)	125	128	102	56-143
75-15-0	Carbon Disulfide	25	25.2	101	66-148
56-23-5	Carbon Tetrachloride	25	26.1	104	76-136
108-90-7	Chlorobenzene	25	25.6	102	82-124
75-00-3	Chloroethane	25	26.8	107	62-144
67-66-3	Chloroform	25	24.7	99	80-124
124-48-1	Dibromochloromethane	25	21.5	86	78-122
75-34-3	1,1-Dichloroethane	25	24.6	98	81-122
107-06-2	1,2-Dichloroethane	25	23.0	92	75-125
75-35-4	1,1-Dichloroethylene	25	26.9	108	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.4	94	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.6	110	76-127
78-87-5	1,2-Dichloropropane	25	25.8	103	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.3	97	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.4	98	80-120
100-41-4	Ethylbenzene	25	26.7	107	81-121
591-78-6	2-Hexanone	125	157	126	61-129
74-83-9	Methyl Bromide	25	28.4	114	59-143
74-87-3	Methyl Chloride	25	27.8	111	50-159
75-09-2	Methylene Chloride	25	24.8	99	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	123	98	66-122
100-42-5	Styrene	25	24.3	97	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	21.9	88	72-120
127-18-4	Tetrachloroethylene	25	27.2	109	76-135
108-88-3	Toluene	25	25.6	102	80-120
71-55-6	1,1,1-Trichloroethane	25	24.5	98	75-130
79-00-5	1,1,2-Trichloroethane	25	24.8	99	76-119
79-01-6	Trichloroethylene	25	27.5	110	81-126
75-01-4	Vinyl Chloride	25	28.7	115	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: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4265-BS	B105232.D	1	04/29/15	DP	n/a	n/a	VB4265

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-9, FA23825-10, FA23825-11, FA23825-12, FA23825-13, FA23825-14, FA23825-15, FA23825-16, FA23825-17, FA23825-18, FA23825-19, FA23825-21

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

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI703-BS	I29372.D	1	04/30/15	DP	n/a	n/a	VI703

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-19, FA23825-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	26.9	108	76-135

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	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	106%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4266-BS	B105255.D	1	04/30/15	DP	n/a	n/a	VB4266

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	27.1	108	78-120
79-01-6	Trichloroethylene	25	28.4	114	81-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	95%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI704-BS	I29403.D	1	05/01/15	DP	n/a	n/a	VI704

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-17, FA23825-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	25.9	104	76-135

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23740-1MS	I29293.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1MSD	I29294.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1 ^a	I29276.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-1, FA23825-2, FA23825-3, FA23825-4, FA23825-5, FA23825-6, FA23825-7, FA23825-8

CAS No.	Compound	FA23740-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U	125	84.6	68	125	88.9	71	5	50-147/21
71-43-2	Benzene	1.0 U	25	24.4	98	25	23.7	95	3	81-122/14
75-27-4	Bromodichloromethane	1.0 U	25	22.7	91	25	21.1	84	7	79-123/19
75-25-2	Bromoform	1.0 U	25	23.0	92	25	21.8	87	5	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	92.4	74	125	96.3	77	4	56-143/18
75-15-0	Carbon Disulfide	2.0 U	25	30.1	120	25	26.6	106	12	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	23.8	95	25	22.9	92	4	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	27.2	109	25	26.4	106	3	82-124/14
75-00-3	Chloroethane	2.0 U	25	27.1	108	25	26.1	104	4	62-144/20
67-66-3	Chloroform	1.0 U	25	24.5	98	25	23.9	96	2	80-124/15
124-48-1	Dibromochloromethane	1.0 U	25	22.9	92	25	22.5	90	2	78-122/19
75-34-3	1,1-Dichloroethane	1.0 U	25	26.1	104	25	25.9	104	1	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	24.3	97	25	24.1	96	1	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	36.7	147*	25	39.2	157*	7	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	26.3	105	25	24.9	100	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.4	25	26.3	100	25	26.4	100	0	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	24.1	96	25	23.7	95	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	20.5	82	25	18.9	76	8	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	22.0	88	25	20.6	82	7	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	25.9	104	25	25.6	102	1	81-121/14
591-78-6	2-Hexanone	10 U	125	106	85	125	111	89	5	61-129/18
74-83-9	Methyl Bromide	2.0 U	25	29.2	117	25	27.7	111	5	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	24.6	98	25	24.5	98	0	50-159/19
75-09-2	Methylene Chloride	5.0 U	25	26.2	105	25	26.1	104	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	121	97	125	124	99	2	66-122/16
100-42-5	Styrene	1.0 U	25	25.4	102	25	25.1	100	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	23.7	95	25	23.6	94	0	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	26.4	106	25	25.6	102	3	76-135/16
108-88-3	Toluene	1.0 U	25	24.4	98	25	24.1	96	1	80-120/14
71-55-6	1,1,1-Trichloroethane	1.0 U	25	22.4	90	25	22.4	90	0	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	25.3	101	25	25.0	100	1	76-119/14
79-01-6	Trichloroethylene	1.0 U	25	24.8	99	25	23.9	96	4	81-126/15
75-01-4	Vinyl Chloride	12.1	25	40.7	114	25	39.6	110	3	69-159/18
1330-20-7	Xylene (total)	3.0 U	75	79.0	105	75	77.5	103	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23740-1MS	I29293.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1MSD	I29294.D	1	04/27/15	DP	n/a	n/a	VI699
FA23740-1 ^a	I29276.D	1	04/27/15	DP	n/a	n/a	VI699

