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Transmittal

To: Ms. Cynde Devlin
SCDHEC
2600 Bull Street
Columbia, SC 29601

Date: March 9, 2020

Re: High Resolution Source Characterization Report
Delavan Spray Technologies Site
Bamberg, South Carolina
SCDHEC VCC Number 13-4762-RP
AECOM Project Number 60620179

We are sending you:

_X_ Herewith ___under separate cover

If material received is not as listed, please notify us at once.

Quantity	Title	Action*
1	One hardcopy and one electronic copy of the High Resolution Source Characterization Report for the Delavan Spray Technologies Site.	I

*Action code: **R**-for your review **N**-reviewed and noted **I**-for your information **S**-resubmit **J**-rejected **Y**-for your approval

Remarks:

Dear Ms. Devlin:

For your files, please find enclosed one hard copy and one electronic copy of the High Resolution Source Characterization Report. If you have any questions or require additional information, please contact Conan Fitzgerald at (919) 461-1260 or via email conan.fitzgerald@aecom.com or me at (864) 234-2282 or via email leslee.alexander@aecom.com.

Sincerely,

Leslee J. Alexander, P.G.

/Enclosures

c: Conan Fitzgerald, AECOM
AECOM Project File 60314964/60620179

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SITE ASSESSMENT, REMEDIATION, & REVITALIZATION

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TO: Cynde Devlin, SCDHEC

FROM: Conan Fitzgerald, AECOM
Leslee J. Alexander, AECOM

COPY: Paul DiNardo, Raytheon Technologies Corporation
Melinda Collins, Collins Aerospace
AECOM Project File 60314964/60590866

RE: High Resolution Source Characterization Report
Delavan Spray LLC
Bamberg, South Carolina
VCC 13-4762-RP

DATE: March 9, 2021

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MAR 11 2021
SITE ASSESSMENT, REMEDIATION, & REVITALIZATION

This *High Resolution Source Characterization Report* documents environmental investigation activities completed for the Delavan Spray Technologies Site ("Delavan"; "the site"), a Delavan Spray LLC manufacturing facility located at 4334 Main Highway in Bamberg, South Carolina. The report has been prepared by AECOM Technical Services, Inc. (AECOM) on behalf of Delavan Spray LLC, a Collins Aerospace company. This report provides a brief background, followed by a summary of activities completed and the results of the investigation.

1.0 INTRODUCTION

The site is located at 4334 Main Highway (US Highway 301 South) in Bamberg, South Carolina (**Figure 1**). Previous assessments have documented chlorinated volatile organic compounds (cVOCs) in soil and groundwater related to their historic use at the facility. The site layout is illustrated on **Figure 2**. The primary compounds of concern are 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). Additional site background and history were reported in detail in Section 2.0 of the Remedial Investigation (RI) Report (AECOM, July 2014) and in the *Spring 2020 Semi-Annual Groundwater Monitoring Report* (AECOM, July 2020).

The objective of the HSRC project was to assess the elevated concentrations of cVOCs that have previously been detected in residual "source areas" beneath and adjacent to the manufacturing facility. Specifically, this includes "hot spots" in shallow groundwater near the two former PCE degreasers, the former PCE secondary containment area, and the former PCE underground storage tank (UST).

As a first step in the process to address source area cVOC impacts, the *Pre-Pilot Study HRSC Work Plan* was developed to conduct HRSC of the source area "hot spots" located beneath and immediately adjacent to the Facility using membrane interface probe / hydraulic profiling tool (MiHPT) technology. The Work Plan was submitted to the South Carolina Department of Health and Environmental Control (SCDHEC) on February 11, 2019 (AECOM, 2019) and approved in correspondence dated March 1, 2019. This report describes the results of the HRSC investigation, which were subsequently used to update the current

conceptual site model (CSM). The updated CSM and data collected to date will be used to evaluate potential remedial alternatives and design a remedy to address the residual source areas at the site.

2.0 HRSC INVESTIGATION ACTIVITIES

In July 2020, HRSC investigation activities were conducted at the site, which included a MiHPT investigation, the collection of direct push technology (DPT) soil and groundwater samples, and the installation of one permanent monitoring well. The MiHPT and DPT boring locations were chosen to address data gaps in understanding the vertical and horizontal extent of the cVOC plume in addition to further characterizing the hydrogeology of the site. As described in the HRSC Work Plan (AECOM, 2019), the purpose of this investigation was to identify the subsurface locations where the highest concentrations of residual cVOCs reside, determine subsurface permeability information where the highest concentrations of residual cVOCs reside, and understand the zones of high and low contaminant mass flux and potential transport pathways. The HRCS investigation was designed to estimate the lateral extent of cVOCs in subsurface soils beneath the four respective source areas (**Figure 3**):

- Former Northern PCE Degreaser (vicinity of MW-19);
- Former Southern PCE Degreaser (vicinity of MW-20);
- Former Eastern PCE Secondary Containment Area (vicinity of MW-1); and
- Former PCE UST Area (vicinity of MW-21).

Field data acquisition methodologies were designed to be in general accordance with the United States Environmental Protection Agency (USEPA) Region 4 Science and Ecosystem Support Division (SESD) Field Branches Quality System and Technical Procedures (http://www.epa.gov/region4/sesd/fbqstp/). To be consistent with the RI, those specific field methods, analytical procedures, and quality assurance/quality control (QA/QC) procedures applicable to the scope of work followed those presented in Section 1 (Field Sampling and Analysis) and Section 2 (Field Quality Assurance Samples) of Appendix B to the *RI Work Plan* (Hart & Hickman, August 2013) and in the *HRSC Work Plan* (AECOM, 2019).

The HRSC investigation activities are described in detail in the following subsections. Field documentation is provided in **Attachment A.**

2.1 MiHPT Investigation Methods

The MiHPT consists of a probe/trunk line system that is used in conjunction with conventional DPT equipment. Using DPT, the MiHPT probe is inserted into the targeted investigation zone, and the information collected by the probe is continuously conveyed to the surface via the connected trunk line. The MiHPT probe combines membrane interface probe (MIP), electrical conductivity (EC), and hydraulic profiling tool (HPT) technologies. The MIP probe utilized three chemical detectors - a photoionization detector (PID), a flame-ionization detector (FID), and a halogen-specific detector (XSD) – to provide an indication of the location and amount of volatile organic compounds (VOCs) in the subsurface. The XSD was especially useful since it is designed to measure chlorinated organics, such as PCE and its degradation products. MiHPT technology is described in detail in the HRSC Work Plan (AECOM, 2019)

and in the *High-Resolution Conceptual Site Model Assessment* that was completed by the MiHPT subcontractor and included in **Attachment B**.

Columbia Technologies, LLC (Columbia Technologies), located in Rockville, Maryland, was selected as the MiHPT subcontractor for the HRSC and South Atlantic Environmental Drilling and Construction Co, Inc. (SAEDACCO), located in Fort Mill, South Carolina, was subcontracted to perform the DPT work for the project. MiHPT Investigation activities were conducted from July 9 – 16, 2020 and July 20 – 24, 2020. Field documentation is provided in **Attachment A**. The complete *High-Resolution Site Characterization Report* from Columbia Analytical Technologies summarizing the MiHPT methods and results can be found in **Attachment B**.

The MiHPT investigation at the four residual source areas was conducted using a combination of Geoprobe® rigs. Because the former northern and southern PCE degreaser units are located within the active Delavan manufacturing facility, access was limited in certain areas to a dolly-mounted Geoprobe® GH42 rig. Outside of the facility and in accessible areas inside the Facility, a larger Geoprobe® 7822DT rig was also used. MiHPT data was not collected from the uppermost five feet of each boring since each location was hand augered to confirm the absence of underground utilities. The targeted intervals for the HRSC investigation at the four areas were from the ground surface (outside of the facility) or from immediately below the concrete surface (inside of the facility) down to rig refusal or contact with the underlying deeper limestone aquifer. This was generally encountered at between 26 to 42 feet below ground surface (ft bgs) at most locations.

Summaries of the MiHPT locations by residual source area are presented and variations from the HRSC work plan (AECOM, 2019) are described in Sections 3.1 through 3.4, and investigation results are detailed in Sections 4.1 through 4.6.

2.2 Soil Investigation Methods

To quantify the MiHPT results and to provide information (e.g., horizontal extent of residual cVOCs and locations of the highest concentrations of cVOCs) for remedial design, unsaturated and saturated soil samples were collected from DPT borings co-located with select MiHPT borings within each of the four residual source areas (**Table 1**).

DPT soil borings were completed using either a Geoprobe® DT-54 or a larger-sized, Geoprobe® 7822DT rig. Two locations (DPT-110 and DPT-115) were inaccessible with the Geoprobe® DT-54 and were completed using hand augers.

At each DPT soil boring, soil cores were collected continuously every five feet beginning from 5 ft bgs down to the terminal depth of the co-located MiHPT point, or DPT rig refusal. Geoprobe® Macro-Core® acetate sleeves were used to collect the soil cores from the DPT borings. For hand augered soil borings, a clean auger was used for each 5-foot soil interval. Soil from each boring was logged for lithology in the field using the Unified Soil Classification System, field screened using a PID, and observations were recorded on the Test Boring Reports included in **Attachment A**. Soil samples were subsequently collected from the 1-foot portion of each 5-foot interval with the highest PID response or the highest XSD response if the MiHPT was completed first (1 sample per 5 feet). Soil samples were collected in accordance with the protocol

presented in the HRSC Work Plan (AECOM. 2019) and placed in laboratory-supplied containers. Quality assurance/quality control (QA/QC) samples were collected in accordance with the work plan.

Soil samples were appropriately managed from the time of collection through the time of relinquishment to ensure sample quality and representativeness. Each sample was assigned a unique sample ID for tracking purposes and sample details were recorded on chain-of-custody forms. Samples were immediately placed on ice after collection. Chain-of-custody forms and samples were packed in coolers with ice. Custody seals were affixed to the lid interface of each cooler to ensure that the samples have not been tampered with. Soil sample collection documents are provided in **Attachment A**.

Soil samples from all locations were analyzed for VOCs by Method 8260D. One sample from a boring in the Former Northern PCE Degreaser area was also analyzed for total oxidant demand (TOD; using permanganate and persulfate) to provide additional information for potential remedial alternatives analysis. Soil samples for VOCs were shipped to SGS North America, Inc. (SGS), a South Carolina-certified laboratory located in Orlando, Florida, for analysis. Soil samples for TOD were shipped to Redox Tech, LLC (Redox Tech), located in Cary, North Carolina, for analysis.

Summaries of the soil boring locations by residual source area are presented and variations from the HRSC work plan (AECOM, 2019) are described in Sections 3.1 through 3.4, and investigation results are detailed in Sections 4.1 through 4.6.

2.3 DPT Groundwater Sampling Methods

Groundwater samples were collected using low flow/low stress sampling methods in accordance with the *RI Work Plan* (Hart & Hickman, August 2013), USEPA's Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures (EPA/540/S-95/504 dated April 1996) and as described the HRSC work plan (AECOM, 2019).

Groundwater grab samples were collected from each of the four residual source areas from select DPT borings (**Table 1**). For collection of these samples, a Geoprobe® Screen Point 16 Groundwater Sampler (4-foot screen point) was used. The screen point sampler was threaded onto the leading end of a probe rod and advanced into the subsurface with the DPT rig. The screen remained sealed in a sleeve as it was pushed down to the desired depth (either DPT rig refusal / contact with limestone or the highest XSD reading, depending on the boring; **Table 1**) whereupon the sleeve was retracted exposing the screen to the surrounding groundwater. After the screen point sampler was opened, polyethylene tubing was inserted through the rods to the bottom of the screen point sampler. The tubing was then be connected to a flow-through cell and peristaltic pump.

At least one rod volume was purged prior to groundwater sample collection. Groundwater was brought to the surface by pumping with the peristaltic pump. After purging, the screen point groundwater samples were collected directly into pre-preserved sample containers. QA/QC samples were collected in accordance with the work plan. Following collection, the groundwater samples were placed on ice immediately after collection. Chain-of-custody forms and samples were packed in coolers with ice. Custody seals were affixed to the lid interface of each cooler to ensure that the samples were not tampered with.

Samples from all DPT groundwater sample locations were analyzed for VOCs by Method 8260D. One sample from one boring in the Former Northern PCE Degreaser area was also analyzed for manganese

(total and dissolved) by Method 6010D and tested for TOD (using permanganate and persulfate) to provide additional information for potential remedial alternatives analysis. Groundwater samples for VOCs and manganese were shipped to SGS for analysis and groundwater samples for TOD were shipped to Redox Tech for analysis.

Summaries of the groundwater sampling locations by residual source areas are presented and variations from the HRSC work plan (AECOM, 2019) are described in Sections 3.1 through 3.4, and investigation results are detailed in Sections 4.1 through 4.6.

2.4 Permanent Monitoring Well Installation and Sampling Methods

A permanent monitoring well (MW-37) was installed adjacent to one MiHPT boring location (MIP-109) to further delineate groundwater beneath the Facility and monitor future remedial performance. This monitoring well was installed on July 13, 2020 and was constructed using 1.25-inch diameter polyvinyl chloride (PVC) pipe with a 0.010-inch machine slot, 10-foot pre-packed well screen (**Table 2**). The length of screen and targeted depth for installation of the well screen were based on the MiHPT results. Total depth of the well was 22.07 ft and the screen was set at 11.81 to 21.81 ft bgs. Prior to drilling, the concrete was cut, and the top 5 ft bgs was hand augered to confirm the absence of underground utilities.

The annulus around the well screen was filled with clean filter sand to approximately 2 feet above the top of the well screen. A layer of bentonite clay chips approximately two-foot-thick was used to seal the monitoring point and was hydrated with potable water. A neat cement-bentonite grout was installed from above the bentonite seal to within approximately 6-inches below the finished concrete floor or surface. The surface completion for the 1-inch monitoring well consisted of a 4-inch diameter cast-iron vault with a bolt down lid. Within the facility, the vault was flush-mounted into the core hole and grouted in place flush with the floor using high strength concrete.

Following installation and after the bentonite seal had time to set properly, the groundwater monitoring well was developed so that it produced representative groundwater samples. The monitoring well was developed by AECOM personnel by surging and purging with a peristaltic pump. Groundwater indicator parameters (e.g. temperature, specific conductivity, dissolved oxygen, pH, oxygen reduction potential, and turbidity) were measured using a water quality meter and recorded on an AECOM Monitoring Well Development log (**Attachment A**). Development of the monitoring well continued until parameters stabilized to within 10% (0.2 standard units for pH) and the turbidity of the water was minimized to the extent possible. The well was pumped dry a few times during well development.

Newly installed monitoring well MW-37 was sampled after development using low flow/low stress sampling methods in accordance with the *RI Work Plan* (Hart & Hickman, August 2013) and USEPA's Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures (EPA/540/S-95/504 dated April 1996) and as described in Appendix B of the *RI Work Plan*. Monitoring well MW-19 was also sampled during the investigation because it was inaccessible during the April 2020 semi-annual monitoring event due to COVID-related restrictions at the Facility during the event. Sampling was also attempted at MW-20, but the monitoring well was dry. Water quality parameters were recorded during sampling on the Field Data Logs for Groundwater Sampling, which are included in **Attachment A**.

2.5 Equipment Decontamination

Equipment decontamination was performed before first use and in-between uses on all re-useable field equipment that is exposed to site media to prevent cross-contamination. Reusable sampling equipment that came in direct contact with samples (e.g., sample bowels and spoons, and hand augers) were decontaminated using a 5-step decontamination process. Two buckets were placed on plastic near the work area and the decontamination process was completed in the following series:

1. removal of residual amounts of soils by wiping with disposable towels,
2. detergent bath and brush in potable water with Alconox/Liquinox soap,
3. initial potable water rinse bath,
4. final rinse with de-ionized water, and
5. air dry and wrap in aluminum foil.

Sampling equipment that was not in direct contact with samples (i.e., core barrels, water level meter, flow-through cell) were cleaned using steps 1 through 3 above. In both cases, decontamination water was changed out as needed. All equipment decontamination residuals were managed as investigation-derived waste (IDW) as described in **Section 2.8** below.

2.6 Borehole Abandonment

Following sampling, MiHPT, DPT and hand auger borings were plugged and abandoned by filling the saturated portion with bentonite chips or pellets by pouring them directly into the borehole. During placement; the depth to the top of the bentonite was monitored to assure that bridging did not occur. The unsaturated portion of the boreholes was completed with a neat cement-bentonite grout installed from above the bentonite to within approximately 6-inches below the finished concrete floor (within the Delavan facility) or paved surface, or to land surface if drilling outside in non-paved areas. Temporary steel plates and flagging were placed over the floor penetrations for a minimum of 24-hours while the grout cured. Within the manufacturing facility or other paved areas, the floor penetrations were plugged flush with the finished floor with high strength concrete as each of the four respective investigation areas were completed.

2.7 Surveying

All MiHPT, soil, groundwater and monitoring well locations installed as part of the HRSC were surveyed by an AECOM professional land surveyor (PLS) licensed in South Carolina. Horizontal locations were reported in South Carolina State Plane Coordinates referenced to the North American Datum of 1983 (NAD-83) to the nearest 0.01 foot. Ground surface/ floor elevations and well top of casing elevations were referenced to the North American Vertical Datum of 1988 (NAVD-88) to the nearest 0.01 foot. The survey information is summarized in **Table 2** for MW-37 and in **Table 3** for the MiHPT and DPT borings.

2.8 Investigation-Derived Waste Management

IDW generated during the HRSC investigation included cored concrete, soil cuttings, decontamination fluids, and purge water. IDW was segregated by media and containerized in 55-gallon steel drums and staged in the waste storage area at the Facility prior to disposal. Two composite samples from each media

(soil and water) were collected for waste characterization purposes. IDW soil was collected for analysis of Toxicity Characteristic Leaching Procedure (TCLP) VOCs by Method 8260B, TCLP semi-volatile organic compounds (SVOCs) by Method 8270D, and TCLP metals by Methods 6010D and 7470A. Aqueous IDW was sampled for analysis of VOCs by Method 8260D, SVOCs by Method 8270E, and metals by Methods 6010D and 7074A. Samples were shipped to SGS for analysis.

3.0 HRSC Investigation Locations

Twenty-nine MiHPT points were completed as part of this investigation, including one background location (MIP-100-BG) that was performed along the eastern site property boundary near MW-4. Eleven Soil borings were completed for the collection of soil and groundwater samples and one permanent monitoring well was installed. **Figure 3** illustrates locations of MiHPT borings, DPT borings, and monitoring wells installed or sampled during this investigation.

The number of MiHPT points and their final locations were dependent on the field conditions encountered as well as the associated near real-time MiHPT results. **Table 1** presents an overview of all completed MiHPT locations and environmental samples collected as part of the HRSC. Deviations from the work plan (AECOM, 2019) are described in detail below and summarized on **Table 1**. Field documentation is presented in **Attachment A**.

3.1 Former Northern PCE Degreaser

Originally, nine MiHPT investigation locations were proposed for the former northern PCE degreaser area. However, seven locations were completed (MIP-101, MIP-102, MIP-103, MIP-104, MIP-106, MIP-107, and MIP-109) based on field conditions. Two of the step-out locations were cancelled in the field (MIP-105 and MIP-108). The MiHPT location, MIP-105, was cancelled in the field due to time constraints and DPT soil and groundwater samples were collected in its place (DPT-105). MiHPT location MIP-108 was cancelled in the field due to minimal XSD response in borings MIP-106 and MIP-107. The DPT soil and groundwater samples proposed for collection at DPT-108 were moved to DPT-107 (**Table 1 and Figure 3**).

Two locations (MIP-101 and MIP-102) were located within the immediate vicinity of the former northern PCE degreaser unit and monitoring well MW-19, respectively. Shallow MiHPT refusal was encountered at MIP-102 (7.65 ft bgs), therefore, a DPT groundwater sample was added to the DPT soil samples at DPT-102 to provide additional information at this location. Five additional MiHPT step-out borings were performed (MIP-103, MIP-104, MIP-106, MIP-107, and MIP-109). Two of these step-outs (MIP-103 and MIP-104) were approximately 15 feet upgradient/cross-gradient from the source area MIP borings. Based on the real-time MIP results from these locations, two additional MIP borings (MIP-106 and MIP-107) were advanced 15 feet cross-gradient of MIP-104 and MIP-104 (30 feet upgradient/cross-gradient of the source area).

One downgradient MiHPT boring (MIP-109) was conducted approximately 30 feet downgradient of the source area. A DPT boring was installed adjacent to the MiHPT boring and a permanent monitoring well (MW-37) was installed to facilitate future performance monitoring of remediation activities. **Section 2.4** provides monitoring well installation and development methods. Monitoring well construction details are summarized on **Table 2**.

A total of five direct push soil borings (co-located with the respective MiHPT boring) were performed at the former northern PCE degreaser for the collection of soil samples (DPT-101, DPT-102, DPT-104, DPT-105, and DPT-107) (**Table 1** and **Figure 3**). Soil samples were collected from depths ranging from 7 ft bgs to 34 ft bgs (one sample per each 5-foot interval as described in **Section 2.2**) and were analyzed for VOCs. One sample from boring DPT-101 in was also analyzed for TOD (using permanganate and persulfate).

In addition to the soil samples, groundwater grab samples (DPT-GW-101, DPT-GW-102, DPT-GW-105, and DPT-GW-107) were collected at DPT rig refusal / contact with the limestone in four direct push borings for analysis of VOCs as described in **Section 2.3**. The groundwater sample from boring DPT-101 was also analyzed for manganese (total and dissolved) and tested for TOD (using permanganate and persulfate) to provide additional information for potential remedial alternatives analysis.

3.2 Former Southern PCE Degreaser

Seven MiHPT borings were proposed for the former southern PCE degreaser area and all were completed (MIP-110, MIP-111, MIP-112, MIP-113, MIP-114, MIP-115, and MIP-116; **Table 1 and Figure 3**). MIP-110 was located within the immediate vicinity of the former southern PCE degreaser unit. Six additional MiHPT step-out borings were performed (MIP-111 through MIP-116). Four of these step-outs (MIP-111 through MIP-114) surrounded MIP-110 (about 15-20 feet away) for source area delineation. An additional two step-out borings (MIP-115 and MIP-116) were also performed to complete delineation in the upgradient/cross-gradient direction to gain information for future remediation design.

To quantify VOC concentrations associated with the MIP results, two soil borings were installed. One of the soil borings (DPT-110) was co-located immediately adjacent to the source area MiHPT boring (MIP-110). The second soil boring location was proposed to be co-located next to the farthest step-out boring from the former southern degreaser area, however, these soil samples were collected adjacent to MIP-115 instead due to limited XSD response in boring MIP-116. Soil samples were collected from each 5-foot interval as described in **Section 2.2** (from depths ranging from 9 ft bgs to 18 ft bgs) and were analyzed for VOCs. As discussed in **Section 2.2**, soil samples from DPT-110 and DPT-115 were collected using hand augers because the area was inaccessible with the Geoprobe® DT-54.

In addition to the soil samples, groundwater grab samples (DPT-GW-110 and DPT-GW-115) were collected from the two DPT borings. Both groundwater grab samples were collected at hand auger refusal, which coincided with the appearance of limestone sediments (limestone-derived sand particles). Groundwater samples were collected for the analysis of VOCs as described in **Section 2.3**.

3.3 Former Eastern PCE Secondary Containment Area

The seven proposed MiHPT investigation borings (MIP-117 through MIP-123) were completed in the former eastern PCE secondary containment area (**Table 1 and Figure 3**). One location (MIP-117) was located within the center of the former containment area. Four MiHPT borings (MIP-118 through MIP-121) surround the former eastern PCE secondary containment area (each approximately 15 feet away from the center of the containment area) with the eastern step-out located between the former secondary containment area and monitoring well MW-1. Two additional MiHPT borings (MIP-122 and MIP-123) were located about 15 feet upgradient of MW-1 (approximately 35 feet upgradient from the Former Eastern PCE Secondary Containment Area).

Two direct push soil borings were completed to provide quantitative analytical result corresponding to the MIP results. One of the DPT soil borings (DPT-117) was co-located immediately adjacent to source area MiHPT boring MIP-117. The second soil boring location (DPT-123) was co-located next to furthest upgradient MiHPT boring (MIP-123), based on field results (**Table 1**). Soil samples were collected from depths ranging from 7 ft bgs to 29 ft bgs (one sample per each 5-foot interval as described in **Section 2.2**) and were analyzed for VOCs.

Groundwater grab samples (DPT-GW-117 and DPT-GW-123) were also collected from the two borings at DPT rig refusal / contact with the underlying limestone (**Table 1**). For DPT-GW-123, the groundwater sample depth was also the interval of the highest XSD detector response in the co-located MiHPT boring. Groundwater samples were collected for the analysis of VOCs as described in **Section 2.3**.

3.4 Former PCE UST Area

Seven MiHPT investigation borings (MIP-124 through MIP-130) were proposed for installation at the former PCE UST area and all were installed (**Table 1 and Figure 3**). One location (MIP-124) was on the western side of the Former PCE UST footprint, between monitoring well MW-21 and the center of the Former PCE UST footprint. Four MiHPT borings (MIP-125 through MIP-128) surround MIP-124 (each approximately 12 to 15 feet away). One MiHPT location (MIP-129) was located approximately 15 feet cross-gradient/upgradient from MIP-125, and one MiHPT location (MIP-130) was located about 15 feet downgradient of MIP-127 and MIP-128.

To quantify VOC concentrations associated with the MIP results, two direct push soil borings were installed. The DPT soil borings (DPT-124 and DPT-129) were co-located adjacent to MIP-124, on the western side of the Former PCE UST, and MIP-129, on the eastern side of the Former PCE UTS, respectively (**Table 1 and Figure 3**). Soil samples were collected from each 5-foot interval as described in **Section 2.2** (from depths ranging from 7 ft bgs to 34 ft bgs) and were analyzed for VOCs.

In addition to the soil samples, groundwater grab samples (DPT-GW-124 and DPT-GW-129) were collected from the two DPT borings. DPT-GW-124 was collected just above DPT rig refusal to characterize VOCs in groundwater at the contact with the underlying limestone. DPT-GW-129 was collected at DPT rig refusal, which coincided with the depth of the highest XSD detector response in the co-located MiHPT boring (**Table 1 and Figure 3**). Groundwater samples were collected for the analysis of VOCs as described in **Section 2.3**.

4.0 HRSC INVESTIGATION RESULTS

The HRSC investigation detected elevated XSD levels indicating cVOCs above and below the groundwater table over most of the areas that were investigated. Although a few areas exhibited elevated responses in the unsaturated zone, most of the cVOC impacts and the highest magnitude cVOC responses were detected below the water table in saturated soil. The following sections summarize the MiHPT investigation results, saturated and unsaturated soil concentrations, and groundwater results.

All July 2020 DPT soil data are presented in **Table 3**. Analytical soil results and maximum XSD readings for the unsaturated zone (approximately 0 ft bgs to 15 ft bgs) and saturated zone (approximately 16 ft bgs to 35 ft bgs) are illustrated on **Figure 4 and Figure 5,** respectively. Groundwater analytical results are

summarized on **Table 4** and are on illustrated on **Figure 6** and **Figure 7** for PCE and TCE results, respectively. Cross-sections showing available soil and groundwater analytical data for PCE, MiHPT results, monitoring well and grab sample screen intervals, and the depth where the limestone was encountered are included as **Figure 8** and **Figure 9** for the Former Northern PCE Degreaser and **Figures 10 through Figure 12** for the Former Southern PCE Degreaser, the Former Eastern PCE Secondary Containment Area, and the Former PCE UST.

The complete *High-Resolution Site Conceptual Site Model Assessment* Report from Columbia Analytical Technologies summarizing the MiHPT investigation in included as **Attachment B**. Laboratory analytical reports and data assessment reports are provided in **Attachment C** and TOD Results are summarized in **Attachment D**. QA/QC data is summarized in **Attachment E** and IDW samples results are summarized in **Attachment F**.

4.1 Former Northern PCE Degreaser Area

Seven MiHPT borings were completed in the vicinity of the Northern PCE Degreaser (MIP-101, MIP-102, MIP-103, MIP-104, MIP-106, MIP-107, and MIP-109). Several of the MiHPT borings in this area had elevated responses near the ground surface, indicating a release of cVOCs. The highest MIP response in the unsaturated zone in this area (763,726 microvolts [µV]) was in the footprint of the former degreaser at location MIP-102 at 5.8 ft bgs (**Figure 4**). The XSD response was elevated (>100,000 µV) consistently between a depth of 4.2 ft bgs and DPT refusal at approximately 7.6 ft bgs (**Figures 8 and 9**; **Appendix B**). For the other MiHPT boring in the footprint of the former degreaser (MIP-101), elevated XSD levels were found consistently from approximately 9.9 ft bgs to 11.5 ft bgs and intermittently from approximately 13 ft bgs to 20 ft bgs, with the maximum XSD (218,970 µV) at approximately 19 ft bgs (**Figure 9**; **Appendix B**). MiHPT borings MIP-103, MIP-104, MIP-106, and MIP-107 exhibited a much lower XSD response than found in the footprint of the former degreaser but were above background (approximately 20,000 to 30,000 µV). The maximum XSD response was shallow in MIP-104 (72,024 µV at 5.85 ft bgs), and deeper in MIP-103 (67,141 µV at 11.85 ft bgs) and MIP-106 (37,385 µV at 20.05 ft bgs and 24.1 ft bgs).

The maximum XSD response in saturated soil for the Former Northern Degreaser Area (361,644 µV) was encountered in MIP-109, located downgradient from the degreaser, at a depth of 17.15 ft bgs, a few feet below the water table, in an interval of low to moderate flow as measured by the HPT. Estimated hydraulic conductivities of greater than 75 feet per day (ft/day) were indicated intermittently at MIP-109, at depths between approximately 25 ft bgs and MIP boring refusal (approximately 42 ft bgs; **Figure 9**; **Appendix B**).

A total of 28 soil samples were collected from the former northern PCE degreaser area from five DPT soil boring (DPT-101, DPT-102, DPT-104, DPT-105, and DPT-107). PCE was detected in a total of 27 samples; at concentrations ranging from 3 micrograms per kilogram (µg/kg) (DPT-107-7) to 973,000 µg/kg (DPT-102-9). All detected concentrations of PCE in the Former Northern Degreaser Area exceeded the United States Environmental Protection Agency (USEPA) Maximum Contaminant Level-Based (MCL-Based) Soil Screening Level (SSL) of 2.3 µg/kg (USEPA, May 2020). The maximum unsaturated soil PCE concentrations at each DPT location ranged from 9.4 µg/kg at DPT-107 (13 ft bgs) to 973,000 µg/kg at DPT-102 (9 ft bgs) (**Figure 4**). The maximum saturated soil PCE concentrations ranged from 346 J (estimated) µg/kg at DPT-104 (34 ft bgs) to 4,740 µg/kg at DPT-105 (23 ft bgs; **Figure 5**). TCE was detected in a total of 12 soil samples, with 8 samples exceeded the USEPA MCL-Based SSL (1.8 µg/kg).

The maximum unsaturated soil TCE concentration in each DPT boring ranged from non-detect to 284 J (estimated) µg/kg at DPT-102 (12ft bgs; **Figure 4**). The maximum saturated soil TCE concentrations ranged from non-detect to 118 µg/kg at DPT-105 (23 ft bgs; **Figure 5**). A summary of soil results is presented in **Table 4**.

DPT groundwater samples were collected from four borings (**Table 5**) at the DPT rig refusal and/or the contact with the underlying limestone (DPT-GW-101, DPT-GW-102, DPT-GW-105, and DPT-GW-107). PCE concentrations from all four groundwater grab samples exceeded the USEPA maximum contaminant level (MCL) for PCE (5 micrograms per liter [µg/L]) and TCE concentrations from three groundwater grab samples (DPT-GW-101, DPT-GW-105 and DPT-GW-107) exceeded the USEPA MCL for TCE (5 µg/L). PCE results ranged from 947 µg/L at DPT-GW-107 to 25,800 µg/L at DPT-GW-102 and TCE results ranged from non-detect in DPT-GW-102 to 38.7 µg/L in DPT-GW-105 (**Figures 6 and 7**). Newly installed monitoring MW-37 (installed adjacent to MIP-109) and existing monitoring well MW-19 were also sampled for groundwater. TCE was not detected above the detection limit in either well, but PCE was detected at concentrations of 13,700 µg/L in MW-37 and 29,800 µg/L in MW-19, both above the MCL for PCE (5 µg/L). A summary of groundwater results is presented in **Table 5**.

Cross-sections A-A' (**Figure 8**) and B-B' (**Figure 9**) illustrate components of the conceptual site model (CSM) for the Former Northern PCE Degreaser Area. The highest PCE concentrations and XSD response was detected in unsaturated soils near the former degreaser (MIP-101, DPT-101, MIP-102, and DPT-35), indicating a shallow soil release in this area. PCE concentrations in groundwater were elevated in the vicinity of the degreaser (MW-19 and DPT-GW-102) and downgradient of the degreaser to the west (MW-37). MiHPT boring refusal and DPT rig refusal at MIP-102/DPT-102 was shallower than nearby borings, so there is potential that additional PCE may be present between the rig refusal depth and the top of the limestone in the immediately vicinity of MIP-102. Elevated PCE concentrations in the vicinity the Former Northern PCE Degreaser impact downgradient groundwater to the west and may contribute to groundwater impacts in the shallow aquifer and limestone aquifer to the south. Soils in the shallow aquifer exhibited low to moderate permeability and hydraulic conductivity, while the limestone aquifer exhibited high permeability, with estimated hydraulic conductivity values in excess of 75 ft/day.

Select DPT samples in the Former Northern PCE Degreaser Area were also analyzed for additional parameters (i.e., total and dissolved manganese and total oxidant demand) that will be used during the evaluation of potential remedies. Groundwater grab samples DPT-GW-101 (in the footprint of the former degreaser) and DPT-GW-107 (furthest cross-gradient DPT sample location) were analyzed for total and dissolved manganese (**Table 5**). The highest concentration of total manganese was in DPT-GW-107 (20,700 µg/L), whereas the highest concentration of dissolved manganese was in source area sample DPT-GW-101 (61.3 µg/L). These data can be used to evaluate the potential for manganese dioxide precipitation to occur during if chemical oxidants (such as permanganate) are considered as part of a source area remedy.

Saturated soil samples were collected from DPT-101 (bottom depth of 19 ft bgs; the interval of the highest XSD response) for total oxidant demand TOD testing using persulfate and permanganate. Groundwater from grab sample DPT-GW-101 was also collected for use in the TOD testing. DPT boring DPT-101 was identified for TOD testing because it was located near the former northern PCE degreaser near the highest PCE concentration detected beneath the Facility (85,400 µg/kg in DPT-35/MW-19 during the Remedial

Investigation [AECOM, 2014]) and, therefore, the location was expected to exhibit the some of the highest TOD at the site. The TOD results will be used in conjunction with previously collected background TOD information to evaluate the potential impact of site TOD values on the performance of potential remedies and for dosing calculations should chemical injections be selected as a potential remedy. TOD results are presented in **Attachment D**.

4.2 Former Southern PCE Degreaser Area

Seven MiHPT stations were completed in the area of the former southern PCE degreaser (MIP-110 through MIP-116; **Figure 3**). The MiHPT responses in this area exhibited higher XSD values and occurred at greater depths than those in the Former Northern PCE degreaser Area (**Section 4.1**). XSD values in the unsaturated zone (<15 ft bgs) were low (approximately 18,000 µV to approximately 43,500 µV), indicating that there is less VOC mass in unsaturated soils here compared to the Former Norther PCE Degreaser Area (**Figure 4**). Peak XSD values for each boring in the Former Southern PCE Degreaser Area ranged from 201,422 µV to 1,287,118 µV and occurred at depths between approximately 19 ft bgs and 28 ft bgs (**Figure 6; Attachment B**). The highest XSD reading for this area (1,287,118 µV at a depth of 19.1 ft bgs) was detected at MIP-114, the southern-most MiHPT boring in the Former Southern PCE Degreaser Area. Elevated XSD responses (>100,000 µV) were consistently detected in MIP-114 from approximately 18.5 ft bgs to approximately 28.5 ft bgs (MiHPT boring refusal was at 29 ft bgs).

MiHPT borings MIP-112 and MIP-113, located on the upgradient edge of the former degreaser footprint, and MiHPT boring 110, located immediate down-gradient of the former degreaser footprint, exhibited XSD response that were significantly lower than that observed in MIP-114 (**Figures 4 and 5; Attachment B**). MIP-110 had consistent elevated XSD readings above 100,000 µV from approximately 19.7 ft bgs to 30 ft bgs, with a peak of 342,570 µV at 25.15 ft bgs, MIP-112 and MIP-113 exhibited similar responses, with elevated XSD readings from a depth of approximately 22 ft bgs to approximately 37 ft bgs (rig refusal), with peaks of 201,422 µV (22.45 ft bgs) and 417,341 µV (27.65 ft bgs) for MIP-112 and MIP-113, respectively. East of the former degreaser at MIP-111, observed XSD response was similar to that within the degreaser's footprint but the range of values was greater than in MIP-112 and MIP-113, with a maximum XSD of 653,401 µV at a depth of 24.25 ft bgs. The XSD levels in the eastern-most MiHPT borings (MIP-115 and MIP-116) were similar to those found in the footprint of the former degreaser (**Attachment B**).

At station MIP-114, there were zones (e.g. 20 ft bgs) where PID levels were high relative to the XSD levels. This may be due to the presence of cutting oil, or a similar substance, combined with the cVOCs (**Attachment B**). The long, smooth reduction in the PID and XSD readings below peak readings is consistent with the presence of cutting oil, which is known to have been used at the Site and may have been removed from the parts at the Southern PCE Degreaser.

A total of six soil samples were collected from two soil borings (DPT-110 and DPT-115) in the Former Southern PCE Degreaser Area. PCE was detected in all six samples, five of which exceeded the USEPA MCL-Based SSL for PCE (2.3 µg/kg). Detected concentrations of PCE in the unsaturated zone ranged from 1.9 J (estimated) µg/kg at DPT-115 (14 ft bgs) to 34.3 J (estimated) µg/kg at DPT-110 (15 ft bgs) (**Table 4 and Figure 4**). In saturated soil, PCE concentrations ranged from 885 µg/kg at DPT-115 (16 ft bgs) to 4,450 µg/kg at DPT-110 (18 ft bgs; **Table 4 and Figure 5**). TCE was detected in three of the six

soil samples and two of the detections (2.8 J µg/kg from 18 ft bgs at DPT-110 and 2.8 µg/kg from 16 ft bgs at DPT-115) exceeded the USEPA MCL-Based SSL for TCE (1.8 µg/kg). A summary of soil results is presented in **Table 4**.

Groundwater grab samples (DPT-GW-110 and DPT-GW-115) were collected at both soil borings. DPT-GW-110 was collected at 15-19 ft bgs and DPT-GW-115 was collected at 12-16 ft bgs. Both samples were collected at the bottom of the hand auger borings, which also coincided to the depth of the highest XSD detector response in the adjacent MIP locations. PCE concentrations exceeded the USEPA MCL for PCE (5 µg/L) at both locations; 2,900 µg /L at DPT-GW-110 and 3,360 µg/L at DPT-GW-115. Similarly, TCE concentrations exceeded the USEPA MCL (5 µg/L) at both locations; 25.1 J (estimated) µg /L at DPT-GW-110 and 21.5 J (estimated) µg/L at DPT-GW-115. Groundwater PCE and TCE concentrations are shown on **Figures 6 and 7**, respectively. A summary of groundwater results is presented in **Table 5**.

Cross-sections C-C' (**Figure 10**) and E-E' (**Figure 12**) illustrate components of the CSM for the Former Southern PCE Degreaser Area. PCE concentrations in the unsaturated zone are lower than those observed for the Former Northern PCE Degreaser, indicating less residual mass in the vadose zone and a smaller release to shallow soils in this area compared to the north. The maximum XSD response in this area was detected in the saturated zone south of the degreaser footprint at MIP-114. The peak XSD response was an order of magnitude higher than the peak in the Northern Degreaser Area. Due to shallow refusal of the soil borings, soil and groundwater analytical data may not be representative of maximum PCE/cVOC concentrations for this area; peak XSD values at MIP-114 indicate additional mass present in the saturated zone above the contact between the shallow aquifer and the underlying limestone. In addition to the cVOCs, MiHPT data at MIP-114 indicate the presence of a substance like cutting oil co-mingled with the cVOCs in this area. Elevated cVOC concentrations in the vicinity of and to the south of the Former Southern PCE Degreaser contribute to groundwater impacts in the shallow aquifer and limestone aquifer to the south and likely contribute to impacts to the east. Soils in the shallow aquifer exhibited low to moderate permeability and hydraulic conductivity, while the limestone aquifer exhibited high permeability, with estimated hydraulic conductivity values in excess of 75 ft/day.

4.3 Former Eastern PCE Secondary Containment Area

Seven MiHPT borings were completed in the Former Eastern PCE Secondary Containment Area (MIP-117 through MIP-123). The XSD levels in this area were comparable in magnitude to those in the Former Northern PCE Degreaser Area, however the depth of the maximum responses was deeper, in the saturated zone, instead of in the vadose zone. The XSD response at MIP-117, within the Former Eastern PCE Secondary Containment Area, were above background values in the unsaturated zone and the peak XSD (73,244 µV) was detected at approximately 20 ft bgs, which is shallower than XSD peaks for other borings in this area. Peak XSD values for this area ranged from 32,273 µV at MIP-121 to 448,012 µV at MIP-123 and all peaks were in the saturated zone (peaks occurred at depths ranging from approximately 20 ft bgs to 30 ft bgs). The XSD levels for this area were highest in MIP-118 and MIP-123, which are located to the east (upgradient / cross-gradient) of the secondary containment structure.

A total of 10 soil samples were collected from two DPT borings (DPT-117and DPT-123) in the Former Eastern PCE Secondary Containment Area. PCE was detected in eight samples, all of which exceeded the USEPA MCL-Based SSL for PCE (2.3 µg/kg). The maximum unsaturated soil PCE concentrations

were 51.2 µg/kg at DPT-117 (13 ft bgs) and 121 µg/kg at DPT-123 (12 ft bgs; **Figure 4**). The maximum saturated soil PCE concentrations were 798 µg/kg at DPT-117 (17 ft bgs) and 4,250 µg/kg at DPT-123 (20 ft bgs; **Figure 5**). TCE was also detected in eight soil samples and seven detected TCE concentrations exceeded the USEPA MCL-Based SSL for TCE (1.8 µg/kg). The maximum unsaturated soil TCE concentrations were 2.1 J (estimated) µg/kg at DPT-117 (13 ft bgs) and 3.7 J (estimated) µg/kg at DPT-123 (12 ft bgs; **Figure 4**). The maximum saturated soil TCE concentrations were 27.9 µg/kg at DPT-117 (23 ft bgs) and 154 µg/kg at DPT-123 (20 ft bgs; **Figure 5**). A summary of soil results is presented in **Table 4**.

DPT groundwater grab samples were collected from each boring (DPT-GW-117 and DPT-GW-123). DPT-GW-117 was collected at 26-30 ft bgs to determine the concentration of PCE in groundwater at its contact with the underlying limestone and DPT-GW-123 was collected from 21-25 ft bgs at the contact with the limestone and just above the highest XSD detector response. PCE concentrations exceeded the USEPA MCL for PCE (5 µg/L) at both locations; 66.6 µg/L at DPT-GW-117 and 3,570 µg /L at DPT-GW-123 (**Figure 6**). The detected TCE concentration exceeded the USEPA MCL for TCE (5 µg/L) at DPT-GW-123 (122 µg/L) but TCE was not detected at DPT-GW-117 (**Figure 7**). A summary of groundwater results is presented in **Table 5**.

Cross-sections C-C' (**Figure 10**) and D-D' (**Figure 11**) illustrate components of the CSM for the Former Eastern PCE Secondary Containment Area. PCE concentrations in the unsaturated zone are lower than those observed for the Former Northern PCE Degreaser, indicating less residual mass in the vadose zone in this area compared to the northern degreaser. The maximum XSD response in this area was detected in the saturated zone at MIP-123 to the east of the secondary containment structure footprint. The peak XSD responses in this area were similar to those in the Northern PCE Degreaser Area but occurred in the saturated zone instead of the vadose zone. XSD responses and detection depths in the Former Eastern PCE Secondary Containment Area relative to the XSD detections in the Former Southern PCE Degreaser Area suggest that some of the cVOCs mass in this area may have migrated from the southern degreaser area. Soils in the shallow aquifer exhibited low to moderate permeability and hydraulic conductivity, while the limestone aquifer exhibited higher permeabilities. Maximum estimated hydraulic conductivity values in this area were lower in this area (MIP-118 and MIP-121) compared to other areas of the site.

4.4 Former PCE UST Area

Seven MiHPT borings were completed in the Former PCE UST Area (MIP-124 through MIP-130). The XSD levels in this area were generally higher than those in other HRSC investigation areas. XSD responses were lower in the unsaturated zone compared to the saturated zone, with peak XSD values in the unsaturated zone ranging from 21,210 µV at MIP-128 (14.55 ft bgs) to 600,334 µV at MIP-124 (13.45 ft bgs; **Figure 4**). Maximum XSD values in the saturated zone were generally an order of magnitude higher, ranging from 139,851 µV at MIP-129 (26.95 ft bgs) to 2,591,784 µV at MIP-124 (16.55 ft bgs). XSD responses in the Former PCE UST area were the highest observed in the HRSC investigation, with multiple locations exhibiting peak XSD responses greater than 2,000,000 µV (e.g., MIP-124 between 15.85 and 16.55 ft bgs, MIP-127 at 28 ft bgs, and MIP-128 at 35.6 ft bgs; **Appendix B**). The high magnitude of the XSD responses indicates that a release is likely to have occurred near MIP-124. Other MiHPT borings in the excavation footprint of the former UST (MIP-125 and MIP-129) had XSD responses lower than the

levels found in boring MIP-124. However, the MIP-125 and MIP-129 responses were over 700,000 and 100,000 µV, respectively. No elevated XSD responses (>100,000 µV) occur above 11 feet within the former UST footprint, and large increases in the response at deeper intervals (below 15 ft bgs) indicate an excavation depth between 11 and 15 ft deep for the Former PCE UST. Borings MIP-127 and MIP-128 were located outside of this footprint and had elevated XSD detections from a depth of approximately 20 ft bgs to the bottom of the boring at approximately 35 ft bgs. Similarly, location MIP-130, southeast of the former UST tank had elevated XSD detections from depths of approximately 21 ft bgs to 33 ft bgs.

Similar to MIP-114 in the southern PCE degreaser area, location MIP-124 and MIP-127 had zones within or bracketing the depth of the peak XSD response where PID levels were high relative to the XSD levels, indicating the presence of cutting oil or similar compound combined with the cVOCs. The long recovery time for the PID and XSD detectors to return to baseline levels is consistent with the presence of cutting oils.

A total of 12 soil samples were collected from two DPT soil borings (DPT-124 and DPT-129) installed in the Former PCE UST Area. PCE was detected in 11 of the 12 samples, and detected concentrations in 10 samples exceeded the USEPA MCL-Based SSL for PCE (2.3 µg/kg). The maximum PCE concentrations in unsaturated soil were 1,930 µg/kg at DPT-124 (15 ft bgs) and 359 µg/kg at DPT-129 (14 ft bgs; **Figure 4**). The maximum PCE concentrations in saturated soil were 3,030,000 µg/kg at DPT-124 (18 ft bgs) and 27,100 µg/kg at DPT-129 (26 ft bgs; **Figure 5**). TCE was detected in 3 of the 12 soil samples. All three sample detections exceeded the USEPA MCL-Based SSL for TCE (1.8 µg/kg). The detected TCE concentrations in soil were 2.9 J (estimated) µg/kg at DPT-124 (15 ft bgs), 1,210 µg/kg at DPT-124 (18 ft bgs) and 58.5 µg/kg at DPT-129 (26 ft bgs; **Figures 4 and 5**). A summary of soil results is presented in **Table 4**.

Groundwater grab samples (DPT-GW-124 and DPT-GW-129) were collected from each of the DPT soil borings. Both grab samples were collected at the contact with the limestone or at DPT rig refusal, and both were within the zone of highest XSD responses for the boring. PCE concentrations exceeded the USEPA MCL for PCE (5 µg/L) at both locations; 11,200 µg/L at DPT-GW-124 (30-34 ft bgs) and 305 µg/L at DPT-GW-129 (28-32 ft bgs; **Figure 6**). TCE concentrations were detected in DPT-GW-129, 4 J (estimated) µg/L, but did not exceed the USEPA MCL (5 µg/L; **Figure 7**). A summary of groundwater results is presented in **Table 5**.

The investigation was not bounded west of MIP-127 and MIP-130, and south of MIP-130 and MIP-128. Although the responses in the eastern stations were significantly lower than those in the middle or western areas of the investigation area, the easternmost responses were still significant and indicate that cVOCs likely extend past the edges of the investigation. Elevated MIP XSD responses near boring refusal suggests cVOCs likely extend below the depth of the investigation.

Cross-sections D-D' (**Figure 11**) and E-E' (**Figure 12**) illustrate components of the CSM for the Former PCE UST Area. Low PCE concentrations and relatively low XSD responses in the unsaturated zone coupled with a large increase in XSD response and concentrations below the water table (~15 ft bgs) indicate an excavation depth of the former UST between 11 ft and 15 ft bgs. The peak XSD responses in borings MIP-124, MIP-127, and MIP-128 were an order of magnitude higher than the peaks observed in other HRSC investigation areas. Peak responses in the saturated zone at and downgradient of the Former

PCE UST indicate significant cVOC impacts to the deeper portions of the surficial aquifer and upper portion of the limestone aquifer in this area. High XSD responses in borings on the edge of the investigation area (e.g., MIP-127, MIP-128, and MIP-130; **Figure 5**) indicate cVOC mass in the saturated zone to the west and south of the investigation and confirm past investigation results that indicated cVOC mass in the lower surficial and upper limestone aquifers in this area. In addition to the cVOCs, MiHPT data at MIP-124 and MIP-127 indicate the presence of a substance like cutting oil co-mingled with the cVOCs in this area. Elevated cVOC concentrations in the vicinity of the Former PCE UST likely merge with impacted groundwater flowing from the Former PCE Southern Degreaser Area and lead to the PCE plume observed in the limestone aquifer to the south of the Delavan Facility. Soils in the shallow aquifer exhibited low to moderate permeability and hydraulic conductivity, while the limestone aquifer exhibited high permeability, with estimated hydraulic conductivity values in excess of 75 ft/day.

4.5 Data Validation and QA/QC Sample Results

In accordance with the work plan, QA/QC samples, including trip blanks, equipment blanks, matrix spikes, matrix spike supplicates, and field duplicates were collected to test the effectiveness of field laboratory QA/QC procedures. QA/QC sample results are included in the laboratory analytical packages in **Attachment C** and are summarized in the tables in **Attachment E**. The QA/QC sample results were reviewed by an AECOM chemist along with primary sample results during the data validation process. The data validation for each laboratory package was documented in the Data Assessment Reports included in **Attachment C**.

Based on the data validation, the laboratory analytical generated during the HRSC was found to be compliant and adequate for its intended use.

4.6 IDW Sample Results

Solid and aqueous IDW generated during the HRSC was sampled in order to provide information needed for proper waste characterization and disposal. Results of the IDW samples included in the laboratory analytical data packages in **Attachment C**. Data summary tables included in **Attachment F** include comparisons to the USEPA Toxicity Characteristic values (40CFR§261.24 Toxicity Characteristic, July 1, 2007). As shown in **Attachment F**, all IDW generated during the investigation was non-hazardous. Following waste characterization, the waste was transported and disposed as non-hazardous. Disposal was managed by Delavan personnel.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Using the data generated during this HRSC investigation and previous investigations, the following conclusion can be summarized as follows.

5.1.1 Former Northern PCE Degreaser

- In the unsaturated zone, the highest concentrations of PCE and the highest XSD responses were in the immediate vicinity of the Former Northern PCE Degreaser. Shallow occurrence of elevated XSD responses in this area indicate a shallow release.
- Elevated PCE concentrations in the vicinity the Former Northern PCE Degreaser impact downgradient groundwater to the west and may contribute to groundwater impacts in the shallow aquifer and limestone aquifer to the south.
- MiHPT boring refusal and DPT rig refusal at MIP-102/DPT-102 was shallower than nearby borings, so there is potential that additional PCE may be present between the rig refusal depth and the top of the limestone in the immediately vicinity of MIP-102.

5.1.2 Former Southern PCE Degreaser

- At the Former Southern PCE Degreaser Area, PCE concentrations and XSD response was lower in the unsaturated zone than in the Former Northern Degreaser Area. The highest XSD response in this area was in the saturated zone south of the former degreaser footprint, at MIP-114.
- Due to shallow refusal of soil borings DPT-110 and DPT-115, soil and groundwater analytical data may not be representative of maximum PCE/cVOC concentrations for this area. The peak XSD response was an order of magnitude higher than the peak in the Northern Degreaser and values at MIP-114 indicate additional mass present in the saturated zone above the contact between the shallow aquifer and the underlying limestone.
- Elevated cVOC concentrations in the vicinity of and to the south of the Former Southern PCE Degreaser contribute to groundwater impacts in the shallow aquifer and limestone aquifer to the south and likely contribute to impacts to the east.
- In addition to the cVOCs, MiHPT data at MIP-114 indicate the presence of cutting oil, or a similar substance, co-mingled with the cVOCs in a portion of the Former Southern PCE Degreaser Area.

5.1.3 Former Eastern PCE Secondary Containment Area

- PCE concentrations in the unsaturated zone at the Former Eastern PCE Secondary Containment Area are lower than those observed for the Former Northern PCE Degreaser, indicating less residual mass in the vadose zone in this area compared to the northern degreaser. The maximum XSD responses in this area were detected in the saturated zone, with the highest response at MIP-123 to the east of the secondary containment structure footprint.
- XSD responses and detection depths in the Former Eastern PCE Secondary Containment Area relative to the XSD detections in the Former Southern PCE Degreaser Area suggest that some of the cVOCs mass in this area may have migrated from the southern degreaser area.

5.1.4 Former UST PCE Area

- In the Former PCE UST area, low PCE concentrations and relatively low XSD responses in the unsaturated zone coupled with a large increase in XSD response and concentrations below the

water table (~15 ft bgs) indicate an excavation depth of the former UST between 11 ft and 15 ft bgs.

- The peak XSD responses in Former PCE UST Area borings MIP-124, MIP-127, and MIP-128 were an order of magnitude higher than the peaks observed in other HRSC investigation areas. Peak responses in the saturated zone at and downgradient of the Former PCE UST indicate significant cVOC impacts to the deeper portions of the surficial aquifer and upper portion of the limestone aquifer in this area.
- High XSD responses in borings on the edge of the Former PCE UST Area (e.g., MIP-127, MIP-128, and MIP-130) indicate cVOC mass in the saturated zone to the west and south of the investigation and confirm past investigation results that indicated cVOC mass in the lower surficial and upper limestone aquifers in this area.
- Elevated cVOC concentrations in the vicinity of the Former PCE UST likely merge with impacted groundwater flowing from the Former PCE Southern Degreaser Area and lead to the PCE plume observed in the limestone aquifer to the south of the Delavan Facility.
- In addition to the cVOCs, MiHPT data at MIP-124 and MIP-127 indicate the presence of cutting oil , or a similar substance, co-mingled with the cVOCs in a portion of the Former PCE UST Area.

5.1.5 General Conclusions

- Soils in the shallow aquifer exhibited low to moderate permeability and hydraulic conductivity, while the limestone aquifer exhibited high permeability, with estimated hydraulic conductivity values in excess of 75 ft/day. Maximum estimated hydraulic conductivity values for the limestone aquifer in the Former PCE Secondary Containment Area were lower compared to other areas of the site.
- In all areas, high concentration and elevated XSD responses corresponded to depths of both high and low HPT pressure.

5.2 Recommendations

Data generated during this HRSC and previous investigations is currently being used to construct an Environmental Visualization Software (EVS) model. The model will be used during upcoming evaluation and planning for remediation.

Once the model is complete, a work plan will be prepared to outline remedial approach(es) and associated design items. The work plan will be submitted for SCDHEC approval prior to initiation of any field work related to remedy construction or implementation.

Tables

Table 1
Summary of MiHPT and DPT Borings
Delavan Spray Technologies Site
Bamberg, South Carolina

MIP Sampling Location	Date MiHPT Completed	MiHPT TD (ft bgs)	Corresponding Soil/Groundwater Sample ID	Date DPT Completed	DPT TD (ft bgs)	TCL VOCs	TOD[1]	Total and Dissolved Mn	Comments
Background Area for MIP Calibration									
MIP-100-BG	7/9/2020	37.85							Near background location MW-4.
Former Northern Degreaser Area - DPT Soil Samples, DPT Groundwater Samples, and TOD Samples									
MIP-101	7/16/2020	30.40	DPT-101-X DPT-GW-101	7/16/2020	32	X X	X X	X	DPT soil samples were collected from 5 separate intervals. Soil TOD sample collected from interval with highest XSD response. Groundwater sample was collected at refusal / contact with limestone.
MIP-102	7/15/2020	7.65	DPT-102-X DPT-GW-102	7/27/2020	28	X X			DPT soil samples were collected from 5 separate intervals DPT-GW-102 added in field since MiHPT refusal < 10 ft; Groundwater sample was collected at refusal / contact with limestone.
MIP-103	7/15/2020	35.85							Step-out location, upgradient direction.
MIP-104	7/15/2020	35.25	DPT-104-X	7/5/2020	36	X			Step-out location, upgradient direction. DPT soil samples were collected from 6 separate intervals.
~~MIP-105~~	-	-	DPT-105-X DPT-GW-105	7/27/2020	32	X X			Step-out location, upgradient direction. MiHPT Location cancelled in the field and DPT location added in field. Soil samples were collected from 6 separated intervals. Groundwater sample was collected at refusal / contact with the limestone.
MIP-106	7/14/2020	37.25							Contingent step-out location, upgradient direction.
MIP-107	7/14/2020	30.35	DPT-107-X DPT-GW-107	7/21/2020	34	X X		X	Contingent step-out location, upgradient direction. DPT soil and groundwater samples moved from cancelled location DPT-108. DPT soil samples collected from 6 separate intervals. Groundwater sample was collected at refusal / contact with the limestone.
~~MIP-108~~	-	-	~~DPT-108X~~ ~~DPT-GW-108~~			~~X~~ ~~X~~		~~X~~	~~Contingent step-out location, upgradient direction.~~ MiHPT location cancelled; DPT soil and groundwater samples moved to DPT-107. ~~'DPT groundwater sample will be located adjacent to furthest upgradient MIP and numbered accordingly~~ .
MIP-109	7/13/2020	41.95	MW-37			X			Step-out location, downgradient direction. Monitoring Well MW-37 installed adjacent to the MIP-109 location.
Former Southern Degreaser Area - DPT Soil Samples and DPT Groundwater Samples									
MIP-110	7/12/2020	38.60	DPT-110-X DPT-GW-110	7/23/2020	19	X X			Soil samples were collected from 3 separate intervals - boring completed with a hand auger due to access issues. Groundwater sample was collected at hand auger refusal, which also corresponds to the highest XSD for the sampled interval.
MIP-111	7/14/2020	29.35							
MIP-112	7/12/2020	37.15							
MIP-113	7/11/2020	36.40							
MIP-114	7/11/2020	29.00							Step-out location, downgradient direction.
MIP-115	7/22/2020	38.15	DPT-115-X DPT-GW-115	7/23/2020	17	X X			Step-out location, upgradient direction. Soil and groundwater samples moved from location DPT-116. Soil samples were collected from 3 separate intervals. Boring completed with a hand auger due to access issues. Groundwater samples was collected at hand auger refusal, which was also the highest XSD for the sampled interval.
MIP-116	7/22/2020	35.90	~~DPT-116-X~~ ~~DPT-GW-116~~			~~X~~ ~~X~~			Step-out location, upgradient direction. Soil and groundwater samples moved to DPT-115.
Former Eastern PCE Secondary Containment Area - DPT Soil Samples and DPT Groundwater Samples									
MIP-117	7/20/2020	26.25	DPT-117-X DPT-GW-117		30	X X			DPT soil samples were collected from 5 separate intervals. Groundwater sample was collected at refusal / contact with limestone.
MIP-118	7/22/2020	34.25							
MIP-119	7/23/2020	26.90							
MIP-120	7/10/2020	28.00							
MIP-121	7/23/2020	33.90							
MIP-122	7/23/2020	41.95							
MIP-123	7/23/2020	26.40	DPT-123-X DPT-GW-123	7/27/2020	29	X X			Contingent step-out location, upgradient direction. DPT soil samples were collected from 5 separate intervals. Groundwater sample was collected at the contact with limestone and immediately above the interval with highest XSD response.

Table 1
Summary of MiHPT and DPT Borings
Delavan Spray Technologies Site
Bamberg, South Carolina

MIP Sampling Location	Date MiHPT Completed	MiHPT TD (ft bgs)	Corresponding Soil/Groundwater Sample ID	Date DPT Completed	DPT TD (ft bgs)	TCL VOCs	TOD[1]	Total and Dissolved Mn	Comments
Former PCE Underground Storage Tank Area - DPT Soil Samples and DPT Groundwater Samples									
MIP-124	7/9/2020	34.90	DPT-124-X DPT-GW-124	7/8/2020	36.5	X X			DPT soil samples were collected from 6 separate intervals. Groundwater sample was collected at just above DPT refusal and in the zone of highest XSD response.
MIP-125	7/22/2020	35.20							
MIP-126	7/10/2020	34.10							
MIP-127	7/23/2020	34.85							Step-out location, downgradient direction.
MIP-128	7/24/2020	36.05							Step-out location, downgradient direction.
MIP-129	7/22/2020	35.70	DPT-129-X DPT-GW-129	7/20/2020	32	X X			DPT soil samples were collected from 6 separate intervals. Groundwater sample was collected at the contact with limestone and within the interval with highest XSD response.
MIP-130	7/24/2020	35.95							Step-out location, downgradient direction.

Notes:

[1] - Total Oxidant Demand samples tested using permanganate and persulfate.

X - Depth of the base of sample interval. Soil samples to be collected from 5-10 ft bgs, 10-15 ft bgs, 15-20 ft bgs, 20-25 ft bgs, 25-30 ft bgs, and 30-35 ft bgs.

Red text indicates a change from the workplan. ~~Strikeout text~~ indicates a cancelled location or sample.

cVOCs - chlorinated VOCs
DPT - Direct Push Technology
ft bgs - feet below ground surface
HPT - hydraulic profiling tool
ID - Identification
MiHPT - MIP/HPT
MIP - membrane interface probe
TCL - target compound list
TD - total depth
TCLP - Toxicity Characteristic Leaching Procedure
VOCs - Volatile Organic Compounds
XSD - Halogen-Specific Detector

Table 2
Summary of Monitoring Well Construction Details
Delavan Spray Technologies Site
Bamberg, South Carolina

Well No.	Northing	Easting	Date Installed	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	Vertical Datum	Stickup (ft)	Well Diameter (inches)	Casing Type	Total Depth (ft bgs)	Well Classification	Screen Interval (ft bgs)
MW-37	527410.10	1985754.61	7/13/2020	148.64	148.36	NAVD88	-0.28	1.25	PVC	22.07	Shallow	11.81 - 21.81

Notes:
amsl - above mean sea level
bgs - below ground surface
PVC - polyvinyl chloride
Horizontal positions are referenced to South Carolina State Plane North American Datum of 1983 and vertical positions are referenced to North American Vertical Datum of 1988.

Table 3
Survey and Details for Borings
Delavan Spray Technologies Site
Bamberg, South Carolina

Description	Northing	Easting	Elevation	Depth (ft bgs)
MIP-100-BG	527577.6559	1986403.2362	147.38	37.9
MIP-101	527446.2300	1985789.0286	148.56	30.4
MIP-102	527455.9760	1985785.4655	148.57	7.7
MIP-103	527444.1040	1985802.1900	148.55	35.9
MIP-104	527460.9981	1985800.6099	148.51	35.3
MIP-106	527458.6326	1985815.5972	148.52	37.3
MIP-107	527472.5141	1985811.1903	148.49	30.4
MIP-109	527409.2055	1985751.7460	148.63	42.0
MIP-110	527386.9899	1985892.3606	148.63	38.6
MIP-111	527400.0487	1985911.1881	148.59	28.4
MIP-112	527399.9045	1985889.1880	148.63	37.2
MIP-113	527396.9153	1985880.8607	148.65	36.4
MIP-114	527374.9173	1985899.5415	148.61	29.0
MIP-115	527395.0086	1985926.1913	148.64	38.2
MIP-116	527409.1563	1985920.4633	148.63	35.9
MIP-117	527369.4303	1985946.4081	148.48	26.3
MIP-118	527374.7793	1985959.8730	148.04	34.3
MIP-119	527383.7539	1985943.0495	147.81	26.9
MIP-120	527365.4632	1985932.9396	148.70	28.0
MIP-121	527354.7949	1985953.2610	148.36	33.9
MIP-122	527374.1689	1985985.8391	147.51	42.0
MIP-123	527393.6945	1985979.0058	147.34	26.4
MIP-124	527338.5895	1985904.6013	148.33	34.9
MIP-125	527342.4478	1985915.0124	148.28	35.2
MIP-126	527354.6087	1985905.6500	148.65	34.1
MIP-127	527330.8541	1985884.4279	148.29	34.9
MIP-128	527323.8243	1985907.6632	148.06	36.1
MIP-129	527345.2827	1985929.9162	148.24	35.7
MIP-130	527316.6471	1985892.3962	148.06	36.0
DPT-101	527444.3376	1985789.9237	148.55	32.0
DPT-102	527454.0318	1985784.3286	148.56	28.0
DPT-104	527461.9673	1985802.8198	148.51	36.0
DPT-105	527484.1475	1985783.6352	148.36	32.0
DPT-107	527474.8564	1985810.5969	148.50	34.0
DPT-110	527386.0655	1985894.4546	148.64	19.0
DPT-115	527392.4201	1985926.9470	148.66	17.0
DPT-117	527370.5447	1985948.6116	148.44	30.0
DPT-123	527395.2985	1985978.8356	147.35	29.0
DPT-124	527339.5753	1985907.0107	148.33	36.5
DPT-129	527346.6438	1985933.7563	148.09	32.0

Notes
ft bgs - feel below ground surface
Horizontal positions are reported in South Carolina State Plane Coordinates referenced to the North American Datum of 1983 (NAD-83) to the nearest 0.01 foot.
Elevations were referenced to the North American Vertical Datum of 1988 (NAVD-88) to the nearest 0.01 foot.

Table 4
Summary of Analytical Results in Soil Samples - Detected Compounds
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	DPT-101-10	DPT-101-14	DPT-101-16	DPT-101-24	DPT-101-28	DPT-102-9
Lab Sample ID	MCL-Based	FA76926-12	FA76926-13	FA76926-14	FA76926-15	FA76926-16	FA77253-23
Date Collected	SSL	07/16/20	07/16/20	07/16/20	07/16/20	07/16/20	07/27/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 0.79	< 0.67	< 0.66	< 0.74	< 1.1	**181 J//**
1,1-Dichloroethylene	2.5	< 0.79	< 0.67	< 0.66	**5.8**	**5.8**	< 70
cis-1,2-Dichloroethylene	21	< 1.1	**1.3 J//**	< 0.91	< 1	< 1.6	< 97
Ethylbenzene	780	< 0.79	< 0.67	< 0.66	< 0.74	< 1.1	< 70
Tetrachloroethylene	2.3	**18.9**	**287**	**129**	**1740**	**170**	**973000**
trans-1,2-Dichloroethylene	31	< 0.79	< 0.67	< 0.66	< 0.74	< 1.1	< 70
Trichloroethylene	1.8	< 0.79	**1.5 J//**	< 0.66	< 0.74	< 1.1	**163 J//**
Vinyl Chloride	0.69	< 0.79	< 0.67	< 0.66	< 0.74	< 1.1	< 70
Xylene (total)	9900	< 1.7	< 1.4	< 1.4	< 1.6	< 2.4	< 150

Sample ID	USEPA	DPT-102-12	DPT-102-16	DPT-102-24	DPT-102-28	DPT-104-8	DPT-104-12
Lab Sample ID	MCL-Based	FA77253-24	FA77253-25	FA77253-26	FA77253-22	FA76926-4	FA76926-5
Date Collected	SSL	07/27/20	07/27/20	07/27/20	07/27/20	07/15/20	07/15/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	**711**	**17.7**	< 0.81	**45.8**	< 0.73	< 0.57
1,1-Dichloroethylene	2.5	< 62	**9.9**	**26.6**	**32.3**	< 0.73	< 0.57
cis-1,2-Dichloroethylene	21	< 86	**2 J//**	**2.5 J//**	< 0.8	< 1	< 0.79
Ethylbenzene	780	**210 J//**	< 0.74	< 0.81	< 0.58	< 0.73	< 0.57
Tetrachloroethylene	2.3	**587000**	**3900**	**1290**	**2390**	**57.6**	**16.4**
trans-1,2-Dichloroethylene	31	< 62	< 0.74	< 0.81	< 0.58	< 0.73	< 0.57
Trichloroethylene	1.8	**284 J//**	**3.2 J//**	**0.99 J//**	**1.1 J//**	< 0.73	< 0.57
Vinyl Chloride	0.69	< 62	< 0.74	< 0.81	< 0.58	< 0.73	< 0.57
Xylene (total)	9900	**2520**	< 1.5	< 1.7	< 1.2	< 1.5	< 1.2

Table 4
Summary of Analytical Results in Soil Samples - Detected Compounds
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	DPT-104-18	DPT-104-24	DPT-104-26	DPT-104-34	DPT-105-9	DPT-105-14
Lab Sample ID	MCL-Based	FA76926-6	FA76926-7	FA76926-8	FA76926-9	FA77253-13	FA77253-14
Date Collected	SSL	07/15/20	07/15/20	07/15/20	07/15/20	07/27/20	07/27/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 0.68	< 0.87	< 0.96	< 1.1	< 0.65	**1.1 J//**
1,1-Dichloroethylene	2.5	< 0.68	**1.1 J//**	< 0.96	**1.3 J//**	< 0.65	< 0.63
cis-1,2-Dichloroethylene	21	< 0.94	< 1.2	< 1.3	< 1.5	< 0.9	**32.7**
Ethylbenzene	780	< 0.68	< 0.87	< 0.96	< 1.1	< 0.65	< 0.63
Tetrachloroethylene	2.3	**10.6**	**326 J//**	**101 /M/m**	**346 J//**	< 0.83	**104**
trans-1,2-Dichloroethylene	31	< 0.68	< 0.87	< 0.96	< 1.1	< 0.65	< 0.63
Trichloroethylene	1.8	< 0.68	< 0.87	< 0.96	< 1.1	< 0.65	**34.6**
Vinyl Chloride	0.69	< 0.68	< 0.87	< 0.96	< 1.1	< 0.65	< 0.63
Xylene (total)	9900	< 1.4	< 1.8	< 2	< 2.3	< 1.4	< 1.3

Sample ID	USEPA	DPT-105-16	DPT-105-23	DPT-105-30	DPT-105-32	DPT-107-7	DPT-107-13
Lab Sample ID	MCL-Based	FA77253-15	FA77253-16	FA77253-17	FA77253-18	FA77062-11	FA77062-12
Date Collected	SSL	07/27/20	07/27/20	07/27/20	07/27/20	07/21/20	07/21/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	**2.7 J//**	**3.7 J//**	**12.4**	**6.3**	< 0.74	< 0.73
1,1-Dichloroethylene	2.5	**1.3 J//**	**5.7**	**7.1**	**9.5**	< 0.74	< 0.73
cis-1,2-Dichloroethylene	21	**23.3**	**258 J//**	**48.3**	**52.8**	< 1	< 1
Ethylbenzene	780	< 0.79	< 0.8	< 0.62	< 1.1	< 0.74	< 0.73
Tetrachloroethylene	2.3	**2630**	**4740**	**3420**	**3090**	**3 J//**	**9.4**
trans-1,2-Dichloroethylene	31	< 0.79	< 0.8	< 0.62	< 1.1	< 0.74	< 0.73
Trichloroethylene	1.8	**18.8**	**118**	**40.8**	**38.2**	< 0.74	< 0.73
Vinyl Chloride	0.69	< 0.79	< 0.8	< 0.62	< 1.1	< 0.74	< 0.73
Xylene (total)	9900	< 1.6	< 1.7	< 1.3	< 2.2	< 1.5	< 1.5

Table 4
Summary of Analytical Results in Soil Samples - Detected Compounds
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	DPT-107-17	DPT-107-23	DPT-107-27	DPT-107-34	DPT-110-10	DPT-110-15
Lab Sample ID	MCL-Based	FA77062-13	FA77062-14	FA77062-15	FA77062-16	FA77178-1	FA77178-4
Date Collected	SSL	07/21/20	07/21/20	07/21/20	07/21/20	07/23/20	07/23/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 0.78	< 0.94	< 0.83	**0.93 J//**	< 1.2	< 0.64
1,1-Dichloroethylene	2.5	< 0.78	< 0.94	< 0.83	**3.4 J//**	< 1.2	< 0.64
cis-1,2-Dichloroethylene	21	< 1.1	< 1.3	< 1.2	**2.3 J//**	< 1.7	**0.95 J//**
Ethylbenzene	780	< 0.78	< 0.94	< 0.83	< 0.76	< 1.2	< 0.64
Tetrachloroethylene	2.3	**11.9**	**71**	**80.5**	**601**	**9.2 /B/V**	**34.3 /JB/AV**
trans-1,2-Dichloroethylene	31	< 0.78	< 0.94	< 0.83	< 0.76	< 1.2	< 0.64
Trichloroethylene	1.8	< 0.78	< 0.94	< 0.83	**1.5 J//**	< 1.2	**1 J//**
Vinyl Chloride	0.69	< 0.78	< 0.94	< 0.83	< 0.76	< 1.2	< 0.64
Xylene (total)	9900	< 1.6	< 2	< 1.8	< 1.6	< 2.5	< 1.3

Sample ID	USEPA	DPT-110-18	DPT-115-09	DPT-115-14	DPT-115-16	DPT-117-9	DPT-117-13
Lab Sample ID	MCL-Based	FA77178-7	FA77178-8	FA77178-9	FA77178-10	FA77253-7	FA77253-8
Date Collected	SSL	07/23/20	07/23/20	07/23/20	07/23/20	07/27/20	07/27/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 0.66	< 0.8	< 1	< 0.56	< 0.72	< 0.84
1,1-Dichloroethylene	2.5	< 0.66	< 0.8	< 1	< 0.56	< 0.72	< 0.84
cis-1,2-Dichloroethylene	21	**5.1**	< 1.1	< 1.4	**4.4**	< 0.99	**4.6**
Ethylbenzene	780	< 0.66	< 0.8	< 1	< 0.56	< 0.72	< 0.84
Tetrachloroethylene	2.3	**4450 /B/V**	**2.7 J/B/V**	**1.9 J/B/V**	**885 /B/V**	< 0.92	**51.2**
trans-1,2-Dichloroethylene	31	< 0.66	< 0.8	< 1	< 0.56	< 0.72	< 0.84
Trichloroethylene	1.8	**2.8 J//**	< 0.8	< 1	**2.8**	< 0.72	**2.1 J//**
Vinyl Chloride	0.69	< 0.66	< 0.8	< 1	< 0.56	< 0.72	< 0.84
Xylene (total)	9900	< 1.4	< 1.7	< 2.2	< 1.2	< 1.5	< 1.8

Table 4
Summary of Analytical Results in Soil Samples - Detected Compounds
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	DPT-117-17	DPT-117-23	DPT-117-27	DPT-123-7	DPT-123-12	DPT-123-18
Lab Sample ID	MCL-Based	FA77253-9	FA77253-10	FA77253-11	FA77253-1	FA77253-2	FA77253-3
Date Collected	SSL	07/27/20	07/27/20	07/27/20	07/27/20	07/27/20	07/27/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 0.92	< 0.75	< 0.53	< 0.94	< 0.83	< 1.2
1,1-Dichloroethylene	2.5	< 0.92	< 0.75	**3.5**	< 0.94	< 0.83	< 1.2
cis-1,2-Dichloroethylene	21	**10.3**	**183 J//**	**1430**	< 1.3	**7.3**	**167**
Ethylbenzene	780	< 0.92	< 0.75	< 0.53	< 0.94	< 0.83	< 1.2
Tetrachloroethylene	2.3	**798**	**314**	**12.4**	< 1.2	**121**	**2340 /M/m**
trans-1,2-Dichloroethylene	31	< 0.92	< 0.75	**0.54 J//**	< 0.94	< 0.83	< 1.2
Trichloroethylene	1.8	**7.1**	**27.9**	**0.71 J//**	< 0.94	**3.7 J//**	**23.5**
Vinyl Chloride	0.69	< 0.92	< 0.75	**1.2 J//**	< 0.94	< 0.83	< 1.2
Xylene (total)	9900	< 1.9	< 1.6	< 1.1	< 2	< 1.7	< 2.6

Sample ID	USEPA	DPT-123-20	DPT-123-29	DPT-124-8.0	DPT-124-15	DPT-124-18.0	DPT-124-20.5
Lab Sample ID	MCL-Based	FA77253-4	FA77253-6	FA76719-1	FA76719-2	FA76719-3	FA76719-4
Date Collected	SSL	07/27/20	07/27/20	07/08/20	07/08/20	07/08/20	07/08/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 1.2	< 0.68	< 0.74	< 0.83	< 43	< 56
1,1-Dichloroethylene	2.5	**8**	**1.6 J//**	< 0.74	< 0.83	< 43	< 56
cis-1,2-Dichloroethylene	21	**2510**	**44.6**	< 1	< 1.1	< 60	< 77
Ethylbenzene	780	< 1.2	< 0.68	< 0.74	< 0.83	**205 J//**	< 56
Tetrachloroethylene	2.3	**4250**	**398**	< 0.94	**1930 /M/mD**	**3030000**	**24500**
trans-1,2-Dichloroethylene	31	**10.3**	< 0.68	< 0.74	< 0.83	< 43	< 56
Trichloroethylene	1.8	**154**	**12.6**	< 0.74	**2.9 J//**	**1210**	< 56
Vinyl Chloride	0.69	**2.1 J//**	< 0.68	< 0.74	< 0.83	< 43	< 56
Xylene (total)	9900	< 2.5	< 1.4	< 1.5	< 1.7	**541 J//**	< 120

Table 4
Summary of Analytical Results in Soil Samples - Detected Compounds
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	DPT-124-30.0	DPT-124-34	DPT-129-7	DPT-129-14	DPT-129-16	DPT-129-23
Lab Sample ID	MCL-Based	FA76719-5	FA76719-6	FA77062-1	FA77062-4	FA77062-5	FA77062-7
Date Collected	SSL	07/08/20	07/08/20	07/21/20	07/21/20	07/21/20	07/21/20
Volatile Organic Compounds by Method 8260D (µg/kg)							
1,1,1-Trichloroethane	70	< 42	< 59	< 0.79	< 0.67	< 0.88	< 65
1,1-Dichloroethylene	2.5	< 42	< 59	< 0.79	< 0.67	< 0.88	< 65
cis-1,2-Dichloroethylene	21	**66.7 J//**	**99.3 J//**	< 1.1	< 0.93	< 1.2	< 90
Ethylbenzene	780	< 42	< 59	< 0.79	< 0.67	< 0.88	< 65
Tetrachloroethylene	2.3	**22500**	**16700**	**1.1 J//**	**359**	**2250**	**9980**
trans-1,2-Dichloroethylene	31	< 42	< 59	< 0.79	< 0.67	< 0.88	< 65
Trichloroethylene	1.8	< 42	< 59	< 0.79	< 0.67	< 0.88	< 65
Vinyl Chloride	0.69	< 42	< 59	< 0.79	< 0.67	< 0.88	< 65
Xylene (total)	9900	< 89	< 120	< 1.7	< 1.4	< 1.8	< 140

Sample ID	USEPA	DPT-129-26	DPT-129-32
Lab Sample ID	MCL-Based	FA77062-8	FA77062-9
Date Collected	SSL	07/21/20	07/21/20
Volatile Organic Compounds by Method 8260D (µg/kg)			
1,1,1-Trichloroethane	70	< 0.77	< 0.71
1,1-Dichloroethylene	2.5	< 0.77	< 0.71
cis-1,2-Dichloroethylene	21	**39.5**	< 0.98
Ethylbenzene	780	**2 J//**	< 0.71
Tetrachloroethylene	2.3	**27100**	**28.7**
trans-1,2-Dichloroethylene	31	< 0.77	< 0.71
Trichloroethylene	1.8	**58.5**	< 0.71
Vinyl Chloride	0.69	< 0.77	< 0.71
Xylene (total)	9900	**4.6 J//**	< 1.5

Notes:
µg/kg - micrograms per kilogram (parts per billion)
USEPA MCL-Based SSL - United States Environmental Protection Agency Maximum Contaminant Level-Based Soil Screening Level, using a dilution attenuation factor of 1 (May 2020).
Bold font and shading indicate the concentration is detected.
Bold outline indicates the concentration exceeds the MCL.
For the sample ID, the 3-digit number after the first "-" is the location number and the number after the second "-" is the sample ending depth in feet below ground surface.
See Table 6 for explanation of data qualifiers.

Table 5
Summary of Detected Results in Groundwater Samples - Detected Compounds
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID / **Lab Sample ID** / **Date Collected**	USEPA MCL	DPT-GW-101 FA76926-19 07/16/20	DPT-GW-102 FA77253-21 07/27/20	DPT-GW-105 FA77253-19 07/27/20	DPT-GW-107 FA77062-17 07/21/20	DPT-GW-110 FA77178-6 07/23/20	DPT-GW-115 FA77178-11 07/23/20	DPT-GW-117 FA77253-12 07/27/20
Volatile Organic Compounds by Method 8260D (µg/L)								
1,1,1-Trichloroethane	200	< 2.5	**138**	< 6.2	**2.5 J//**	< 12	< 12	< 12
1,1-Dichloroethylene	7	**49.4**	**59.9**	**19.7 J//**	**24.7**	< 16	< 16	< 16
cis-1,2-Dichloroethylene	70	**18.5**	< 14	**61.5**	**10.7**	**40.8 J//**	< 14	**3830**
Tetrachloroethylene	5	**1350**	**25800**	**1850**	**947**	**2900 /B/V**	**3360 /B/V**	**66.6**
Trichloroethylene	5	**6.6 J//**	< 17	**38.7**	**4.6 J//**	**25.1 J//**	**21.5 J//**	< 17
Manganese by Method 6010D (µg/L)								
Manganese	50[1]	**525**	NA	NA	**20700**	NA	NA	NA
Manganese (Dissolved)	50[1]	**61.3**	NA	NA	**1.6 J**	NA	NA	NA

Sample ID / **Lab Sample ID** / **Date Collected**	USEPA MCL	DPT-GW-123 FA77253-5 07/27/20	DPT-GW-124 FA76719-7 07/08/20	DPT-GW-129 FA77062-10 07/21/20	MW-19 FA76926-3 07/15/20	MW-37 FA76926-11 07/16/20
Volatile Organic Compounds by Method 8260D (µg/L)						
1,1,1-Trichloroethane	200	< 12	< 50	< 1.2	< 120	**40.3 J//**
1,1-Dichloroethylene	7	< 16	< 64	**2.4 J//**	< 160	**70.8 J//**
cis-1,2-Dichloroethylene	70	**1100**	< 55	**8.1**	< 140	< 28
Tetrachloroethylene	5	**3570**	**11200**	**305**	**29800**	**13700**
Trichloroethylene	5	**122**	< 69	**4 J//**	< 170	< 35
Manganese by Method 6010D (µg/L)						
Manganese	50[1]	NA	NA	NA	NA	NA
Manganese (Dissolved)	50[1]	NA	NA	NA	NA	NA

Notes:
µg/L - micrograms per liter (parts per billion)
USEPA MCL - United States Environmental Protection Agency Maximum Contaminant Level (March, 2018).
— - Indicates No Standard (for screening criteria).
The value for manganese is a secondary drinking water regulation.
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 26, 2020) were also identified for the list of detected chemicals in groundwater. In each case, however, they were the same values as the USEPA MCLs.
[1]Secondary MCL
See Table 6 for explanation of data qualifiers.

Table 6
Definitions of Data Qualifiers
Delavan Spray Technologies Site
Bamberg, South Carolina

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

Laboratory Data Qualifiers

Qualifier	Description
J	Estimated concentration above the method detection limit and below the reporting limit.

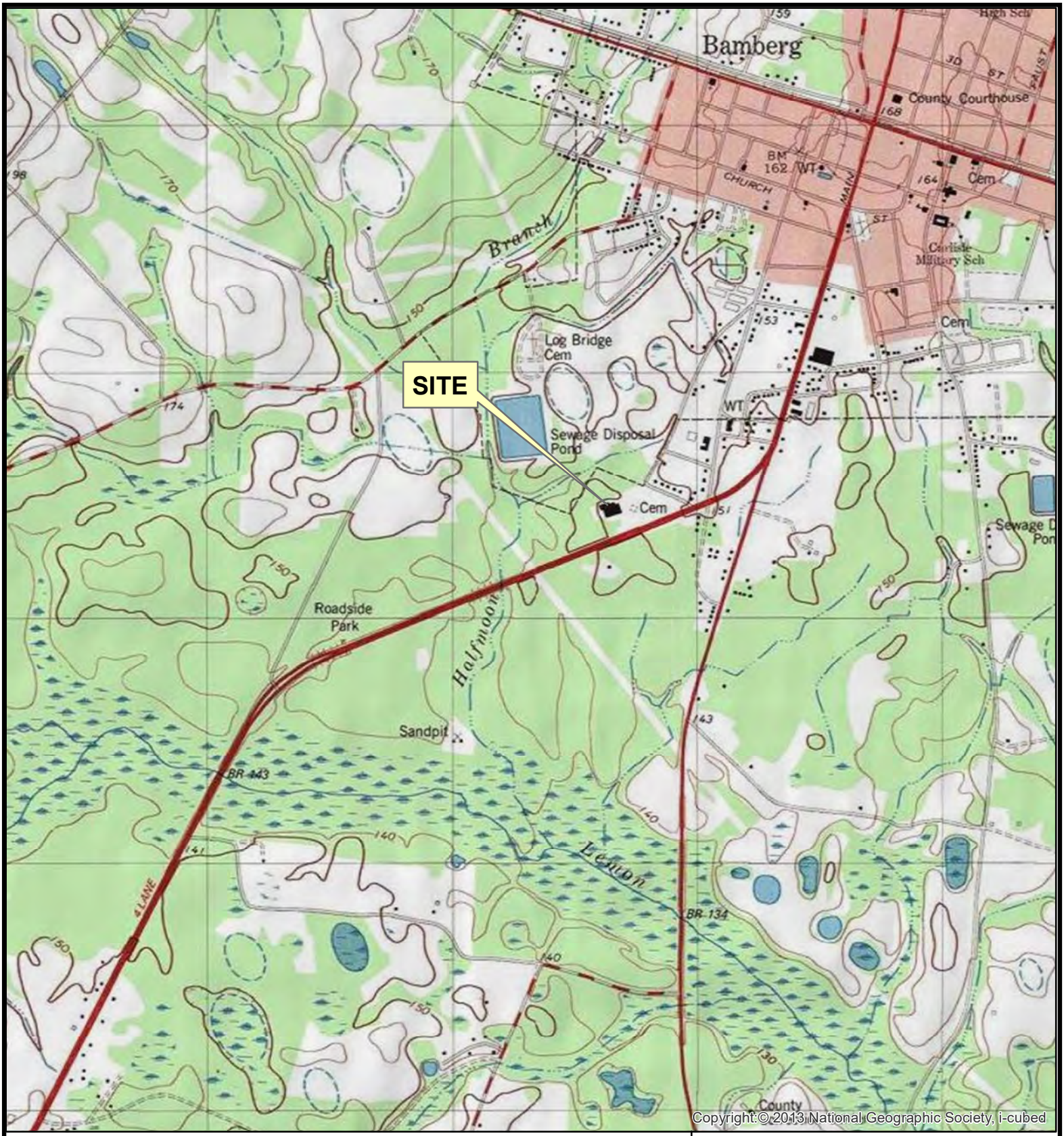
Result Data Qualifiers

Qualifier	Description
B	The analyte was found in an associated blank as well as in the sample.
J	The analyte was positively identified. The quantitation is an estimation.
M	A matrix effect was present.

Analysis Data Qualifiers

Qualifier	Description
A	Percent difference between the primary and duplicate sample exceeded the established criteria.
D	Percent difference of matrix spike duplicate exceeded the established criteria.
m	Matrix spike recovery below established criteria.
V	Detected in the associated equipment rinsate blank.