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-1, FA23825-2, FA23825-3, FA23825-4, FA23825-5, FA23825-6, FA23825-7, FA23825-8

CAS No.	Surrogate Recoveries	MS	MSD	FA23740-1	Limits
1868-53-7	Dibromofluoromethane	101%	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	99%	94%	79-125%
2037-26-5	Toluene-D8	100%	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	101%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23614-4MS	B105192.D	1	04/28/15	DP	n/a	n/a	VB4263
FA23614-4MSD	B105193.D	1	04/28/15	DP	n/a	n/a	VB4263
FA23614-4	B105185.D	1	04/28/15	DP	n/a	n/a	VB4263

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-7, FA23825-8

CAS No.	Compound	FA23614-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	1.7	25	26.1	98	25	25.4	95	3	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA23614-4	Limits
1868-53-7	Dibromofluoromethane	102%	105%	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	121%	128%*	124%	79-125%
2037-26-5	Toluene-D8	101%	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	103%	102%	100%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23825-17MS	B105248.D	1	04/29/15	DP	n/a	n/a	VB4265
FA23825-17MSD	B105249.D	1	04/29/15	DP	n/a	n/a	VB4265
FA23825-17 ^a	B105243.D	10	04/29/15	DP	n/a	n/a	VB4265

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-9, FA23825-10, FA23825-11, FA23825-12, FA23825-13, FA23825-14, FA23825-15, FA23825-16, FA23825-17, FA23825-18, FA23825-19, FA23825-21

CAS No.	Compound	FA23825-17		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		125	141	113	125	144	115	2	50-147/21
71-43-2	Benzene	ND		25	29.1	116	25	28.0	112	4	81-122/14
75-27-4	Bromodichloromethane	ND		25	29.5	118	25	29.6	118	0	79-123/19
75-25-2	Bromoform	ND		25	30.0	120	25	28.2	113	6	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	121	97	125	126	101	4	56-143/18
75-15-0	Carbon Disulfide	ND		25	30.6	122	25	30.2	121	1	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	31.0	124	25	30.0	120	3	76-136/23
108-90-7	Chlorobenzene	ND		25	30.7	123	25	28.9	116	6	82-124/14
75-00-3	Chloroethane	ND		25	28.1	112	25	30.0	120	7	62-144/20
67-66-3	Chloroform	ND		25	28.8	115	25	28.9	116	0	80-124/15
124-48-1	Dibromochloromethane	ND		25	26.7	107	25	25.7	103	4	78-122/19
75-34-3	1,1-Dichloroethane	ND		25	31.1	124*	25	31.7	127*	2	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	28.9	116	25	28.3	113	2	75-125/14
75-35-4	1,1-Dichloroethylene	ND		25	33.1	132	25	32.5	130	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	33.1		25	31.3	112	25	32.3	116	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	33.8	135*	25	34.3	137*	1	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	29.4	118	25	28.7	115	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	27.7	111	25	27.2	109	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	32.4	130*	25	30.1	120	7	80-120/22
100-41-4	Ethylbenzene	ND		25	32.0	128*	25	29.4	118	8	81-121/14
591-78-6	2-Hexanone	ND		125	143	114	125	137	110	4	61-129/18
74-83-9	Methyl Bromide	ND		25	29.1	116	25	30.8	123	6	59-143/19
74-87-3	Methyl Chloride	ND		25	26.7	107	25	30.0	120	12	50-159/19
75-09-2	Methylene Chloride	ND		25	31.1	124	25	31.7	127	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	142	114	125	144	115	1	66-122/16
100-42-5	Styrene	ND		25	30.0	120*	25	27.3	109	9	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	27.1	108	25	27.9	112	3	72-120/14
127-18-4	Tetrachloroethylene	1570	E	25	174	68* ^b	25	164	28* ^b	6	76-135/16
108-88-3	Toluene	ND		25	31.5	126*	25	30.8	123*	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		25	29.0	116	25	29.3	117	1	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	30.6	122*	25	29.1	116	5	76-119/14
79-01-6	Trichloroethylene	133		25	43.1	119	25	43.4	120	1	81-126/15
75-01-4	Vinyl Chloride	ND		25	27.9	112	25	30.2	121	8	69-159/18
1330-20-7	Xylene (total)	ND		75	93.1	124	75	88.4	118	5	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23825-17MS	B105248.D	1	04/29/15	DP	n/a	n/a	VB4265
FA23825-17MSD	B105249.D	1	04/29/15	DP	n/a	n/a	VB4265
FA23825-17 ^a	B105243.D	10	04/29/15	DP	n/a	n/a	VB4265

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-9, FA23825-10, FA23825-11, FA23825-12, FA23825-13, FA23825-14, FA23825-15, FA23825-16, FA23825-17, FA23825-18, FA23825-19, FA23825-21

CAS No.	Surrogate Recoveries	MS	MSD	FA23825-17	Limits
1868-53-7	Dibromofluoromethane	100%	98%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	104%	79-125%
2037-26-5	Toluene-D8	102%	102%	101%	85-112%
460-00-4	4-Bromofluorobenzene	96%	98%	100%	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 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB92658-2MS	I29397.D	1	04/30/15	DP	n/a	n/a	VI703
JB92658-2MSD	I29398.D	1	04/30/15	DP	n/a	n/a	VI703
JB92658-2	I29376.D	1	04/30/15	DP	n/a	n/a	VI703

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-19, FA23825-21

CAS No.	Compound	JB92658-2 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	ND	25	26.0	104	25	25.6	102	2	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	JB92658-2	Limits
1868-53-7	Dibromofluoromethane	96%	96%	92%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	98%	92%	79-125%
2037-26-5	Toluene-D8	100%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	103%	106%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23917-1MS	B105278.D	50	04/30/15	DP	n/a	n/a	VB4266
FA23917-1MSD	B105279.D	50	04/30/15	DP	n/a	n/a	VB4266
FA23917-1 ^a	B105269.D	50	04/30/15	DP	n/a	n/a	VB4266

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-18

CAS No.	Compound	FA23917-1 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	12.0	J	1250	1210	96	1250	1170	93	3	78-120/15
79-01-6	Trichloroethylene	50 U		1250	1330	106	1250	1190	95	11	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA23917-1	Limits
1868-53-7	Dibromofluoromethane	98%	103%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	96%	95%	79-125%
2037-26-5	Toluene-D8	101%	99%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	103%	98%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23911-1MS	I29427.D	1	05/01/15	DP	n/a	n/a	VI704
FA23911-1MSD	I29428.D	1	05/01/15	DP	n/a	n/a	VI704
FA23911-1	I29407.D	1	05/01/15	DP	n/a	n/a	VI704

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23825-17, FA23825-18

CAS No.	Compound	FA23911-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	1.3	25	26.3	100	25	25.6	97	3	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA23911-1	Limits
1868-53-7	Dibromofluoromethane	99%	98%	91%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	99%	86%	79-125%
2037-26-5	Toluene-D8	98%	99%	103%	85-112%
460-00-4	4-Bromofluorobenzene	105%	102%	108%	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: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-MB	L0682105.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

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

FA23825-21

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	0.50	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.50	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.50	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.1	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.50	ug/l	
	3&4-Methylphenol	ND	5.0	1.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.88	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.68	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.63	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.50	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.50	ug/l	
120-12-7	Anthracene	ND	5.0	0.50	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	0.58	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.85	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	5.0	0.64	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	1.0	ug/l	
86-74-8	Carbazole	ND	5.0	0.50	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.50	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.63	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	0.50	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.50	ug/l	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	5.0	0.57	ug/l	
218-01-9	Chrysene	ND	5.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.68	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-MB	L0682105.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

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

FA23825-21

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	0.63	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.65	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.52	ug/l	
84-66-2	Diethyl Phthalate	ND	5.0	1.4	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	0.58	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.69	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	0.50	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.63	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.60	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	1.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.68	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.63	ug/l	
78-59-1	Isophorone	ND	5.0	0.51	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.50	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.53	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.99	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.52	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	5.0	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.59	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.51	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	48%	14-67%
4165-62-2	Phenol-d5	36%	10-50%

Method Blank Summary

Job Number: FA23825
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-MB	L0682105.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

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

FA23825-21

CAS No.	Surrogate Recoveries	Limits
118-79-6	2,4,6-Tribromophenol	87% 33-118%
4165-60-0	Nitrobenzene-d5	70% 42-108%
321-60-8	2-Fluorobiphenyl	74% 40-106%
1718-51-0	Terphenyl-d14	78% 39-121%

Blank Spike Summary

Page 1 of 3

Job Number: FA23825**Account:** UTC United Technologies Corporation**Project:** AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-BS	L0682104.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

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

FA23825-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	14.5	15	10-69
59-50-7	4-Chloro-3-methyl Phenol	50	36.6	73	54-103
95-57-8	2-Chlorophenol	50	37.8	76	52-98
120-83-2	2,4-Dichlorophenol	50	36.4	73	53-103
105-67-9	2,4-Dimethylphenol	50	28.8	58	43-90
51-28-5	2,4-Dinitrophenol	100	71.3	71	44-112
534-52-1	4,6-Dinitro-o-cresol	100	92.6	93	66-121
95-48-7	2-Methylphenol	50	33.3	67	43-90
	3&4-Methylphenol	100	62.5	63	36-88
88-75-5	2-Nitrophenol	50	35.2	70	53-102
100-02-7	4-Nitrophenol	100	38.1	38	18-62
87-86-5	Pentachlorophenol	100	89.1	89	61-115
108-95-2	Phenol	50	19.6	39	19-56
95-95-4	2,4,5-Trichlorophenol	50	42.5	85	62-109
88-06-2	2,4,6-Trichlorophenol	50	40.8	82	59-107
83-32-9	Acenaphthene	50	43.0	86	61-107
208-96-8	Acenaphthylene	50	40.2	80	60-104
120-12-7	Anthracene	50	43.5	87	65-108
56-55-3	Benzo(a)anthracene	50	45.5	91	66-111
50-32-8	Benzo(a)pyrene	50	44.1	88	62-107
205-99-2	Benzo(b)fluoranthene	50	43.3	87	65-114
191-24-2	Benzo(g,h,i)perylene	50	44.2	88	66-116
207-08-9	Benzo(k)fluoranthene	50	46.0	92	65-114
100-51-6	Benzyl Alcohol	50	34.8	70	46-94
101-55-3	4-Bromophenyl Phenyl Ether	50	44.1	88	65-109
85-68-7	Butyl Benzyl Phthalate	50	43.8	88	65-112
86-74-8	Carbazole	50	42.4	85	59-113
106-47-8	4-Chloroaniline	50	34.0	68	49-105
111-91-1	bis(2-Chloroethoxy)methane	50	36.0	72	51-102
111-44-4	bis(2-Chloroethyl)ether	50	40.7	81	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	41.4	83	45-106
91-58-7	2-Chloronaphthalene	50	39.7	79	57-103
7005-72-3	4-Chlorophenyl Phenyl Ether	50	41.8	84	62-105
218-01-9	Chrysene	50	45.1	90	66-111
53-70-3	Dibenzo(a,h)anthracene	50	45.6	91	66-119
132-64-9	Dibenzofuran	50	41.0	82	61-106