Figures



N

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)

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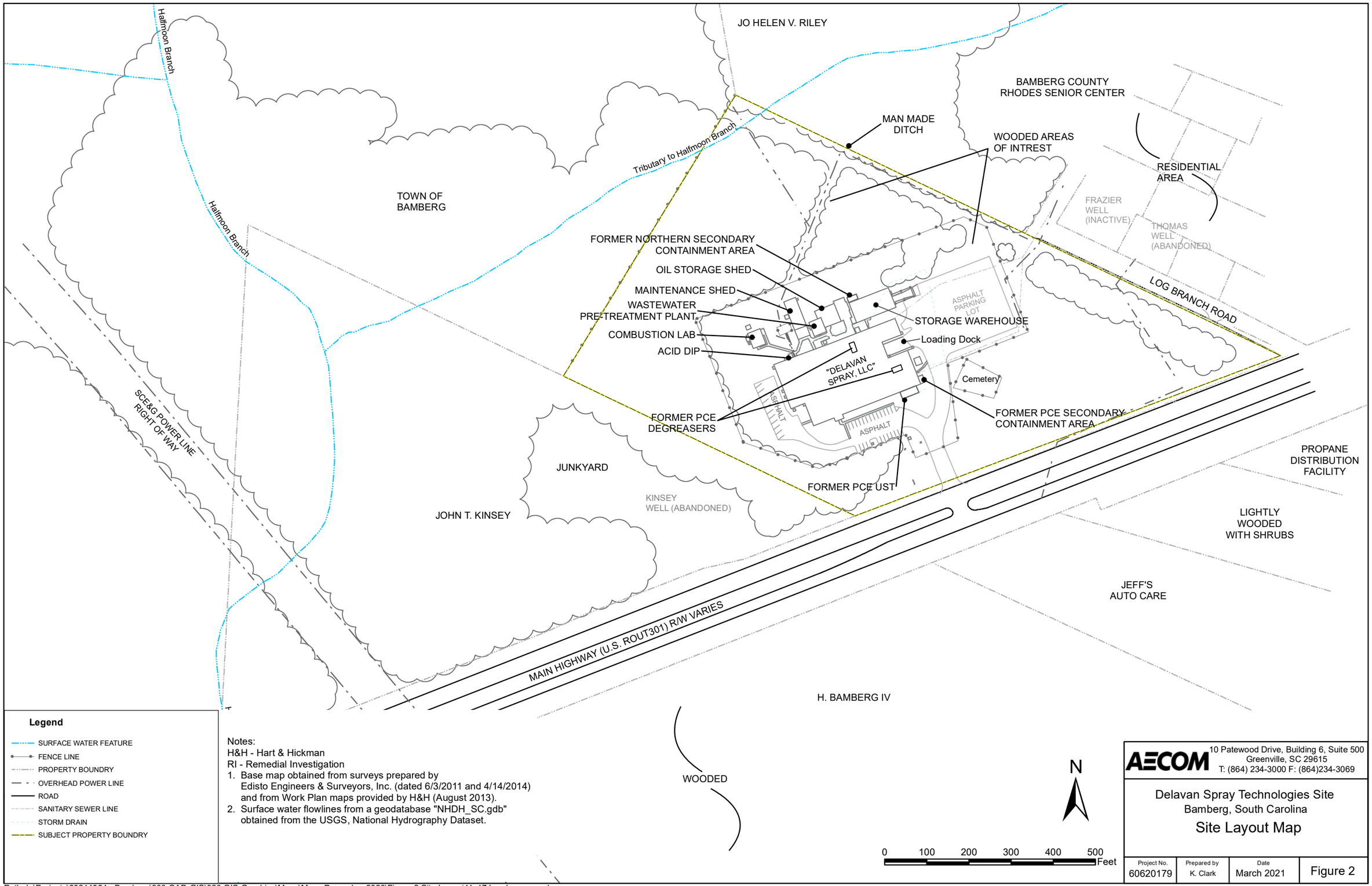
Delavan Spray Technologies Site
Bamberg, South Carolina

Site Location Map

Project No.	Prepared by	Date	
60620179	RJS	March 2021	Figure 1

Path: L:\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020\Figure 1 Site Location Map.mxd



Legend

- SURFACE WATER FEATURE
- FENCE LINE
- PROPERTY BOUNDRY
- OVERHEAD POWER LINE
- ROAD
- SANITARY SEWER LINE
- STORM DRAIN
- SUBJECT PROPERTY BOUNDRY

Notes:
H&H - Hart & Hickman
RI - Remedial Investigation

1. Base map obtained from surveys prepared by Edisto Engineers & Surveyors, Inc. (dated 6/3/2011 and 4/14/2014) and from Work Plan maps provided by H&H (August 2013).
2. Surface water flowlines from a geodatabase "NHDH_SC.gdb" obtained from the USGS, National Hydrography Dataset.

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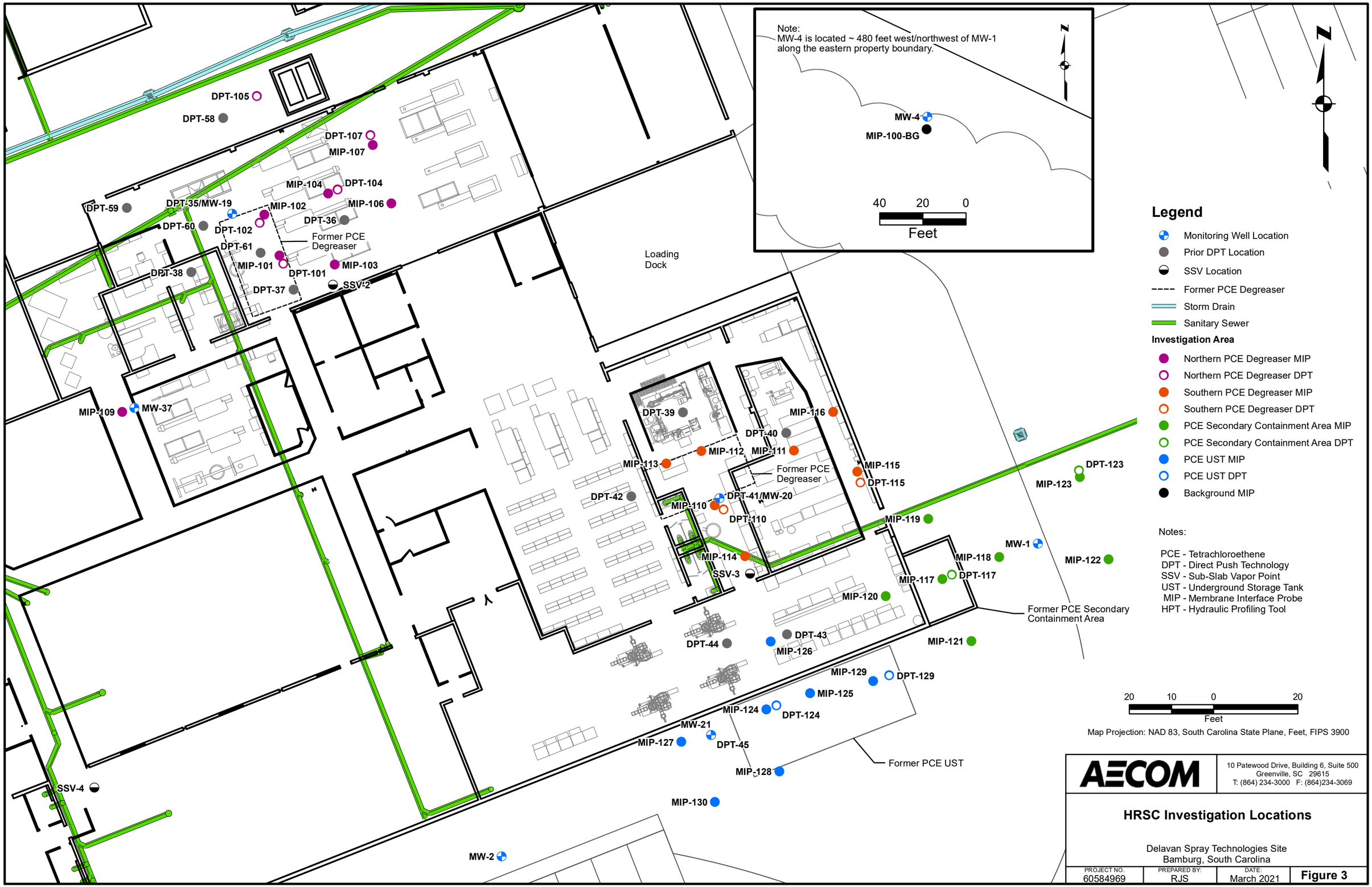
Delavan Spray Technologies Site
Bamberg, South Carolina

Site Layout Map

Project No.	Prepared by	Date	
60620179	K. Clark	March 2021	Figure 2

Path: L:\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020\Figure 2 Site Layout11x17 Landscape.mxd



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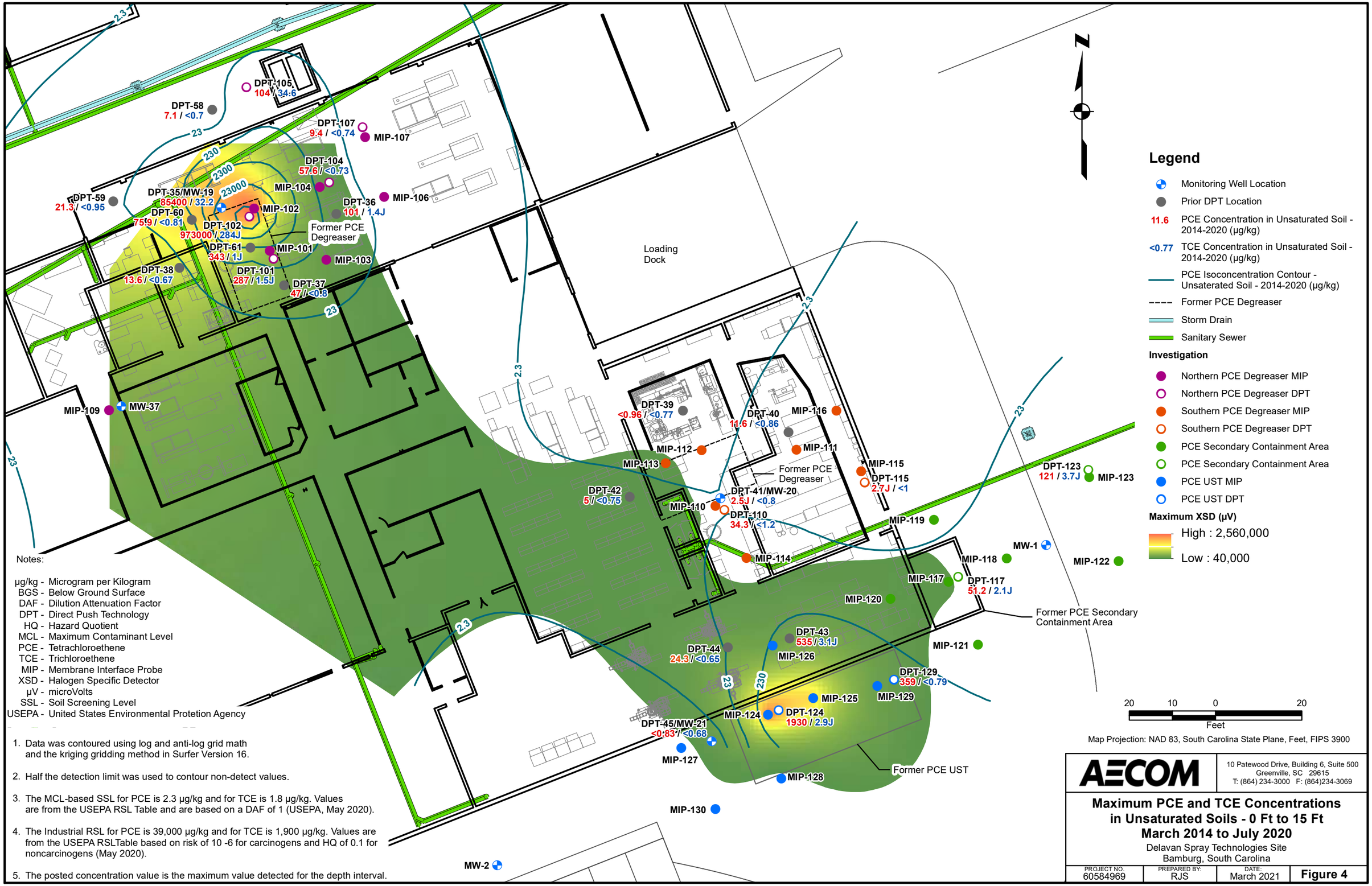
HRSC Investigation Locations

Delavan Spray Technologies Site
Bamburg, South Carolina

PROJECT NO.	PREPARED BY:	DATE:	
60584969	RJS	March 2021	Figure 3

\\USGRN1FP001\Data\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020 HRSC Investigation\Figure 3 HRSC Investigation NAD83.mxd



Notes:

µg/kg - Microgram per Kilogram
BGS - Below Ground Surface
DAF - Dilution Attenuation Factor
DPT - Direct Push Technology
HQ - Hazard Quotient
MCL - Maximum Contaminant Level
PCE - Tetrachloroethene
TCE - Trichloroethene
MIP - Membrane Interface Probe
XSD - Halogen Specific Detector
µV - microVolts
SSL - Soil Screening Level
USEPA - United States Environmental Protetion Agency

1. Data was contoured using log and anti-log grid math and the kriging gridding method in Surfer Version 16.
2. Half the detection limit was used to contour non-detect values.
3. The MCL-based SSL for PCE is 2.3 µg/kg and for TCE is 1.8 µg/kg. Values are from the USEPA RSL Table and are based on a DAF of 1 (USEPA, May 2020).
4. The Industrial RSL for PCE is 39,000 µg/kg and for TCE is 1,900 µg/kg. Values are from the USEPA RSLTable based on risk of 10 -6 for carcinogens and HQ of 0.1 for noncarcinogens (May 2020).
5. The posted concentration value is the maximum value detected for the depth interval.

Map Projection: NAD 83, South Carolina State Plane, Feet, FIPS 3900

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Maximum PCE and TCE Concentrations in Unsaturated Soils - 0 Ft to 15 Ft March 2014 to July 2020

Delavan Spray Technologies Site
Bamburg, South Carolina

PROJECT NO.	PREPARED BY:	DATE:	
60584969	RJS	March 2021	Figure 4

\\USGRN1FP001\Data\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020 HRSC Investigation\Figure 4 Max PCE and TCE in Unsat Soils .mxd

Notes:

µg/kg - Microgram per Kilogram
BGS - Below Ground Surface
DAF - Dilution Attenuation Factor
DPT - Direct Push Technology
HQ - Hazard Quotient
MCL - Maximum Contaminant Level
PCE - Tetrachloroethene
TCE - Trichloroethene
MIP - Membrane Interface Probe
XSD - Halogen Specific Detector
µV - microVolts
SSL - Soil Screening Level
USEPA - United States Environmental Protetion Agency

1. Data was contoured using log and anti-log grid math and the kriging gridding method in Surfer Version 16.
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5. The posted concentration value is the maximum value detected for the depth interval.

Map Projection: NAD 83, South Carolina State Plane, Feet, FIPS 3900

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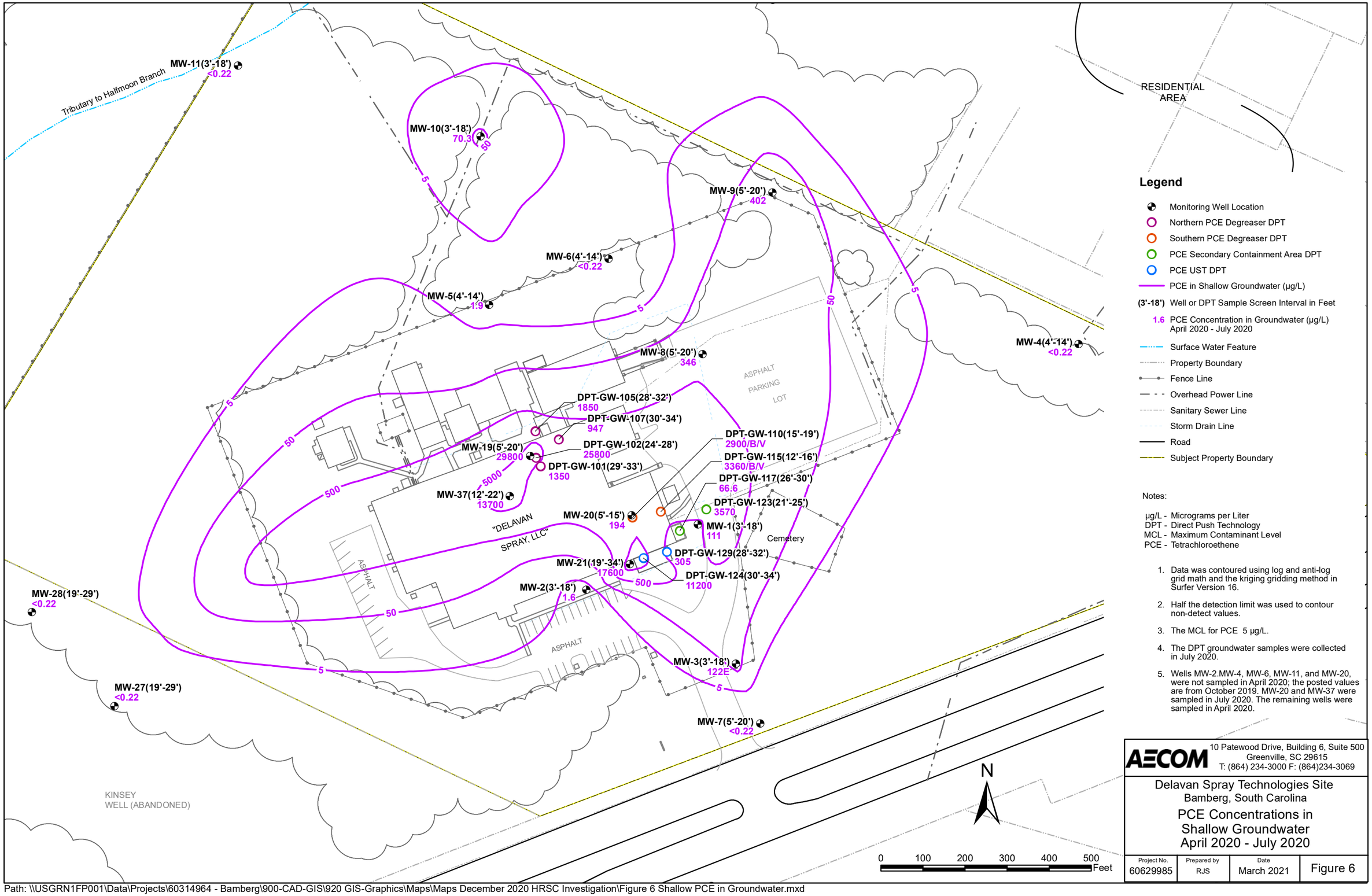
Maximum PCE and TCE Concentrations in Saturated Soil - 16Ft to 35 Ft March 2014 to July 2020

Delavan Spray Technologies Site
Bamburg, South Carolina

PROJECT NO.	PREPARED BY:	DATE:	
60584969	RJS	March 2021	Figure 5

\\USGRN1FP001\Data\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020 HRSC Investigation\Figure 5 Max PCE and TCE in Sat Soils.mxd



Legend

- Monitoring Well Location
- Northern PCE Degreaser DPT
- Southern PCE Degreaser DPT
- PCE Secondary Containment Area DPT
- PCE UST DPT
- PCE in Shallow Groundwater (µg/L)
- (3'-18') Well or DPT Sample Screen Interval in Feet
- 1.6 PCE Concentration in Groundwater (µg/L) April 2020 - July 2020
- Surface Water Feature
- Property Boundary
- Fence Line
- Overhead Power Line
- Sanitary Sewer Line
- Storm Drain Line
- Road
- Subject Property Boundary

Notes:

µg/L - Micrograms per Liter
DPT - Direct Push Technology
MCL - Maximum Contaminant Level
PCE - Tetrachloroethene

1. Data was contoured using log and anti-log grid math and the kriging gridding method in Surfer Version 16.
2. Half the detection limit was used to contour non-detect values.
3. The MCL for PCE 5 µg/L.
4. The DPT groundwater samples were collected in July 2020.
5. Wells MW-2.MW-4, MW-6, MW-11, and MW-20, were not sampled in April 2020; the posted values are from October 2019. MW-20 and MW-37 were sampled in July 2020. The remaining wells were sampled in April 2020.

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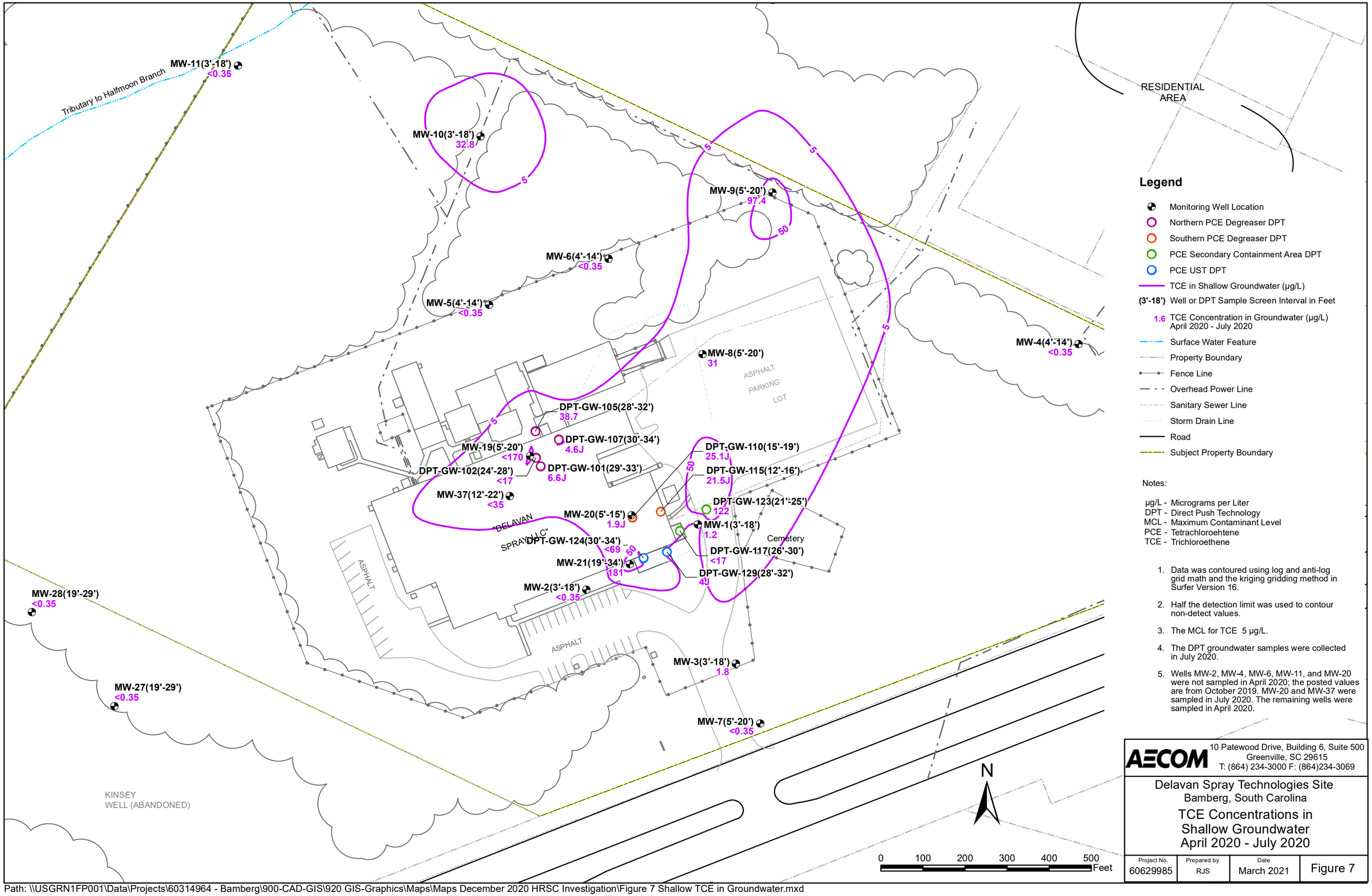
Delavan Spray Technologies Site
Bamberg, South Carolina

PCE Concentrations in Shallow Groundwater April 2020 - July 2020

Project No.	Prepared by	Date	
60629985	RJS	March 2021	Figure 6

Path: \\USGRN1FP001\Data\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020 HRSC Investigation\Figure 6 Shallow PCE in Groundwater.mxd



Legend

- Monitoring Well Location
- Northern PCE Degreaser DPT
- Southern PCE Degreaser DPT
- PCE Secondary Containment Area DPT
- PCE UST DPT
- TCE in Shallow Groundwater (µg/L)
- (3'-18') Well or DPT Sample Screen Interval in Feet
- 1.6 TCE Concentration in Groundwater (µg/L) April 2020 - July 2020
- Surface Water Feature
- Property Boundary
- Fence Line
- Overhead Power Line
- Sanitary Sewer Line
- Storm Drain Line
- Road
- Subject Property Boundary

Notes:

µg/L - Micrograms per Liter
DPT - Direct Push Technology
MCL - Maximum Contaminant Level
PCE - Tetrachloroehtene
TCE - Trichloroethene

1. Data was contoured using log and anti-log grid math and the kriging gridding method in Surfer Version 16.
2. Half the detection limit was used to contour non-detect values.
3. The MCL for TCE 5 µg/L.
4. The DPT groundwater samples were collected in July 2020.
5. Wells MW-2, MW-4, MW-6, MW-11, and MW-20 were not sampled in April 2020; the posted values are from October 2019. MW-20 and MW-37 were sampled in July 2020. The remaining wells were sampled in April 2020.

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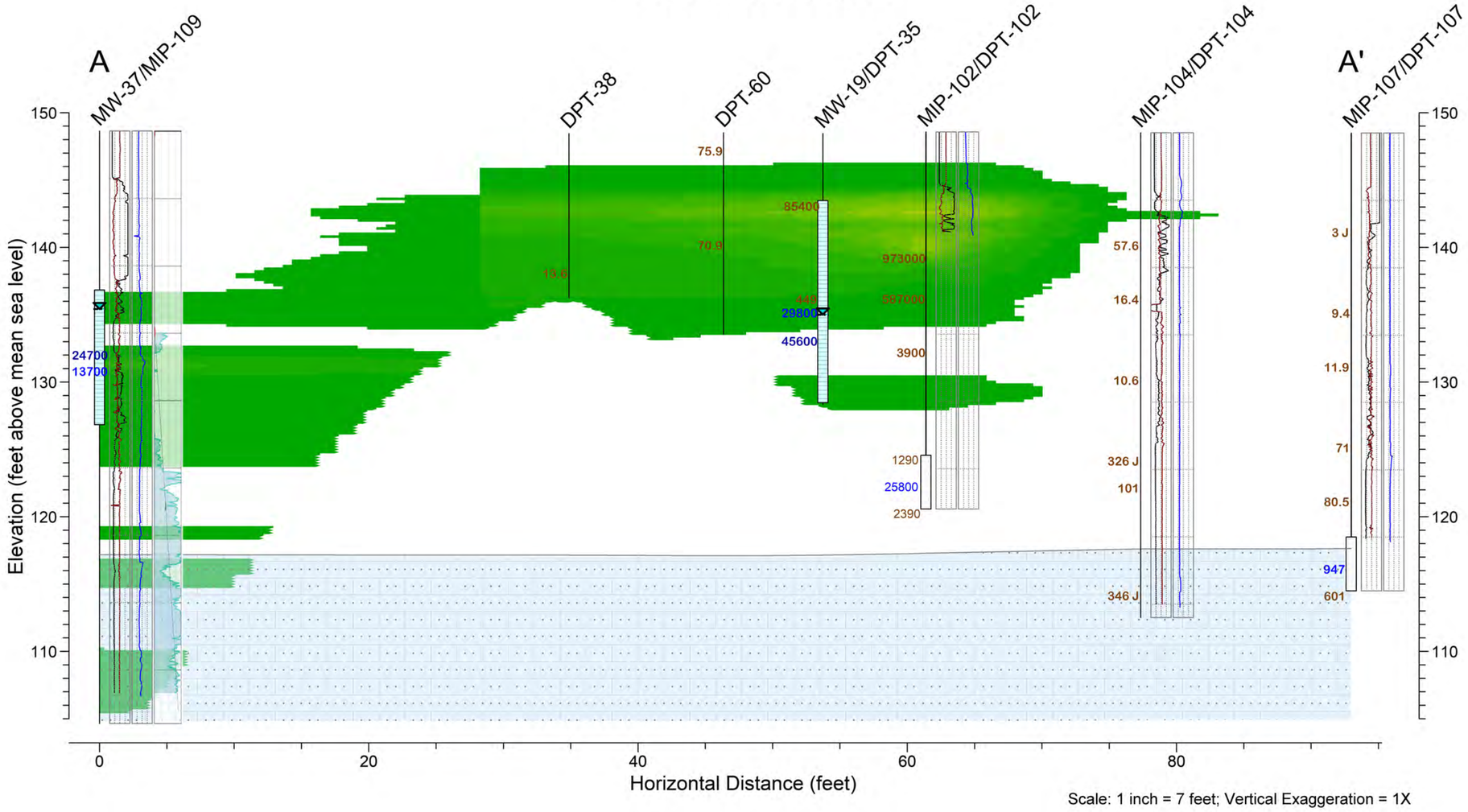
Delavan Spray Technologies Site
Bamberg, South Carolina

TCE Concentrations in Shallow Groundwater April 2020 - July 2020

Project No.	Prepared by	Date	
60629985	RJS	March 2021	Figure 7

Path: \\USGRN1FP001\Data\Projects\60314964 - Bamberg\900-CAD-GIS\920 GIS-Graphics\Maps\Maps December 2020 HRSC Investigation\Figure 7 Shallow TCE in Groundwater.mxd

Cross-Section A-A'



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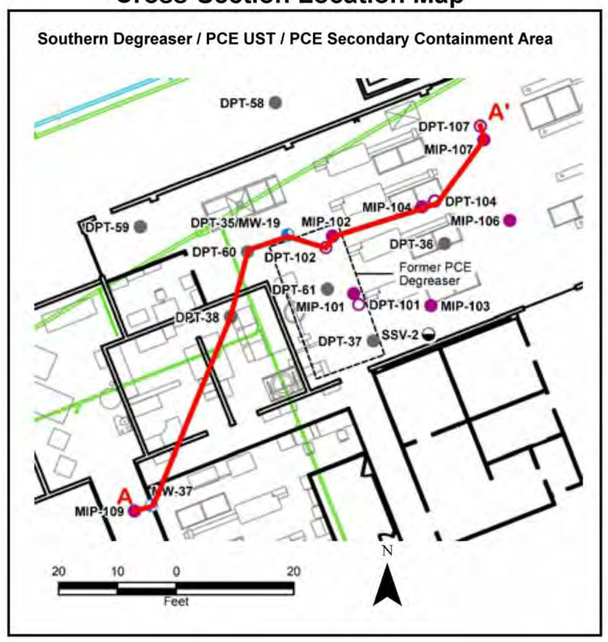
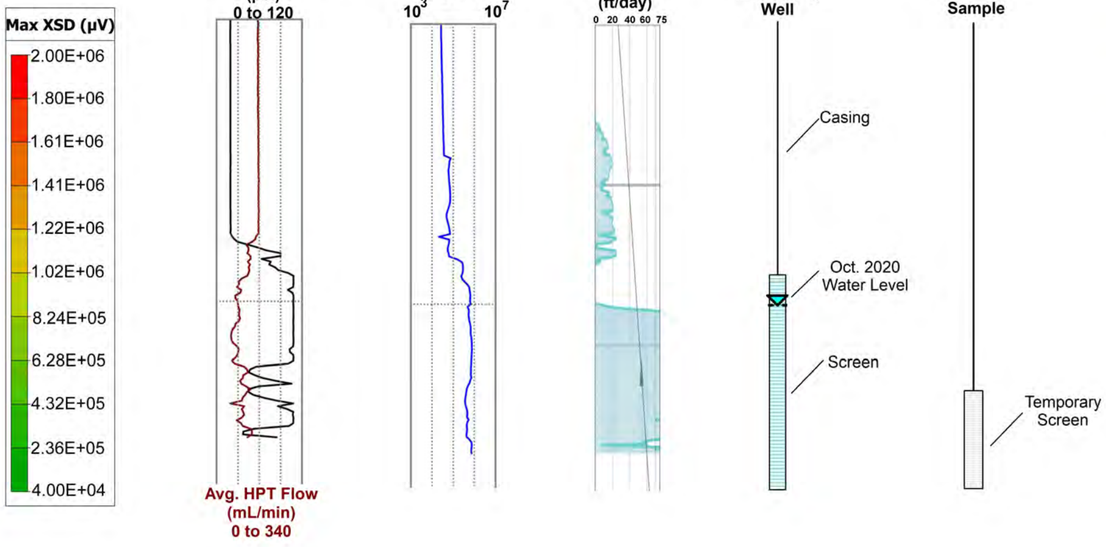
Cross-Section Location Map



LEGEND



9.2 PCE Conc. in Soil - 2014-2020 - µg/kg

2900 PCE Conc. from DPT GW Samples 2014-2020 - µg/kg

2900 PCE Conc. in GW - Ocober 2020 - µg/L

Limestone - Sand and sand-sized shell hash; fossiliferous; weak-no cementation

Notes:
µg/kg - micrograms per kilogram
µg/L - micrograms per liter
µV - microvolts
Avg. - average
DPT - direct push technology
ft/day - feet per day
GW - groundwater
HPT - hydraulic profiling tool
K - hydraulic conductivity
MIP - membrane interface probe
PCE - tectrachloroethene
UST - undergroud storage tank
XSD - halogen-specific detector

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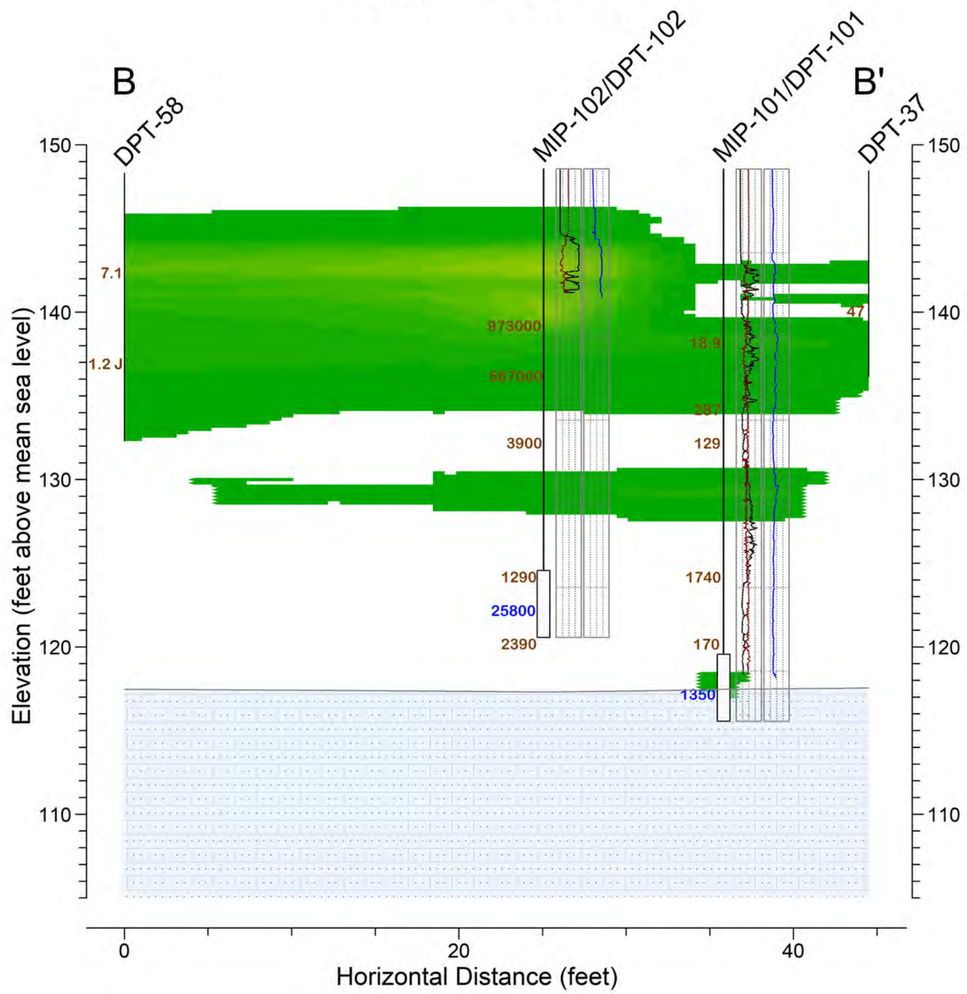
Cross-Section A-A'

Delavan Spray Technologies Site
Bamberg, South Carolina

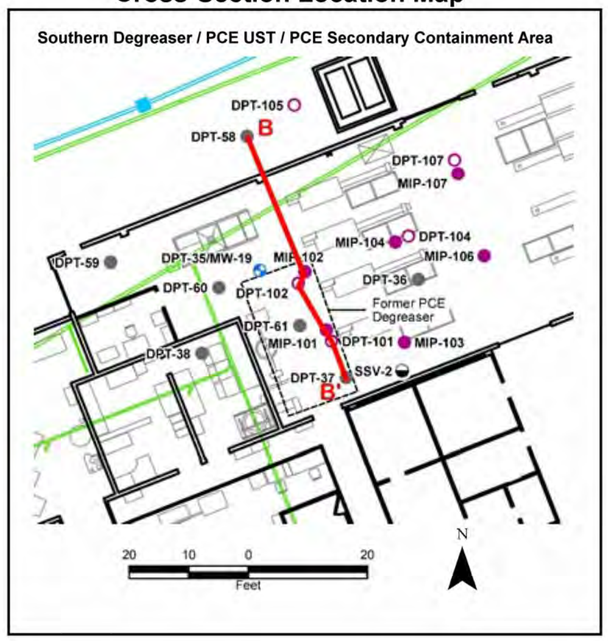
PROJECT NO.	PREPARED BY:	DATE:	
60587969	LJA	01/29/21	**Figure 8**

Cross-Section B-B



Scale: 1 inch = 7 feet; Vertical Exaggeration = 1X

Cross-Section Location Map



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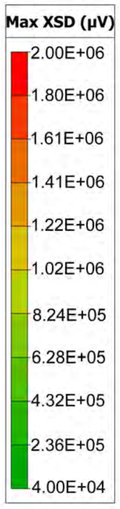

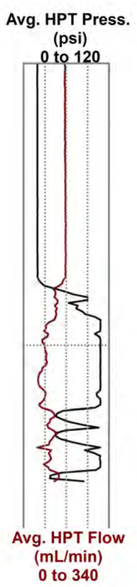

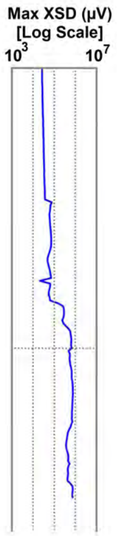

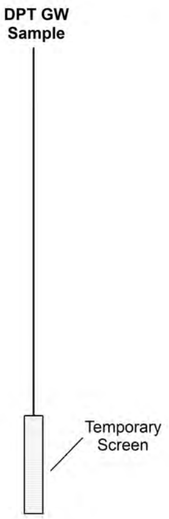

9.2 PCE Conc. in Soil - 2014-2020 - µg/kg

2900 PCE Conc. from DPT GW Samples 2014-2020 - µg/kg

2900 PCE Conc. in GW - Ocober 2020 - µg/L

Limestone - Sand and sand-sized shell hash; fossiliferous; weak-no cementation

Notes:
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µg/L - micrograms per liter
µV - microvolts
Avg. - average
DPT - direct push technology
ft/day - feet per day
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XSD - halogen-specific detector

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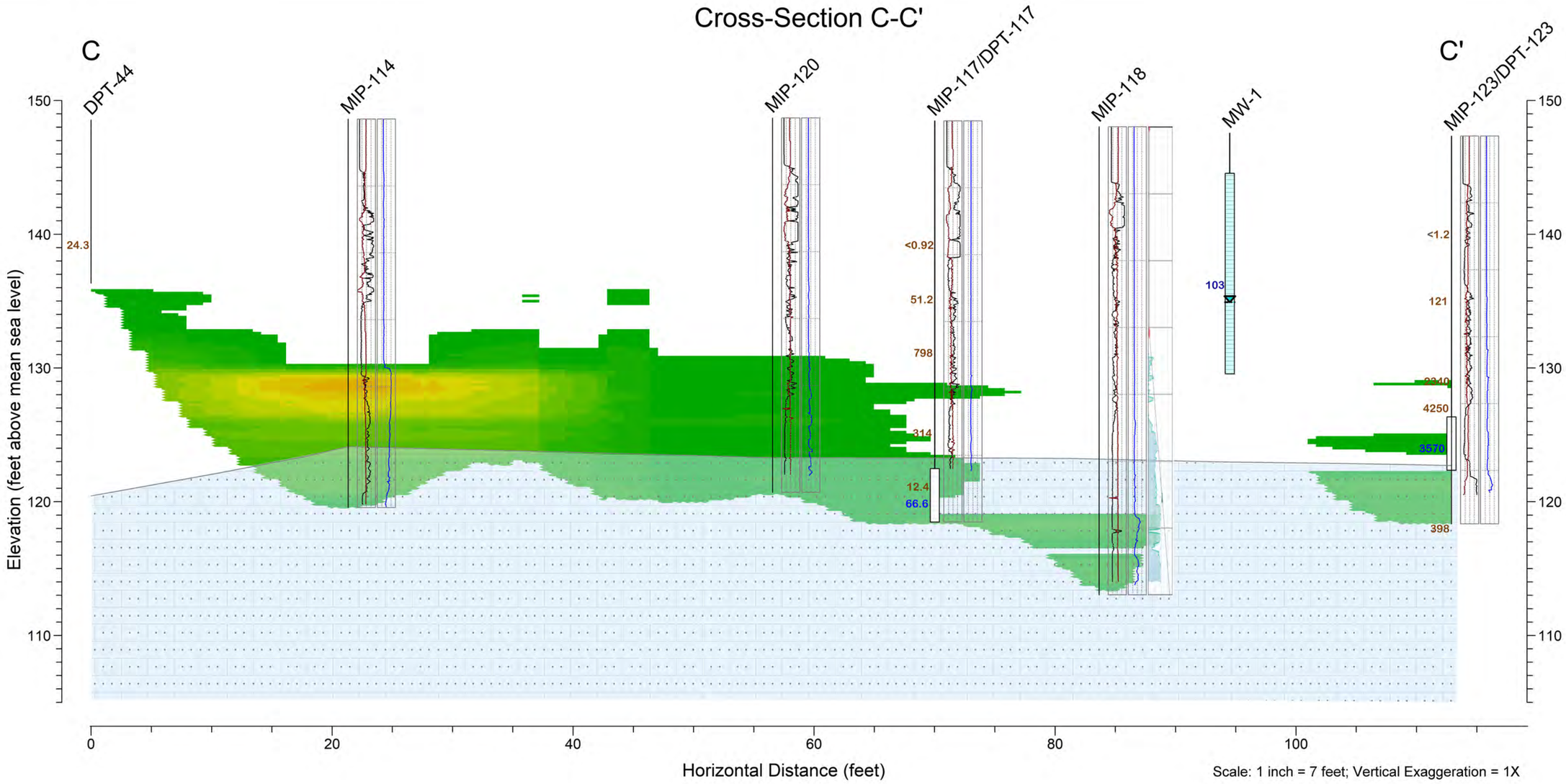
Cross-Section B-B'

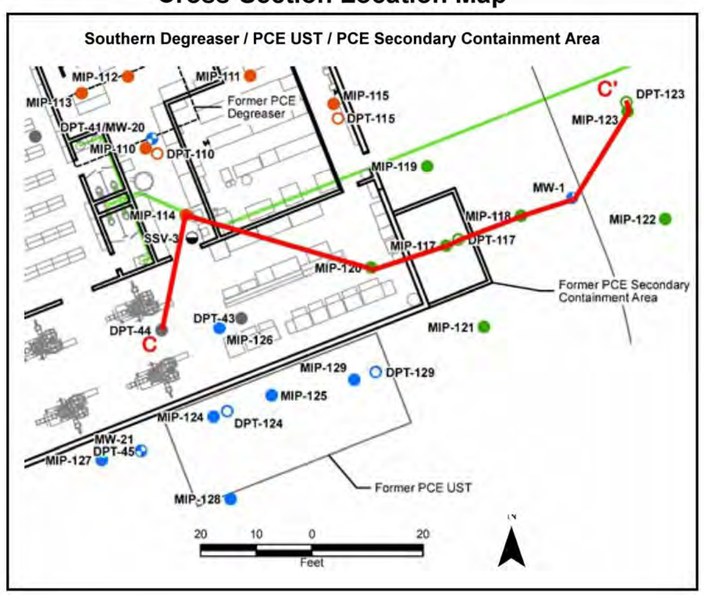
Delavan Spray Technologies Site
Bamberg, South Carolina

PROJECT NO.	PREPARED BY:	DATE:	
60587969	LJA	01/29/21	**Figure 9**

Cross-Section C-C'



Cross-Section Location Map



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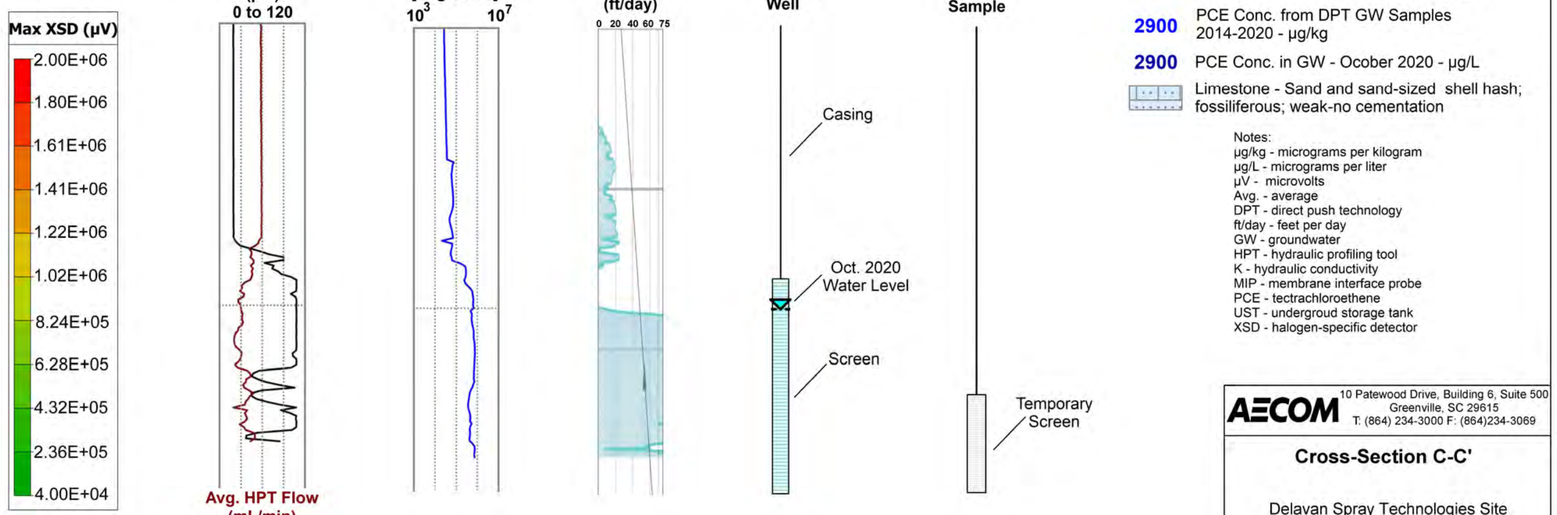

9.2 PCE Conc. in Soil - 2014-2020 - µg/kg

2900 PCE Conc. from DPT GW Samples 2014-2020 - µg/kg

2900 PCE Conc. in GW - Ocober 2020 - µg/L

Limestone - Sand and sand-sized shell hash; fossiliferous; weak-no cementation

Notes:
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µg/L - micrograms per liter
µV - microvolts
Avg. - average
DPT - direct push technology
ft/day - feet per day
GW - groundwater
HPT - hydraulic profiling tool
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PCE - tectrachloroethene
UST - undergroud storage tank
XSD - halogen-specific detector

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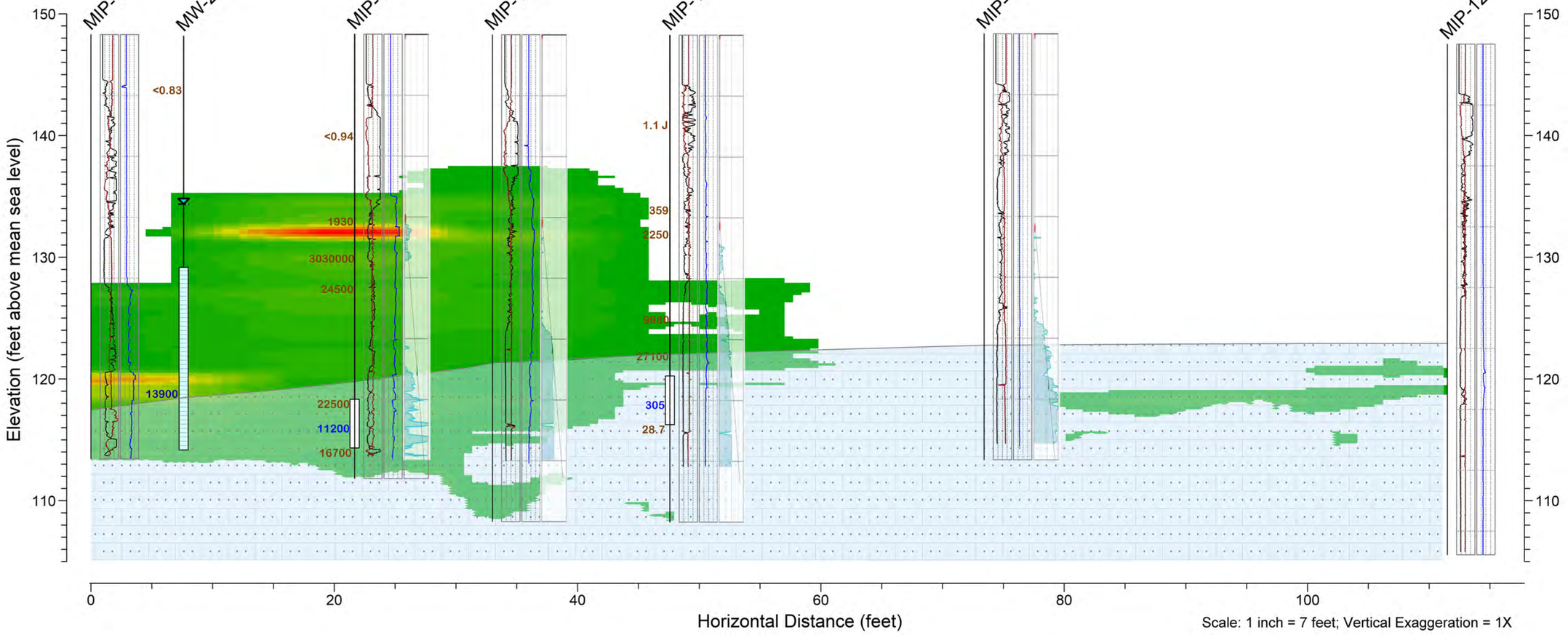
Cross-Section C-C'

Delavan Spray Technologies Site
Bamberg, South Carolina

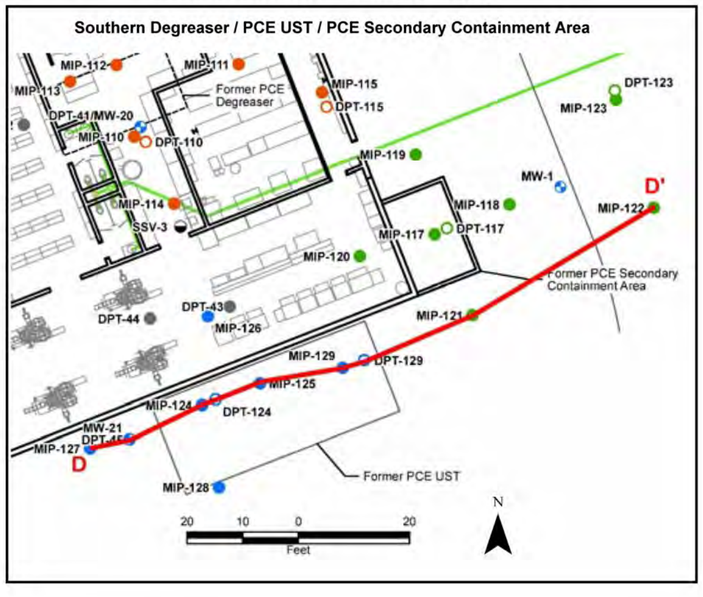
PROJECT NO.	PREPARED BY:	DATE:	
60587969	LJA	01/29/21	**Figure 10**

Report Works_Delavan C-C'.RwRpt

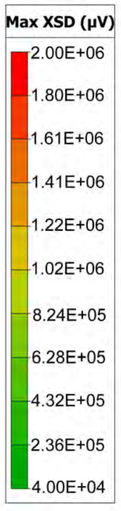
Cross-Section D-D'

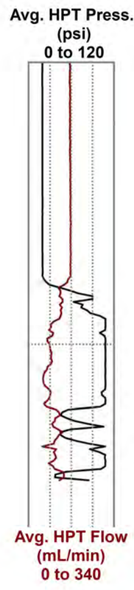


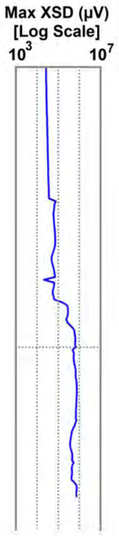
Cross-Section Location Map

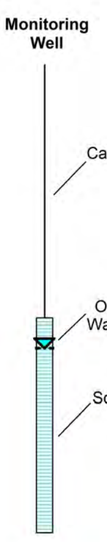


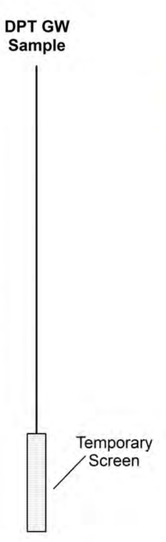
LEGEND











9.2 PCE Conc. in Soil - 2014-2020 - µg/kg

2900 PCE Conc. from DPT GW Samples 2014-2020 - µg/kg

2900 PCE Conc. in GW - Ocober 2020 - µg/L

Limestone - Sand and sand-sized shell hash; fossiliferous; weak-no cementation

Notes:
µg/kg - micrograms per kilogram
µg/L - micrograms per liter
µV - microvolts
Avg. - average
DPT - direct push technology
ft/day - feet per day
GW - groundwater
HPT - hydraulic profiling tool
K - hydraulic conductivity
MIP - membrane interface probe
PCE - tectrachloroethene
UST - undergroud storage tank
XSD - halogen-specific detector

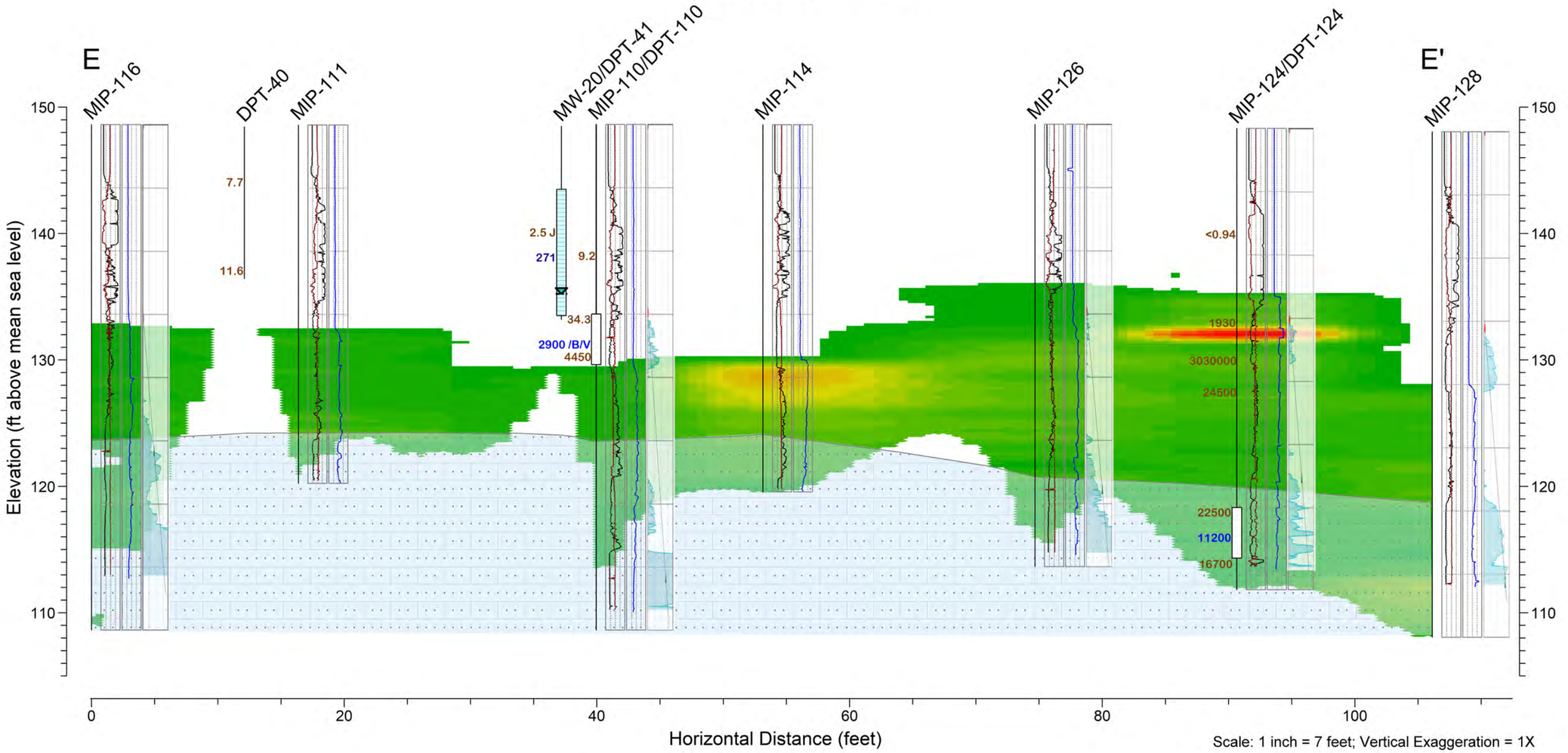
AECOM
10 Patewood Drive, Building 6, Suite 500
Greenville, SC 29615
T: (864) 234-3000 F: (864)234-3069

Cross-Section D-D'

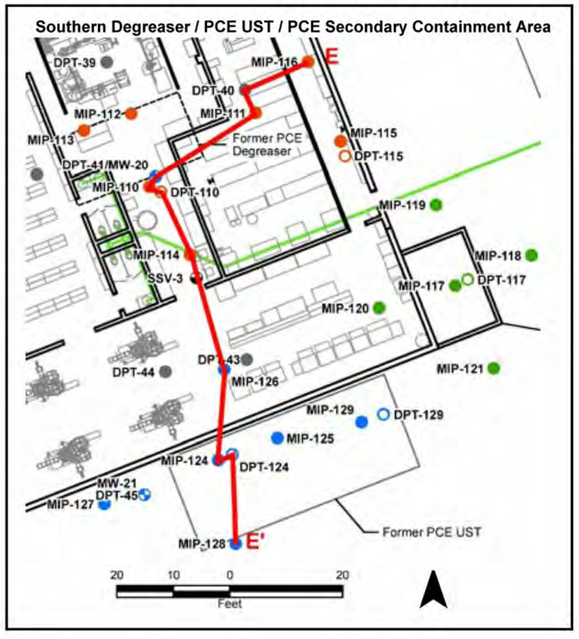
Delavan Spray Technologies Site
Bamberg, South Carolina

PROJECT NO.	PREPARED BY:	DATE:	
60587969	LJA	01/29/21	Figure 11

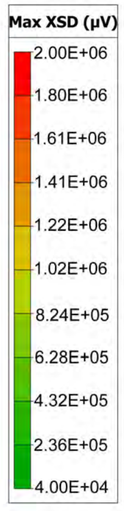
Cross-Section E-E'

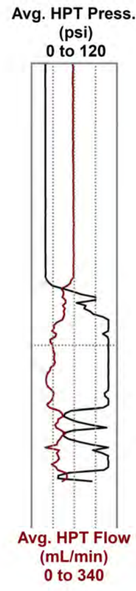


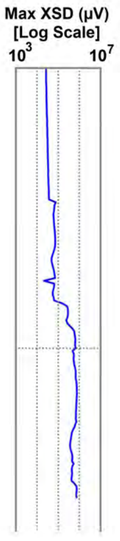
Cross-Section Location Map

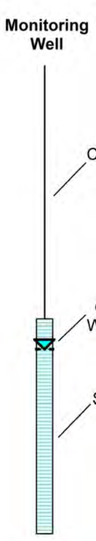


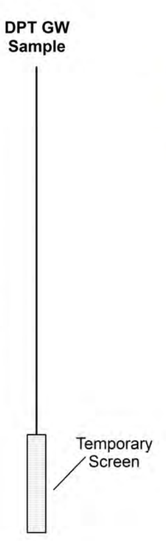
LEGEND











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2900 PCE Conc. from DPT GW Samples 2014-2020 - µg/kg

2900 PCE Conc. in GW - Ocober 2020 - µg/L

Limestone - Sand and sand-sized shell hash; fossiliferous; weak-no cementation

Notes:
µg/kg - micrograms per kilogram
µg/L - micrograms per liter
µV - microvolts
Avg. - average
DPT - direct push technology
ft/day - feet per day
GW - groundwater
HPT - hydraulic profiling tool
K - hydraulic conductivity
MIP - membrane interface probe
PCE - tectrachloroethene
UST - undergroud storage tank
XSD - halogen-specific detector

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

Cross-Section E-E'

Delavan Spray Technologies Site
Bamberg, South Carolina

PROJECT NO.	PREPARED BY:	DATE:	
60587969	LJA	01/29/21	Figure 12

Attachment A

Field Documentation

Instrument Calibration Logs

YSI Pro + / Water Quality Calibration Certificate

AECOM

Cal Standard	Temp, LAB, C :	22.8	Temp, FIELD, C :	

Conductivity 1413 UMHO/CM @ 25C	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
	7903107	3/21	1.28		(+/- .5%)

PH 4.00 @ 25C	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
	7003164	3/22	3.98		(+/- 0.2 units)

PH 7.01 @ 25C	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
	7003167	3/22	7.05		(+/- 0.2 units)

PH 10.01 @ 25C	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
	7003038	3/22	9.95		(+/- 0.2 units)

ORP ZOBELLS 231.0 MV @ 25C	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
	7004132	1/21	237.5		(+/- 20 MV)

Dissolved Oxygen (Saturated Air)		Temp, C	% Saturation	mg/L	Acceptable Range
	Post-Cal, LAB	23.1	96.4	8.33	(+/- 2%) / (+/- 2%)
	Post-Cal, FIELD				

New DO Membrane: ○ Yes ☒ No

Do Cap Color: ○ Black ◉ ~~Blue~~ ☒ Yellow

Model: YSI - PRO PLUS S/N: 3731 Cable: N/A

Calibration referenced to the temperature of the calibration standards.

Turbidity	Lot #	Expiration	Post-Cal, LAB	Post-Cal, FIELD	Acceptable Range
.02 NTU	2001146	JAN-22	0.01		(.0196 to .0204)
10 NTU	91102	NOV-21	9.87		(9.8 to 10.2)
1000 NTU	2001149	JAN-22	998.3		(970 to 1031)

Model: Micro TPW S/N: 20071199

Calibrated By: Eric Olson Date of Calibration: 7-1-20

Project Name: UTC DeLaveN Project number: 60620179

Signed: Eric Olson

REV-6, 10/31/2018 EKO

Photo / Flame-Ionization Detector Calibration Certificate

AECOM

Cal Standard

PID	Lot #	Expiration	Post-Cal Reading	Acceptable Range
Isobutylene	MBI-248-100-10	12-22	103	98 - 102
100 ppm				

FID	Lot #	Expiration	Post-Cal Reading	Acceptable Range
Methane		N/A		98 - 102
100 ppm				

Pump Flow mL/min	Acceptable Range
360	350 - 450

Model MiniRae 3000 **S/N** 592 - 925481

Lamp 10.6

Project Name: UTC PELICAN

Project #: 60620179

Calibrated By: Eric Olson Date of Calibration: 7-1-20

Signed: _____

Instrument Calibration Log

Instrument Information	
Instrument Name: Mini RAE PID / 4 Gas Meter	Manufacturer: RAE
Serial Number: MW02A021475	Last Service Date:
Parameter(s): CO, O2, LEL, H2S	Calibration Gas: ① zero air, O_2, N_2 ② CO, H_2S, CH_4, O_2, N_2
Calibration Procedure: ① calibrate per manufacturer directions to zero air, O_2 20.9%, N (balance) ② Calibrate per manufacturer directions to CO (50ppm) H_2S (10ppm), CH_4 (50% LEL) O_2 (18%), N_2 (balan	

Daily Calibration Results		
Date: 7/21/20	Calibration Result: O_2 20.9% CO 49ppm H_2S 9.9 LEL 50%	
Name: Mariah Rockwell	Signature: Mariah Rockwell	
Notes:		
Date: 7/22/20	Calibration Result: O_2 20.9% CO 50ppm H_2S 10.0 LEL 50%	
Name: Mariah Rockwell	Signature: Mariah Rockwell	
Notes:		
Date: 7/23/20	Calibration Result: PID = air 10.0 gas	
Name: M. Rockwell	Signature: Mariah Rockwell	
Notes:		
Date: 7/24/20	Calibration Result: PID = air 9.8 gas	
Name: M. Rockwell	Signature: Mariah Rockwell	
Notes:		
Date: 7/27/20	Calibration Result: PID = air 9.9 gas	
Name: M. Rockwell	Signature: Mariah Rockwell	
Notes:		
Date:	Calibration Result:	
Name:	Signature:	
Notes:		

Project: _____ Job No.: _____

Date: _____ Operator: _____

Instrument: _____ Calibration: _____

Instrument Calibration Log

Instrument Information	
Instrument Name: RAE-QRAE3 4-Gas Monitor	Manufacturer: RAE
Serial Number: M02A021475	Last Service Date:
Parameter(s): CO, O2, LEL, H2S	Calibration Gas: ① Zero Air, O2, N2 ② CO, H2S, CH4, O2, N2
Calibration Procedure: Calibrate per manufacturer directions to bottle containing zero air, O2 20.9%, and nitrogen (balance) Calibrate per manufacture directions to bottle containing CO(50 ppm), H2S(10 ppm), CH4(50% LEL), O2(18%), N2 (Balance)	

Daily Calibration Results

Date: 7/10/20 Calibration Result: O2 20.9% CO 42, H2S 9.7, LEL 47%
Name: Chuck Suddeth Signature: Charles K Suddeth
Notes:

Date: 7/11/20 Calibration Result: O2 20.9% CO 44 H2S 9.7 LEL 48%
Name: Mariah Rockwell Signature: Mariah Rockwell
Notes:

Date: 7/12/20 Calibration Result: O2 20.9%, CO 50 ppm, H2S 10 ppm, LEL 50%
Name: Chuck Suddeth Signature: Charles K Suddeth
Notes:

Date: 7/13/20 Calibration Result: O2 18%, CO 50 ppm, H2S 10 ppm, LEL 50%
Name: Chuck Suddeth Signature: _____ PID = Zero air
Notes:

Project: WTC Delaware Job No.: 60062179
Date: 7/10/20 Operator: Rockwell / Suddeth
Instrument: 4-Gas Meter / MiniRAE PID Calibration: Manufactur

Instrument Calibration Log

Instrument Information	
Instrument Name: RAE-QRAE 3	Manufacturer: RAE
Serial Number: MOZA021475	Last Service Date:
Parameter(s): CO, O2, LEL, H2S	Calibration Gas: ① zero air, O_2, N_2 ② CO, H_2S, CH4, O2, H_2
Calibration Procedure: calibrate per manufacturer directions to zero air, O2 20.9% and nitrogen CO (50ppm) H_2S (10ppm) CH4 (50% LEL) O_2 (18%) N_2 (Balance)	

Daily Calibration Results

Date: 7/14/20 Calibration Result: O_2 18%, CO 50ppm, H_2S 10ppm, LEL 50% PID = zero air
Name: Mariah Rockwell Signature: M. Rockwell
Notes:

Date: 7/15/20 Calibration Result: O_2 18% CO 49PPM H_2S 9.9 PPM LEL 50% PID = zero air
Name: M. Rockwell Signature: Mariah Rockwell
Notes:

Date: 7/16/20 Calibration Result: O_2 18% CO 50ppm H_2S 10.0 ppm LEL 50% PID = zero air
Name: M. Rockwell Signature: M. Rockwell
Notes:

Date: 7/20/20 Calibration Result: PID = zero air
Name: M. Rockwell Signature: M. Rockwell
Notes:

Project: _____ Job No.: _____

Date: _____ Operator: _____

Instrument: _____ Calibration: _____

AECOM

Project Name: UTC Delevan
Project Number: 60620179
Calibrated By: Randy Morgan
Signature: Randy Morgan

YSI 556 SN: ProPlus 3731
Turbidimeter Model/SN: MicroTPW 20071199
Additional Equipulpment/SN:
Date: 7-15-20

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 initialy 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 maintainence

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 Temeratures

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	7.966	32	7.305	37	6.727
18	9.467	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

YSI 556 Calibration

Parameter	Before Calibration	After Calibration	Time	Units
Barametric Pressure	758.0		0723	mmHg
Temperature (Saturated Air)	27.5	27.7	0723	c
Temperature (Calibration Solution)	29.0	28.7	0743	c
D.O.	10.14	7.86	0723	mg/L
PH 7	9.09	6.99	0731	SU
PH 4	4.00	4.00	0735	SU
PH 10	9.94	10.00	0739	SU
Specific Conductance	1.29	1.54	0727	mS/cm
ORP	223.4	224.5	0743	mV

(1.54)

MicroTPW Calibration

Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted: (YES) NO (Circle One)

AECOM

Project Name: UTC Delavan

Project Number:

Calibrated By: Randy Morgan

Signature: Randy Morgan

YSI ~~556~~ SN: Pro Plus 3731

Turbidimeter Model/SN: MicroTPW 20071199

Additional Equipulpment/SN:

Date: 9-16-20

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 initialy 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 maintainence

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.

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20	4.00	7.02	10.05	1278.00	237.50
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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.

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18	9.467	23	8.578	28	7.827	33	7.183	38	6.620
19	9.276	24	8.418	29	7.691	34	7.065	39	6.515

YSI 556 Calibration				
Parameter	Before Calibration	After Calibration	Time	Units
Barametric Pressure	760.0		0640	mmHg
Temperature (Saturated Air)	25.6	25.8	0640	c
Temperature (Calibration Solution)	28.7	28.6	0700	c
D.O.	6.38	8.14	0640	mg/L
PH 7	7.11	7.00	0648	SU
PH 4	4.01	4.00	0652	SU
PH 10	9.96	9.96	0656	SU
Specific Conductance	1.54	1.54	0644	mS/cm
ORP	224.3	~~224.5~~	0700	mV

MicroTPW Calibration		
Calibrations performed 0.02, 10, and 1000 NTU	Calibrations accepted.	(YES) NO Circle One

Test Boring Reports

AECOM

Test Boring Report

BORING NO. DPT-101
PAGE 1 OF 3

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe DT-54

PROJECT NO: 60314964
LOCATION
ELEVATION:
DATE START 7/16/20
DATE FINISH 7/16/20
DRILLER:
PREPARED BY: C. Sudduth

GROUND WATER		DEPTH TO:				CASING	SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			HA 0-5	Hand Auger 0-5 ft. No lithologic description
2.5				
5.0			5-8	SAND (SP), tan to red, fine grained, trace clay, poorly graded, damp
7.5			8-12	SAND (SP), tan to red, as above
10.0				

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM

Test Boring Report

BORING NO. DPT-101
PAGE 2 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0			8-12	SAND (SP), tan to red, fine to medium grained, poorly graded, few clay, damp
12.5			12-16	SAND (SP), tan to red, fine grained, poorly graded, few clay, damp.
15.0			16-20	SAND (SP), tan, fine grained, poorly graded, saturated
17.5				CLAY (CH), tan, few silt, high plasticity, soft, wet
20.0			20-24	SAND (SP), tan, fine grained, poorly graded, saturated
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-101
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5			20-24	SAND (SP), as above
			24-28	
25.0				CLAY (CH), tan to red, soft, high plasticity, few fine sand, wet
27.5				
			28-32	CLAY (CH), as above
30.0				SILTY SAND (SM), brown, fine grained, little silt, poorly graded, saturated
				LIMESTONE, yellow, unconsolidated, sand to gravel size particles
32.5				Boring terminated at 32 ft
35.0				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-102
PAGE 1 OF 3

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 54DT

PROJECT NO: 60314964
LOCATION North Degreaser
ELEVATION:
DATE START 7/27/20
DATE FINISH 7/27/20
DRILLER: S. Hunt
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Hand Auger 0-5' bgs
2.5				
5.0	12.8		5-9 Run	SANDY CLAY M. dense to loose, dry, orange-brown to grayish-brown, mostly clay, some fine to med. sand, low-non plastic, no structure
	46.3			
7.5	18.6			
	52.8			CLAY dense, dry. Yellowish gray w/iron staining, low-med plasticity, no structure
	64.9	DPT-102-9 1900		
10.0	72.0			

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-102
PAGE 2 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	72.0			CLAY dense, damp, yellowish-gray w/ iron staining, low-med plasticity, no structure
	116.3			
	201.0	DPT-102-12 1905		
12.5				
	83.6			
	71.9			
				SANDY CLAY loose, damp, light orange-brown, mostly clay, some fine-med sand, low plasticity, no structure
15.0				
	14.3			
	93.6	DPT-102-16 1915		
				—WATER—
	80.6			
17.5				
				SAND loose, wet, pale brown, mostly coarse to fine sand (well graded), few to little clay, no structure
	76.3			
	20.1			
				—shells?—
20.0				
	34.8			SANDY CLAY dense, wet, pale orange-brown, mostly clay, some to little fine sand, non-low plasticity, no structure
22.5				NO RECOVERY 21.5'-24'

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-102
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5				
24	32.4	DPT-102-24 1930		CLAY dense, wet, dark brown, mostly clay. some iron staining, high plasticity
25.0	26.1			
	13.8			
27.5	31.6			
	52.7	DPT-102-28 1940		Refusal @ 28' bgs Terminated Boring
30.0				
32.5				
35.0				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM Test Boring Report

BORING NO. DPT-104
PAGE 1 OF 3

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 54DT

PROJECT NO: 60314964
LOCATION North
ELEVATION:
DATE START 7/15/20
DATE FINISH 7/15/20
DRILLER: S Hunt
PREPARED BY:

GROUND WATER		DEPTH TO:				CASING	SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			Recovery	Used MiP-104 original boring; cleared 0-7' bgs w/hand auger
2.5				
5.0				
7.5	2.8	DPT-104-8 1850		Med-SAND light reddish brown moist, loose, mostly med sand, trace to few clay, low-non plasticity, no structure
				Poorly Sorted-Well Graded SAND
	2.6		8-12' recov	moist, loose, brownish-red, mostly well-graded poorly-sorted sand, non plastic no structures
				some iron-staining @ 8.5' bgs
10.0	2.8			Same as above - more clay

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM Test Boring Report

BORING NO. DPT-104
PAGE 2 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	2.8		Recovery 12'-14' recovery	CLAY w/ SAND moist, med dense, gray-brown w/ iron stains, mostly clay, some to little poorly sorted sand, low plasticity, no structure
	4.3			
	10.2	DPT-104-12 1900		SAND w/ CLAY moist, med dense, dark red-brown, poorly sorted mostly sand, little to some clay,
12.5	6.4		12'-16' recovery	CLAY moist, dense, gray, clay lense, med/high plasticity, no structure
	6.9			POORLY SORTED SAND moist, dense, red-brown, mostly poorly-sorted well-graded sand, iron stains
15.0	3.2			
	3.6			CLAY w/ SAND moist, v dense, grayish-yellow, mostly clay, little med-fine sand, med plasticity
	5.7			CLAY lense moist, dense, gray, clay lence, high plasticity
17.5	6.0	DPT-104-18 1910	16'-20' recovery	SAND wet, loose, grayish red-brown, mostly fine-med sand, well-sorted, gets finer w/ depth
	3.8			CLAY wet, Very dense, yellow-gray, mostly clay, high plasticity, no structure
20.0	3.0			Lost 20-21.5'
	X		X	
				SAME AS ABOVE Clay
	07		21.5'-24'	
22.5				

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM

Test Boring Report

BORING NO. DPT-104
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE / Recovery	FIELD CLASSIFICATION AND REMARKS
22.5			21.5'-24' Recovery	SAND w/ CLAY wet, loose, brownish-red, poorly sorted fine-coarse sand, some-little clay, more clay-rich w/depth
23	3.9			
24	4.7	DPT-104-24 1920		
25.0	3.9		24-28'	CLAY wet, dense, orange-gray, high plasticity
	3.1	DPT-104-26 1950		
27.5	2.5			
	1.6		28-32'	* NO RECOVERY
	[illegible]			
30.0	2.8 MR			SAME AS ABOVE
	2.9			
32.5	3.1			SAND w/ CLAY wet, loose brownish-red, well-sorted med sand, some to little clay, low plasticity no structure
	1.7		32-36' (Core is marked backwards)	
	4.3	DPT-104-34 2010		LIMESTONE wet, loose, friable, gray Rhizomuan, shell hash, calcite
35.0	3.3			End of Boring @ 36' bgs

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

DPT-105

AECOM Test Boring Report

BORING NO. DPT-105
PAGE 1 OF 03

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 7822DT

PROJECT NO: 60314964
LOCATION North Degreaser
ELEVATION:
DATE START 7/27/20
DATE FINISH 7/27/20
DRILLER: S. Hurst
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:				CASING	SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Hand Auger 0-5' bgs
2.5 ~~2.5~~				
~5.0 ~~5.0~~	0.0			SANDY CLAY dense, dry, dark red-brown w/ iron staining, mostly clay, some to little well-graded sand, trace organics, non-plastic, no structure
	0.0			
7.5 ~~7.5~~	0.0			
	0.0			
	0.6	DPT-105 @ 1700		
~10.0 ~~10.0~~	0.0			CLAY dense, moist, dark red-brown, mostly clay, med plasticity, no structure

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM

Test Boring Report

BORING NO. DPT-105
PAGE 2 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	8.0			NO Recovery 10-10.85' bgs
				SANDY CLAY
	0.0			dense to med dense, dry, dark red-brown grading to bright orange-brown, mostly clay, some fine sand, few medium sand, non-low plasticity, no structure
	5.7			
12.5	6.3			
	17.8	DPT-105-14 1710		
15.0	12.2			
	21.4	DPT-105-16 1720		
				CLAY
	0.9			dense to very dense, damp, light gray to gray-brown, mostly clay, some iron-staining, high plasticity, no structure
17.5	1.2			
	0.0			
20.0	0.0			
	4.8			
	3.2			
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-105
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5				CLAY dense, moist, gray-brown to light gray, all clay, high plasticity, no structure
	7.1	DPT-105-23 1730		SANDY CLAY dense, moist, light orange-brown, mostly clay, some to little fine sand, low plasticity, no structure
	2.8			
25.0	3.1			CLAY dense, moist, light reddish-brown, mostly all clay, high plasticity, no structure
	0.8			
	1.1			
27.5	0.3			
	2.6			SANDY CLAY loose, wet, dark brown to olive-brown, mostly clay, some fine sand, shells, low-non plasticity, no structure
30.0	14.9	DPT-105-30 1740		LIMESTONE SAND MATRIX loose, wet, light brown, mostly limestone shell hash coarse-fine sand-sized particles
	6.9			
	17.3	DPT-105-32 1750		Refusal @ 32' bgs Terminated Boring
32.5				
35.0				

DPT-GW-105 1745 Water sample screen

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-107
PAGE 1 OF

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 7822 DT

PROJECT NO: 60314964
LOCATION North Degreaser
ELEVATION:
DATE START 7/21/20
DATE FINISH
DRILLER: S. Hunt
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Hand Augered 0-5' bgs
2.5				
5.0	0.0			CLAY w/SAND dense, dry, dark reddish brown, mostly clay, some to little fine sand, low plasticity, no structure
	0.0			
7.5	0.0	DPT-101-7 1850	5'-10' Run	
	0.0			SAME AS ABOVE dark orange-brown
	0.0			
10.0	0.0			SAME AS ABOVE dark orange-brown sand/clay w/gray sandy clay layers

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-107
PAGE 2 OF _____

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	0.0			CLAY w/ SAND dense, moist, dark orange-brown, mostly clay w/some fine sand, low plasticity, iron-staining
	0.0		10-15' Run	
	0.0			
12.5				
	0.0	DPT-107-13 1855		
	0.0			WELL-SORTED SAND damp, dense, dark orange-brown, mostly fine-med sized sand, few to trace clay, no plasticity
15.0				
	0.0			
	0.0			
			15-20' Run	
	0.0	DPT-107-17 1910		CLAY med. damp, ~~very~~ dense, tan-orange-brown, mostly clay, high plasticity, iron staining, no structure
17.5				
	0.0			
	0.0			
20.0	0.0			
			20-25'	SAME AS ABOVE more moisture, denser, getting lighter in color
	0.0			
22.5	0.0			

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-107
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5	0.0			CLAY
	0.0	DPT-107-23	20-25' Run	damp, med dense, tan-orange-brown to yellowish gray clay, mostly clay, high plasticity, iron staining, no structure
	0.0			
	0.0			
25.0	0.0			NO RECOVERY 25-26.5'
				SAND w/ CLAY
	0.0		25-30' Run	wet, loose, dark brown, mostly fine to med sand, some to little clay, low Plasticity, no structure
27.5	6.0			
	0.0			
30.0				SAME AS ABOVE
	0.0			more clay rich w/ depth, dark brown (SANDY CLAY or CLAYEY SAND)
				LIMESTONE SAND w/ CLAY
	5.5			water, loose, mostly shell hash and coarse limestone sand-sized particles, very ~~to~~ from 0.5' is coarse sand/limestone matrix, clay @ top 0.5'
32.5	1.3			
	2.9			End of Boring @ 34' bgs
	6.4	DPT-107-34		
35.0				~~End of Boring 35' bgs~~ (NA)

water sample

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM

Test Boring Report

BORING NO. MW-37
PAGE 1 OF 1

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 7822DT / Concrete Core

PROJECT NO: 60314964
LOCATION North Degreaser
ELEVATION:
DATE START 7/13/20
DATE FINISH
DRILLER: S. Hunt
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
6'				* Cut through concrete floor w/ core drill, then hand auger to 5' bgs
12'				* Hand augered (0.5 - 5.0' bgs)
18'				* NO LITHOLOGY *
24'				End of Boring @ 22.' bgs Terminated Boring

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM Test Boring Report

BORING NO. DPT-110
PAGE 1 OF

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: HAND AUGER

PROJECT NO: 60314964
LOCATION South Degreaser
ELEVATION:
DATE START 7/23/20
DATE FINISH 7/23/20
DRILLER:
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO: 16'			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
		16'			SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Concrete floor
1				Gravel, clean backfill (sand)
2				Cleared for utilities
2.5				
3				
4	92.8			
5.0				
	71.2			CLAY W/ SAND
6	55.8			dry, loose, dark red-brown, mostly clay, some fine sand, low plasticity, no structure
7	49.0			
7.5				
8	40.1			
9	45.7			
10.0	74.8	MS/MSD DPT-110-10 1730		

Sample Interval 5-10'

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM

Test Boring Report

BORING NO. DPT-110
PAGE 2 OF 2

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0				CLAY dense, moist, grayish brown, mostly clay, little to few fine sand, iron staining med plasticity, no structure
11	21.3			
12	33.3			SAME AS ABOVE mostly clay, some fine sand
12.5				
13	17.4			SAND w/ CLAY loose-dense, moist, dark reddish brown, mostly fine sand, little clay, low-no plasticity, no structure
	30.7			
15.0	41.8	DPT-110-15 1750 FD-SO-01		WATER
	12.9			
	21.3			SAME AS ABOVE mostly fine sand, some clay (grayish-tan)
17.5				
	57.8	DPT-110-18 1830		LIMESTONE SAND MATRIX wet, loose, light grayish-yellow, coarse-fine sand-size limestone particles, no structure
	17.6	GW-110 1835		Refusal @ 19' *Auger almost fell, water created vacuum*
20.0				
22.5				

16-15' Sample Interval

15-20' Interval

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-115
PAGE 1 OF 2

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: HAND AUGER

PROJECT NO: 60314964
LOCATION South Degreaser
ELEVATION:
DATE START 7/23/20
DATE FINISH 7/23/20
DRILLER:
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:				CASING	SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Hand auger, clear for utilities
2.5				
4	35.0			SANDY CLAY
5.0	2.7			dry, loose to dense, dark orange-brown, mostly clay, some fine-med sand, low plasticity, no structure
6	13.5			
7	18.3			SAME AS ABOVE
7.5				Clay is lighter in color (gray-brown)
8	14.1			
9	25.0	DPT-115-09 1950		SAME AS ABOVE
10.0	15.9			70% clay 30% fine sand, very dense

Sample interval from 5-10' take highest PID

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-115
PAGE 2 OF 2

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	15.9			CLAY
11	38.9			damp, dense to very dense, grayish brown, mostly clay, little fine sand (orange-brown color), low - med plasticity, no structure
12	38.5			
12.5				
13	15.2			
14	104.1	DPT-115-14 2010		SAME AS ABOVE mostly clay, some fine sand, damp to moist
15.0	88.1			-WATER-
14	92.7	DPT-115-16 2010		Trace Limestone Sand Matrix
17	76.8			Refusal @ 17' bgs Terminated Boring
17.5				
18				
19				
20.0				
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-117
PAGE 1 OF

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 7822DT

PROJECT NO: 60314964
LOCATION PCE UST
ELEVATION:
DATE START 7/27/20
DATE FINISH 7/27/20
DRILLER: S. Hunt
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				HAND AUGER 0-5' bgs
2.5				
5.0	0.0			CLAY
	6.1			dense, dry, grayish-brown w/ iron staining, mostly clay, few to trace fine sands, med-high plasticity, no structure
7.5	0.0			
	0.0			
	0.8	DPT-117-9 1400		
10.0	0.0			

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

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AECOM

Test Boring Report

BORING NO. DPT-117
PAGE 2 OF ____

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	0.0			SANDY CLAY dense to loose, dry, orange-brown to grayish-tan, mostly clay, some to little fine-med sand, low-med plasticity, no structure
	0.0			
12.5	0.0			
	0.3	DPT-117-13 1410		CLAY very dense, moist, gray-brown to light reddish-brown, med-high plasticity, no structure
	0.1			
15.0	0.0			
	0.0			
	4.2	DPT-117-17 1420		
17.5	0.7			
	0.3			
20.0	0.1			SANDY CLAY loose, wet, brownish-gray, mostly clay, some to little fine sand, low plasticity, no structure
	0.0			
	0.0			
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-117
PAGE 3 OF _____

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5				SANDY CLAY
	6.9	DPT-117-23 1430		loose, wet, brownish-gray to yellow-gray, mostly clay, some to little fine sand, low plasticity, no structure, shells?
	3.4			
25.0	2.1			LIMESTONE SAND MATRIX
	6.3			loose, wet, yellowish-gray to gray-brown, mostly coarse - med sand-sized shell grains/particles, limestone matrix, no structure, trace pebble-size limestone
	18.6	DPT-117-27 1495		
27.5	12.9			
	16.7			
30.0	9.1			Refusal @ 30' bgs
32.5				
35.0				

DPT-GW-117 Watersereen

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-123
PAGE 1 OF

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 7822DT

PROJECT NO: 60314964
LOCATION East Degreaser
ELEVATION:
DATE START 7/27/20
DATE FINISH 7/27/20
DRILLER: S. Hunt
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:				CASING	SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Hand auger 0-5' bgs
2.5				
5.0	0.0			WELL GRADED SAND
				dry, dense, tan-reddish brown, mostly well-graded poorly sorted sand, some organics, little to few clay, some iron staining
	0.0			
7.5	0.0	DPT-123-7 1150		SAME AS ABOVE
	0.0			more clay rich, mostly med-fine sand, some to little clay
	0.0			
10.0	0.0			

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-123
PAGE 2 OF _____

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	0.0			CLAYEY SAND dry, dense, tan reddish-brown, mostly fine sand, some to little clay, some iron staining
	0.0			
	0.7	DPT-123-12 1200		CLAY very dense, moist, yellowish gray, some iron staining, mostly clay, med-high plasticity, no structure
12.5	0.0			
	0.6			
15.0	2.1			SAME AS ABOVE darker color (reddish brown)
	0.9			
	1.8			SANDY CLAY dense, moist, mostly clay, some to little fine sand, low plasticity, no structure
17.5	3.6	DPT-123-18 1210		
	2.8			CLAY orange-brown dense, moist, mostly clay, high plasticity, no structure
20.0	102.1	DPT-123-20 1220		
	31.6	-WATER-		~~WATER~~ WATE SANDY CLAY loose, wet, rust brown, mostly clay, some fine sand, low plasticity, no structure
	28.1			
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-123
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5				
	10.9			
	12.6			SHELL ~~HASH~~ | LIMESTONE SAND MATRIX?
25.0				NO RECOVERY
	8.1			Except 0.5' from 28.5-29' bgs
	X			
27.5				
	X			
				LIMESTONE SAND MATRIX
	30.8	DPT-123-29 1230		Refusal @ 29' bgs
				Terminated Boring
		DPT-GW-123 1240 Screen 21-25'		
30.0				
32.5				
35.0				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

Hw 99.8
al

AECOM

Test Boring Report

BORING NO. DPT-124
PAGE 1 OF 3

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: 7822 DT

PROJECT NO: 60314964
LOCATION
ELEVATION:
DATE START 7/8/20
DATE FINISH 7/8/20
DRILLER: S. Hunt
PREPARED BY: M. Rockwell

GROUND WATER		DEPTH TO:			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				0-5' Hand clear w/auger begin DPT @ 1338
2.5				
5.0	0.0			Recovery 5-10' SANDY CLAY dense, reddish brown, mostly clay, some fine-med sands low plastic, trace root / organic material
	0.0			
7.5	1.9	~~DPT-124~~ -8.0		SAME AS ABOVE pale yellow gray CLAY very dense, gray, mostly clay, few silt, high plasticity, non-structure
1350	0.0			
10.0	0.1			

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID.		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM Test Boring Report

BORING NO. DPT-124
PAGE 2 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	0.0			SANDY CLAY dense, iron-staining in gray, mostly clay, some fine sand; med-high plastic iron staining (water?); trace med sand
	0.0			
	0.3			
12.5				
	96.7			Same as above more sandy; getting lighter in color red-brown
1355	324	DPT-124 -15		organic-rich layer @ 15-15.5'
15.0				
	1561			SAND w/ CLAY loose, wet, light brownish gray, mostly med-coarse sand, little clay, non-plastic
	1333			
17.5				
1410	1951	DPT-124-18.0		CLAY w/ SAND dense, moist, light red-brown, mostly clay, little to few fine sand, med-plastic no structure
	717			
	1086			
20.0				
1420	908	DPT-124 -20.5		Same as above more gray
	240			
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-124
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5	602			SANDY Clay med. dense, wet, pale brown, mostly clay, little to few fine sand, low plasticity, no structure
	121			
	64.8			
25.0				
	182			
	249			
27.5				
	106			SAND w/ clay med dense, wet, pale brown-gray, mostly fine sand, little clay, few to trace med. sand, low-plastic no structure
	184			
1430	700	DPT-124-30.0		
30.0				
	21.0			
				SAME AS ABOVE gets darker in color
	84.1			
32.5				
	34.2			
1440	204	DPT-124-34		
34				
	NR			
35.0				Refusal @ 36.5'

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

	SAMPLER ID.
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

	NOTES
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM Test Boring Report

BORING NO. DPT-129
PAGE 1 OF 3

PROJECT: UTC Delavan Spray Technologies Site
CLIENT: UTC
CONTRACTOR: SAEDACCO
EQUIPMENT: Geoprobe 7822DT / Hand Auger

PROJECT NO: 60314964
LOCATION PCE UST
ELEVATION:
DATE START 7/20/20
DATE FINISH 7/21/20
DRILLER: S. Hunt
PREPARED BY: M. Reckert

GROUND WATER		DEPTH TO:			CASING		SAMPLER	CORE BARREL
DATE	HRS AFTER COMP	WATER	BOTTOM OF CASING	BOTTOM OF HOLE	TYPE		Acetate Liners	Core barrel
					SIZE ID			
					HAMMER WT			
					HAMMER FALL			

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
				Hand auger 0-5' bgs
2.5				
5.0	0.0		5'-10' Run	CLAY dense, dry, dark reddish brown, mostly clay, some to little fine sand, high plasticity, some iron staining
	0.0			
	0.0	DPT-129-7 1520		
7.5				Well Sorted SAND w/ CLAY dense, dry, brown w/ iron staining, mostly med/fine sand, little to some clay, low plasticity, no structure
	0.0			
	0.0			
10.0	0.0			

BLOWS/FT.	DENSITY	BLOWS/FT.	CONSISTENCY	SAMPLER ID		DESCRIPTIONS		NOTES	
0-4	VERY LOOSE	0-2	VERY SOFT	SS	SPLIT SPOON	MOSTLY	50-100%	WD	WHILE DRILLING
5-10	LOOSE	3-4	SOFT	ST	SHELBY TUBE	SOME	30-45%	NE	NOT ENCOUNTERED
11-30	MEDIUM DENSE	5-8	MEDIUM STIFF	G	GRAB SAMPLE	LITTLE	15-25%	UR	NOT READ
31-50	DENSE	9-15	STIFF	MC	MACRO-CORE	FEW	5-10%	NR	NO RECOVERY
50+	VERY DENSE	16-30	VERY STIFF			TRACE	<5%		
		31+	HARD						

AECOM

Test Boring Report

BORING NO. DPT-129
PAGE 2 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
10.0	0.0			well sorted SAND w/ CLAY dense, dry, getting lighter w/depth, tanish brown, mostly med/fine sand w/ some clay, low plasticity, no structure.
	1.6		10-15	
	8.7			
12.5				
	16.0			
	38.2	DPT-129-14 1525		SAME AS ABOVE more sand rich (various size); less than few to trace clay; reddish light brown color
15.0	1.0			
	9.4	DPT-129-16 1535 FD-50-03 1535	15-20	CLAY very dense, moist, light yellow-gray, mostly clay, ~~some~~ few to trace silt, gradually gets darker ? more dense w/depth
17.5	1.3			
	0.6			
	1.9			SAME AS ABOVE orange-brown, all clay, very dense
20.0	0.2			
	5.6		20-25'	
	6.0			
22.5				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

AECOM

Test Boring Report

BORING NO. DPT-129
PAGE 3 OF 3

DEPTH IN FEET	ORGANIC VAPOR SCREENING (PPM)	UTC Kalama SAMPLE INFIORMATION	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
22.5			20.26'	SANDY CLAY Loose, wet, mostly fine sand, some clay, dark reddish-brown.
	9.5	DPT-129-23 1545		
	7.8			
25.0	8.5			SAME AS ABOVE 70% sand, 30% clay, dark greenish gray
	106	DPT-129-26 1600	26	CLAY w/ SAND dense, wet, ~~orange-brown~~, mostly clay, some to little fine sand (shell hash), ~~hard~~ plastic, no structure
	13.2		25-38'	
27.5			27	LIMESTONE SAND loose, wet, yellowish-gray, mostly poorly-sorted sand (shells), shells are coarse to fine sand size, limestone is totally weathered, no structure
	0.0			
	0.0	Water Sample DPT-GW-129 1540		
30.0				
	1.2			SAME AS ABOVE grayish brown color
			30-38'	
	4.8	DPT-129-32 1610	Run	
32.5				End of Boring @ 32' bgs
35.0				

BLOWS/FT.	DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
50+	VERY DENSE

BLOWS/FT.	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	MEDIUM STIFF
9-15	STIFF
16-30	VERY STIFF
31+	HARD

SAMPLER ID.	
SS	SPLIT SPOON
ST	SHELBY TUBE
G	GRAB SAMPLE
MC	MACRO-CORE

DESCRIPTIONS	
MOSTLY	50-100%
SOME	30-45%
LITTLE	15-25%
FEW	5-10%
TRACE	<5%

NOTES	
WD	WHILE DRILLING
NE	NOT ENCOUNTERED
UR	NOT READ
NR	NO RECOVERY

Monitoring Well Construction Details

Shallow Monitoring Well Construction Details

PROJECT:	Delavan Spray Technologies Site HRSC	**WELL NUMBER:**	MW-37
LOCATION:	Bamberg, SC	**JOB NUMBER:**	60620179
CLIENT:	Raytheon Technologies	**TYPE OF INSTALLATION:**	
CONTRACTOR:	SAEDACCO		Monitoring Well installed by DPT
DRILLER:	S. Hunt	**LOCATION:**	~50 ft W/SW of northern degreaser
FIELD REPRESENTATIVE:	M. Rockwell	**INSTALLATION DATE:**	07/13/20

SURVEY DATUM: SC State Plane, NAVD 88 (Vertical)
NAD 83 (Horizontal)

NORTHING: 527,410.10

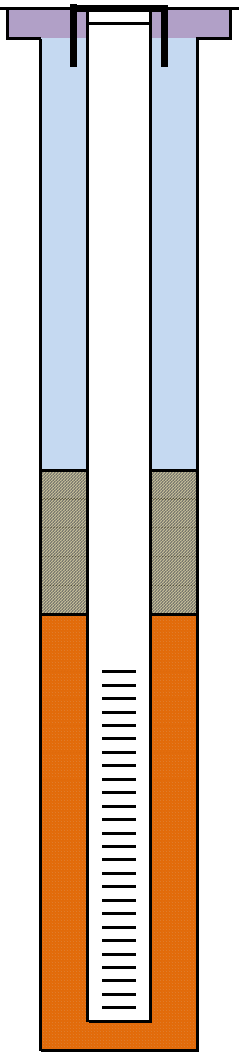
TOP OF CASING ELEVATION: 143.64 ft

EASTING: 1,985,754.61

GROUND SURFACE ELEVATION: 143.83 ft

CASING STICKUP: -0.19

COMMENTS:



TYPE OF ANNULAR SEAL	Cement Grout
TYPE OF WELL CASING OR RISER	Sch. 40 PVC
INSIDE DIAMETER	1.25 inch
NOMINAL BOREHOLE DIAMETER	4.0 inch
TOP OF WELL SEAL	7.97 feet
TYPE OF SEAL	Bentonite
TOP OF SAND FILTER PACK	10.00 feet
TOP OF SCREENED INTERVAL	11.81 feet
TYPE OF SCREEN	PVC
SLOT SIZE	0.010 inch
INSIDE DIAMETER	1.25 inch
SCREEN LENGTH	10.0 feet
FILTER PACK AROUND SCREEN	No. 1 sand
BOTTOM OF WELL	22.07 feet
BOTTOM OF BOREHOLE	22.25 feet

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE
DIAGRAM NOT TO SCALE

Groundwater Development and Sampling Logs

AECOM

Monitoring Well Development Log

Page 1 of 1

Date Started (yr/mo/day) 2020-7-15 Date Completed (yr/mo/day) 2020-7-15

Field Personnel Randy Morgan

Site Name UTC Delavan

Job #

Well ID # MW-37

____ Upgradient ____ Downgradient

Weather Conditions Clear/ Sunny

Air Temperature 70's °F

Total Well Depth (TWD) = 22.50 BGS 1/100 ft

Depth to Ground Water (DGW) = 13.60 BGS 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 8.90 1/100 ft

1 Casing Volume (OCV) = LWC x 0.041 = 0.36 gallons

5 Casing Volumes = 1.82 gallons

Method of Well Development peristaltic pump

Total Volume of Water Removed ____ gallons

Date/Time July 15, 2020	Discharge Rate (gpm)	Volume Purged (gallons)	Water Temperature (°C)	pH	Eh ORP	Specific Conductivity (µmhos/cm)	Turbidity/Color	Sand Content (%)	Remarks	DTW
0805		.25	21.6	7.82	153.9	0.211	63.17	0/clear	Surged	15.60
0810		1.0	21.2	6.12	104.8	0.095	66.73	0-clear	Surged	18.25
0815		2.0	21.0	6.01	104.4	0.103	72.13	0-clear	Surged	22.10
DRY										

COMMENTS/OBSERVATIONS: Dry at 2.0 gal allow to recover to continue developing
0910 WL 21.21 very slow recovery
1020 WL 20.45
1625 WL 17.05

AECOM

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Date (mo/day/yr)	July 15, 2010
Field Personnel	Randy Morgan
Site Name	UTC Delavan Spray Technologies Site
AECOM Job #	60314964
Sample ID*	MW-19
	___ Upgradient ___ Downgradient ___ Sidegradient X Source
Weather Conditions	Clear/Sunny
Air Temperature	90s/ ° F
Total Well Depth (TWD) =	20.15 1/100 ft
Depth to Ground Water (DGW) =	13.57 1/100 ft
Length of Water Column (LWC) = TWD - DGW =	___ 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.041 =	___ 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	1.50 gal

Casing Diameter	1.0 inches
Casing Material	PVC
Measuring Point Elevation	148.22 1/100 ft
Height of Riser (above land surface)	-0.25 1/100 ft
Land Surface Elevation	148.47 1/100 ft
Screened Interval	5 - 20 1/100 ft
Dedicated Pump or Bailer	YES X NO ___ Type Tubing
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:	1622
Sample Analytes:	VOC's
~~Hach Fe Kit~~	NA mg/L

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

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

FIELD ANALYSES

	Initial	.30	.60	.90	1.20	1.50					
VOLUME PURGED (gallons)											
TIME (Military)	1555	1600	1605	1610	1615	1620					
Water Level (ft BTOC)	14.07	14.45	14.59	14.70	14.75	14.80					
pH (S.U.)	4.72	4.51	4.44	4.40	4.38	4.38					
Sp. Cond. (mS/cm)	0.089	0.091	0.085	0.082	0.081	0.080					
Water Temp. (°C)	22.8	22.6	22.4	22.4	22.3	22.3					
Turbidity (NTUs)	26.39	18.89	12.33	5.59	4.83	5.10					
DO - (mg/L)	7.45	2.44	1.82	1.84	1.92	1.90					
Salinity (ppt)	0.04	0.04	0.04	0.04	0.04	0.04					
ORP (mV)	176.0	166.8	167.5	169.6	168.8	167.0					

COMMENTS/OBSERVATIONS ___

DRY

AECOM

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Date (mo/day/yr) _____

Field Personnel _____

Site Name UTC Delavan Spray Technologies Site

AECOM Job # 60314964

Sample ID* MW-20

____ Upgradient ____ Downgradient ____ Sidegradient X Source

Weather Conditions _____

Air Temperature _____ ° F

Total Well Depth (TWD) = 15.15 1/100 ft

Depth to Ground Water (DGW) = 15.28 1/100 ft

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

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

Casing Diameter 1.0 inches

Casing Material PVC

Measuring Point Elevation 148.19 1/100 ft

Height of Riser (above land surface) -0.31 1/100 ft

Land Surface Elevation 148.50 1/100 ft

Screened Interval 5 - 15 1/100 ft

Dedicated Pump or Bailer YES ____ NO ____ Type ____

Steel Guard Pipe Around Casing YES ____ NO ____

Locking Cap YES ____ NO ____

Protective Post/Abutment YES ____ NO ____

Well Integrity Satisfactory YES ____ NO ____

Yield LOW ____ MODERATE ____ HIGH X

Comments/Observations

Sample Time: _____

Sample Analytes: _____

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) = π 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)											
Water Level (ft BTOC)											
pH (S.U.)											
Sp. Cond. (mS/cm)											
Water Temp. (°C)											
Turbidity (NTUs)											
DO - (mg/L)											
Salinity (ppt)											
ORP (mV)											

COMMENTS/OBSERVATIONS _____

AECOM

FIELD DATA LOG FOR GROUNDWATER SAMPLING

Page ____ of ____

Date (mo/day/yr): July-16-2020
Field Personnel: Randy Morgan
Site Name: UTC Delavan
AECOM Job #:
Well ID*: MW-37
____ Upgradient ____ Downgradient ____ Sidegradient ____ Source
Weather Conditions:
Air Temperature: ____ ° F
Total Well Depth (TWD) = 22.50 BGS 1/100 ft
Depth to Ground Water (DGW) = BGS 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV)* = LWC x 0.041 = ____ gal
3 Casing Volumes = ____ gal = Standard Evacuation Volume
Method of Sample Evacuation: peristaltic pump
Method of Sample Collection: peristaltic pump
Total Volume of Water Removed: 1.50 gal

Casing Diameter: 1.0" 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: 12.5 - 22.5 1/100 ft
Dedicated Pump or Bailer: YES ____ NO X Type ____
Steel Guard Pipe Around Casing: YES ____ NO X
Locking Cap: YES ____ NO X
Protective Post/Abutment: YES ____ NO X
Well Integrity Satisfactory: YES X NO ____
Yield: LOW X MODERATE ____ HIGH ____
Comments/Observations
Sample Time: 0757
New install not completed
Inside Bldg.

* - 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	.30	.60	.90	1.20	1.50					
TIME (Military)	0730	0735	0740	0745	0750	0755					
Water Level (ft BTOC)	14.35	15.53	17.00	18.35	19.40	20.80					
pH (S.U.)	7.17	5.83	5.42	5.44	5.48	5.54					
Sp. Cond. (mS/cm)	0.121	0.095	0.086	0.083	0.083	0.087					
Water Temp. (°C)	21.6	21.4	21.4	21.4	21.3	21.2					
Turbidity (NTUs)	14.56	15.21	14.97	9.36	5.87	8.07					
DO - (mg/L)	7.89	5.63	5.22	5.75	5.84	5.68					
Salinity (ppt)	0.05	0.04	0.04	0.04	0.04	0.04					
ORP (mV)	90.3	101.8	106.2	105.5	102.7	92.5					

COMMENTS/OBSERVATIONS

Chain of Custody Forms

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 3

SGS - ORLANDO Quote # SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg 6 Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Marcer Email: leslee.alstrom@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed)
Sampler 1: M. Rockwell Sampler 2: R. Morgan

Project Information

Project Name: UIC Delaware H12SC
Street 4334 Main Hwy
City Bamberg State SC
Project # 60620791
Fax #
Client Purchase Order # 125840 ACM

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	TCL VOCs (8260D)	% Moisture	TCLP VOCs 8260B	TCLP SVOCs 8270D	TCLP Metals					LAB USE ONLY
	DPT-123-7	7.27	1150	MK	SO	4		3	1							X	X								
	DPT-123-12		1200	MK	SO	4		3	1							X	X								
	DPT-123-18		1210	MK	SO	4		3	1							X	X								
	DPT-123-18-MS		1210	MK	SO	4		3	1							X	X								
	DPT-123-18-MSD		1210	MK	SO	4		3	1							X	X								
	DPT-123-20		1220	MK	SO	4		3	1							X	X								
	DPT-GW-123		1240	MK	GW	3		3								X									
	DPT-123-29		1230	MK	SO	4		3	1							X	X								
	DPT-117-9		1400	MK	SO	4		3	1							X	X								
	DPT-117-13		1410	MK	SO	4		3	1							X	X								
	DPT-117-17		1420	MK	SO	4		3	1							X	X								
	DPT-117-23		1430	MK	SO	4		3	1							X	X								

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Approved By: / Date:
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	M. Rockwell AECOM	7/28/20	2	3		4
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # :

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg 6 Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed)
Sampler 1: M Rockwell Sampler 2:

Project Information

Project Name: UTC Delaware HRSC
Street 4334 main Hwy
City Bamberg State SC
Project # 60628179
Fax #
Client Purchase Order # 125840 IACM

Analytical Information

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	TCL VOCs (8260C/D)	% Moisture	LAB USE ONLY
	DPT-117-27	7-27-20	1435	MK	SO	4		3	1							X	X	
	DPT-GW-117	7-27-20	1440	MK	GW	3		3								X		
	DPT-105-9	7-27-20	1700	MK	SO	4		3	1							X	X	
	DPT-105-14	7-27-20	1710	MK	SO	4		3	1							X	X	
	DPT-105-16	7-27-20	1720	MK	SO	4		3	1							X	X	
	DPT 105-23	7-27-20	1730	MK	SO	4		3	1							X	X	
	DPT 105-30	7-27-20	1740	MK	SO	4		3	1							X	X	
	DPT 105-32	7-27-20	1750	MK	SO	4		3	1							X	X	
	DPT-GW-105	7-27-20	1745	MK	GW	3		3								X	X	
	EB-SO-03	7-27-20	1640	MK	W	3		3								X		
	DPT-GW-102	7-27-20	1950	MK	GW	2		2								X		
	DPT-102-28	7-27-20	1940	MK	SO	4		3	1							X	X	

Turnaround Time (Business days)

- 10 Day (Business) — Approved By: / Date: M
- 7 Day
- 5 Day
- 3 Day *RUSH*
- 2 Day *RUSH*
- 1 Day *RUSH*
- Other

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	M Rockwell	7-28-20 1400	2	3		4
5	Relinquished by/Affiliation	Date Time:	6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # :

SGS - ORLANDO Quote #

SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed)
Sampler 1: Mark Rockwell Sampler 2:

Project Information

Project Name: UTC Delavan HIRSC
Street 4334 Main Hwy
City Greenville State SC
Project # 60620179
Fax #
Client Purchase Order # 125840 ACM

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	TCL VOCs (8260D)	% Moisture	TCLP VOCs	TCLP SVOCs	TCLP Metals					LAB USE ONLY
	DPT-102-9	7.27	1900	MK	SO	4		3	1							X	X								
	DPT-102-12	7.27	1905	MK	SO	4		3	1							X	X								
	DPT-102-16	7.27	1915	MK	SO	4		3	1							X	X								
	DPT-102-24	7.27	1930	MK	SO	4		3	1							X	X								
	IDW-01	7.27	2050	MK	SO	4		3	1							X	X	X	X	X					
	IDW-02	7.27	2055	MK	SO	4		3	1							X	X	X	X	X					
	IDW-03	7.27	2100	MK	GW	3		3								X		X	X						
	IDW-04	7.27	2105	MK	GW	3		3								X		X	X						
	IDW-05	7.27	2110	MK	GW	3		3								X		X	X						
	Trip Blank				SO	3																			
	Trip Blank				GW	2																			

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Mark Rockwell	7.28.20 1400	2	3		4
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # :

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Drive Bldg VI Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslie Alexander Email: Leslie.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed)
Sampler 1: Randy Morgan Sampler 2: Mariah Rockwell

Project Information

Project Name: UTC Delavan HRSC
Street 4334 Main Hwy
City Bamberg State SC
Project # 60620179
Fax #
Client Purchase Order # 125840 ACM

Analytical Information

TCL VOCs 8260
% Moisture

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	TCL VOCs 8260	% Moisture	LAB USE ONLY
	Trip Blank - 01 Aqueous	7/15/20			GW	2		2								X		
	Trip Blank - 02 Soil	7/15/20			GW	3	1							2		X		
	MW-19	7/15/20	1622	RM	GW	3		3								X		
	DPT-104-8	7/15/20	1850	RM	SO	4	1	1						2		X	X	
	DPT-104-12	7/15/20	1900	RM	SO	4	1	1						2		X	X	
	DPT-104-18	7/15/20	1910	RM	SO	4	1	1						2		X	X	
	DPT-104-24	7/15/20	1920	RM	SO	4	1	1						2		X	X	
	DPT-104-26	7/15/20	1950	RM	SO	4	1	1						2		X	X	
	DPT-104-34	7/15/20	2010	RM	SO	4	1	1						2		X	X	
	FD-SO-02	7/15/20		RM	SO	4	1	1						2		X	X	
	MW-37	7/16/20	0757	RM	GW	3		3								X		
	DPT-101-10	7/16/20	1325	RM	SO	4	1	1						2		X	X	

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Approved By: / Date:
Rush T/A Data Available VIA Email or Lablink

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- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Randy Morgan AECOM	7/16/20 2000	2 Fed EX	3		4
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation 6	Relinquished By/Affiliation 7	Date Time:	Received By/Affiliation 8

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Chain of Custody

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www.sgs.com

SGS - ORLANDO JOB # : PAGE 2 OF 2

SGS - ORLANDO Quote # SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg VI Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed) Sampler 1: Randy Mayo Sampler 2:

Project Information

Project Name: LTC Delavan HRSC
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 125840ACM

Analytical Information

TCL VOCs 8260
% Moisture
Total Manganese (SOIL)
0.45µ Filtered Manganese

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	TCL VOCs 8260	% Moisture	Total Manganese (SOIL)	0.45µ Filtered Manganese	LAB USE ONLY
	DPT-101-14	7/16/20	1335	RM	SO	4	1	1						2		X	X			
	DPT-101-16	7/16/20	1350	RM	SO	4	1	1						2		X	X			
	DPT-101-24	7/16/20	1485	RM	SO	4	1	1						2		X	X			
	DPT-101-28	7/16/20	1525	RM	SO	4	1	1						2		X	X			
	EB-GW-01	7/16/20	1515	RM	GW	3		3								X				
	FD-GW-01	7/16/20		RM	GW	3		3								X				
	DPT-GW-101	7/16/20	1600	RM	GW	3		3			1					X		X	X	
	DPT-GW-101-MS	7/16/20	1600	RM	GW	3		3								X				
	DPT-GW-101-MSD	7/16/20	1600	RM	GW	3		3								X				
	EB-SO-01	7/16/20	1645	RM	GW	3		3								X				

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Approved By: / Date:

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
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- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Randy Mayo	7/16/20 2000	2 Fed EX	3		4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

49435*

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 098002

RedoxTech, LLC

Client: AECOM	Report to Contact: Alexander	Telephone No. / E-mail: 864-787-6916 lee.lee.alexander@aecom.com	Quote No.
Address: 70 Patewood Dr Bldg VI Suite	Sampler's Signature: X Randy Morgan	Analysis (Attach list if more space is needed)	Page 1 of 1
City: Greenville	State: SC	Zip Code: 29615	Printed Name: Randy Morgan		
Project Name: LTC Delavan					

Project No.	P.O. No.			Matrix			No of Containers by Preservative Type							TOD per Manganate	TOD per Sulfate			Laboratory Lot Number
Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Aqueous	Solid	Non-Aqueous	Unpres.	H2SO4	HNO3	HCl	NaOH	5035 Kit						Remarks / Cooler I.D.
DPT-GW-101	7/16/20	1600	G	X			X							X	X			
DPT-101-19	7/16/20	1355	G	X			X							X	X			

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☐ Disposal by Lab

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by: Randy Morgan	7/16/20	2000	1. Received by: Fed Ex		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by		

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack

Receipt Temp. _____ °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Daily Logbook Entries

83° 7/8/20

0915 Leave Hotel
1000 Arrive on site.
1005 Meet Delaware contact; H/S meeting walk site / all locations for today.
1140 Decide plan of action
① Ask Todd about water / electric source
② weekend schedule? temp ✓?
1150 Offsite for lunch break.
1220 Everyone back on site. Created gameplan; called Leslee to inform her of start @ DPT-124
1330 Begin DPT @ DPT-124
1350 Sample DPT-124-8.0
1355 Sample DPT-124-15
1410 Sample DPT-124-18.0
1420 Sample DPT-124-20.5
1430 Sample DPT-124-30
1440 Sample DPT-124-34.
1500 Sample DPT-GW-124
1530 ~~Sample~~ Chuck offsite. decon / clean up
1615 Check out / off site.
1700 Arrive @ Hotel

Bill 7/8/20

78°F 7/9/20

0720 Leave hotel
0800 Arrive on site.
0900 Complete H/S meeting, checked into facility.
0910 Mob to MiP-100 (near MW-4)
- Clearing path for MiP to fit using 7822 DT Rig to clear path
- Setting boring off 20ft from electric pole
1030 Begin Hand Auger 5' bgs then set up MiP to start @ 5' bgs
* Friday-Sunday 7-3:30pm
Monday — 8-5pm
1100 Talked to Leslee; discussed sample shipping & target goals
1120 Water level @ MW-4 10.34 from TOC
1130 Chuck talked to Todd/Melinda about FedEx
1135 @ 22.05' bgs MiP-100-BG
1224 Total Depth 37.85' bgs (used 7822 DT Rig) @ MiP-100-BG
1231 Decon rods; then moving to PCE-UST area
1310 Setting up @ MiP-124
1400 Set cooler w/samples in loading dock to be picked up via FedEx

UTC Delaware HRSC

7/9/20 85°F

1500 checking dolly rig to be sure works / has everything
Jermaine - 2nd Shift Supervisor
↳ check out w/ Jermaine at EOD
1510 Checked new rig / staged overnight
1515 continue MiP-124 boring
1524 terminate boring @ 34.90'
1525 Begin decon MiP equipment and break down for today
1645 Scott Pieper off site for day.
1700 Continue testing new geoprobe test went well
1710 Everyone offsite. Badges turned in.
1750 Arrive @ hotel

7/9/20

UTC Delaware HRSC

7/10/20 73°F

0600 Leave hotel.
0630 Arrive on site H/S meeting
0700 Sunbelt dropped off exhaust hoses.
0730 Begin set up @ MiP-120
0830 Begin drilling through concrete floor w/ ~~Hammer~~ concrete core drill.
* taking a while for drill to push through
1000 still using ~~Hammer~~ concrete core drill @ MiP-120 ↳ driller is afraid to push machine - having a lot of resistance
1015 Saedacco making calls to figure out if they need larger drill or may need to try different method of getting through concrete
1038 Broke through concrete w/ core drill
- Begin Prepping Geoprobe GH42 - *Air Monitoring Began
1130 Jordan will begin coring @ MiP-126, while Scott Hunt begins drilling MiP-120 w/ GH42
1152 setting up MiP @ MiP-120
1220 lost power to core drill - need to reset breaker

WTC Delaware HRSC

7/10/20

1230 Continue air monitoring every ½ hour w/ continuous readings (record every 0.5 hr)
1240 Concrete core broke through @ MiP-126
1325 Continue MiP @ MiP-120 once reading is complete, move MiP equipment to MiP-126
1335 Jordan Setup concrete core @ MiP-114
1340 Jonathan M. (facility manager) will be back @ 6am tomorrow and is off site for today.
1430 Reached 28' bgs @ MiP-126
1438 2nd Breaker blown using concrete core drill - stuck in MiP-114
1440 - Begin decon of MiP rods - Jordan continues w/ augering MiP-126
1500 MiP-114 is bored to bottom of concrete / begin set up for MiP-126
1540 GH42 in place @ MiP-126
1610 Starting up rig @ MiP-126
1630 Mariah off site.
C. Suddeth continues oversight, Continue pushing with multi-gas meter

7/10/20

1850 MIP refusal at 34 ft
Remove rods
1914 Rods out of ground. Secure rig, MIP equipment in this area with cones and caution tape.
1945 Depart site

Chuck Suddeth
Mariah Pickell 7/10/20

7/11/20 70°

0600 Leave hotel.

0630 Arrive on site. H&S meeting. check into facility w/ Jonathan M. Can only work til 3:30pm today and tomorrow.

0700 Begin prepping equipment to drill M.P-114

0720 - Jordan uses core drill to remove concrete core from M.P-114

- Scott P. sets up / calibrates M.P stuff

- Scott H. sets up ICE / drilling

- Mariah R. Calibrated 4-gas meter

0735 Jordan moves to M.P-113 w/ core drill to prep for boring.

- Scott P / Scott H still setting up equipment for M.P-114

0810 Chuck arrived on site.

* continuous air monitoring started @ 0805 when ICE powered on

0830 Begin drilling M.P-114

0920 - Jordan still using core drill @ M.P-113

- Scott P / Scott H cont. M.P-114

0929 M.P-113 broke through concrete; Jordan moves core drill to M.P-112

7/11/20

1030 Jordan broke through concrete @ M.P-112

1110 Hit refusal @ 29' bgs @ M.P-114 - End of boring -

1115 Decon M.P rods; move Geoprobe GH42 over to M.P-113; set up core drill @ M.P-110

1135 - Chuck off site for lunch break - continuous air monitoring -

- moved ICE to loading dock w/ bay door open for vent/exhaust

1150 - Jordan Foust will be gone tomorrow (7/12/20) which will make Scott Hunt the only driller

- called Leslee; discussed plan for today & tomorrow; MW-37 will wait til Monday; cont. today with M.P-113 & M.P-110 cored to start DPT / M.P tomorrow

1230 Set up GH42 @ M.P-113 while Jordan cores M.P/DPT-110 to be ready tomorrow to bore

1250 Exhaust on ICE melted where connected; replaced exhaust hose. Continue air monitoring.

UTC Delaware HRSC

7/11/20 85°

0800 Begin MiP @ MiP-113
1319 completed concrete core @ MiP-110 w/core drill
326 – Jordan moves over 2.5' from MiP-110 to core DPT-110
– Chuck noticed rising CO levels (9-10) within breathing zone – ICE exhaust keeps overheating, tightened hose around exhaust and freed any kinks in hose line
1350 Periodicly the tooling gets overheated from pushing the rods harder (more resistant ground layer) so have to stop every so often to cool down
1415 Jordan still working on DPT-110 concrete core; Scott H/Scott P continue MiP work @ MiP-113
* Since we have to be off site by 3:30 we will start decon early *
1430 Jordan broke through concrete @ DPT-110; begins clean up
1510 Refusal @ 36.40' bgs @ MiP-113; begin clean up for EOD
1540 Everyone off site.

7/11/20

UTC Delaware HRSC

7/12/20 82°

0550 Arrive on site
0600 Jonathan of UTC Delaware arrives, Obtain badges. Jonathan informs that he needs to leave @ 1400 today but he will try to get T. McLeod to stay with us until 1530.
0610 Conduct safety meeting and prep for MiP work. Calibrate meters.
0630 Scott Hunt mixes concrete to abandon the open borings and level off @ flow surface
0635 Scott Pieper sets up MiP equipment and decons rods from yesterday while Software warms up.
0700 Mariah on site, wasn't feeling well this morning.
0730 ICE turned out to move rig to next MiP/DPT location
Began air monitoring
0800 Setting up GH42 @ MiP-110
0809 Begin boring @ MiP-110
0830 Continue air monitoring
0900 Mariah takes inventory of sample bottles and writes sample plan.
0910 Scott Hunt moves other Geoprobe near loading dock bay door to setup for MW-37 boring tomorrow (potentially)

0940 Talked w/ Jonathan re: no one can stay on site past 2pm today - need to start breaking down by 13:30 today
1010 Continue air monitoring - ICE
* Chuck helped complete filling in MiP-113 w/ concrete while Scott H & Scott P cont. w/ MiP-110
1025 Refusal @ 38.6' bgs @ MiP-110
* going to MiP-112 next instead of doing DPT-110 today - w/ hard stop time of 1400, doing DPT work would need to send Scott P. home *
1035 Mariah cleaned up work room from Friday - pick up trash, steel plates, cones, put facility equipment back to original position(s) (had to move some tables/trash cans for clearance)
1049 Will start w/ DPT-110 first thing tomorrow - Scott Pieper can have delayed start time
1134 Boring began @ MiP-112 cont. air monitoring
1156 Scott finishes pouring concrete in terminated boring MiP-113

1236 MiP-112 currently @ 32' bgs Still going - NOT @ refusal yet
* Scott P / Scott H worked together to change hammer speed - now we're moving 4x faster than before
1302 Hit refusal @ MiP-112 @ 37.15'
1415 Everyone off site.

7/12/20
MiP-112

UTC Delavan HRSC

7/13/20 80°

0615 Leave hotel.

0645 Arrive onsite. Check into H/S meeting and facility

0910 Worked directly working on DPT-110 area - too many H/S Hazards - will wait to do this location during 2nd shift w/less workers (around 4:30-5pm)

0730 Talked w/TODD from facility - he's okay w/us doing DPT-110 later and moving to MiP-109 / MW-37

0800 Drillers prep/mob rig; while Scott Pieper decons / warm up his MiP equipment

0850 Talked w/ drillers - same concern about overhead w/rig will move exact bore location some to accomodate

0920 moved rig inside - fixed exhaust hose/ok overhead

1013 Start concrete core drill @MiP-109 continue air monitoring

1130 End concrete coring, start auger 1st 5'

1149 Begin MiP-109

1154 Jordan uses core drill to make location for MW-37, once MiP-109 is complete

UTC Delavan

7/13/20

1315 Refusal @ MiP-109 41.95' bgs

1350 - Decon rods → set screen @ MW-37 from 12-22' bgs based on MiP results

- Bottom of MW-37 will target @ 22' bgs

1435 continue decon / setup for installation of MW-37

1440 add hole plug to abandone MiP-109; finish w/ cement

1500 Begin DPT @ MW-37

1518 Exhaust hose melted; powered off rig and drillers will need to fix. Get more metal tape from facility. Also looking at materials the facity has to help.

1553 Exhaust duct repaired. Continue pushing 3.75" rods for well installation

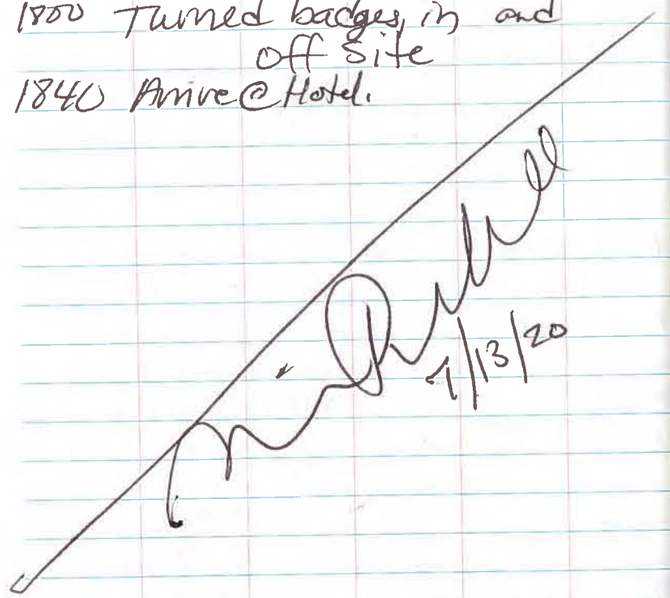
1612 Reached 22' bgs - placed PVC in temp. casing - overdrilled by ~3" - backfilled w/ sand

1620 → Screen = 22 - 12' bgs
Sand = 22.25 - 10' bgs
Bentonite = 10 - 7.97'
Cement Grout = 7.97' -

1650 wait 1hr for bentonite to set

7/13/20 utc Delavan

1520 chuck off site.
1521 Continue cleaning up for end of day.
1535 Leaving equipment near MW-37 → will complete concrete tomorrow.
1730 Scott Pieper off site.
Drill rig staged for overnight.
1750 Drillers off site.
1800 Turned badges in and off site
1840 Arrive @ Hotel.



7/14/20

0615 Leave Hotel.
0645 Arrive on site
0700 Check into facility. H/S meeting
0715 Mob to MiP-106/MiP-107
0740 Scott H. mixes concrete grout to complete MW-37 and terminate MiP-109; while Jordan gets concrete core drill set up @ 106/107; Scott Pieper moves equipment to 106/107
0800 * make note - using 6" bit getting dull - needs to be sharpened
0805 Manager in facility asked we let him know when we get to MiP-101 → 104 b/c he will be sure to shut down by 2pm so we can have no workers - also asked to keep bay door closed enough to only allow vents/exhaust hose
0840 Tripped breaker while using core drill & shop vac; Scott H. sharpens/files 6" bit to expose diamond cutters
0907 Broke through concrete Began hand auger 0-5' bgs
0910 Start driving rig over

7/14/20 82° UTC Delavan HRSC

0940 Rig is in place @ MiP-106
0945 Secured area - no thru traffic or workers
0948 Begin pushing w/ MiP-106
↳ air monitoring started
0953 Jordan uses core drill to start cutting through @ MiP-107 which will be the next location
1020 Jordan got through concrete @ MiP-107 → move him to next location (MiP-111) after rig is moved & set for MiP-107
↳ trying to keep Jordan 1 hole ahead of rig so we don't have to wait for core drill
1040 MiP-106 currently @ 30' bgs still going → cont. air monitoring
1059 Refusal 37.25' bgs @ MiP-106
↳ begin decon MIP rods; reset for MiP-107
1127 Put hole plug in MiP-106 to abandon boring
1145 Drillers off site for lunch
Mariah off site for lunch.
1205 Mariah back on site.
1210 Drillers back on site.

7/14/20 UTC Delavan HRSC 90°

1213 Mariah walked MiP-111, currently no workers inside that room
1227 Jordan sets up core drill @ MiP-111 while Scott H | Scott P begin pushing MiP-107
1307 MiP-107 currently @ 28' bgs continue pushing until refusal
1312 Refusal @ 30.35' bgs @ MiP-107
1319 Jordan broke through concrete flooring / foundation @ MiP-111
1320 Begin decon MiP equipment, going to stage rig outside, then move to MiP-111 w/ dolly Rig (GH42)
1340 moved dolly rig to MiP-111
Todd from the facility said we can't really start until 4pm -
Scott H. mixes & pours concrete @ 109/106/107
in the meantime - Jordan augers MiP-111, then will move to coring MiP-103
1440 Jordan ~~Set~~ (MK) coring @ MiP-103
Scott P. sets up MiP equipment
1500 Talked w/ Scott P & Scott H. about schedule: work outside first part of day, then move inside

UTC Delaware

7/14/20 92°

after 2pm each day to get remaining locations inside facility

1550 Going to finish MIP-111 today, then decon and stage equipment to start @ MIP-117 tomorrow AM

1620 Continue prepping GH42 to begin pushing

1627 Begin pushing MIP-111

1727 End borng @ 28.35' bgs @ MIP-111

1730 Begin decon of mip equipment; stage rig overnight outside

1750 Scott Pieper said his membrane on the rig burned out on the way up - he'll have to replace tomorrow

1830 Off site

UTC Delaware

88°

7/15/20

0615 Leave hotel

0715 Arrive on site - someone stole muffler off my rental truck - drive very slowly

- H/S meeting - Randy on site - he starts w/ well development

0735 Geoprobe 54DT 9415 set up @ MIP-103

0740 Jordan sets up core drill @ 102

0742 Facility manager said we can work inside spindle room (MIP-101-108) for entire day - they're moving rack for MIP-104

0800 Mariah (me) may need to step away to complete police report for stolen muffler

0824 Jordan begins core drill @ 102

0828 Rig set up @ MIP-103 ready to start pushing → Randy is developing MW-37 (next day, waiting to recover)

0840 Potentially doing DPT-106 instead of DPT-108; also may do 115/116 in Southern Degreaser; meaning ~2 days inside w/ small rig, ~1 day w/ skilly rig (115/116) + 117 outside

0845 Jordan got through concrete

UTC Delaware HRSC

7/15/20

@ MiP-102
0911 Start pushing MiP-103
0930 stopped at MIP-103 change rigs
1000 continue pushing MIP-103
1005 shut down due to CO = 65.0 around rig + generator
1018 Start GH42 rig (dolly rig) @ MiP-103
* Jordan cut through concrete @ MiP-104 (0940-1005)
* 0915 Mariah had to step outside to complete police report for truck
1058 Jordan starts DPT-104 boring w/ core drill to break through concrete
* Randy went to label IDW drums and complete IDW management forms
* Cont. air monitoring
1110 Jordan noticed harder layer beneath concrete @ both holes @ MiP-104 — can't hand auger. Need to move 104 location but have to wait for Leslee's call
1200 MiP-102 near utility line okay to drill-hand augers

UTC Delaware HRSC

7/15/20

1220 Drillers off site for lunch.
1228 Randy said MW-19 went dry - want to recharge
* Mariah has been taking pictures / making calls to Leslee & Scott Pieper about 101/102/104 locations and associated problems
1230 101 can be 2-3' off utility line; 102 okay; 104 still waiting
* Between 1110-1140 Refusal @ 35.85' @ MiP-103
1310 Drillers back on site.
1310 Jordan attempts to cut through second layer w/ core drill @ existing holes @ MiP-104
1320 Begin pushing @ MiP-102 7.65'
1340 Refusal @ 7' bgs @ MiP-102
Jordan took core bit all the way to floor surface, still not all the way through; trying East-104 hole again w/ core drill
1350 Begin decon / taking rods out @ MiP-102; Randy helps Jordan cont. coring @ MiP-104 locations

7/15/20 UTC Delavan HRSC

1410 Jordan starts 3rd location for MiP-104 as Scott H. fills already open holes 1, 3, 2 and fills 102
1420 Jordan out through 3rd hole @ 104, starting 4th (1 & 2 filled)
1430 Existing open holes have been filled & leveled @ surface (open holes were @ MiP-102, 1 & 3 2 @ 104, and MiP-111) holes
1435 Randy hand augered DPT/MiP-104
1457 Jordan starts coring @ DPT/MiP-101
1506 Begin pushing MiP-104
1513 Jordan got DPT-101 cored, 1.5' starting MiP-101 core w/ core drill
2 cont. pushing @ MiP-104 / Randy helps Jordan so / cleanup while coring
1545 MiP-104 hit refusal @ 7' bgs (5442) took dolly rig out & tried 7822DT but Mast is too tall, hits overhead
1600 Switch holes @ 104, move MiP to other drilled location then Put DPT in the original
1603 will start soil samples @ 7' bgs for DPT-104

7/15/20 UTC Delavan HRSC 90°

1530 Randy samples starts Purging @ MW-19
1620 Using 7822DT @ MiP-104, setting up exhaust hose fan
1628 ① Randy completed Sampling @ MW-19
② turned fan off to prevent overhead @ MiP-104
③ Reset MiP rods to same depth (~8' bgs) will lose 5-8, but still sample 8-10' bgs when doing DPT-104
1648 Started pushing MiP-104 (again at 2nd hole)
1726 will need to move DPT-104 again, can't use small rig b/c not powerful enough, can't use larger rig b/c too tall; only other option is to re-drill a new location East, but that puts DPT-104 in line w/ 106 & 107
1740 Mariah called Leslee; try medium rig (54DT) for DPT-104 @ current location; Scott Hunt ont very confident it will push through
1810 Refusal @ MiP-104 @ 35.25'

UTC Delaware HRSC 7/15/20

1830 Moved 7822DT Rig out, brought 54DT in to DPT-104
1840 Start pushing DPT-104
1850 DPT-104-8 sampled
1900 DPT-104-12 sampled
1910 DPT-104-18 sampled
1920 DPT-104-24 sampled/ FD-SO-02 sampled
1950 DPT-104-26 sampled
2010 DPT-104-34 sampled
2030 – Begin breaking down, save decon for tomorrow and save ceres to do lith
2100 Everyone off site

Jen Pollard 7/15/20

UTC Delaware

7/16/20 81°

0630 Leave hotel.
0700 Arrive onsite. H/S meeting, MOB to MiP-101 location
0720 Randy sets up @ MW-37 to try to sample (ran dry yesterday)
0721 @ Scott Hunt uses hole plug to abandon DPT-104
@ Scott Pieper starts prepping his MIP equipment & setting up @ MiP-101
0840 Scott Hunt having trouble w/ ICE possibly spark-plugs are burned out
0841 Jordan completed coring @ DPT-102; Randy is filling out COC's for soil/GW samples from yesterday & today (MW-37/DPT-104)
FedEx comes b/w 2-4pm
0906 Start pushing MiP-101 w/GH42 rig
0930 Chuck arrived on site. MR off/on site.
1020 Refusal at 30'1 at MIP-101
Remove rods
1045 Prep for DPT-101. Plan to use the DT-54 track rig.
Highest XSD @ 19 ft ≥ 220,000
1142 Set up DT-54 rig at DPT-101
1155 Begin pushing DPT-101

7/16/20

1205 While retrieving the 8'-12' macro-core, the core barrel broke off of the rods a fell into the borehole.
Scott says he has more tooling, will need to core another hole.

1215 Begin coring 2nd location for DPT-101

1244 End coring concrete. Begin hand-augering 5 ft.

1254 End hand-augering. Begin drilling DPT-101

1500 End drilling DPT-101 at 32 ft. Limestone in shoe.
Collect equipment blank for GW by pouring DI water through a clean direct push screen. Push screen sampler to 33 ft and pull back to expose screen interval of 29'-33'

1530 Begin GW sampling.
Have conversation with L. Alexander about QA/QC samples. There is some confusion about whether some QA/QC samples for ether are analyzed for more than VOCs. L. Alexander says just follow the WP which says Dups + MS/MSD are for just VOCs.

1600 End GW sampling.

1600 Set up to drill DPT-102. Then drillers inform that we probably should not attempt DPT-102. I agree with them.

1700 Discuss with L. Alexander. Plan to work next week something like 10-10 to allow remaining inside work to be completed after 4:00 PM.
Drillers clean up and store their equipment in designated areas
R. Morgan preps samples for shipment

1745 Drillers depart site.
R. Morgan preps 2 sample coolers for shipment

1830 R. Morgan departs site for Columbia Airport to deliver sample coolers to FedEx.

1845 C. Suddeth depart site

utc Delavan

7/20/20 92°

0730 Leave office in Greenville.
1015 Arrive at Facility in Bamberg, SC
H/S meeting w/ Randy & Scott
1100 Jordan / Scott Hunt arrive on site, Check into facility.
1120 Begin to setup @ MiP/DPT-117
1142 Jordan starts coring MiP/DPT/117
* Plan for today is to complete MiP/DPT-117 in secondary PPE containment, then move to 115/116
* Scott Hunt stated he's been on the clock since 7:30am today and doesn't feel comfortable w/ending @ 10pm
1210 Jordan exits through canopy @ MiP-117
1217 Jordan starts coring DPT-117
1730 Scott H. asks for fork lift to move GH/C Rig into containment
Todd is gone, trying to find operator to help move rig
1310 Got rig safely inside containment area Tommy (verification) moved rig w/ fork lift
1327 Hoses are too hot & ICE B

utc Delavan 7/20/20

overheating - not safe to operate. Move to MiP/DPT-129 location.
1330 Jordan hand augered 0-5' bgs @ MiP-129 location
1350 Begin pushing @ MiP-129
1424 MiP probe is possibly dropped down hole (MiP-129) - Scott Pieper & Drillers attempt to retrieve probe - lost @ 17' bgs
1440 using augers (4" x 5') to retrieve rod
1510 Continue using augers to retrieve MiP probe.
1515 Marian off site to get ice & drinks
1520 Rain starts - shut down til rain slows down
1550 Got MiP probe out of ground, start ~~entry~~ moving to wickman NOM (DPT-102 & 107) Abandon MiP 129 hole
1600 Lightening ~~Starts~~ again
1715 Manah made decision to move core drill inside and wait for storms to move over; then when storms are gone move rigs
* @ 1600 Scott Pieper works on fixing MiP probe - had to cut cable in order to pull out of ground

UTC Delaware #RSC

7/20/20

1717 Scott/Jordan begin coring MiP-115/116 locations - Storm @ 5.3 miles away
1743 MiP-116 cored, move to MiP115
1805 Decision made to clean up equipment, bucket soils ~~and~~ from MiP-129 (~~final depth~~ attenuation) Stage equipment so ready to start tomorrow.
1835 MiP-115 cored (0.5'bgs); Soil from MiP-129 drummed as soil IDW and other soil from 115/116
1845 ScottPieper has fixed MiP cable issues, should be ready to go
1846 Outside/inside equipment staged and covered for overnight.
1850 ScottPieper fixing MiP equipment.
1925 Everyone off site

7/20/20

UTC Delaware #RSC

7/21/20

0845 Mariah leave hotel; Drillers Roudy, and ScottPieper arrive on site to prep equipment.
0930 Arrive on site. H/S Meeting, start w/ MiP/DPT-117, waiting on ScottPieper for MiP equipment to be ready, dolly rig is set up & ready
1025 Spoke w/ ScottPieper, says his instrument isn't stabilizing quickly.
1027 Drillers position GH42 rig @ 117
1037 PID calibrated, no more calibration sheets, will have to record
1058 Begin drilling DPT-117
1126 Driller says soil core is getting stuck inside barrel - not sure how to fix - will use sample 8-12'bgs
1230 Drillers discover sump pumps missing - have to wait to decon dirty core barrel; will do MiP-117 w/ dolly rig then move DPT-117 outside w/ell using 7822DT rig, then move to PPT-107 w/ 7822DT, and PPT-110 using dolly rig and 2' rams
1235 Begin pushing MiP-117

7/21/20 98 [illegible]

1340 Refusal @ MiP-117 @ 26.25' bgs
1342 Begin decon, breakdown, then move to DPT-129 to complete sampling (+Heat index @ 101°F)
1350 Drillers take lunch break while Scott Pieper resets his equipment
1500 Setting up @ DPT-129, hand auger 0-5' bgs
1511 Scott Pieper loans site his gas pump for drillers
1520 DPT-129-7 sampled
1525 DPT-129-14 sampled
1535 DPT-129-16 sampled
+ FD-50-03 sampled
1545 DPT-129-23 sampled
1600 DPT-129-26 sampled
1610 DPT-129-32 Sampled
1540 DPT-GW-129 Sampled
1610 Begin pulling rods, decon, reset for next location DPT-107
1635 Scott Pieper back on site, all getting setup for DPT-107
1645 Jordan / Scott Hunt set up decon pad to clean core barrel; Pieper helps; ~~Jordan~~ (me)

7/21/20

1715 Jordan starts to core DPT-107
1735 Core cut @ DPT-107
1800 Scott Hunt has concern he's too tired to work to 10pm - so this will be last hole today.
1820 Begin pushing DPT-107
1850 DPT-107-7 (5')
1855 DPT-107-13 (10')
1910 DPT-107-17 (MS/MSD)
1920 DPT-107-23 (20-25')
1955 DPT-107-27 (25-30')
* PID has been reading 0.0 for every reading, calibrated, tested, passed tests
2020 ~~DPT-GW-107~~ (gw sample VOCs)
1930 Core barrel has sal sleeve stuck water created vacuum around sleeve
2007 final core pulled (30-34')
end of boring @ 34' bgs DPT-107
water sample screened @ 30-34' bgs
2015 DPT-107-34 sampled
2020 GW sampled, begin decon and clean up; Randy takes samples to Fedex tomorrow
2055 Everyone off site

7/21/20

WC Delaware #1&2

7/22/20 76°

0815 Leave hotel | Drillers & Scott P. arrive on site to prep equipment.
0845 Mariah arrives on site. H&S meeting, start @ MiP-125
* Need to find Todd to discuss possible weekend work & moving dolly rig w/ fork lift
0937 Begin pushing MiP-125
* plan is to stay outside on MiP's then take 1 hour break around 2/2:30pm then move inside @ MiP-115/116
1034 Refusal 35.20' bgs @ MiP-125
1035 Begin pulling MiP rods/decon, then move to MiP-129 (2nd attempt)
1100 Setup rig @ MiP-129
1120 SAE DACCO guy dropped off drums and new core barrels
1130 Got Tommy from facility to help assist moving dolly rig w/ lift
1135 Begin pushing MiP-129
1227 Jordan starting hand auger @ 118
1238 Refusal @ MiP-129 35.70' bgs
1240 Begin decon MIP rods, move to 118
1257 Setup @ MiP-118
* Scott Pieper's MiP is takeing

WC Delaware #1&2

Heat Index: 96°F 7/22/20

long time to calibrate - Mariah
Off site to get ice - Drillers take 2 hour break
1350 Begin pushing MiP-118
* 2nd shift on Friday - Saturday off
1430 MiP equipment runs calibration tests
1449 Begin pushing again MiP-118
1503 Refusal 34.25' bgs @ MiP-118
↳ begin decon MIP equipment
↳ drillers take break after decon, then reset @ MiP-115/116
1515 Scott Pieper found hole in probe - will need 2 hrs to fix
↳ Drillers start 1 hr break
↳ Mariah dumps soil IDWs
1630 ① Drillers complete concrete surfaces @ 101/107/MW-37 (still needs the well cover)
② Set up dolly rig @ MiP-115
③ Scott Pieper still working on MiP equipment - replace probe
1700 dolly rig setup @ MiP-115 just need MiP ready
1708 Begin pushing MiP-115 / air monitoring
1830 Refusal @ 38.15' bgs @ MiP-115
1920 Begin pushing MiP-116

7/22/20 86°

1920 Continue air monitoring.
2054 Refusal @ 35.9' bgs MiP-116
2055 Begin decon. Stage equipment for over night
2150 Everyone off site
2230 Arrive at hotel.

7/23/20 84°F

0815 Leave hotel / Drillers arrive on site to do prep work.
0850 Arrive on site. Check into facility, H&S meeting, setup @ MiP-122
0905 Cleared 0-5' bgs
0919 Begin pushing MiP-122
1056 Refusal 41.95' bgs MiP-122
1057 Begin decon & reset for MiP-123
* Jordan abandones MiP-122 w/ bentonite
1115 Begin pushing MiP-123
1230 Mariah off site to get lunch for crew, ice for coolers, and drinks to hydrate
1256 Hit refusal @ 36.40' bgs MiP-123
1325 Pushing MiP-119
1405 Hit refusal @ MiP-119 26.90' bgs
1406 Begin decon, reset for next mip
1420 Setup @ MiP-121 - Drillers taken to break
Begin pushing MiP-121
1530 Randy arrived on site.
1540 Scott Hunt wants to go for another MiP location today - I said we should focus on the ones I've set for us today - he wants to argue.

7/23/20

1555 Begin pushing MiP-121
* Randy will hand auger DPT-110 ; dollying too slow and not strong enough to drive macro-core to desired depth
*Jordan will core DPT-115 & MiP-105 location
1610 Randy hand augers DPT-110, Scott H/ Scott Pieper continue @ MiP-121, Jordan cores DPT-115
1717 MiP-121 Refusal @ 33.90' bgs
1718 Begin decon & reset for MiP-127
* Jordan helps Randy hand auger DPT-110
1730 Sample DPT-110-10
Sample DPT-110-10-MS
Sample DPT-110-10-MSD
1738 ~~Pushing MiP~~ (MP) Lightening Shut down. Move inside-wait
1750 DPT-110-15 Sampled
FD-50-01 Sampled
1812 All clear - Randy & Jordan get ready for GW Sample @ DPT-110

7/23/20

1830 Pushing MiP-127
-Sample DPT-110-18
1835 PPT-GW-110 sampled
1850 -Hand augering DPT-115 Randy/Jordan auger while Mariah samples
-Scott P/Scott H cont. MiP-127
1920 Refusal @ MiP-127 @ 34.85' bgs
1950 DPT-115-09 sampled
2010 ① Randy continues hand augering DPT-115; Drillers mix concrete to patch open borings; Scott Pieper decons/breaks down MiP equipment for tonight
② once DPT-115 is complete, all team members move to DPT-102 in wickman room
2010 DPT-115-14 sampled
2030 DPT-GW-115 sampled
2040 DPT-115-16 Sampled
2050 EB-50-02 taken off screen
2052 DPT-115 refusal @ 17' bgs
2100 Set up @ DPT-102
2150 Everyone offsite.

DPT-110 Refusal @ 19'

150

7/24/20

85°

0800 Leave hotel, Drillers / Scott Proper
arrive on site; patch open holes,
clean equipment
0835 Arrive on site. H/S Meeting
0935 Begin Pushing MiP-128
* Jordan continues house
cleaning and gathering their
supplies from inside the facility
1949 Scott Proper has issue w/ probe
1030 Scott Hurst does well pad
completion on MW-37
and fills DPT-102 core (new core man)
1100 Scott Proper is ready to push
1104 Pushing MiP-128
1206 Refusal @ MiP-128 36.05' bgs
1207 Begin decon - Reset MiP
1254 Begin pushing MiP-130
1310 Thunderstorm delay, stand down
1408 all clear - begin pushing MiP-130
* Jordan was able to get
dolly rig / ICE ready for Fedex to pick up
1508 MiP-130 Refusal @ 35.95'
* MiP probe needs repair
1510 Decon / reset for MiP-105
1536 mob to MiP-105

7/24/20 159

1145 Begin pushing MiP-105
* Hand augered 0-5' bgs
1621 Stand down for T-storm
w/in 10 miles
1712 Leslee / Conan said to
change MiP-105 to DPT on
Monday - T-storms are not
going away
1728 Evacuate off site
2000 Arrive @ office.

Mark Pollard

140
07/08/20

0745 C. Suddeth depart Lexington

0915 Arrive at UTC Delavan

UTC Delavan HRSC

(41)

7/27/20

0730 Leave Greenville Office.

1000 Arrive on site. Check into facility.

1100 H/S meeting w/drillers.

* Only 4 DPT locations remain:
- DPT-123 (Asphalt)
- DPT-117 (PCE WST)
- DPT-102 (Workman Room)
- DPT-105 (110 111 BS)

1110 Begin hand augering 0-5' bgs @ DPT-123

1130 Begin pushing DPT-123

1240 End Boring DPT-123 @ 29' bgs

1150 DPT-123-7 (5-10)

1200 DPT-123-12 (10-15)

1210 DPT-123-18 MS/MSD (15-20)

1220 DPT-123-20 (20-25)

1230 DPT-123-29 (25-30)

1240 DPT-GW-123

1242 Begin decon; fill hole w/ bent grout

1246 Drillers off site for lunch.

1300 Mariah gets ice/water

1315 Everyone back on site.

1340 Begin pushing DPT-117

1440 End Boring @ 30' bgs DPT-117

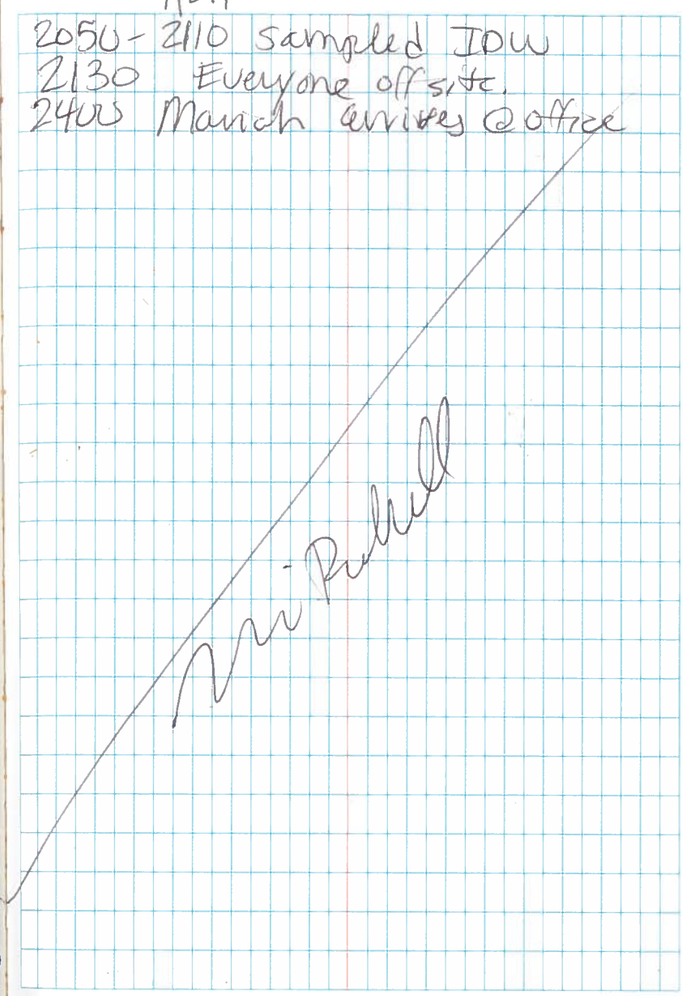
clean, decon, reset to DPT-105

7/27/20 UIC Delaware HKX

1500 Lightning alert - stand down; Drillers clean up inside facility (gather tools; equipment, clean work areas)
*see log DPT-117 for sample times
1640 EB-SO-03 off acetate sleeve before DPT-105 is started
1650 Begin pushing DPT-105
1700 DPT-105-9 sampled
1710 DPT-105-14 sampled
1720 DPT-105-16
1730 DPT-105-23
1740 DPT-105-30
1745 DPT-GW-105
1750 DPT-105-32 sampled
1752 Refusal @ 32' bgs
Begin decon / reset @ DPT-102
1842 Begin pushing DPT-102
1900 DPT-102-9 Sampled
1905 DPT-102-12
1915 DPT-102-16
1930 DPT-102-24
1940 DPT-102-28 - Refusal @ 28' bgs
1950 DPT-GW-102 sampled 24-28' Extra
2030 Decon / clean up / packup

7/27/20

2050 - 2110 Sampled IDW
2130 Everyone off site.
2400 Manch arrives @ office



Attachment B

High Resolution Site Characterization Report – Columbia Analytical Technologies

Prepared for:

AECOM
10 Patewood Drive
Greenville, SC 29615

High-Resolution Conceptual Site Model Assessment
UTC Delavan Spray Technologies
4334 Main Highway, Bamberg, SC

CT Project Number 3706-2018-01

Submitted by:

COLUMBIA Technologies, LLC

Rockville, MD

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Figure 8 – XSD and HPT Results

Figure 9 – XSD vs. Monitoring Well PCE

Figure 10 – Cross-sectional Composite

Appendices

APPENDIX A - Direct Sensing Equipment Description

APPENDIX B – Quality Control Procedures

APPENDIX C – Data Logs for Membrane Interface Probe/EC with Hydraulic Profiling Tool (MiHpt) – Individual Scale

APPENDIX D – Data Logs for Membrane Interface Probe/EC with Hydraulic Profiling Tool (MiHpt) - Collective Scale

APPENDIX E – MIP Performance Test Results

Conversion Factors

Inch/Ounce/Pound/PSI to International System of Units

Multiply	By	To obtain
Length		
Inch (in.)	2.54	Centimeter (cm)
Inch (in.)	25.4	Millimeter (mm)
Foot (ft.)	0.3048	Meter (m)
Volume		
Ounce (oz.)	29.6	Milliliters (ml)
Gallon (gal)	3.8	Liters (L)
Pressure		
Pounds per Square Inch (psi)	6.89	Kilopascals (kPa)
Hydraulic Conductivity		
Feet per day (ft/day)	0.0003527	Centimeters per second (cm/sec)

Temperature in degrees Celsius (°C) is converted to degrees Fahrenheit (°F) as

$$(°F) = (1.8 \times (°C)) + 32$$

Datum

Horizontal and vertical coordinates are referenced from the World Geodetic System 1984 [EPSG:4326].

Supplemental Information

Electrical conductivity (EC) is provided in millisiemens per meter (mS/meter).

Concentrations of chemical constituents in water are provided in either milligrams per liter (mg/L) or micrograms per liter (µg/L).

Concentrations of chemical constituents in soil are provided in either milligrams per kilogram (mg/kg) or micrograms per kilogram (µg/kg).

Concentrations of chemical constituents in vapor are provided in either milligrams per cubic meter (mg/m^3) or micrograms per cubic meter ($\mu g/m^3$).

High-Resolution Site Assessment, UTC Delavan Spray Technologies Bamberg, SC July 2020

Summary

COLUMBIA Technologies, **LLC**, (**COLUMBIA**) in collaboration with **AECOM Technical Services, Inc. (AECOM)** conducted a High-Resolution Site Characterization (HRSC) of the UTC Delavan Spray Technologies facility located at 4334 Main Highway in Bamberg, South Carolina (the Site), during the period of July 9 through 24, 2020. The facility manufactures and distributes spray nozzles for oil heating, industrial and aerospace applications. Site overview maps with historic groundwater monitoring well locations are presented in **Figures 3** and **4** following this report.

The objectives of this HRSC investigation were to support **AECOM's** continued investigation and remediation planning in four residual source areas of the Site by:

1. Identifying the subsurface locations where the highest concentrations of residual chlorinated volatile organic compounds (cVOCs) reside;
2. Determine subsurface permeability information where the highest concentrations of residual cVOCs reside;
3. Understand the zones of high and low contaminant mass flux and potential transport pathways; and
4. Estimate the lateral and vertical extent of cVOCs in subsurface soils beneath the four respective source areas. This estimate will be used as a basis for estimating the cVOC volume and mass.

Prior investigations identified elevated levels of cVOCs in soil and groundwater at the Site.

The survey was conducted using a combined Membrane Interface Probe (MIP) and Hydraulic Profiling Tool (HPT) system equipped with three gas chromatograph (GC) detectors, a photo-ionization detector (PID), a flame-ionization detector (FID) and a halogen-specific detector (XSD). The combined probe is referred to as the MiHpt. See **Appendix A** at the end of this report for further information on the MiHpt equipment.

The MiHpt was operated in standard

mode to investigate the four source areas. The locations of the MiHpt stations were chosen by **AECOM** to address data gaps in understanding the vertical and lateral extent of the cVOC plume as well as to further characterize the hydrogeology of the Site. The locations were adjusted as the investigation progressed based on the findings at the initial locations.

This investigation advanced standard MiHpt at twenty-nine (29) direct sensing stations, which are presented in **Figure 5.**

The investigation found elevated XSD levels indicating cVOCs above and below the groundwater table over much of the Site. Most of the cVOC responses were found below the water table. MIP-124, MIP-127, and MIP-128 have the highest XSD responses, however, the highest response in these three stations were all in different subsurface zones. MIP-124's peak response was in a shallow high-permeability zone. The highest response in MIP-127 was in a deep high-permeability zone. The elevated responses in MIP-128 were mostly in a lower permeability zone between the impacted zones of MIP-124 and MIP-127, however, the peak XSD level in station MIP-128 was in a narrow zone in the lower high-permeability zone.

There were zones where PID responses were high relative to the XSD responses (such as at stations MIP-114, MIP-124, and MIP-127). This may be due to cutting oil combined with the cVOCs. Cutting oil is known to have been, and is currently, used at the Site and presumed to have been removed from the parts at the former degreaser. The long time for the PID and XSD detectors to return to baseline levels is consistent with the presence of cutting oils.

The stations south of the building had higher XSD responses than those inside the building

The responses in the eastern stations were significantly lower than those in the middle or western areas of the investigation area, indicating that the source area concentrations decreased toward the east. However, the easternmost responses were still significant and indicate that cVOCs likely extend past the edges of the investigation area. For example, the investigation was not bounded west of MIP-127 and MIP-130, nor south of MIP-130 and MIP-128.

Dissipation tests were successful at 14 of 29 MiHpt stations and the calculated groundwater surface ranged from approximately 14 to 16 ft bgs. Each station exhibited both low- and high-permeability zones, with permeability (Estimated K), ranging from too low to measure to at least over 35 ft/day, and in many stations over 75 ft/day.

Background

(*Information provided by **AECOM***)

Site and Release History

The Site is an active industrial facility located at 4334 Main Highway in Bamberg, South Carolina. The facility manufactures and distributes spray nozzles for oil heating, industrial and aerospace applications.

Lithology

Based on soil borings in the area of investigation, the soil is predominantly clayey sand in the shallower zones. There are layers of poorly graded sand and silty layers in many of the borings, especially deeper. Limestone is found at approximately 30 to 35 feet below ground surface (ft bgs) across the Site.

Groundwater

Depth to groundwater is generally 12-15 ft bgs. Groundwater flow is in a general southwesterly direction.

Remediation History

The PCE underground storage tank (UST) and PCE degreasers were previously removed along with backfill and surrounding soil. The PCE above ground storage tank that was present in the PCE secondary containment area was removed previously.

Current Groundwater Conditions

Elevated cVOCs, principally PCE and daughter products have been detected in groundwater samples taken from monitoring wells and in soil samples taken from borings in the area of this investigation.

.

Objectives

The objectives of this HRSC investigation were to support **AECOM's** continued Investigation and remediation planning in four residual source areas of the Site by:

1. Identifying the source area subsurface locations where the highest concentrations of residual cVOCs reside;
2. Determine subsurface permeability information where the highest concentrations of residual cVOCs reside;
3. Understand the zones of high and low contaminant mass flux and potential transport pathways; and
4. Estimate the lateral extent of cVOCs in subsurface soils beneath the four respective source areas. This estimate will be used as a basis for estimating the cVOC volume and mass.

The specific objectives for the four residual source areas included in this investigation are:

1. Former Northern PCE Degreaser (vicinity of MW-19) The collected HRSC information will be used to optimize the source area pilot study remedial design and to provide the necessary information to estimate the costs to complete the pilot study.
2. Former Southern PCE Degreaser (vicinity of MW-20) The MIP, soil and groundwater quality data will be used to define the "limits" (lateral and vertical extent) of cVOCs in this residual source area.
3. Former Eastern PCE Secondary Containment Area (vicinity of MW-1) The MIP, soil and groundwater quality data will be used to define the "limits" (lateral and vertical extent) of cVOCs in this residual source area.
4. Former PCE Underground Storage Tank (UST) Area (vicinity of MW-21) The MIP, soil and groundwater quality data will be used to define the "limits" (lateral and vertical extent) of cVOCs in this residual source area.

The data generated will be instrumental in supporting **AECOM's** continued management of the Site. Historic data and data generated from this investigation were used to construct an Environmental Visualization System (EVS) model that will be utilized by AECOM in their on-going remediation efforts at the Site.

Methods, Assumptions, and Procedures

Planning for this HRSC involved a review of available Site documentation to develop an understanding of the existing Conceptual Site Model (CSM) and indications of residual cVOC impacts.

AECOM planned 32 borings across the Site. Target depth was Direct Push Technology (DPT) rig refusal, which based on prior investigations was expected to be around 30 to 35 ft bgs. The locations were adjusted in the field based on the responses seen during the investigation.

Membrane Interface Probe-Hydraulic Profiling Tool (MiHpt)

For this assessment, **COLUMBIA** used the MiHpt system equipped with three laboratory grade chemical detectors: a Halogen Specific Detector (XSD), a Flame-Ionization Detector (FID) and a Photo-Ionization Detector (PID). The MiHpt also contains the Hydraulic Profiling Tool (HPT) and the Electrical Conductivity (EC).

The MIP system shows the vertical distribution of contaminants, while the HPT and EC display the hydraulic characteristics of the subsurface at each location. These combined lines of evidence provide information about the contaminant distribution as related to hydraulic conductivity, which is critical for planning remediation activities.

Additional discussion of direct sensing equipment and chemical sensors used for this assessment are provided in **Appendix A.** Quality control procedures are discussed in **Appendix B.**

COLUMBIA employed the HPT with the EC system to evaluate subsurface hydrostratigraphy in the area of the release.

The HPT pressure logs record changes in hydraulic pressure measured directly as water is pumped into the formation at a constant rate. These logs reveal the variability and relative hydraulic conductivity of the soil.

A high-resolution profile of the estimated hydraulic conductivity “K” is obtained following a series of tests in which the HPT pressure is allowed to dissipate to the static hydraulic pressure of the soil formation at different depths.

The combined MiHpt probe also contains an EC dipole at the tip of the probe that measures the EC of soil and groundwater.

EC measurements identify changes in the soil's electrical conductivity that can be related to changes in stratigraphy, providing insight into contaminant pathways when viewed in relation to chemical detector response.

Low EC values generally indicate coarse-grained materials (sand and gravel), while higher EC values usually indicate

elevated clay content, although water chemistry and other site-specific factors, such as cementation, influence EC response as well.

General conductivity ranges for basic soil types are presented in **Figure 1**, below (Geoprobe, 2015).[1]

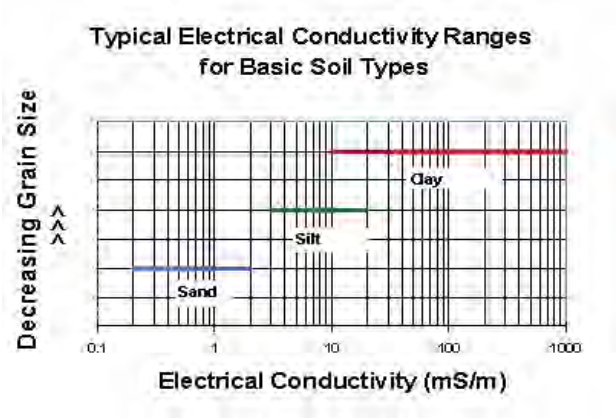

Figure 1

Guided by the MiHpt information, high-resolution soil and groundwater samples were collected by **AECOM** in zones of interest to determine the actual concentrations and to aid in estimating the contaminant mass.

[1] Geoprobe Systems. January 2015. Technical Bulletin MK3201: Standard Operating Procedure for Geoprobe® Electrical Conductivity (EC) System

Results and Discussion

MiHpt borings were advanced at 29 locations as shown in **Figure 5** at the end of this report. All but the last boring, MIP-130 was advanced until refusal.

Chlorinated VOCs near the Source Areas

The MIP-PID, MIP-FID and MIP-XSD were used to detect the possible presence of cVOCs. The HPT provided detailed vertical profiles of estimated hydraulic conductivity along each transect.

The initial MiHpt stations were located near the monitoring wells that **AECOM** identified as having persistent elevated cVOC concentrations. The investigation then continued with additional stations in the areas of higher concentration to better delineate the source area. The logs are presented in **Appendices C** and **D**.

The results for each of the four areas are discussed in more detail below. All three chemical detectors, XSD, PID, and FID had similar patterns of elevated response so this report will generally refer to the XSD detector in the discussion of results and the visualizations of the data. The XSD footprint results and results are shown on **Figure 6** and **Figure 7**, respectively.

Former Northern PCE Degreaser (vicinity of MW-19). As shown in **Figure 5** seven MiHpt stations were completed in this area: MIP-101, MIP-102, MIP-103, MIP-104, MIP-106, MIP-107, and MIP-109. Station MIP-102, which was placed in the footprint of the former degreaser, had a maximum XSD reading of 763,726 uV, which was the highest reading in this area. The XSD reading was elevated from a depth of just over four ft bgs to refusal at approximately 7.5 ft bgs. Prior experience has shown that liquid phase DNAPL usually exists in areas that have XSD levels in excess of 700,000 uV. Several of the stations in this area had slightly elevated detections near the ground surface, which indicates that a release of cVOCs likely occurred in this area. The bulk of the elevated XSD detections in MIP-102 were in a zone of elevated HPT pressure. Elevated XSD levels were found intermittently from approximately 5.5 to 23 ft bgs at station MIP-101, which was also placed in the footprint of the former degreaser. The elevated XSD detections in MIP-101 were found in both high and low HPT pressure zones. The highest XSD levels in the surrounding stations were much lower than the levels found in the footprint of the former degreaser, but they were above background (approximately 200,000 uV). The depth of elevated XSD detections in these surrounding stations varied from

approximately four to 26 ft bgs, generally in zones where low HPT pressures were found. A visualization of the XSD and HPT levels in this area are shown in **Figure 8** at the end of this report.

Former Southern PCE Degreaser (vicinity of MW-20). As shown in **Figure 5** seven MiHpt stations were completed in this area: MIP-110, MIP-111, MIP-112, MIP-113, MIP-114, MIP-115, and MIP-116. The XSD levels in this area were generally higher than in the Former Northern Degreaser area. The highest XSD reading in this area (1,287,118 uV) was at station MIP-114, which was placed south of the footprint of the former degreaser. The XSD reading was elevated from a depth of approximately 18.5 to 28 ft bgs. The bulk of the elevated XSD detections in MIP-114 were in a zone of moderate to high HPT pressure. Prior experience has shown that liquid phase DNAPL usually exists in areas that have XSD levels in excess of 700,000 uV. The XSD levels in the footprint of the former degreaser (MIP-112 and MIP-113) were significantly lower than the levels found in station MIP-114 and some of the other surrounding stations, yet they were over 200,000 and 400,000 uV, respectively indicating significant concentrations of cVOCs. Stations MIP-112 and MIP-113 in this footprint of the former degreaser had slightly elevated detections near the ground surface, which indicates that a release of cVOCs may have occurred in this area.

The peak XSD levels in the stations in this area occurred at various depths between approximately 21 ft bgs to the bottoms of the borings, approximately 37 ft bgs, and corresponded mostly to zones of moderately high HPT pressure.

Station MIP-111, which was placed east of the former degreaser, also had XSD levels that were greater than the levels within the former degreaser's footprint (i.e. max levels of more than 600,000 uV). Elevated XSD levels were found intermittently from approximately 16 ft bgs to the end of the boring, at approximately 28 ft bgs. The elevated XSD detections in MIP-111 were generally found in moderate to high HPT pressure zones. The highest XSD levels in the other surrounding stations MIP-110, MIP-115 and MIP-116 had comparable XSD levels to those found in the footprint of the former degreaser, but the elevated XSD responses in MIP-115 and MIP-116 began at a shallower depth, comparable to MIP-111. The elevated XSD detections in these surrounding stations were found in both low and high HPT pressure zones. A visualization of the XSD and HPT levels in this area are shown in **Figure 8** at the end of this report.

At station MIP-114 there were zones, such as at 20 ft bgs, where PID levels were high relative to the XSD levels. This may be due to cutting oil combined with the cVOCs. Cutting oil is known to have

been used at the Site and presumed to have been removed from the parts at the Southern Degreaser Station. The long smooth reduction in the PID and XSD readings below the peak readings at this station is consistent with the presence of cutting oils.

Former Eastern PCE Secondary Containment Area (vicinity of MW-1). As shown in **Figure 5** seven MiHpt stations were completed in this area: MIP-117, MIP-118, MIP-119, MIP-120, MIP-121, MIP-122, and MIP-123. The XSD levels in this area were roughly comparable to those in the Former Northern Degreaser area. The highest XSD reading in this area (448,012 uV) was at station MIP-123, which was placed east of the footprint of the former Secondary Containment Area. The XSD reading was elevated at a depth of approximately 26 ft bgs, in a zone of high HPT pressure. The XSD levels in the footprint of the former secondary containment area (MIP-117) were significantly lower than the levels found in station MIP-123, but the peak detection in MIP-117 was over 70,000 uV, indicating the likely presence of cVOCs. The detections began at the surface at approximately 40,000 uV and continued to the end of the boring, which was at approximately 26 ft bgs. This indicates that the station was likely located near a source area. The peak levels in this area were at various depths between approximately 20 and 30 ft bgs and corresponded to zones of low and high HPT pressure.

Station MIP-118, which was placed just east of the Former Secondary Containment, also had XSD levels that were greater than the levels within the former secondary containment footprint. Elevated XSD levels were found intermittently from approximately 29 ft bgs to the end of the boring, at approximately 34 ft bgs. This was one of the deepest XSD detections on the Site. The elevated XSD detections in MIP-118 were found in both low and high HPT pressure zones. A visualization of the XSD and HPT levels in this area are shown in **Figure 8** at the end of this report.

The XSD levels and depths of detection in this area relative to the XSD detections in the Southern Degreaser Area make it possible that some of the cVOCs in this area migrated from the Southern Degreaser Area. A visualization of the XSD and HPT levels in this area and the Southern Degreaser Area are shown in **Figure 8** at the end of this report.

Former PCE Underground Storage Tank (UST) Area (vicinity of MW-21). As shown in **Figure 5** seven MiHpt stations were completed in this area: MIP-124, MIP-125, MIP-126, MIP-127, MIP-128, MIP-129, and MIP-130. The XSD levels in this area were generally higher than those in the Former Southern Degreaser

area. The highest XSD reading in this investigation (over 2,000,000 uV) was at station MIP-124, which was placed in the excavation footprint of the former UST. The XSD reading was elevated from a depth of approximately 13 ft bgs to the bottom of the boring at approximately 35 ft bgs. The highest XSD response in MIP-124 was at approximately 17 ft bgs, which was one of the shallowest peak detection in this area. The depth and strength of the XSD response indicates that a release is likely to have occurred near MIP-124. Prior experience has shown that liquid phase DNAPL usually exists in areas that have XSD levels in excess of 700,000 uV. The XSD levels in the other stations in the excavation footprint of the former UST (MIP-125 and MIP-129) were somewhat lower than the levels found in station MIP-124, yet they were over 700,000 and 100,000 uV, respectively indicating significant concentrations of cVOCs. There are no XSD responses above background levels in the excavation footprint above 11 ft bgs and a large increase in responses in these stations begins at approximately 15 ft bgs indicating that the excavation depth was likely between 11 and 15 ft deep.

Station MIP-126, located north of the former PCE UST footprint, had elevated XSD detections from a depth of approximately 16 ft bgs to the bottom of the boring at approximately 34 ft bgs. Stations MIP-127 and MIP-128 outside of this footprint had elevated XSD detections from a depth of approximately 20 ft bgs to the bottom of the borings at approximately 35 ft bgs. Station MIP-130, southwest of the former UST tank had elevated XSD detections from a depth of approximately 21 to 33 ft bgs

The peak XSD levels in this area were at various depths between approximately 16 to 35 ft bgs and corresponded to both low and high HPT pressure zones.

A visualization of the XSD and HPT levels in this area are shown in **Figure 8** at the end of this report.

At station MIP-124 there were zones above and below the peak XSD response such as at 15 and 18 ft bgs where PID levels were high relative to the XSD levels. This may be due to cutting oil combined with the cVOCs. Cutting oil is known to have been used at the Site and presumed to have been removed from the parts at the Southern Degreaser Station.

The responses in the eastern stations were significantly lower than those in the middle or western areas of the investigation area, indicating that the source area was bounded by the investigation on the east. However, the easternmost responses were still significant and indicate that cVOCs likely extend past the edges of the investigation. For example, the investigation was not bounded west of

MIP-127 and MIP-130, nor south of MIP-130 and MIP-128.

Many of the borings had significant XSD responses at the bottoms of the borings and there was no clear pattern of elevated XSD levels associated with specific soil zones, indicating that the cVOCs are likely to extend below the depth of the investigation.

The response ratios between the detectors can provide clues to the chemical constituents they are detecting. Higher XSD and PID with low FID indicates a higher proportion of PCE and TCE. Decreasing XSD response and increasing PID and FID responses can indicate a higher proportion of daughter products such as DCEs, vinyl chloride, and ethene. At this Site zones where PID levels were high relative to the XSD levels, such as at stations MIP-114 and MIP-127 may be due to cutting oil combined with the cVOCs. Cutting oil is known to have been used at the Site and presumed to have been removed from the parts at the degreasers. The long recovery time for the PID and XSD detectors to return to baseline levels is consistent with the presence of cutting oils. Some of the logs exhibit this long recovery time as a smooth reduction in readings with depth as opposed to sharp, spiked responses, which were generally seen across the Site. Higher FID responses often indicate methane. Soil and water sampling and analysis are needed to determine the actual chemical composition and concentrations.

Based on the EVS model of the XSD data that was collected in this investigation, the volume of soil that had XSD levels greater than 100,000 uV was 2,080 cubic yards. **Table 1** at the end of the report Shows the volume of soil in four XSD ranges for the Former Northern Degreaser Area and the combined area of the Former Southern Degreaser Area, the Former Eastern PCE Secondary Containment Area, and the Former PCE UST Area.

Hydrostratigraphy

As shown in **Figure 2**, high HPT pressure and low system flow are indicative of low permeability soils. Higher permeability is manifested by low hydraulic pressure and normal system flow. The relationship between soil permeability and cVOC concentrations is also shown in **Figure 2.**

For this Site, HPT data identified soils exhibiting highly variable hydraulic conductivity. All of the stations exhibited both high and low permeable zones. Above the water table and to a depth of approximately 22 to 36 ft bgs, depending on locations the soils showed interbedded layers of high and low HPT pressures. The soils below the interbedded zones were generally less interbedded and exhibited low HPT

pressures.

Below the water table the permeability (Estimated K) was calculated from the HPT pressure and flow measurements where the dissipation tests allowed permeability to be calculated. All of the stations had zones where the permeabilities were too low to measure. All of the stations had a peak permeability of at least 35 ft/day. Eight of 14 stations had peak permeability of over 75 ft/day. Thin zones of moderate permeability (approximately 20 ft/day) were found in all of the stations, starting at approximately 15 to 26 ft bgs, depending on location. In most stations the moderate permeability zone was underlain by a low permeability zone, followed by a high permeability zone, which were found below 22 to 36 ft bgs, depending on the location. The high permeability soils extended to the end of each boring.

The HPT data is generally consistent with the soil types described in the boring logs provided by **AECOM**, although only one of the boring logs provided by **AECOM** extended to the deeper, high-permeability zone identified using the HPT in this investigation.

As discussed above, the highest PID and XSD responses were in both lower and higher permeability zones. The lower permeability strata play an important role in retaining any residual contaminant and retarding the performance of any hydraulic-based remediation system. The higher permeability zones allow the movement of the contaminants.

Fourteen of the MiHpt locations had successful dissipation tests. Based on the dissipation tests, the groundwater surface ranged from approximately 14 to 16 ft bgs across the four areas of concern during this investigation.

The XSD responses are compared to the HPT pressure in **Figures 8** and **10**.

Monitoring Well Assessment

Figures 9 and **10** show the relationship between the contaminant mass as measured by the PID and XSD detectors, respectively, and concentrations measured in monitoring wells that were sampled in 2019. The screened intervals in the monitoring wells intersect the zones where this investigation found elevated PID and XSD responses and there is strong correlation between the highest monitoring well concentrations and the highest MiHpt responses in MW-1, MW-19, MW-20, and MW-21. However, most of the screened intervals of the monitoring wells do not extend to the depths where some of the cVOCs were found in this investigation.

Soil Sample Assessment

The soil samples taken in prior investigations in 2014 and 2015 include samples from zones that had elevated MiHpt responses in this investigation. There were few soil samples from the deeper zones included in this investigation. **AECOM** has collected additional soil samples from soil borings installed during this investigation that are presented in their investigation report.

Presentation of Data Logs and Scale

Individual logs of direct sensing data are presented in both individual scales for each log and on a collective scale for all logs in **Appendices C** and **D**.

The reader is advised to pay particular attention to the scale for each detector response for each log when comparing results from location to location and depth to depth. Of particular note, a high detector response at one depth could mask a lower response at a depth below it.

Issues and Limitations

This investigation did not define the extent of the cVOCs in any cardinal direction, nor did it define the depth that cVOCs have reached below the Site.

Quality Control

The MiHpt direct sensing equipment was operated in accordance with the manufacturer's *Standard Operating Procedure for the Membrane Interface Probe*, Geoprobe Technical Bulletin MK3010 (Geoprobe, 2012) and the *Standard Practice for Direct Push Technology for Volatile Contaminant Logging with the Membrane Interface Probe (MIP)* ASTM STANDARD D7352 – 07 (ASTM International, 2007). Performance testing was performed on each system prior to and following each survey sounding. These procedures are outlined in **Appendix B.**

MIP Performance Test Results for this project are presented in **Appendix E.**

Data Anomalies

No significant anomalies affecting the outcome of the data analysis were observed.

The direct-sensing logs generated for this assessment are presented in **Appendices C** and **D**.

References

A. ASTM International. 2007. Standard Practice for Direct Push Technology for Volatile Contaminant Logging with the Membrane Interface Probe (MIP) ASTM D7352 – 07.

B. Geoprobe Systems. April 2012 (Revised). Technical Bulletin MK3010: Standard Operating Procedure for Geoprobe® Membrane Interface Probe (MIP).

C. Geoprobe Systems. January 2015. Technical Bulletin MK3201: Standard Operating Procedure for Geoprobe® Electrical Conductivity (EC) System

List of Symbols, Abbreviations, and Acronyms

Abbreviation	Definition
CSM	**Conceptual Site Model.** A **CSM** is a method to describe what is known or can be inferred about a site for the purpose of making a decision. A CSM generally will address physical, chemical and biological systems; contaminant release and transport; societal issues; policy, land use, and exposures.
cVOC	**Chlorinated Volatile Organic Compound.** A **VOC** containing chlorine atoms; typically, a cleaning solvent.
DPT	**Direct-Push Technology** (DPT) refers to a group of techniques used for subsurface investigation by driving, pushing and/or vibrating small-diameter rods into the ground.
DNAPL	**Dense Non-Aqueous Phase Liquid.** A **DNAPL** is a denser-than-water NAPL, i.e. a liquid that is both denser than water and is immiscible in or does not dissolve in water.
HPT	**Hydraulic Profiling Tool**. The **HPT** is a logging **tool** that measures the pressure required to inject a flow of water into the soil as the probe is advanced into the subsurface. In addition to measurement of injection pressure, the HPT can also be used to measure hydrostatic pressure under the zero flow condition.
PCE	**Tetrachloroethylene.** The chemical compound **PCE** is a nonflammable, liquid solvent commonly used in dry cleaning, metal degreasing, and other manufacturing processes.
PID	**Photo Ionization Detector.** In a **PID** high-energy photons break molecules into positively charged ions. The **PID** will only respond to components that have ionization energies at or below the energy of the photons produced by the **PID** lamp.
TCE	**Trichloroethylene.** The chemical compound **TCE** is a halocarbon commonly used as an industrial solvent. It is a clear non-flammable liquid with a sweet smell.
XSD	**Halogen Specific Detector.** The **XSD** was developed for the selective detection of halogen-containing compounds.