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG; Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-BS	L0682104.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

The QC reported here applies to the following samples:

Method: SW846 8270D

FA23825-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	37.9	76	48-97
541-73-1	1,3-Dichlorobenzene	50	36.0	72	45-95
106-46-7	1,4-Dichlorobenzene	50	37.0	74	45-98
91-94-1	3,3'-Dichlorobenzidine	50	42.3	85	46-117
84-66-2	Diethyl Phthalate	50	43.5	87	64-108
131-11-3	Dimethyl Phthalate	50	44.1	88	63-106
84-74-2	Di-n-butyl Phthalate	50	42.9	86	65-107
117-84-0	Di-n-octyl Phthalate	50	44.2	88	62-118
121-14-2	2,4-Dinitrotoluene	50	42.0	84	61-110
606-20-2	2,6-Dinitrotoluene	50	40.5	81	63-108
117-81-7	bis(2-Ethylhexyl)phthalate	50	45.0	90	61-117
206-44-0	Fluoranthene	50	41.2	82	63-106
86-73-7	Fluorene	50	42.9	86	62-108
118-74-1	Hexachlorobenzene	50	42.7	85	63-108
87-68-3	Hexachlorobutadiene	50	32.7	65	42-102
77-47-4	Hexachlorocyclopentadiene	50	32.2	64	39-102
67-72-1	Hexachloroethane	50	35.2	70	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	44.1	88	64-119
78-59-1	Isophorone	50	34.8	70	43-87
91-57-6	2-Methylnaphthalene	50	35.7	71	51-102
91-20-3	Naphthalene	50	35.5	71	47-100
88-74-4	2-Nitroaniline	50	39.4	79	54-128
99-09-2	3-Nitroaniline	50	40.5	81	56-106
100-01-6	4-Nitroaniline	50	42.5	85	55-120
98-95-3	Nitrobenzene	50	33.4	67	50-104
621-64-7	N-Nitrosodi-n-propylamine	50	40.3	81	52-104
86-30-6	N-Nitrosodiphenylamine	50	42.4	85	64-108
85-01-8	Phenanthrene	50	44.2	88	66-110
129-00-0	Pyrene	50	44.5	89	64-113
120-82-1	1,2,4-Trichlorobenzene	50	33.3	67	45-97

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	51%	14-67%
4165-62-2	Phenol-d5	35%	10-50%

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-BS	L0682104.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

The QC reported here applies to the following samples:

Method: SW846 8270D

FA23825-21

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	90%	33-118%
4165-60-0	Nitrobenzene-d5	66%	42-108%
321-60-8	2-Fluorobiphenyl	78%	40-106%
1718-51-0	Terphenyl-d14	92%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-MS	L0682110.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
OP55904-MSD	L0682111.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
FA23848-1	L0682117.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

The QC reported here applies to the following samples:

Method: SW846 8270D

FA23825-21

CAS No.	Compound	FA23848-1 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50 U		192	68.4	36	192	68.1	35	0	10-69/39
59-50-7	4-Chloro-3-methyl Phenol	5.0 U		96.2	64.9	67	96.2	68.0	71	5	54-103/23
95-57-8	2-Chlorophenol	5.0 U		96.2	64.7	67	96.2	66.8	69	3	52-98/25
120-83-2	2,4-Dichlorophenol	5.0 U		96.2	59.0	61	96.2	63.0	66	7	53-103/26
105-67-9	2,4-Dimethylphenol	5.0 U		96.2	49.1	51	96.2	50.9	53	4	43-90/27
51-28-5	2,4-Dinitrophenol	25 U		192	138	72	192	145	75	5	44-112/25
534-52-1	4,6-Dinitro-o-cresol	10 U		192	173	90	192	183	95	6	66-121/23
95-48-7	2-Methylphenol	5.0 U		96.2	60.6	63	96.2	63.5	66	5	43-90/28
	3&4-Methylphenol	5.0 U		192	116	60	192	121	63	4	36-88/28
88-75-5	2-Nitrophenol	5.0 U		96.2	57.6	60	96.2	62.6	65	8	53-102/29
100-02-7	4-Nitrophenol	25 U		192	97.6	51	192	98.6	51	1	18-62/33
87-86-5	Pentachlorophenol	25 U		192	161	84	192	172	89	7	61-115/26
108-95-2	Phenol	5.0 U		96.2	41.9	44	96.2	44.4	46	6	19-56/35
95-95-4	2,4,5-Trichlorophenol	5.0 U		96.2	73.3	76	96.2	77.5	81	6	62-109/22
88-06-2	2,4,6-Trichlorophenol	5.0 U		96.2	70.9	74	96.2	74.9	78	5	59-107/23
83-32-9	Acenaphthene	5.0 U		96.2	74.1	77	96.2	79.5	83	7	61-107/22
208-96-8	Acenaphthylene	5.0 U		96.2	70.8	74	96.2	74.2	77	5	60-104/22
120-12-7	Anthracene	5.0 U		96.2	80.2	83	96.2	85.5	89	6	65-108/20
56-55-3	Benzo(a)anthracene	5.0 U		96.2	80.3	84	96.2	84.5	88	5	66-111/22
50-32-8	Benzo(a)pyrene	5.0 U		96.2	81.3	85	96.2	85.3	89	5	62-107/23
205-99-2	Benzo(b)fluoranthene	5.0 U		96.2	77.1	80	96.2	85.0	88	10	65-114/23
191-24-2	Benzo(g,h,i)perylene	5.0 U		96.2	80.6	84	96.2	84.3	88	4	66-116/23
207-08-9	Benzo(k)fluoranthene	5.0 U		96.2	83.3	87	96.2	88.0	92	5	65-114/24
100-51-6	Benzyl Alcohol	5.0 U		96.2	64.1	67	96.2	65.2	68	2	46-94/27
101-55-3	4-Bromophenyl Phenyl Ether	5.0 U		96.2	77.8	81	96.2	84.2	88	8	65-109/23
85-68-7	Butyl Benzyl Phthalate	5.0 U		96.2	77.4	80	96.2	81.6	85	5	65-112/24
86-74-8	Carbazole	5.0 U		96.2	76.7	80	96.2	83.2	87	8	59-113/21
106-47-8	4-Chloroaniline	5.0 U		96.2	56.3	59	96.2	61.1	64	8	49-105/27
111-91-1	bis(2-Chloroethoxy)methane	5.0 U		96.2	61.0	63	96.2	64.0	67	5	51-102/28
111-44-4	bis(2-Chloroethyl)ether	5.0 U		96.2	66.4	69	96.2	71.2	74	7	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	5.0 U		96.2	71.2	74	96.2	71.8	75	1	45-106/26
91-58-7	2-Chloronaphthalene	5.0 U		96.2	69.4	72	96.2	73.2	76	5	57-103/23
7005-72-3	4-Chlorophenyl Phenyl Ether	5.0 U		96.2	75.3	78	96.2	78.8	82	5	62-105/20
218-01-9	Chrysene	5.0 U		96.2	80.9	84	96.2	84.1	87	4	66-111/22
53-70-3	Dibenzo(a,h)anthracene	5.0 U		96.2	82.5	86	96.2	86.8	90	5	66-119/24
132-64-9	Dibenzofuran	5.0 U		96.2	72.6	76	96.2	76.8	80	6	61-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-MS	L0682110.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
OP55904-MSD	L0682111.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
FA23848-1	L0682117.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

The QC reported here applies to the following samples:

Method: SW846 8270D

FA23825-21

CAS No.	Compound	FA23848-1	Spike	MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l		%
95-50-1	1,2-Dichlorobenzene	5.0 U	96.2	63.8	66	96.2	66.9	70	5	48-97/24
541-73-1	1,3-Dichlorobenzene	5.0 U	96.2	63.1	66	96.2	65.2	68	3	45-95/25
106-46-7	1,4-Dichlorobenzene	5.0 U	96.2	62.4	65	96.2	66.0	69	6	45-98/25
91-94-1	3,3' -Dichlorobenzidine	5.0 U	96.2	75.0	78	96.2	77.8	81	4	46-117/29
84-66-2	Diethyl Phthalate	5.0 U	96.2	81.8	85	96.2	86.0	89	5	64-108/21
131-11-3	Dimethyl Phthalate	5.0 U	96.2	78.8	82	96.2	83.0	86	5	63-106/22
84-74-2	Di-n-butyl Phthalate	5.0 U	96.2	79.9	83	96.2	85.1	89	6	65-107/21
117-84-0	Di-n-octyl Phthalate	5.0 U	96.2	81.1	84	96.2	84.5	88	4	62-118/24
121-14-2	2,4-Dinitrotoluene	5.0 U	96.2	73.6	77	96.2	78.8	82	7	61-110/21
606-20-2	2,6-Dinitrotoluene	5.0 U	96.2	71.4	74	96.2	76.6	80	7	63-108/21
117-81-7	bis(2-Ethylhexyl)phthalate	5.0 U	96.2	78.2	81	96.2	82.3	86	5	61-117/23
206-44-0	Fluoranthene	5.0 U	96.2	79.0	82	96.2	82.5	86	4	63-106/21
86-73-7	Fluorene	5.0 U	96.2	78.3	81	96.2	83.3	87	6	62-108/20
118-74-1	Hexachlorobenzene	5.0 U	96.2	74.5	77	96.2	79.9	83	7	63-108/22
87-68-3	Hexachlorobutadiene	5.0 U	96.2	53.8	56	96.2	59.1	61	9	42-102/28
77-47-4	Hexachlorocyclopentadiene	5.0 U	96.2	55.3	58	96.2	58.0	60	5	39-102/29
67-72-1	Hexachloroethane	5.0 U	96.2	58.8	61	96.2	61.8	64	5	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	5.0 U	96.2	82.0	85	96.2	85.8	89	5	64-119/24
78-59-1	Isophorone	5.0 U	96.2	61.1	64	96.2	63.1	66	3	43-87/25
91-57-6	2-Methylnaphthalene	5.0 U	96.2	62.7	65	96.2	66.0	69	5	51-102/26
91-20-3	Naphthalene	5.0 U	96.2	62.0	64	96.2	65.3	68	5	47-100/29
88-74-4	2-Nitroaniline	5.0 U	96.2	72.0	75	96.2	76.2	79	6	54-128/24
99-09-2	3-Nitroaniline	5.0 U	96.2	73.7	77	96.2	74.8	78	1	56-106/27
100-01-6	4-Nitroaniline	5.0 U	96.2	76.2	79	96.2	80.5	84	5	55-120/24
98-95-3	Nitrobenzene	5.0 U	96.2	56.5	59	96.2	60.9	63	7	50-104/28
621-64-7	N-Nitrosodi-n-propylamine	5.0 U	96.2	69.7	72	96.2	72.4	75	4	52-104/25
86-30-6	N-Nitrosodiphenylamine	5.0 U	96.2	77.5	81	96.2	83.7	87	8	64-108/23
85-01-8	Phenanthrene	5.0 U	96.2	79.7	83	96.2	86.1	90	8	66-110/21
129-00-0	Pyrene	5.0 U	96.2	79.3	82	96.2	83.3	87	5	64-113/23
120-82-1	1,2,4-Trichlorobenzene	5.0 U	96.2	55.5	58	96.2	59.8	62	7	45-97/28

CAS No.	Surrogate Recoveries	MS	MSD	FA23848-1	Limits
367-12-4	2-Fluorophenol	53%	55%	34%	14-67%
4165-62-2	Phenol-d5	40%	42%	23%	10-50%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA23825

Account: UTC United Technologies Corporation

Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55904-MS	L0682110.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
OP55904-MSD	L0682111.D	1	05/04/15	MV	04/29/15	OP55904	SL3648
FA23848-1	L0682117.D	1	05/04/15	MV	04/29/15	OP55904	SL3648

The QC reported here applies to the following samples:

Method: SW846 8270D

FA23825-21

CAS No.	Surrogate Recoveries	MS	MSD	FA23848-1	Limits
118-79-6	2,4,6-Tribromophenol	87%	91%	85%	33-118%
4165-60-0	Nitrobenzene-d5	58%	62%	64%	42-108%
321-60-8	2-Fluorobiphenyl	70%	74%	71%	40-106%
1718-51-0	Terphenyl-d14	84%	89%	70%	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: FA23825
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28857
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/28/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14	4.5	<200
Antimony	6.0	1	1	-1.6	<6.0
Arsenic	10	1.3	1.3	-0.20	<10
Barium	200	1	1	0.20	<200
Beryllium	4.0	.2	.2	-0.10	<4.0
Cadmium	5.0	.2	.2	-0.10	<5.0
Calcium	1000	50	50	2.2	<1000
Chromium	10	1	1	-0.20	<10
Cobalt	50	.2	.2	-0.10	<50
Copper	25	1	1	-0.10	<25
Iron	300	17	17	7.3	<300
Lead	5.0	1	1.1	-0.40	<5.0
Magnesium	5000	35	35	-2.4	<5000
Manganese	15	.5	1	-0.10	<15
Molybdenum	50	.3	.3		
Nickel	40	.4	.4	-0.40	<40
Potassium	10000	200	200	22.3	<10000
Selenium	10	2.4	2.9	2.3	<10
Silver	10	.7	.7	-0.20	<10
Sodium	10000	500	500	77.9	<10000
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	-0.40	<50
Zinc	20	3	4.4	0.10	<20

Associated samples MP28857: FA23825-21

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28857
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/28/15