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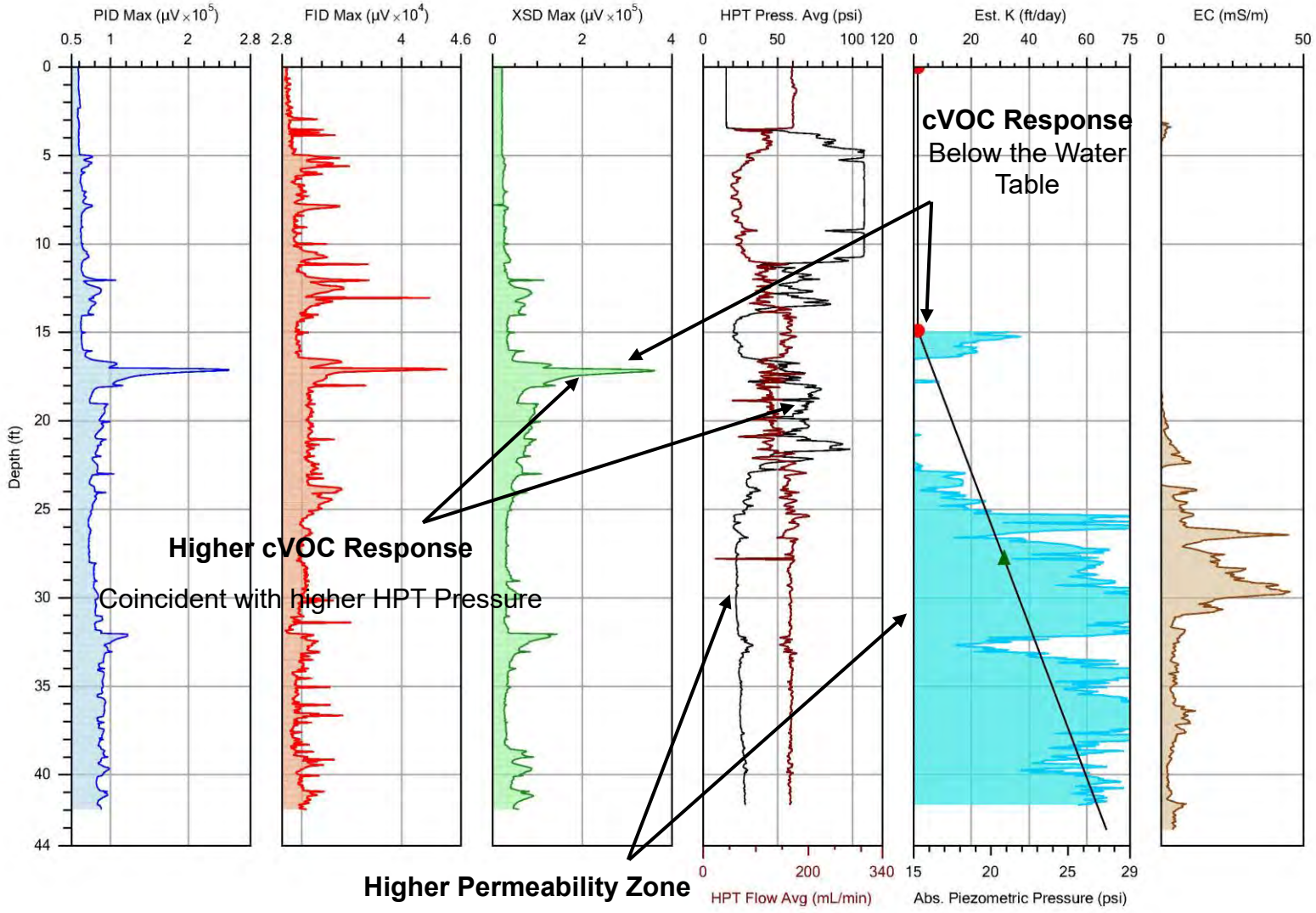
Figures



Example MiHpt Log

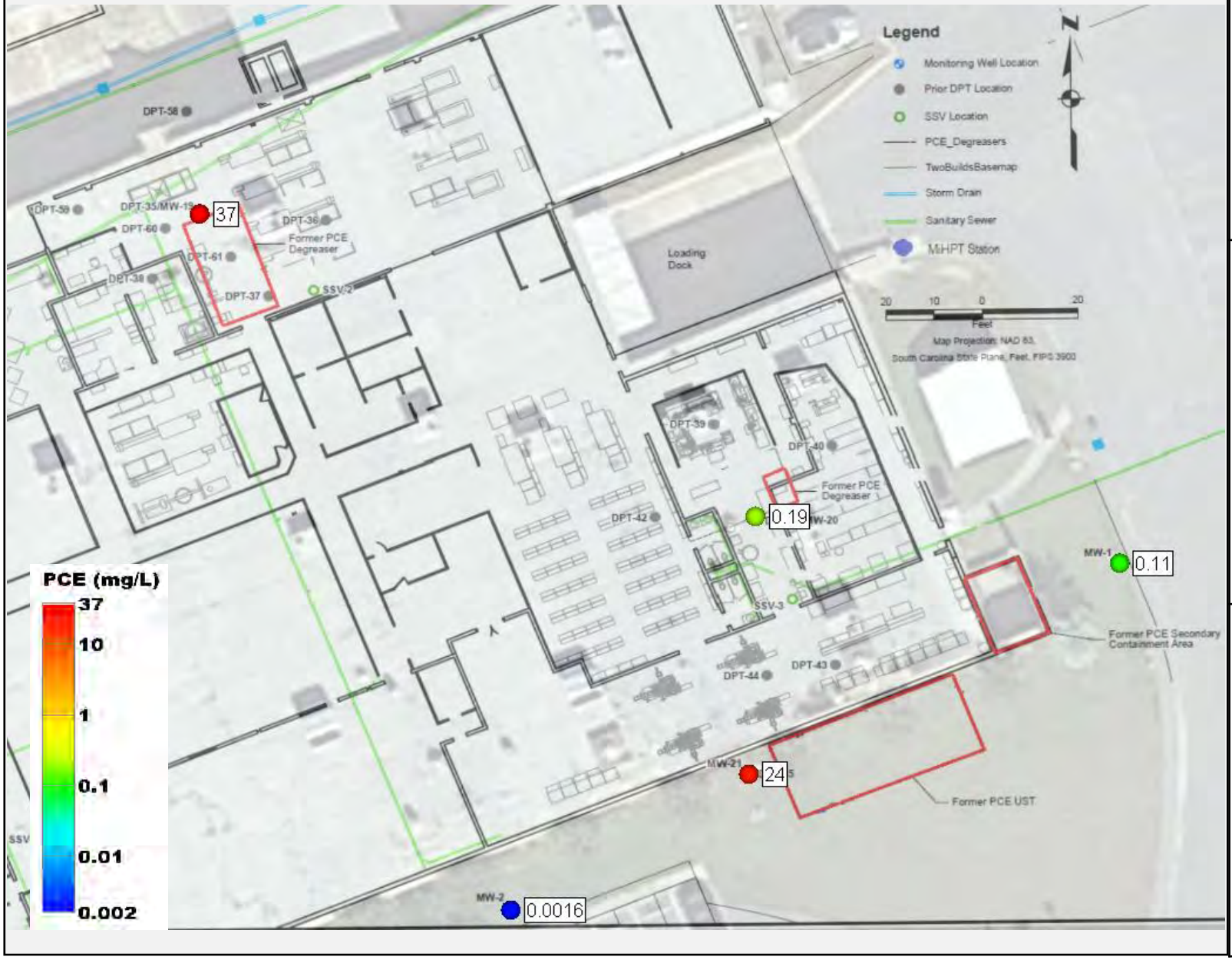
Figure 2

Delavan Spray Technologies
Bamberg, SC

July 2020

High-Resolution Site Characterization

COLUMBIA TECHNOLOGIES



PCE GW Results in Wells

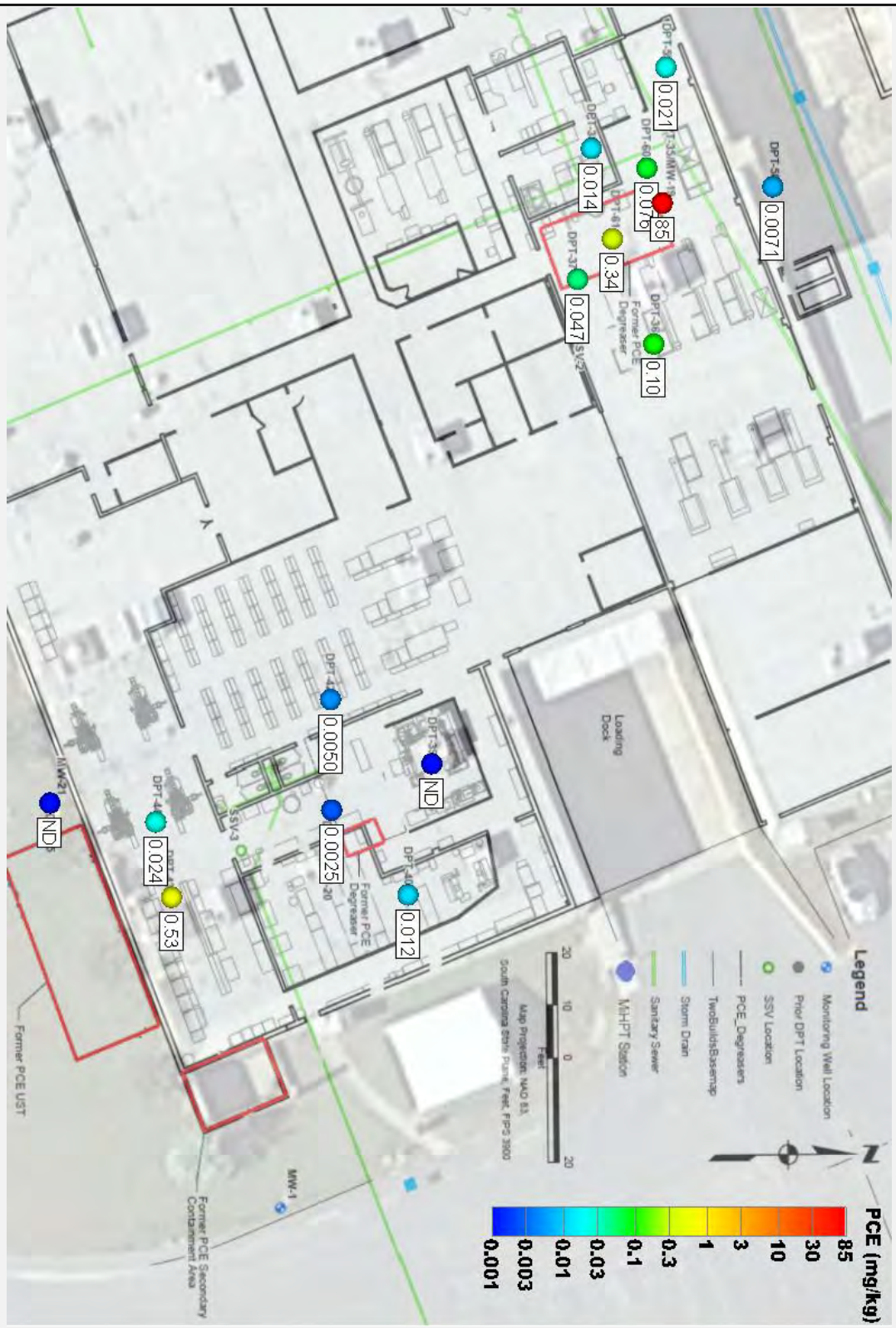
Figure 3

Delavan Spray Technologies
Bamberg, SC

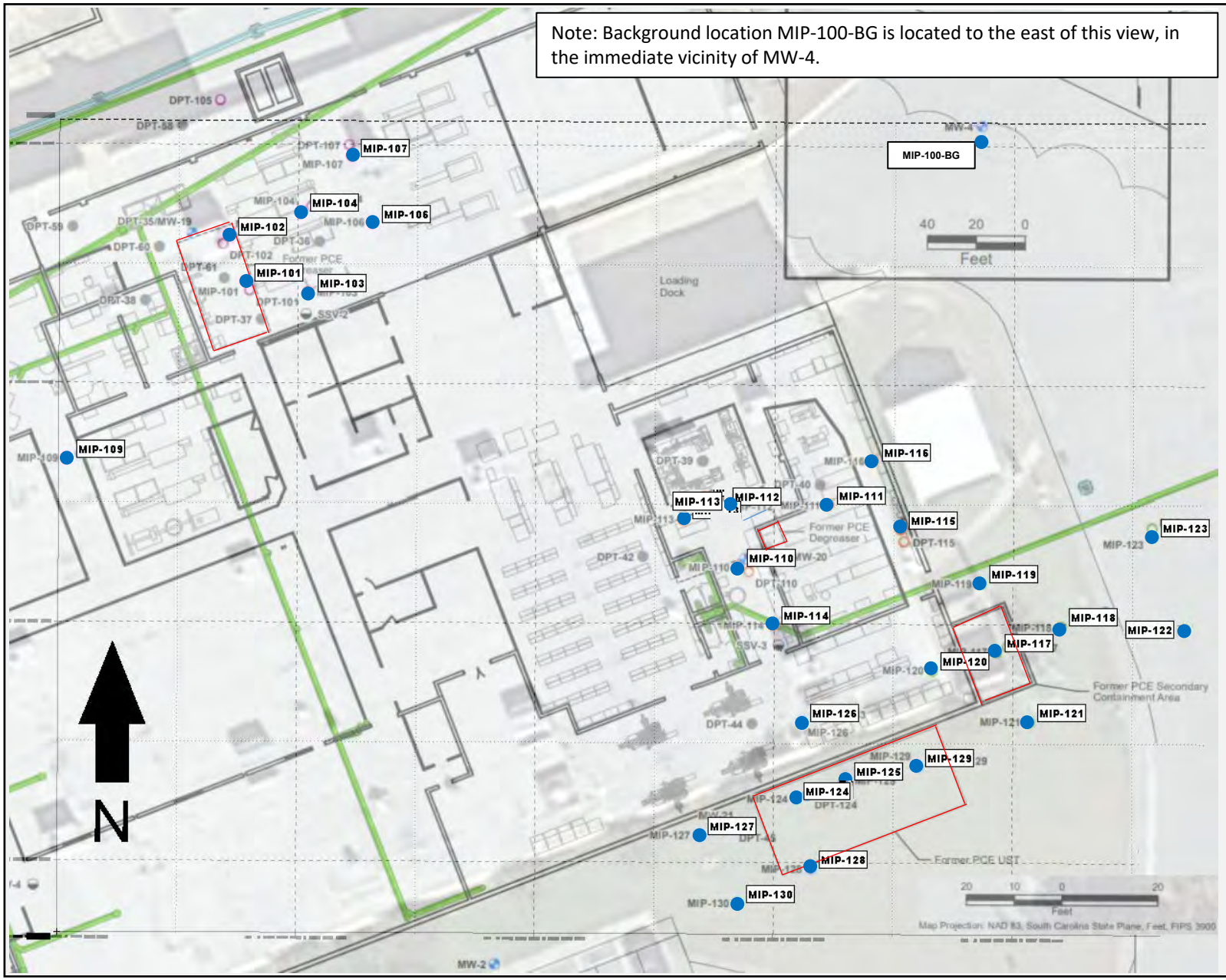
July 2020

High-Resolution Site Characterization

COLUMBIA TECHNOLOGIES



COLUMBIA TECHNOLOGIES	**Delavan Spray Technologies Bamberg, SC**	**Historic PCE Results in Soils**
	High-Resolution Site Characterization / **July 2020**	**Figure 4**



MiHpt Stations

Figure 5

Delavan Spray Technologies
Bamberg, SC

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High-Resolution Site Characterization

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XSD Footprint

Figure 6

Delavan Spray Technologies
Bamberg, SC

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High-Resolution Site Characterization

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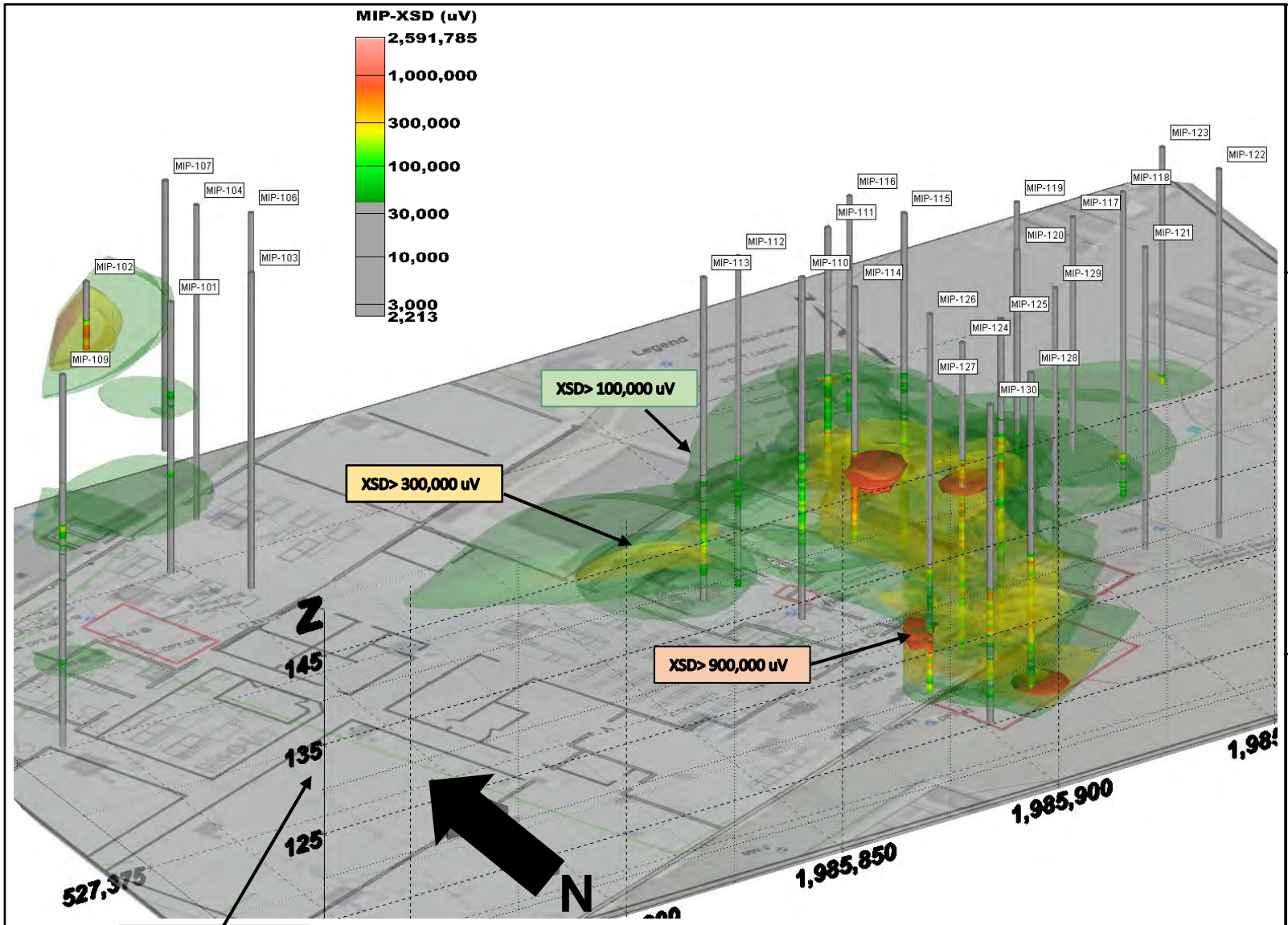

MIP-XSD Results

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High-Resolution Site Characterization

July 2020

Figure 7

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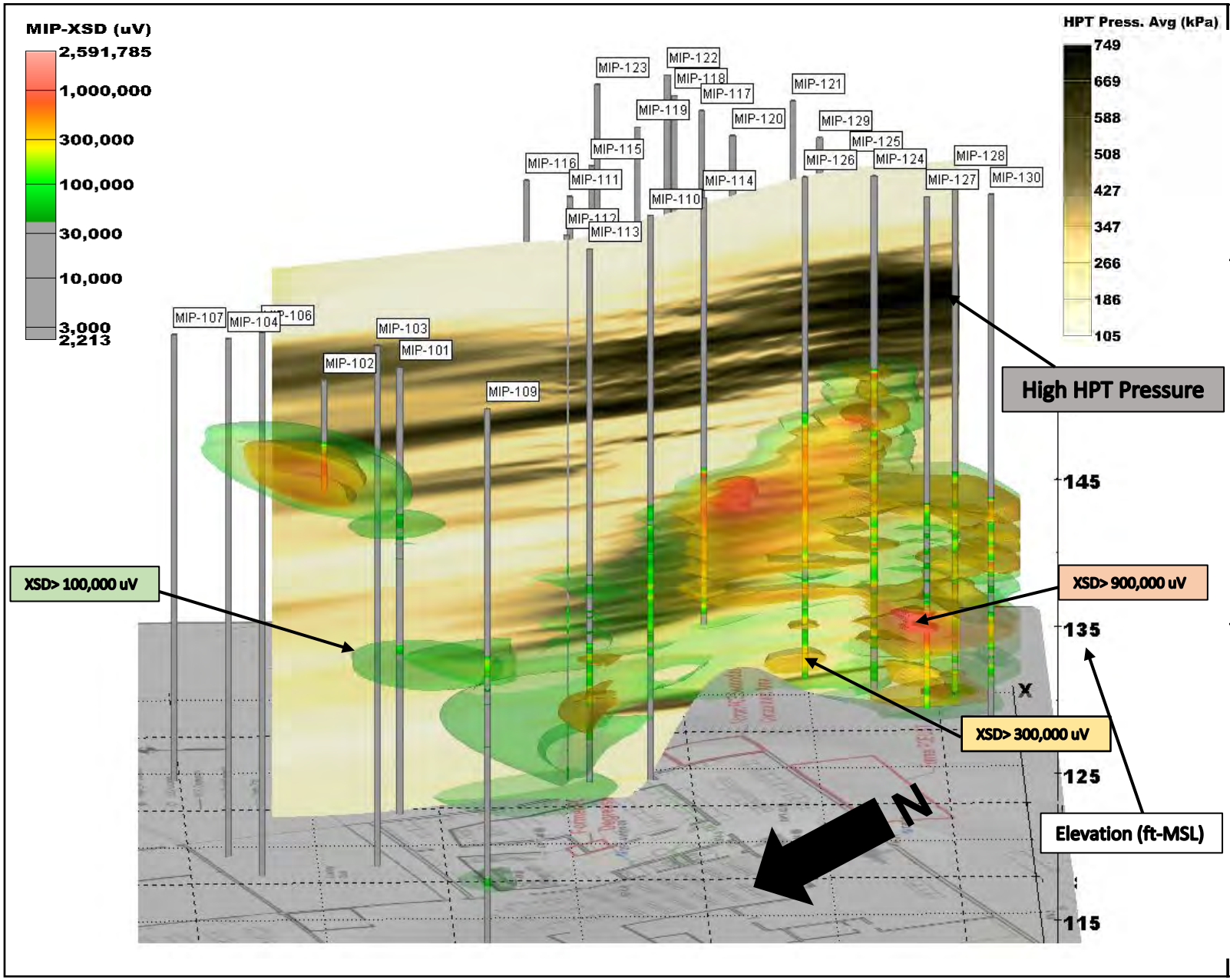

XSD and HPT Results

Figure 8

Delavan Spray Technologies
Bamberg, SC

July 2020

High-Resolution Site Characterization

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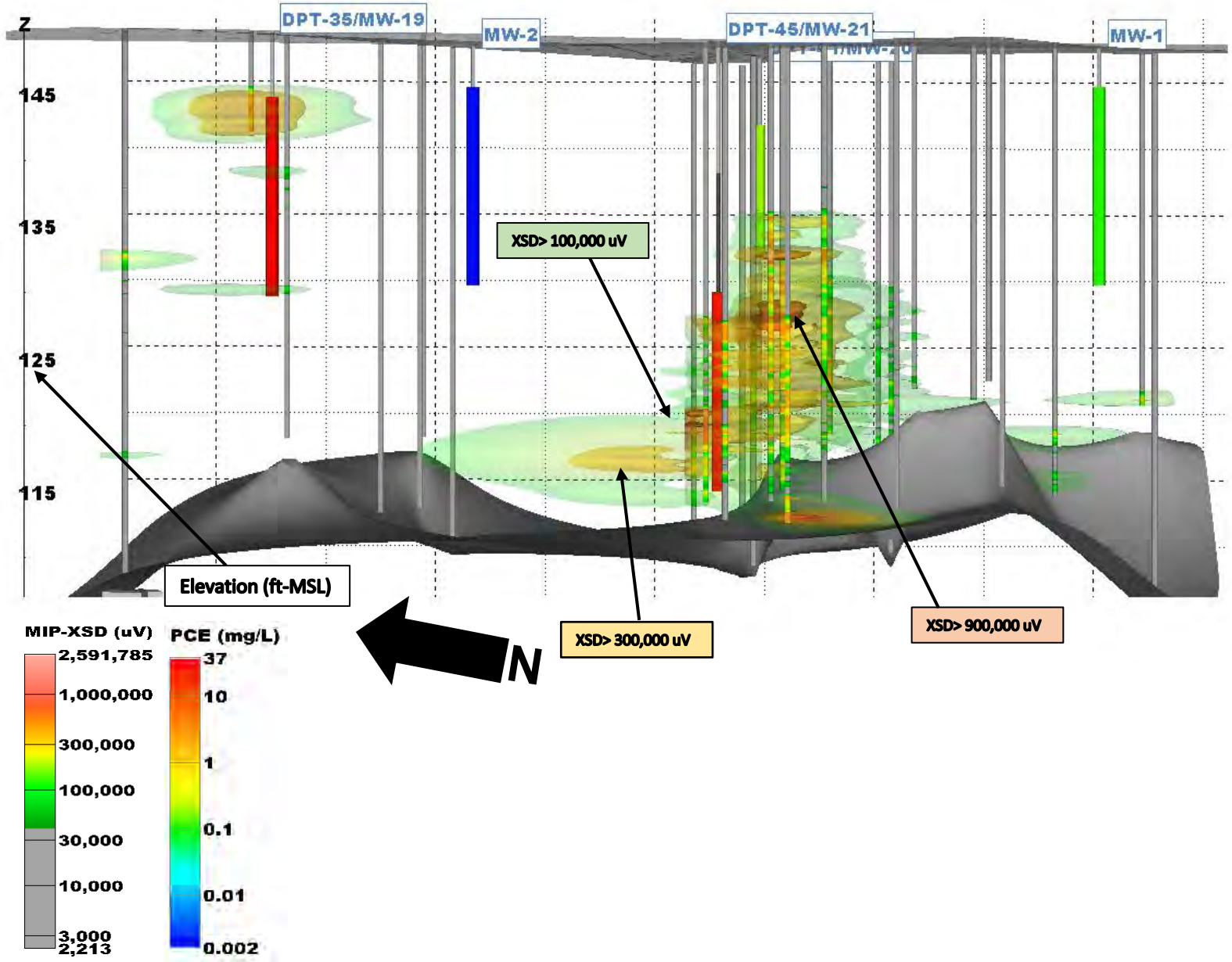

XSD Vs. Monitoring Well PCE

Figure 9

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High-Resolution Site Characterization

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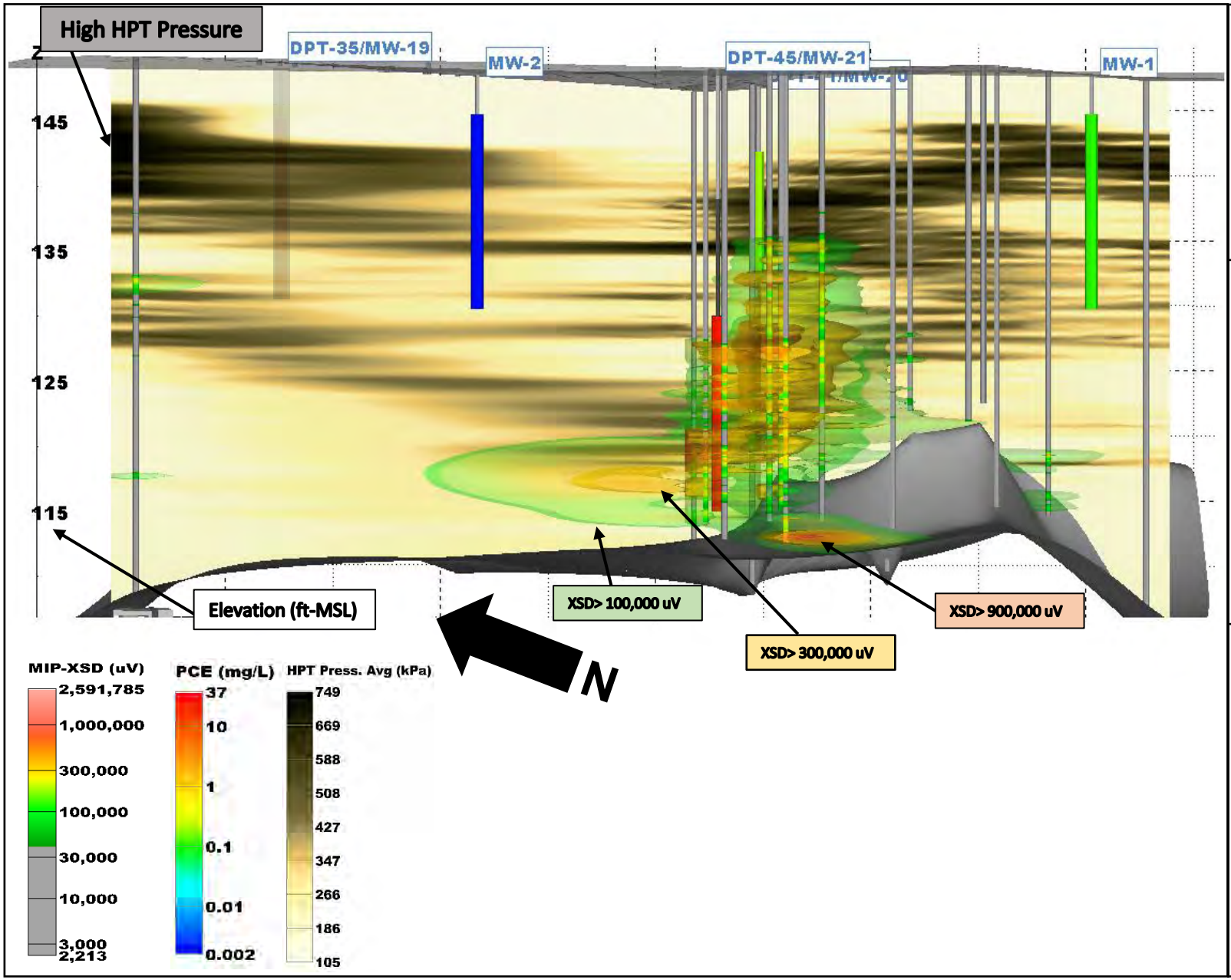

Cross-sectional Composite

Figure 10

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July 2020

High-Resolution Site Characterization

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Tables

Table 1 – Soil Volumes by Area and XSD Level

XSD Range (uV)	Volume of Soil (Cubic Yards)		
	Northern Degreaser Area	Southern Degreaser, Secondary Containment, and UST Areas	Total
100,000 to 200,000	85	1,230	1,315
200,000 to 500,000	38	640	678
500,000 to 700,000	5	50	55
>700,000	2	30	32
Total >100,000	**130**	**1,950**	**2,080**

Appendices

APPENDIX A – Direct Sensing Equipment Description

MiHpt Equipment Description

The MiHpt was developed by Geoprobe Systems® and contains three separate systems: The Membrane Interface Probe (MIP); the Hydraulic Profiling Tool (HPT); and the Electrical Conductivity (EC) dipole. The MiHpt probe is approximately 24 inches in length and 1.75 inches in diameter. The probe is driven into the ground at the nominal rate of 12 inches per minute using a direct push technology (DPT) rig from Geoprobe Systems® or equivalent.

The MiHpt Field Instrument collects and continuously displays real-time operating data during each push of the probe, including EC data, MIP detector responses, MIP operating parameters, the rate of push speed, MIP temperature, HPT Pressure, and HPT Flow.

Electrical Conductivity (EC)

EC: Soil electrical conductivity, the inverse of soil resistivity, is measured using a dipole arrangement. In this process, an alternating electrical current is transmitted through the soil from the center, isolated pin of the probe. This current is then passed back to the probe body. The voltage response of the imposed current to the soil is measured across these same two points. Conductivity is measured in Siemens/meter, and due to the low conductivity of earth materials, the EC probe uses millisiemens/meter (mS/m). The probe is reasonably accurate in the range of 5 to 400 mS/m.

The electrical properties of soil vary by geological setting. Therefore, conductivity measurements will vary both in magnitude and the relative change from one soil type to another in each geological setting. In general, at a given location, lower conductivity values are characteristic of larger particles such as cobbles and sands, while higher conductivities are characteristic of finer sized particles such as fine sands, silts, and clays.

Observed conductivities significantly higher than 400 mS/m are indicative of ionic materials other than soil. Examples include saltwater intrusion, the presence of ionic chemicals from storage or injection, or potentially soil mixtures with metallic compounds.

Membrane Interface Probe (MIP)

The MIP portion of the probe is used to create high-resolution, real-time profiles of subsurface volatile organic compounds (VOCs). The operating principle is based on heating the soil and/or water around a semi-permeable polymer membrane to 121 degrees Celsius (ºC), which allows VOCs to partition across this membrane.

The MIP can be used in saturated or unsaturated soils, as water does not pass through the membrane. Nitrogen is used as an inert carrier gas and travels from a surface supply down a transfer tubing which sweeps across the back of the membrane and returns any captured VOCs to the installed detectors at the surface. It takes approximately 60 seconds for the nitrogen gas stream to travel through 150 feet of

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inert tubing and reach the detectors.

COLUMBIA Technologies utilizes up to three chemical detectors on the MIP: The Photo-Ionization Detector (PID); the Flame-Ionization Detector (FID); and the Halogen Specific Detector (XSD); all mounted on a laboratory grade gas chromatograph (GC). The output signals from the detectors are captured by the MiHpt data logging system installed on a laptop computer.

The PID consists of a special ultraviolet (UV) lamp mounted on a thermostatically controlled, low volume, flow-through cell. The temperature is adjustable from ambient temperature to 250 ºC. The 10.6-electron volt (eV) UV lamp emits energy at a wavelength of 120 nm, which is sufficient to ionize most aromatics such as BTEX and many other molecules such as hydrogen sulfide (H_2S), hexane, and ethanol whose ionization potentials are less than 10.6 eV.

The PID also emits a response for chlorinated compounds containing double-bonded carbons (e.g. halogenated ethylenes), such as trichloroethylene (TCE) and tetrachloroethylene (PCE). Methanol and water, which have ionization potentials greater than 10.6 eV, do not respond on the PID. Given that the PID is non-destructive, it is often run first in series with other detectors for multiple analyses from a single injection.

The FID utilizes a hydrogen flame to combust compounds in the carrier gas. The carrier gas effluent from the MIP probe is mixed with hydrogen and burned. This combustion ionizes the analyte molecules. A collector electrode attracts the negative ions to the electrometer amplifier, producing an analog signal, which is directed to the data system input. The FID responds linearly over several orders of magnitude, and the response is very stable from day to day. This detector responds to any molecule with a carbon-hydrogen bond, but poorly to compounds such as H_2S, carbon tetrachloride, PCE, or ammonia. The FID is especially useful for mapping breakdown products from natural attenuation processes, such as methane, ethane, and ethene.

The XSD was developed to address the need for a sensitive and selective detector for halogenated compounds. The XSD is sensitive to halogen atoms including bromine, chlorine, and fluorine. This detector provides high halogen selectivity, making it an effective tool for identification and measurement of halogenated compounds in environments where other contaminants are present, such as petroleum hydrocarbons. The XSD is used to measure concentrations of a broad range of chlorinated volatile organics such as PCE, TCE and their daughter products. Compounds such as Freons®, carbon tetrachloride, and trichloroethanes respond well on the XSD but are not seen on the PID.

The XSD detector consists of a ceramic probe, platinum wire (anode) and platinum bead (cathode) mounted inside a high-temperature reactor. The detector reactor combusts the incoming sample into a stream of air and converts halogenated organics into free halogen atoms. The free halogen atoms will then react with alkali atoms on the surface of the electrically charged platinum bead, which functions as an electron emitter. When this reaction

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takes place, the current is measured and transmitted to the data system.

Unlike other halogen selective detectors, the XSD contains no radioactive sources and does not use organic solvents.

Hydraulic Profiling Tool (HPT)

The HPT portion of the system is used to create high-resolution, real-time profiles of soil hydraulic properties, which can be used to infer permeability and hydraulic conductivity. The HPT system consists of a pump, a pressure transducer, and a permeable screen.

HPT screening is performed simultaneously with the MIP and EC logging. As the tool is advanced, water is pumped through the trunkline and passes into the soil through the permeable screen. The flow is regulated to be as constant as possible. The pressure required to maintain a constant flow of water into the soil, known as the HPT pressure, is monitored by the pressure transducer and recorded on the field computer in pounds per square inch (psi) versus depth. The flow rate of the water into the soil formation is also measured and recorded in milliliters per minute (mL/min) versus depth.

Static pressure measurements (dissipation tests) can also be made by stopping at discrete intervals, allowing users to determine the static water level. The dissipation test provides an estimate of the static water level, based on the hydraulic head imposed on the probe at rest as compared to the pressure measured at the surface prior to starting each location push. Dissipation tests are best to run in coarse-grained materials (sands and gravels) to assure that the local ambient hydrostatic pressure is measured quickly and accurately.

To perform a dissipation test, the HPT probe is advanced to a depth below the water table and the water flow is stopped. The pressure dissipation (reduction of pressure gradient caused by forcibly pumping water into the formation) is monitored until a stable value is observed. The pressure dissipates over time and usually approaches an inflection point or stable value for the hydraulic pressure that can be used to estimate static water depth. The HPT software can also provide an estimate of K (a value used in hydrogeologic calculations) to provide an interpretation of the hydraulic permeability of the formation.

Depth Measurement

Depth in feet is measured and recorded using a precision potentiometer with a 100-inch linear range. The potentiometer is mounted on the mast of the DPT rig and a counter-weight anchored to the foot of the rig. Measurements are recorded on the down stroke of the mast, as the tooling string is pushed into the ground, and is accurate within 1/10th of an inch. The reference elevation (depth) reported for each individual boring is established by setting the data logger to zero feet with the sensing window of the downhole probe aligned with the ground surface.

Plotting the boring locations on a contour map provides elevations of the ground at the station. The ground surface elevations

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at the stations can be surveyed if more precise elevations are needed.

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APPENDIX B – Quality Control Procedures

System Quality Control Checks

Direct sensing technologies such as MIP, UVOST®, and OIP provide qualitative or semi-quantitative direct contact measurements of conditions in the soil, water, and vapor matrix of the subsurface. Correct performance response of the instruments is determined using standards or mixtures of known values or concentrations. Before and after each measurement run, the instruments are tested with these known standards to ensure their response is within an acceptable range.

The nature of direct-sensing technology is different than a typical laboratory analysis. In the lab, a known volume of a known concentration is introduced to the system, the compounds are separated chromatographically, and the response for each individual compound is recorded. This process is highly reproducible, and precise standards exist for laboratory control limits.

These performance tests of direct sensing instruments are not calibrations, per se. While the instrument response can be expected to be linear for a single chemical compound or in the known matrix conditions of the performance test standards, matrix conditions and chemical mixtures will be highly variable throughout the measurement run in subsurface.

In MIP, for instance, subsurface compounds diffuse across the MIP membrane, enter the carrier gas stream, and are transported directly to the GC. There is no chromatographic separation, just total response with depth.

Several other factors affect direct-sensing responses.

For OIP and UVOST®, these factors include:

- Soil grain size
- Interferences from fluorescent minerals such as limestones
- Contaminant types
- Degree of saturation
- System performance

For MIP, these factors include:

- The diffusion rate across the MIP membrane. This differs for every compound, based on:
    - Vapor pressure
    - Solubility
    - Interactions with other compounds
    - Membrane age and wear
- Ambient temperature
- Temperature of the subsurface
- Soil conditions (Clays provide a higher response than sands, due to increased back-pressure at the membrane)
- Detector response for each compound
- System performance

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For these reasons, a "calibration" is not possible. The variables within compounds of interest, mixtures of compounds, and subsurface conditions cannot be standardized. However, system performance can. Therefore, COLUMBIA Technologies implements protocols to test and evaluate system performance to produce the highest quality data in the industry. The results of these performance tests are maintained with each project file and available upon request.

UVOST® System Performance Tests

As a quality control check, the UVOST® system response is evaluated prior to and upon completion of each UVOST® screening location. This evaluation is completed using a Reference Emitter (RE) that consists of a blend of NAPL and produces a consistent fluorescence response over the four wavelengths monitored by the UVOST® system. Collected data is then presented as a percentage of the RE. Using the same RE at each location and site allows normalization of data collected over several locations, sites, or screening events. The RE standard is provided by the manufacturer, Dakota Technologies, and is the same for all UVOST® systems currently in operation.

In addition to obtaining a baseline RE for each location, the background reading of the UVOST® system is electronically recorded prior to insertion into the soil. This background reading is required to be less than 0.5% of RE prior to the start of any testing. The background during tool advancement typically stays at or below the surface background reading – giving confidence that any increases in fluorescence are "true" readings and not fluctuations or variations in background.

OIP System Performance Tests

OIP system performance is checked using known compounds such as diesel, synthetic motor oil, and gasoline. A visible target is used to verify the camera is functioning properly and check image focus. A black box test is then run to verify the OIP window is clear of contaminants that may result in false positives. The known compounds are then tested to verify the functionality of the UV light source and camera detection. Site specific products may be used as an additional performance check.

MIP System Performance Tests

System response is checked via Performance Tests with known compounds at known concentrations to verify that the system is responding to an acceptable level. On the recommendation of the manufacturer, Geoprobe Systems, this minimum acceptable response level is established as five times the standard deviation of the baseline noise level for each detector.

These tests vary, mostly due to ambient

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temperature and the age of the membrane. So, rather than looking for a specific response factor, the system is monitored for an acceptable response. When the response is not acceptable, the system is investigated, and corrective actions are implemented as necessary.

COLUMBIA Technologies performs several levels of MIP system evaluation for each project:

- Pre-Mobilization 5-Point Response Check
- Site Arrival 5-Point Response Check
- Pre-log Midpoint Response Check
- Post-Log Midpoint Response Check

For 5-point response tests, the system is evaluated at 0.10, 0.50, 1.0, 5.0, and 10.0 ppm to check response across three orders of magnitude of concentrations. For sites with expected petroleum contamination the system is checked using Toluene. For sites where chlorinated VOCs are expected, the system is checked using Trichloroethene (TCE). Site -specific compounds may be used where appropriate.

As an ongoing quality control check, the MIP system response is evaluated using a 1.0 ppm performance test solution prior to and upon completion of each MIP location. The resulting response values are recorded and compared to the results of the 5-point performance tests. When the response tests fall below 25% of the baseline value, corrective action must be taken.

Low-Level MIP System performance Test

The Low-Level system is evaluated using a similar 5-point response test. The test concentrations are 10, 50, 100, 500, and 1,000 ppb, using Toluene or TCE as appropriate. Ongoing Response tests are performed using a 100-ppb solution.

HPT System Performance Test

The EC dipole is evaluated using a brass and stainless-steel test jig, resulting in known values of 55 and 290 millisiemens (mS). Results must fall within 10% of the expected values; otherwise corrective action must be performed.

The HPT pressure and flow sensors are also evaluated using static (no flow) and dynamic (flow at approximately 150 milliliters per minute) hydraulic pressure measurements at two different head elevations, six inches apart. The difference for each test must be 0.2 psi, +/- 10%; otherwise corrective action must be performed.

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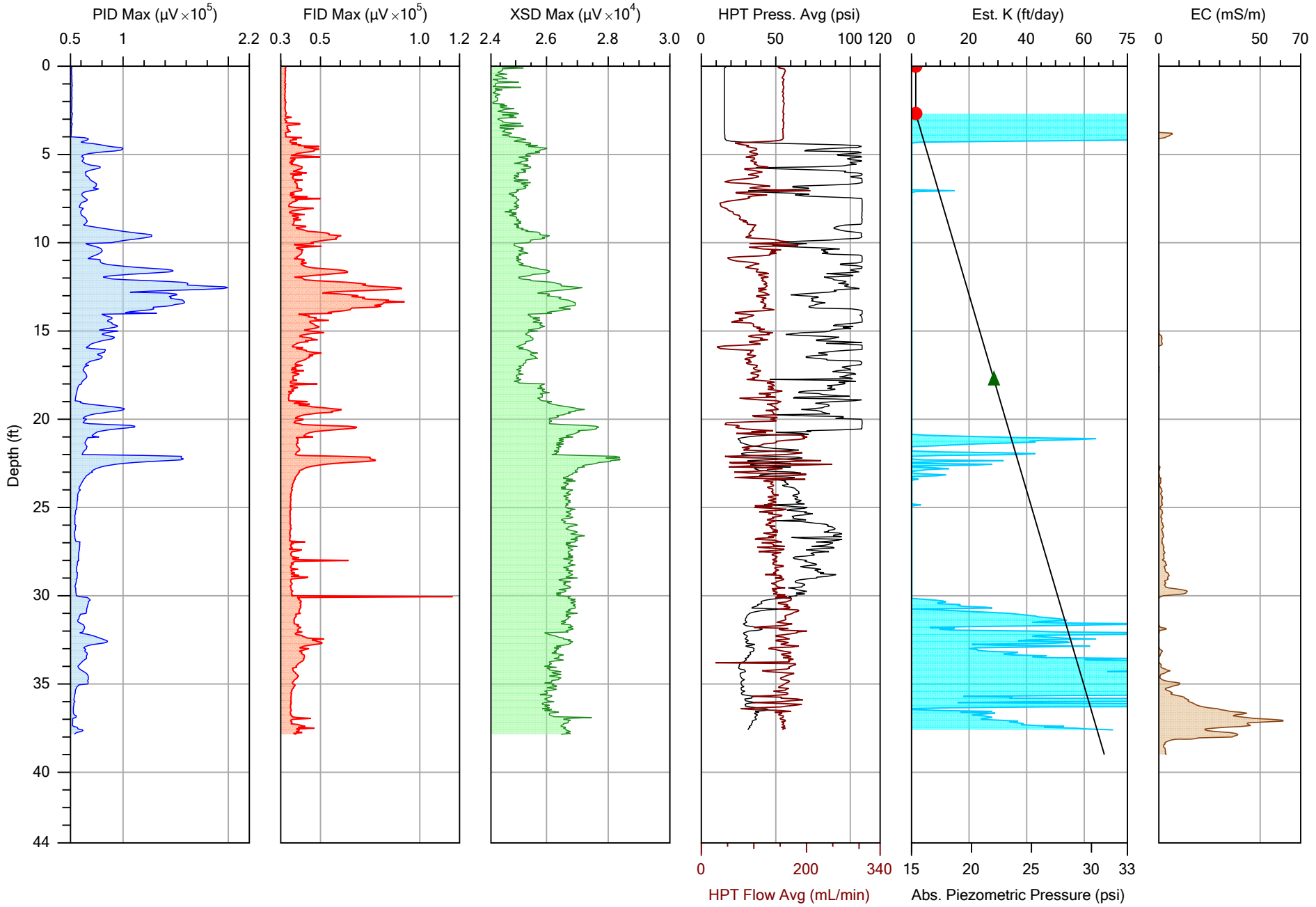
APPENDIX C – Data Logs for Membrane Interface Probe/EC with Hydraulic Profiling Tool (MiHpt) – Individual Scale



COLUMBIA TECHNOLOGIES

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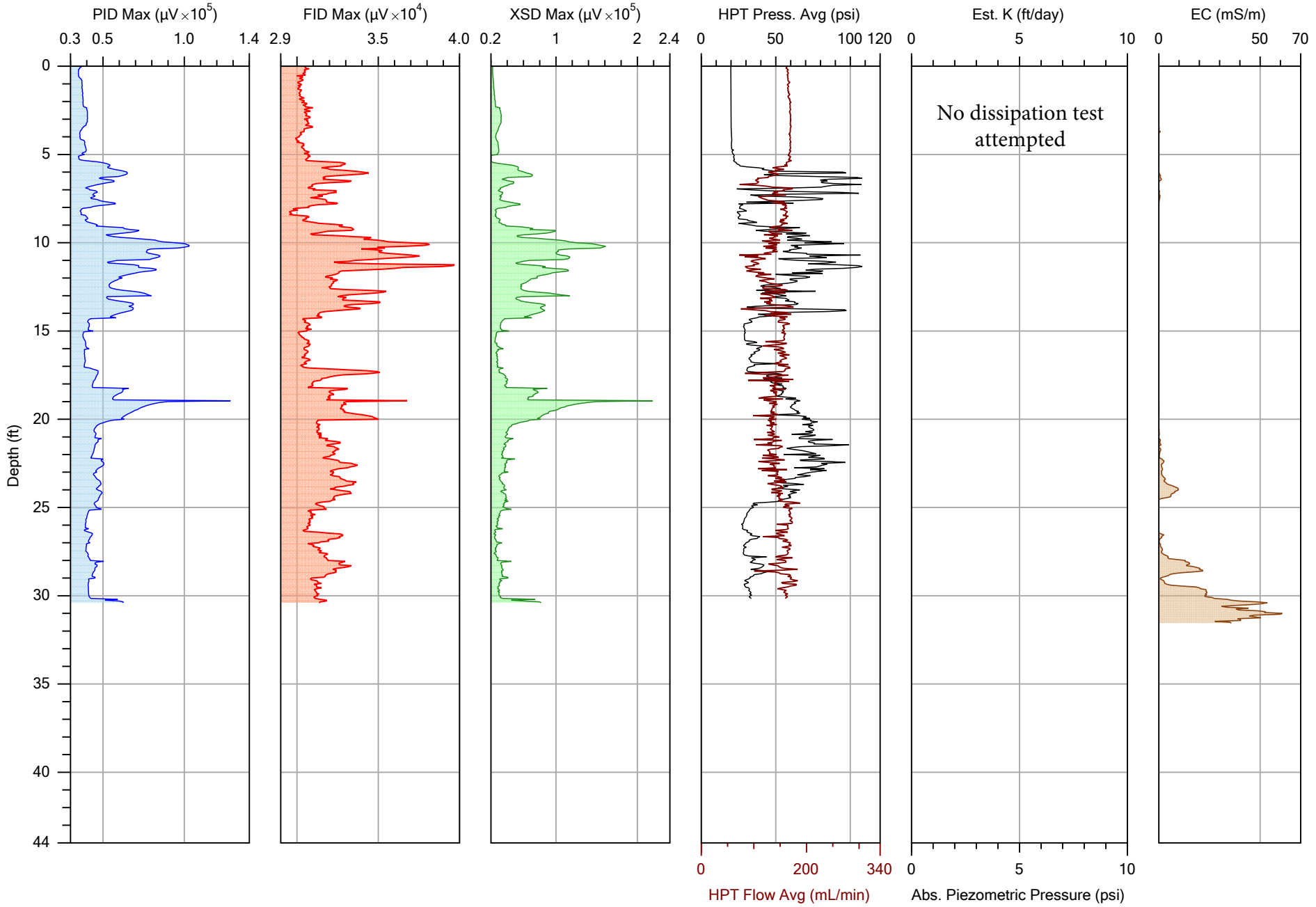
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



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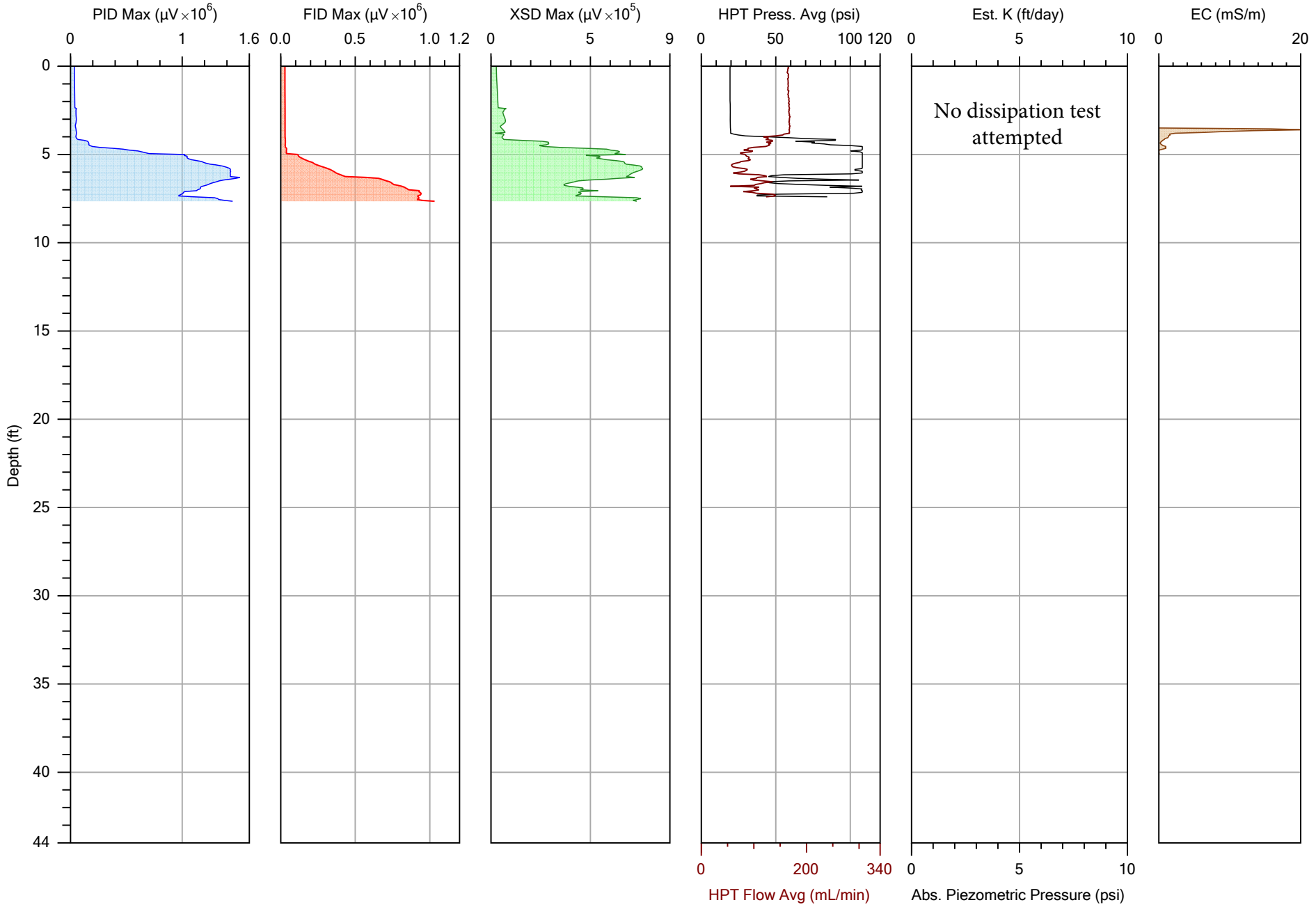

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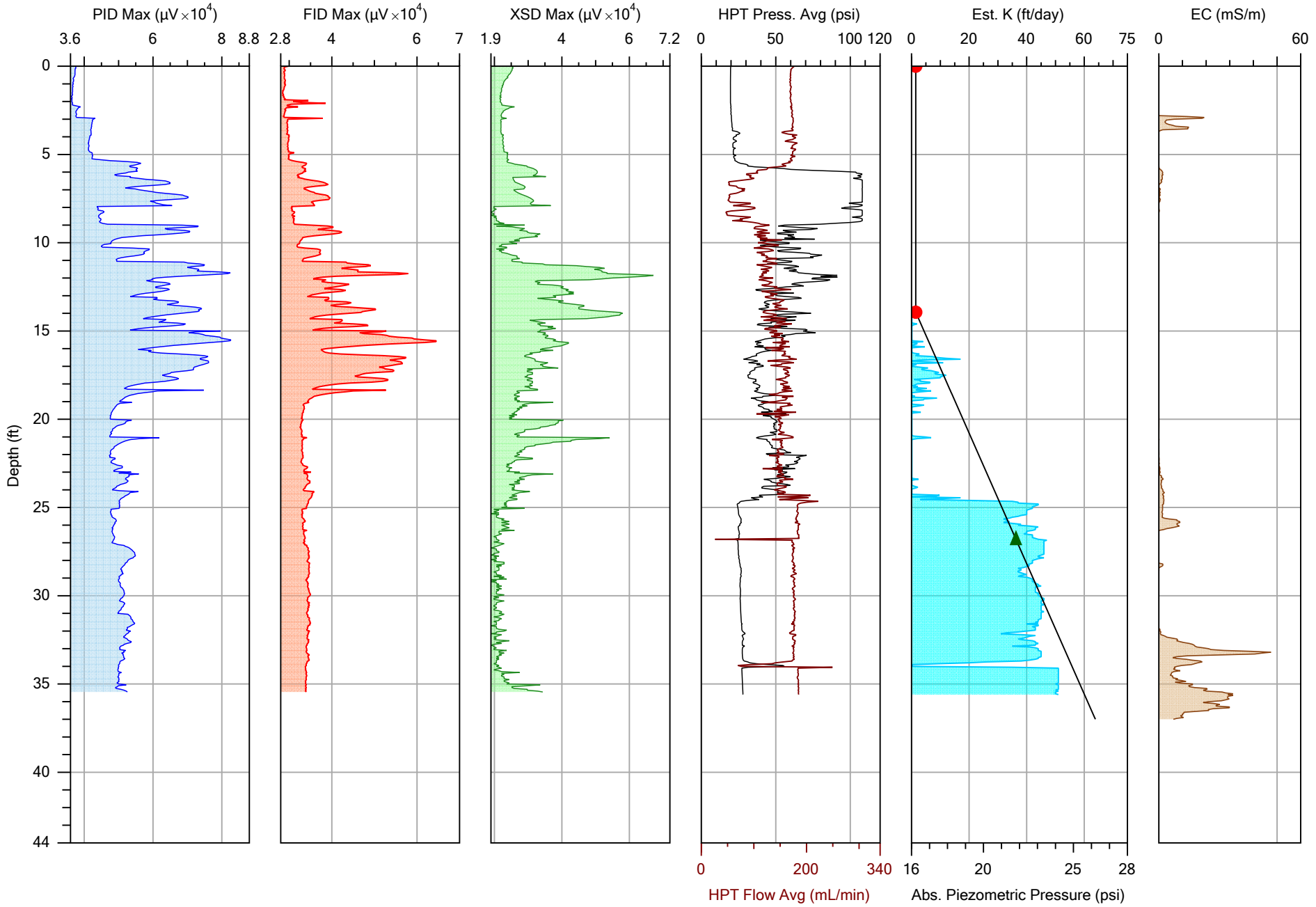

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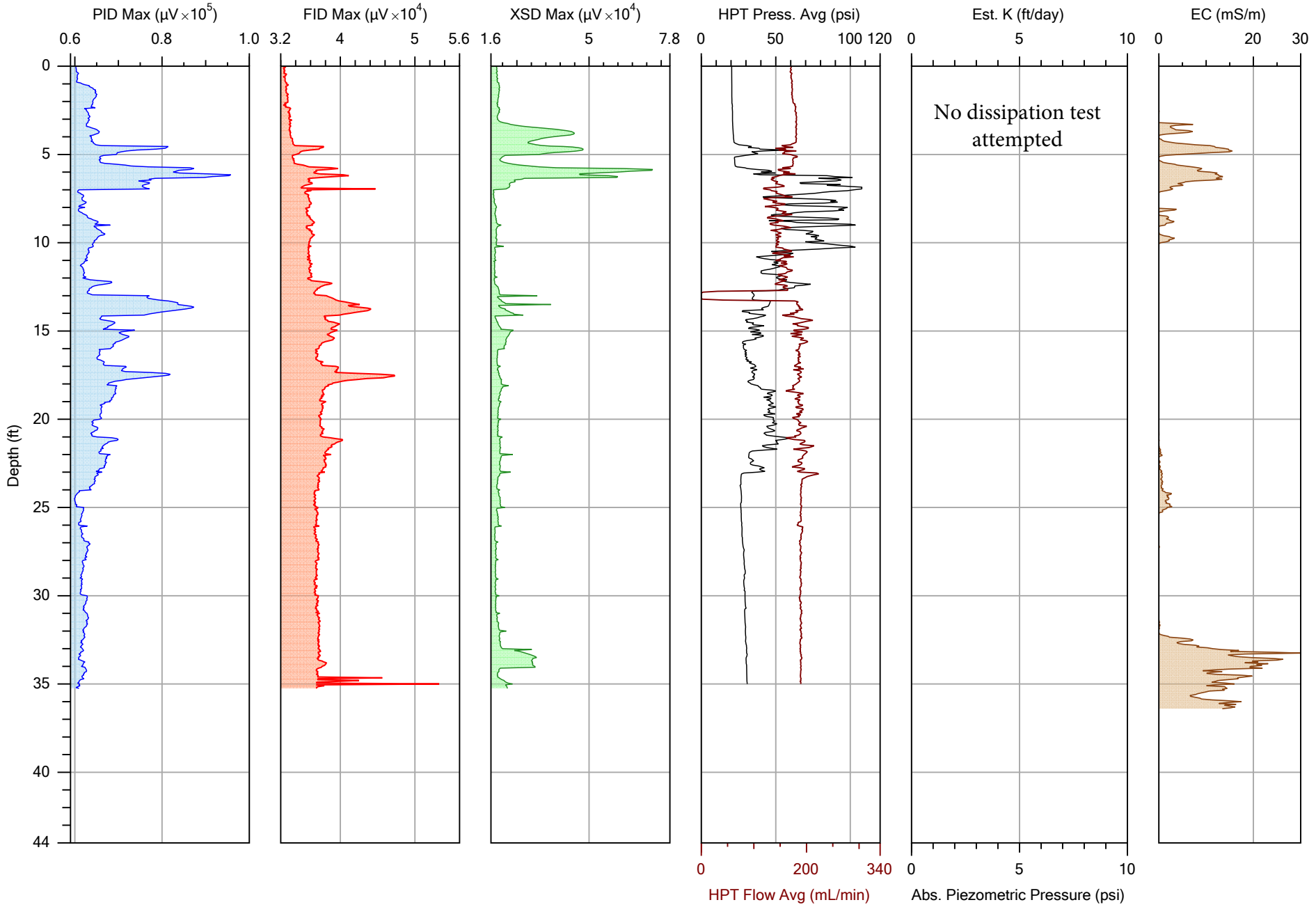

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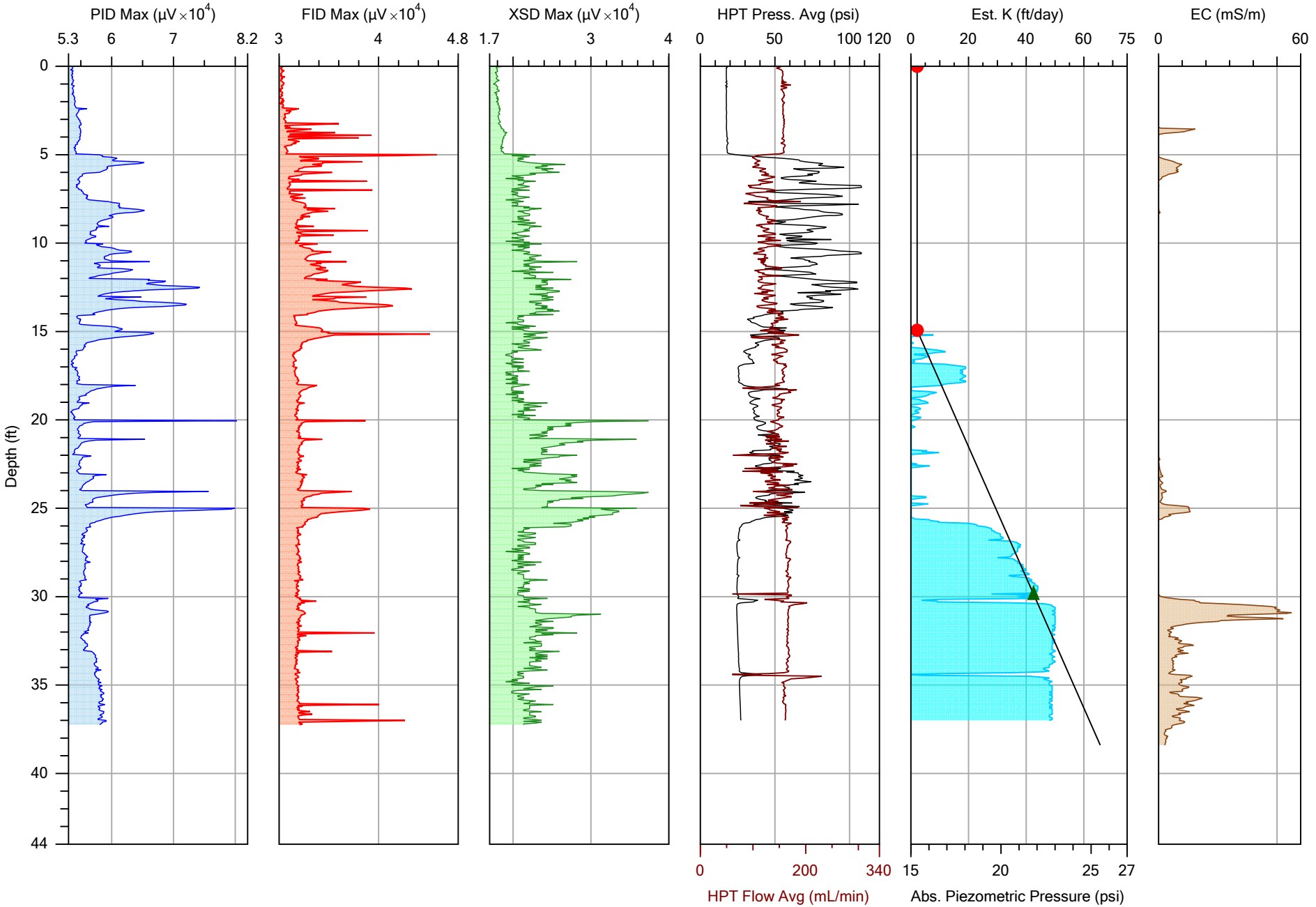

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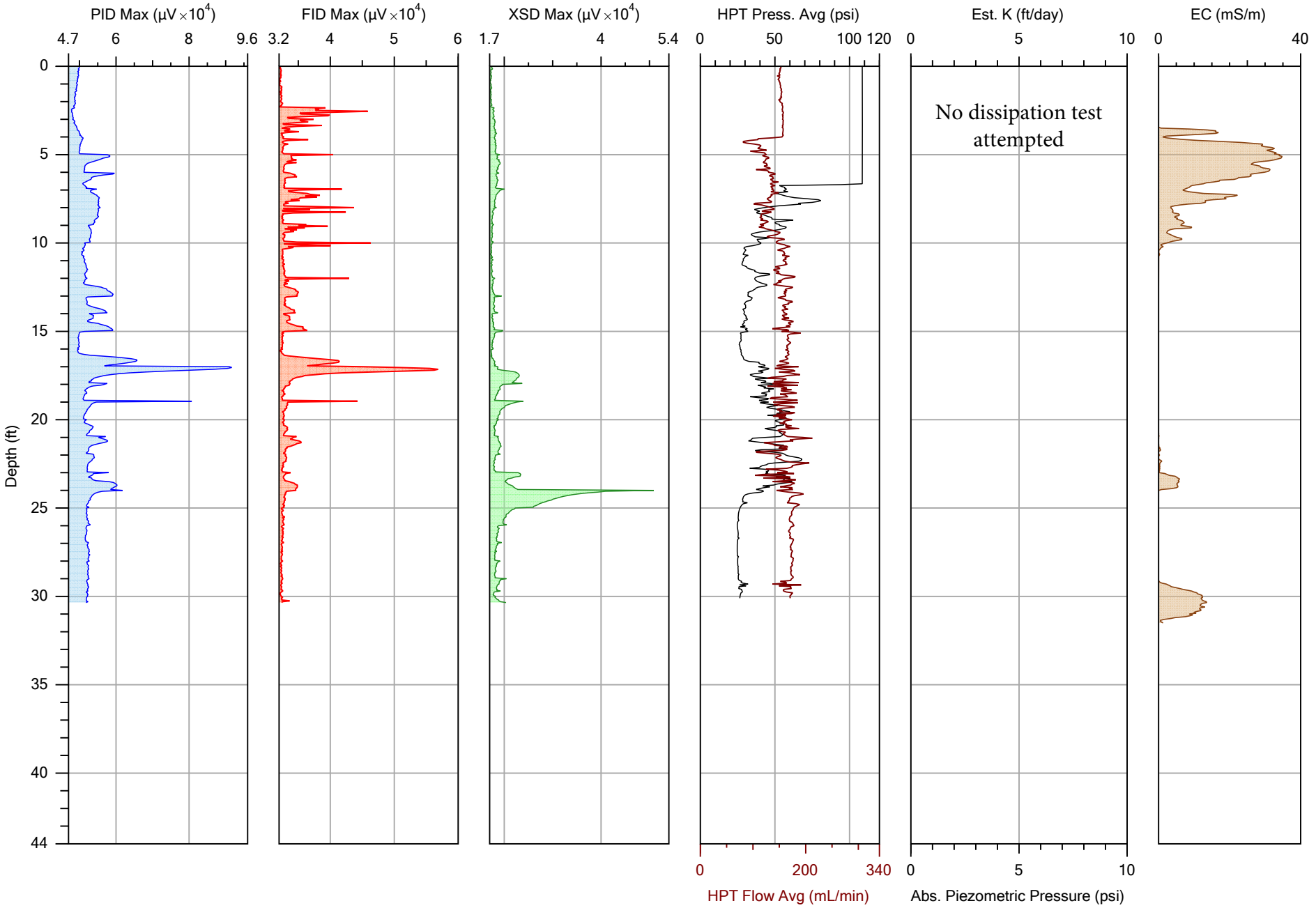

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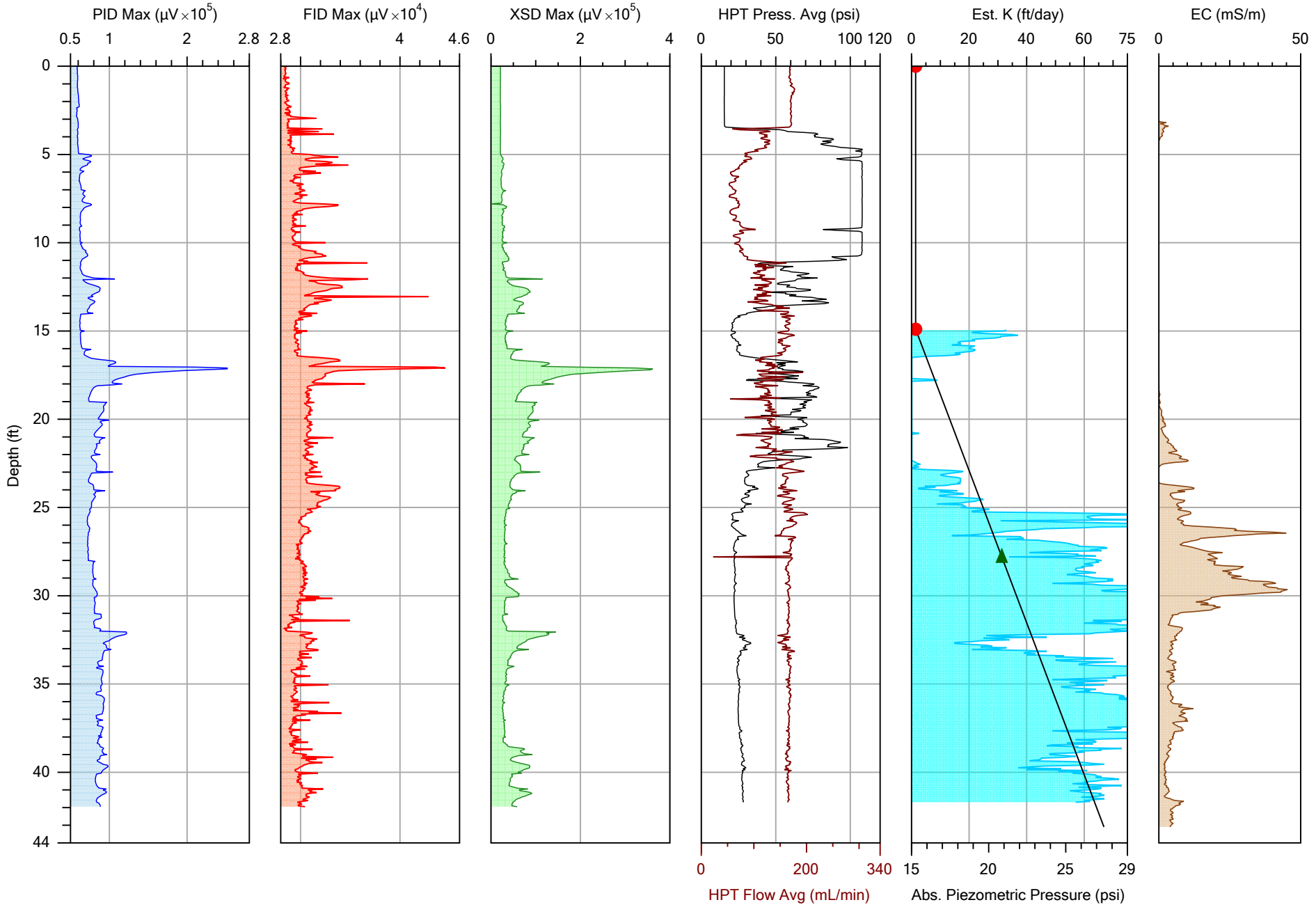

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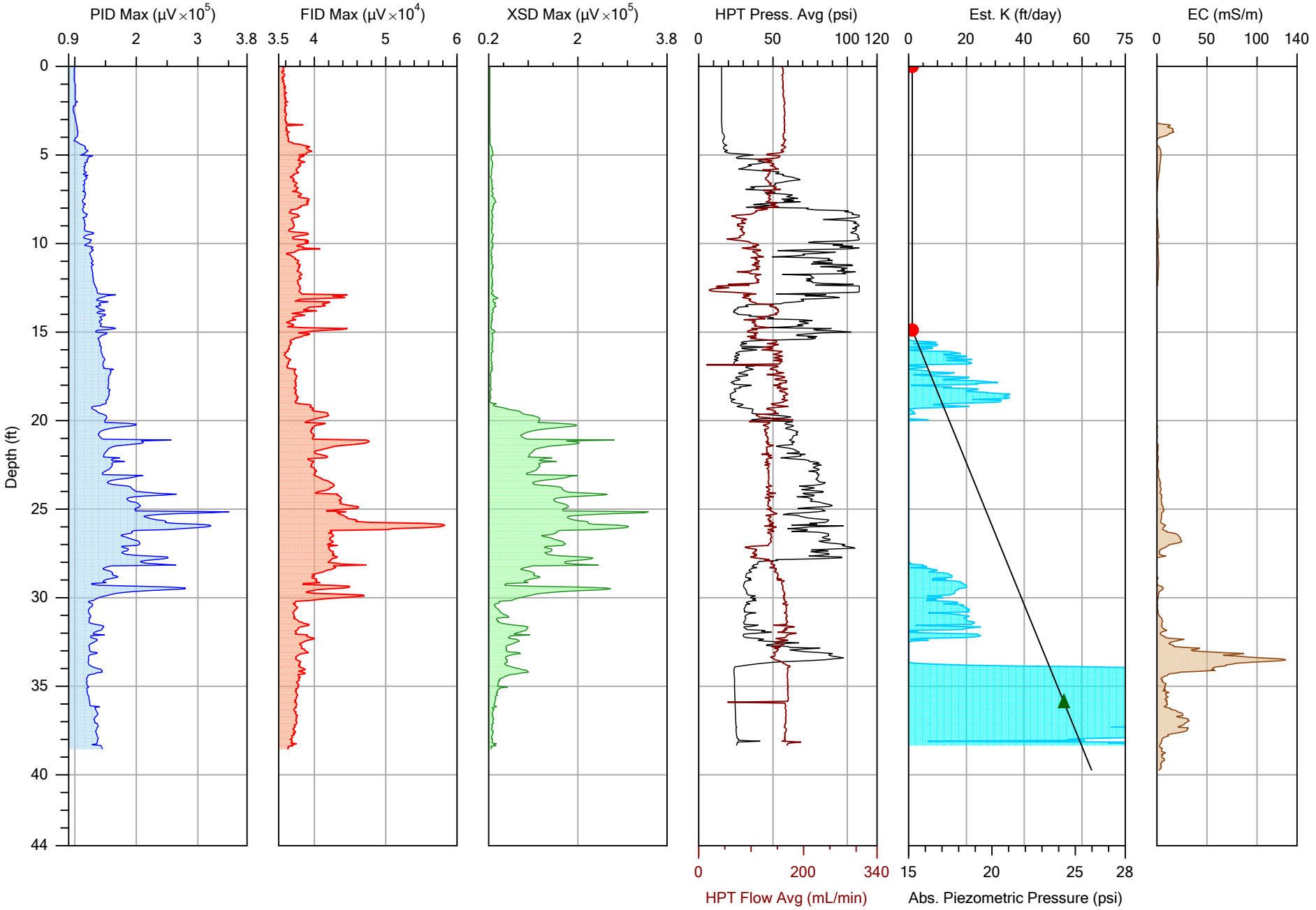

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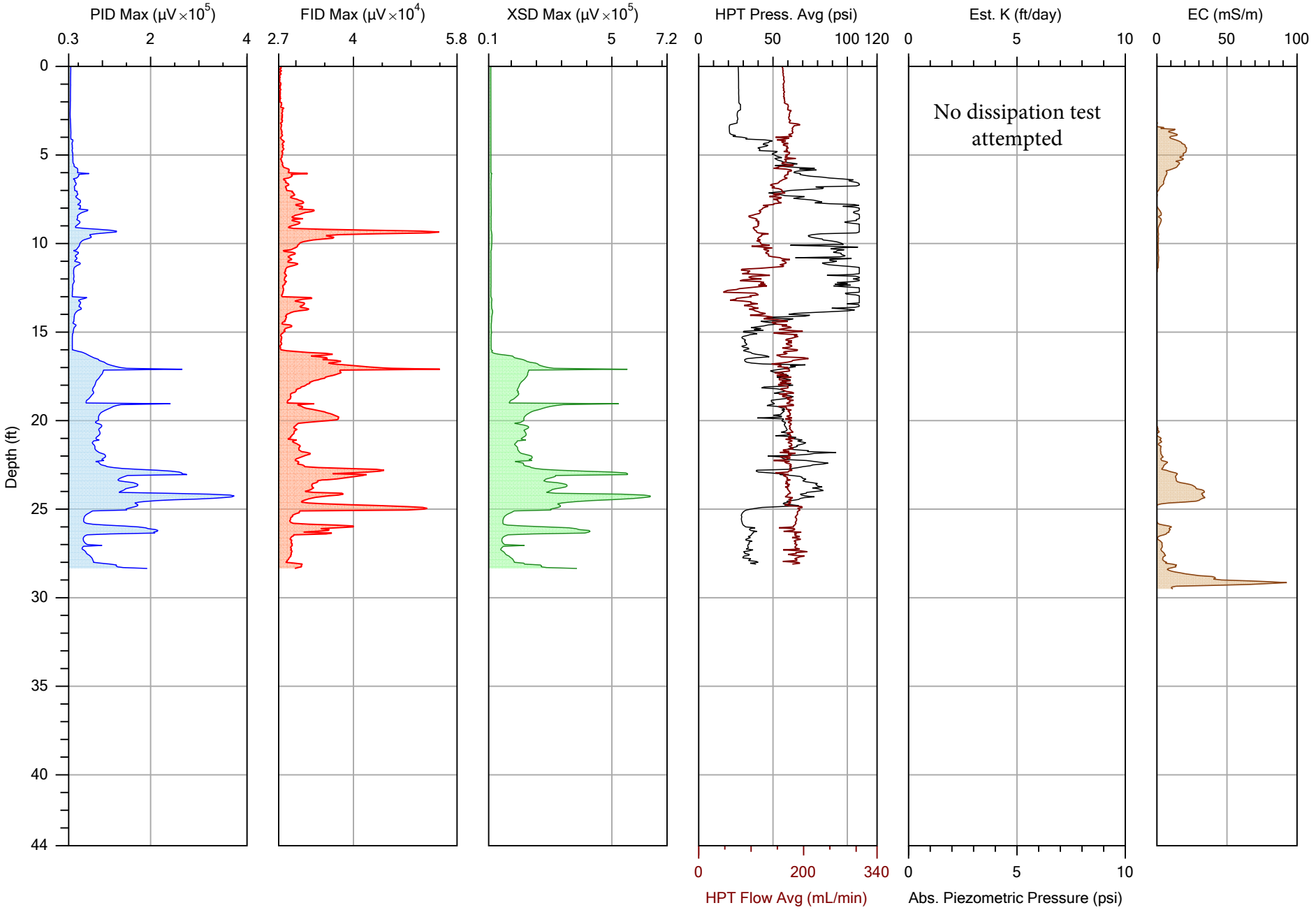

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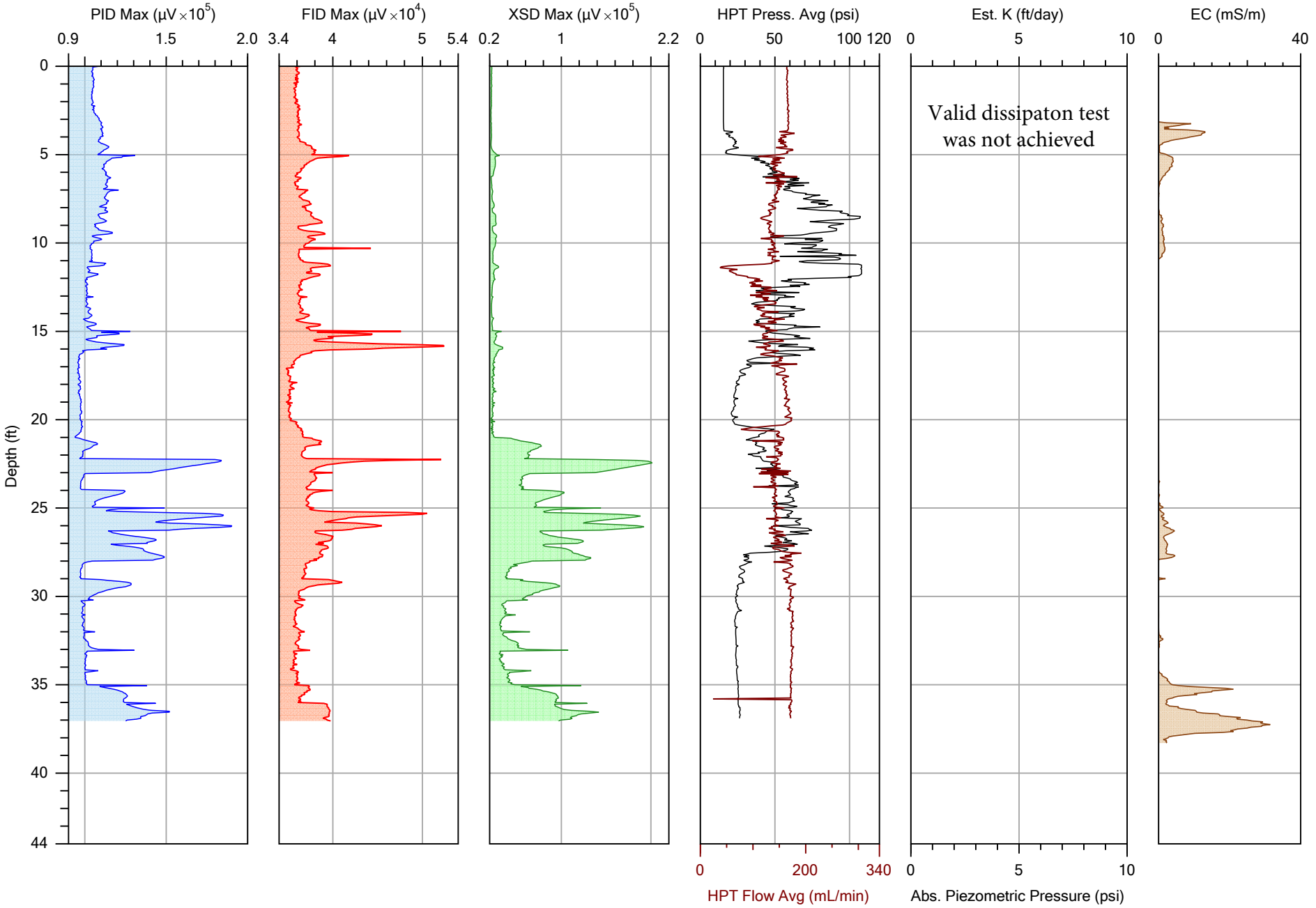

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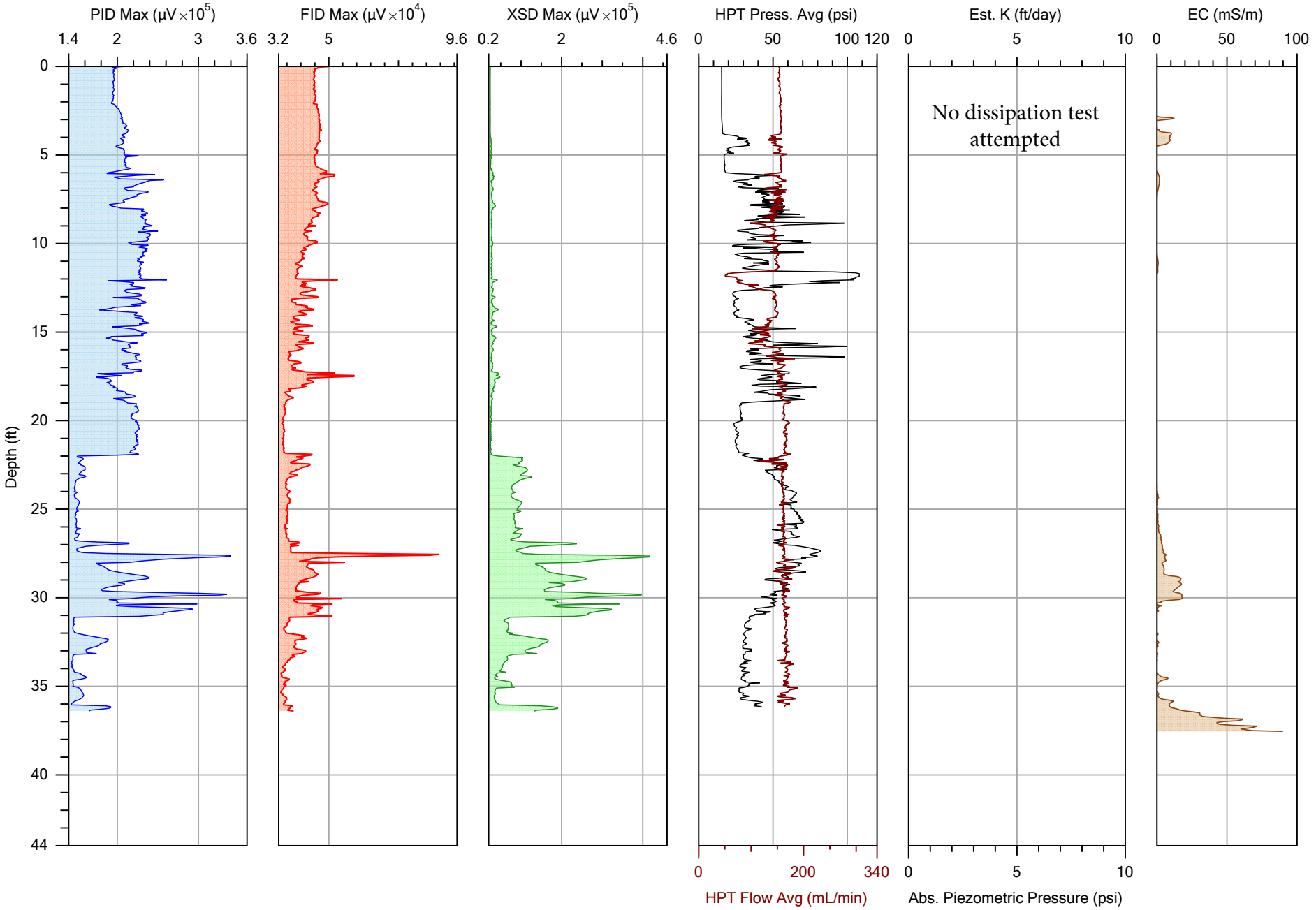

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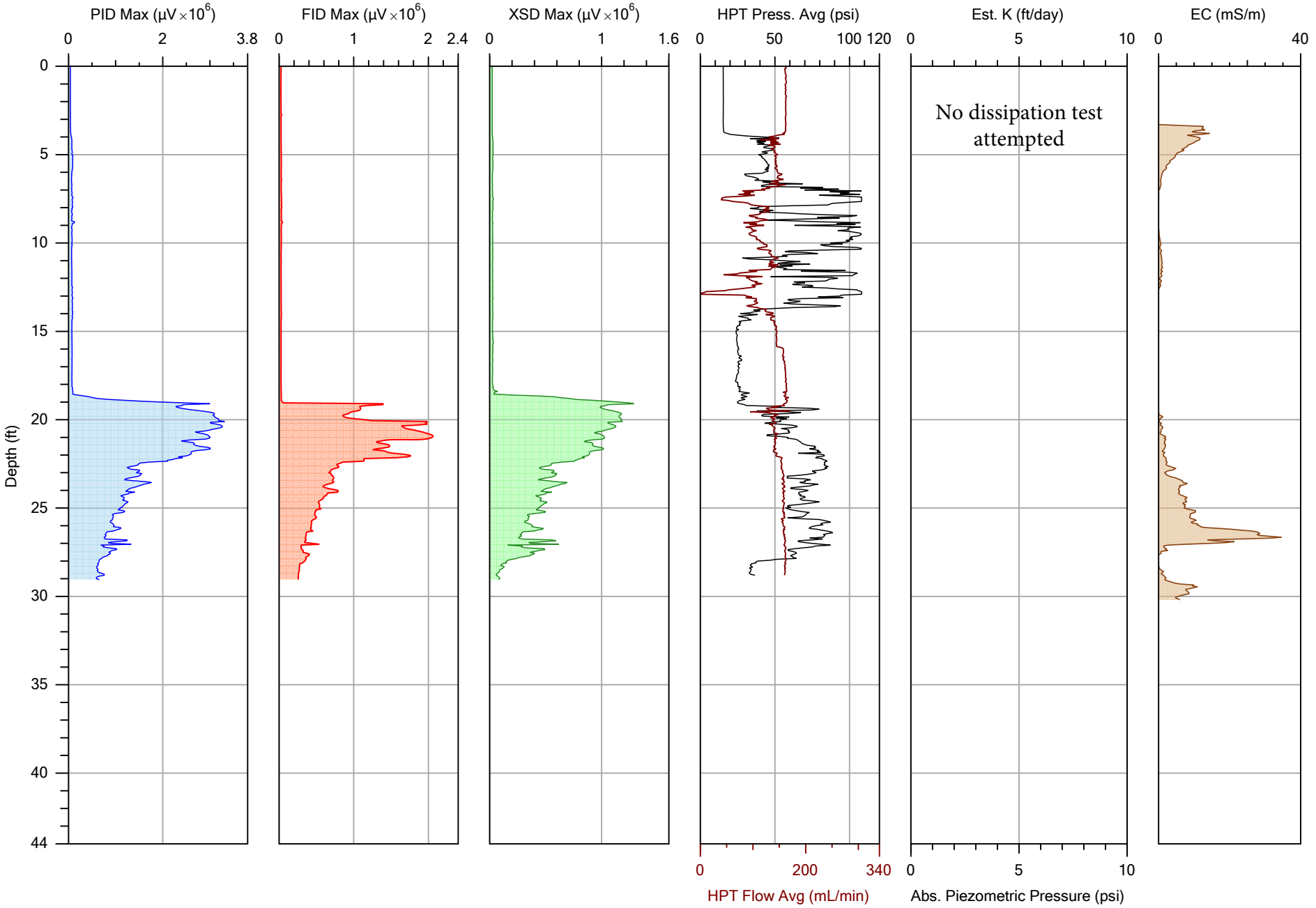

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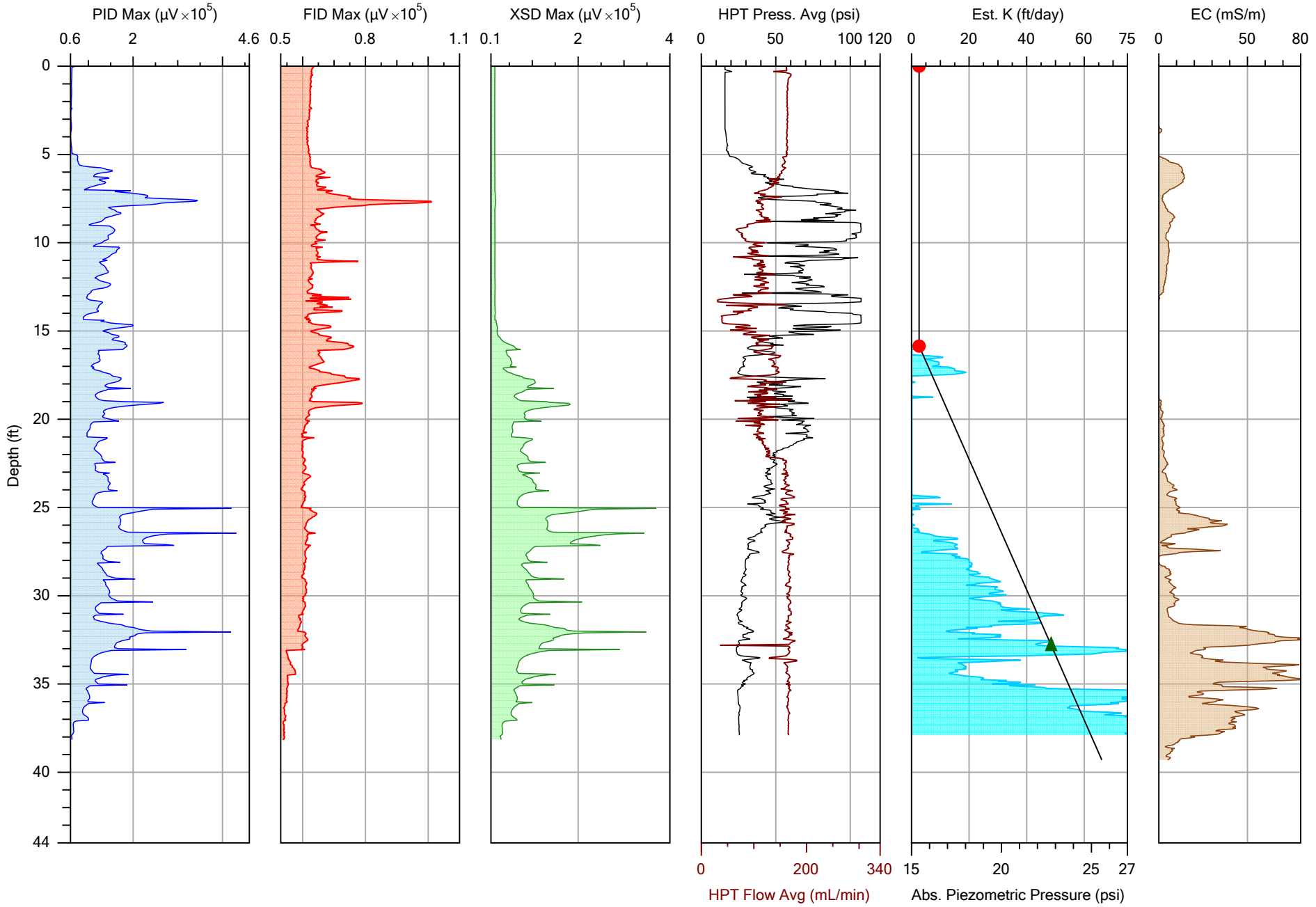

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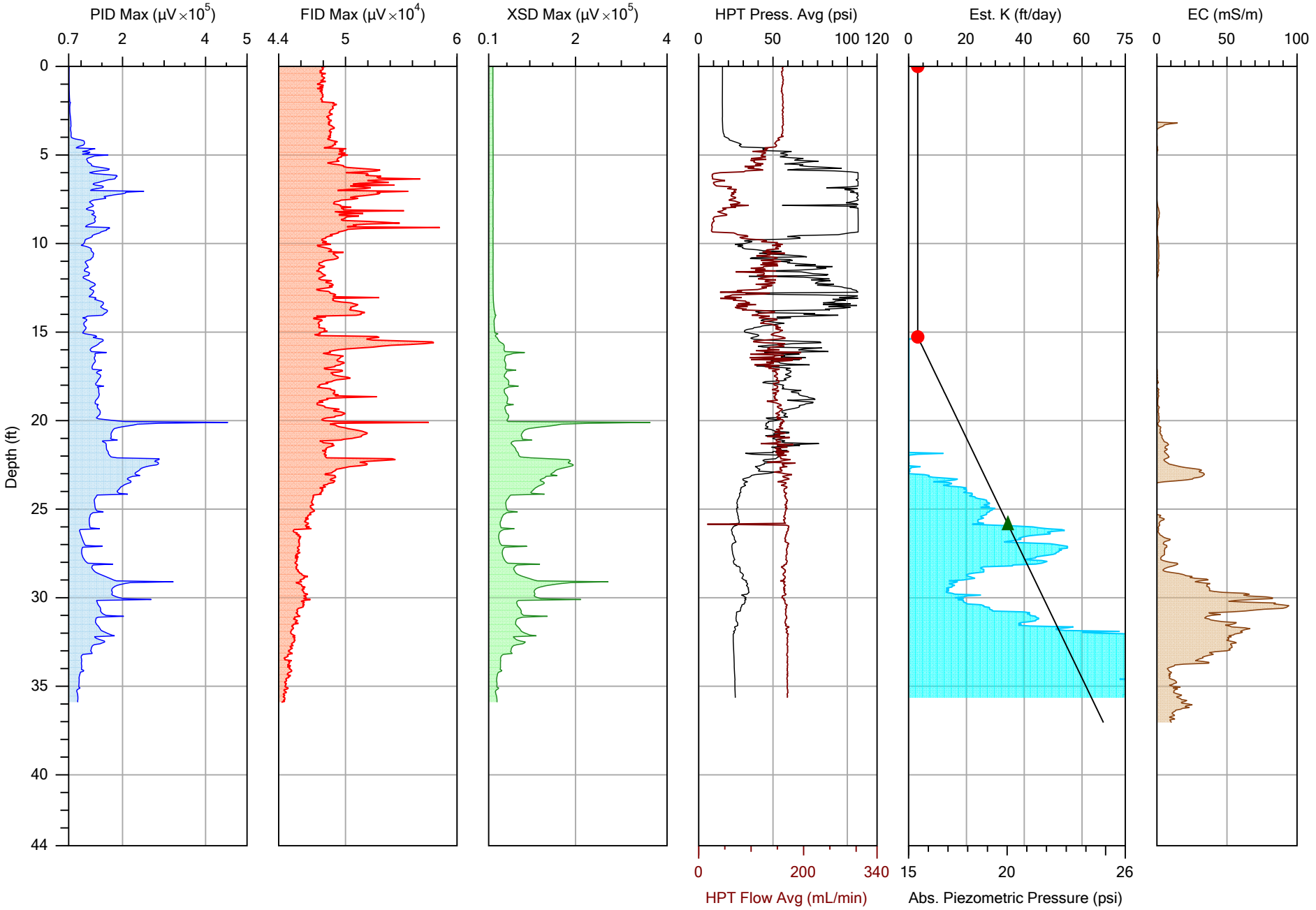

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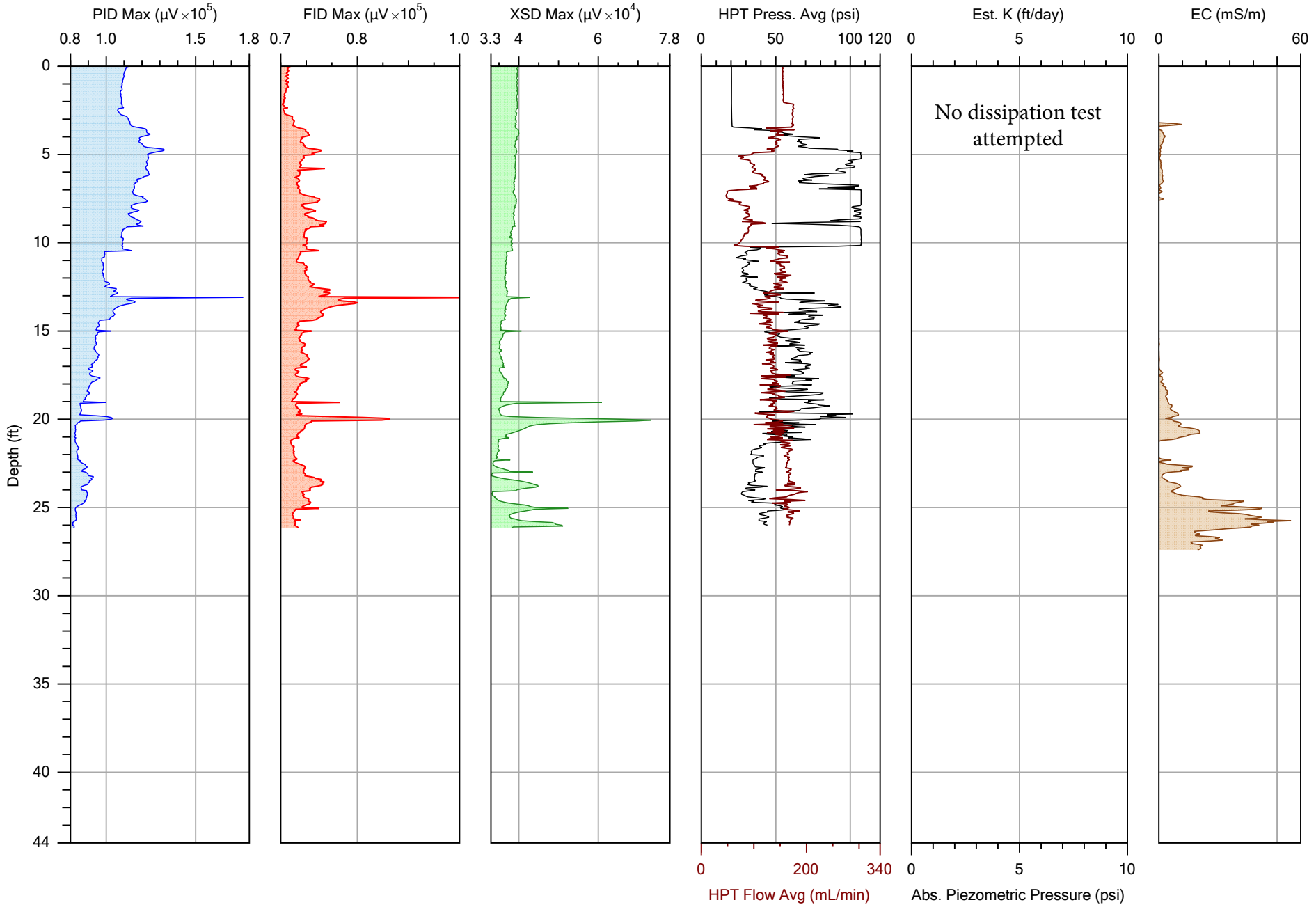

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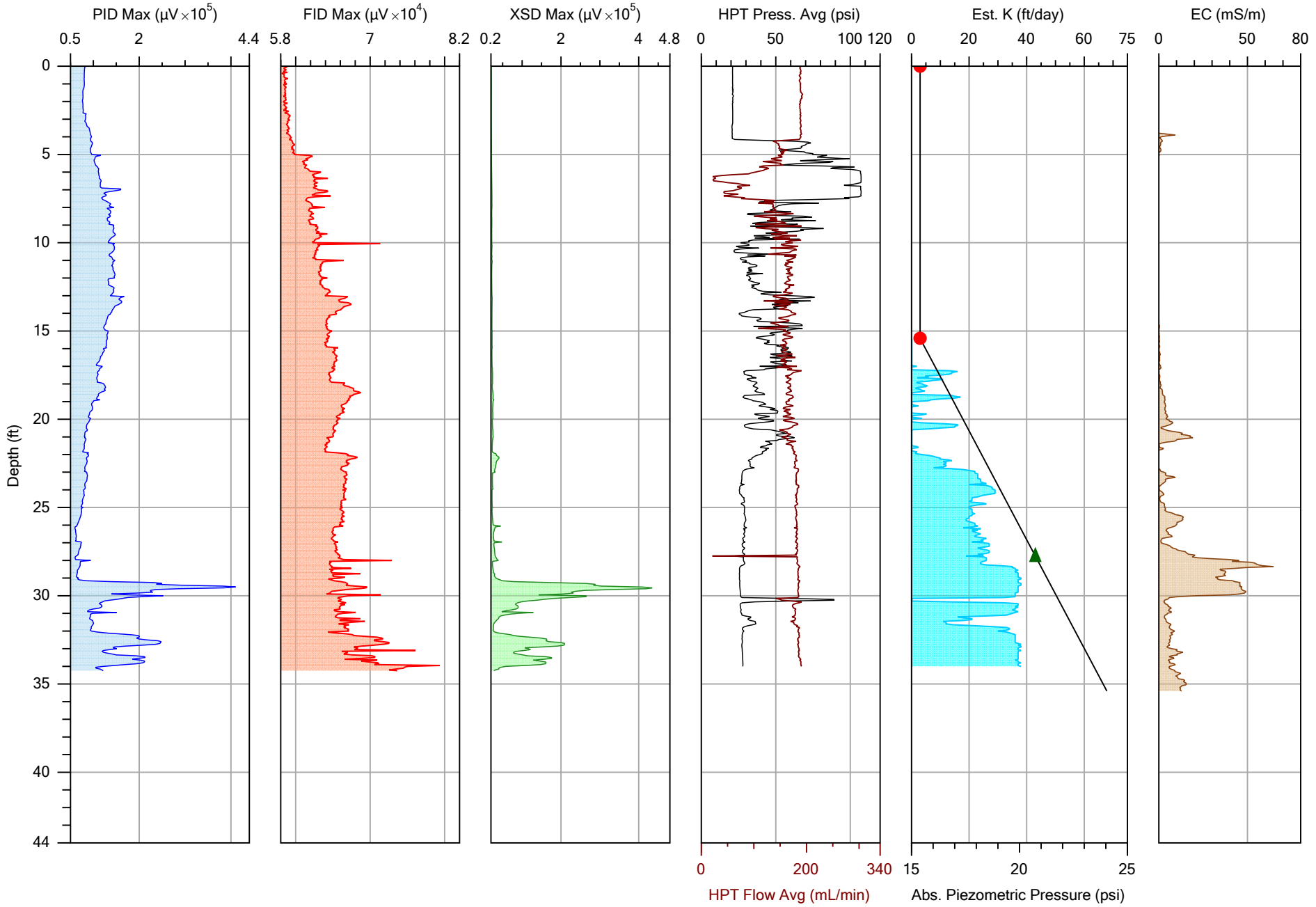

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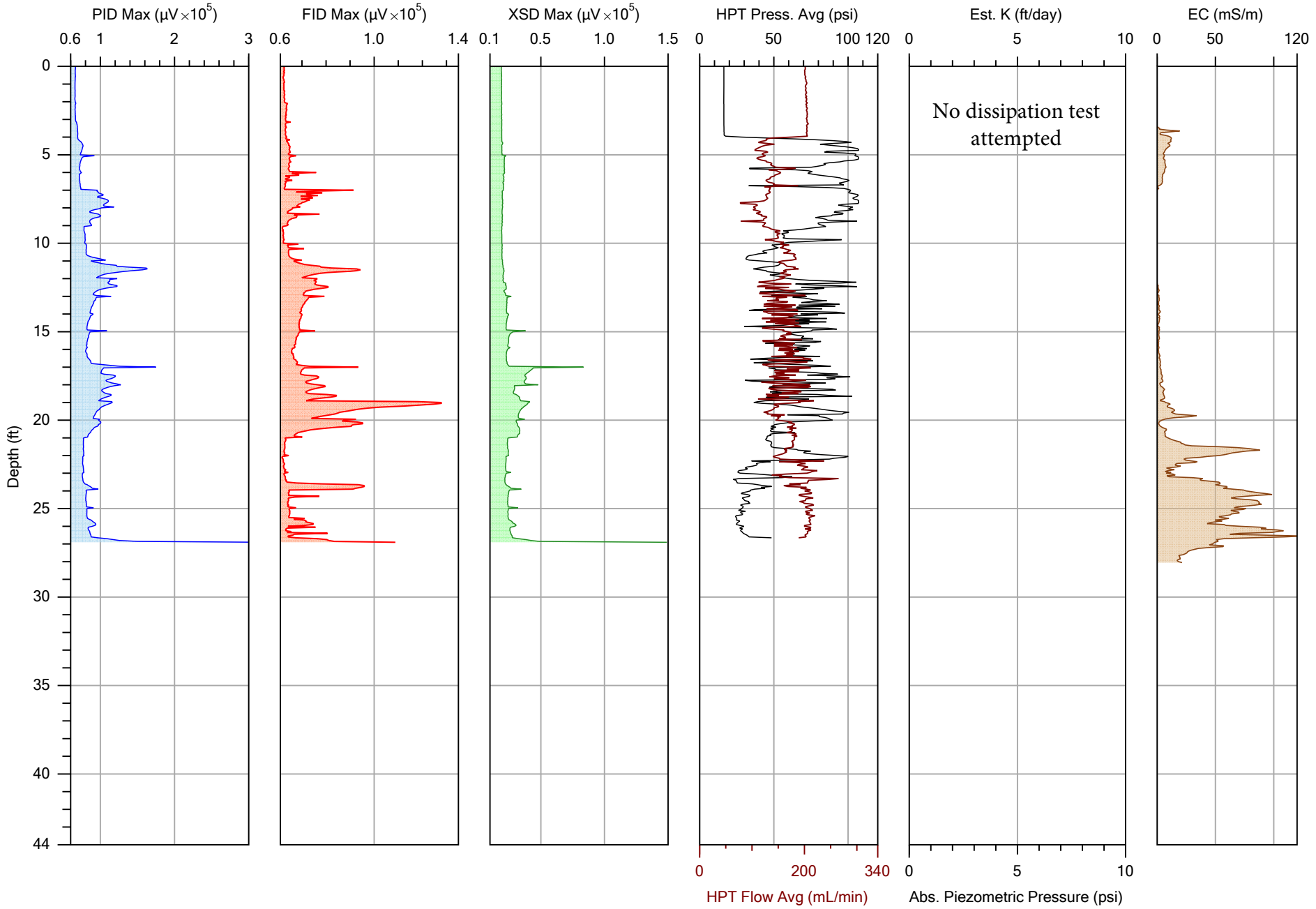

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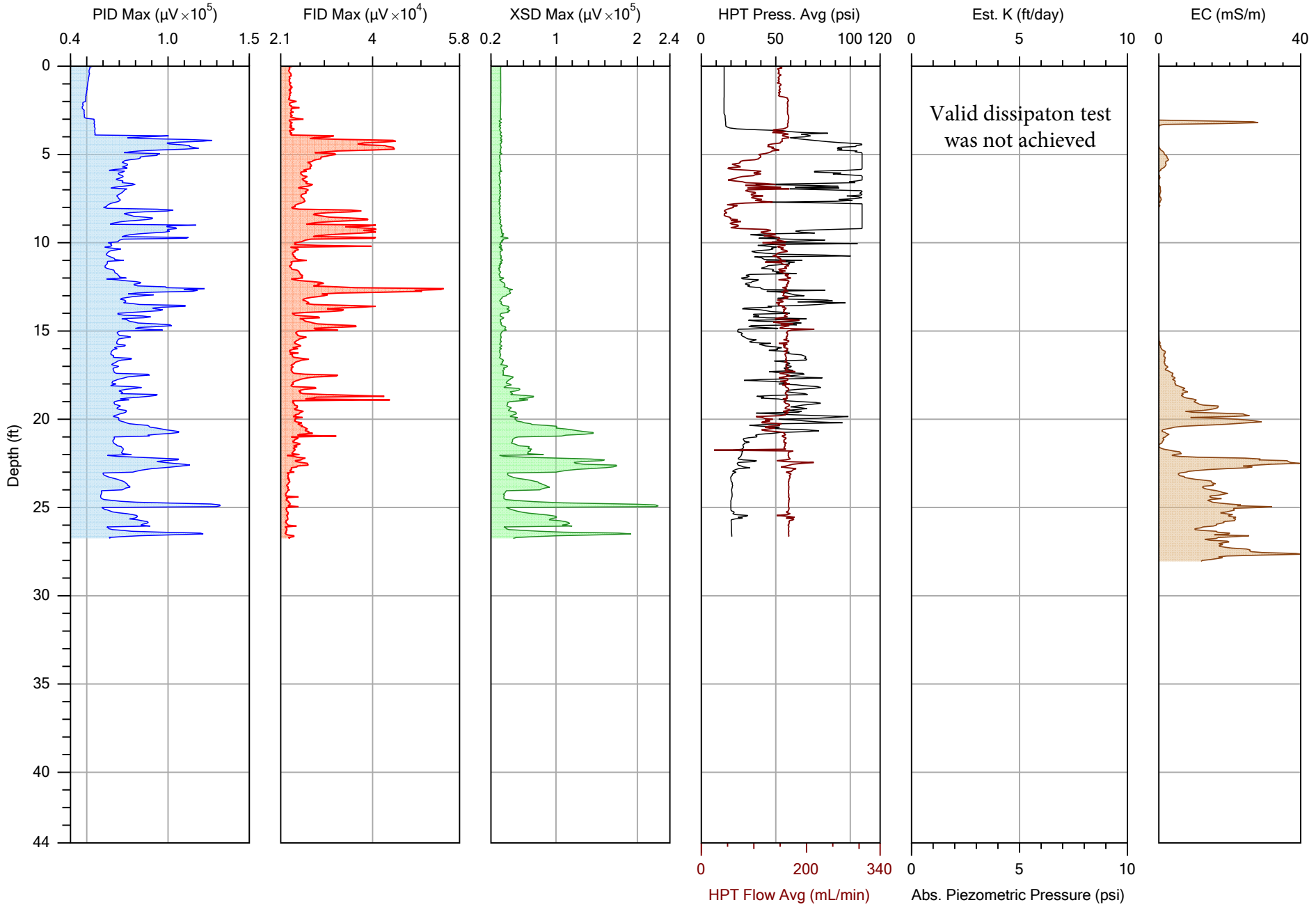

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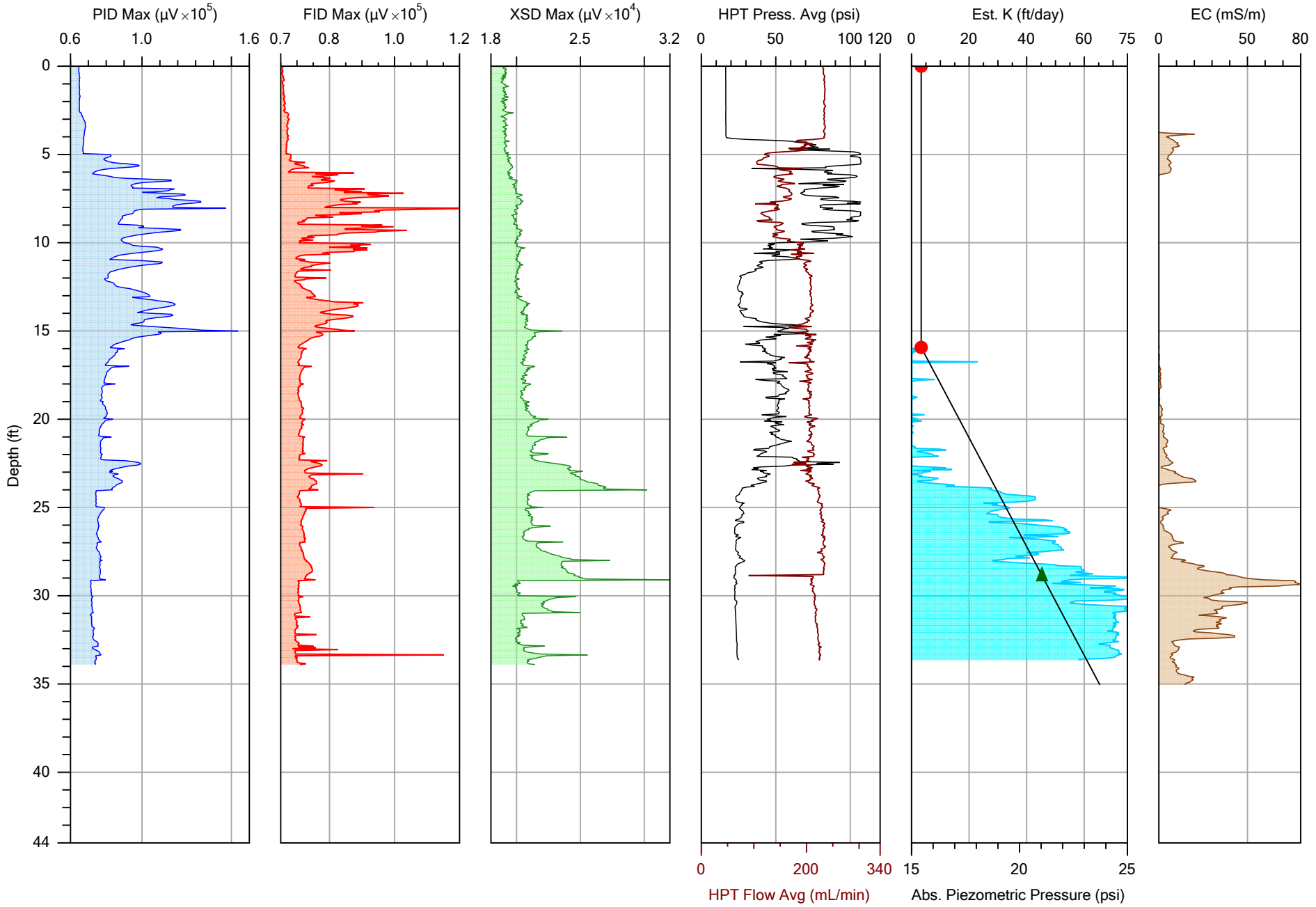

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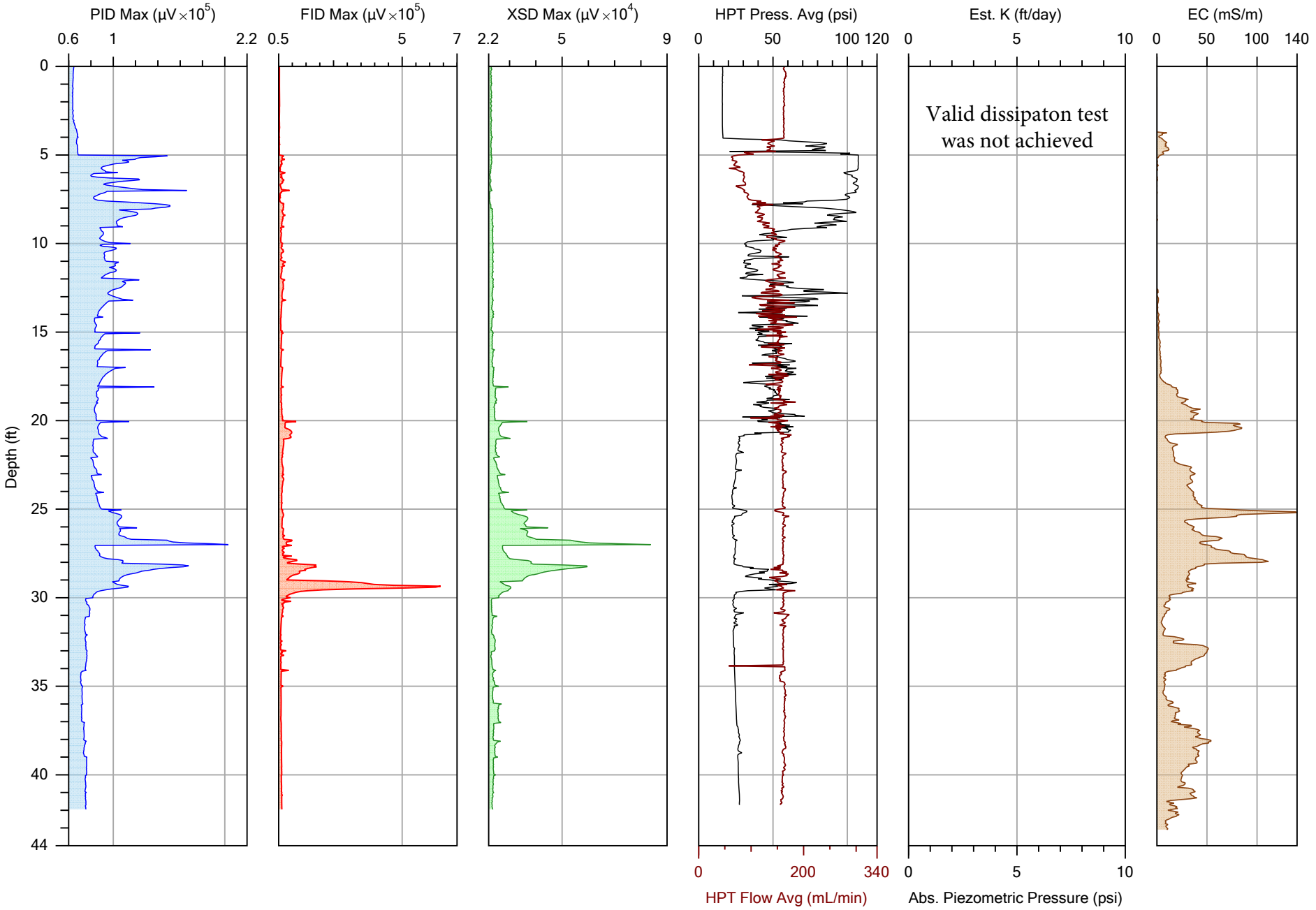

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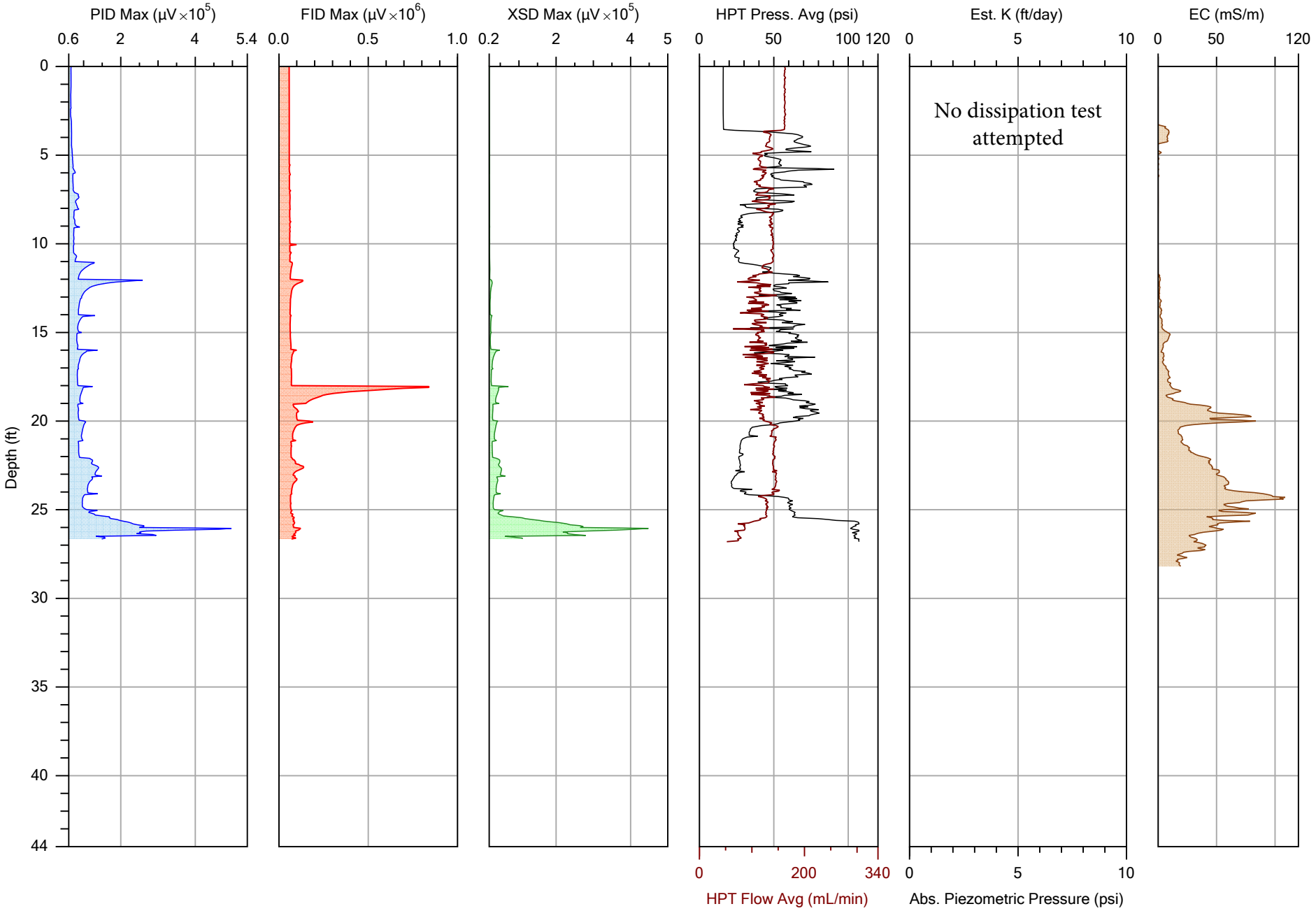

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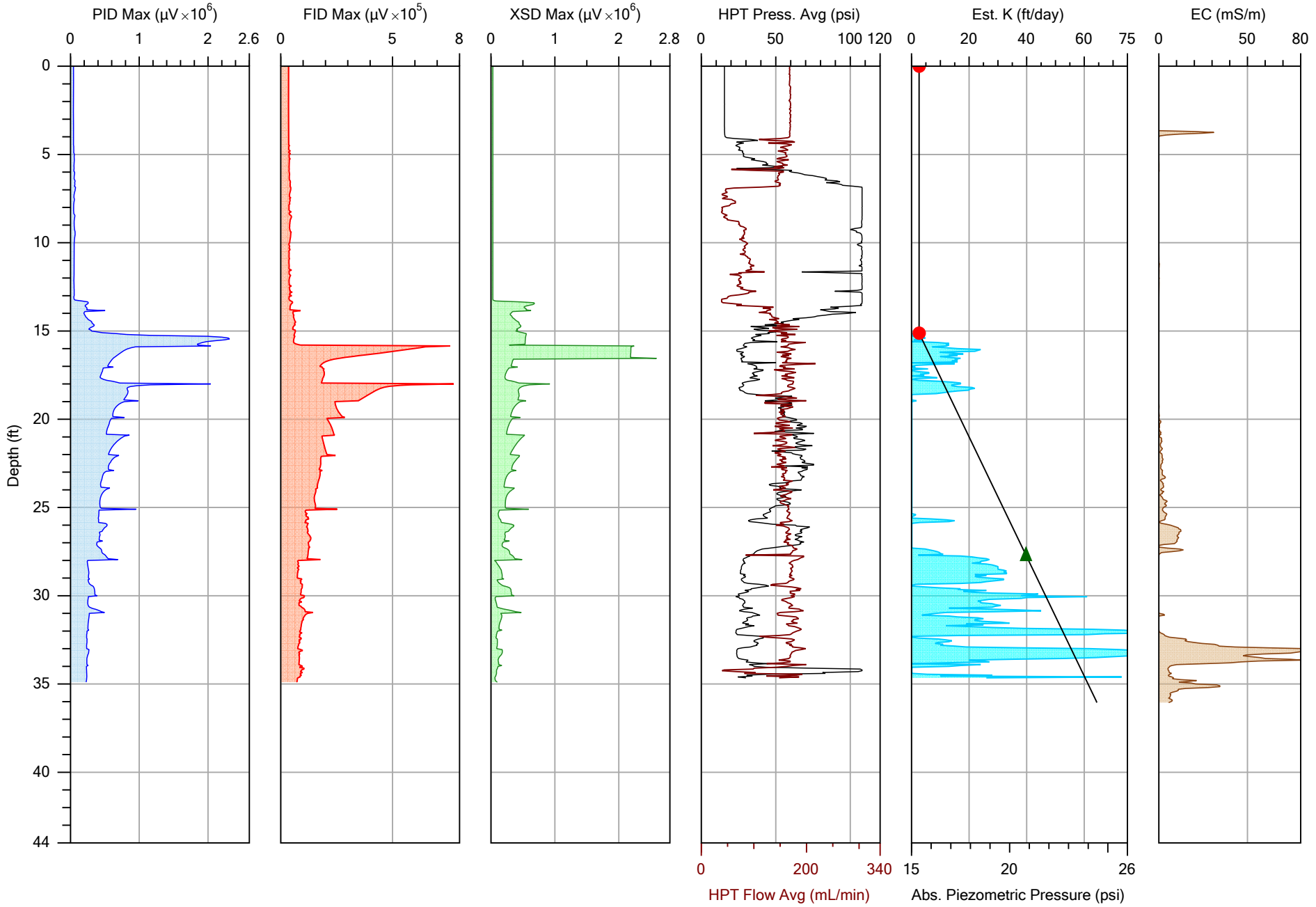

COLUMBIA TECHNOLOGIES

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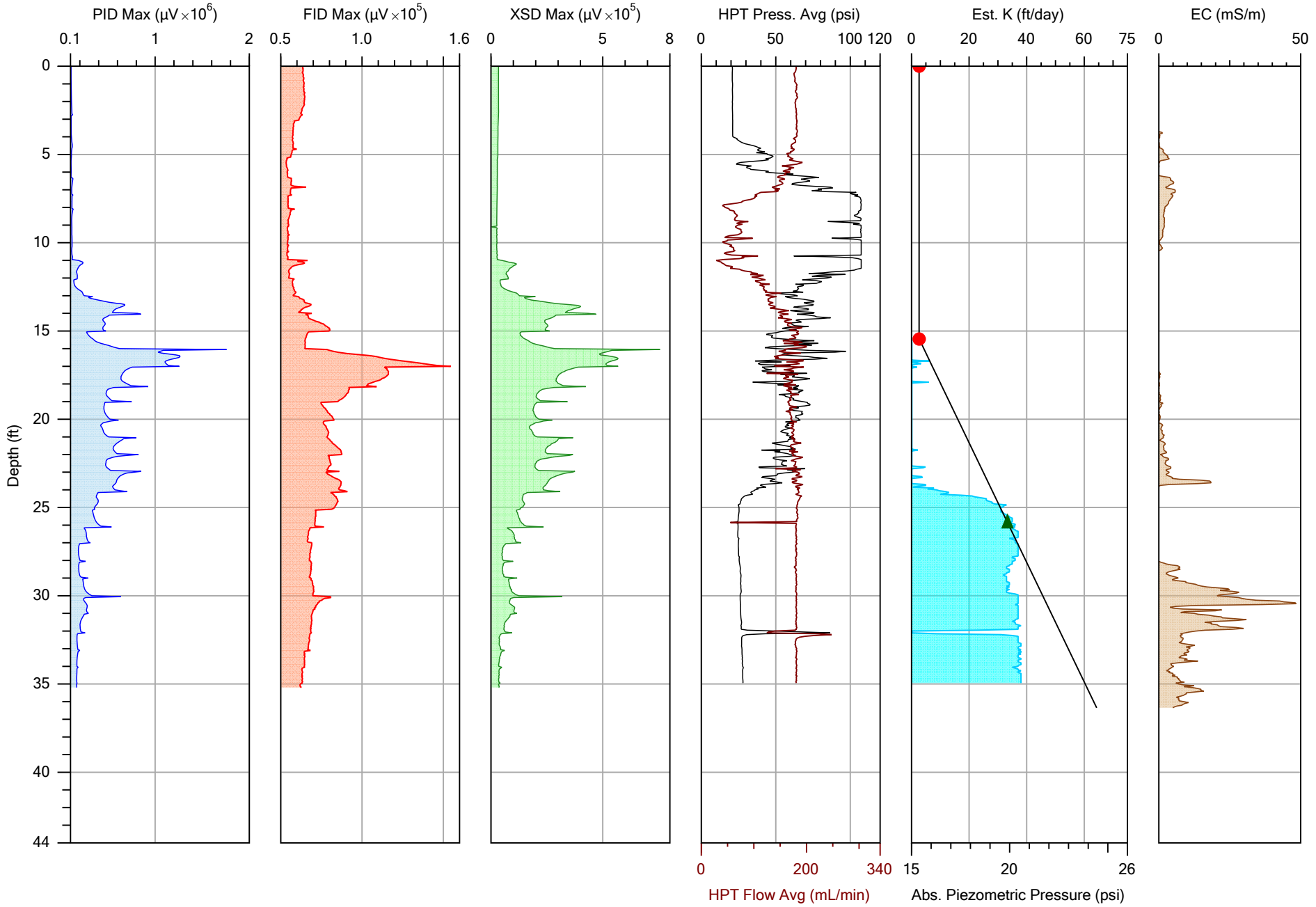

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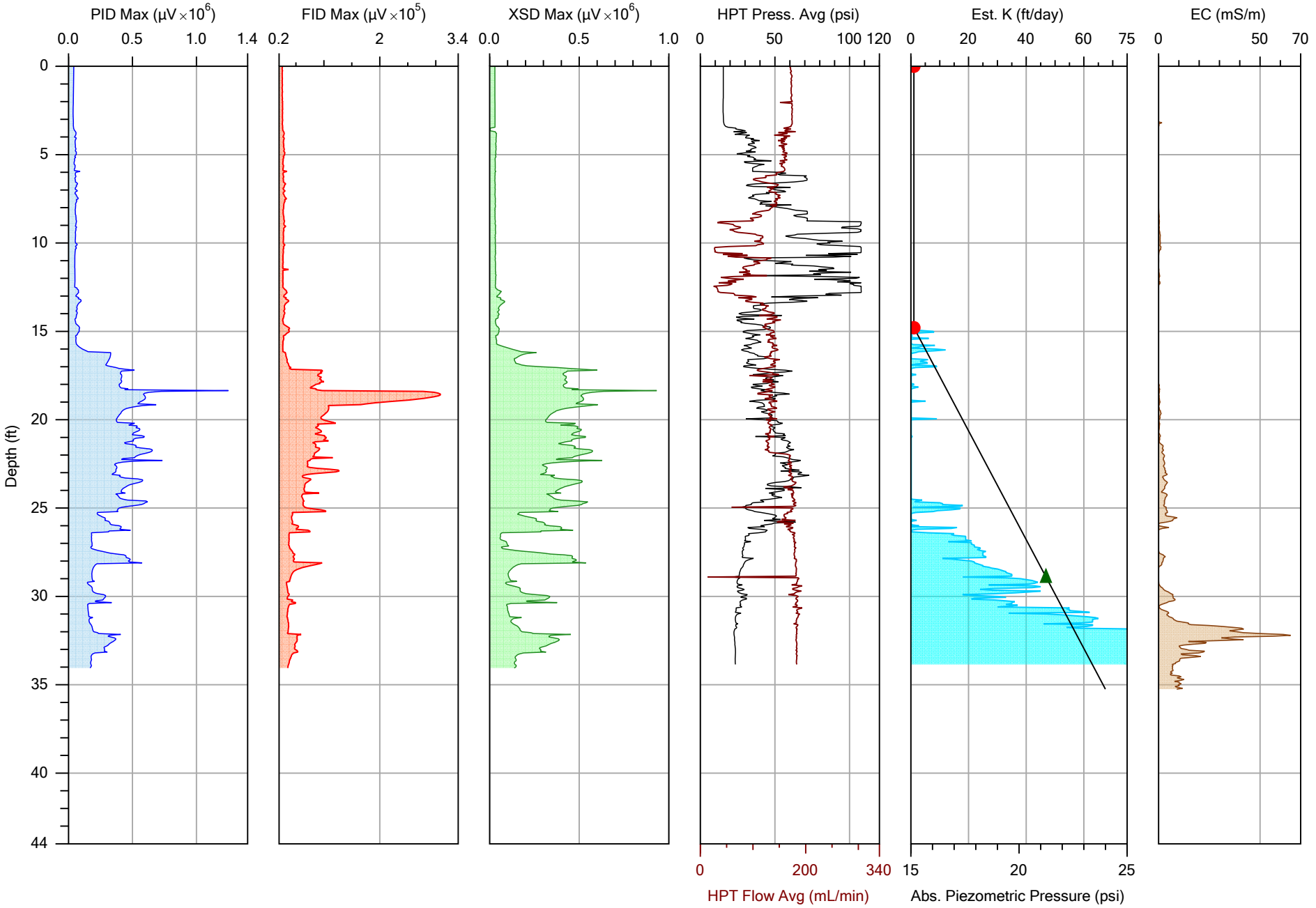

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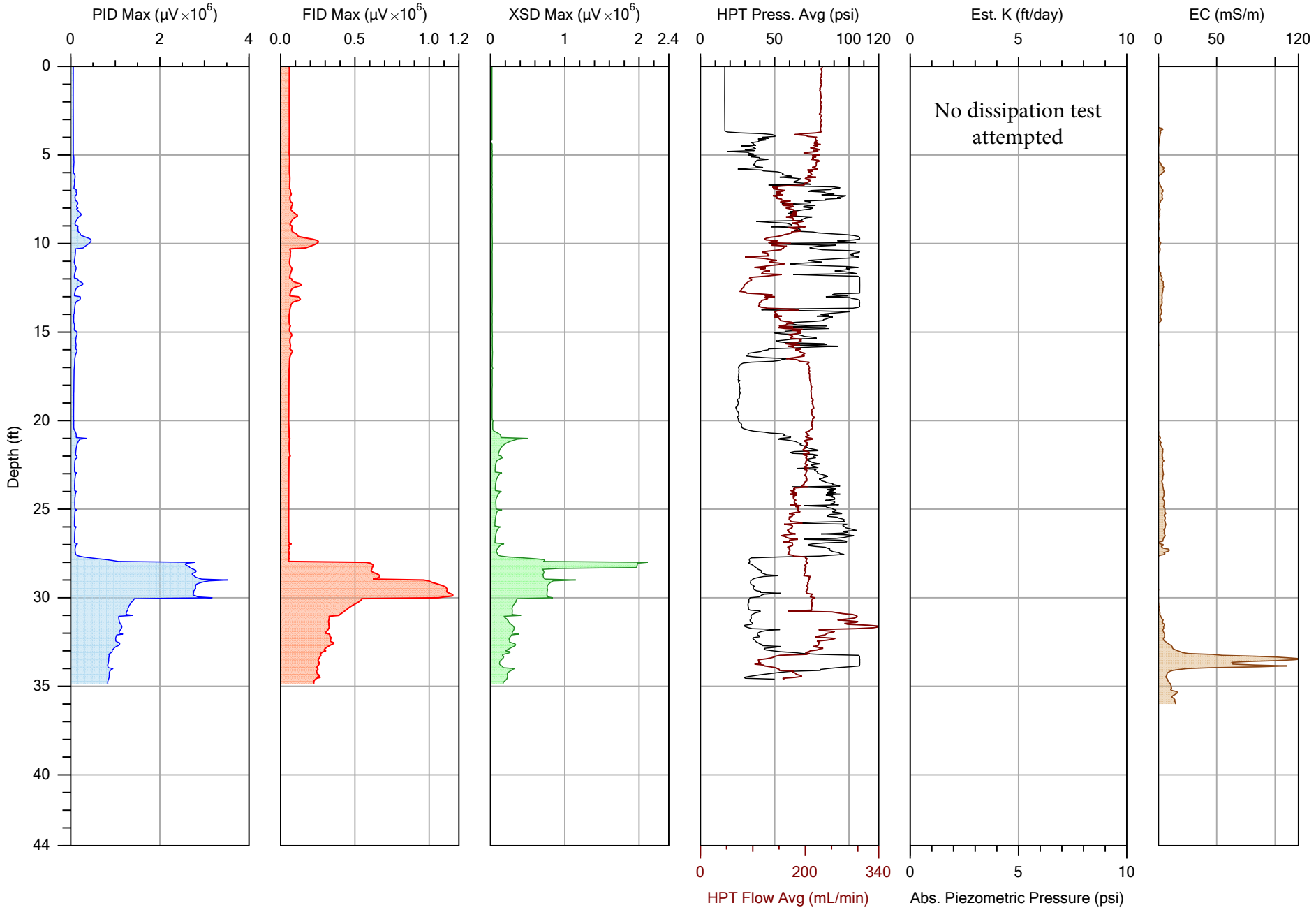

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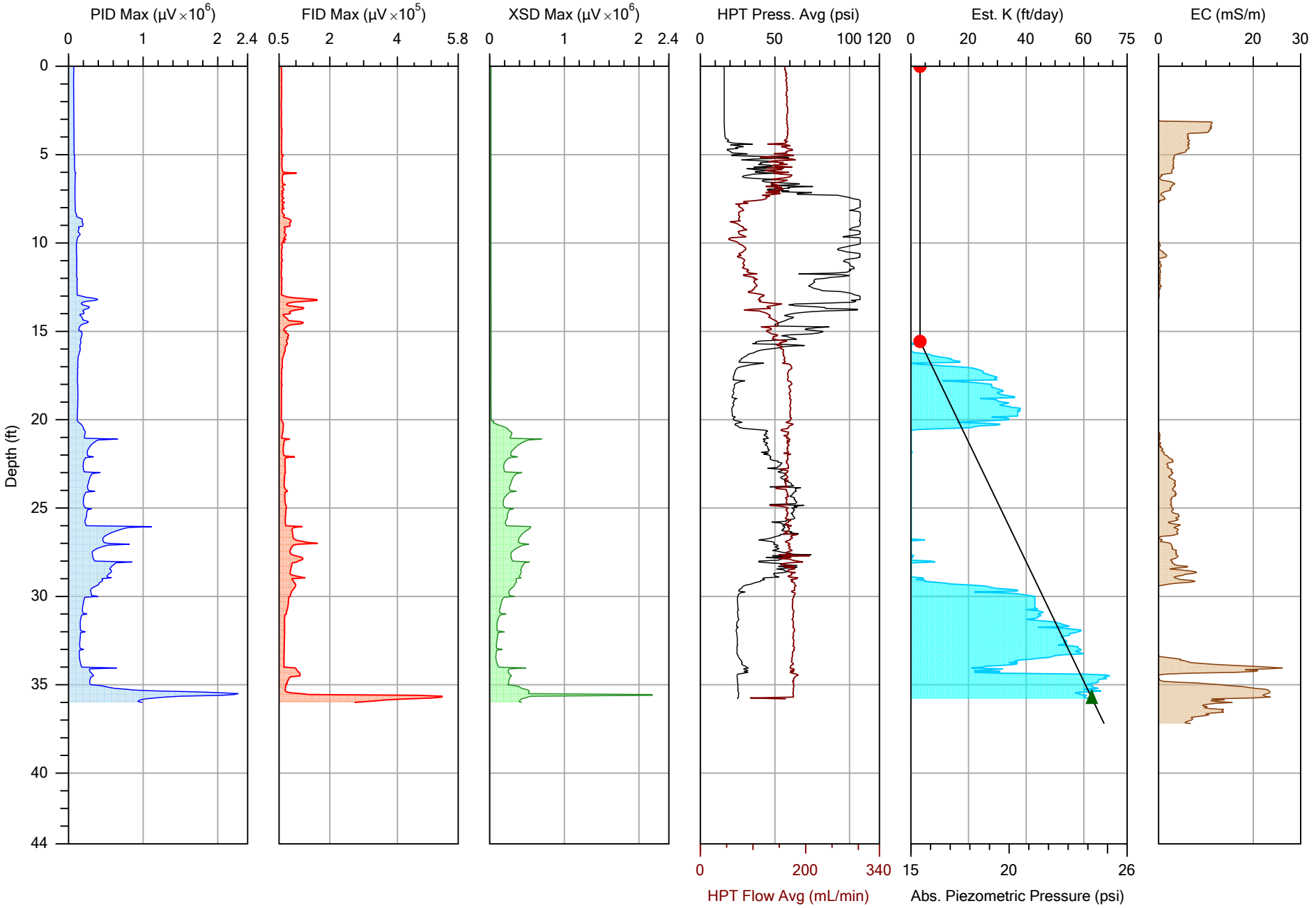
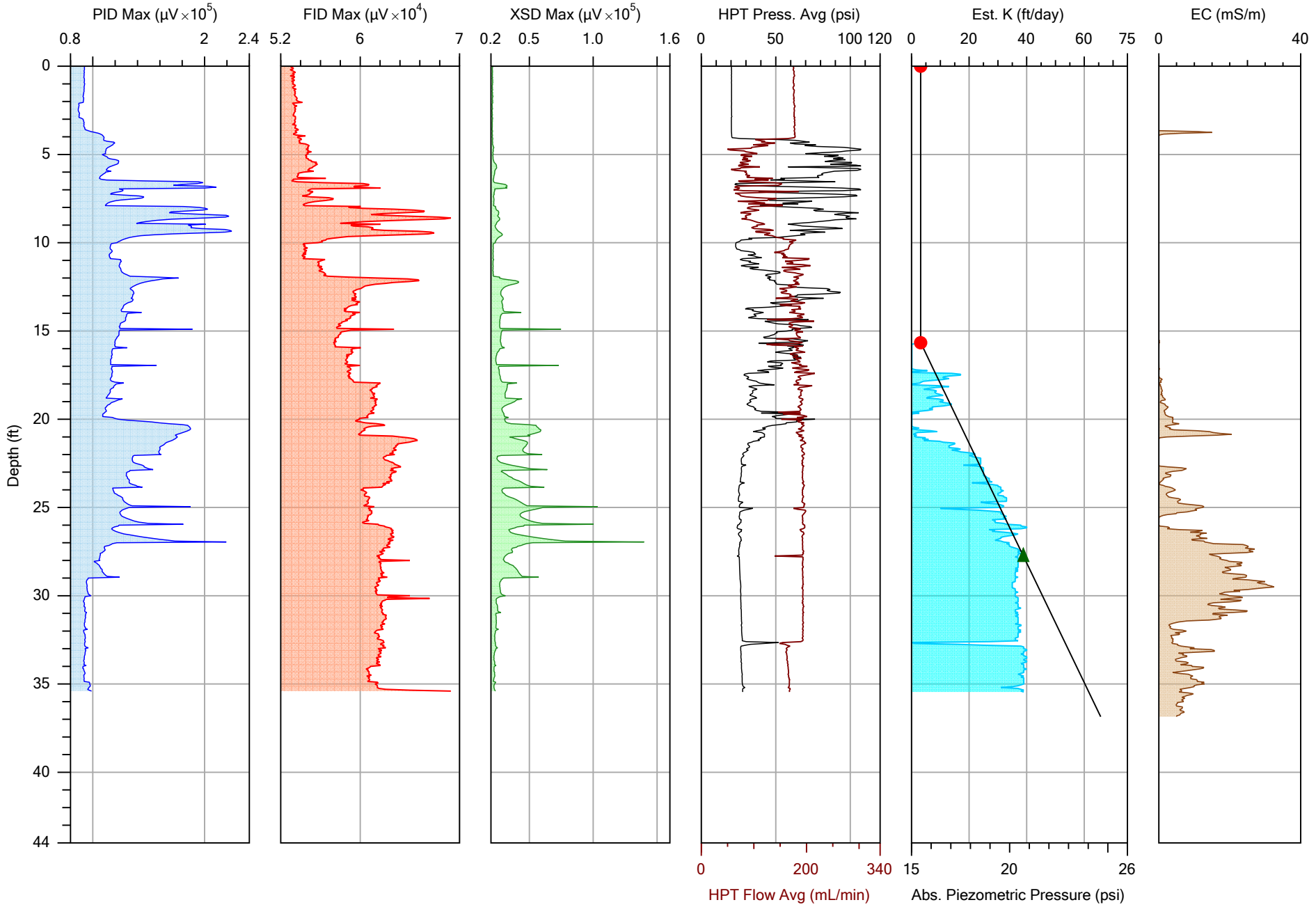
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/23/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



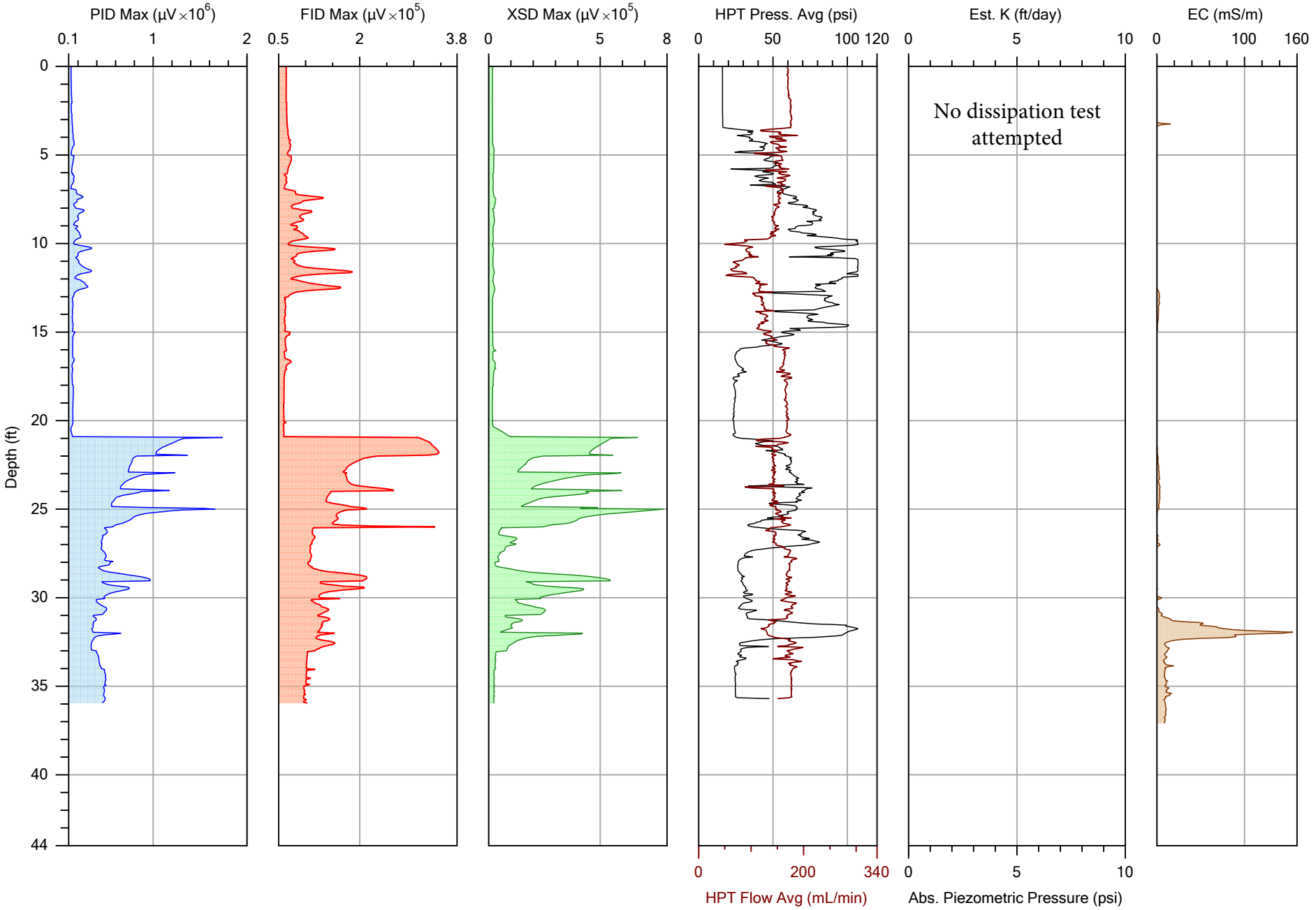
COLUMBIA TECHNOLOGIES

		File: MIP-128.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/24/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

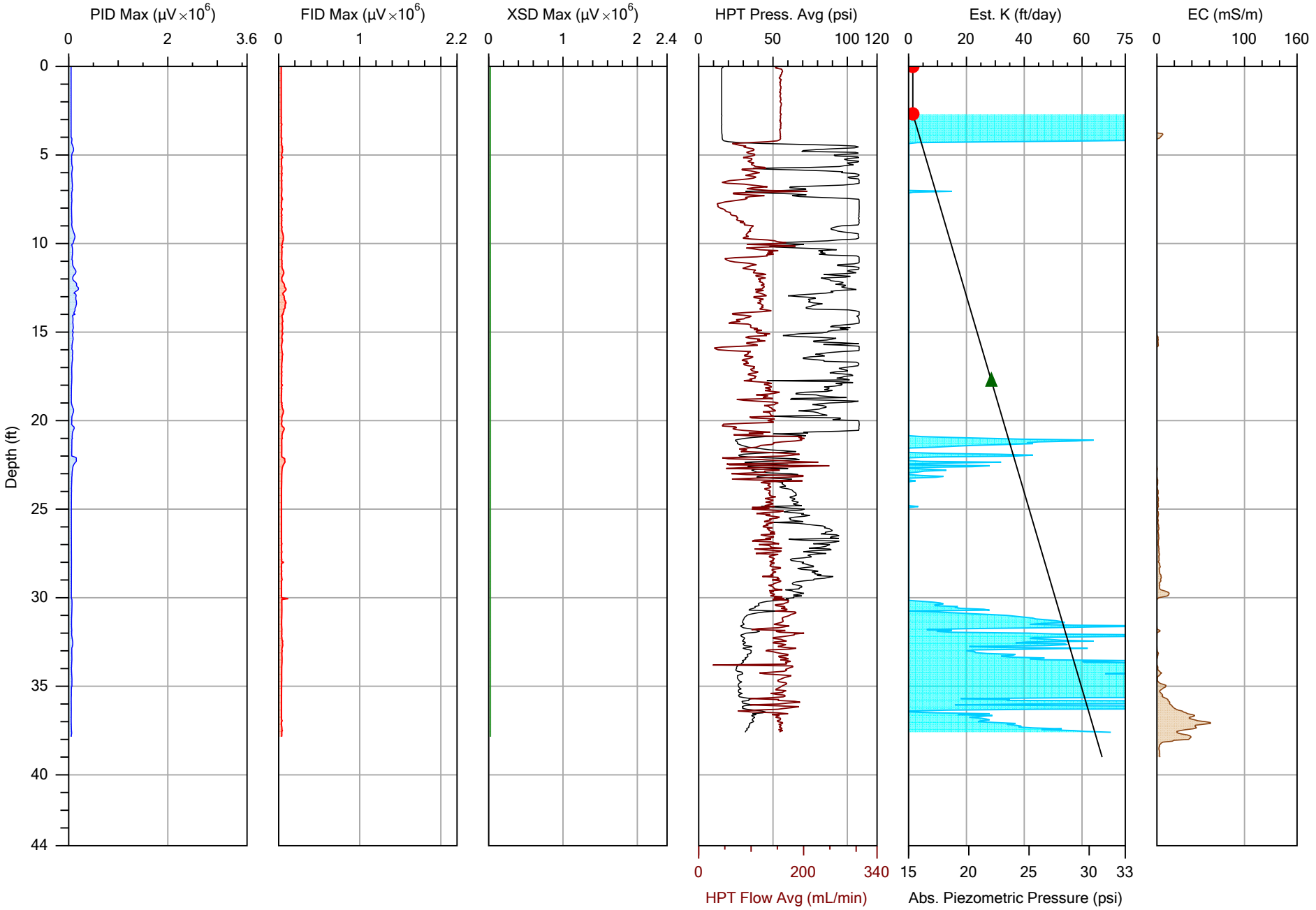
		File: MIP-129.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/22/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

		File: MIP-130.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/24/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC

APPENDIX D – Data Logs for Membrane Interface Probe/EC with Hydraulic Profiling Tool (MiHpt) - Collective Scale



COLUMBIA TECHNOLOGIES

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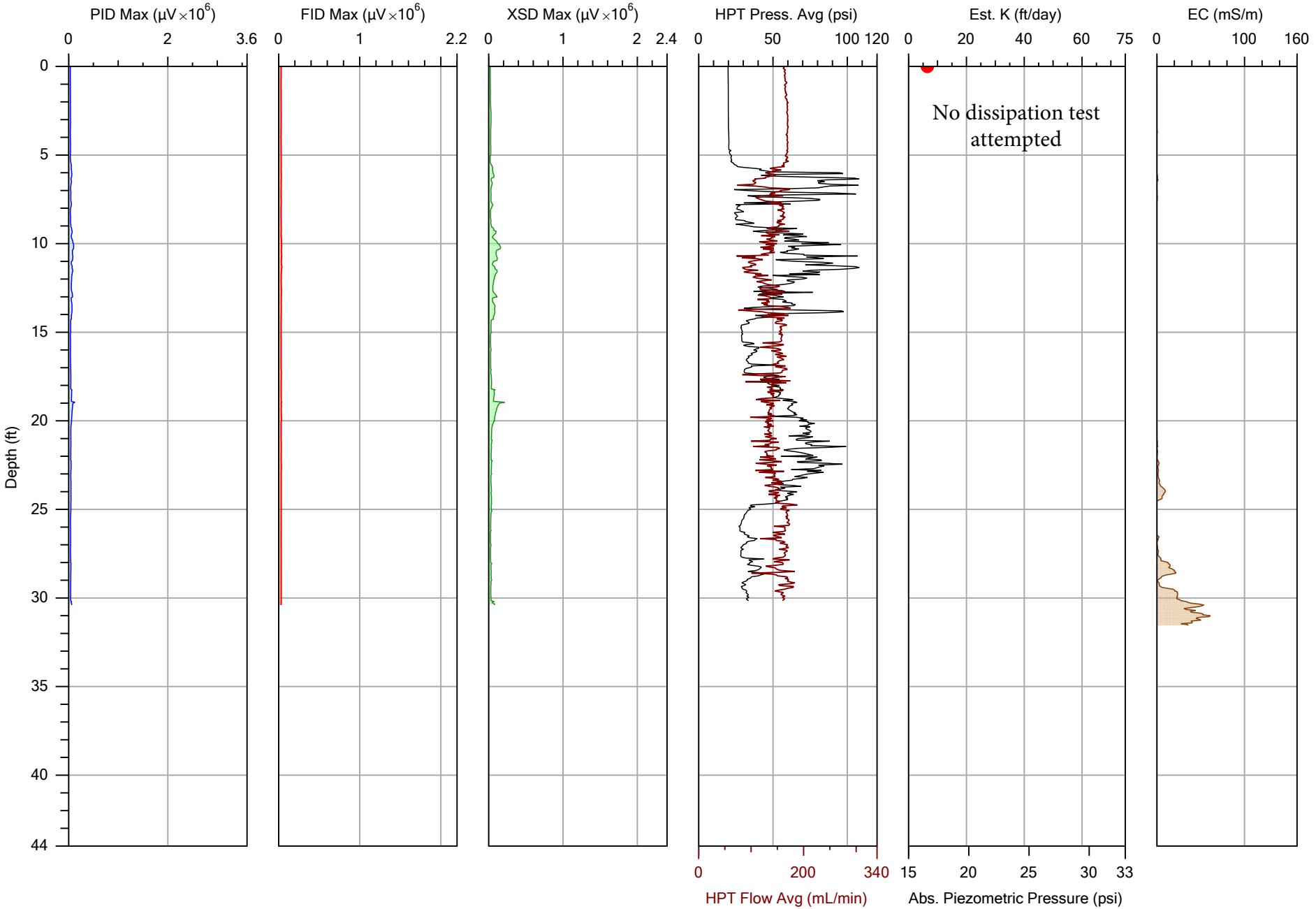
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/9/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



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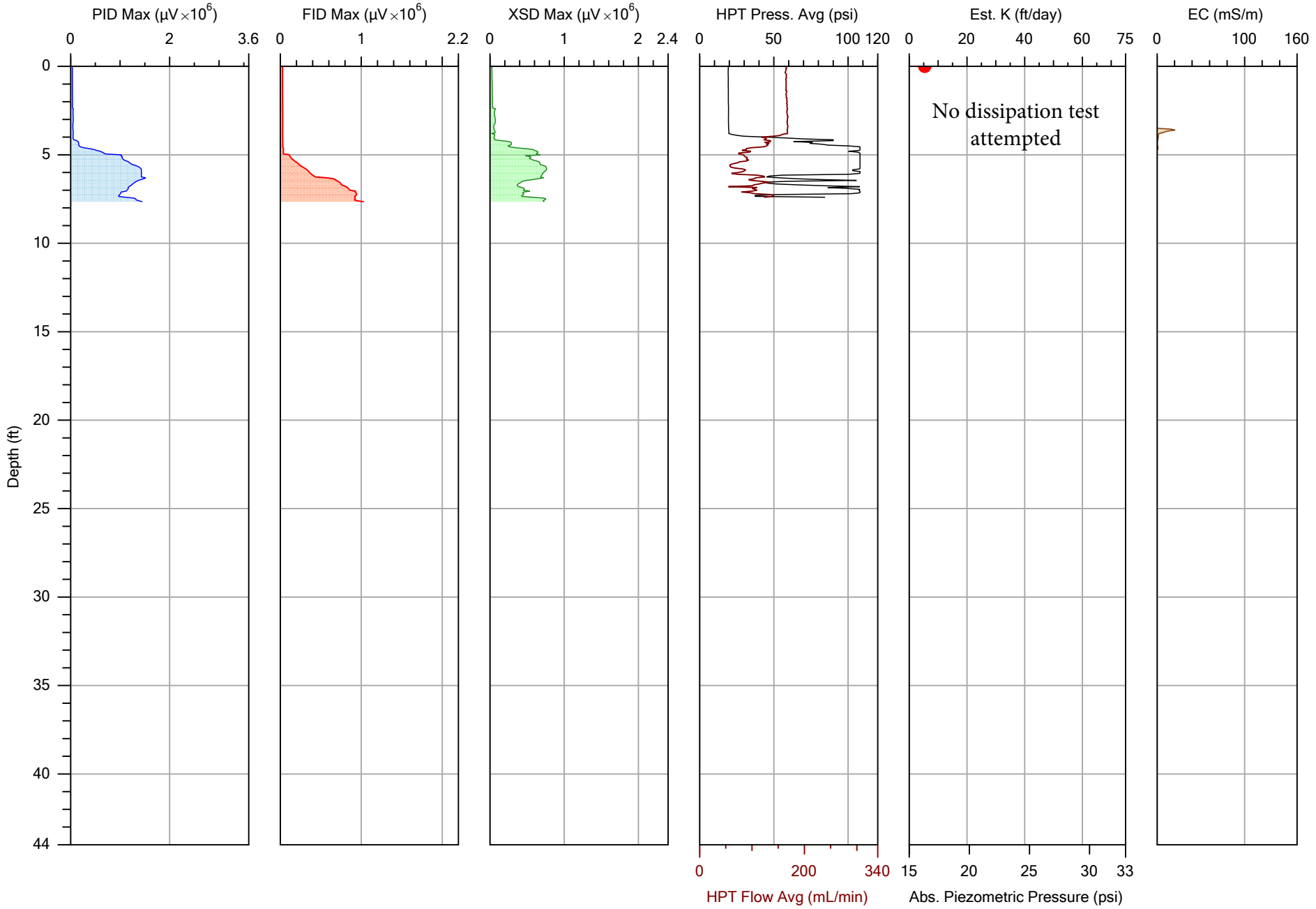
Company: COLUMBIA Technologies LLC		Operator: RSP	Date: 7/16/2020
Project ID: UTC Delavan		Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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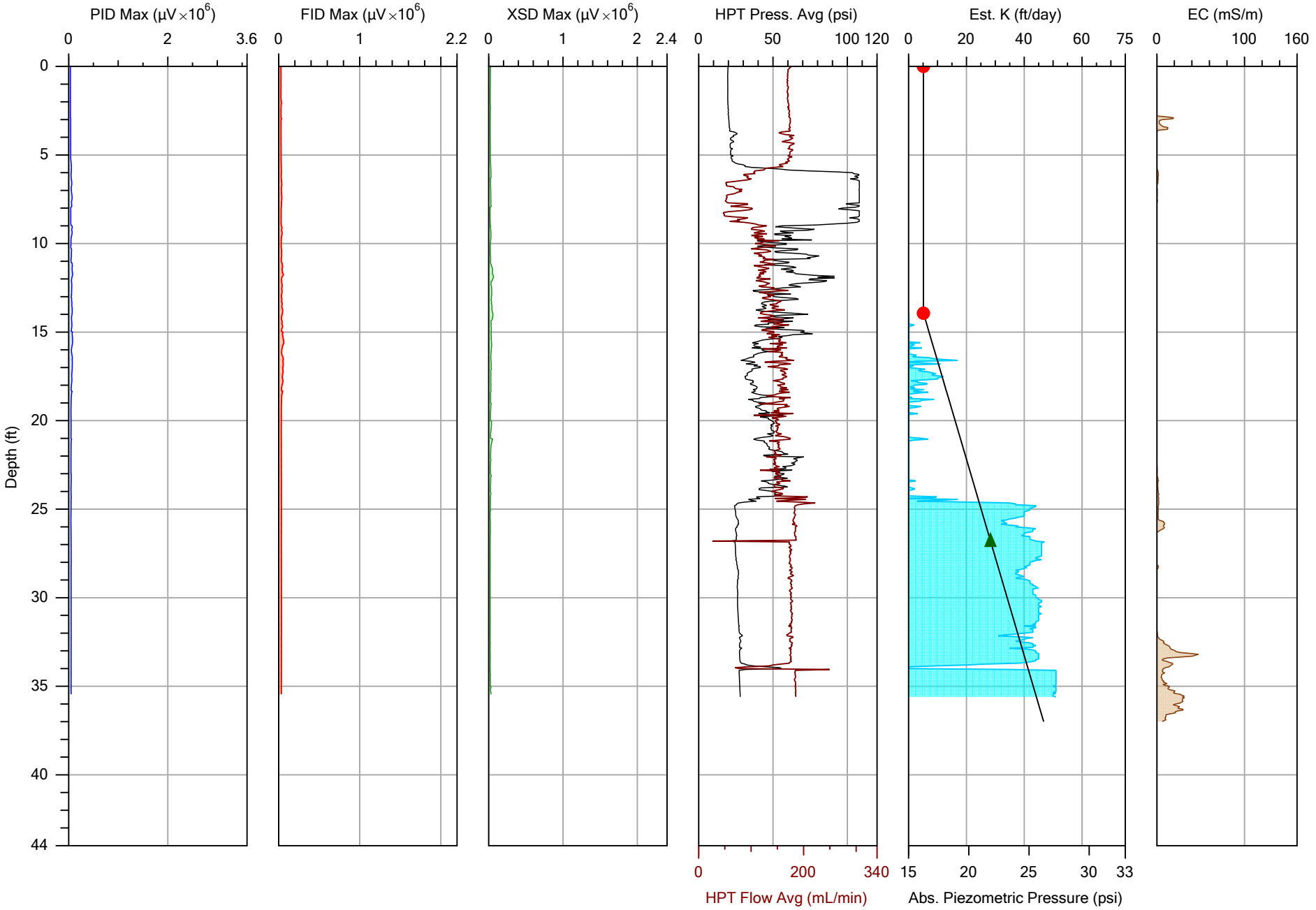
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/15/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