04/28/15

Metal	FA23848-1 Original DUP		RPD	QC Limits	FA23848-1 Original MS		Spikelot MPFLICP2 % Rec		QC Limits
Aluminum	0.00	0.0	NC	0-20	0.00	28200	27000	104.4	80-120
Antimony	0.0	0.0	NC	0-20	0.0	517	500	103.4	80-120
Arsenic	0.0	0.0	NC	0-20	0.0	2110	2000	105.5	80-120
Barium	20.5	20.1	2.0	0-20	20.5	2190	2000	108.5	80-120
Beryllium	0.0	0.0	NC	0-20	0.0	53.5	50	107.0	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	52.4	50	104.8	80-120
Calcium	5860	5860	0.0	0-20	5860	32000	25000	104.6	80-120
Chromium	0.0	0.0	NC	0-20	0.0	215	200	107.5	80-120
Cobalt	0.60	0.50	18.2	0-20	0.60	531	500	106.1	80-120
Copper	0.0	0.0	NC	0-20	0.0	265	250	106.0	80-120
Iron	149	137	8.4	0-20	149	27100	26000	103.7	80-120
Lead	0.0	0.0	NC	0-20	0.0	513	500	102.6	80-120
Magnesium	481	492	2.3	0-20	481	25700	25000	100.9	80-120
Manganese	18.5	18.6	0.5	0-20	18.5	542	500	104.7	80-120
Molybdenum									
Nickel	0.70	0.50	33.3 (a)	0-20	0.70	530	500	105.9	80-120
Potassium	1520	1550	2.0	0-20	1520	27600	25000	104.3	80-120
Selenium	0.0	0.0	NC	0-20	0.0	2040	2000	102.0	80-120
Silver	0.0	0.0	NC	0-20	0.0	51.5	50	103.0	80-120
Sodium	2380	2370	0.4	0-20	2380	28700	25000	105.3	80-120
Strontium									
Thallium	0.0	0.0	NC	0-20	0.0	2070	2000	103.5	80-120
Tin									
Titanium									
Vanadium	0.0	0.0	NC	0-20	0.0	510	500	102.0	80-120
Zinc	9.5	9.8	3.1	0-20	9.5	534	500	104.9	80-120

Associated samples MP28857: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28857
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/28/15

Metal	FA23848-1 Original	MSD	Spikelet MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	0.00	28600	27000	105.9	1.4	20
Antimony	0.0	522	500	104.4	1.0	20
Arsenic	0.0	2140	2000	107.0	1.4	20
Barium	20.5	2210	2000	109.5	0.9	20
Beryllium	0.0	54.0	50	108.0	0.9	20
Cadmium	0.0	52.8	50	105.6	0.8	20
Calcium	5860	32300	25000	105.8	0.9	20
Chromium	0.0	217	200	108.5	0.9	20
Cobalt	0.60	536	500	107.1	0.9	20
Copper	0.0	266	250	106.4	0.4	20
Iron	149	27400	26000	104.8	1.1	20
Lead	0.0	519	500	103.8	1.2	20
Magnesium	481	26000	25000	102.1	1.2	20
Manganese	18.5	547	500	105.7	0.9	20
Molybdenum						
Nickel	0.70	534	500	106.7	0.8	20
Potassium	1520	28000	25000	105.9	1.4	20
Selenium	0.0	2060	2000	103.0	1.0	20
Silver	0.0	52.0	50	104.0	1.0	20
Sodium	2380	29000	25000	106.5	1.0	20
Strontium						
Thallium	0.0	2090	2000	104.5	1.0	20
Tin						
Titanium						
Vanadium	0.0	516	500	103.2	1.2	20
Zinc	9.5	538	500	105.7	0.7	20

Associated samples MP28857: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28857
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/28/15

Metal	BSP Result	SpikeLot MPFLICP2 % Rec	QC Limits
Aluminum	28200	27000	104.4 80-120
Antimony	519	500	103.8 80-120
Arsenic	2100	2000	105.0 80-120
Barium	2170	2000	108.5 80-120
Beryllium	53.4	50	106.8 80-120
Cadmium	52.4	50	104.8 80-120
Calcium	26200	25000	104.8 80-120
Chromium	215	200	107.5 80-120
Cobalt	532	500	106.4 80-120
Copper	266	250	106.4 80-120
Iron	27100	26000	104.2 80-120
Lead	512	500	102.4 80-120
Magnesium	25300	25000	101.2 80-120
Manganese	530	500	106.0 80-120
Molybdenum			
Nickel	534	500	106.8 80-120
Potassium	26000	25000	104.0 80-120
Selenium	2050	2000	102.5 80-120
Silver	52.2	50	104.4 80-120
Sodium	26400	25000	105.6 80-120
Strontium			
Thallium	2070	2000	103.5 80-120
Tin			
Titanium			
Vanadium	511	500	102.2 80-120
Zinc	525	500	105.0 80-120

Associated samples MP28857: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28857
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/28/15

Metal	FA23848-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	0.00	0.00	NC	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	20.5	20.5	0.0	0-10
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	5860	5700	2.8	0-10
Chromium	0.00	0.00	NC	0-10
Cobalt	0.600	0.00	100.0(a)	0-10
Copper	0.00	0.00	NC	0-10
Iron	149	103	31.1 (a)	0-10
Lead	0.00	0.00	NC	0-10
Magnesium	481	478	0.6	0-10
Manganese	18.5	17.8	3.8	0-10
Molybdenum				
Nickel	0.700	0.00	100.0(a)	0-10
Potassium	1520	1460	4.0	0-10
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	2380	0.00	100.0(a)	0-10
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	0.00	0.00	NC	0-10
Zinc	9.50	0.00	100.0(a)	0-10

Associated samples MP28857: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28857
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/28/15