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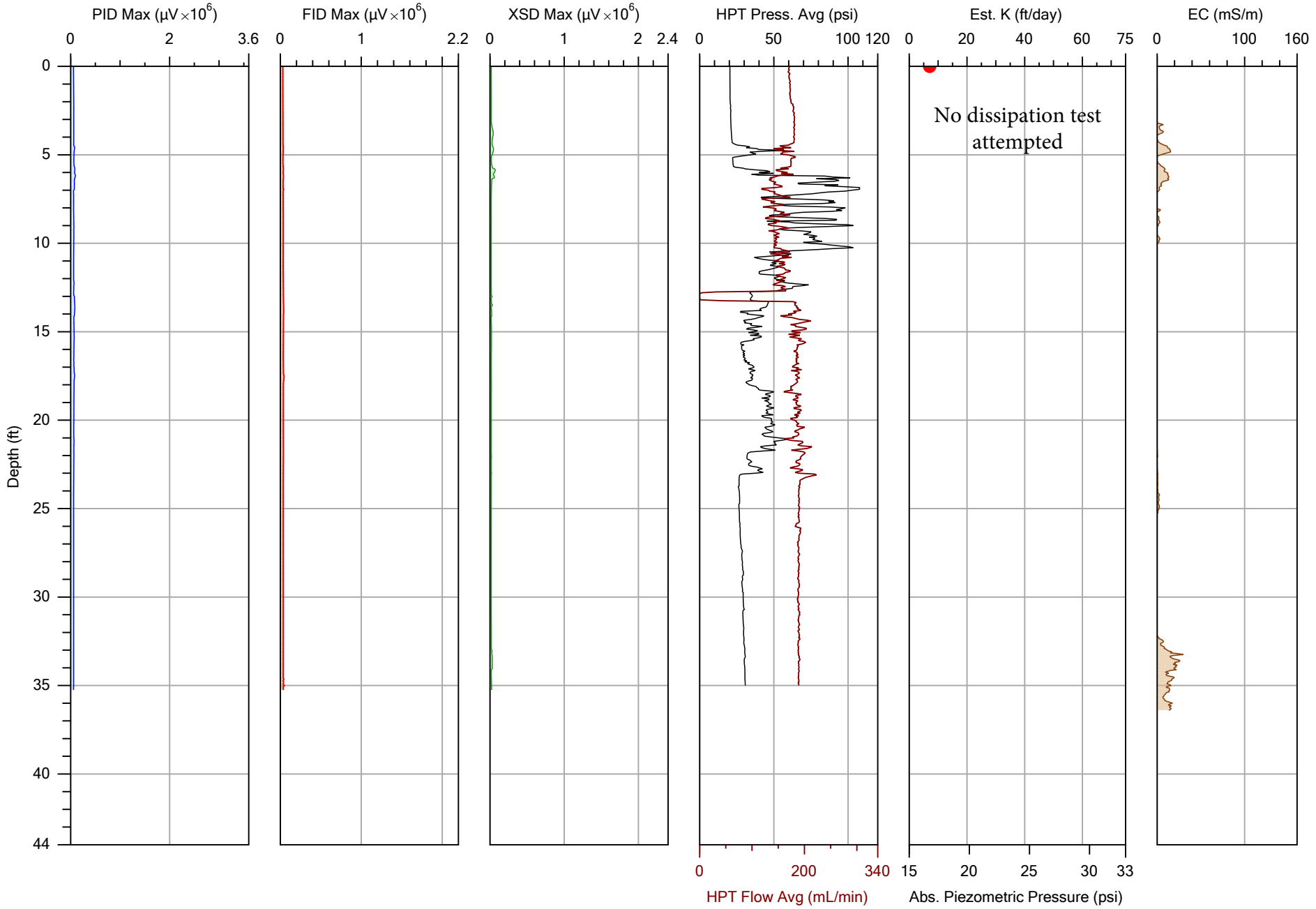
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/15/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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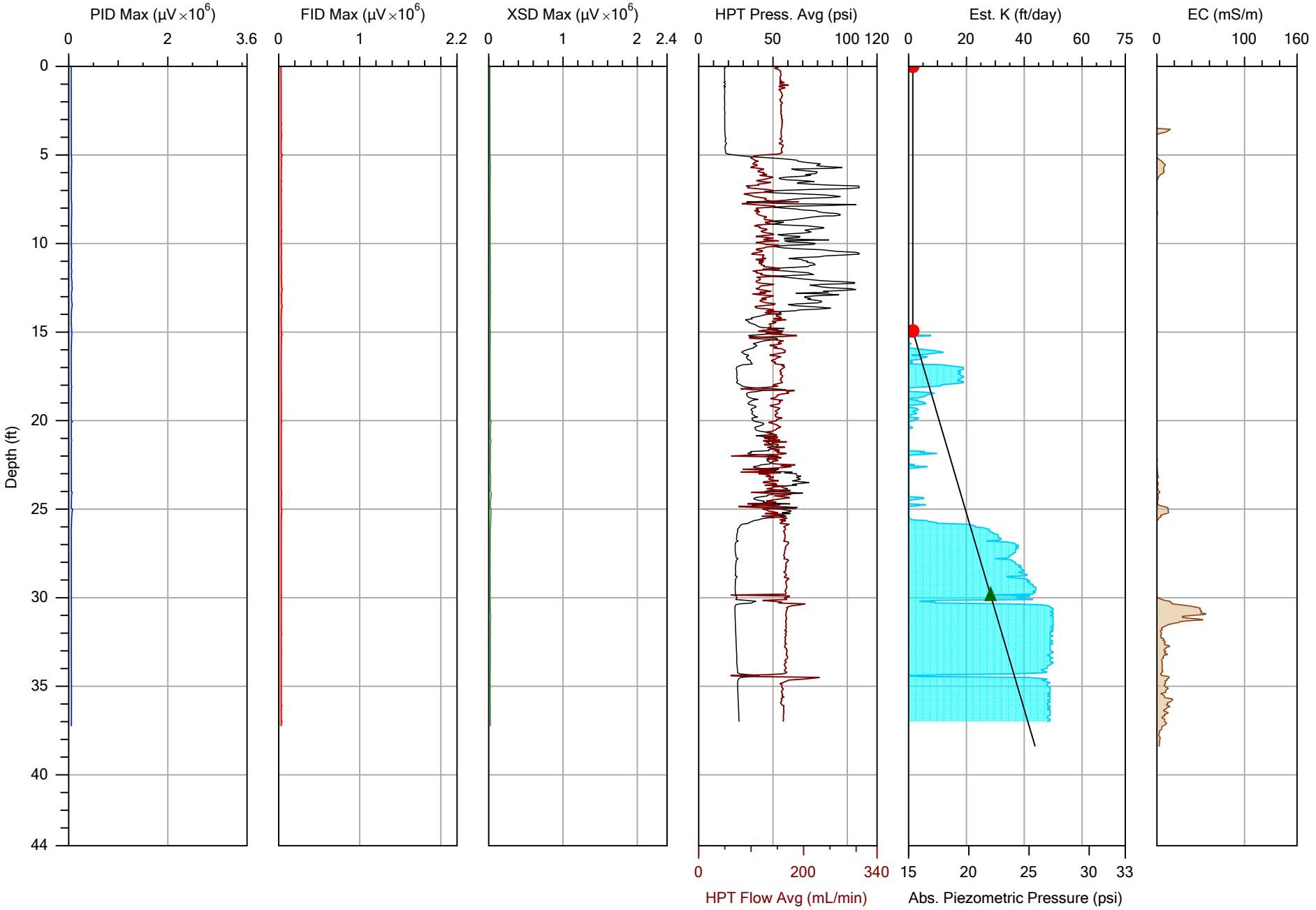
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/15/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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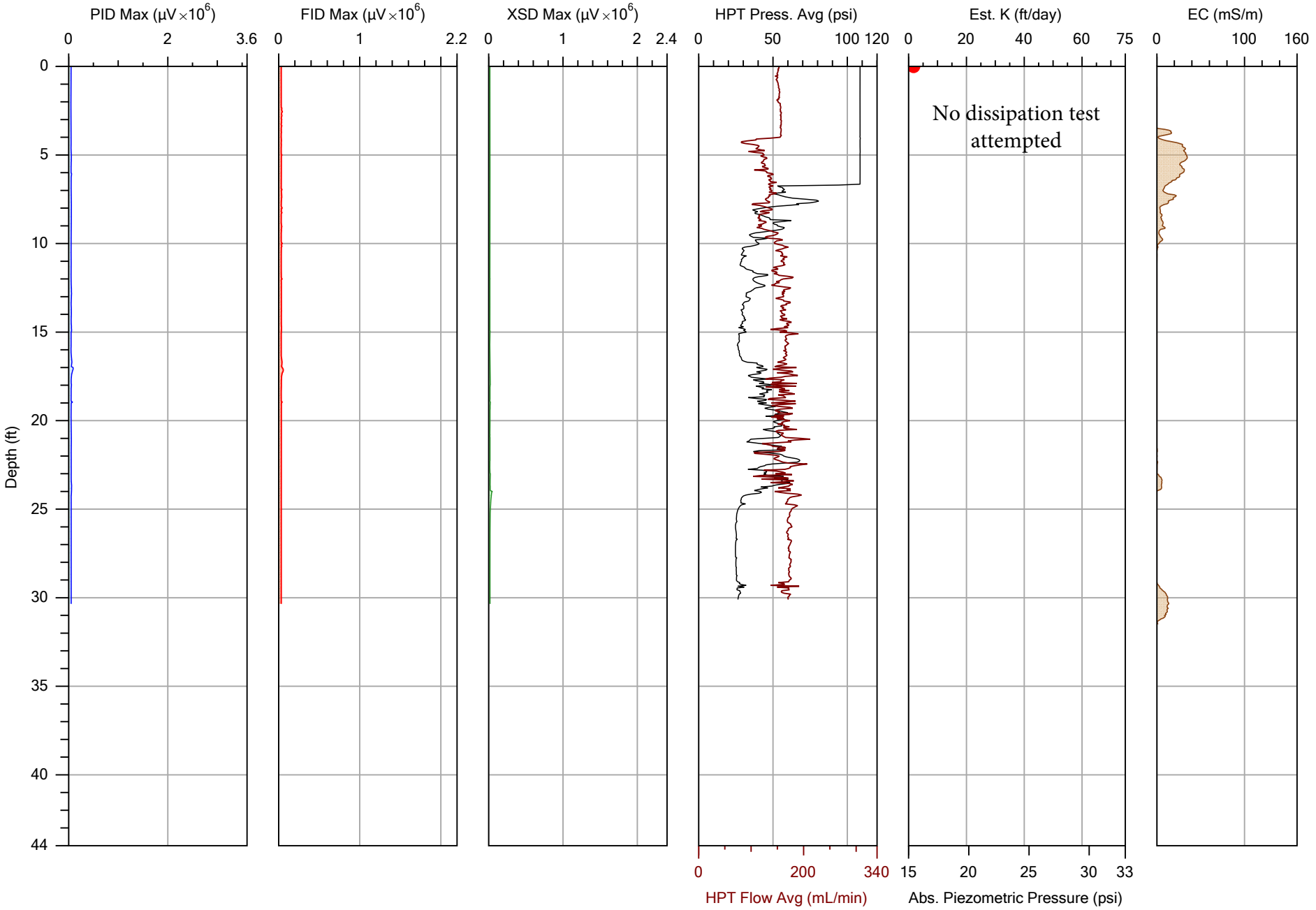
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/14/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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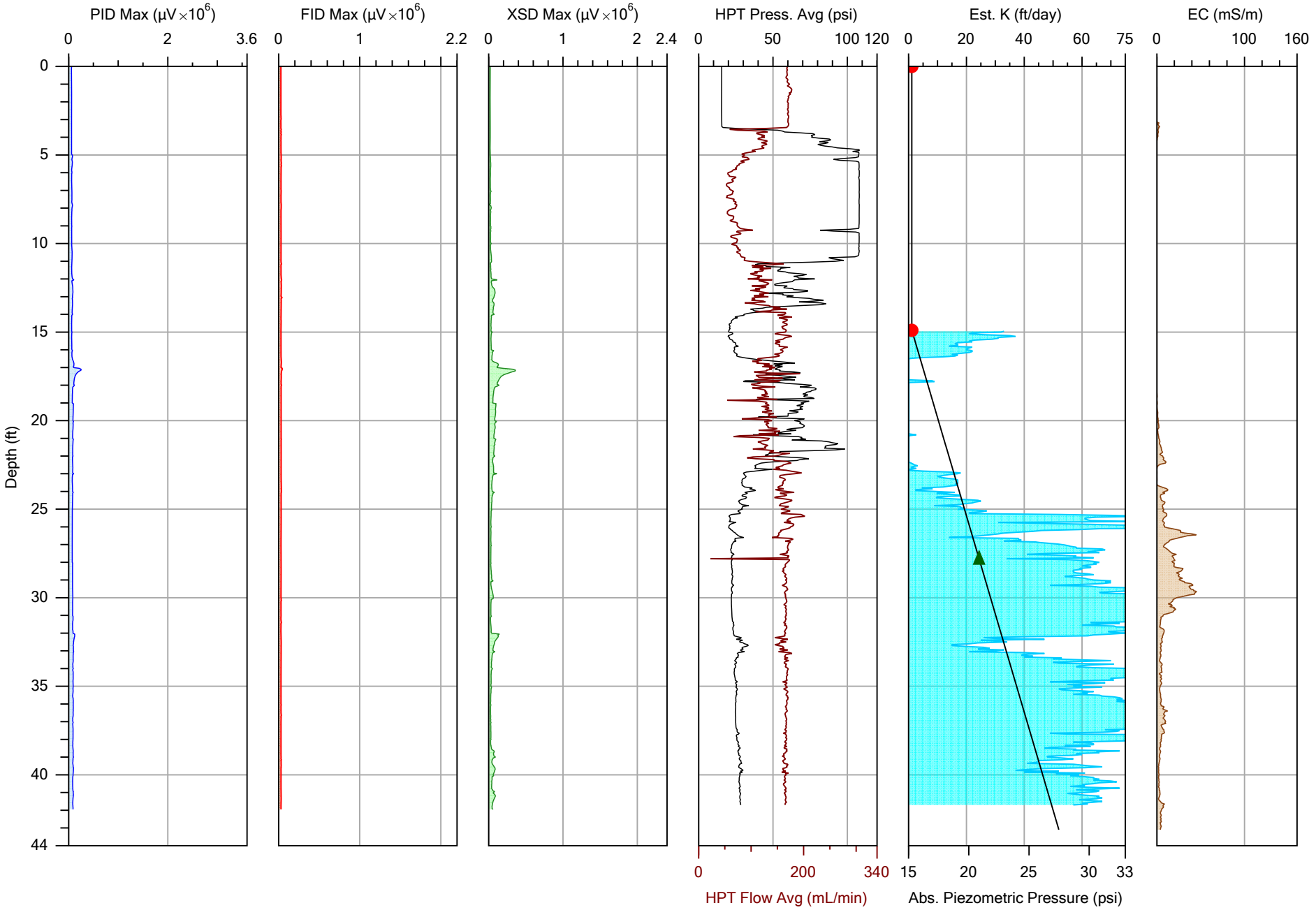
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/14/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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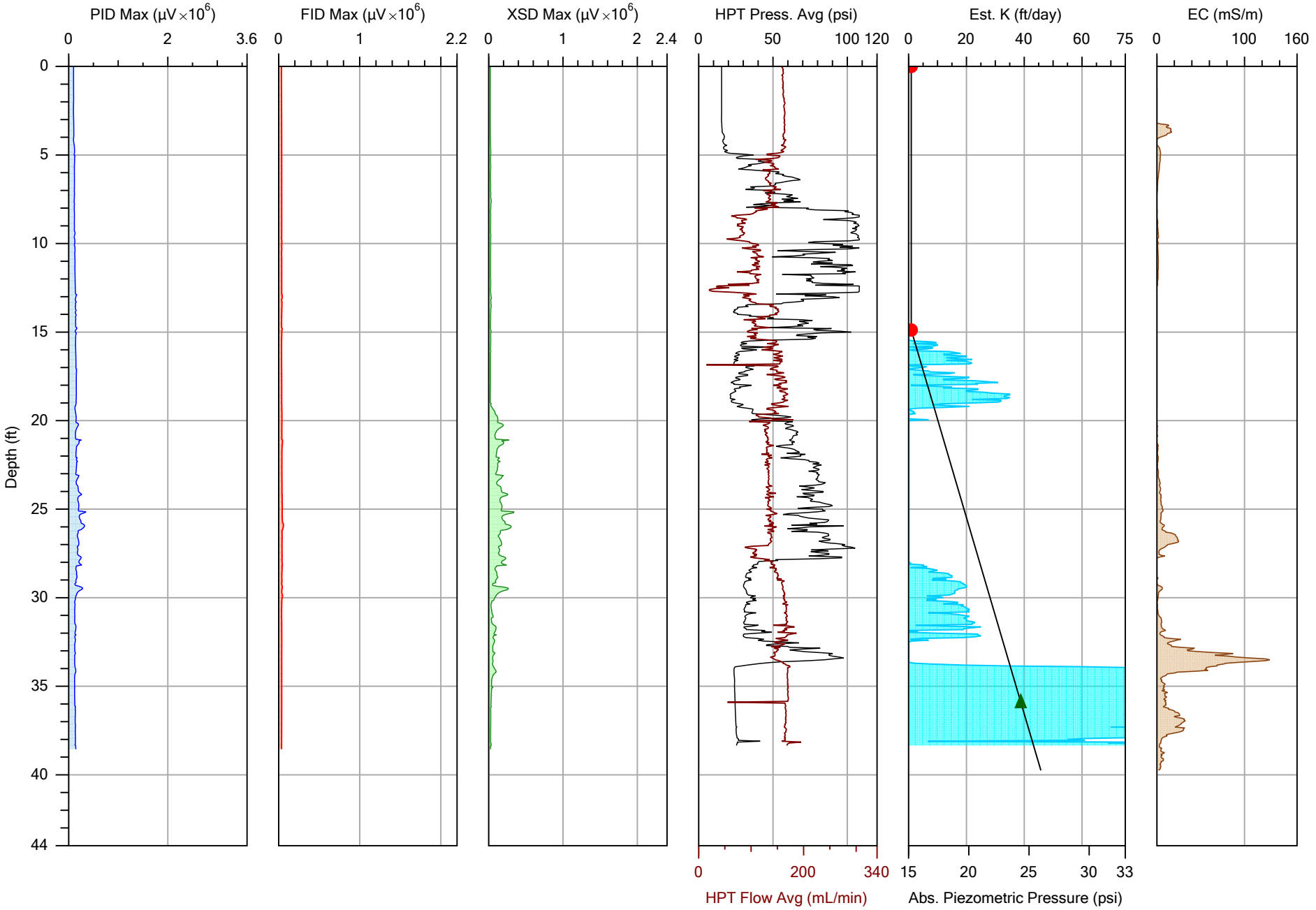
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/13/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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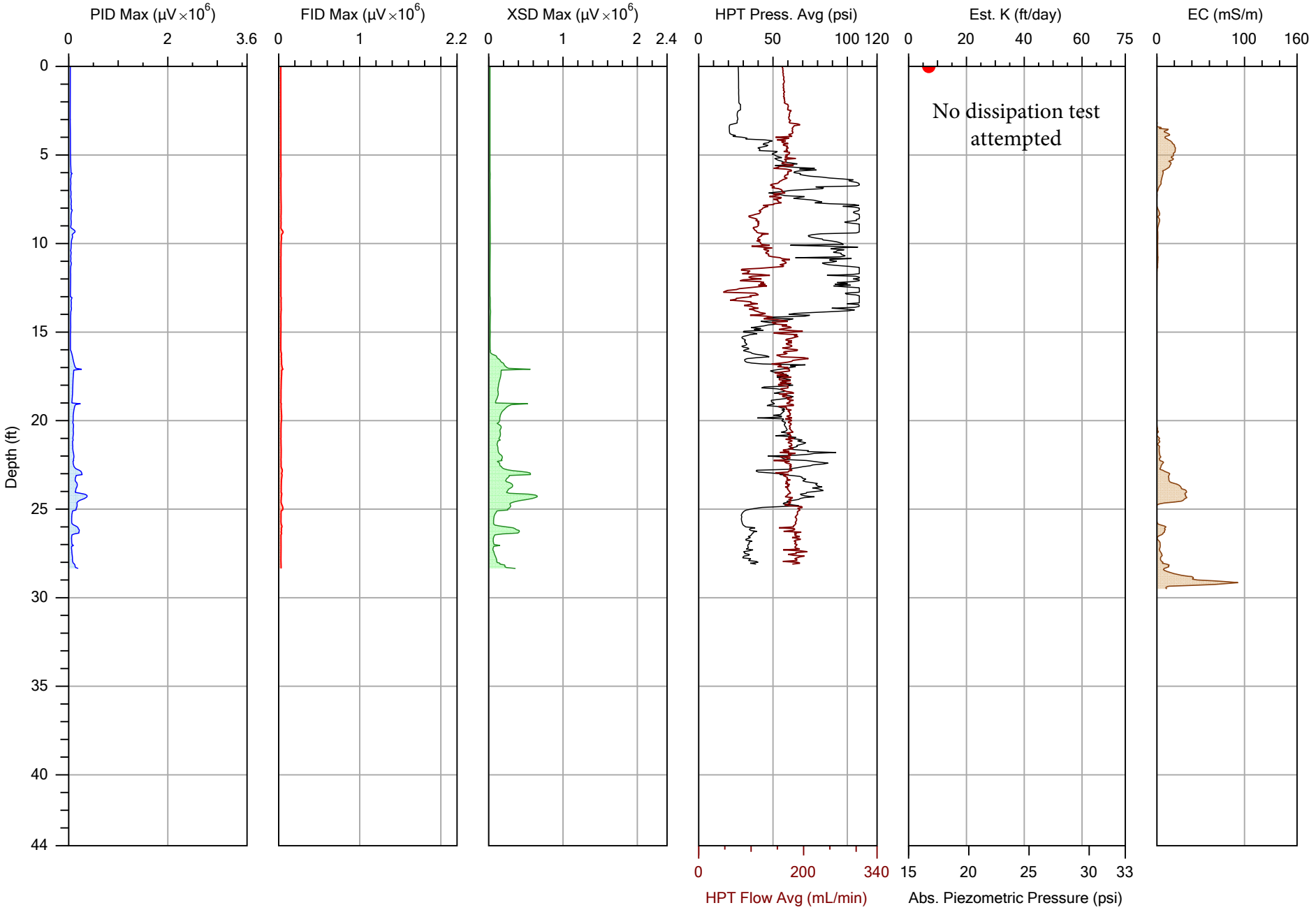
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/12/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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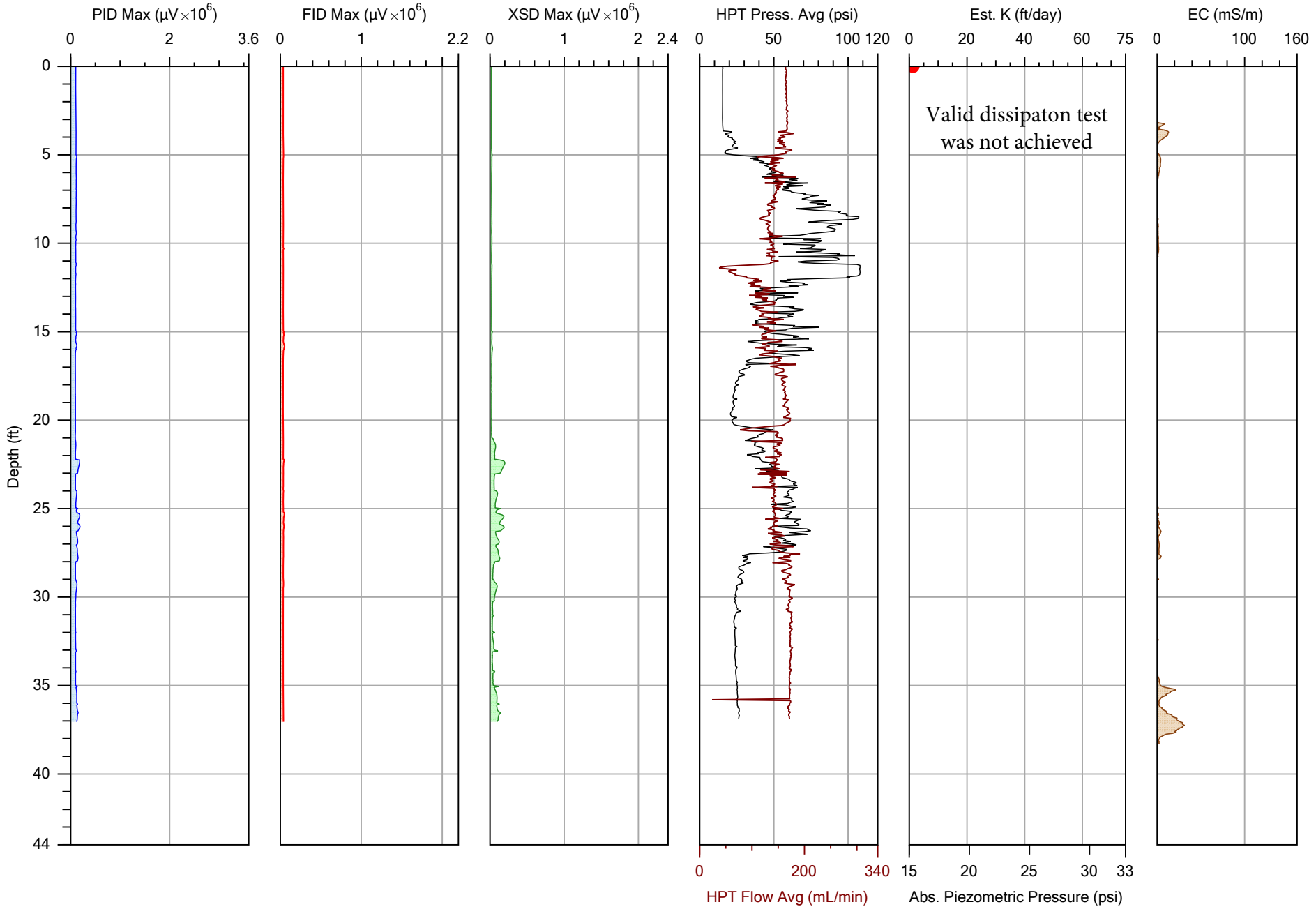
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/14/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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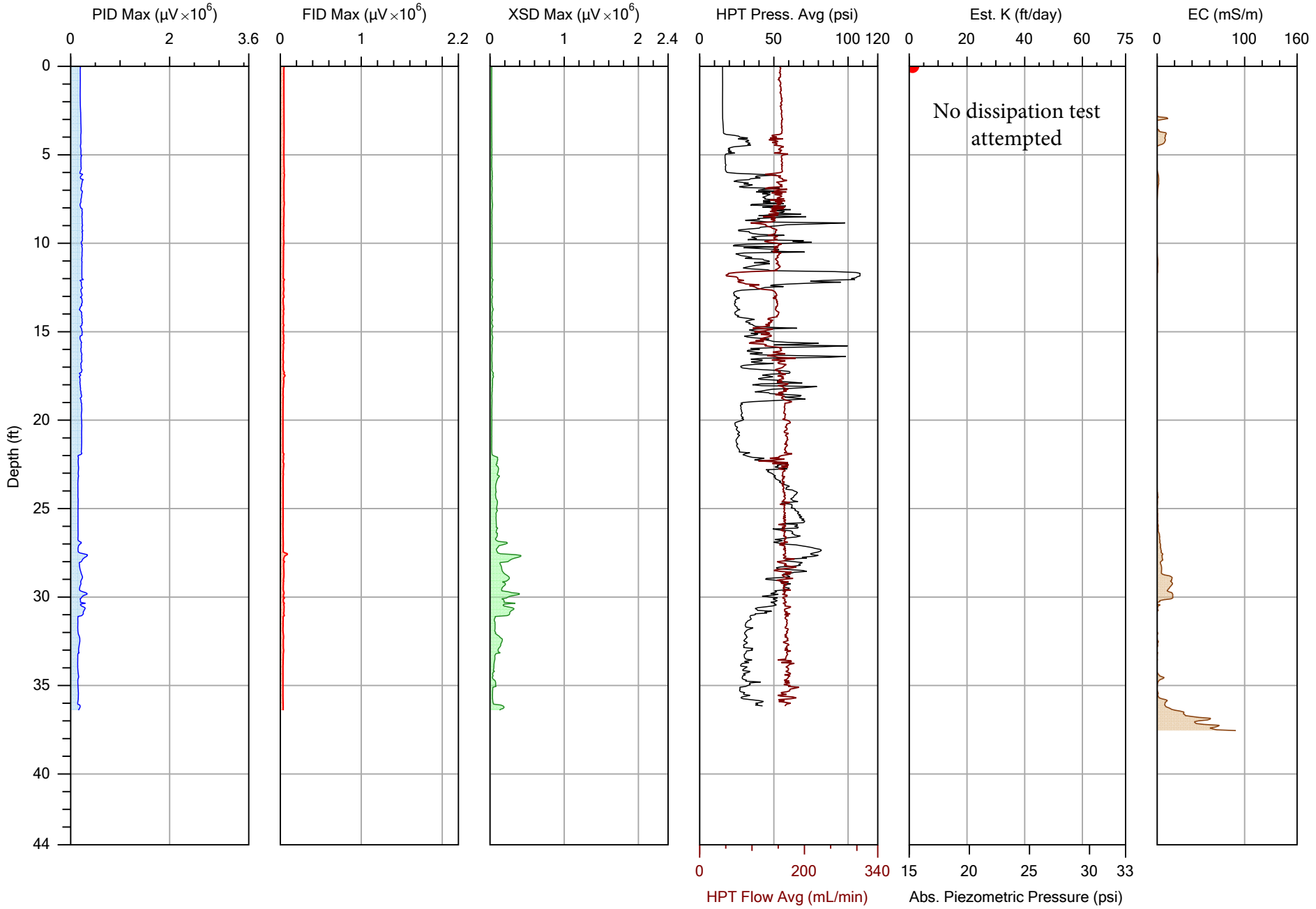
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/12/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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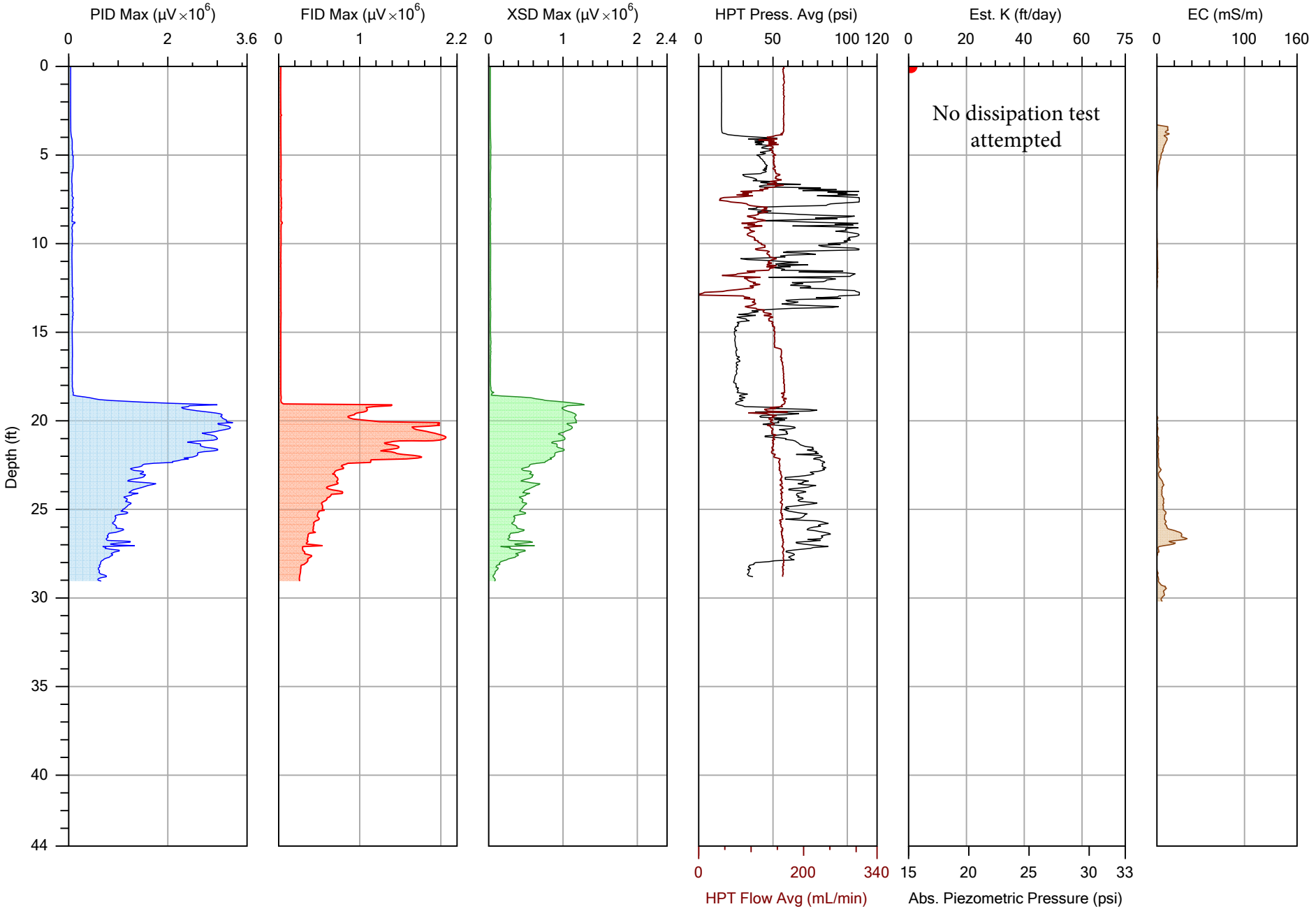
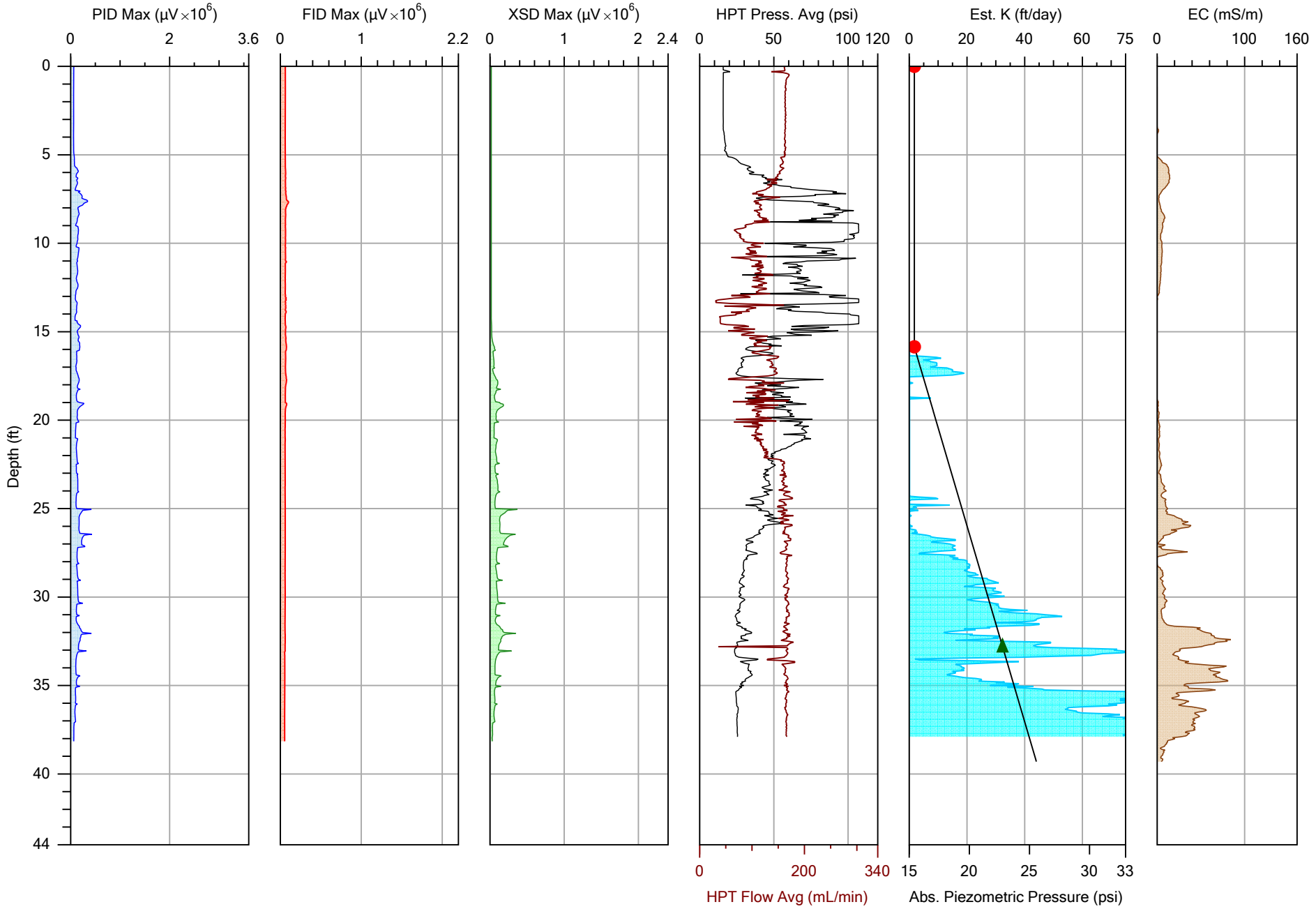
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/11/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

		File: MIP-114.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/11/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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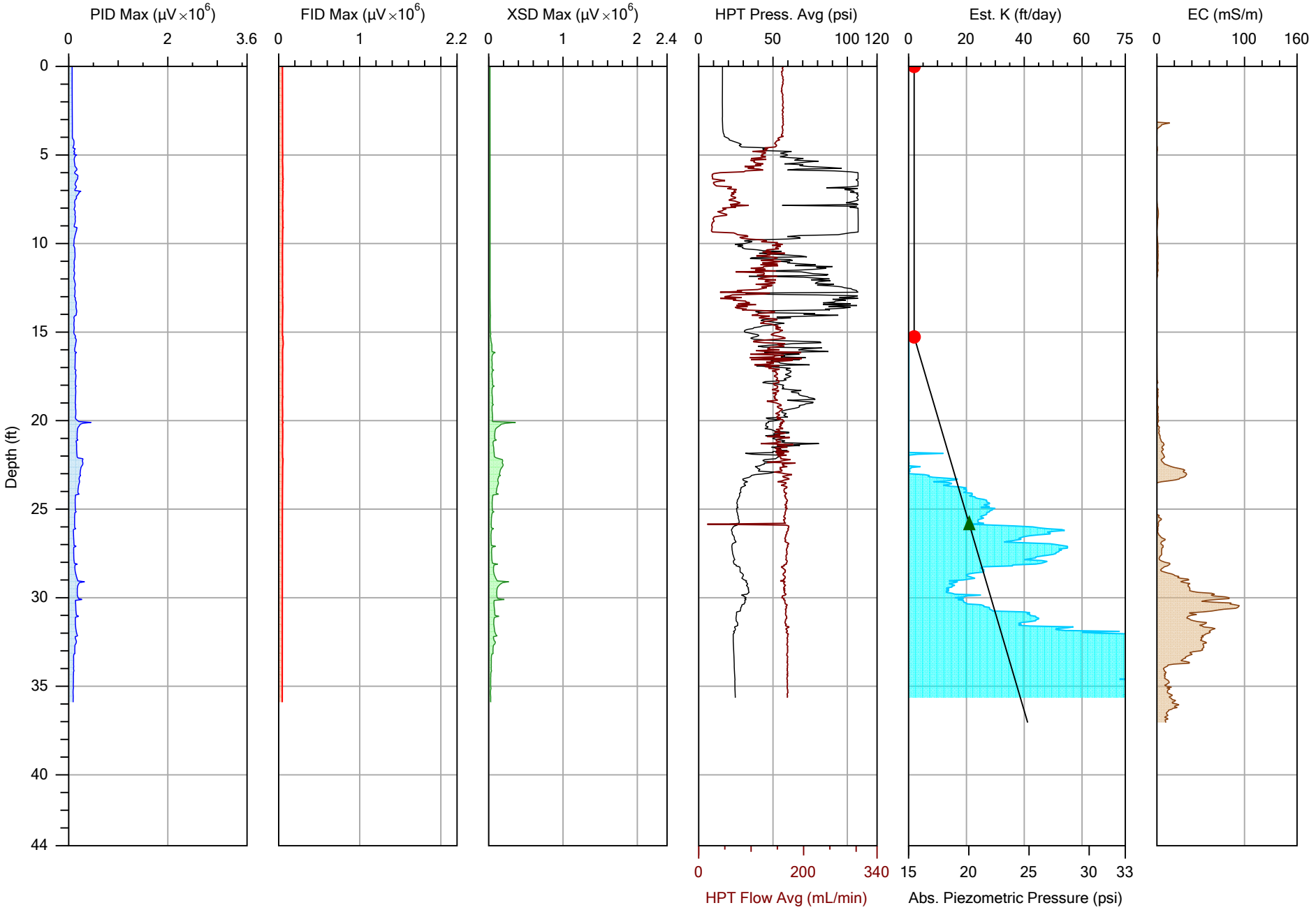
Company: COLUMBIA Technologies LLC	Operator: RSP	Date:
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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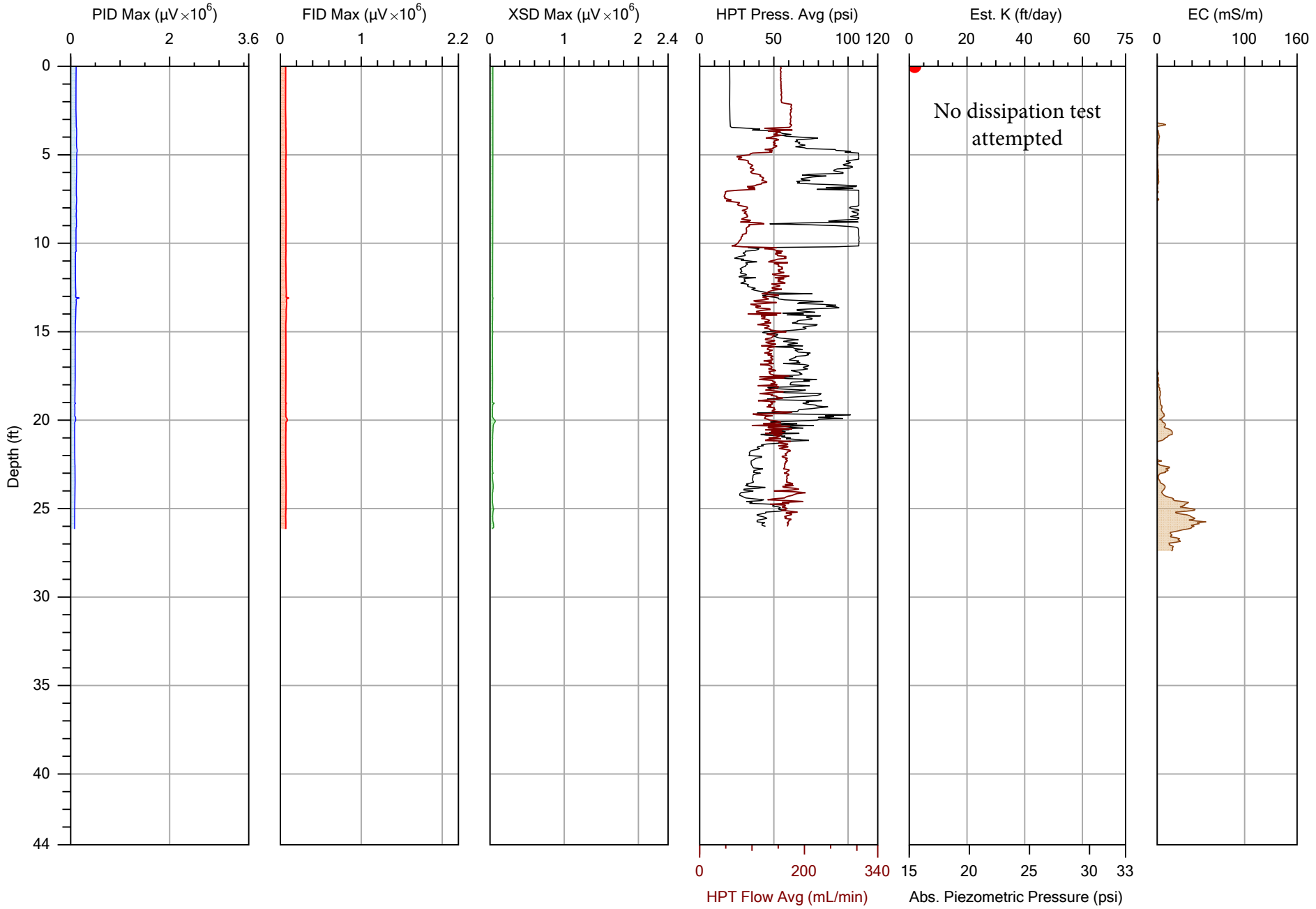
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/22/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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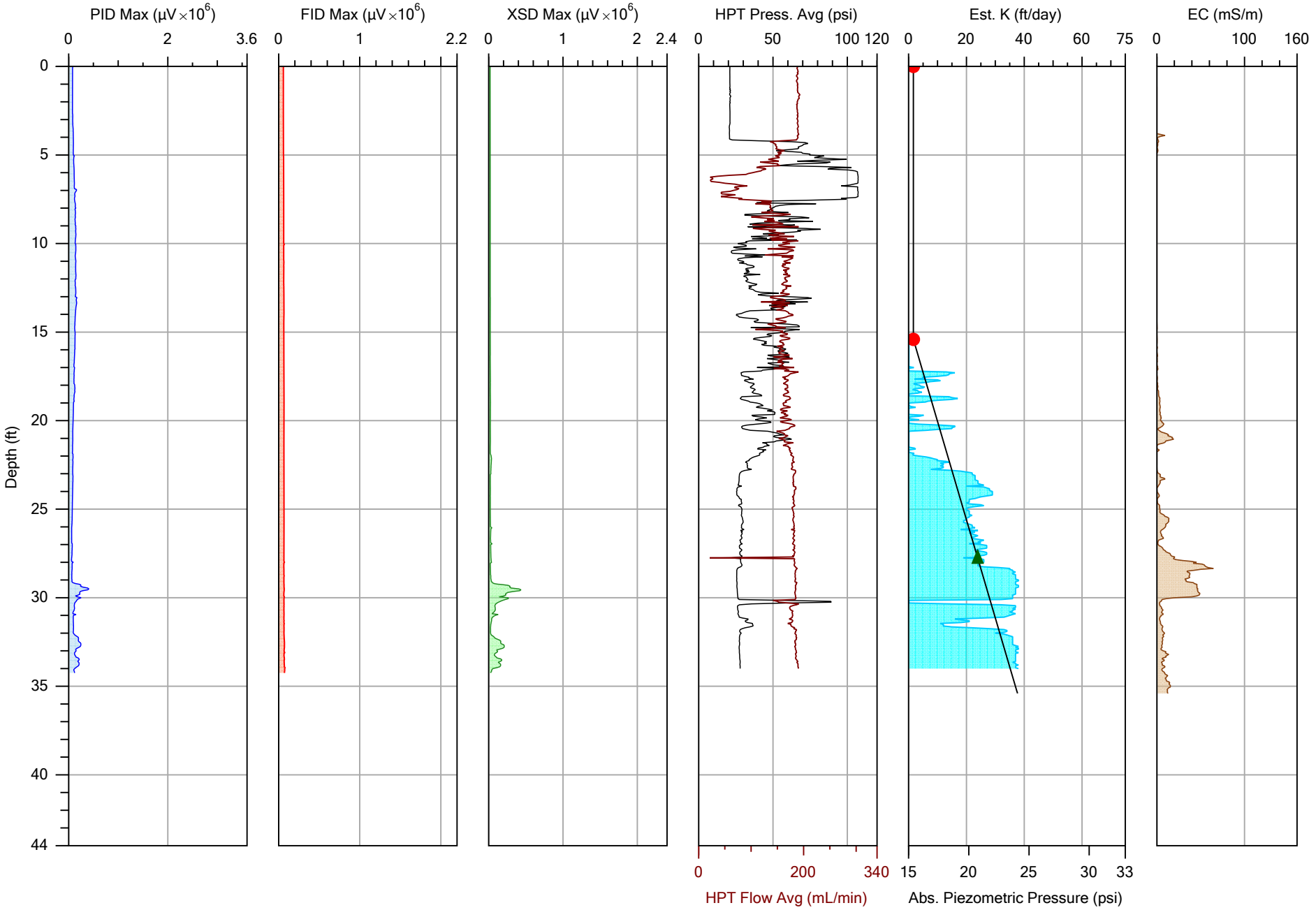
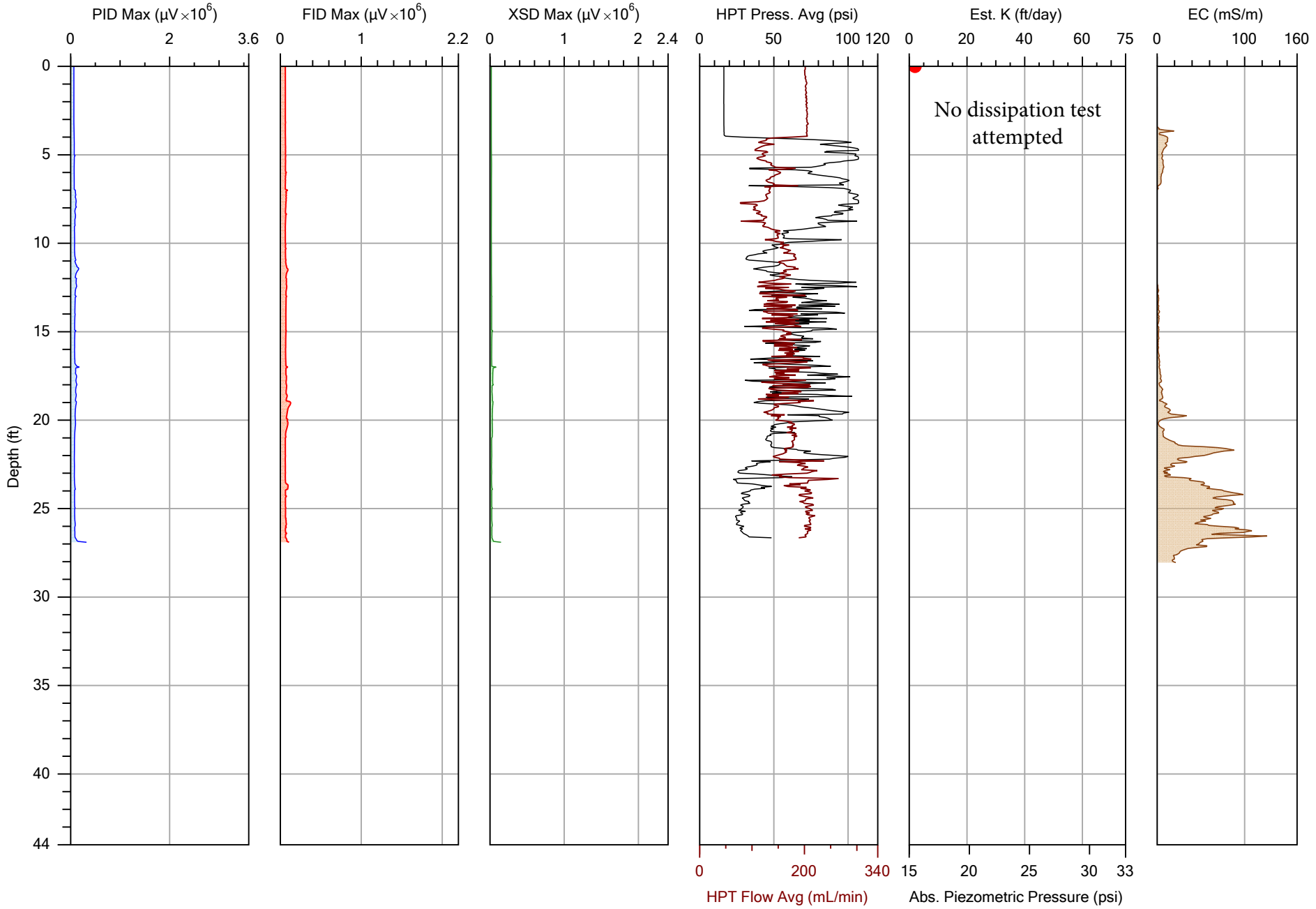
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/21/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

		File: MIP-118.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/22/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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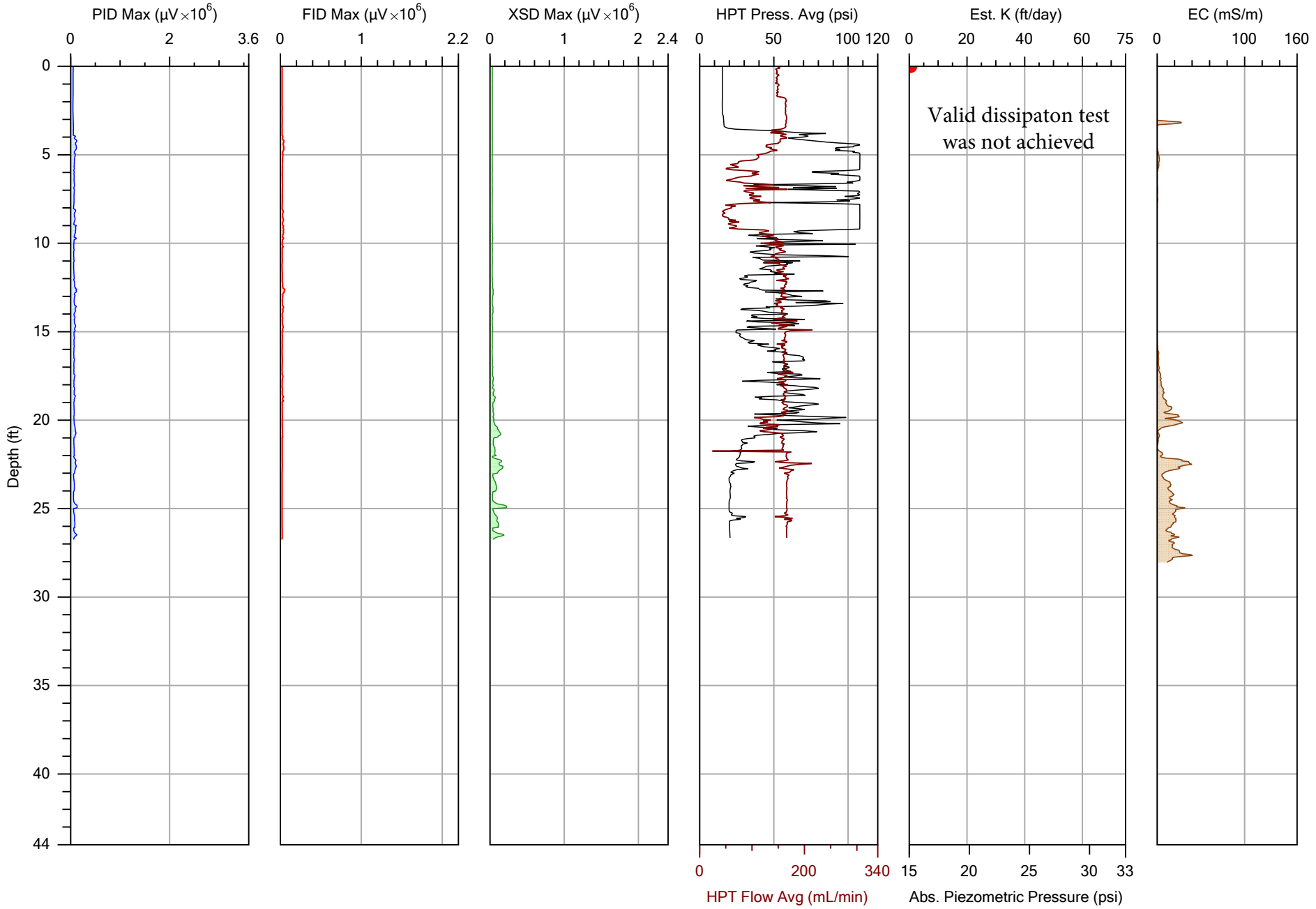
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/23/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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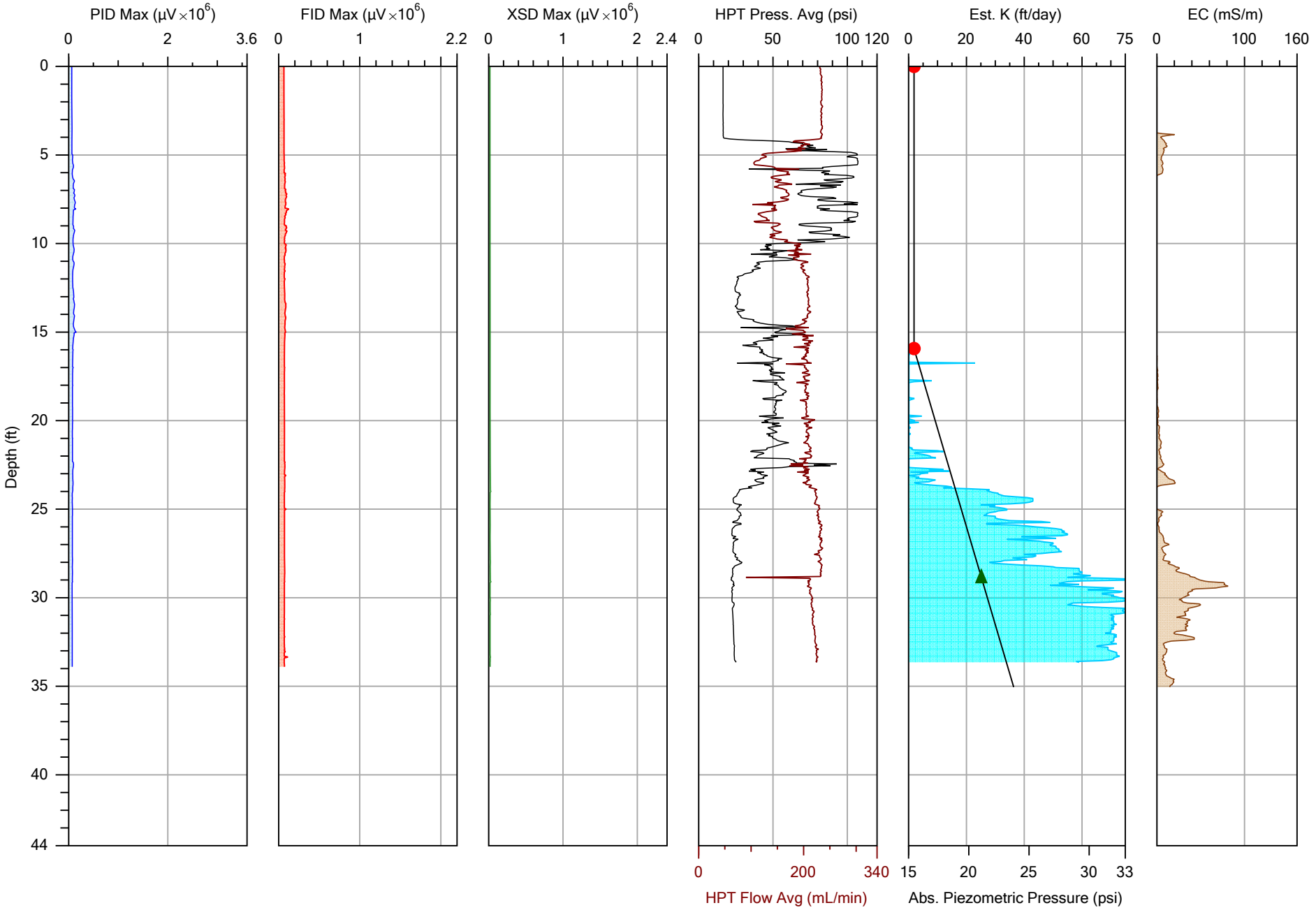
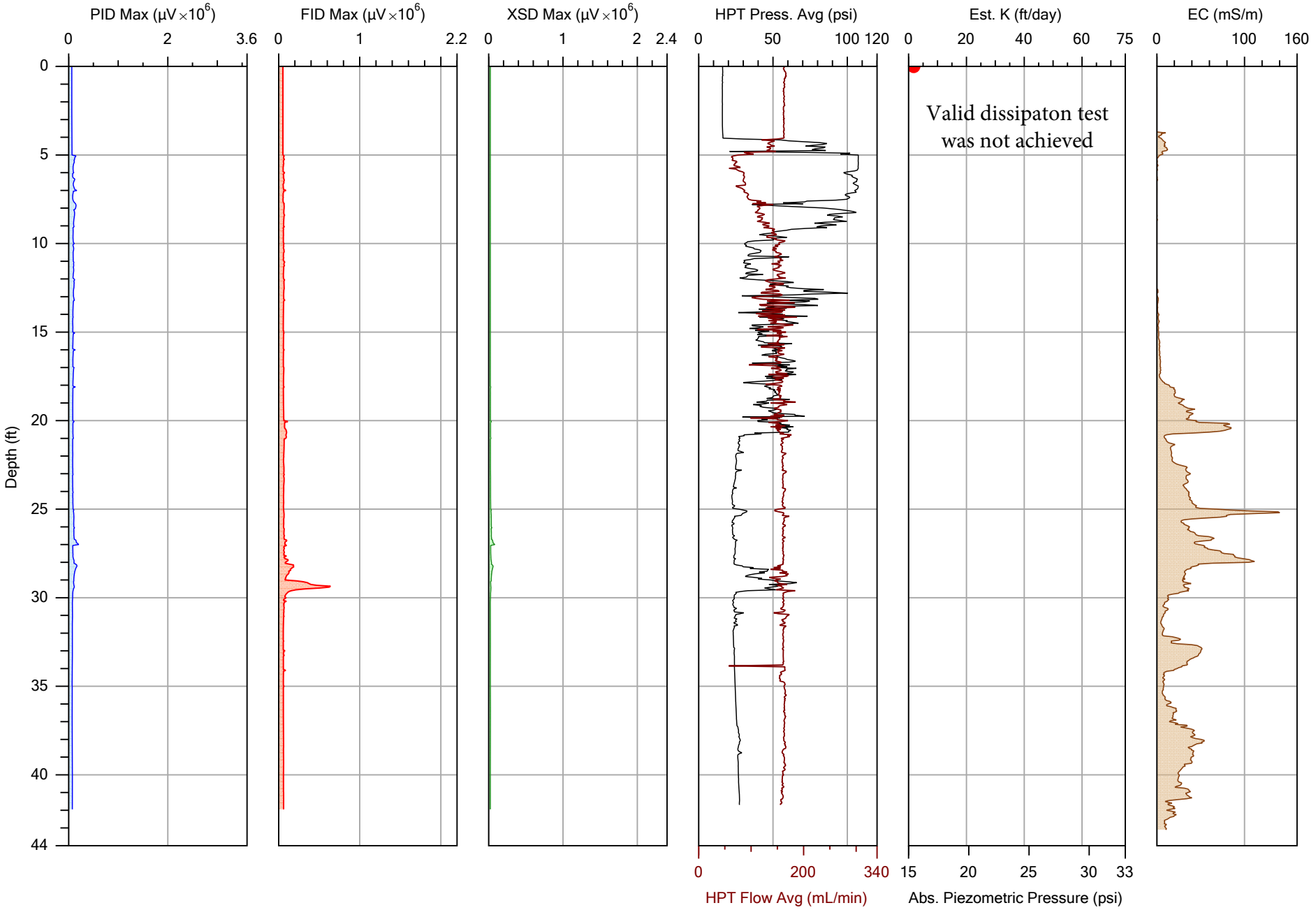
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/10/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



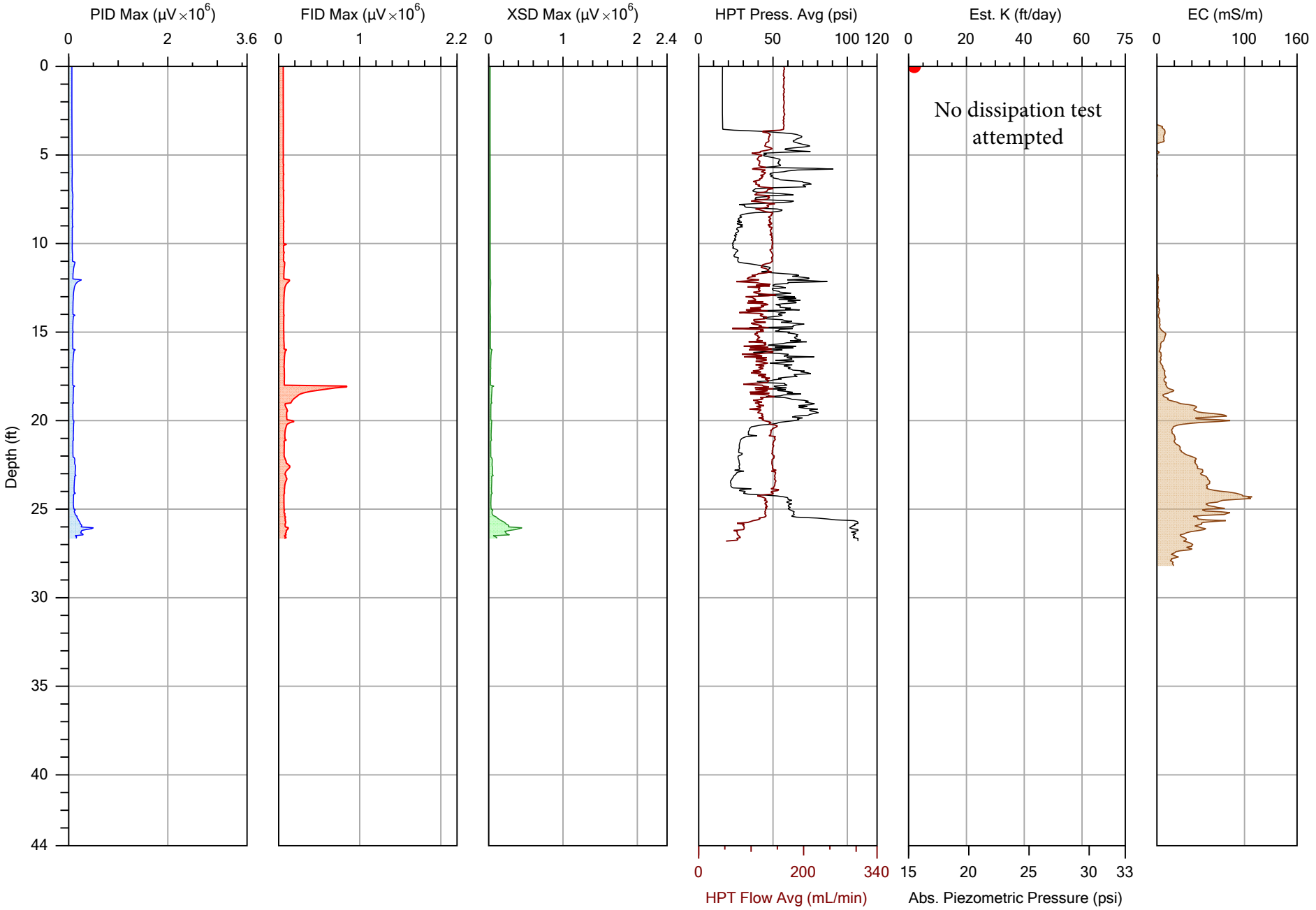
COLUMBIA TECHNOLOGIES

		File: MIP-121.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/23/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

		File: MIP-122.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/23/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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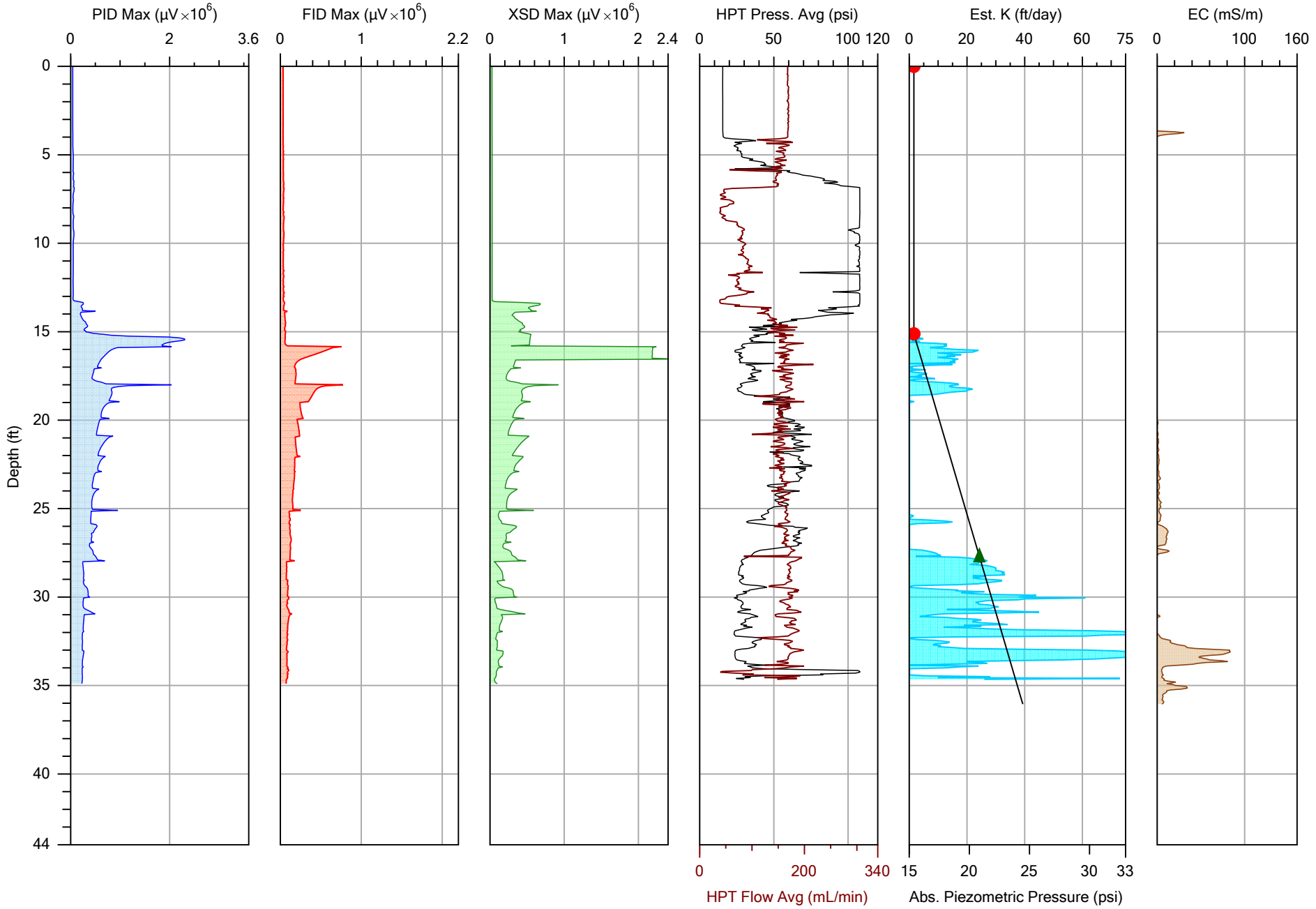
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/23/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



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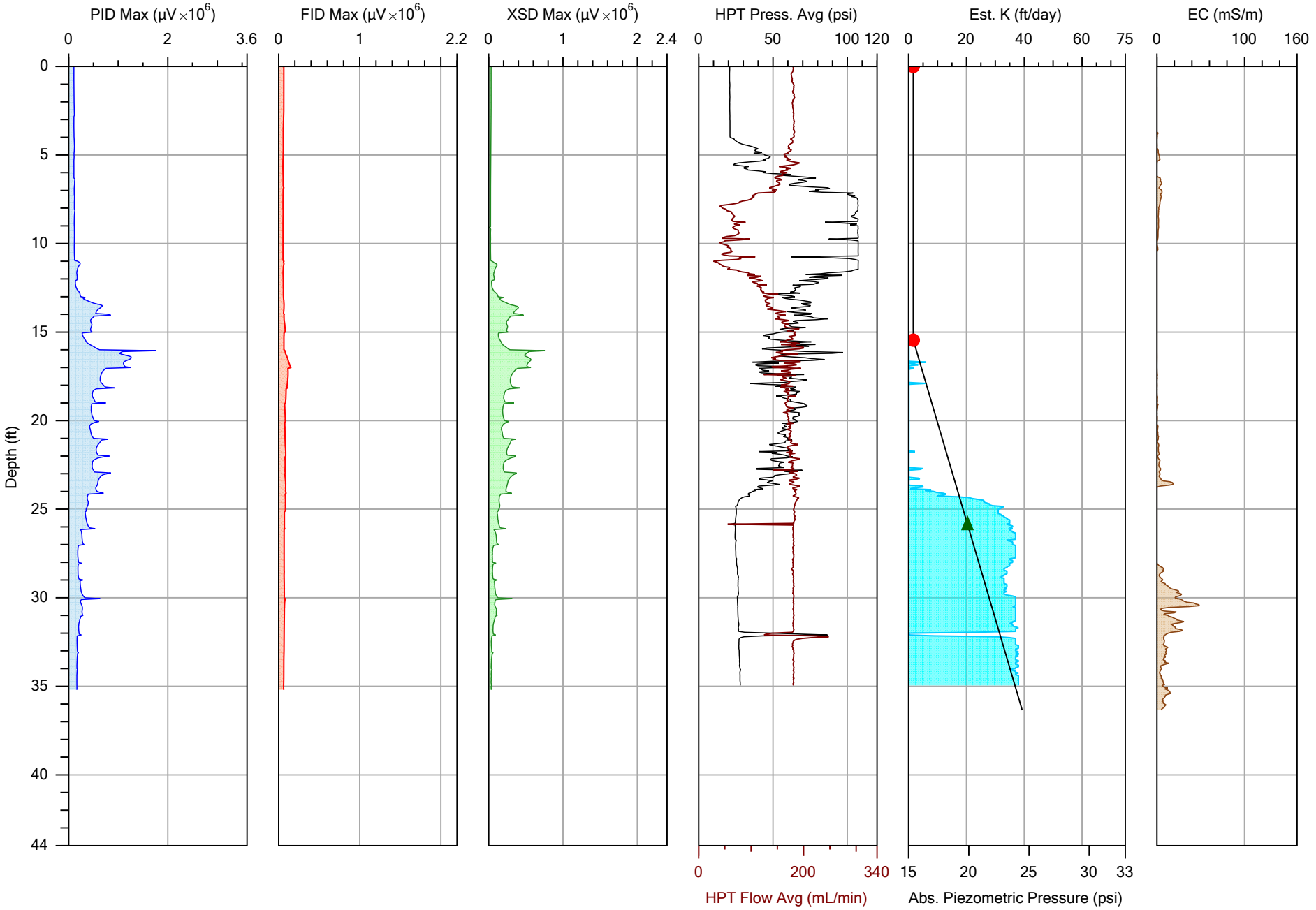
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/9/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



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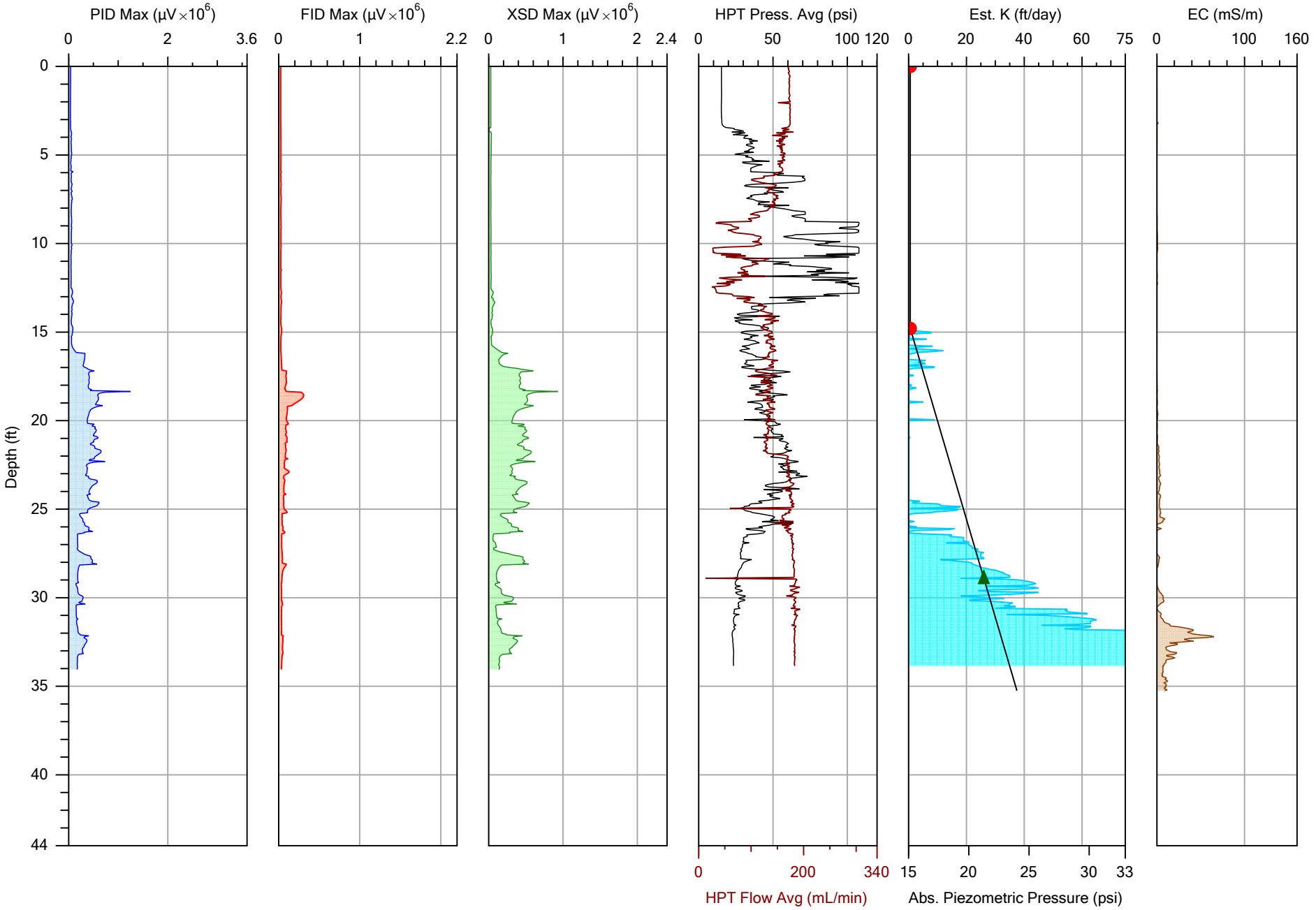
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/22/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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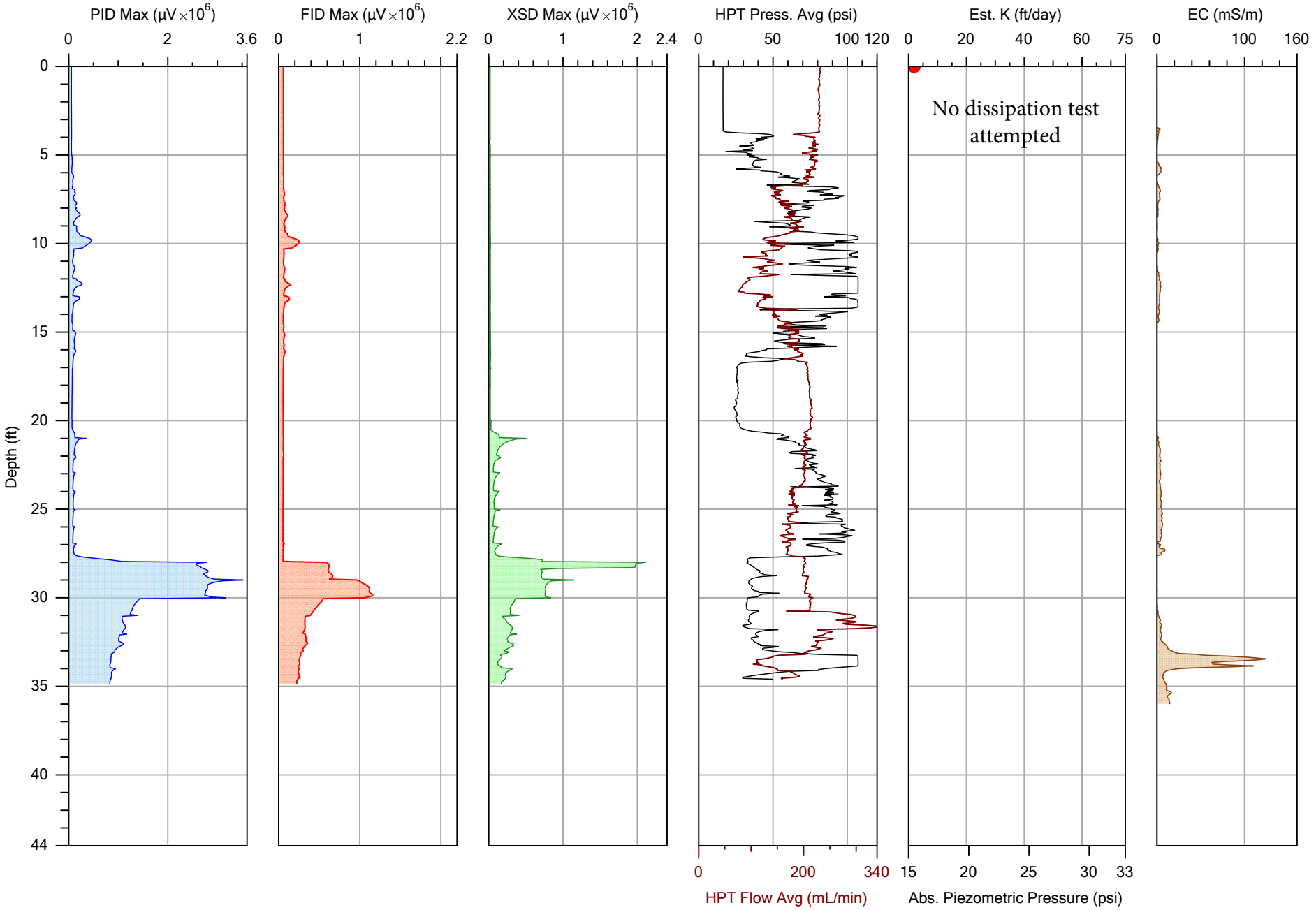
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/10/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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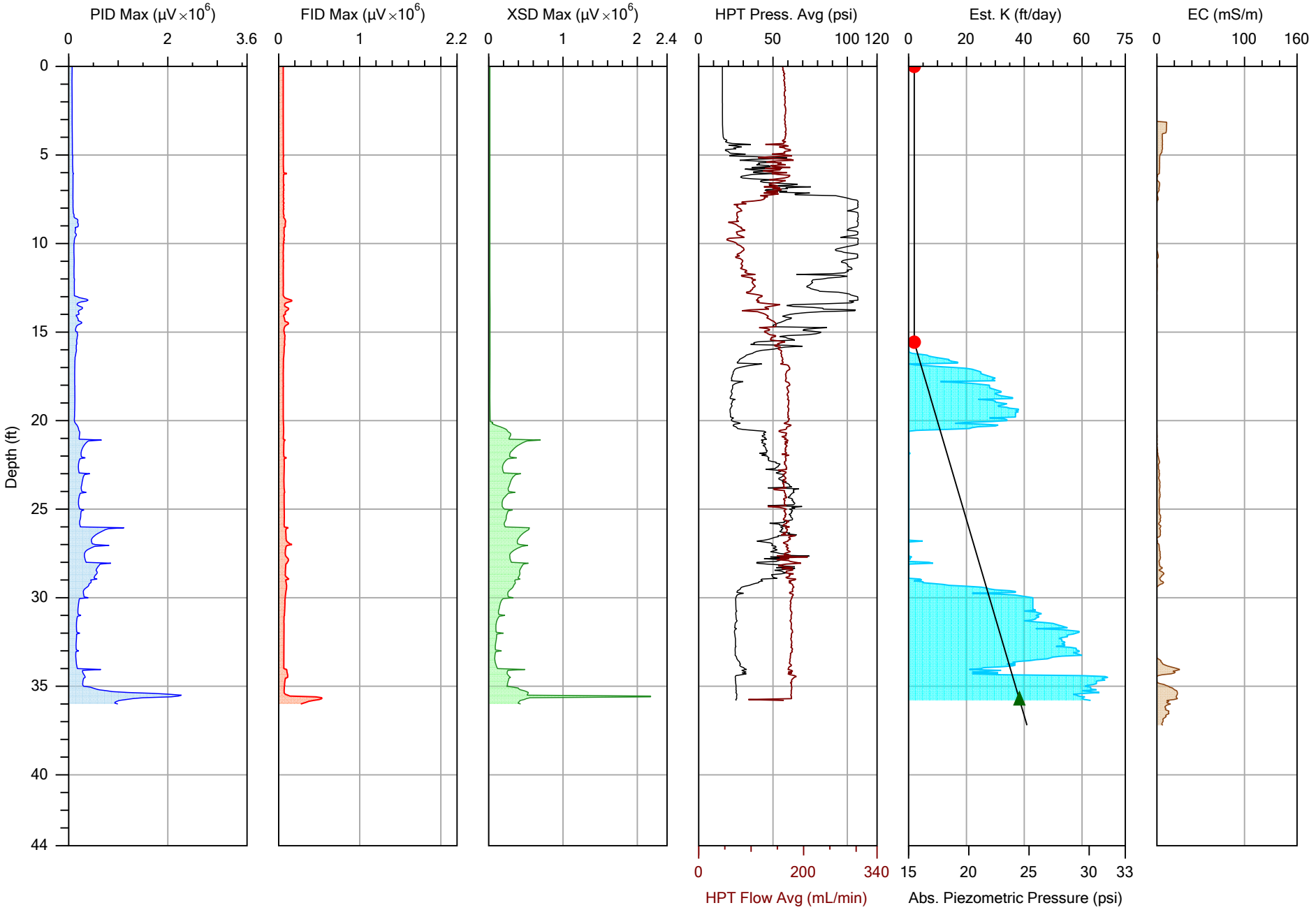
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/23/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

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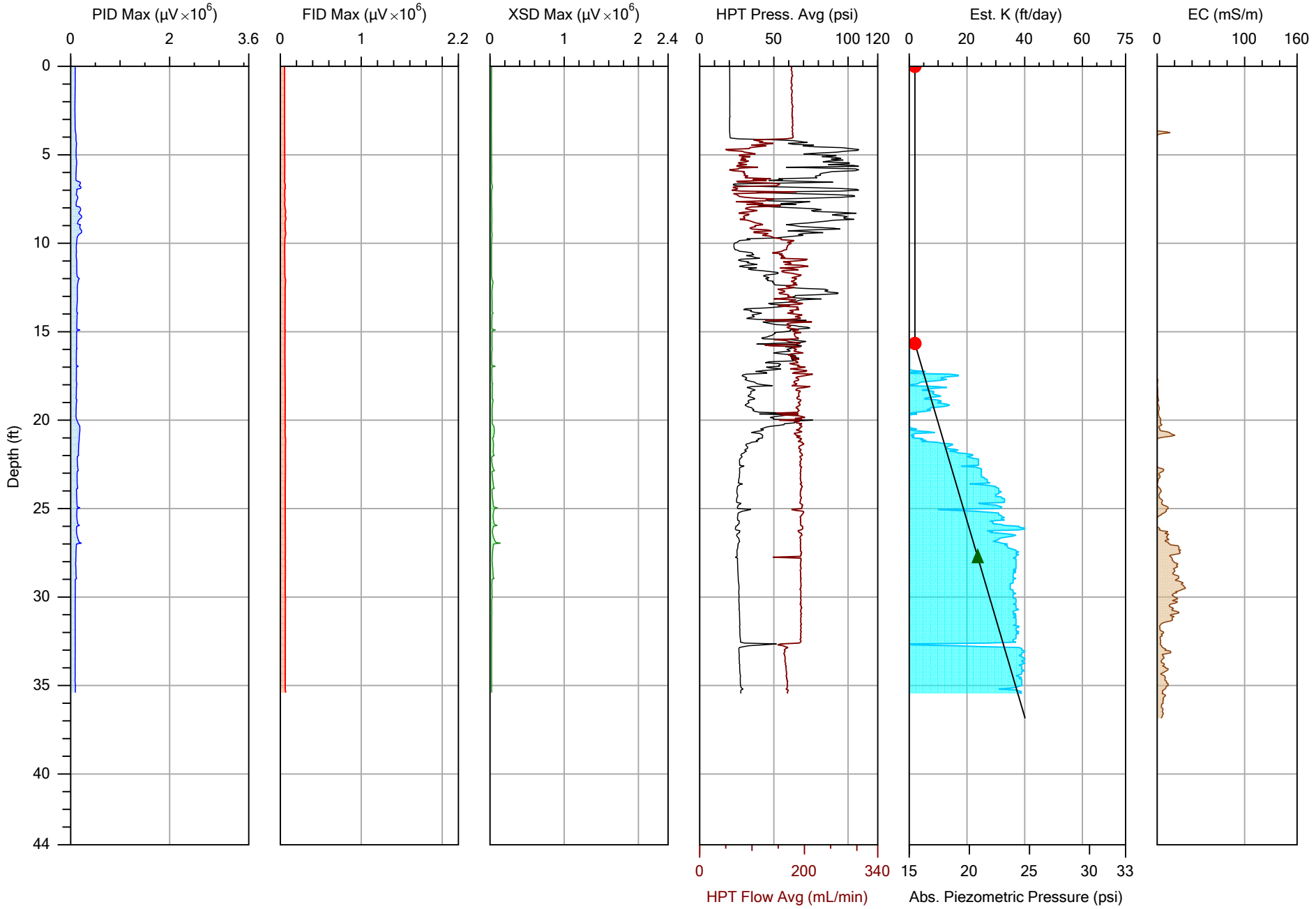
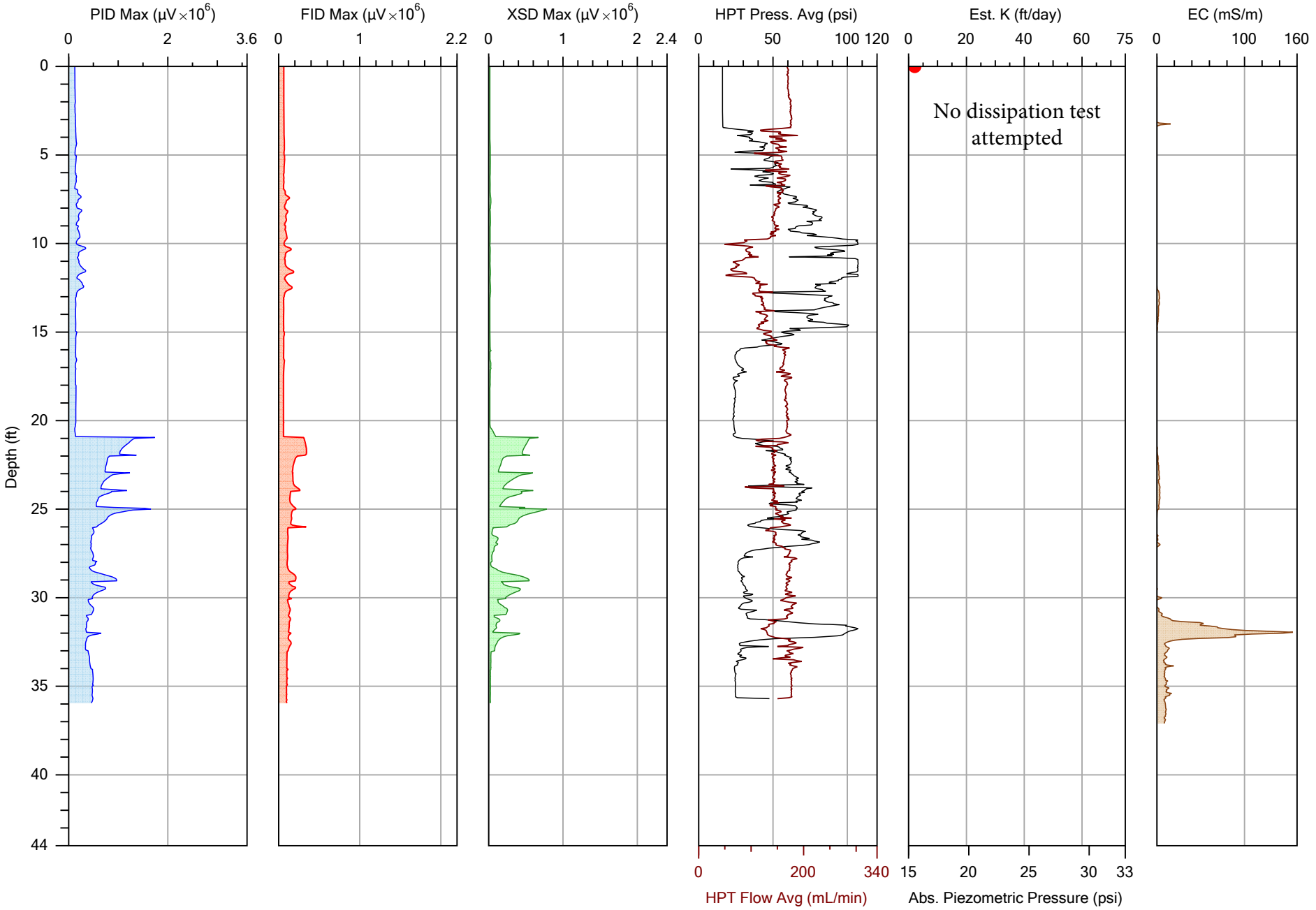
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/24/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

		File: MIP-129.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/22/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC



COLUMBIA TECHNOLOGIES

		File: MIP-130.MHP
Company: COLUMBIA Technologies LLC	Operator: RSP	Date: 7/24/2020
Project ID: UTC Delavan	Client: AECOM	Location: Bamberg SC

APPENDIX E – MIP Performance Test Results

MiHpt Quality Assurance

Start Date: 9-Jul
End Date 24-Jul
Site Name: UTC Delavan
CT Project Number: 3706-2018-01
Client: AECOM

Date	Time	Location	MIP Response Test								Detector Response				EC Test				HPT Test		Notes	Issues	Corrective Action taken
			PID Max	XSD Max	PID Baseline	XSD Baseline	PID Response	XSD Response	PID Noise	XSD Noise	PID (>5)	P/F	XSD (>5)	P/F	Low (55 ± 10%)	P/F	High (360 ± 10%)	P/F	Δ p (0.22 ± 10%)	P/F			
7/9/20	1001	MIP-100-BG	9.29E+04	3.06E+04	6.73E+04	2.48E+04	2.56E+04	5.87E+03	250	200	102.6	P	29.3	P	55.6	P	371.9	P	0.22	P			
	1322	MIP-124	4.51E+04	3.16E+04	4.20E+04	2.79E+04	3.05E+03	3.65E+03	300	250	10.2	P	14.6	P	55.4	P	370.0	P	0.21	P			
	1622	MIP-124 Post	1.18E+05	3.02E+04	1.10E+05	2.80E+04	7.87E+03	2.14E+03	1321	200	6.0	P	10.7	P	55.7	P	368.2	P	0.21	P			
7/10/20	1141	MIP-120	5.70E+04	3.61E+04	5.12E+04	3.15E+04	5.81E+03	4.68E+03	300	400	19.4	P	11.7	P	55.8	P	327.7	P	0.24	P			
	1548	MIP-126	3.84E+04	3.14E+04	3.59E+04	2.84E+04	2.52E+03	3.07E+03	200	175	12.6	P	17.5	P	55.1	P	361.8	P	0.23	P			
	1925	MIP-126 Post	7.09E+04	3.17E+04	6.52E+04	2.94E+04	5.75E+03	2.24E+03	650	150	8.8	P	15.0	P	56.0	P	363.9	P	0.22	P			
7/11/20	747	MIP-114	5.39E+04	2.39E+04	5.23E+04	2.18E+04	1.56E+03	2.13E+03	275	400	5.7	P	5.3	P	55.9	P	372.5	P	0.22	P			
	1236	MIP-113	2.14E+05	2.34E+04	1.95E+05	2.04E+04	1.89E+04	2.98E+03	2000	350	9.5	P	8.5	P	54.9	P	365.6	P	0.22	P	High Baseline, noisy after previous log		
7/12/20	709	MIP-110	1.05E+05	2.74E+04	9.58E+04	2.50E+04	9.38E+03	2.37E+03	1000	200	9.4	P	11.9	P	56.5	P	369.4	P	0.22	P			
	1112	MIP-112	1.14E+05	2.38E+04	1.04E+05	2.19E+04	9.87E+03	1.95E+03	1700	300	5.8	P	6.5	P	57.1	P	366.3	P	0.22	P			
	1347	MIP-112 Post	7.29E+04	2.30E+04	6.65E+04	2.03E+04	6.47E+03	2.65E+03	700	200	9.2	P	13.2	P	57.4	P	346.6	P	0.22	P			
7/13/20	953	MIP-109	6.19E+04	2.52E+04	5.67E+04	2.26E+04	5.15E+03	2.56E+03	500	100	10.3	P	25.6	P	55.2	P	363.6	P	0.23	P			
	1511	MIP-109 Post	5.57E+04	1.89E+04	5.08E+04	1.69E+04	4.90E+03	1.94E+03	350	200	14.0	P	9.7	P	56.8	P	378.4	P	0.23	P			
7/14/20	834	MIP-106	6.67E+04	3.03E+04	5.83E+04	2.67E+04	8.39E+03	3.57E+03	300	150	28.0	P	23.8	P	56.2	P	369.2	P	0.22	P	Cleaned detectors, new standard		
	1136	MIP-107	5.66E+04	1.87E+04	5.35E+04	1.68E+04	3.06E+03	1.87E+03	250	180	12.2	P	10.4	P	56.1	P	379.8	P	0.22	P			
	1550	MIP-111	3.30E+04	2.05E+04	3.09E+04	1.85E+04	2.13E+03	2.03E+03	150	180	14.2	P	11.3	P	56.5	P	365.2	P	0.21	P	No Post-run test, hole in membrane. Log looks fine.		
7/15/20	834	MIP-103	4.12E+04	2.32E+04	3.60E+04	1.78E+04	5.23E+03	5.46E+03	150	500	34.8	P	10.9	P	56.3	P	368.8	P	0.22	P	New Membrane		
	1246	MIP-102	3.47E+04	2.28E+04	3.15E+04	1.86E+04	3.14E+03	4.27E+03	250	250	12.6	P	17.1	P	56.1	P	367.6	P	0.22	P			
	1447	MIP-104	7.06E+04	1.87E+04	6.63E+04	1.70E+04	4.30E+03	1.70E+03	250	200	17.2	P	8.5	P	56.7	P	370.8	P	0.22	P			
	1841	MIP-104 post	4.96E+04	1.99E+04	4.66E+04	1.70E+04	2.97E+03	2.95E+03	150	250	19.8	P	11.8	P	56.7	P	370.8	P	0.22	P			
7/16/20	819	MIP-101	3.89E+04	2.83E+04	3.31E+04	2.36E+04	5.75E+03	4.75E+03	200	150	28.7	P	31.7	P	56.1	P	369.1	P	0.22	P			
	1056	MIP-101 Post	3.52E+04	1.89E+04	3.27E+04	1.68E+04	2.56E+03	2.12E+03	175	170	14.6	P	12.5	P	56.1	P	363.6	P	0.21	P			
7/20/20	1249	MIP-129	8.45E+04	3.44E+04	7.30E+04	1.98E+04	1.15E+04	1.46E+04	600	225	19.2	P	64.8	P	55.3	P	374.0	P	0.21	P	Lost probe at 17'		
7/21/20	1159	MIP-17	2.33E+05	4.77E+04	2.31E+05	4.46E+04	2.70E+03	3.13E+03	300	130	9.0	P	24.1	P	55.5	P	365.7	P	0.22	P	Recovered ad reattached		
	1413	MIP-117 Post	7.40E+04	3.21E+04	7.22E+04	2.98E+04	1.72E+03	2.27E+03	300	200	5.7	P	11.3	P	55.8	P	366.6	P	0.22	P			
7/22/20	914	MIP-125	1.11E+05	3.26E+04	1.06E+05	3.11E+04	5.33E+03	1.53E+03	350	100	15.2	P	15.3	P	56.2	P	370.9	P	0.22	P			
	1114	MIP-129	1.21E+05	2.42E+04	1.10E+05	2.04E+04	1.09E+04	3.80E+03	600	175	18.2	P	21.7	P	56.6	P	377.6	P	0.21	P			
	1339	MIP-118	1.01E+05	2.23E+04	9.10E+04	2.08E+04	9.54E+03	1.51E+03	800	250	11.9	P	6.0	P	55.8	P	382.0	P	0.21	P	Heater block developed leak at end of run		
	1624	MIP-115	1.36E+05	2.22E+04	1.31E+05	1.95E+04	5.12E+03	2.72E+03	450	200	11.4	P	13.6	P	57.3	P	377.3	P	0.22	P	New probe		
	1909	MIP-116	8.03E+04	2.10E+04	7.29E+04	1.94E+04	7.38E+03	1.57E+03	300	170	24.6	P	9.2	P	55.2	P	369.2	P	0.22	P			
	2128	MIP-116 Post	7.02E+04	2.01E+04	6.45E+04	1.85E+04	5.70E+03	1.60E+03	350	175	16.3	P	9.2	P	57.3	P	377.0	P	0.22	P			
7/23/20	917	MIP-122	7.49E+04	2.40E+04	7.01E+04	2.18E+04	4.78E+03	2.14E+03	350	175	13.6	P	12.2	P	56.9	P	370.2	P	0.22	P			
	1133	MIP-123	7.10E+04	2.12E+04	6.52E+04	1.98E+04	5.81E+03	1.38E+03	400	200	14.5	P	6.9	P	56.9	P	374.7	P	0.23	P			
	1305	MIP-119	6.98E+04	2.05E+04	6.48E+04	1.90E+04	4.98E+03	1.47E+03	300	150	16.6	P	9.8	P	56.1	P	374.6	P	0.22	P			
	1448	MIP-121	7.35E+04	2.16E+04	6.62E+04	1.88E+04	7.34E+03	2.80E+03	200	200	36.7	P	14.0	P	57.2	P	369.9	P	0.21	P			
	1747	MIP-127	7.22E+04	2.35E+04	6.67E+04	2.04E+04	5.46E+03	3.10E+03	400	250	13.6	P	12.4	P	57.8	P	375.3	P	0.23	P			
	2033	MIP-127 Post	1.93E+05	2.04E+04	1.77E+05	1.82E+04	1.65E+04	2.21E+03	2000	150	8.2	P	14.7	P	57.1	P	370.6	P	0.22	P	Very noisy after high response		
7/24/20	1030	MIP-128	1.52E+05	2.05E+04	1.36E+05	1.73E+04	1.56E+04	3.20E+03	1200	125	13.0	P	25.6	P	56.7	P	371.0	P	0.22	P			
	1254	MIP-130	1.42E+05	1.94E+04	1.28E+05	1.76E+04	1.36E+04	1.78E+03	1600	120	8.5	P	14.8	P	56.8	P	371.8	P	0.22	P			
	1604	MIP-130 Post	8.69E+04	1.89E+04	7.26E+04	1.68E+04	1.43E+04	2.02E+03	500	200	28.6	P	10.1	P	56.7	P	370.4	P	0.23	P			
							0.00E+00	0.00E+00															
							0.00E+00	0.00E+00															

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Attachment C

Analytical Reports/Data Assessment Reports

(Electronic Copy on CD)

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60314964

SGS Job Number: FA76719

Sampling Date: 07/08/20

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: 44

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Heather Wandrey 407-425-6700

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

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SGS North America Inc.

Sample Summary

United Technologies Corporation

Job No: FA76719

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA76719-1	07/08/20	13:50	MR	07/10/20	SO	Soil	DPT-124-8.0
FA76719-2	07/08/20	13:55	MR	07/10/20	SO	Soil	DPT-124-15
FA76719-3	07/08/20	14:10	MR	07/10/20	SO	Soil	DPT-124-18.0
FA76719-4	07/08/20	14:20	MR	07/10/20	SO	Soil	DPT-124-20.5
FA76719-5	07/08/20	14:30	MR	07/10/20	SO	Soil	DPT-124-30.0
FA76719-6	07/08/20	14:40	MR	07/10/20	SO	Soil	DPT-124-34
FA76719-7	07/08/20	15:00	MR	07/10/20	AQ	Ground Water	DPT-GW-124
FA76719-8	07/08/20	00:00	MR	07/10/20	SO	Trip Blank Soil	TRIP BLANK SOIL
FA76719-9	07/08/20	00:00	MR	07/10/20	AQ	Trip Blank Water	TRIP BLANK WATER

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation **Job No:** FA76719

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC **Report Date** 7/21/2020 1:14:58

7 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 07/08/2020 and were received at SGS North America Inc - Orlando on 07/10/2020 properly preserved, at 1.1 Deg. C and intact. These Samples received an SGS Orlando job number of FA76719. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1A1185

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA76610-9MS, FA76610-9MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Methyl Bromide are outside control limits.

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

Matrix Spike Duplicate Recovery(s) for Methyl Bromide, Toluene, Xylene (total) are outside control limits. Probable cause is due to matrix interference.

FA76719-7 for Methyl Bromide: Associated CCV and BS recovery outside control limits high, sample was ND.

FA76719-7: Sample was not preserved to a pH < 2.

FA76719-9 for Methyl Bromide: Associated CCV and BS recovery outside control limits high, sample was ND.

FA76719-9: Sample was not preserved to a pH < 2.

Matrix: SO **Batch ID:** VF3397

All samples were analyzed within the recommended method holding time.

Sample(s) FA76719-2MS, FA76719-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

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

Matrix Spike Duplicate Recovery(s) for Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Tetrachloroethylene are outside control limits for sample FA76719-2MSD. Probable cause is due to sample non-homogeneity.

FA76719-1 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-1: Soil vials were not frozen within 48 hours of sampling; results are considered minimum values.

FA76719-2 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-2: Soil vials were not frozen within 48 hours of sampling; results are considered minimum values.

FA76719-3 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-3 for 4-Methyl-2-pentanone (MIBK): Associated CCV outside of control limits high, sample was ND.

FA76719-4 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-4 for 4-Methyl-2-pentanone (MIBK): Associated CCV outside of control limits high, sample was ND.

FA76719-5 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-5 for 4-Methyl-2-pentanone (MIBK): Associated CCV outside of control limits high, sample was ND.

FA76719-6 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-6 for 4-Methyl-2-pentanone (MIBK): Associated CCV outside of control limits high, sample was ND.

FA76719-8 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

FA76719-8 for 4-Methyl-2-pentanone (MIBK): Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** VF3402

All samples were analyzed within the recommended method holding time.

Sample(s) FA76926-8MS were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

VF3402-BS: No MS/MSD available for this run.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85645

Sample(s) FA76159-45RDUP were used as the QC samples for Solids, Percent.

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

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on file)*

Summary of Hits

Job Number: FA76719
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/08/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA76719-1	**DPT-124-8.0**					
No hits reported in this sample.						
FA76719-2	**DPT-124-15**					
Tetrachloroethylene		1930	200	51	ug/kg	SW846 8260D
Trichloroethylene [a]		2.9 J	4.2	0.83	ug/kg	SW846 8260D
FA76719-3	**DPT-124-18.0**					
Ethylbenzene		205 J	220	43	ug/kg	SW846 8260D
Tetrachloroethylene		3030000	220000	55000	ug/kg	SW846 8260D
Trichloroethylene		1210	220	43	ug/kg	SW846 8260D
Xylene (total)		541 J	650	91	ug/kg	SW846 8260D
FA76719-4	**DPT-124-20.5**					
Tetrachloroethylene		24500	2800	710	ug/kg	SW846 8260D
FA76719-5	**DPT-124-30.0**					
cis-1,2-Dichloroethylene		66.7 J	210	59	ug/kg	SW846 8260D
Tetrachloroethylene		22500	2100	540	ug/kg	SW846 8260D
FA76719-6	**DPT-124-34**					
cis-1,2-Dichloroethylene		99.3 J	290	81	ug/kg	SW846 8260D
Tetrachloroethylene		16700	2900	750	ug/kg	SW846 8260D
FA76719-7	**DPT-GW-124**					
Tetrachloroethylene [b]		11200	200	43	ug/l	SW846 8260D
FA76719-8	**TRIP BLANK SOIL**					
No hits reported in this sample.						
FA76719-9	**TRIP BLANK WATER**					
No hits reported in this sample.						

(a) Soil vials were not frozen within 48 hours of sampling; results are considered minimum values.
(b) Sample was not preserved to a pH < 2.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	DPT-124-8.0		
Lab Sample ID:	FA76719-1	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	87.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	F0096522.D	1	07/14/20 13:44	SP	n/a	n/a	VF3397
Run #2							

	Initial Weight	Final Volume
Run #1	7.74 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	74	ug/kg	
71-43-2	Benzene	ND	3.7	0.90	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.74	ug/kg	
75-25-2	Bromoform	ND	3.7	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.4	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	0.74	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.74	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.98	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.74	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.74	ug/kg	
591-78-6	2-Hexanone [b]	ND	18	5.5	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [b]	ND	18	5.5	ug/kg	
100-42-5	Styrene	ND	3.7	0.74	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.74	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.7	0.94	ug/kg	
108-88-3	Toluene	ND	15	7.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.74	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.74	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.74	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-124-8.0		
Lab Sample ID:	FA76719-1	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	87.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.7	0.74	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		75-124%
17060-07-0	1,2-Dichloroethane-D4	91%		72-135%
2037-26-5	Toluene-D8	102%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%

(a) Soil vials were not frozen within 48 hours of sampling; results are considered minimum values.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-124-15		
Lab Sample ID:	FA76719-2	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	88.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	F0096523.D	1	07/14/20 14:12	SP	n/a	n/a	VF3397
Run #2	F0096534.D	1	07/14/20 19:16	SP	n/a	n/a	VF3397

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.77 g	5.0 ml	
Run #2	8.36 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	170	83	ug/kg	
71-43-2	Benzene	ND	4.2	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	4.2	0.83	ug/kg	
75-25-2	Bromoform	ND	4.2	0.83	ug/kg	
78-93-3	2-Butanone (MEK)	ND	21	6.0	ug/kg	
75-15-0	Carbon Disulfide	ND	4.2	0.83	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.2	0.85	ug/kg	
108-90-7	Chlorobenzene	ND	4.2	0.83	ug/kg	
75-00-3	Chloroethane	ND	4.2	1.7	ug/kg	
67-66-3	Chloroform	ND	4.2	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.2	0.83	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.2	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.2	0.83	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.2	0.83	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.2	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.2	0.83	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.2	0.83	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	0.83	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	0.83	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	0.83	ug/kg	
591-78-6	2-Hexanone [b]	ND	21	6.2	ug/kg	
74-83-9	Methyl Bromide	ND	4.2	1.7	ug/kg	
74-87-3	Methyl Chloride	ND	4.2	1.7	ug/kg	
75-09-2	Methylene Chloride	ND	17	9.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [b]	ND	21	6.2	ug/kg	
100-42-5	Styrene	ND	4.2	0.83	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	0.83	ug/kg	
127-18-4	Tetrachloroethylene	1930 [c]	200	51	ug/kg	
108-88-3	Toluene	ND	17	8.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.2	0.83	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.2	0.83	ug/kg	
79-01-6	Trichloroethylene	2.9	4.2	0.83	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-124-15		
Lab Sample ID:	FA76719-2	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	88.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.2	0.83	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%	91%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	89%	72-135%
2037-26-5	Toluene-D8	102%	102%	75-126%
460-00-4	4-Bromofluorobenzene	100%	98%	71-133%

(a) Soil vials were not frozen within 48 hours of sampling; results are considered minimum values.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-124-18.0		
Lab Sample ID:	FA76719-3	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	87.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096524.D	1	07/14/20 14:38	SP	n/a	n/a	VF3397
Run #2	F0096629.D	100	07/20/20 14:48	SP	n/a	n/a	VF3402

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.97 g	5.0 ml	100 ul
Run #2	7.97 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	8700	4300	ug/kg	
71-43-2	Benzene	ND	220	53	ug/kg	
75-27-4	Bromodichloromethane	ND	220	43	ug/kg	
75-25-2	Bromoform	ND	220	43	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1100	310	ug/kg	
75-15-0	Carbon Disulfide	ND	220	43	ug/kg	
56-23-5	Carbon Tetrachloride	ND	220	44	ug/kg	
108-90-7	Chlorobenzene	ND	220	43	ug/kg	
75-00-3	Chloroethane	ND	220	87	ug/kg	
67-66-3	Chloroform	ND	220	58	ug/kg	
124-48-1	Dibromochloromethane	ND	220	43	ug/kg	
75-34-3	1,1-Dichloroethane	ND	220	77	ug/kg	
107-06-2	1,2-Dichloroethane	ND	220	43	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	220	43	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	220	60	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	220	43	ug/kg	
78-87-5	1,2-Dichloropropane	ND	220	43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	220	43	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	220	43	ug/kg	
100-41-4	Ethylbenzene	205	220	43	ug/kg	J
591-78-6	2-Hexanone [a]	ND	1100	320	ug/kg	
74-83-9	Methyl Bromide	ND	220	87	ug/kg	
74-87-3	Methyl Chloride	ND	220	87	ug/kg	
75-09-2	Methylene Chloride	ND	870	480	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	1100	320	ug/kg	
100-42-5	Styrene	ND	220	43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	220	43	ug/kg	
127-18-4	Tetrachloroethylene	3030000 [b]	220000	55000	ug/kg	
108-88-3	Toluene	ND	870	430	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	220	43	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	220	43	ug/kg	
79-01-6	Trichloroethylene	1210	220	43	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-124-18.0		
Lab Sample ID:	FA76719-3	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	87.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	220	43	ug/kg	
1330-20-7	Xylene (total)	541	650	91	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%	92%	75-124%
17060-07-0	1,2-Dichloroethane-D4	87%	90%	72-135%
2037-26-5	Toluene-D8	109%	102%	75-126%
460-00-4	4-Bromofluorobenzene	102%	101%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-124-20.5		
Lab Sample ID:	FA76719-4	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	71.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096525.D	1	07/14/20 15:05	SP	n/a	n/a	VF3397
Run #2	F0096536.D	1	07/14/20 20:07	SP	n/a	n/a	VF3397

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.71 g	5.0 ml	100 ul
Run #2	9.71 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11000	5600	ug/kg	
71-43-2	Benzene	ND	280	68	ug/kg	
75-27-4	Bromodichloromethane	ND	280	56	ug/kg	
75-25-2	Bromoform	ND	280	56	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1400	400	ug/kg	
75-15-0	Carbon Disulfide	ND	280	56	ug/kg	
56-23-5	Carbon Tetrachloride	ND	280	57	ug/kg	
108-90-7	Chlorobenzene	ND	280	56	ug/kg	
75-00-3	Chloroethane	ND	280	110	ug/kg	
67-66-3	Chloroform	ND	280	74	ug/kg	
124-48-1	Dibromochloromethane	ND	280	56	ug/kg	
75-34-3	1,1-Dichloroethane	ND	280	98	ug/kg	
107-06-2	1,2-Dichloroethane	ND	280	56	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	280	56	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	280	77	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	280	56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	280	56	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	280	56	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	280	56	ug/kg	
100-41-4	Ethylbenzene	ND	280	56	ug/kg	
591-78-6	2-Hexanone [a]	ND	1400	420	ug/kg	
74-83-9	Methyl Bromide	ND	280	110	ug/kg	
74-87-3	Methyl Chloride	ND	280	110	ug/kg	
75-09-2	Methylene Chloride	ND	1100	610	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	1400	420	ug/kg	
100-42-5	Styrene	ND	280	56	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	280	56	ug/kg	
127-18-4	Tetrachloroethylene	24500 [b]	2800	710	ug/kg	
108-88-3	Toluene	ND	1100	560	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	280	56	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	280	56	ug/kg	
79-01-6	Trichloroethylene	ND	280	56	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-124-20.5		
Lab Sample ID:	FA76719-4	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	71.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	280	56	ug/kg	
1330-20-7	Xylene (total)	ND	830	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%	92%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	90%	72-135%
2037-26-5	Toluene-D8	102%	102%	75-126%
460-00-4	4-Bromofluorobenzene	98%	100%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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: DPT-124-30.0
Lab Sample ID: FA76719-5
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/08/20
Date Received: 07/10/20
Percent Solids: 81.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096526.D	1	07/14/20 15:31	SP	n/a	n/a	VF3397
Run #2	F0096537.D	1	07/14/20 20:32	SP	n/a	n/a	VF3397

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.95 g	5.0 ml	100 ul
Run #2	9.95 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	8500	4200	ug/kg	
71-43-2	Benzene	ND	210	52	ug/kg	
75-27-4	Bromodichloromethane	ND	210	42	ug/kg	
75-25-2	Bromoform	ND	210	42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1100	310	ug/kg	
75-15-0	Carbon Disulfide	ND	210	42	ug/kg	
56-23-5	Carbon Tetrachloride	ND	210	43	ug/kg	
108-90-7	Chlorobenzene	ND	210	42	ug/kg	
75-00-3	Chloroethane	ND	210	85	ug/kg	
67-66-3	Chloroform	ND	210	56	ug/kg	
124-48-1	Dibromochloromethane	ND	210	42	ug/kg	
75-34-3	1,1-Dichloroethane	ND	210	75	ug/kg	
107-06-2	1,2-Dichloroethane	ND	210	42	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	210	42	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	66.7	210	59	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	210	42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	210	42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	210	42	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	210	42	ug/kg	
100-41-4	Ethylbenzene	ND	210	42	ug/kg	
591-78-6	2-Hexanone [a]	ND	1100	320	ug/kg	
74-83-9	Methyl Bromide	ND	210	85	ug/kg	
74-87-3	Methyl Chloride	ND	210	85	ug/kg	
75-09-2	Methylene Chloride	ND	850	470	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	1100	320	ug/kg	
100-42-5	Styrene	ND	210	42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	210	42	ug/kg	
127-18-4	Tetrachloroethylene	22500 [b]	2100	540	ug/kg	
108-88-3	Toluene	ND	850	420	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	210	42	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	210	42	ug/kg	
79-01-6	Trichloroethylene	ND	210	42	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-124-30.0		
Lab Sample ID:	FA76719-5	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	81.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	210	42	ug/kg	
1330-20-7	Xylene (total)	ND	640	89	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	92%	75-124%
17060-07-0	1,2-Dichloroethane-D4	89%	89%	72-135%
2037-26-5	Toluene-D8	102%	102%	75-126%
460-00-4	4-Bromofluorobenzene	98%	100%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-124-34		
Lab Sample ID:	FA76719-6	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	70.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096527.D	1	07/14/20 15:58	SP	n/a	n/a	VF3397
Run #2	F0096538.D	1	07/14/20 20:57	SP	n/a	n/a	VF3397

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.28 g	5.0 ml	100 ul
Run #2	9.28 g	5.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12000	5900	ug/kg	
71-43-2	Benzene	ND	290	71	ug/kg	
75-27-4	Bromodichloromethane	ND	290	59	ug/kg	
75-25-2	Bromoform	ND	290	59	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1500	430	ug/kg	
75-15-0	Carbon Disulfide	ND	290	59	ug/kg	
56-23-5	Carbon Tetrachloride	ND	290	60	ug/kg	
108-90-7	Chlorobenzene	ND	290	59	ug/kg	
75-00-3	Chloroethane	ND	290	120	ug/kg	
67-66-3	Chloroform	ND	290	78	ug/kg	
124-48-1	Dibromochloromethane	ND	290	59	ug/kg	
75-34-3	1,1-Dichloroethane	ND	290	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	290	59	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	290	59	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	99.3	290	81	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	290	59	ug/kg	
78-87-5	1,2-Dichloropropane	ND	290	59	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	290	59	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	290	59	ug/kg	
100-41-4	Ethylbenzene	ND	290	59	ug/kg	
591-78-6	2-Hexanone [a]	ND	1500	440	ug/kg	
74-83-9	Methyl Bromide	ND	290	120	ug/kg	
74-87-3	Methyl Chloride	ND	290	120	ug/kg	
75-09-2	Methylene Chloride	ND	1200	640	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	1500	440	ug/kg	
100-42-5	Styrene	ND	290	59	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	290	59	ug/kg	
127-18-4	Tetrachloroethylene	16700 [b]	2900	750	ug/kg	
108-88-3	Toluene	ND	1200	590	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	290	59	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	290	59	ug/kg	
79-01-6	Trichloroethylene	ND	290	59	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-124-34		
Lab Sample ID:	FA76719-6	**Date Sampled:**	07/08/20
Matrix:	SO - Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	70.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	290	59	ug/kg	
1330-20-7	Xylene (total)	ND	880	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	92%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	89%	72-135%
2037-26-5	Toluene-D8	102%	102%	75-126%
460-00-4	4-Bromofluorobenzene	99%	101%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-GW-124		
Lab Sample ID:	FA76719-7	**Date Sampled:**	07/08/20
Matrix:	AQ - Ground Water	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A28908.D	200	07/13/20 16:37	CV	n/a	n/a	V1A1185
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	5000	2000	ug/l	
71-43-2	Benzene	ND	200	62	ug/l	
75-27-4	Bromodichloromethane	ND	200	48	ug/l	
75-25-2	Bromoform	ND	200	81	ug/l	
78-93-3	2-Butanone (MEK)	ND	1000	400	ug/l	
75-15-0	Carbon Disulfide	ND	400	110	ug/l	
56-23-5	Carbon Tetrachloride	ND	200	71	ug/l	
108-90-7	Chlorobenzene	ND	200	40	ug/l	
75-00-3	Chloroethane	ND	400	130	ug/l	
67-66-3	Chloroform	ND	200	60	ug/l	
124-48-1	Dibromochloromethane	ND	200	55	ug/l	
75-34-3	1,1-Dichloroethane	ND	200	68	ug/l	
107-06-2	1,2-Dichloroethane	ND	200	62	ug/l	
75-35-4	1,1-Dichloroethylene	ND	200	64	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	200	55	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	200	44	ug/l	
78-87-5	1,2-Dichloropropane	ND	200	85	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	200	58	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	200	43	ug/l	
100-41-4	Ethylbenzene	ND	200	71	ug/l	
591-78-6	2-Hexanone	ND	2000	400	ug/l	
74-83-9	Methyl Bromide [b]	ND	400	120	ug/l	
74-87-3	Methyl Chloride	ND	400	100	ug/l	
75-09-2	Methylene Chloride	ND	1000	400	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1000	200	ug/l	
100-42-5	Styrene	ND	200	44	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	60	ug/l	
127-18-4	Tetrachloroethylene	11200	200	43	ug/l	
108-88-3	Toluene	ND	200	60	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	200	93	ug/l	
79-01-6	Trichloroethylene	ND	200	69	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:	DPT-GW-124		
Lab Sample ID:	FA76719-7	**Date Sampled:**	07/08/20
Matrix:	AQ - Ground Water	**Date Received:**	07/10/20
Method:	SW846 8260D	**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	200	82	ug/l	
1330-20-7	Xylene (total)	ND	600	140	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	90%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV and BS recovery outside control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TRIP BLANK SOIL		
Lab Sample ID:	FA76719-8	**Date Sampled:**	07/08/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096529.D	1	07/14/20 16:51	SP	n/a	n/a	VF3397
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone [a]	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	

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

Report of Analysis

Client Sample ID:	TRIP BLANK SOIL		
Lab Sample ID:	FA76719-8	**Date Sampled:**	07/08/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/10/20
Method:	SW846 8260D	**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	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		75-124%
17060-07-0	1,2-Dichloroethane-D4	91%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	102%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID: TRIP BLANK WATER
Lab Sample ID: FA76719-9
Matrix: AQ - Trip Blank Water
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/08/20
Date Received: 07/10/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A28895.D	1	07/13/20 10:59	CV	n/a	n/a	V1A1185
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK WATER		
Lab Sample ID:	FA76719-9	**Date Sampled:**	07/08/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/10/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	92%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV and BS recovery outside control limits high, sample was ND.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA76719

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr, Bldg 6, Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed) Sampler 1: M. Rockwell Sampler 2:

Project Information

Project Name: UTC Delaware
Street Main Hwy
City Bamberg State SC
Project # 60314964
Fax #
Client Purchase Order #

Analytical Information

SGS Orlando Sample #	Field ID / Point of Collection	Date	Time	Sampled By:	Matrix	Total # of Bottles	Other	None	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI Water	MeOH	V82 6oTCL + 5oil	V82 6oTCL - 8260D
1	DPT-124-8.0	7/8/20	1350	MR	Soil	4			X							X	X
2	DPT-124-15		1355	MR		4			X							X	X
3	DPT-124-18.0		1410	MR		4			X							X	X
4	DPT-124-20.5		1420	MR		4			X							X	X
5	DPT-124-30.0		1430	MR		4			X							X	X
6	DPT-124-34		1440	MR		4			X							X	X
7	DPT-GW-124	7/8/20	1500	MR	GW	3			X								X
8	Trip Blank - Soil					3										X	X
9	Trip Blank - water					2											X

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

LAB USE ONLY

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other standard Overnight

Approved By: / Date:

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- COMMERCIAL "A" (RESULTS ONLY)
- COMMERCIAL "B" (RESULTS PLUS QC)
- REDT1 (EPA LEVEL 3)
- FULLT1 (EPA LEVEL 4)
- EDD'S

INITIAL ASSESSMENT BK
LABEL VERIFICATION AK

Comments / Remarks

7/10/20

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Marina Rockwell	7/9/20 1400	2 Fedex	3 Fedex	7/10/20	4 915
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation 6	Relinquished By/Affiliation 7	Date Time:	Received By/Affiliation 8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 1.1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FA76719: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FA76719 **Client:** AECOM **Project:** UTC DELAVAN

Date / Time Received: 7/10/2020 9:15:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 138666003500

Therm ID: IR 1; **Therm CF:** -0.8; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.1);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: BRYANG Date: 7/10/2020 9:15:00 AM Reviewer: _____ Date: _____

5.1

5

FA76719: Chain of Custody
Page 2 of 2

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1185-MB	1A28894.D	1	07/13/20	CV	n/a	n/a	V1A1185

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

FA76719-7, FA76719-9

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

Method Blank Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1185-MB	1A28894.D	1	07/13/20	CV	n/a	n/a	V1A1185

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

FA76719-7, FA76719-9

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	90%	79-125%
2037-26-5	Toluene-D8	92%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

Method Blank Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3397-MB	F0096520.D	1	07/14/20	SP	n/a	n/a	VF3397

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

FA76719-1, FA76719-2, FA76719-3, FA76719-4, FA76719-5, FA76719-6, FA76719-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3397-MB	F0096520.D	1	07/14/20	SP	n/a	n/a	VF3397

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

FA76719-1, FA76719-2, FA76719-3, FA76719-4, FA76719-5, FA76719-6, FA76719-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	89%	75-124%
17060-07-0	1,2-Dichloroethane-D4	87%	72-135%
2037-26-5	Toluene-D8	102%	75-126%
460-00-4	4-Bromofluorobenzene	100%	71-133%

Method Blank Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3402-MB	F0096627.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76719-3

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	90%	72-135%
2037-26-5	Toluene-D8	107%	75-126%
460-00-4	4-Bromofluorobenzene	96%	71-133%

Blank Spike Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1185-BS	1A28892.D	1	07/13/20	CV	n/a	n/a	V1A1185

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

FA76719-7, FA76719-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	129	103	50-147
71-43-2	Benzene	25	26.3	105	81-122
75-27-4	Bromodichloromethane	25	23.7	95	79-123
75-25-2	Bromoform	25	23.3	93	66-123
78-93-3	2-Butanone (MEK)	125	123	98	56-143
75-15-0	Carbon Disulfide	25	21.1	84	66-148
56-23-5	Carbon Tetrachloride	25	27.2	109	76-136
108-90-7	Chlorobenzene	25	24.5	98	82-124
75-00-3	Chloroethane	25	28.6	114	62-144
67-66-3	Chloroform	25	24.3	97	80-124
124-48-1	Dibromochloromethane	25	23.2	93	78-122
75-34-3	1,1-Dichloroethane	25	25.0	100	81-122
107-06-2	1,2-Dichloroethane	25	25.7	103	75-125
75-35-4	1,1-Dichloroethylene	25	25.8	103	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.5	102	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.1	100	76-127
78-87-5	1,2-Dichloropropane	25	24.7	99	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.9	100	75-118
10061-02-6	trans-1,3-Dichloropropene	25	23.4	94	80-120
100-41-4	Ethylbenzene	25	24.1	96	81-121
591-78-6	2-Hexanone	125	117	94	61-129
74-83-9	Methyl Bromide	25	48.1	192*	59-143
74-87-3	Methyl Chloride	25	25.4	102	50-159
75-09-2	Methylene Chloride	25	23.4	94	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	104	83	66-122
100-42-5	Styrene	25	23.5	94	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	20.1	80	72-120
127-18-4	Tetrachloroethylene	25	26.1	104	76-135
108-88-3	Toluene	25	22.0	88	80-120
71-55-6	1,1,1-Trichloroethane	25	25.8	103	75-130
79-00-5	1,1,2-Trichloroethane	25	22.2	89	76-119
79-01-6	Trichloroethylene	25	25.1	100	81-126
75-01-4	Vinyl Chloride	25	27.0	108	69-159
1330-20-7	Xylene (total)	75	69.4	93	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1185-BS	1A28892.D	1	07/13/20	CV	n/a	n/a	V1A1185

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

FA76719-7, FA76719-9

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	93%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3397-BS	F0096519.D	1	07/14/20	SP	n/a	n/a	VF3397

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

FA76719-1, FA76719-2, FA76719-3, FA76719-4, FA76719-5, FA76719-6, FA76719-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	285	114	61-152
71-43-2	Benzene	50	51.2	102	76-126
75-27-4	Bromodichloromethane	50	47.3	95	74-130
75-25-2	Bromoform	50	50.2	100	76-127
78-93-3	2-Butanone (MEK)	250	307	123	75-137
75-15-0	Carbon Disulfide	50	43.5	87	72-122
56-23-5	Carbon Tetrachloride	50	40.2	80	78-133
108-90-7	Chlorobenzene	50	47.8	96	81-129
75-00-3	Chloroethane	50	41.0	82	68-133
67-66-3	Chloroform	50	44.2	88	72-123
124-48-1	Dibromochloromethane	50	49.0	98	76-127
75-34-3	1,1-Dichloroethane	50	47.5	95	73-125
107-06-2	1,2-Dichloroethane	50	44.3	89	74-128
75-35-4	1,1-Dichloroethylene	50	42.8	86	81-136
156-59-2	cis-1,2-Dichloroethylene	50	46.4	93	74-126
156-60-5	trans-1,2-Dichloroethylene	50	46.3	93	70-127
78-87-5	1,2-Dichloropropane	50	52.5	105	74-125
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	80-123
10061-02-6	trans-1,3-Dichloropropene	50	51.6	103	75-131
100-41-4	Ethylbenzene	50	49.1	98	77-123
591-78-6	2-Hexanone	250	298	119	72-133
74-83-9	Methyl Bromide	50	37.3	75	65-139
74-87-3	Methyl Chloride	50	43.8	88	71-144
75-09-2	Methylene Chloride	50	44.5	89	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	301	120	76-132
100-42-5	Styrene	50	51.3	103	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	59.6	119	71-126
127-18-4	Tetrachloroethylene	50	44.0	88	79-130
108-88-3	Toluene	50	54.2	108	76-124
71-55-6	1,1,1-Trichloroethane	50	40.2	80	70-129
79-00-5	1,1,2-Trichloroethane	50	53.1	106	74-124
79-01-6	Trichloroethylene	50	46.1	92	75-128
75-01-4	Vinyl Chloride	50	46.2	92	76-141
1330-20-7	Xylene (total)	150	151	101	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3397-BS	F0096519.D	1	07/14/20	SP	n/a	n/a	VF3397

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

FA76719-1, FA76719-2, FA76719-3, FA76719-4, FA76719-5, FA76719-6, FA76719-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	90%	75-124%
17060-07-0	1,2-Dichloroethane-D4	87%	72-135%
2037-26-5	Toluene-D8	103%	75-126%
460-00-4	4-Bromofluorobenzene	103%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3402-BS [a]	F0096628.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76719-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
127-18-4	Tetrachloroethylene	50	42.5	85	79-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	72-135%
2037-26-5	Toluene-D8	103%	75-126%
460-00-4	4-Bromofluorobenzene	103%	71-133%

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

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-8MS	F0096648.D	1	07/20/20	SP	n/a	n/a	VF3402
FA76926-8	F0096640.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76719-3

CAS No.	Compound	FA76926-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
127-18-4	Tetrachloroethylene	101		69.7	90.3	-15*	79-130

CAS No.	Surrogate Recoveries	MS	FA76926-8	Limits
1868-53-7	Dibromofluoromethane	96%	93%	75-124%
17060-07-0	1,2-Dichloroethane-D4	89%	90%	72-135%
2037-26-5	Toluene-D8	101%	101%	75-126%
460-00-4	4-Bromofluorobenzene	100%	103%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76610-9MS	1A28905.D	50	07/13/20	CV	n/a	n/a	V1A1185
FA76610-9MSD	1A28906.D	50	07/13/20	CV	n/a	n/a	V1A1185
FA76610-9	1A28899.D	50	07/13/20	CV	n/a	n/a	V1A1185

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

FA76719-7, FA76719-9

CAS No.	Compound	FA76610-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		6250	7130	114	6250	7400	118	4	50-147/21
71-43-2	Benzene	2150		1250	3460	105	1250	3400	100	2	81-122/14
75-27-4	Bromodichloromethane	ND		1250	1170	94	1250	1200	96	3	79-123/19
75-25-2	Bromoform	ND		1250	1030	82	1250	1140	91	10	66-123/21
78-93-3	2-Butanone (MEK)	ND		6250	6770	108	6250	7310	117	8	56-143/18
75-15-0	Carbon Disulfide	ND		1250	982	79	1250	1020	82	4	66-148/23
56-23-5	Carbon Tetrachloride	ND		1250	1350	108	1250	1360	109	1	76-136/23
108-90-7	Chlorobenzene	ND		1250	1230	98	1250	1250	100	2	82-124/14
75-00-3	Chloroethane	ND		1250	1430	114	1250	1470	118	3	62-144/20
67-66-3	Chloroform	ND		1250	1220	98	1250	1240	99	2	80-124/15
124-48-1	Dibromochloromethane	ND		1250	1060	85	1250	1130	90	6	78-122/19
75-34-3	1,1-Dichloroethane	ND		1250	1240	99	1250	1260	101	2	81-122/15
107-06-2	1,2-Dichloroethane	ND		1250	1330	106	1250	1330	106	0	75-125/14
75-35-4	1,1-Dichloroethylene	ND		1250	1250	100	1250	1300	104	4	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		1250	1260	101	1250	1280	102	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		1250	1230	98	1250	1260	101	2	76-127/17
78-87-5	1,2-Dichloropropane	ND		1250	1250	100	1250	1260	101	1	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		1250	1230	98	1250	1250	100	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1090	87	1250	1140	91	4	80-120/22
100-41-4	Ethylbenzene	1270		1250	2390	90	1250	2390	90	0	81-121/14
591-78-6	2-Hexanone	ND		6250	6420	103	6250	6800	109	6	61-129/18
74-83-9	Methyl Bromide	ND		1250	1790	143	1250	2060	165*	14	59-143/19
74-87-3	Methyl Chloride	ND		1250	1250	100	1250	1250	100	0	50-159/19
75-09-2	Methylene Chloride	ND		1250	1180	94	1250	1190	95	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		6250	5520	88	6250	5820	93	5	66-122/16
100-42-5	Styrene	ND		1250	1140	91	1250	1160	93	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1040	83	1250	1070	86	3	72-120/14
127-18-4	Tetrachloroethylene	ND		1250	1280	102	1250	1290	103	1	76-135/16
108-88-3	Toluene	4250		1250	4990	59* [a]	1250	4900	52* [a]	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		1250	1290	103	1250	1320	106	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		1250	1100	88	1250	1120	90	2	76-119/14
79-01-6	Trichloroethylene	ND		1250	1290	103	1250	1300	104	1	81-126/15
75-01-4	Vinyl Chloride	ND		1250	1360	109	1250	1400	112	3	69-159/18
1330-20-7	Xylene (total)	8470		3750	11500	81	3750	11300	75* [a]	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76610-9MS	1A28905.D	50	07/13/20	CV	n/a	n/a	V1A1185
FA76610-9MSD	1A28906.D	50	07/13/20	CV	n/a	n/a	V1A1185
FA76610-9	1A28899.D	50	07/13/20	CV	n/a	n/a	V1A1185

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

FA76719-7, FA76719-9

CAS No.	Surrogate Recoveries	MS	MSD	FA76610-9	Limits
1868-53-7	Dibromofluoromethane	102%	103%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	100%	90%	79-125%
2037-26-5	Toluene-D8	89%	90%	90%	85-112%
460-00-4	4-Bromofluorobenzene	97%	98%	101%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76719-2MS	F0096539.D	1	07/14/20	SP	n/a	n/a	VF3397
FA76719-2MSD	F0096540.D	1	07/14/20	SP	n/a	n/a	VF3397
FA76719-2 [a]	F0096523.D	1	07/14/20	SP	n/a	n/a	VF3397
FA76719-2	F0096534.D	1	07/14/20	SP	n/a	n/a	VF3397

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

FA76719-1, FA76719-2, FA76719-3, FA76719-4, FA76719-5, FA76719-6, FA76719-8

CAS No.	Compound	FA76719-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		402	396	99	403	418	104	5	61-152/27
71-43-2	Benzene	ND		80.3	84.1	105	80.6	85.6	106	2	76-126/26
75-27-4	Bromodichloromethane	ND		80.3	78.7	98	80.6	79.2	98	1	74-130/25
75-25-2	Bromoform	ND		80.3	79.1	98	80.6	80.8	100	2	76-127/26
78-93-3	2-Butanone (MEK)	ND		402	431	107	403	425	105	1	75-137/25
75-15-0	Carbon Disulfide	ND		80.3	75.0	93	80.6	82.6	103	10	72-122/29
56-23-5	Carbon Tetrachloride	ND		80.3	67.5	84	80.6	73.2	91	8	78-133/29
108-90-7	Chlorobenzene	ND		80.3	80.0	100	80.6	81.5	101	2	81-129/29
75-00-3	Chloroethane	ND		80.3	77.2	96	80.6	84.9	105	10	68-133/29
67-66-3	Chloroform	ND		80.3	76.6	95	80.6	81.6	101	6	72-123/26
124-48-1	Dibromochloromethane	ND		80.3	79.4	99	80.6	81.2	101	2	76-127/27
75-34-3	1,1-Dichloroethane	ND		80.3	80.8	101	80.6	86.7	108	7	73-125/27
107-06-2	1,2-Dichloroethane	ND		80.3	74.4	93	80.6	76.7	95	3	74-128/23
75-35-4	1,1-Dichloroethylene	ND		80.3	73.6	92	80.6	82.0	102	11	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		80.3	80.2	100	80.6	85.6	106	7	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		80.3	78.0	97	80.6	85.7	106	9	70-127/27
78-87-5	1,2-Dichloropropane	ND		80.3	85.0	106	80.6	83.4	104	2	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		80.3	82.8	103	80.6	80.2	100	3	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		80.3	83.1	103	80.6	81.9	102	1	75-131/28
100-41-4	Ethylbenzene	ND		80.3	82.1	102	80.6	85.0	105	3	77-123/31
591-78-6	2-Hexanone	ND		402	426	106	403	435	108	2	72-133/26
74-83-9	Methyl Bromide	ND		80.3	69.0	86	80.6	76.8	95	11	65-139/31
74-87-3	Methyl Chloride	ND		80.3	73.1	91	80.6	81.6	101	11	71-144/27
75-09-2	Methylene Chloride	ND		80.3	73.6	92	80.6	80.8	100	9	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		402	414	103	403	471	117	13	76-132/26
100-42-5	Styrene	ND		80.3	84.1	105	80.6	84.2	104	0	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		80.3	92.1	115	80.6	97.4	121	6	71-126/30
127-18-4	Tetrachloroethylene	1930 [c]		80.3	855	-1338* [b]	80.6	404	-1894* [b]	72*	79-130/31
108-88-3	Toluene	ND		80.3	82.0	102	80.6	85.1	106	4	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		80.3	70.3	87	80.6	75.8	94	8	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		80.3	87.3	109	80.6	86.9	108	0	74-124/28
79-01-6	Trichloroethylene	2.9	J	80.3	77.8	93	80.6	82.4	99	6	75-128/27
75-01-4	Vinyl Chloride	ND		80.3	79.1	98	80.6	87.3	108	10	76-141/27
1330-20-7	Xylene (total)	ND		241	251	104	242	264	109	5	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76719
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76719-2MS	F0096539.D	1	07/14/20	SP	n/a	n/a	VF3397
FA76719-2MSD	F0096540.D	1	07/14/20	SP	n/a	n/a	VF3397
FA76719-2 [a]	F0096523.D	1	07/14/20	SP	n/a	n/a	VF3397
FA76719-2	F0096534.D	1	07/14/20	SP	n/a	n/a	VF3397

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

FA76719-1, FA76719-2, FA76719-3, FA76719-4, FA76719-5, FA76719-6, FA76719-8

CAS No.	Surrogate Recoveries	MS	MSD	FA76719-2	FA76719-2	Limits
1868-53-7	Dibromofluoromethane	95%	98%	89%	91%	75-124%
17060-07-0	1,2-Dichloroethane-D4	90%	90%	88%	89%	72-135%
2037-26-5	Toluene-D8	103%	105%	102%	102%	75-126%
460-00-4	4-Bromofluorobenzene	97%	95%	100%	98%	71-133%

(a) Soil vials were not frozen within 48 hours of sampling; results are considered minimum values.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Result is from Run #2.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60620179

SGS Job Number: FA76926

Sampling Dates: 07/15/20 - 07/16/20

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: **88**

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Heather Wandrey 407-425-6700

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

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SGS North America Inc.

Sample Summary

United Technologies Corporation

Job No: FA76926

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FA76926-1	07/15/20	00:00	RMMR	07/17/20	AQ	Trip Blank Water	TRIP BLANK 01
FA76926-2	07/15/20	00:00	RMMR	07/17/20	SO	Trip Blank Soil	TRIP BLANK 02
FA76926-3	07/15/20	16:22	RMMR	07/17/20	AQ	Ground Water	MW-19
FA76926-4	07/15/20	18:50	RMMR	07/17/20	SO	Soil	DPT-104-8
FA76926-5	07/15/20	19:00	RMMR	07/17/20	SO	Soil	DPT-104-12
FA76926-6	07/15/20	19:10	RMMR	07/17/20	SO	Soil	DPT-104-18
FA76926-7	07/15/20	19:20	RMMR	07/17/20	SO	Soil	DPT-104-24
FA76926-8	07/15/20	19:50	RMMR	07/17/20	SO	Soil	DPT-104-26
FA76926-9	07/15/20	20:10	RMMR	07/17/20	SO	Soil	DPT-104-34
FA76926-10	07/15/20	00:00	RMMR	07/17/20	SO	Soil	FD-SO-02
FA76926-11	07/16/20	07:57	RMMR	07/17/20	AQ	Ground Water	MW-37
FA76926-12	07/16/20	13:25	RMMR	07/17/20	SO	Soil	DPT-101-10

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

United Technologies Corporation

Job No: FA76926

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA76926-13	07/16/20	13:35	RMMR	07/17/20	SO	Soil	DPT-101-14
FA76926-14	07/16/20	13:50	RMMR	07/17/20	SO	Soil	DPT-101-16
FA76926-15	07/16/20	14:35	RMMR	07/17/20	SO	Soil	DPT-101-24
FA76926-16	07/16/20	15:25	RMMR	07/17/20	SO	Soil	DPT-101-28
FA76926-17	07/16/20	15:15	RMMR	07/17/20	AQ	Equipment Blank	EB-GW-01
FA76926-18	07/16/20	00:00	RMMR	07/17/20	AQ	Ground Water	FD-GW-01
FA76926-19	07/16/20	16:00	RMMR	07/17/20	AQ	Ground Water	DPT-GW-101
FA76926-19D	07/16/20	16:00	RMMR	07/17/20	AQ	Water Dup/MSD	DPT-GW-101
FA76926-19F	07/16/20	16:00	RMMR	07/17/20	AQ	Groundwater Filtered	DPT-GW-101
FA76926-19S	07/16/20	16:00	RMMR	07/17/20	AQ	Water Matrix Spike	DPT-GW-101
FA76926-20	07/16/20	16:45	RMMR	07/17/20	AQ	Equipment Blank	EB-SO-01

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation **Job No:** FA76926

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC **Report Date:** 7/29/2020 2:54:38 PM

18 Samples and 2 Trip Blanks were collected on between 07/15/2020 and 07/16/2020 and were received at SGS North America Inc - Orlando on 07/17/2020 properly preserved, at 2.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA76926. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** VC5705

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA76926-19MS, FA76926-19MSD were used as the QC samples indicated.

VC5705-MB: Sample was treated with an anti-foaming agent.

FA76926-1: Sample was not preserved to a pH < 2.

FA76926-3: Sample was not preserved to a pH < 2.

FA76926-11: Sample was not preserved to a pH < 2.

FA76926-17: Sample was not preserved to a pH < 2.

FA76926-18: Sample was not preserved to a pH < 2.

FA76926-19: Sample was not preserved to a pH < 2.

Matrix: AQ **Batch ID:** VP2895

All samples were analyzed within the recommended method holding time.

Sample(s) FA76926-11MS, FA76926-11MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Blank Spike Recovery(s) for 2-Butanone (MEK), Acetone are outside control limits.

Matrix Spike Recovery(s) for 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Methyl Bromide are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethane, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Chlorobenzene, Chloroform, cis-1,2-Dichloroethylene, Methyl Bromide, Tetrachloroethylene, Xylene (total) are outside control limits. Probable cause is due to matrix interference.

VP2895-MB: Sample was treated with an anti-foaming agent.

FA76926-11: Sample was not preserved to a pH < 2.

FA76926-18: Sample was not preserved to a pH < 2.

FA76926-19: Sample was not preserved to a pH < 2.

FA76926-20: Sample was not preserved to a pH < 2.

FA76926-20 for 2-Butanone (MEK): Associated CCV and BS recovery outside control limits high, sample was ND.

FA76926-20 for Chloroethane: Associated CCV outside of control limits low.

FA76926-20 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** VF3402

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA76926-8MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

VF3402-BS: No MS/MSD available for this run.

Matrix: SO **Batch ID:** VF3403

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA76926-12MS, FA76926-12MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP37570

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) FA76921-1DUP, FA76921-1MSD, FA76921-1SDL, FA76921-1PS were used as the QC samples for metals.

Matrix Spike Recovery(s) for Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Matrix Spike Duplicate Recovery(s) for Manganese are outside control limits. Probable cause is due to matrix interference.

RPD(s) for Serial Dilution for Manganese are outside control limits for sample MP37570-SD1. Probable cause is due to sample non-homogeneity.

MP37570-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85690

Sample(s) FA76926-12DUP were used as the QC samples for Solids, Percent.

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

Narrative prepared by:

_____

Jenna Kravitz, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA76926
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/15/20 thru 07/16/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA76926-1	**TRIP BLANK 01**					
No hits reported in this sample.						
FA76926-2	**TRIP BLANK 02**					
No hits reported in this sample.						
FA76926-3	**MW-19**					
Tetrachloroethylene [a]		29800	500	110	ug/l	SW846 8260D
FA76926-4	**DPT-104-8**					
Tetrachloroethylene		57.6	3.6	0.93	ug/kg	SW846 8260D
FA76926-5	**DPT-104-12**					
Tetrachloroethylene		16.4	2.9	0.74	ug/kg	SW846 8260D
FA76926-6	**DPT-104-18**					
Tetrachloroethylene		10.6	3.4	0.88	ug/kg	SW846 8260D
FA76926-7	**DPT-104-24**					
1,1-Dichloroethylene		1.1 J	4.4	0.87	ug/kg	SW846 8260D
Tetrachloroethylene		326 J	400	100	ug/kg	SW846 8260D
FA76926-8	**DPT-104-26**					
Tetrachloroethylene		101	4.8	1.2	ug/kg	SW846 8260D
FA76926-9	**DPT-104-34**					
1,1-Dichloroethylene		1.3 J	5.5	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		346 J	410	110	ug/kg	SW846 8260D
FA76926-10	**FD-SO-02**					
1,1-Dichloroethylene		1.3 J	5.3	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		492	340	87	ug/kg	SW846 8260D

Summary of Hits

Job Number: FA76926
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/15/20 thru 07/16/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA76926-11	**MW-37**					
1,1-Dichloroethylene [a]		70.8 J	100	32	ug/l	SW846 8260D
Tetrachloroethylene [a]		13700	250	54	ug/l	SW846 8260D
1,1,1-Trichloroethane [a]		40.3 J	100	25	ug/l	SW846 8260D
FA76926-12	**DPT-101-10**					
Tetrachloroethylene		18.9	4.0	1.0	ug/kg	SW846 8260D
FA76926-13	**DPT-101-14**					
cis-1,2-Dichloroethylene		1.3 J	3.3	0.92	ug/kg	SW846 8260D
Tetrachloroethylene		287	200	51	ug/kg	SW846 8260D
Trichloroethylene		1.5 J	3.3	0.67	ug/kg	SW846 8260D
FA76926-14	**DPT-101-16**					
Tetrachloroethylene		129	3.3	0.85	ug/kg	SW846 8260D
FA76926-15	**DPT-101-24**					
1,1-Dichloroethylene		5.8	3.7	0.74	ug/kg	SW846 8260D
Tetrachloroethylene		1740	220	55	ug/kg	SW846 8260D
FA76926-16	**DPT-101-28**					
1,1-Dichloroethylene		5.8	5.7	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		170	5.7	1.5	ug/kg	SW846 8260D
FA76926-17	**EB-GW-01**					
Methyl Bromide [a]		0.96 J	2.0	0.59	ug/l	SW846 8260D
FA76926-18	**FD-GW-01**					
1,1-Dichloroethylene [a]		46.2	10	3.2	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		17.9	10	2.8	ug/l	SW846 8260D
Tetrachloroethylene [a]		1290	25	5.4	ug/l	SW846 8260D
Trichloroethylene [a]		7.0 J	10	3.5	ug/l	SW846 8260D
FA76926-19	**DPT-GW-101**					
1,1-Dichloroethylene [a]		49.4	10	3.2	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		18.5	10	2.8	ug/l	SW846 8260D

Summary of Hits

Job Number: FA76926
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/15/20 thru 07/16/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Tetrachloroethylene [a]		1350	25	5.4	ug/l	SW846 8260D
Trichloroethylene [a]		6.6 J	10	3.5	ug/l	SW846 8260D
Manganese		525	15	1.0	ug/l	SW846 6010D
FA76926-19F	**DPT-GW-101**					
Manganese		61.3	15	1.0	ug/l	SW846 6010D
FA76926-20	**EB-SO-01**					

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:	TRIP BLANK 01		
Lab Sample ID:	FA76926-1	**Date Sampled:**	07/15/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0142334.D	1	07/20/20 13:49	KB	n/a	n/a	VC5705
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK 01		
Lab Sample ID:	FA76926-1	**Date Sampled:**	07/15/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	95%		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:	TRIP BLANK 02		
Lab Sample ID:	FA76926-2	**Date Sampled:**	07/15/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096635.D	1	07/20/20 17:19	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	

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

Report of Analysis

Client Sample ID:	TRIP BLANK 02		
Lab Sample ID:	FA76926-2	**Date Sampled:**	07/15/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**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	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		75-124%
17060-07-0	1,2-Dichloroethane-D4	94%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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		
Lab Sample ID:	FA76926-3	**Date Sampled:**	07/15/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0142341.D	500	07/20/20 17:06	KB	n/a	n/a	VC5705
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	13000	5000	ug/l	
71-43-2	Benzene	ND	500	160	ug/l	
75-27-4	Bromodichloromethane	ND	500	120	ug/l	
75-25-2	Bromoform	ND	500	200	ug/l	
78-93-3	2-Butanone (MEK)	ND	2500	1000	ug/l	
75-15-0	Carbon Disulfide	ND	1000	270	ug/l	
56-23-5	Carbon Tetrachloride	ND	500	180	ug/l	
108-90-7	Chlorobenzene	ND	500	100	ug/l	
75-00-3	Chloroethane	ND	1000	330	ug/l	
67-66-3	Chloroform	ND	500	150	ug/l	
124-48-1	Dibromochloromethane	ND	500	140	ug/l	
75-34-3	1,1-Dichloroethane	ND	500	170	ug/l	
107-06-2	1,2-Dichloroethane	ND	500	160	ug/l	
75-35-4	1,1-Dichloroethylene	ND	500	160	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	500	140	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	500	110	ug/l	
78-87-5	1,2-Dichloropropane	ND	500	210	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	500	150	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	500	110	ug/l	
100-41-4	Ethylbenzene	ND	500	180	ug/l	
591-78-6	2-Hexanone	ND	5000	1000	ug/l	
74-83-9	Methyl Bromide	ND	1000	290	ug/l	
74-87-3	Methyl Chloride	ND	1000	250	ug/l	
75-09-2	Methylene Chloride	ND	2500	1000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2500	500	ug/l	
100-42-5	Styrene	ND	500	110	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	150	ug/l	
127-18-4	Tetrachloroethylene	29800	500	110	ug/l	
108-88-3	Toluene	ND	500	150	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	500	120	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	500	230	ug/l	
79-01-6	Trichloroethylene	ND	500	170	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-19		
Lab Sample ID:	FA76926-3	**Date Sampled:**	07/15/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**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	500	200	ug/l	
1330-20-7	Xylene (total)	ND	1500	360	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	96%		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: DPT-104-8
Lab Sample ID: FA76926-4
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/15/20
Date Received: 07/17/20
Percent Solids: 83.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096636.D	1	07/20/20 17:45	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	8.24 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	73	ug/kg	
71-43-2	Benzene	ND	3.6	0.89	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.73	ug/kg	
75-25-2	Bromoform	ND	3.6	0.73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.3	ug/kg	
75-15-0	Carbon Disulfide	ND	3.6	0.73	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.6	0.74	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.73	ug/kg	
75-00-3	Chloroethane	ND	3.6	1.5	ug/kg	
67-66-3	Chloroform	ND	3.6	0.97	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.73	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.73	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.73	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.73	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.73	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.73	ug/kg	
100-41-4	Ethylbenzene	ND	3.6	0.73	ug/kg	
591-78-6	2-Hexanone	ND	18	5.4	ug/kg	
74-83-9	Methyl Bromide	ND	3.6	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.6	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.4	ug/kg	
100-42-5	Styrene	ND	3.6	0.73	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.73	ug/kg	
127-18-4	Tetrachloroethylene	57.6	3.6	0.93	ug/kg	
108-88-3	Toluene	ND	15	7.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.73	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.73	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.73	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-8		
Lab Sample ID:	FA76926-4	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	83.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.6	0.73	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		75-124%
17060-07-0	1,2-Dichloroethane-D4	92%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	100%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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: DPT-104-12
Lab Sample ID: FA76926-5
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/15/20
Date Received: 07/17/20
Percent Solids: 91.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096637.D	1	07/20/20 18:10	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	9.55 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	110	57	ug/kg	
71-43-2	Benzene	ND	2.9	0.70	ug/kg	
75-27-4	Bromodichloromethane	ND	2.9	0.57	ug/kg	
75-25-2	Bromoform	ND	2.9	0.57	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	4.2	ug/kg	
75-15-0	Carbon Disulfide	ND	2.9	0.57	ug/kg	
56-23-5	Carbon Tetrachloride	ND	2.9	0.59	ug/kg	
108-90-7	Chlorobenzene	ND	2.9	0.57	ug/kg	
75-00-3	Chloroethane	ND	2.9	1.1	ug/kg	
67-66-3	Chloroform	ND	2.9	0.76	ug/kg	
124-48-1	Dibromochloromethane	ND	2.9	0.57	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.9	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.9	0.57	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.9	0.57	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.9	0.79	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.9	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.9	0.57	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.9	0.57	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.9	0.57	ug/kg	
100-41-4	Ethylbenzene	ND	2.9	0.57	ug/kg	
591-78-6	2-Hexanone	ND	14	4.3	ug/kg	
74-83-9	Methyl Bromide	ND	2.9	1.1	ug/kg	
74-87-3	Methyl Chloride	ND	2.9	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	11	6.3	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	14	4.3	ug/kg	
100-42-5	Styrene	ND	2.9	0.57	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.9	0.57	ug/kg	
127-18-4	Tetrachloroethylene	16.4	2.9	0.74	ug/kg	
108-88-3	Toluene	ND	11	5.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.9	0.57	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.9	0.57	ug/kg	
79-01-6	Trichloroethylene	ND	2.9	0.57	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-12		
Lab Sample ID:	FA76926-5	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	91.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	2.9	0.57	ug/kg	
1330-20-7	Xylene (total)	ND	8.6	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		75-124%
17060-07-0	1,2-Dichloroethane-D4	98%		72-135%
2037-26-5	Toluene-D8	99%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-18		
Lab Sample ID:	FA76926-6	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	83.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096638.D	1	07/20/20 18:35	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	8.77 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	140	68	ug/kg	
71-43-2	Benzene	ND	3.4	0.83	ug/kg	
75-27-4	Bromodichloromethane	ND	3.4	0.68	ug/kg	
75-25-2	Bromoform	ND	3.4	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	5.0	ug/kg	
75-15-0	Carbon Disulfide	ND	3.4	0.68	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.4	0.70	ug/kg	
108-90-7	Chlorobenzene	ND	3.4	0.68	ug/kg	
75-00-3	Chloroethane	ND	3.4	1.4	ug/kg	
67-66-3	Chloroform	ND	3.4	0.91	ug/kg	
124-48-1	Dibromochloromethane	ND	3.4	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.4	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.4	0.68	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.4	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.4	0.94	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.4	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.4	0.68	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
100-41-4	Ethylbenzene	ND	3.4	0.68	ug/kg	
591-78-6	2-Hexanone	ND	17	5.1	ug/kg	
74-83-9	Methyl Bromide	ND	3.4	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.4	1.4	ug/kg	
75-09-2	Methylene Chloride	ND	14	7.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.1	ug/kg	
100-42-5	Styrene	ND	3.4	0.68	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.68	ug/kg	
127-18-4	Tetrachloroethylene	10.6	3.4	0.88	ug/kg	
108-88-3	Toluene	ND	14	6.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.4	0.68	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.4	0.68	ug/kg	
79-01-6	Trichloroethylene	ND	3.4	0.68	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-18		
Lab Sample ID:	FA76926-6	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	83.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.4	0.68	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		75-124%
17060-07-0	1,2-Dichloroethane-D4	94%		72-135%
2037-26-5	Toluene-D8	99%		75-126%
460-00-4	4-Bromofluorobenzene	103%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-24		
Lab Sample ID:	FA76926-7	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	65.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096639.D	1	07/20/20 19:01	SP	n/a	n/a	VF3402
Run #2	F0096664.D	1	07/21/20 15:49	SP	n/a	n/a	VF3403

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.80 g	5.0 ml	
Run #2	7.22 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	170	87	ug/kg	
71-43-2	Benzene	ND	4.4	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.4	0.87	ug/kg	
75-25-2	Bromoform	ND	4.4	0.87	ug/kg	
78-93-3	2-Butanone (MEK)	ND	22	6.3	ug/kg	
75-15-0	Carbon Disulfide	ND	4.4	0.87	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.4	0.89	ug/kg	
108-90-7	Chlorobenzene	ND	4.4	0.87	ug/kg	
75-00-3	Chloroethane	ND	4.4	1.7	ug/kg	
67-66-3	Chloroform	ND	4.4	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.4	0.87	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.4	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.4	0.87	ug/kg	
75-35-4	1,1-Dichloroethylene	1.1	4.4	0.87	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	ND	4.4	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.4	0.87	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.4	0.87	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.4	0.87	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.4	0.87	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	0.87	ug/kg	
591-78-6	2-Hexanone	ND	22	6.5	ug/kg	
74-83-9	Methyl Bromide	ND	4.4	1.7	ug/kg	
74-87-3	Methyl Chloride	ND	4.4	1.7	ug/kg	
75-09-2	Methylene Chloride	ND	17	9.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	22	6.5	ug/kg	
100-42-5	Styrene	ND	4.4	0.87	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	0.87	ug/kg	
127-18-4	Tetrachloroethylene	326 [a]	400	100	ug/kg	J
108-88-3	Toluene	ND	17	8.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.4	0.87	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.4	0.87	ug/kg	
79-01-6	Trichloroethylene	ND	4.4	0.87	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-24		
Lab Sample ID:	FA76926-7	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	65.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.4	0.87	ug/kg	
1330-20-7	Xylene (total)	ND	13	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	95%	75-124%
17060-07-0	1,2-Dichloroethane-D4	99%	95%	72-135%
2037-26-5	Toluene-D8	100%	99%	75-126%
460-00-4	4-Bromofluorobenzene	103%	100%	71-133%

(a) Result is from Run# 2

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

Report of Analysis

Client Sample ID: DPT-104-26
Lab Sample ID: FA76926-8
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/15/20
Date Received: 07/17/20
Percent Solids: 71.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096640.D	1	07/20/20 19:26	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	7.21 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	190	96	ug/kg	
71-43-2	Benzene	ND	4.8	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.96	ug/kg	
75-25-2	Bromoform	ND	4.8	0.96	ug/kg	
78-93-3	2-Butanone (MEK)	ND	24	7.0	ug/kg	
75-15-0	Carbon Disulfide	ND	4.8	0.96	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.8	0.98	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.96	ug/kg	
75-00-3	Chloroethane	ND	4.8	1.9	ug/kg	
67-66-3	Chloroform	ND	4.8	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.96	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	0.96	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	0.96	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	0.96	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.96	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.96	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.96	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	0.96	ug/kg	
591-78-6	2-Hexanone	ND	24	7.2	ug/kg	
74-83-9	Methyl Bromide	ND	4.8	1.9	ug/kg	
74-87-3	Methyl Chloride	ND	4.8	1.9	ug/kg	
75-09-2	Methylene Chloride	ND	19	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	24	7.2	ug/kg	
100-42-5	Styrene	ND	4.8	0.96	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.96	ug/kg	
127-18-4	Tetrachloroethylene	101	4.8	1.2	ug/kg	
108-88-3	Toluene	ND	19	9.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.96	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.96	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	0.96	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-26		
Lab Sample ID:	FA76926-8	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	71.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.8	0.96	ug/kg	
1330-20-7	Xylene (total)	ND	14	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		75-124%
17060-07-0	1,2-Dichloroethane-D4	90%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	103%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-34		
Lab Sample ID:	FA76926-9	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	62.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096641.D	1	07/20/20 19:51	SP	n/a	n/a	VF3402
Run #2	F0096665.D	1	07/21/20 16:17	SP	n/a	n/a	VF3403

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.23 g	5.0 ml	
Run #2	7.52 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	220	110	ug/kg	
71-43-2	Benzene	ND	5.5	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	1.1	ug/kg	
75-25-2	Bromoform	ND	5.5	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	28	8.0	ug/kg	
75-15-0	Carbon Disulfide	ND	5.5	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.5	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	1.1	ug/kg	
75-00-3	Chloroethane	ND	5.5	2.2	ug/kg	
67-66-3	Chloroform	ND	5.5	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	1.1	ug/kg	
75-35-4	1,1-Dichloroethylene	1.3	5.5	1.1	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	ND	5.5	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.5	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	1.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.5	1.1	ug/kg	
591-78-6	2-Hexanone	ND	28	8.3	ug/kg	
74-83-9	Methyl Bromide	ND	5.5	2.2	ug/kg	
74-87-3	Methyl Chloride	ND	5.5	2.2	ug/kg	
75-09-2	Methylene Chloride	ND	22	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	28	8.3	ug/kg	
100-42-5	Styrene	ND	5.5	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	1.1	ug/kg	
127-18-4	Tetrachloroethylene	346 [a]	410	110	ug/kg	J
108-88-3	Toluene	ND	22	11	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	1.1	ug/kg	
79-01-6	Trichloroethylene	ND	5.5	1.1	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-104-34		
Lab Sample ID:	FA76926-9	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	62.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.5	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	17	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	72-135%
2037-26-5	Toluene-D8	100%	99%	75-126%
460-00-4	4-Bromofluorobenzene	102%	99%	71-133%

(a) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	FD-SO-02		
Lab Sample ID:	FA76926-10	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	68.4
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096642.D	1	07/20/20 20:16	SP	n/a	n/a	VF3402
Run #2	F0096666.D	1	07/21/20 16:46	SP	n/a	n/a	VF3403

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.88 g	5.0 ml	
Run #2	8.13 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	210	110	ug/kg	
71-43-2	Benzene	ND	5.3	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	1.1	ug/kg	
75-25-2	Bromoform	ND	5.3	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	27	7.7	ug/kg	
75-15-0	Carbon Disulfide	ND	5.3	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.3	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	1.1	ug/kg	
75-00-3	Chloroethane	ND	5.3	2.1	ug/kg	
67-66-3	Chloroform	ND	5.3	1.4	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	1.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.3	1.1	ug/kg	
75-35-4	1,1-Dichloroethylene	1.3	5.3	1.1	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	ND	5.3	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.3	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	1.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.3	1.1	ug/kg	
591-78-6	2-Hexanone	ND	27	8.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.3	2.1	ug/kg	
74-87-3	Methyl Chloride	ND	5.3	2.1	ug/kg	
75-09-2	Methylene Chloride	ND	21	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	27	8.0	ug/kg	
100-42-5	Styrene	ND	5.3	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/kg	
127-18-4	Tetrachloroethylene	492 [a]	340	87	ug/kg	
108-88-3	Toluene	ND	21	11	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	1.1	ug/kg	
79-01-6	Trichloroethylene	ND	5.3	1.1	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	FD-SO-02		
Lab Sample ID:	FA76926-10	**Date Sampled:**	07/15/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	68.4
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.3	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	16	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	91%	96%	72-135%
2037-26-5	Toluene-D8	101%	99%	75-126%
460-00-4	4-Bromofluorobenzene	102%	98%	71-133%

(a) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	MW-37		
Lab Sample ID:	FA76926-11	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0142342.D	100	07/20/20 17:34	KB	n/a	n/a	VC5705
Run #2 [a]	P72965.D	250	07/21/20 16:53	SO	n/a	n/a	VP2895

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1000	ug/l	
71-43-2	Benzene	ND	100	31	ug/l	
75-27-4	Bromodichloromethane	ND	100	24	ug/l	
75-25-2	Bromoform	ND	100	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	200	ug/l	
75-15-0	Carbon Disulfide	ND	200	53	ug/l	
56-23-5	Carbon Tetrachloride	ND	100	36	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	200	67	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	34	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	31	ug/l	
75-35-4	1,1-Dichloroethylene	70.8	100	32	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	ND	100	28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	100	22	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	21	ug/l	
100-41-4	Ethylbenzene	ND	100	36	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
74-83-9	Methyl Bromide	ND	200	59	ug/l	
74-87-3	Methyl Chloride	ND	200	50	ug/l	
75-09-2	Methylene Chloride	ND	500	200	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	500	100	ug/l	
100-42-5	Styrene	ND	100	22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/l	
127-18-4	Tetrachloroethylene	13700 [b]	250	54	ug/l	
108-88-3	Toluene	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	40.3	100	25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	100	47	ug/l	
79-01-6	Trichloroethylene	ND	100	35	ug/l	

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

Report of Analysis

Client Sample ID:	MW-37		
Lab Sample ID:	FA76926-11	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**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	100	41	ug/l	
1330-20-7	Xylene (total)	ND	300	72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	79-125%
2037-26-5	Toluene-D8	95%	104%	85-112%
460-00-4	4-Bromofluorobenzene	97%	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:	DPT-101-10		
Lab Sample ID:	FA76926-12	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	90.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096667.D	1	07/21/20 17:15	SP	n/a	n/a	VF3403
Run #2							

	Initial Weight	Final Volume
Run #1	7.02 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	160	79	ug/kg	
71-43-2	Benzene	ND	4.0	0.97	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.79	ug/kg	
75-25-2	Bromoform	ND	4.0	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.8	ug/kg	
75-15-0	Carbon Disulfide	ND	4.0	0.79	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.0	0.81	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.79	ug/kg	
75-00-3	Chloroethane	ND	4.0	1.6	ug/kg	
67-66-3	Chloroform	ND	4.0	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.79	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.79	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.79	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.79	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.79	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.79	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.79	ug/kg	
591-78-6	2-Hexanone	ND	20	5.9	ug/kg	
74-83-9	Methyl Bromide	ND	4.0	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	4.0	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	5.9	ug/kg	
100-42-5	Styrene	ND	4.0	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	0.79	ug/kg	
127-18-4	Tetrachloroethylene	18.9	4.0	1.0	ug/kg	
108-88-3	Toluene	ND	16	7.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.79	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.79	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.79	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-101-10		
Lab Sample ID:	FA76926-12	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	90.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.0	0.79	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		75-124%
17060-07-0	1,2-Dichloroethane-D4	100%		72-135%
2037-26-5	Toluene-D8	98%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-101-14		
Lab Sample ID:	FA76926-13	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	89.4
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096644.D	1	07/20/20 21:06	SP	n/a	n/a	VF3402
Run #2	F0096669.D	1	07/21/20 18:11	SP	n/a	n/a	VF3403

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.36 g	5.0 ml	
Run #2	8.21 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	67	ug/kg	
71-43-2	Benzene	ND	3.3	0.82	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.67	ug/kg	
75-25-2	Bromoform	ND	3.3	0.67	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.9	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.67	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.67	ug/kg	
75-00-3	Chloroethane	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.89	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.67	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.67	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	1.3	3.3	0.92	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.67	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.67	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.67	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.67	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.67	ug/kg	
591-78-6	2-Hexanone	ND	17	5.0	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.0	ug/kg	
100-42-5	Styrene	ND	3.3	0.67	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.67	ug/kg	
127-18-4	Tetrachloroethylene	287 [a]	200	51	ug/kg	
108-88-3	Toluene	ND	13	6.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.67	ug/kg	
79-01-6	Trichloroethylene	1.5	3.3	0.67	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-101-14		
Lab Sample ID:	FA76926-13	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	89.4
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.3	0.67	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	96%	95%	72-135%
2037-26-5	Toluene-D8	100%	99%	75-126%
460-00-4	4-Bromofluorobenzene	101%	100%	71-133%

(a) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-101-16		
Lab Sample ID:	FA76926-14	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	87.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096645.D	1	07/20/20 21:30	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	8.66 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	66	ug/kg	
71-43-2	Benzene	ND	3.3	0.81	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.66	ug/kg	
75-25-2	Bromoform	ND	3.3	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.8	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.66	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.66	ug/kg	
75-00-3	Chloroethane	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.88	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.66	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.66	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.3	0.91	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.66	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.66	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.66	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.66	ug/kg	
591-78-6	2-Hexanone	ND	17	5.0	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.3	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.0	ug/kg	
100-42-5	Styrene	ND	3.3	0.66	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.66	ug/kg	
127-18-4	Tetrachloroethylene	129	3.3	0.85	ug/kg	
108-88-3	Toluene	ND	13	6.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.66	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.66	ug/kg	
79-01-6	Trichloroethylene	ND	3.3	0.66	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-101-16		
Lab Sample ID:	FA76926-14	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	87.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.3	0.66	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		75-124%
17060-07-0	1,2-Dichloroethane-D4	96%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	103%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-101-24		
Lab Sample ID:	FA76926-15	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096646.D	1	07/20/20 21:55	SP	n/a	n/a	VF3402
Run #2	F0096670.D	1	07/21/20 18:39	SP	n/a	n/a	VF3403

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.19 g	5.0 ml	
Run #2	9.50 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	74	ug/kg	
71-43-2	Benzene	ND	3.7	0.91	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.74	ug/kg	
75-25-2	Bromoform	ND	3.7	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	5.4	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	0.74	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.76	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.74	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.99	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.74	ug/kg	
75-35-4	1,1-Dichloroethylene	5.8	3.7	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.74	ug/kg	
591-78-6	2-Hexanone	ND	19	5.6	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	19	5.6	ug/kg	
100-42-5	Styrene	ND	3.7	0.74	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.74	ug/kg	
127-18-4	Tetrachloroethylene	1740 [a]	220	55	ug/kg	
108-88-3	Toluene	ND	15	7.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.74	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.74	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.74	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-101-24		
Lab Sample ID:	FA76926-15	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.7	0.74	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	95%	75-124%
17060-07-0	1,2-Dichloroethane-D4	96%	95%	72-135%
2037-26-5	Toluene-D8	103%	99%	75-126%
460-00-4	4-Bromofluorobenzene	96%	100%	71-133%

(a) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-101-28		
Lab Sample ID:	FA76926-16	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	63.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0096647.D	1	07/20/20 22:19	SP	n/a	n/a	VF3402
Run #2							

	Initial Weight	Final Volume
Run #1	6.97 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	230	110	ug/kg	
71-43-2	Benzene	ND	5.7	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	1.1	ug/kg	
75-25-2	Bromoform	ND	5.7	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	28	8.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.7	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.7	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	1.1	ug/kg	
75-00-3	Chloroethane	ND	5.7	2.3	ug/kg	
67-66-3	Chloroform	ND	5.7	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	1.1	ug/kg	
75-35-4	1,1-Dichloroethylene	5.8	5.7	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.7	1.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.7	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	1.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.7	1.1	ug/kg	
591-78-6	2-Hexanone	ND	28	8.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.7	2.3	ug/kg	
74-87-3	Methyl Chloride	ND	5.7	2.3	ug/kg	
75-09-2	Methylene Chloride	ND	23	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	28	8.5	ug/kg	
100-42-5	Styrene	ND	5.7	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	1.1	ug/kg	
127-18-4	Tetrachloroethylene	170	5.7	1.5	ug/kg	
108-88-3	Toluene	ND	23	11	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	1.1	ug/kg	
79-01-6	Trichloroethylene	ND	5.7	1.1	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-101-28		
Lab Sample ID:	FA76926-16	**Date Sampled:**	07/16/20
Matrix:	SO - Soil	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	63.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.7	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	17	2.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		75-124%
17060-07-0	1,2-Dichloroethane-D4	97%		72-135%
2037-26-5	Toluene-D8	99%		75-126%
460-00-4	4-Bromofluorobenzene	103%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	EB-GW-01		
Lab Sample ID:	FA76926-17	**Date Sampled:**	07/16/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0142335.D	1	07/20/20 14:17	KB	n/a	n/a	VC5705
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	0.96	2.0	0.59	ug/l	J
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

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

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

Report of Analysis

Client Sample ID:	EB-GW-01		
Lab Sample ID:	FA76926-17	**Date Sampled:**	07/16/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	96%		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:	FD-GW-01		
Lab Sample ID:	FA76926-18	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0142347.D	10	07/20/20 19:54	KB	n/a	n/a	VC5705
Run #2 [a]	P72966.D	25	07/21/20 17:18	SO	n/a	n/a	VP2895

	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	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	46.2	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	17.9	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	20	5.9	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	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	1290 [b]	25	5.4	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	
79-01-6	Trichloroethylene	7.0	10	3.5	ug/l	J

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

Report of Analysis

Client Sample ID:	FD-GW-01		
Lab Sample ID:	FA76926-18	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**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	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	108%	79-125%
2037-26-5	Toluene-D8	95%	104%	85-112%
460-00-4	4-Bromofluorobenzene	98%	106%	83-118%

(a) Sample was not preserved to a pH < 2.
(b) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-GW-101		
Lab Sample ID:	FA76926-19	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	C0142339.D	10	07/20/20 16:10	KB	n/a	n/a	VC5705
Run #2 [a]	P72967.D	25	07/21/20 17:43	SO	n/a	n/a	VP2895

	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	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	49.4	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	18.5	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide	ND	20	5.9	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	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	1350 [b]	25	5.4	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	
79-01-6	Trichloroethylene	6.6	10	3.5	ug/l	J

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

Report of Analysis

Client Sample ID:	DPT-GW-101		
Lab Sample ID:	FA76926-19	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
Method:	SW846 8260D	**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	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	106%	79-125%
2037-26-5	Toluene-D8	96%	104%	85-112%
460-00-4	4-Bromofluorobenzene	98%	104%	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:	DPT-GW-101		
Lab Sample ID:	FA76926-19	**Date Sampled:**	07/16/20
Matrix:	AQ - Ground Water	**Date Received:**	07/17/20
		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
Manganese	525	15	1.0	ug/l	1	07/21/20	07/22/20	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA16921
(2) Prep QC Batch: MP37570

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:	DPT-GW-101		
Lab Sample ID:	FA76926-19F	**Date Sampled:**	07/16/20
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/17/20
		Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	61.3	15	1.0	ug/l	1	07/21/20	07/22/20	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA16921
(2) Prep QC Batch: MP37570

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:	EB-SO-01		
Lab Sample ID:	FA76926-20	**Date Sampled:**	07/16/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P72955.D	1	07/21/20 12:43	SO	n/a	n/a	VP2895
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	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK) [b]	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane [c]	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone [d]	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide [c]	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [d]	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

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

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

Report of Analysis

Client Sample ID:	EB-SO-01		
Lab Sample ID:	FA76926-20	**Date Sampled:**	07/16/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/17/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

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

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV and BS recovery outside control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated CCV outside of control limits high, sample was ND.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

FA76926

SGS - ORLANDO JOB # :

PAGE 1 OF 2

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Drive Bldg IV Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslie Alexander Email: Leslie.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed) Sampler 1: Randy Morgan Sampler 2: Mariah Rockwell

Project Information

Project Name: UTC Delavan HRSC
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 175846 ACM

Analytical Information

TCL VOC's 8260
% Moisture

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION OTHER	NONE	HCl	NaOH	HNO3	H2SO4	MeOH/DI	DI WATER	MEOH	LAB USE ONLY
1	Trip Blank - 01 Aqueous	7/15/20			GW	2		2							X	
2	Trip Blank - 02 Soil	7/15/20			GW	3	1							2	X	
3	MW-19	7/15/20	1622	RM	GW	3		3							X	
4	DPT-104-8	7/15/20	1850	RM	SO	4	1	1						2	X	X
5	DPT-104-12	7/15/20	1900	RM	SO	4	1	1						2	X	X
6	DPT-104-18	7/15/20	1910	RM	SO	4	1	1						2	X	X
7	DPT-104-24	7/15/20	1920	RM	SO	4	1	1						2	X	X
8	DPT-104-26	7/15/20	1950	RM	SO	4	1	1						2	X	X
9	DPT-104-34	7/15/20	2010	RM	SO	4	1	1						2	X	X
10	FD-50-02	7/15/20		RM	SO	4	1	1						2	X	X
11	MW-37	7/16/20	0757	RM	GW	3		3							X	
12	DPT-101-10	7/16/20	1325	RM	SO	4	1	1						2	X	X

INITIAL ASSESSMENT RG
FINAL VERIFICATION AK

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Randy Morgan AECOM	7/16/20 2000	2 FedEX	3 FX		4 Perch 7/17/20 930
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation 6	Relinquished By/Affiliation 7	Date Time:	Received By/Affiliation 8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.2

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FA76926

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
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SGS - ORLANDO JOB # : FA76926 PAGE 2 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 70 Patewood Dr Bldg VI Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslie Alexander Email: leslie.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed) Sampler 1: Randy Mangum Sampler 2:

Project Information

Project Name: UTC Delavan HRSC
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 125840ACM

Analytical Information

TCL VOCs 8260
% Moisture
Total Manganese 6010C
Dissolved Manganese 6010C

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	MeOH+ZnAc	DI WATER	MEOH	TCL VOCs 8260	% Moisture	Total Manganese 6010C	Dissolved Manganese 6010C	LAB USE ONLY
13	DPT-101-14	7/16/20	1335	RM	SO	4	1	1						2		X	X			
14	DPT-101-16	7/16/20	1360	RM	SO	4	1	1						2		X	X			
15	DPT-101-24	7/16/20	1485	RM	SO	4	1	1						2		X	X			
16	DPT-101-28	7/16/20	1525	RM	SO	4	1	1						2		X	X			
17	EB-GW-01	7/16/20	1515	RM	GW	3		3								X				
18	FD-GW-01	7/16/20		RM	GW	3		3								X				
19	DPT-GW-101	7/16/20	1600	RM	GW	5		4		1						X		X	X	
19	DPT-GW-101-MS	7/16/20	1600	RM	GW	3		3								X				
19	DPT-GW-101-MSD	7/16/20	1600	RM	GW	3		3								X				
20	EB-SO-01	7/16/20	1645	RM	GW	3		3								X				

Turnaround Time (Business days)

- 10 Day (Business) — Approved By: / Date:
- 7 Day
- 5 Day
- 3 Day *RUSH*
- 2 Day *RUSH*
- 1 Day *RUSH*
- Other

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
Randy Mangum	7/16/20 2000	2 Fed EX	3 FX		4 FedEX 7/17/20 930
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

SGS Sample Receipt Summary

Job Number: FA76926 **Client:** AECOM **Project:** UTC DELARAN HRSC

Date / Time Received: 7/17/2020 9:30:00 AM **Delivery Method:** FX **Airbill #'s:**

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: 12 Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 7/17/2020 9:30:00 AM Reviewer: _____ Date: _____

MS 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: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC5705-MB [a]	C0142333.D	1	07/20/20	KB	n/a	n/a	VC5705

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

FA76926-1, FA76926-3, FA76926-11, FA76926-17, FA76926-18, FA76926-19

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

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC5705-MB [a]	C0142333.D	1	07/20/20	KB	n/a	n/a	VC5705

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

FA76926-1, FA76926-3, FA76926-11, FA76926-17, FA76926-18, FA76926-19

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

(a) Sample was treated with an anti-foaming agent.

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3402-MB	F0096627.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76926-2, FA76926-4, FA76926-5, FA76926-6, FA76926-7, FA76926-8, FA76926-9, FA76926-10, FA76926-13, FA76926-14, FA76926-15, FA76926-16

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3402-MB	F0096627.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76926-2, FA76926-4, FA76926-5, FA76926-6, FA76926-7, FA76926-8, FA76926-9, FA76926-10, FA76926-13, FA76926-14, FA76926-15, FA76926-16

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	90%	72-135%
2037-26-5	Toluene-D8	107%	75-126%
460-00-4	4-Bromofluorobenzene	96%	71-133%

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2895-MB [a]	P72953.D	1	07/21/20	SO	n/a	n/a	VP2895

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

FA76926-11, FA76926-18, FA76926-19, FA76926-20

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

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2895-MB [a]	P72953.D	1	07/21/20	SO	n/a	n/a	VP2895

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

FA76926-11, FA76926-18, FA76926-19, FA76926-20

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	106%	85-112%
460-00-4	4-Bromofluorobenzene	110%	83-118%

(a) Sample was treated with an anti-foaming agent.

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3403-MB	F0096658.D	1	07/21/20	SP	n/a	n/a	VF3403

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

FA76926-7, FA76926-9, FA76926-10, FA76926-12, FA76926-13, FA76926-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3403-MB	F0096658.D	1	07/21/20	SP	n/a	n/a	VF3403

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

FA76926-7, FA76926-9, FA76926-10, FA76926-12, FA76926-13, FA76926-15

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	75-124%
17060-07-0	1,2-Dichloroethane-D4	95%	72-135%
2037-26-5	Toluene-D8	99%	75-126%
460-00-4	4-Bromofluorobenzene	100%	71-133%

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC5705-BS	C0142331.D	1	07/20/20	KB	n/a	n/a	VC5705

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

FA76926-1, FA76926-3, FA76926-11, FA76926-17, FA76926-18, FA76926-19

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	142	114	50-147
71-43-2	Benzene	25	27.4	110	81-122
75-27-4	Bromodichloromethane	25	26.8	107	79-123
75-25-2	Bromoform	25	24.1	96	66-123
78-93-3	2-Butanone (MEK)	125	126	101	56-143
75-15-0	Carbon Disulfide	25	26.1	104	66-148
56-23-5	Carbon Tetrachloride	25	28.4	114	76-136
108-90-7	Chlorobenzene	25	25.9	104	82-124
75-00-3	Chloroethane	25	24.2	97	62-144
67-66-3	Chloroform	25	26.3	105	80-124
124-48-1	Dibromochloromethane	25	24.8	99	78-122
75-34-3	1,1-Dichloroethane	25	26.7	107	81-122
107-06-2	1,2-Dichloroethane	25	26.6	106	75-125
75-35-4	1,1-Dichloroethylene	25	27.7	111	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.4	110	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.8	107	76-127
78-87-5	1,2-Dichloropropane	25	27.7	111	76-124
10061-01-5	cis-1,3-Dichloropropene	25	27.3	109	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.5	102	80-120
100-41-4	Ethylbenzene	25	25.8	103	81-121
591-78-6	2-Hexanone	125	117	94	61-129
74-83-9	Methyl Bromide	25	25.4	102	59-143
74-87-3	Methyl Chloride	25	22.8	91	50-159
75-09-2	Methylene Chloride	25	25.4	102	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	106	85	66-122
100-42-5	Styrene	25	26.6	106	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	25.2	101	72-120
127-18-4	Tetrachloroethylene	25	26.3	105	76-135
108-88-3	Toluene	25	25.1	100	80-120
71-55-6	1,1,1-Trichloroethane	25	27.2	109	75-130
79-00-5	1,1,2-Trichloroethane	25	25.7	103	76-119
79-01-6	Trichloroethylene	25	27.6	110	81-126
75-01-4	Vinyl Chloride	25	23.7	95	69-159
1330-20-7	Xylene (total)	75	77.3	103	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC5705-BS	C0142331.D	1	07/20/20	KB	n/a	n/a	VC5705

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

FA76926-1, FA76926-3, FA76926-11, FA76926-17, FA76926-18, FA76926-19

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3402-BS [a]	F0096628.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76926-2, FA76926-4, FA76926-5, FA76926-6, FA76926-7, FA76926-8, FA76926-9, FA76926-10, FA76926-13, FA76926-14, FA76926-15, FA76926-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	246	98	61-152
71-43-2	Benzene	50	48.4	97	76-126
75-27-4	Bromodichloromethane	50	46.2	92	74-130
75-25-2	Bromoform	50	45.6	91	76-127
78-93-3	2-Butanone (MEK)	250	248	99	75-137
75-15-0	Carbon Disulfide	50	46.6	93	72-122
56-23-5	Carbon Tetrachloride	50	42.2	84	78-133
108-90-7	Chlorobenzene	50	46.2	92	81-129
75-00-3	Chloroethane	50	44.7	89	68-133
67-66-3	Chloroform	50	44.8	90	72-123
124-48-1	Dibromochloromethane	50	45.9	92	76-127
75-34-3	1,1-Dichloroethane	50	47.6	95	73-125
107-06-2	1,2-Dichloroethane	50	44.7	89	74-128
75-35-4	1,1-Dichloroethylene	50	44.1	88	81-136
156-59-2	cis-1,2-Dichloroethylene	50	46.5	93	74-126
156-60-5	trans-1,2-Dichloroethylene	50	46.1	92	70-127
78-87-5	1,2-Dichloropropane	50	49.5	99	74-125
10061-01-5	cis-1,3-Dichloropropene	50	48.1	96	80-123
10061-02-6	trans-1,3-Dichloropropene	50	48.6	97	75-131
100-41-4	Ethylbenzene	50	47.6	95	77-123
591-78-6	2-Hexanone	250	252	101	72-133
74-83-9	Methyl Bromide	50	38.9	78	65-139
74-87-3	Methyl Chloride	50	41.4	83	71-144
75-09-2	Methylene Chloride	50	45.6	91	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	254	102	76-132
100-42-5	Styrene	50	47.9	96	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	54.7	109	71-126
127-18-4	Tetrachloroethylene	50	42.5	85	79-130
108-88-3	Toluene	50	47.4	95	76-124
71-55-6	1,1,1-Trichloroethane	50	42.7	85	70-129
79-00-5	1,1,2-Trichloroethane	50	48.5	97	74-124
79-01-6	Trichloroethylene	50	45.3	91	75-128
75-01-4	Vinyl Chloride	50	44.0	88	76-141
1330-20-7	Xylene (total)	150	145	97	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3402-BS [a]	F0096628.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76926-2, FA76926-4, FA76926-5, FA76926-6, FA76926-7, FA76926-8, FA76926-9, FA76926-10, FA76926-13, FA76926-14, FA76926-15, FA76926-16

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	72-135%
2037-26-5	Toluene-D8	103%	75-126%
460-00-4	4-Bromofluorobenzene	103%	71-133%

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2895-BS	P72950.D	1	07/21/20	SO	n/a	n/a	VP2895

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

FA76926-11, FA76926-18, FA76926-19, FA76926-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	194	155*	50-147
71-43-2	Benzene	25	21.4	86	81-122
75-27-4	Bromodichloromethane	25	21.1	84	79-123
75-25-2	Bromoform	25	22.6	90	66-123
78-93-3	2-Butanone (MEK)	125	181	145*	56-143
75-15-0	Carbon Disulfide	25	22.2	89	66-148
56-23-5	Carbon Tetrachloride	25	21.3	85	76-136
108-90-7	Chlorobenzene	25	20.9	84	82-124
75-00-3	Chloroethane	25	16.9	68	62-144
67-66-3	Chloroform	25	20.3	81	80-124
124-48-1	Dibromochloromethane	25	21.8	87	78-122
75-34-3	1,1-Dichloroethane	25	21.1	84	81-122
107-06-2	1,2-Dichloroethane	25	20.3	81	75-125
75-35-4	1,1-Dichloroethylene	25	21.7	87	78-137
156-59-2	cis-1,2-Dichloroethylene	25	20.5	82	78-120
156-60-5	trans-1,2-Dichloroethylene	25	21.7	87	76-127
78-87-5	1,2-Dichloropropane	25	21.5	86	76-124
10061-01-5	cis-1,3-Dichloropropene	25	20.8	83	75-118
10061-02-6	trans-1,3-Dichloropropene	25	22.3	89	80-120
100-41-4	Ethylbenzene	25	21.8	87	81-121
591-78-6	2-Hexanone	125	157	126	61-129
74-83-9	Methyl Bromide	25	16.9	68	59-143
74-87-3	Methyl Chloride	25	22.2	89	50-159
75-09-2	Methylene Chloride	25	19.2	77	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	140	112	66-122
100-42-5	Styrene	25	20.8	83	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	26.1	104	72-120
127-18-4	Tetrachloroethylene	25	21.7	87	76-135
108-88-3	Toluene	25	21.3	85	80-120
71-55-6	1,1,1-Trichloroethane	25	21.6	86	75-130
79-00-5	1,1,2-Trichloroethane	25	21.6	86	76-119
79-01-6	Trichloroethylene	25	21.2	85	81-126
75-01-4	Vinyl Chloride	25	22.6	90	69-159
1330-20-7	Xylene (total)	75	63.1	84	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2895-BS	P72950.D	1	07/21/20	SO	n/a	n/a	VP2895

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

FA76926-11, FA76926-18, FA76926-19, FA76926-20

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3403-BS	F0096657.D	1	07/21/20	SP	n/a	n/a	VF3403

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

FA76926-7, FA76926-9, FA76926-10, FA76926-12, FA76926-13, FA76926-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	270	108	61-152
71-43-2	Benzene	50	56.1	112	76-126
75-27-4	Bromodichloromethane	50	53.8	108	74-130
75-25-2	Bromoform	50	54.3	109	76-127
78-93-3	2-Butanone (MEK)	250	286	114	75-137
75-15-0	Carbon Disulfide	50	56.0	112	72-122
56-23-5	Carbon Tetrachloride	50	51.5	103	78-133
108-90-7	Chlorobenzene	50	52.3	105	81-129
75-00-3	Chloroethane	50	53.0	106	68-133
67-66-3	Chloroform	50	53.3	107	72-123
124-48-1	Dibromochloromethane	50	52.6	105	76-127
75-34-3	1,1-Dichloroethane	50	56.1	112	73-125
107-06-2	1,2-Dichloroethane	50	52.0	104	74-128
75-35-4	1,1-Dichloroethylene	50	54.6	109	81-136
156-59-2	cis-1,2-Dichloroethylene	50	54.7	109	74-126
156-60-5	trans-1,2-Dichloroethylene	50	55.9	112	70-127
78-87-5	1,2-Dichloropropane	50	56.9	114	74-125
10061-01-5	cis-1,3-Dichloropropene	50	55.6	111	80-123
10061-02-6	trans-1,3-Dichloropropene	50	54.4	109	75-131
100-41-4	Ethylbenzene	50	54.3	109	77-123
591-78-6	2-Hexanone	250	283	113	72-133
74-83-9	Methyl Bromide	50	46.0	92	65-139
74-87-3	Methyl Chloride	50	48.0	96	71-144
75-09-2	Methylene Chloride	50	52.0	104	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	282	113	76-132
100-42-5	Styrene	50	54.6	109	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	58.1	116	71-126
127-18-4	Tetrachloroethylene	50	51.4	103	79-130
108-88-3	Toluene	50	54.7	109	76-124
71-55-6	1,1,1-Trichloroethane	50	52.3	105	70-129
79-00-5	1,1,2-Trichloroethane	50	54.7	109	74-124
79-01-6	Trichloroethylene	50	53.6	107	75-128
75-01-4	Vinyl Chloride	50	51.6	103	76-141
1330-20-7	Xylene (total)	150	166	111	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3403-BS	F0096657.D	1	07/21/20	SP	n/a	n/a	VF3403

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

FA76926-7, FA76926-9, FA76926-10, FA76926-12, FA76926-13, FA76926-15

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	91%	72-135%
2037-26-5	Toluene-D8	102%	75-126%
460-00-4	4-Bromofluorobenzene	103%	71-133%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-8MS	F0096648.D	1	07/20/20	SP	n/a	n/a	VF3402
FA76926-8	F0096640.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76926-2, FA76926-4, FA76926-5, FA76926-6, FA76926-7, FA76926-8, FA76926-9, FA76926-10, FA76926-13, FA76926-14, FA76926-15, FA76926-16

CAS No.	Compound	FA76926-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	ND		348	258	74	61-152
71-43-2	Benzene	ND		69.7	72.3	104	76-126
75-27-4	Bromodichloromethane	ND		69.7	68.7	99	74-130
75-25-2	Bromoform	ND		69.7	62.9	90	76-127
78-93-3	2-Butanone (MEK)	ND		348	287	82	75-137
75-15-0	Carbon Disulfide	ND		69.7	69.4	100	72-122
56-23-5	Carbon Tetrachloride	ND		69.7	64.5	93	78-133
108-90-7	Chlorobenzene	ND		69.7	67.4	97	81-129
75-00-3	Chloroethane	ND		69.7	73.2	105	68-133
67-66-3	Chloroform	ND		69.7	68.6	98	72-123
124-48-1	Dibromochloromethane	ND		69.7	66.4	95	76-127
75-34-3	1,1-Dichloroethane	ND		69.7	70.2	101	73-125
107-06-2	1,2-Dichloroethane	ND		69.7	65.3	94	74-128
75-35-4	1,1-Dichloroethylene	ND		69.7	66.8	96	81-136
156-59-2	cis-1,2-Dichloroethylene	ND		69.7	68.8	99	74-126
156-60-5	trans-1,2-Dichloroethylene	ND		69.7	67.8	97	70-127
78-87-5	1,2-Dichloropropane	ND		69.7	72.9	105	74-125
10061-01-5	cis-1,3-Dichloropropene	ND		69.7	68.5	98	80-123
10061-02-6	trans-1,3-Dichloropropene	ND		69.7	67.2	96	75-131
100-41-4	Ethylbenzene	ND		69.7	70.1	101	77-123
591-78-6	2-Hexanone	ND		348	291	84	72-133
74-83-9	Methyl Bromide	ND		69.7	64.0	92	65-139
74-87-3	Methyl Chloride	ND		69.7	59.6	86	71-144
75-09-2	Methylene Chloride	ND		69.7	63.4	91	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		348	312	90	76-132
100-42-5	Styrene	ND		69.7	68.9	99	78-125
79-34-5	1,1,2,2-Tetrachloroethane	ND		69.7	66.6	96	71-126
127-18-4	Tetrachloroethylene	101		69.7	90.3	-15*	79-130
108-88-3	Toluene	ND		69.7	69.3	99	76-124
71-55-6	1,1,1-Trichloroethane	ND		69.7	66.8	96	70-129
79-00-5	1,1,2-Trichloroethane	ND		69.7	67.7	97	74-124
79-01-6	Trichloroethylene	ND		69.7	67.6	97	75-128
75-01-4	Vinyl Chloride	ND		69.7	66.5	95	76-141
1330-20-7	Xylene (total)	ND		209	213	102	80-129

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-8MS	F0096648.D	1	07/20/20	SP	n/a	n/a	VF3402
FA76926-8	F0096640.D	1	07/20/20	SP	n/a	n/a	VF3402

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

FA76926-2, FA76926-4, FA76926-5, FA76926-6, FA76926-7, FA76926-8, FA76926-9, FA76926-10, FA76926-13, FA76926-14, FA76926-15, FA76926-16

CAS No.	Surrogate Recoveries	MS	FA76926-8	Limits
1868-53-7	Dibromofluoromethane	96%	93%	75-124%
17060-07-0	1,2-Dichloroethane-D4	89%	90%	72-135%
2037-26-5	Toluene-D8	101%	101%	75-126%
460-00-4	4-Bromofluorobenzene	100%	103%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-19MS	C0142350.D	10	07/20/20	KB	n/a	n/a	VC5705
FA76926-19MSD	C0142351.D	10	07/20/20	KB	n/a	n/a	VC5705
FA76926-19 [a]	C0142339.D	10	07/20/20	KB	n/a	n/a	VC5705