Metal	Sample ml	Final ml	FA23848-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10			2688	0.2	125	2500	107.5	80-120
Antimony	9.8	10			106.9	0.2	5	100	106.9	80-120
Arsenic	9.8	10			110.2	0.2	5	100	110.2	80-120
Barium	9.8	10	20.5	20.09	293	0.2	12.5	250	109.2	80-120
Beryllium	9.8	10			54	0.2	2.5	50	108.0	80-120
Cadmium	9.8	10			55	0.2	2.5	50	110.0	80-120
Calcium	9.8	10	5861	5743.78	11060	0.2	250	5000	106.3	80-120
Chromium	9.8	10			55	0.2	2.5	50	110.0	80-120
Cobalt	9.8	10	.6	.588	56.4	0.2	2.5	50	111.6	80-120
Copper	9.8	10			108.8	0.2	5	100	108.8	80-120
Iron	9.8	10	149.4	146.412	3269	0.2	150	3000	104.1	80-120
Lead	9.8	10			51.9	0.2	2.5	50	103.8	80-120
Magnesium	9.8	10	481.1	471.478	5373	0.2	250	5000	98.0	80-120
Manganese	9.8	10	18.5	18.13	72.6	0.2	2.5	50	108.9	80-120
Molybdenum										
Nickel	9.8	10	.7	.686	112.2	0.2	5	100	111.5	80-120
Potassium	9.8	10	1522	1491.56	11800	0.2	500	10000	103.1	80-120
Selenium	9.8	10			103.8	0.2	5	100	103.8	80-120
Silver	9.8	10			50.1	0.2	2.5	50	100.2	80-120
Sodium	9.8	10	2384	2336.32	13290	0.2	500	10000	109.5	80-120
Strontium										
Thallium	9.8	10			106.4	0.2	5	100	106.4	80-120
Tin										
Titanium										
Vanadium	9.8	10			52.6	0.2	2.5	50	105.2	80-120
Zinc	9.8	10	9.5	9.31	281.6	0.2	12.5	250	108.9	80-120

Associated samples MP28857: FA23825-21

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA23825
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28860
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/29/15

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.016	<0.50

Associated samples MP28860: FA23825-21

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28860
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/29/15 04/29/15

Metal	FA23825-21 Original DUP		RPD	QC Limits	FA23825-21 Original MS		Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	3.2	3	106.7	80-120

Associated samples MP28860: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28860
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/29/15

Metal	FA23825-21 Original MSD		Spike lot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.1	3	103.3	3.2	20

Associated samples MP28860: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28860
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/29/15

Metal	BSP Result	SpikeLot HGFLWS1	% Rec	QC Limits
Mercury	3.1	3	103.3	80-120

Associated samples MP28860: FA23825-21

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: FA23825
 Account: UTC - United Technologies Corporation
 Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP28860
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/29/15

Metal	FA23825-21		QC	
	Original	SDL 1:5	%DIF	Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP28860: FA23825-21

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), *USEPA National Functional Guidelines for Superfund Organic Data Review* (USEPA, August 2014), and *Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services* (USEPA, July 1999). 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 FA23750 were collected on October 27-28, 2014 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 tetrachloroethene in sample MW-3D were qualified “/M/M” due to high recovery in the associated matrix spike sample above the acceptable range of 40-160% (316%). These qualifiers indicate the results should be considered biased high.

Total Organic Carbon by Method SM 5310B

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

Chloride, Nitrate, Nitrite, and Sulfate by Method 300.0/9056

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

Dissolved Gases (Methane, Ethane, and Ethene) by Method RSK-175

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

Data Summary and Usability

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), *USEPA National Functional Guidelines for Superfund Organic Data Review* (USEPA, August 2014), and *Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services* (USEPA, July 1999). 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 FA23825 were collected on April 21-22, 2015 for UTC - Delavan Spray Technologies located in Bamberg, South Carolina. The analytical data were validated according to the procedures outlined above. Where data flags have been applied to this data set, they are separated by a slash "/" and presented in the following format:

Laboratory Flag / Result Flags / Analysis Flags

- **Laboratory Flag:** This flag precedes the first slash and is added by the laboratory as a result of QC excursions from the analytical method. These flags are laboratory-specific and are described in the associated laboratory report.
- **Result Flags:** These are presented after the first slash and are added by AECOM based on data validation procedures and guidelines. They tell how and if the data should be used.
- **Analysis Flags:** These flags are presented after the second slash and are added by AECOM to inform the data user of any specific QA/QC problems that were encountered.

Any data requiring qualification as a result of the validation process were assigned data flags, as discussed below. The validation flags indicate how any QC excursions may have impacted the usability of the data.

Volatile Organic Compounds by Method 8260B

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

Semivolatile Organic Compounds by Method 8270D

Non-detections of semivolatile organic compound benzoic acid in samples associated with preparatory batch SL3648 (sample IDW) were qualified “/R/c” due to recovery in the associated laboratory control sample below the established criteria of 25-150% (153%). These qualifiers indicate the non-detections are biased low and should be rejected.

Target Analyte List Metals by Methods 6010C/7470B

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

Data Summary and Usability

With the exception of the non-detections of semivolatile organic compound benzoic acid in samples associated with preparatory batch SL3648 (sample IDW), the QC excursions encountered during the validation of this data set did not result in the rejection of any data. Therefore, the remaining data associated with this laboratory batch should be considered compliant and adequate for its intended use.

References

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

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

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