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

FA76926-1, FA76926-3, FA76926-11, FA76926-17, FA76926-18, FA76926-19

CAS No.	Compound	FA76926-19 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1250	1440	115	1250	1400	112	3	50-147/21
71-43-2	Benzene	ND		250	274	110	250	270	108	1	81-122/14
75-27-4	Bromodichloromethane	ND		250	272	109	250	269	108	1	79-123/19
75-25-2	Bromoform	ND		250	230	92	250	240	96	4	66-123/21
78-93-3	2-Butanone (MEK)	ND		1250	1250	100	1250	1220	98	2	56-143/18
75-15-0	Carbon Disulfide	ND		250	248	99	250	252	101	2	66-148/23
56-23-5	Carbon Tetrachloride	ND		250	288	115	250	281	112	2	76-136/23
108-90-7	Chlorobenzene	ND		250	256	102	250	256	102	0	82-124/14
75-00-3	Chloroethane	ND		250	276	110	250	267	107	3	62-144/20
67-66-3	Chloroform	ND		250	267	107	250	262	105	2	80-124/15
124-48-1	Dibromochloromethane	ND		250	251	100	250	255	102	2	78-122/19
75-34-3	1,1-Dichloroethane	ND		250	275	110	250	276	110	0	81-122/15
107-06-2	1,2-Dichloroethane	ND		250	269	108	250	262	105	3	75-125/14
75-35-4	1,1-Dichloroethylene	49.4		250	335	114	250	327	111	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	18.5		250	300	113	250	300	113	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		250	284	114	250	271	108	5	76-127/17
78-87-5	1,2-Dichloropropane	ND		250	279	112	250	269	108	4	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		250	264	106	250	267	107	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		250	245	98	250	248	99	1	80-120/22
100-41-4	Ethylbenzene	ND		250	254	102	250	255	102	0	81-121/14
591-78-6	2-Hexanone	ND		1250	1100	88	1250	1120	90	2	61-129/18
74-83-9	Methyl Bromide	ND		250	206	82	250	242	97	16	59-143/19
74-87-3	Methyl Chloride	ND		250	209	84	250	214	86	2	50-159/19
75-09-2	Methylene Chloride	ND		250	261	104	250	253	101	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1250	1050	84	1250	1080	86	3	66-122/16
100-42-5	Styrene	ND		250	255	102	250	260	104	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	247	99	250	250	100	1	72-120/14
127-18-4	Tetrachloroethylene	1400	E	250	1690	116	250	1700	120	1	76-135/16
108-88-3	Toluene	ND		250	244	98	250	247	99	1	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		250	280	112	250	280	112	0	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		250	253	101	250	259	104	2	76-119/14
79-01-6	Trichloroethylene	6.6	J	250	285	111	250	277	108	3	81-126/15
75-01-4	Vinyl Chloride	ND		250	259	104	250	250	100	4	69-159/18
1330-20-7	Xylene (total)	ND		750	750	100	750	755	101	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-19MS	C0142350.D	10	07/20/20	KB	n/a	n/a	VC5705
FA76926-19MSD	C0142351.D	10	07/20/20	KB	n/a	n/a	VC5705
FA76926-19 [a]	C0142339.D	10	07/20/20	KB	n/a	n/a	VC5705

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

FA76926-1, FA76926-3, FA76926-11, FA76926-17, FA76926-18, FA76926-19

CAS No.	Surrogate Recoveries	MS	MSD	FA76926-19	Limits
1868-53-7	Dibromofluoromethane	104%	103%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	98%	101%	79-125%
2037-26-5	Toluene-D8	97%	98%	96%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	98%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-11MS	P72968.D	250	07/21/20	SO	n/a	n/a	VP2895
FA76926-11MSD	P72969.D	250	07/21/20	SO	n/a	n/a	VP2895
FA76926-11 [a]	P72965.D	250	07/21/20	SO	n/a	n/a	VP2895

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

FA76926-11, FA76926-18, FA76926-19, FA76926-20

CAS No.	Compound	FA76926-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		31300	50400	161*	31300	46100	148*	9	50-147/21
71-43-2	Benzene	ND		6250	5880	94	6250	5230	84	12	81-122/14
75-27-4	Bromodichloromethane	ND		6250	5790	93	6250	5200	83	11	79-123/19
75-25-2	Bromoform	ND		6250	5800	93	6250	5470	88	6	66-123/21
78-93-3	2-Butanone (MEK)	ND		31300	52300	167*	31300	48300	155*	8	56-143/18
75-15-0	Carbon Disulfide	ND		6250	5880	94	6250	4990	80	16	66-148/23
56-23-5	Carbon Tetrachloride	ND		6250	5590	89	6250	5080	81	10	76-136/23
108-90-7	Chlorobenzene	ND		6250	5550	89	6250	4930	79*	12	82-124/14
75-00-3	Chloroethane	ND		6250	5120	82	6250	4520	72	12	62-144/20
67-66-3	Chloroform	ND		6250	5430	87	6250	4910	79*	10	80-124/15
124-48-1	Dibromochloromethane	ND		6250	5710	91	6250	5300	85	7	78-122/19
75-34-3	1,1-Dichloroethane	ND		6250	5700	91	6250	5030	80*	12	81-122/15
107-06-2	1,2-Dichloroethane	ND		6250	5790	93	6250	5240	84	10	75-125/14
75-35-4	1,1-Dichloroethylene	ND		6250	5720	92	6250	5080	81	12	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		6250	5320	85	6250	4780	76*	11	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		6250	5650	90	6250	5030	80	12	76-127/17
78-87-5	1,2-Dichloropropane	ND		6250	5600	90	6250	5160	83	8	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		6250	5440	87	6250	4960	79	9	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		6250	5790	93	6250	5370	86	8	80-120/22
100-41-4	Ethylbenzene	ND		6250	5740	92	6250	5180	83	10	81-121/14
591-78-6	2-Hexanone	ND		31300	47400	152*	31300	43300	139*	9	61-129/18
74-83-9	Methyl Bromide	ND		6250	2940	47*	6250	3160	51*	7	59-143/19
74-87-3	Methyl Chloride	ND		6250	5840	93	6250	5550	89	5	50-159/19
75-09-2	Methylene Chloride	ND		6250	5380	86	6250	4810	77	11	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		31300	44000	141*	31300	40500	130*	8	66-122/16
100-42-5	Styrene	ND		6250	5440	87	6250	4910	79	10	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		6250	7080	113	6250	6420	103	10	72-120/14
127-18-4	Tetrachloroethylene	13700		6250	20000	101	6250	17600	62* [b]	13	76-135/16
108-88-3	Toluene	ND		6250	5580	89	6250	4970	80	12	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		6250	5670	91	6250	5180	83	9	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		6250	5960	95	6250	5420	87	9	76-119/14
79-01-6	Trichloroethylene	ND		6250	5840	93	6250	5040	81	15	81-126/15
75-01-4	Vinyl Chloride	ND		6250	6100	98	6250	5510	88	10	69-159/18
1330-20-7	Xylene (total)	ND		18800	16400	87	18800	14800	79*	10	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-11MS	P72968.D	250	07/21/20	SO	n/a	n/a	VP2895
FA76926-11MSD	P72969.D	250	07/21/20	SO	n/a	n/a	VP2895
FA76926-11 [a]	P72965.D	250	07/21/20	SO	n/a	n/a	VP2895

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

FA76926-11, FA76926-18, FA76926-19, FA76926-20

CAS No.	Surrogate Recoveries	MS	MSD	FA76926-11	Limits
1868-53-7	Dibromofluoromethane	100%	99%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	109%	104%	79-125%
2037-26-5	Toluene-D8	99%	100%	104%	85-112%
460-00-4	4-Bromofluorobenzene	101%	100%	105%	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

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-12MS	F0096671.D	1	07/21/20	SP	n/a	n/a	VF3403
FA76926-12MSD	F0096672.D	1	07/21/20	SP	n/a	n/a	VF3403
FA76926-12	F0096667.D	1	07/21/20	SP	n/a	n/a	VF3403

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

FA76926-7, FA76926-9, FA76926-10, FA76926-12, FA76926-13, FA76926-15

CAS No.	Compound	FA76926-12 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		269	252	94	261	239	92	5	61-152/27
71-43-2	Benzene	ND		53.8	59.8	111	52.2	52.9	101	12	76-126/26
75-27-4	Bromodichloromethane	ND		53.8	58.2	108	52.2	51.0	98	13	74-130/25
75-25-2	Bromoform	ND		53.8	54.9	102	52.2	48.0	92	13	76-127/26
78-93-3	2-Butanone (MEK)	ND		269	268	100	261	256	98	5	75-137/25
75-15-0	Carbon Disulfide	ND		53.8	59.4	110	52.2	54.3	104	9	72-122/29
56-23-5	Carbon Tetrachloride	ND		53.8	55.7	103	52.2	50.6	97	10	78-133/29
108-90-7	Chlorobenzene	ND		53.8	54.0	100	52.2	46.9	90	14	81-129/29
75-00-3	Chloroethane	ND		53.8	58.2	108	52.2	50.9	97	13	68-133/29
67-66-3	Chloroform	ND		53.8	57.8	107	52.2	51.3	98	12	72-123/26
124-48-1	Dibromochloromethane	ND		53.8	55.5	103	52.2	47.4	91	16	76-127/27
75-34-3	1,1-Dichloroethane	ND		53.8	60.0	111	52.2	53.9	103	11	73-125/27
107-06-2	1,2-Dichloroethane	ND		53.8	56.4	105	52.2	49.3	94	13	74-128/23
75-35-4	1,1-Dichloroethylene	ND		53.8	59.1	110	52.2	54.5	104	8	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		53.8	58.3	108	52.2	52.1	100	11	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		53.8	59.5	111	52.2	53.5	102	11	70-127/27
78-87-5	1,2-Dichloropropane	ND		53.8	59.5	111	52.2	52.7	101	12	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		53.8	58.0	108	52.2	50.5	97	14	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		53.8	55.5	103	52.2	47.5	91	16	75-131/28
100-41-4	Ethylbenzene	ND		53.8	55.3	103	52.2	48.5	93	13	77-123/31
591-78-6	2-Hexanone	ND		269	266	99	261	254	97	5	72-133/26
74-83-9	Methyl Bromide	ND		53.8	51.5	96	52.2	44.8	86	14	65-139/31
74-87-3	Methyl Chloride	ND		53.8	51.0	95	52.2	48.4	93	5	71-144/27
75-09-2	Methylene Chloride	ND		53.8	55.3	103	52.2	49.6	95	11	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		269	269	100	261	250	96	7	76-132/26
100-42-5	Styrene	ND		53.8	55.5	103	52.2	47.7	91	15	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		53.8	54.3	101	52.2	48.8	93	11	71-126/30
127-18-4	Tetrachloroethylene	18.9		53.8	51.9	61*	52.2	46.5	53*	11	79-130/31
108-88-3	Toluene	ND		53.8	56.1	104	52.2	49.4	95	13	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		53.8	56.9	106	52.2	52.1	100	9	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		53.8	56.0	104	52.2	48.8	93	14	74-124/28
79-01-6	Trichloroethylene	ND		53.8	57.3	106	52.2	51.1	98	11	75-128/27
75-01-4	Vinyl Chloride	ND		53.8	55.6	103	52.2	51.2	98	8	76-141/27
1330-20-7	Xylene (total)	ND		161	170	105	157	147	94	15	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA76926
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76926-12MS	F0096671.D	1	07/21/20	SP	n/a	n/a	VF3403
FA76926-12MSD	F0096672.D	1	07/21/20	SP	n/a	n/a	VF3403
FA76926-12	F0096667.D	1	07/21/20	SP	n/a	n/a	VF3403

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

FA76926-7, FA76926-9, FA76926-10, FA76926-12, FA76926-13, FA76926-15

CAS No.	Surrogate Recoveries	MS	MSD	FA76926-12	Limits
1868-53-7	Dibromofluoromethane	99%	100%	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	94%	98%	100%	72-135%
2037-26-5	Toluene-D8	99%	99%	98%	75-126%
460-00-4	4-Bromofluorobenzene	98%	99%	101%	71-133%

* = 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: FA76926
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37570
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date:				07/21/20		07/21/20	
Metal	RL	IDL	MDL	MB raw	MB final	MB raw	MB final
Aluminum	200	14	14				
Antimony	6.0	1	1				
Arsenic	10	1.3	1.3				
Barium	200	1	1				
Beryllium	4.0	.2	.2				
Cadmium	5.0	.2	.2				
Calcium	1000	50	50				
Chromium	10	1	1				
Cobalt	50	.2	.2				
Copper	25	1	1				
Iron	300	17	17				
Lead	5.0	1	1.1				
Magnesium	5000	35	35				
Manganese	15	.5	1	0.0	<15	0.0	<15
Molybdenum	50	.3	.3				
Nickel	40	.4	.4				
Potassium	10000	200	200				
Selenium	10	2.4	2.9				
Silver	10	.7	.7				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.1	1.4				
Tin	50	.9	1				
Titanium	10	.5	1				
Vanadium	50	.5	.6				
Zinc	20	3	4.4				

Associated samples MP37570: FA76926-19, FA76926-19F

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: FA76926
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37570
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/21/20 07/21/20

Metal	FA76921-1 Original	DUP	RPD	QC Limits	FA76921-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron									
Lead	anr								
Magnesium									
Manganese	17700	18300(a)	3.3	0-20	17700	17300(a)	500	-80.0(b)	80-120
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium									
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP37570: FA76926-19, FA76926-19F

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) Sample dilution required due to difficult matrix.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA76926
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37570
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/21/20

Metal	FA76921-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium	anr					
Cobalt						
Copper	anr					
Iron						
Lead	anr					
Magnesium						
Manganese	17700	20400(a)	500	540.0(b)	16.4	20
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium						
Silver						
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP37570: FA76926-19, FA76926-19F

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) Sample dilution required due to difficult matrix.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA76926
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37570
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/21/20

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese	509	500	101.8	80-120
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP37570: FA76926-19, FA76926-19F

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA76926
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37570 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 07/21/20

Metal	FA76921-1 Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese	17700	15100	14.7*(a)	0-10
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP37570: FA76926-19, FA76926-19F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: FA76926
Account: UTC - United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37570
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/21/20

Metal	Sample ml	Final ml	FA76921-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese	9.8	10	17670	17316.6	19330	0.2	2.5	50	4026.8*a	80-120
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP37570: FA76926-19, FA76926-19F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Raytheon Technologies

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60620179

SGS Job Number: FA77062

Sampling Date: 07/21/20

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: **88**

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

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

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

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EHS.US.CustomerCare@sgs.com

August 13, 2020

Ms. Doria Cullom
AECOM
10 Patewood Dr
Greenville,SC 29615

RE: SGS North America Inc. - Orlando job FA77062 Reissue

Dear Ms. Cullom,

The final report for job number FA77062 has been edited to reflect requested corrections. These edits have been incorporated into the revised report.

The report has been revised include the Dissolved Mn for -17

SGS North America Inc. - Orlando apologies for any inconvenience this may have caused. Please feel free to contact us if we can be of further assistance.

Sincerely,

SGS North America, Inc. - Orlando

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SGS North America Inc.

Sample Summary

Raytheon Technologies

Job No: FA77062

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FA77062-1	07/21/20	15:20	RMMR	07/23/20	SO	Soil	DPT-129-7
FA77062-2	07/21/20	00:00	RMMR	07/23/20	SO	Trip Blank Soil	TRIP BLANK 03
FA77062-3	07/21/20	00:00	RMMR	07/23/20	AQ	Trip Blank Water	TRIP BLANK 04
FA77062-4	07/21/20	15:25	RMMR	07/23/20	SO	Soil	DPT-129-14
FA77062-5	07/21/20	15:35	RMMR	07/23/20	SO	Soil	DPT-129-16
FA77062-6	07/21/20	00:00	RMMR	07/23/20	SO	Soil	FD-SO-03
FA77062-7	07/21/20	15:45	RMMR	07/23/20	SO	Soil	DPT-129-23
FA77062-8	07/21/20	16:00	RMMR	07/23/20	SO	Soil	DPT-129-26
FA77062-9	07/21/20	16:10	RMMR	07/23/20	SO	Soil	DPT-129-32
FA77062-10	07/21/20	15:40	RMMR	07/23/20	AQ	Ground Water	DPT-GW-129
FA77062-11	07/21/20	18:50	RMMR	07/23/20	SO	Soil	DPT-107-7
FA77062-12	07/21/20	18:55	RMMR	07/23/20	SO	Soil	DPT-107-13

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Raytheon Technologies

Job No: FA77062

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77062-13	07/21/20	19:10	RMMR	07/23/20	SO	Soil	DPT-107-17
FA77062-13D	07/21/20	19:10	RMMR	07/23/20	SO	Soil Dup/MSD	DPT-107-17
FA77062-13S	07/21/20	19:10	RMMR	07/23/20	SO	Soil Matrix Spike	DPT-107-17
FA77062-14	07/21/20	19:20	RMMR	07/23/20	SO	Soil	DPT-107-23
FA77062-15	07/21/20	19:55	RMMR	07/23/20	SO	Soil	DPT-107-27
FA77062-16	07/21/20	20:15	RMMR	07/23/20	SO	Soil	DPT-107-34
FA77062-17	07/21/20	20:20	RMMR	07/23/20	AQ	Ground Water	DPT-GW-107
FA77062-17F	07/21/20	20:20	RMMR	07/23/20	AQ	Groundwater Filtered	DPT-GW-107

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Raytheon Technologies **Job No:** FA77062

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC **Report Date** 8/3/2020 9:02:56 PM

9/1/2020 12:02:47 PM

15 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 07/21/2020 and were received at SGS North America Inc - Orlando on 07/23/2020 properly preserved, at 4.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA77062. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1A1198

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

V1A1198-MB: Sample was treated with an anti-foaming agent.

Sample(s) FA77062-10MS, FA77062-10MSD were used as the QC samples indicated.

For Sample(s) FA77062-10, FA77062-17 are associated with an CCV that has a recovery for Methyl Bromide outside low control limit.

FA77062-10: Sample was not preserved to a pH < 2.

FA77062-10 for Methyl Bromide: Associated CCV outside of control limits low.

FA77062-17: Sample was not preserved to a pH < 2.

FA77062-17 for Methyl Bromide: Associated CCV outside of control limits low.

Matrix: AQ **Batch ID:** VY2136

All samples were analyzed within the recommended method holding time.

Sample(s) FA77004-1MS, FA77004-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

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

Matrix Spike Duplicate Recovery(s) for Methyl Bromide, Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Methyl Bromide are outside control limits for sample FA77004-1MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA77062-3 is associated with an CCV that has a recovery for Acetone outside lower control limit.

FA77062-3: Sample was not preserved to a pH < 2.

FA77062-3 for Acetone: Associated CCV outside of control limits low.

FA77062-17: Sample was not preserved to a pH < 2.

Matrix: SO **Batch ID:** V3C449

All samples were analyzed within the recommended method holding time.

Sample(s) FA77062-13MS, FA77062-13MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Benzene, Bromodichloromethane, Bromoform, Carbon Disulfide, Chlorobenzene, Chloroform, cis-1,2-Dichloroethylene, cis-1,3-Dichloropropene, Dibromochloromethane, Ethylbenzene, Methyl Chloride, Methylene Chloride, Styrene, Toluene, trans-1,3-Dichloropropene, Vinyl Chloride, Xylene (total) are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Benzene, Bromodichloromethane, Bromoform, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chloroform, cis-1,2-Dichloroethylene, cis-1,3-Dichloropropene, Dibromochloromethane, Ethylbenzene, Methyl Chloride, Methylene Chloride, Styrene, Tetrachloroethylene, Toluene, trans-1,2-Dichloroethylene, trans-1,3-Dichloropropene, Trichloroethylene, Vinyl Chloride, Xylene (total) are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 2-Butanone (MEK), Acetone are outside control limits for sample FA77062-13MSD. Probable cause is due to sample non-homogeneity.

FA77062-1 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-2 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-4 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-5 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-6 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-7 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-8 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-13 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-14 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-15 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-16 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** V3C450

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77062-12MS, FA77062-12MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Methyl Chloride, Vinyl Chloride are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Methyl Chloride, Vinyl Chloride are outside control limits. Probable cause is due to matrix interference.

FA77062-9 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-11 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
FA77062-12 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP37617

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) FA77087-1DUP, FA77087-1MS, FA77087-1MSD, FA77087-1PS, FA77087-1SDL were used as the QC samples for metals.

Matrix: AQ **Batch ID:** MP37745

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) FA77889-2DUP, FA77889-2MS, FA77889-2MSD, FA77889-2PS, FA77889-2SDL were used as the QC samples for metals.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85737

Sample(s) FA77062-13DUP were used as the QC samples for Solids, Percent.

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

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Revised Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA77062
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/21/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77062-1	**DPT-129-7**					
Tetrachloroethylene		1.1 J	4.0	1.0	ug/kg	SW846 8260D
FA77062-2	**TRIP BLANK 03**					
No hits reported in this sample.						
FA77062-3	**TRIP BLANK 04**					
No hits reported in this sample.						
FA77062-4	**DPT-129-14**					
Tetrachloroethylene		359	210	54	ug/kg	SW846 8260D
FA77062-5	**DPT-129-16**					
Tetrachloroethylene		2250	340	87	ug/kg	SW846 8260D
FA77062-6	**FD-SO-03**					
Tetrachloroethylene		2730	450	120	ug/kg	SW846 8260D
FA77062-7	**DPT-129-23**					
Tetrachloroethylene		9980	320	83	ug/kg	SW846 8260D
FA77062-8	**DPT-129-26**					
cis-1,2-Dichloroethylene		39.5	3.8	1.1	ug/kg	SW846 8260D
Ethylbenzene		2.0 J	3.8	0.77	ug/kg	SW846 8260D
Tetrachloroethylene		27100	5700	1400	ug/kg	SW846 8260D
Trichloroethylene		58.5	3.8	0.77	ug/kg	SW846 8260D
Xylene (total)		4.6 J	12	1.6	ug/kg	SW846 8260D
FA77062-9	**DPT-129-32**					
Tetrachloroethylene		28.7	3.6	0.91	ug/kg	SW846 8260D
FA77062-10	**DPT-GW-129**					
1,1-Dichloroethylene [a]		2.4 J	5.0	1.6	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		8.1	5.0	1.4	ug/l	SW846 8260D
Tetrachloroethylene [a]		305	5.0	1.1	ug/l	SW846 8260D

Summary of Hits

Job Number: FA77062
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/21/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Trichloroethylene [a]		4.0 J	5.0	1.7	ug/l	SW846 8260D
FA77062-11	**DPT-107-7**					
Tetrachloroethylene		3.0 J	3.7	0.94	ug/kg	SW846 8260D
FA77062-12	**DPT-107-13**					
Tetrachloroethylene		9.4	3.7	0.94	ug/kg	SW846 8260D
FA77062-13	**DPT-107-17**					
Tetrachloroethylene		11.9	3.9	1.0	ug/kg	SW846 8260D
FA77062-14	**DPT-107-23**					
Tetrachloroethylene		71.0	4.7	1.2	ug/kg	SW846 8260D
FA77062-15	**DPT-107-27**					
Tetrachloroethylene		80.5	4.2	1.1	ug/kg	SW846 8260D
FA77062-16	**DPT-107-34**					
1,1-Dichloroethylene		3.4 J	3.8	0.76	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		2.3 J	3.8	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		601	230	60	ug/kg	SW846 8260D
1,1,1-Trichloroethane		0.93 J	3.8	0.76	ug/kg	SW846 8260D
Trichloroethylene		1.5 J	3.8	0.76	ug/kg	SW846 8260D
FA77062-17	**DPT-GW-107**					
1,1-Dichloroethylene [a]		24.7	10	3.2	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		10.7	10	2.8	ug/l	SW846 8260D
Tetrachloroethylene [a]		947	20	4.3	ug/l	SW846 8260D
1,1,1-Trichloroethane [a]		2.5 J	10	2.5	ug/l	SW846 8260D
Trichloroethylene [a]		4.6 J	10	3.5	ug/l	SW846 8260D
Manganese		20700	75	5.0	ug/l	SW846 6010D
FA77062-17F	**DPT-GW-107**					
Manganese		1.6 J	15	1.0	ug/l	SW846 6010D

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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	DPT-129-7		
Lab Sample ID:	FA77062-1	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	73.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10771.D	1	07/23/20 16:05	SP	n/a	n/a	V3C449
Run #2							

	Initial Weight	Final Volume
Run #1	8.61 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	160	79	ug/kg	
71-43-2	Benzene	ND	4.0	0.97	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.79	ug/kg	
75-25-2	Bromoform	ND	4.0	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.8	ug/kg	
75-15-0	Carbon Disulfide	ND	4.0	0.79	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.0	0.81	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.79	ug/kg	
75-00-3	Chloroethane [a]	ND	4.0	1.6	ug/kg	
67-66-3	Chloroform	ND	4.0	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.79	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.79	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.79	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.79	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.79	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.79	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.79	ug/kg	
591-78-6	2-Hexanone	ND	20	5.9	ug/kg	
74-83-9	Methyl Bromide	ND	4.0	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	4.0	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	5.9	ug/kg	
100-42-5	Styrene	ND	4.0	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	0.79	ug/kg	
127-18-4	Tetrachloroethylene	1.1	4.0	1.0	ug/kg	J
108-88-3	Toluene	ND	16	7.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.79	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.79	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.79	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-7		
Lab Sample ID:	FA77062-1	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	73.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.0	0.79	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		75-124%
17060-07-0	1,2-Dichloroethane-D4	103%		72-135%
2037-26-5	Toluene-D8	90%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TRIP BLANK 03		
Lab Sample ID:	FA77062-2	**Date Sampled:**	07/21/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10772.D	1	07/23/20 16:31	SP	n/a	n/a	V3C449
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane [a]	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	

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

Report of Analysis

Client Sample ID:	TRIP BLANK 03		
Lab Sample ID:	FA77062-2	**Date Sampled:**	07/21/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**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	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-124%
17060-07-0	1,2-Dichloroethane-D4	97%		72-135%
2037-26-5	Toluene-D8	90%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TRIP BLANK 04		
Lab Sample ID:	FA77062-3	**Date Sampled:**	07/21/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y51739.D	1	07/24/20 13:04	CV	n/a	n/a	VY2136
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	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK 04		
Lab Sample ID:	FA77062-3	**Date Sampled:**	07/21/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-14		
Lab Sample ID:	FA77062-4	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	85.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10773.D	1	07/23/20 16:57	SP	n/a	n/a	V3C449
Run #2	3C10795.D	1	07/24/20 13:08	SP	n/a	n/a	V3C450

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.69 g	5.0 ml	
Run #2	8.80 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	67	ug/kg	
71-43-2	Benzene	ND	3.4	0.82	ug/kg	
75-27-4	Bromodichloromethane	ND	3.4	0.67	ug/kg	
75-25-2	Bromoform	ND	3.4	0.67	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.9	ug/kg	
75-15-0	Carbon Disulfide	ND	3.4	0.67	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.4	0.69	ug/kg	
108-90-7	Chlorobenzene	ND	3.4	0.67	ug/kg	
75-00-3	Chloroethane [a]	ND	3.4	1.3	ug/kg	
67-66-3	Chloroform	ND	3.4	0.90	ug/kg	
124-48-1	Dibromochloromethane	ND	3.4	0.67	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.4	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.4	0.67	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.4	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.4	0.93	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.4	0.67	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.4	0.67	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.4	0.67	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.4	0.67	ug/kg	
100-41-4	Ethylbenzene	ND	3.4	0.67	ug/kg	
591-78-6	2-Hexanone	ND	17	5.1	ug/kg	
74-83-9	Methyl Bromide	ND	3.4	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.4	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.1	ug/kg	
100-42-5	Styrene	ND	3.4	0.67	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.67	ug/kg	
127-18-4	Tetrachloroethylene	359 [b]	210	54	ug/kg	
108-88-3	Toluene	ND	13	6.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.4	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.4	0.67	ug/kg	
79-01-6	Trichloroethylene	ND	3.4	0.67	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-14		
Lab Sample ID:	FA77062-4	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	85.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.4	0.67	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	96%	100%	72-135%
2037-26-5	Toluene-D8	91%	93%	75-126%
460-00-4	4-Bromofluorobenzene	92%	91%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-129-16		
Lab Sample ID:	FA77062-5	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	68.5
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10774.D	1	07/23/20 17:23	SP	n/a	n/a	V3C449
Run #2	3C10796.D	1	07/24/20 13:33	SP	n/a	n/a	V3C450

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.34 g	5.0 ml	
Run #2	8.05 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	180	88	ug/kg	
71-43-2	Benzene	ND	4.4	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.4	0.88	ug/kg	
75-25-2	Bromoform	ND	4.4	0.88	ug/kg	
78-93-3	2-Butanone (MEK)	ND	22	6.4	ug/kg	
75-15-0	Carbon Disulfide	ND	4.4	0.88	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.4	0.89	ug/kg	
108-90-7	Chlorobenzene	ND	4.4	0.88	ug/kg	
75-00-3	Chloroethane [a]	ND	4.4	1.8	ug/kg	
67-66-3	Chloroform	ND	4.4	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.4	0.88	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.4	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.4	0.88	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.4	0.88	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.4	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.4	0.88	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.4	0.88	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.4	0.88	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.4	0.88	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	0.88	ug/kg	
591-78-6	2-Hexanone	ND	22	6.6	ug/kg	
74-83-9	Methyl Bromide	ND	4.4	1.8	ug/kg	
74-87-3	Methyl Chloride	ND	4.4	1.8	ug/kg	
75-09-2	Methylene Chloride	ND	18	9.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	22	6.6	ug/kg	
100-42-5	Styrene	ND	4.4	0.88	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	0.88	ug/kg	
127-18-4	Tetrachloroethylene	2250 [b]	340	87	ug/kg	
108-88-3	Toluene	ND	18	8.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.4	0.88	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.4	0.88	ug/kg	
79-01-6	Trichloroethylene	ND	4.4	0.88	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-16		
Lab Sample ID:	FA77062-5	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	68.5
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.4	0.88	ug/kg	
1330-20-7	Xylene (total)	ND	13	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	101%	98%	72-135%
2037-26-5	Toluene-D8	90%	94%	75-126%
460-00-4	4-Bromofluorobenzene	91%	91%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	FD-SO-03		
Lab Sample ID:	FA77062-6	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	60.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10775.D	1	07/23/20 17:49	SP	n/a	n/a	V3C449
Run #2	3C10797.D	1	07/24/20 13:59	SP	n/a	n/a	V3C450

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.38 g	5.0 ml	
Run #2	7.34 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	99	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.99	ug/kg	
75-25-2	Bromoform	ND	5.0	0.99	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.2	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	0.99	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.99	ug/kg	
75-00-3	Chloroethane [a]	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.99	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.99	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.99	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.99	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.99	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.99	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.99	ug/kg	
591-78-6	2-Hexanone	ND	25	7.4	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.4	ug/kg	
100-42-5	Styrene	ND	5.0	0.99	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.99	ug/kg	
127-18-4	Tetrachloroethylene	2730 [b]	450	120	ug/kg	
108-88-3	Toluene	ND	20	9.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.99	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.99	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.99	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	FD-SO-03		
Lab Sample ID:	FA77062-6	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	60.1
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	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	90%	100%	72-135%
2037-26-5	Toluene-D8	92%	93%	75-126%
460-00-4	4-Bromofluorobenzene	92%	92%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-129-23		
Lab Sample ID:	FA77062-7	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	68.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10776.D	1	07/23/20 18:15	SP	n/a	n/a	V3C449
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.59 g	5.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13000	6500	ug/kg	
71-43-2	Benzene	ND	320	79	ug/kg	
75-27-4	Bromodichloromethane	ND	320	65	ug/kg	
75-25-2	Bromoform	ND	320	65	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1600	470	ug/kg	
75-15-0	Carbon Disulfide	ND	320	65	ug/kg	
56-23-5	Carbon Tetrachloride	ND	320	66	ug/kg	
108-90-7	Chlorobenzene	ND	320	65	ug/kg	
75-00-3	Chloroethane [a]	ND	320	130	ug/kg	
67-66-3	Chloroform	ND	320	86	ug/kg	
124-48-1	Dibromochloromethane	ND	320	65	ug/kg	
75-34-3	1,1-Dichloroethane	ND	320	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	320	65	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	320	65	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	320	90	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	320	65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	320	65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	320	65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	320	65	ug/kg	
100-41-4	Ethylbenzene	ND	320	65	ug/kg	
591-78-6	2-Hexanone	ND	1600	490	ug/kg	
74-83-9	Methyl Bromide	ND	320	130	ug/kg	
74-87-3	Methyl Chloride	ND	320	130	ug/kg	
75-09-2	Methylene Chloride	ND	1300	710	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1600	490	ug/kg	
100-42-5	Styrene	ND	320	65	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	320	65	ug/kg	
127-18-4	Tetrachloroethylene	9980	320	83	ug/kg	
108-88-3	Toluene	ND	1300	650	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	320	65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	320	65	ug/kg	
79-01-6	Trichloroethylene	ND	320	65	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-23		
Lab Sample ID:	FA77062-7	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	68.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	320	65	ug/kg	
1330-20-7	Xylene (total)	ND	970	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		75-124%
17060-07-0	1,2-Dichloroethane-D4	98%		72-135%
2037-26-5	Toluene-D8	91%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-129-26		
Lab Sample ID:	FA77062-8	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	73.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10777.D	1	07/23/20 18:41	SP	n/a	n/a	V3C449
Run #2	3C10803.D	1	07/24/20 16:36	SP	n/a	n/a	V3C450

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.83 g	5.0 ml	
Run #2	8.79 g	5.0 ml	5.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	77	ug/kg	
71-43-2	Benzene	ND	3.8	0.94	ug/kg	
75-27-4	Bromodichloromethane	ND	3.8	0.77	ug/kg	
75-25-2	Bromoform	ND	3.8	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	5.6	ug/kg	
75-15-0	Carbon Disulfide	ND	3.8	0.77	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.8	0.78	ug/kg	
108-90-7	Chlorobenzene	ND	3.8	0.77	ug/kg	
75-00-3	Chloroethane [a]	ND	3.8	1.5	ug/kg	
67-66-3	Chloroform	ND	3.8	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	3.8	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.8	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.8	0.77	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.8	0.77	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	39.5	3.8	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.8	0.77	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.8	0.77	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.8	0.77	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.8	0.77	ug/kg	
100-41-4	Ethylbenzene	2.0	3.8	0.77	ug/kg	J
591-78-6	2-Hexanone	ND	19	5.8	ug/kg	
74-83-9	Methyl Bromide	ND	3.8	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.8	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	19	5.8	ug/kg	
100-42-5	Styrene	ND	3.8	0.77	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	0.77	ug/kg	
127-18-4	Tetrachloroethylene	27100 [b]	5700	1400	ug/kg	
108-88-3	Toluene	ND	15	7.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.8	0.77	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.8	0.77	ug/kg	
79-01-6	Trichloroethylene	58.5	3.8	0.77	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-26		
Lab Sample ID:	FA77062-8	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	73.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.8	0.77	ug/kg	
1330-20-7	Xylene (total)	4.6	12	1.6	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	99%	99%	72-135%
2037-26-5	Toluene-D8	96%	94%	75-126%
460-00-4	4-Bromofluorobenzene	91%	92%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-129-32		
Lab Sample ID:	FA77062-9	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	88.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10799.D	1	07/24/20 14:51	SP	n/a	n/a	V3C450
Run #2	3C10778.D	1	07/23/20 19:06	SP	n/a	n/a	V3C449

	Initial Weight	Final Volume
Run #1	7.88 g	5.0 ml
Run #2	8.16 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND [a]	140	69	ug/kg	
71-43-2	Benzene	ND	3.6	0.87	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.71	ug/kg	
75-25-2	Bromoform	ND	3.6	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.2	ug/kg	
75-15-0	Carbon Disulfide	ND	3.6	0.71	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.6	0.73	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.71	ug/kg	
75-00-3	Chloroethane [b]	ND	3.6	1.4	ug/kg	
67-66-3	Chloroform	ND	3.6	0.95	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.71	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.98	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.71	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.71	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.71	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.71	ug/kg	
100-41-4	Ethylbenzene	ND	3.6	0.71	ug/kg	
591-78-6	2-Hexanone	ND	18	5.4	ug/kg	
74-83-9	Methyl Bromide	ND	3.6	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.6	1.4	ug/kg	
75-09-2	Methylene Chloride	ND	14	7.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.4	ug/kg	
100-42-5	Styrene	ND	3.6	0.71	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.71	ug/kg	
127-18-4	Tetrachloroethylene	28.7	3.6	0.91	ug/kg	
108-88-3	Toluene	ND	14	7.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.71	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.71	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.71	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-129-32		
Lab Sample ID:	FA77062-9	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	88.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.6	0.71	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	105%	75-124%
17060-07-0	1,2-Dichloroethane-D4	99%	104%	72-135%
2037-26-5	Toluene-D8	94%	91%	75-126%
460-00-4	4-Bromofluorobenzene	92%	92%	71-133%

(a) Result is from Run# 2
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-GW-129		
Lab Sample ID:	FA77062-10	**Date Sampled:**	07/21/20
Matrix:	AQ - Ground Water	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29188.D	5	07/27/20 12:58	CV	n/a	n/a	V1A1198
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	ND	5.0	1.6	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	10	2.7	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.3	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.6	ug/l	
75-35-4	1,1-Dichloroethylene	2.4	5.0	1.6	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	8.1	5.0	1.4	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.8	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
74-83-9	Methyl Bromide [b]	ND	10	2.9	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	5.0	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	ug/l	
127-18-4	Tetrachloroethylene	305	5.0	1.1	ug/l	
108-88-3	Toluene	ND	5.0	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.3	ug/l	
79-01-6	Trichloroethylene	4.0	5.0	1.7	ug/l	J

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

Report of Analysis

Client Sample ID:	DPT-GW-129		
Lab Sample ID:	FA77062-10	**Date Sampled:**	07/21/20
Matrix:	AQ - Ground Water	**Date Received:**	07/23/20
Method:	SW846 8260D	**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	5.0	2.0	ug/l	
1330-20-7	Xylene (total)	ND	15	3.6	ug/l	

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

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-107-7		
Lab Sample ID:	FA77062-11	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	89.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10800.D	1	07/24/20 15:17	SP	n/a	n/a	V3C450
Run #2	3C10779.D	1	07/23/20 19:32	SP	n/a	n/a	V3C449

	Initial Weight	Final Volume
Run #1	7.57 g	5.0 ml
Run #2	8.05 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND [a]	140	69	ug/kg	
71-43-2	Benzene	ND	3.7	0.90	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.74	ug/kg	
75-25-2	Bromoform	ND	3.7	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.4	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	0.74	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.74	ug/kg	
75-00-3	Chloroethane [b]	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.98	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.74	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.74	ug/kg	
591-78-6	2-Hexanone	ND	18	5.5	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.5	ug/kg	
100-42-5	Styrene	ND	3.7	0.74	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.74	ug/kg	
127-18-4	Tetrachloroethylene	3.0	3.7	0.94	ug/kg	J
108-88-3	Toluene	ND	15	7.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.74	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.74	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.74	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-107-7		
Lab Sample ID:	FA77062-11	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	89.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.7	0.74	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	104%	75-124%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	72-135%
2037-26-5	Toluene-D8	94%	93%	75-126%
460-00-4	4-Bromofluorobenzene	94%	92%	71-133%

(a) Result is from Run# 2
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-107-13		
Lab Sample ID:	FA77062-12	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	88.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10801.D	1	07/24/20 15:43	SP	n/a	n/a	V3C450
Run #2	3C10780.D	1	07/23/20 19:58	SP	n/a	n/a	V3C449

	Initial Weight	Final Volume
Run #1	7.71 g	5.0 ml
Run #2	7.55 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND [a]	150	75	ug/kg	
71-43-2	Benzene	ND	3.7	0.89	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.73	ug/kg	
75-25-2	Bromoform	ND	3.7	0.73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.3	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	0.73	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.73	ug/kg	
75-00-3	Chloroethane [b]	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.97	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.73	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.73	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.73	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.73	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.73	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.73	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.73	ug/kg	
591-78-6	2-Hexanone	ND	18	5.5	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.5	ug/kg	
100-42-5	Styrene	ND	3.7	0.73	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.73	ug/kg	
127-18-4	Tetrachloroethylene	9.4	3.7	0.94	ug/kg	
108-88-3	Toluene	ND	15	7.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.73	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.73	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.73	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-107-13		
Lab Sample ID:	FA77062-12	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	88.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.7	0.73	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	104%	75-124%
17060-07-0	1,2-Dichloroethane-D4	98%	97%	72-135%
2037-26-5	Toluene-D8	94%	92%	75-126%
460-00-4	4-Bromofluorobenzene	92%	92%	71-133%

(a) Result is from Run# 2
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-107-17		
Lab Sample ID:	FA77062-13	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	74.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10781.D	1	07/23/20 20:24	SP	n/a	n/a	V3C449
Run #2							

	Initial Weight	Final Volume
Run #1	8.61 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	160	78	ug/kg	
71-43-2	Benzene	ND	3.9	0.95	ug/kg	
75-27-4	Bromodichloromethane	ND	3.9	0.78	ug/kg	
75-25-2	Bromoform	ND	3.9	0.78	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.9	0.78	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.9	0.80	ug/kg	
108-90-7	Chlorobenzene	ND	3.9	0.78	ug/kg	
75-00-3	Chloroethane [a]	ND	3.9	1.6	ug/kg	
67-66-3	Chloroform	ND	3.9	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	3.9	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.9	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.9	0.78	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.9	0.78	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.9	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.9	0.78	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.9	0.78	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.9	0.78	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.78	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.78	ug/kg	
591-78-6	2-Hexanone	ND	20	5.9	ug/kg	
74-83-9	Methyl Bromide	ND	3.9	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	3.9	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	5.9	ug/kg	
100-42-5	Styrene	ND	3.9	0.78	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.9	0.78	ug/kg	
127-18-4	Tetrachloroethylene	11.9	3.9	1.0	ug/kg	
108-88-3	Toluene	ND	16	7.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.9	0.78	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.9	0.78	ug/kg	
79-01-6	Trichloroethylene	ND	3.9	0.78	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-107-17		
Lab Sample ID:	FA77062-13	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	74.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.9	0.78	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		75-124%
17060-07-0	1,2-Dichloroethane-D4	105%		72-135%
2037-26-5	Toluene-D8	91%		75-126%
460-00-4	4-Bromofluorobenzene	91%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID: DPT-107-23
Lab Sample ID: FA77062-14
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/21/20
Date Received: 07/23/20
Percent Solids: 66.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10782.D	1	07/23/20 20:50	SP	n/a	n/a	V3C449
Run #2							

	Initial Weight	Final Volume
Run #1	8.10 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	190	94	ug/kg	
71-43-2	Benzene	ND	4.7	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.94	ug/kg	
75-25-2	Bromoform	ND	4.7	0.94	ug/kg	
78-93-3	2-Butanone (MEK)	ND	23	6.8	ug/kg	
75-15-0	Carbon Disulfide	ND	4.7	0.94	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.7	0.95	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.94	ug/kg	
75-00-3	Chloroethane [a]	ND	4.7	1.9	ug/kg	
67-66-3	Chloroform	ND	4.7	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.94	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.7	0.94	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.7	0.94	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.7	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.7	0.94	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.94	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.94	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.94	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	0.94	ug/kg	
591-78-6	2-Hexanone	ND	23	7.0	ug/kg	
74-83-9	Methyl Bromide	ND	4.7	1.9	ug/kg	
74-87-3	Methyl Chloride	ND	4.7	1.9	ug/kg	
75-09-2	Methylene Chloride	ND	19	10	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	23	7.0	ug/kg	
100-42-5	Styrene	ND	4.7	0.94	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.94	ug/kg	
127-18-4	Tetrachloroethylene	71.0	4.7	1.2	ug/kg	
108-88-3	Toluene	ND	19	9.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.94	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.94	ug/kg	
79-01-6	Trichloroethylene	ND	4.7	0.94	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-107-23		
Lab Sample ID:	FA77062-14	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	66.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.7	0.94	ug/kg	
1330-20-7	Xylene (total)	ND	14	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-124%
17060-07-0	1,2-Dichloroethane-D4	97%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-107-27		
Lab Sample ID:	FA77062-15	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	70.4
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10783.D	1	07/23/20 21:16	SP	n/a	n/a	V3C449
Run #2							

	Initial Weight	Final Volume
Run #1	8.51 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	170	83	ug/kg	
71-43-2	Benzene	ND	4.2	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	4.2	0.83	ug/kg	
75-25-2	Bromoform	ND	4.2	0.83	ug/kg	
78-93-3	2-Butanone (MEK)	ND	21	6.1	ug/kg	
75-15-0	Carbon Disulfide	ND	4.2	0.83	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.2	0.85	ug/kg	
108-90-7	Chlorobenzene	ND	4.2	0.83	ug/kg	
75-00-3	Chloroethane [a]	ND	4.2	1.7	ug/kg	
67-66-3	Chloroform	ND	4.2	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.2	0.83	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.2	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.2	0.83	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.2	0.83	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.2	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.2	0.83	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.2	0.83	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	0.83	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	0.83	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	0.83	ug/kg	
591-78-6	2-Hexanone	ND	21	6.3	ug/kg	
74-83-9	Methyl Bromide	ND	4.2	1.7	ug/kg	
74-87-3	Methyl Chloride	ND	4.2	1.7	ug/kg	
75-09-2	Methylene Chloride	ND	17	9.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	21	6.3	ug/kg	
100-42-5	Styrene	ND	4.2	0.83	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	0.83	ug/kg	
127-18-4	Tetrachloroethylene	80.5	4.2	1.1	ug/kg	
108-88-3	Toluene	ND	17	8.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.2	0.83	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.2	0.83	ug/kg	
79-01-6	Trichloroethylene	ND	4.2	0.83	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-107-27		
Lab Sample ID:	FA77062-15	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	70.4
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.2	0.83	ug/kg	
1330-20-7	Xylene (total)	ND	13	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		75-124%
17060-07-0	1,2-Dichloroethane-D4	91%		72-135%
2037-26-5	Toluene-D8	94%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-107-34		
Lab Sample ID:	FA77062-16	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	82.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10784.D	1	07/23/20 21:42	SP	n/a	n/a	V3C449
Run #2	3C10802.D	1	07/24/20 16:10	SP	n/a	n/a	V3C450

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.92 g	5.0 ml	
Run #2	8.33 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	76	ug/kg	
71-43-2	Benzene	ND	3.8	0.93	ug/kg	
75-27-4	Bromodichloromethane	ND	3.8	0.76	ug/kg	
75-25-2	Bromoform	ND	3.8	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	5.5	ug/kg	
75-15-0	Carbon Disulfide	ND	3.8	0.76	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.8	0.78	ug/kg	
108-90-7	Chlorobenzene	ND	3.8	0.76	ug/kg	
75-00-3	Chloroethane [a]	ND	3.8	1.5	ug/kg	
67-66-3	Chloroform	ND	3.8	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	3.8	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.8	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.8	0.76	ug/kg	
75-35-4	1,1-Dichloroethylene	3.4	3.8	0.76	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	2.3	3.8	1.1	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	3.8	0.76	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.8	0.76	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.8	0.76	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.8	0.76	ug/kg	
100-41-4	Ethylbenzene	ND	3.8	0.76	ug/kg	
591-78-6	2-Hexanone	ND	19	5.7	ug/kg	
74-83-9	Methyl Bromide	ND	3.8	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.8	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	19	5.7	ug/kg	
100-42-5	Styrene	ND	3.8	0.76	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	0.76	ug/kg	
127-18-4	Tetrachloroethylene	601 [b]	230	60	ug/kg	
108-88-3	Toluene	ND	15	7.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	0.93	3.8	0.76	ug/kg	J
79-00-5	1,1,2-Trichloroethane	ND	3.8	0.76	ug/kg	
79-01-6	Trichloroethylene	1.5	3.8	0.76	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-107-34		
Lab Sample ID:	FA77062-16	**Date Sampled:**	07/21/20
Matrix:	SO - Soil	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	82.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.8	0.76	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	94%	99%	72-135%
2037-26-5	Toluene-D8	94%	94%	75-126%
460-00-4	4-Bromofluorobenzene	92%	91%	71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(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:	DPT-GW-107		
Lab Sample ID:	FA77062-17	**Date Sampled:**	07/21/20
Matrix:	AQ - Ground Water	**Date Received:**	07/23/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29193.D	10	07/27/20 15:07	CV	n/a	n/a	V1A1198
Run #2 [a]	Y51756.D	20	07/24/20 22:13	CV	n/a	n/a	VY2136

	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	250	100	ug/l	
71-43-2	Benzene	ND	10	3.1	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	24.7	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	10.7	10	2.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
74-83-9	Methyl Bromide [b]	ND	20	5.9	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	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	947 [c]	20	4.3	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.5	10	2.5	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	
79-01-6	Trichloroethylene	4.6	10	3.5	ug/l	J

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

Report of Analysis

Client Sample ID:	DPT-GW-107		
Lab Sample ID:	FA77062-17	**Date Sampled:**	07/21/20
Matrix:	AQ - Ground Water	**Date Received:**	07/23/20
Method:	SW846 8260D	**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	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

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

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-GW-107		
Lab Sample ID:	FA77062-17	**Date Sampled:**	07/21/20
Matrix:	AQ - Ground Water	**Date Received:**	07/23/20
		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
Manganese	20700	75	5.0	ug/l	5	07/31/20	08/03/20	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA16946
(2) Prep QC Batch: MP37617

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:	DPT-GW-107		
Lab Sample ID:	FA77062-17F	**Date Sampled:**	07/21/20
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/23/20
		Percent Solids:	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1.6 J	15	1.0	ug/l	1	08/29/20	08/31/20	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA17016
(2) Prep QC Batch: MP37745

RL = Reporting Limit
MDL = Method Detection Limit

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS PREM **SGS North America Inc - Orlando**

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

FA77062

SGS - ORLANDO JOB #: PAGE 1 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg VI Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Lesice Alexander Email: lesice.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed) Sampler 1: Randy Morgan Sampler 2: Mariah Rockwell

Project Information

Project Name: ATC Delavan
Street: 4334 Main Hwy
City: Bowmberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 1538440 AECM

Analytical Information

TCL VOCs 8260
% Moisture

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	CONTAINER INFORMATION: NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	LAB USE ONLY
1	DPT-129-7	7/21/20	1520	RM	SO	4	1	1						2		
2	Trip Blank-03-5011	7/21/20			SO	3	1							2		
3	Trip Blank-04-Aqueous	7/21/20			GW	2		2								
4	DPT-129-14	7/21/20	1525	RM	SO	4	1	1						2		
5	DPT-129-16	7/21/20	1535	RM	SO	4	1	1						2		
6	FD-SO-03	7/21/20		RM	SO	4	1	1						2		
7	DPT-129-23	7/21/20	1545	RM	SO	4	1	1						2		
8	DPT-129-26	7/21/20	1600	RM	SO	4	1	1						2		
9	DPT-129-32	7/21/20	1610	RM	SO	4	1	1						2		
10	DPT-GW-129	7/21/20	1540	RM	GW	3		3								
11	DPT-107-7	7/21/20	1850	RM	SO	4	1	1						2		
12	DPT-107-13	7/21/20	1855	RM	SO	4	1	1						2		

Turnaround Time (Business days)

10 Day (Business) — Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

INITIAL ASESSMENT AG
LABEL VERIFICATION DO

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Randy Morgan AECOM	7/22/20 1330	2 FEDEX	3	07/23/20	4 9:15
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only: Cooler Temperature (s) Celsius (corrected): 4.2

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (1) Rev 031318

FA77062: Chain of Custody
Page 1 of 3

SGS PREM

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : FA77062 PAGE 2 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg III Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916

Project Information

Project Name: ATC Delavan
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 123840 ACM

Sampler(s) Name(s) (Printed)
Sampler 1: Randy Morgan Sampler 2: Mariah Rockwell

Analytical Information

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	TCL VOCs 8260	1,4-Dioxane 8260	Total Manganese 6010C	Dissolved Manganese 6010C	LAB USE ONLY
13	DPT-107-17	7/21/20	1910	RM	SO	4	1	1						2		X	X			
~~14~~	DPT-107-17-MS	7/21/20	1910	RM	SO	4	1	1						2		X	X			
~~15~~	DPT-107-17-MSD	7/21/20	1910	RM	SO	4	1	1						2		X	X			
14	~~16~~ DPT-107-23	7/21/20	1920	RM	SO	4	1	1						2		X	X			
15	~~17~~ DPT-107-27	7/21/20	1965	RM	SO	4	1	1						2		X	X			
16	~~18~~ DPT-107-34	7/21/20	2015	RM	SO	4	1	1						2		X	X			
17	~~19~~ DPT-GW-107	7/21/20	2020	RM	GW	5			4		X					X		X	X	

Turnaround Time (Business days)

10-Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Randy Morgan AECOM	7/22/2020 1330	2 FED EX	3	07/23/20	4 9:15
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only: Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (1) Rev 031318

SGS Sample Receipt Summary

Job Number: FA77062 **Client:** AECOM **Project:** UTC DELAVAN

Date / Time Received: 7/23/2020 9:15:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 138666003521

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.4);

Cooler Temps (Corrected) °C: Cooler 1: (4.2);

Cooler Information	Y	N
1. Custody Seals Present	☑	☐
2. Custody Seals Intact	☑	☐
3. Temp criteria achieved	☑	☐
4. Cooler temp verification	IR Gun	
5. Cooler media	Ice (Bag)	

Trip Blank Information	Y	N	N/A
1. Trip Blank present / cooler	☑	☐	☐
2. Trip Blank listed on COC	☑	☐	☐

	W	S	N/A
3. Type Of TB Received	☐	☑	☐

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: AKARIG Date: 7/23/2020 9:15:00 AM Reviewer: _____ Date: _____

MS 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: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C449-MB	3C10770.D	1	07/23/20	SP	n/a	n/a	V3C449

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

FA77062-1, FA77062-2, FA77062-4, FA77062-5, FA77062-6, FA77062-7, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-13, FA77062-14, FA77062-15, FA77062-16

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	3.5	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C449-MB	3C10770.D	1	07/23/20	SP	n/a	n/a	V3C449

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

FA77062-1, FA77062-2, FA77062-4, FA77062-5, FA77062-6, FA77062-7, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-13, FA77062-14, FA77062-15, FA77062-16

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	75-124%
17060-07-0	1,2-Dichloroethane-D4	99%	72-135%
2037-26-5	Toluene-D8	90%	75-126%
460-00-4	4-Bromofluorobenzene	95%	71-133%

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2136-MB	Y51738.D	1	07/24/20	CV	n/a	n/a	VY2136

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

FA77062-3, FA77062-17

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

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2136-MB	Y51738.D	1	07/24/20	CV	n/a	n/a	VY2136

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

FA77062-3, FA77062-17

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

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C450-MB	3C10794.D	1	07/24/20	SP	n/a	n/a	V3C450

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

FA77062-4, FA77062-5, FA77062-6, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-16

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	3.0	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C450-MB	3C10794.D	1	07/24/20	SP	n/a	n/a	V3C450

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

FA77062-4, FA77062-5, FA77062-6, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-16

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	98%	72-135%
2037-26-5	Toluene-D8	95%	75-126%
460-00-4	4-Bromofluorobenzene	94%	71-133%

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-MB [a]	1A29183.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77062-10, FA77062-17

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

Method Blank Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-MB [a]	1A29183.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77062-10, FA77062-17

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	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	107%	83-118%

(a) Sample was treated with an anti-foaming agent.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C449-BS	3C10769.D	1	07/23/20	SP	n/a	n/a	V3C449

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

FA77062-1, FA77062-2, FA77062-4, FA77062-5, FA77062-6, FA77062-7, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-13, FA77062-14, FA77062-15, FA77062-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	211	84	61-152
71-43-2	Benzene	50	50.3	101	76-126
75-27-4	Bromodichloromethane	50	49.7	99	74-130
75-25-2	Bromoform	50	43.4	87	76-127
78-93-3	2-Butanone (MEK)	250	229	92	75-137
75-15-0	Carbon Disulfide	50	41.3	83	72-122
56-23-5	Carbon Tetrachloride	50	47.0	94	78-133
108-90-7	Chlorobenzene	50	48.5	97	81-129
75-00-3	Chloroethane	50	56.0	112	68-133
67-66-3	Chloroform	50	48.8	98	72-123
124-48-1	Dibromochloromethane	50	47.5	95	76-127
75-34-3	1,1-Dichloroethane	50	47.7	95	73-125
107-06-2	1,2-Dichloroethane	50	48.9	98	74-128
75-35-4	1,1-Dichloroethylene	50	45.1	90	81-136
156-59-2	cis-1,2-Dichloroethylene	50	50.0	100	74-126
156-60-5	trans-1,2-Dichloroethylene	50	46.2	92	70-127
78-87-5	1,2-Dichloropropane	50	50.0	100	74-125
10061-01-5	cis-1,3-Dichloropropene	50	50.0	100	80-123
10061-02-6	trans-1,3-Dichloropropene	50	47.6	95	75-131
100-41-4	Ethylbenzene	50	48.5	97	77-123
591-78-6	2-Hexanone	250	215	86	72-133
74-83-9	Methyl Bromide	50	53.4	107	65-139
74-87-3	Methyl Chloride	50	41.4	83	71-144
75-09-2	Methylene Chloride	50	48.3	97	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	220	88	76-132
100-42-5	Styrene	50	47.8	96	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.2	94	71-126
127-18-4	Tetrachloroethylene	50	46.6	93	79-130
108-88-3	Toluene	50	46.1	92	76-124
71-55-6	1,1,1-Trichloroethane	50	48.6	97	70-129
79-00-5	1,1,2-Trichloroethane	50	47.4	95	74-124
79-01-6	Trichloroethylene	50	51.4	103	75-128
75-01-4	Vinyl Chloride	50	43.9	88	76-141
1330-20-7	Xylene (total)	150	144	96	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C449-BS	3C10769.D	1	07/23/20	SP	n/a	n/a	V3C449

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

FA77062-1, FA77062-2, FA77062-4, FA77062-5, FA77062-6, FA77062-7, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-13, FA77062-14, FA77062-15, FA77062-16

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%
2037-26-5	Toluene-D8	93%	75-126%
460-00-4	4-Bromofluorobenzene	97%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2136-BS	Y51736.D	1	07/24/20	CV	n/a	n/a	VY2136

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

FA77062-3, FA77062-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	182	146	50-147
71-43-2	Benzene	25	24.7	99	81-122
75-27-4	Bromodichloromethane	25	24.3	97	79-123
75-25-2	Bromoform	25	21.3	85	66-123
78-93-3	2-Butanone (MEK)	125	122	98	56-143
75-15-0	Carbon Disulfide	25	23.0	92	66-148
56-23-5	Carbon Tetrachloride	25	24.7	99	76-136
108-90-7	Chlorobenzene	25	23.3	93	82-124
75-00-3	Chloroethane	25	23.1	92	62-144
67-66-3	Chloroform	25	23.3	93	80-124
124-48-1	Dibromochloromethane	25	23.2	93	78-122
75-34-3	1,1-Dichloroethane	25	24.3	97	81-122
107-06-2	1,2-Dichloroethane	25	22.8	91	75-125
75-35-4	1,1-Dichloroethylene	25	22.3	89	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.6	94	78-120
156-60-5	trans-1,2-Dichloroethylene	25	22.9	92	76-127
78-87-5	1,2-Dichloropropane	25	24.6	98	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.0	100	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.5	98	80-120
100-41-4	Ethylbenzene	25	23.6	94	81-121
591-78-6	2-Hexanone	125	117	94	61-129
74-83-9	Methyl Bromide	25	30.3	121	59-143
74-87-3	Methyl Chloride	25	31.6	126	50-159
75-09-2	Methylene Chloride	25	21.0	84	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	101	81	66-122
100-42-5	Styrene	25	24.0	96	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	21.2	85	72-120
127-18-4	Tetrachloroethylene	25	22.7	91	76-135
108-88-3	Toluene	25	23.2	93	80-120
71-55-6	1,1,1-Trichloroethane	25	24.1	96	75-130
79-00-5	1,1,2-Trichloroethane	25	22.8	91	76-119
79-01-6	Trichloroethylene	25	23.5	94	81-126
75-01-4	Vinyl Chloride	25	27.0	108	69-159
1330-20-7	Xylene (total)	75	74.6	99	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2136-BS	Y51736.D	1	07/24/20	CV	n/a	n/a	VY2136

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

FA77062-3, FA77062-17

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C450-BS	3C10792.D	1	07/24/20	SP	n/a	n/a	V3C450

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

FA77062-4, FA77062-5, FA77062-6, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	50.5	101	76-126
75-27-4	Bromodichloromethane	50	50.6	101	74-130
75-25-2	Bromoform	50	48.5	97	76-127
78-93-3	2-Butanone (MEK)	250	233	93	75-137
75-15-0	Carbon Disulfide	50	40.4	81	72-122
56-23-5	Carbon Tetrachloride	50	47.7	95	78-133
108-90-7	Chlorobenzene	50	53.1	106	81-129
75-00-3	Chloroethane	50	54.2	108	68-133
67-66-3	Chloroform	50	48.6	97	72-123
124-48-1	Dibromochloromethane	50	52.2	104	76-127
75-34-3	1,1-Dichloroethane	50	47.2	94	73-125
107-06-2	1,2-Dichloroethane	50	49.9	100	74-128
75-35-4	1,1-Dichloroethylene	50	44.5	89	81-136
156-59-2	cis-1,2-Dichloroethylene	50	49.3	99	74-126
156-60-5	trans-1,2-Dichloroethylene	50	45.7	91	70-127
78-87-5	1,2-Dichloropropane	50	50.5	101	74-125
10061-01-5	cis-1,3-Dichloropropene	50	50.8	102	80-123
10061-02-6	trans-1,3-Dichloropropene	50	51.3	103	75-131
100-41-4	Ethylbenzene	50	52.7	105	77-123
591-78-6	2-Hexanone	250	233	93	72-133
74-83-9	Methyl Bromide	50	52.0	104	65-139
74-87-3	Methyl Chloride	50	39.0	78	71-144
75-09-2	Methylene Chloride	50	48.1	96	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	236	94	76-132
100-42-5	Styrene	50	51.9	104	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	51.9	104	71-126
127-18-4	Tetrachloroethylene	50	50.7	101	79-130
108-88-3	Toluene	50	49.4	99	76-124
71-55-6	1,1,1-Trichloroethane	50	47.6	95	70-129
79-00-5	1,1,2-Trichloroethane	50	51.6	103	74-124
79-01-6	Trichloroethylene	50	52.1	104	75-128
75-01-4	Vinyl Chloride	50	41.7	83	76-141
1330-20-7	Xylene (total)	150	155	103	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C450-BS	3C10792.D	1	07/24/20	SP	n/a	n/a	V3C450

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

FA77062-4, FA77062-5, FA77062-6, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-16

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	95%	72-135%
2037-26-5	Toluene-D8	97%	75-126%
460-00-4	4-Bromofluorobenzene	96%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-BS	1A29181.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77062-10, FA77062-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	142	114	50-147
71-43-2	Benzene	25	25.9	104	81-122
75-27-4	Bromodichloromethane	25	25.7	103	79-123
75-25-2	Bromoform	25	23.6	94	66-123
78-93-3	2-Butanone (MEK)	125	140	112	56-143
75-15-0	Carbon Disulfide	25	25.3	101	66-148
56-23-5	Carbon Tetrachloride	25	27.7	111	76-136
108-90-7	Chlorobenzene	25	24.5	98	82-124
75-00-3	Chloroethane	25	26.0	104	62-144
67-66-3	Chloroform	25	24.7	99	80-124
124-48-1	Dibromochloromethane	25	25.1	100	78-122
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
107-06-2	1,2-Dichloroethane	25	24.6	98	75-125
75-35-4	1,1-Dichloroethylene	25	27.1	108	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.9	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.0	104	76-127
78-87-5	1,2-Dichloropropane	25	25.7	103	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.8	103	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.9	104	80-120
100-41-4	Ethylbenzene	25	25.5	102	81-121
591-78-6	2-Hexanone	125	129	103	61-129
74-83-9	Methyl Bromide	25	20.4	82	59-143
74-87-3	Methyl Chloride	25	21.7	87	50-159
75-09-2	Methylene Chloride	25	22.6	90	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	117	94	66-122
100-42-5	Styrene	25	26.1	104	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.8	95	72-120
127-18-4	Tetrachloroethylene	25	25.6	102	76-135
108-88-3	Toluene	25	24.6	98	80-120
71-55-6	1,1,1-Trichloroethane	25	26.1	104	75-130
79-00-5	1,1,2-Trichloroethane	25	24.8	99	76-119
79-01-6	Trichloroethylene	25	25.6	102	81-126
75-01-4	Vinyl Chloride	25	24.9	100	69-159
1330-20-7	Xylene (total)	75	75.5	101	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-BS	1A29181.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77062-10, FA77062-17

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-13MS	3C10785.D	1	07/23/20	SP	n/a	n/a	V3C449
FA77062-13MSD	3C10786.D	1	07/23/20	SP	n/a	n/a	V3C449
FA77062-13	3C10781.D	1	07/23/20	SP	n/a	n/a	V3C449

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

FA77062-1, FA77062-2, FA77062-4, FA77062-5, FA77062-6, FA77062-7, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-13, FA77062-14, FA77062-15, FA77062-16

CAS No.	Compound	FA77062-13 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		209	158	76	212	118	56*	29*	61-152/27
71-43-2	Benzene	ND		41.8	30.3	72*	42.4	27.1	64*	11	76-126/26
75-27-4	Bromodichloromethane	ND		41.8	24.1	58*	42.4	21.1	50*	13	74-130/25
75-25-2	Bromoform	ND		41.8	18.2	43*	42.4	15.4	36*	17	76-127/26
78-93-3	2-Butanone (MEK)	ND		209	147	70*	212	110	52*	29*	75-137/25
75-15-0	Carbon Disulfide	ND		41.8	28.9	69*	42.4	27.2	64*	6	72-122/29
56-23-5	Carbon Tetrachloride	ND		41.8	32.9	79	42.4	31.8	75*	3	78-133/29
108-90-7	Chlorobenzene	ND		41.8	27.9	67*	42.4	22.8	54*	20	81-129/29
75-00-3	Chloroethane	ND		41.8	37.4	89	42.4	35.8	84	4	68-133/29
67-66-3	Chloroform	ND		41.8	27.2	65*	42.4	24.5	58*	10	72-123/26
124-48-1	Dibromochloromethane	ND		41.8	21.0	50*	42.4	17.9	42*	16	76-127/27
75-34-3	1,1-Dichloroethane	ND		41.8	28.4	68*	42.4	26.2	62*	8	73-125/27
107-06-2	1,2-Dichloroethane	ND		41.8	23.9	57*	42.4	20.6	49*	15	74-128/23
75-35-4	1,1-Dichloroethylene	ND		41.8	32.6	78*	42.4	31.3	74*	4	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		41.8	27.6	66*	42.4	24.9	59*	10	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		41.8	29.5	70	42.4	27.6	65*	7	70-127/27
78-87-5	1,2-Dichloropropane	ND		41.8	26.3	63*	42.4	23.2	55*	13	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		41.8	24.0	57*	42.4	20.4	48*	16	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		41.8	22.0	53*	42.4	18.3	43*	18	75-131/28
100-41-4	Ethylbenzene	ND		41.8	31.7	76*	42.4	25.9	61*	20	77-123/31
591-78-6	2-Hexanone	ND		209	127	61*	212	104	49*	20	72-133/26
74-83-9	Methyl Bromide	ND		41.8	33.8	81	42.4	29.8	70	13	65-139/31
74-87-3	Methyl Chloride	ND		41.8	25.8	62*	42.4	24.4	58*	6	71-144/27
75-09-2	Methylene Chloride	ND		41.8	25.5	61*	42.4	24.2	57*	5	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		209	118	56*	212	94.8	45*	22	76-132/26
100-42-5	Styrene	ND		41.8	26.0	62*	42.4	20.4	48*	24	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		41.8	22.0	53*	42.4	18.0	42*	20	71-126/30
127-18-4	Tetrachloroethylene	11.9		41.8	45.4	80	42.4	40.9	68*	10	79-130/31
108-88-3	Toluene	ND		41.8	29.5	70*	42.4	24.7	58*	18	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		41.8	32.8	78	42.4	31.1	73	5	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		41.8	22.4	54*	42.4	19.1	45*	16	74-124/28
79-01-6	Trichloroethylene	ND		41.8	34.4	82	42.4	30.5	72*	12	75-128/27
75-01-4	Vinyl Chloride	ND		41.8	30.7	73*	42.4	30.0	71*	2	76-141/27
1330-20-7	Xylene (total)	ND		126	90.0	72*	127	72.4	57*	22	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-13MS	3C10785.D	1	07/23/20	SP	n/a	n/a	V3C449
FA77062-13MSD	3C10786.D	1	07/23/20	SP	n/a	n/a	V3C449
FA77062-13	3C10781.D	1	07/23/20	SP	n/a	n/a	V3C449

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

FA77062-1, FA77062-2, FA77062-4, FA77062-5, FA77062-6, FA77062-7, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-13, FA77062-14, FA77062-15, FA77062-16

CAS No.	Surrogate Recoveries	MS	MSD	FA77062-13	Limits
1868-53-7	Dibromofluoromethane	99%	100%	104%	75-124%
17060-07-0	1,2-Dichloroethane-D4	100%	106%	105%	72-135%
2037-26-5	Toluene-D8	93%	92%	91%	75-126%
460-00-4	4-Bromofluorobenzene	92%	93%	91%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77004-1MS	Y51747.D	10	07/24/20	CV	n/a	n/a	VY2136
FA77004-1MSD	Y51748.D	10	07/24/20	CV	n/a	n/a	VY2136
FA77004-1	Y51743.D	10	07/24/20	CV	n/a	n/a	VY2136

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

FA77062-3, FA77062-17

CAS No.	Compound	FA77004-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1250	1190	95	1250	1050	84	13	50-147/21
71-43-2	Benzene	ND		250	254	102	250	241	96	5	81-122/14
75-27-4	Bromodichloromethane	ND		250	251	100	250	234	94	7	79-123/19
75-25-2	Bromoform	ND		250	228	91	250	218	87	4	66-123/21
78-93-3	2-Butanone (MEK)	ND		1250	1190	95	1250	1070	86	11	56-143/18
75-15-0	Carbon Disulfide	ND		250	242	97	250	235	94	3	66-148/23
56-23-5	Carbon Tetrachloride	ND		250	249	100	250	231	92	8	76-136/23
108-90-7	Chlorobenzene	ND		250	238	95	250	229	92	4	82-124/14
75-00-3	Chloroethane	ND		250	217	87	250	230	92	6	62-144/20
67-66-3	Chloroform	8.6		250	243	94	250	231	89	5	80-124/15
124-48-1	Dibromochloromethane	ND		250	234	94	250	224	90	4	78-122/19
75-34-3	1,1-Dichloroethane	ND		250	248	99	250	240	96	3	81-122/15
107-06-2	1,2-Dichloroethane	ND		250	240	96	250	225	90	6	75-125/14
75-35-4	1,1-Dichloroethylene	ND		250	231	92	250	225	90	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	176		250	452	110	250	431	102	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		250	235	94	250	226	90	4	76-127/17
78-87-5	1,2-Dichloropropane	ND		250	253	101	250	245	98	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		250	248	99	250	233	93	6	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		250	245	98	250	233	93	5	80-120/22
100-41-4	Ethylbenzene	ND		250	243	97	250	233	93	4	81-121/14
591-78-6	2-Hexanone	ND		1250	1180	94	1250	1090	87	8	61-129/18
74-83-9	Methyl Bromide	ND		250	192	77	250	368	147*	63*	59-143/19
74-87-3	Methyl Chloride	ND		250	271	108	250	312	125	14	50-159/19
75-09-2	Methylene Chloride	ND		250	223	89	250	213	85	5	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1250	1130	90	1250	1060	85	6	66-122/16
100-42-5	Styrene	ND		250	245	98	250	237	95	3	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	238	95	250	224	90	6	72-120/14
127-18-4	Tetrachloroethylene	764		250	933	68* [a]	250	913	60* [a]	2	76-135/16
108-88-3	Toluene	ND		250	236	94	250	226	90	4	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		250	238	95	250	227	91	5	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		250	239	96	250	226	90	6	76-119/14
79-01-6	Trichloroethylene	106		250	357	100	250	336	92	6	81-126/15
75-01-4	Vinyl Chloride	ND		250	257	103	250	287	115	11	69-159/18
1330-20-7	Xylene (total)	ND		750	747	100	750	719	96	4	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77004-1MS	Y51747.D	10	07/24/20	CV	n/a	n/a	VY2136
FA77004-1MSD	Y51748.D	10	07/24/20	CV	n/a	n/a	VY2136
FA77004-1	Y51743.D	10	07/24/20	CV	n/a	n/a	VY2136

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

FA77062-3, FA77062-17

CAS No.	Surrogate Recoveries	MS	MSD	FA77004-1	Limits
1868-53-7	Dibromofluoromethane	103%	101%	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	100%	105%	79-125%
2037-26-5	Toluene-D8	97%	97%	100%	85-112%
460-00-4	4-Bromofluorobenzene	96%	99%	100%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-12MS	3C10814.D	1	07/24/20	SP	n/a	n/a	V3C450
FA77062-12MSD	3C10815.D	1	07/24/20	SP	n/a	n/a	V3C450
FA77062-12	3C10801.D	1	07/24/20	SP	n/a	n/a	V3C450

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

FA77062-4, FA77062-5, FA77062-6, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-16

CAS No.	Compound	FA77062-12 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		55.7	52.8	95	56.8	54.1	95	2	76-126/26
75-27-4	Bromodichloromethane	ND		55.7	51.9	93	56.8	52.6	93	1	74-130/25
75-25-2	Bromoform	ND		55.7	48.3	87	56.8	50.0	88	3	76-127/26
78-93-3	2-Butanone (MEK)	ND		278	246	88	284	260	92	6	75-137/25
75-15-0	Carbon Disulfide	ND		55.7	41.9	75	56.8	42.9	76	2	72-122/29
56-23-5	Carbon Tetrachloride	ND		55.7	49.0	88	56.8	50.8	89	4	78-133/29
108-90-7	Chlorobenzene	ND		55.7	56.0	101	56.8	57.2	101	2	81-129/29
75-00-3	Chloroethane	ND		55.7	54.5	98	56.8	55.2	97	1	68-133/29
67-66-3	Chloroform	ND		55.7	50.5	91	56.8	52.3	92	4	72-123/26
124-48-1	Dibromochloromethane	ND		55.7	52.5	94	56.8	53.8	95	2	76-127/27
75-34-3	1,1-Dichloroethane	ND		55.7	48.8	88	56.8	50.1	88	3	73-125/27
107-06-2	1,2-Dichloroethane	ND		55.7	51.0	92	56.8	52.4	92	3	74-128/23
75-35-4	1,1-Dichloroethylene	ND		55.7	45.7	82	56.8	47.3	83	3	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		55.7	51.6	93	56.8	52.9	93	2	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		55.7	47.7	86	56.8	48.9	86	2	70-127/27
78-87-5	1,2-Dichloropropane	ND		55.7	52.3	94	56.8	53.4	94	2	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		55.7	51.9	93	56.8	53.2	94	2	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		55.7	52.4	94	56.8	53.9	95	3	75-131/28
100-41-4	Ethylbenzene	ND		55.7	56.3	101	56.8	57.7	102	2	77-123/31
591-78-6	2-Hexanone	ND		278	254	91	284	267	94	5	72-133/26
74-83-9	Methyl Bromide	ND		55.7	50.0	90	56.8	53.2	94	6	65-139/31
74-87-3	Methyl Chloride	ND		55.7	37.4	67*	56.8	37.3	66*	0	71-144/27
75-09-2	Methylene Chloride	ND		55.7	51.2	92	56.8	52.4	92	2	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		278	257	92	284	267	94	4	76-132/26
100-42-5	Styrene	ND		55.7	54.4	98	56.8	55.9	98	3	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		55.7	53.7	96	56.8	55.0	97	2	71-126/30
127-18-4	Tetrachloroethylene	9.4		55.7	55.7	83	56.8	57.5	85	3	79-130/31
108-88-3	Toluene	ND		55.7	52.1	94	56.8	54.1	95	4	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		55.7	50.0	90	56.8	51.4	91	3	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		55.7	54.0	97	56.8	56.3	99	4	74-124/28
79-01-6	Trichloroethylene	ND		55.7	56.1	101	56.8	56.8	100	1	75-128/27
75-01-4	Vinyl Chloride	ND		55.7	40.6	73*	56.8	41.4	73*	2	76-141/27
1330-20-7	Xylene (total)	ND		167	167	100	170	171	100	2	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-12MS	3C10814.D	1	07/24/20	SP	n/a	n/a	V3C450
FA77062-12MSD	3C10815.D	1	07/24/20	SP	n/a	n/a	V3C450
FA77062-12	3C10801.D	1	07/24/20	SP	n/a	n/a	V3C450

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

FA77062-4, FA77062-5, FA77062-6, FA77062-8, FA77062-9, FA77062-11, FA77062-12, FA77062-16

CAS No.	Surrogate Recoveries	MS	MSD	FA77062-12	Limits
1868-53-7	Dibromofluoromethane	97%	97%	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	92%	92%	98%	72-135%
2037-26-5	Toluene-D8	96%	96%	94%	75-126%
460-00-4	4-Bromofluorobenzene	95%	94%	92%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-10MS	1A29194.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10MSD	1A29195.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10 [a]	1A29188.D	5	07/27/20	CV	n/a	n/a	V1A1198

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

FA77062-10, FA77062-17

CAS No.	Compound	FA77062-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	691	111	625	729	117	5	50-147/21
71-43-2	Benzene	ND		125	131	105	125	133	106	2	81-122/14
75-27-4	Bromodichloromethane	ND		125	129	103	125	130	104	1	79-123/19
75-25-2	Bromoform	ND		125	115	92	125	120	96	4	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	636	102	625	676	108	6	56-143/18
75-15-0	Carbon Disulfide	ND		125	109	87	125	113	90	4	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	136	109	125	139	111	2	76-136/23
108-90-7	Chlorobenzene	ND		125	122	98	125	123	98	1	82-124/14
75-00-3	Chloroethane	ND		125	133	106	125	128	102	4	62-144/20
67-66-3	Chloroform	ND		125	124	99	125	126	101	2	80-124/15
124-48-1	Dibromochloromethane	ND		125	123	98	125	127	102	3	78-122/19
75-34-3	1,1-Dichloroethane	ND		125	129	103	125	130	104	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	125	100	125	126	101	1	75-125/14
75-35-4	1,1-Dichloroethylene	2.4	J	125	130	102	125	133	104	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	8.1		125	135	102	125	139	105	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	124	99	125	127	102	2	76-127/17
78-87-5	1,2-Dichloropropane	ND		125	128	102	125	130	104	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		125	128	102	125	130	104	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	129	103	125	131	105	2	80-120/22
100-41-4	Ethylbenzene	ND		125	126	101	125	127	102	1	81-121/14
591-78-6	2-Hexanone	ND		625	596	95	625	643	103	8	61-129/18
74-83-9	Methyl Bromide	ND		125	78.1	62	125	88.7	71	13	59-143/19
74-87-3	Methyl Chloride	ND		125	107	86	125	104	83	3	50-159/19
75-09-2	Methylene Chloride	ND		125	112	90	125	113	90	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	542	87	625	588	94	8	66-122/16
100-42-5	Styrene	ND		125	128	102	125	130	104	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	116	93	125	119	95	3	72-120/14
127-18-4	Tetrachloroethylene	305		125	400	76	125	402	78	0	76-135/16
108-88-3	Toluene	ND		125	121	97	125	123	98	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		125	130	104	125	132	106	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	124	99	125	126	101	2	76-119/14
79-01-6	Trichloroethylene	4.0	J	125	133	103	125	135	105	1	81-126/15
75-01-4	Vinyl Chloride	ND		125	122	98	125	122	98	0	69-159/18
1330-20-7	Xylene (total)	ND		375	369	98	375	374	100	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77062
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-10MS	1A29194.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10MSD	1A29195.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10 [a]	1A29188.D	5	07/27/20	CV	n/a	n/a	V1A1198

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

FA77062-10, FA77062-17

CAS No.	Surrogate Recoveries	MS	MSD	FA77062-10	Limits
1868-53-7	Dibromofluoromethane	103%	104%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	97%	79-125%
2037-26-5	Toluene-D8	99%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	104%	83-118%

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

* = 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: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37617
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/31/20

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

Associated samples MP37617: FA77062-17

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: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37617
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/31/20 07/31/20

Metal	FA77087-1 Original	DUP	RPD	QC Limits	FA77087-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	0.0	0.0	NC	0-20	0.0	510	500	102.0	80-120
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP37617: FA77062-17

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37617 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 07/31/20

Metal	FA77087-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium						
Beryllium	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium						
Manganese	0.0	504	500	100.8	1.2	20
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP37617: FA77062-17

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: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37617
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/31/20

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium				
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	519	500	103.8	80-120
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP37617: FA77062-17

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37617
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 07/31/20

Metal	FA77087-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium				
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	0.00	0.00	NC	0-10
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP37617: FA77062-17

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

POST DIGESTATE SPIKE SUMMARY

Login Number: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37617 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 07/31/20

Metal	Sample ml	Final ml	FA77087-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese	9.8	10			52.1	0.2	2.5	50	104.2	80-120
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP37617: FA77062-17

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: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37745
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/29/20

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

Associated samples MP37745: FA77062-17F

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: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37745
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/29/20 08/29/20

Metal	FA77889-2 Original	DUP	RPD	QC Limits	FA77889-2 Original	MS	Spikelot MPFLICP2 % Rec	QC Limits
Aluminum								
Antimony	anr							
Arsenic	anr							
Barium	anr							
Beryllium								
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt								
Copper								
Iron	anr							
Lead	anr							
Magnesium								
Manganese	284	276	2.9	0-20	284	770	500	97.2	80-120
Molybdenum								
Nickel								
Potassium								
Selenium	anr							
Silver	anr							
Sodium								
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP37745: FA77062-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37745 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/29/20

Metal	FA77889-2 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron	anr					
Lead	anr					
Magnesium						
Manganese	284	773	500	97.8	0.4	20
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP37745: FA77062-17F

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: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37745
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/29/20

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	498	500	99.6	80-120
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP37745: FA77062-17F

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37745
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/29/20

Metal	FA77889-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	284	280	1.4	0-10
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP37745: FA77062-17F

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

POST DIGESTATE SPIKE SUMMARY

Login Number: FA77062
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37745
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/29/20

Metal	Sample ml	Final ml	FA77889-2 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese	9.8	10	283.9	278.222	322.9	0.2	2.5	50	89.4	80-120
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP37745: FA77062-17F

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

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

United Technologies Corporation

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60620179

SGS Job Number: FA77178

Sampling Date: 07/23/20

Report to:

AECOM Environment
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Greenville, SC 29615
doria.cullom@aecom.com

ATTN: Doria Cullom

Total number of pages in report: **56**

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

Caitlin Brice, M.S.
General Manager

Client Service contact: Heather Wandrey 407-425-6700

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

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SGS North America Inc.

Sample Summary

United Technologies Corporation

Job No: FA77178

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77178-1	07/23/20	17:30	RMMR	07/25/20	SO	Soil	DPT-110-10
FA77178-1D	07/23/20	17:30	RMMR	07/25/20	SO	Soil Dup/MSD	DPT-110-10
FA77178-1S	07/23/20	17:30	RMMR	07/25/20	SO	Soil Matrix Spike	DPT-110-10
FA77178-2	07/23/20	00:00	RMMR	07/25/20	SO	Trip Blank Soil	TRIP BLANK 05
FA77178-3	07/23/20	00:00	RMMR	07/25/20	AQ	Trip Blank Water	TRIP BLANK 06
FA77178-4	07/23/20	17:50	RMMR	07/25/20	SO	Soil	DPT-110-15
FA77178-5	07/23/20	00:00	RMMR	07/25/20	SO	Soil	FD-SO-01
FA77178-6	07/23/20	18:35	RMMR	07/25/20	AQ	Ground Water	DPT-GW-110
FA77178-7	07/23/20	18:30	RMMR	07/25/20	SO	Soil	DPT-110-18
FA77178-8	07/23/20	19:50	RMMR	07/25/20	SO	Soil	DPT-115-09
FA77178-9	07/23/20	20:10	RMMR	07/25/20	SO	Soil	DPT-115-14
FA77178-10	07/23/20	20:40	RMMR	07/25/20	SO	Soil	DPT-115-16

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

United Technologies Corporation

Job No: FA77178

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77178-11	07/23/20	20:30	RMMR	07/25/20	AQ	Ground Water	DPT-GW-115
FA77178-12	07/23/20	20:50	RMMR	07/25/20	AQ	Equipment Blank	EB-SO-02

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: United Technologies Corporation **Job No:** FA77178

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC **Report Date** 8/5/2020 12:37:36

10 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 07/23/2020 and were received at SGS North America Inc - Orlando on 07/25/2020 properly preserved, at 3.6 Deg. C and intact. These Samples received an SGS Orlando job number of FA77178. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1A1198

All samples were analyzed within the recommended method holding time.

Sample(s) FA77062-10MS, FA77062-10MSD were used as the QC samples indicated.

V1A1198-MB: Sample was treated with an anti-foaming agent.

FA77178-3 for Methyl Bromide: Associated CCV outside of control limits low.

FA77178-3: Sample was not preserved to a pH < 2.

FA77178-6 for Methyl Bromide: Associated CCV outside of control limits low.

FA77178-6: Sample was not preserved to a pH < 2.

FA77178-11 for Methyl Bromide: Associated CCV outside of control limits low.

FA77178-11: Sample was not preserved to a pH < 2.

FA77178-12 for Methyl Bromide: Associated CCV outside of control limits low.

FA77178-12: Sample was not preserved to a pH < 2.

Matrix: SO **Batch ID:** V3C455

All samples were analyzed within the recommended method holding time.

Sample(s) FA77178-1MS, FA77178-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

FA77178-1 for Acetone: Associated CCV outside of control limits low.

FA77178-1 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-1 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77178-2 for Acetone: Associated CCV outside of control limits low.

FA77178-2 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-2 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77178-4 for Acetone: Associated CCV outside of control limits low.

FA77178-4 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-4 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77178-5 for Acetone: Associated CCV outside of control limits low.

FA77178-5 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-5 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77178-7 for Acetone: Associated CCV outside of control limits low.

FA77178-7 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-7 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77178-8 for Acetone: Associated CCV outside of control limits low.

FA77178-8 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-8 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77178-9 for Acetone: Associated CCV outside of control limits low.

FA77178-9 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77178-9: Sample was prepared from a bulk container because preservative leaked out of field collected vials.

Matrix: SO **Batch ID:** V3C456

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77253-3MS, FA77253-3MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,1-Dichloroethylene, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Carbon Disulfide, Methyl Chloride, trans-1,3-Dichloropropene, Vinyl Chloride, Tetrachloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Bromoform, Carbon Disulfide, Chlorobenzene, cis-1,3-Dichloropropene, Ethylbenzene, Methyl Chloride, Styrene, Tetrachloroethylene, trans-1,3-Dichloropropene, Vinyl Chloride, Xylene (total) are outside control limits. Probable cause is due to matrix interference.

FA77178-10 for Acetone: Associated CCV outside of control limits low.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85754

Sample(s) FA77178-1DUP were used as the QC samples for Solids, Percent.

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

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA77178
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/23/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77178-1	**DPT-110-10**					
Tetrachloroethylene		9.2	6.0	1.5	ug/kg	SW846 8260D
FA77178-2	**TRIP BLANK 05**					
No hits reported in this sample.						
FA77178-3	**TRIP BLANK 06**					
No hits reported in this sample.						
FA77178-4	**DPT-110-15**					
cis-1,2-Dichloroethylene		0.95 J	3.2	0.88	ug/kg	SW846 8260D
Tetrachloroethylene		34.3	3.2	0.82	ug/kg	SW846 8260D
Trichloroethylene		1.0 J	3.2	0.64	ug/kg	SW846 8260D
FA77178-5	**FD-SO-01**					
Tetrachloroethylene		12.5	3.6	0.91	ug/kg	SW846 8260D
FA77178-6	**DPT-GW-110**					
cis-1,2-Dichloroethylene [a]		40.8 J	50	14	ug/l	SW846 8260D
Tetrachloroethylene [a]		2900	50	11	ug/l	SW846 8260D
Trichloroethylene [a]		25.1 J	50	17	ug/l	SW846 8260D
FA77178-7	**DPT-110-18**					
cis-1,2-Dichloroethylene		5.1	3.3	0.91	ug/kg	SW846 8260D
Tetrachloroethylene		4450	260	66	ug/kg	SW846 8260D
Trichloroethylene		2.8 J	3.3	0.66	ug/kg	SW846 8260D
FA77178-8	**DPT-115-09**					
Tetrachloroethylene		2.7 J	4.0	1.0	ug/kg	SW846 8260D
FA77178-9	**DPT-115-14**					
Tetrachloroethylene [b]		1.9 J	5.2	1.3	ug/kg	SW846 8260D
FA77178-10	**DPT-115-16**					
cis-1,2-Dichloroethylene		4.4	2.8	0.77	ug/kg	SW846 8260D

Summary of Hits

Job Number: FA77178
Account: United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/23/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Tetrachloroethylene		885	190	49	ug/kg	SW846 8260D
Trichloroethylene		2.8	2.8	0.56	ug/kg	SW846 8260D
FA77178-11	**DPT-GW-115**					
Tetrachloroethylene [a]		3360	50	11	ug/l	SW846 8260D
Trichloroethylene [a]		21.5 J	50	17	ug/l	SW846 8260D
FA77178-12	**EB-SO-02**					
Tetrachloroethylene [a]		0.73 J	1.0	0.22	ug/l	SW846 8260D

(a) Sample was not preserved to a pH < 2.
(b) Sample was prepared from a bulk container because preservative leaked out of field collected vials.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	DPT-110-10		
Lab Sample ID:	FA77178-1	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	59.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10911.D	1	07/30/20 14:30	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	6.90 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	240	120	ug/kg	
71-43-2	Benzene	ND	6.0	1.5	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	1.2	ug/kg	
75-25-2	Bromoform	ND	6.0	1.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	30	8.8	ug/kg	
75-15-0	Carbon Disulfide	ND	6.0	1.2	ug/kg	
56-23-5	Carbon Tetrachloride	ND	6.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	1.2	ug/kg	
75-00-3	Chloroethane [b]	ND	6.0	2.4	ug/kg	
67-66-3	Chloroform	ND	6.0	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	2.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	1.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	1.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	1.2	ug/kg	
591-78-6	2-Hexanone	ND	30	9.1	ug/kg	
74-83-9	Methyl Bromide [b]	ND	6.0	2.4	ug/kg	
74-87-3	Methyl Chloride	ND	6.0	2.4	ug/kg	
75-09-2	Methylene Chloride	ND	24	13	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	30	9.1	ug/kg	
100-42-5	Styrene	ND	6.0	1.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	1.2	ug/kg	
127-18-4	Tetrachloroethylene	9.2	6.0	1.5	ug/kg	
108-88-3	Toluene	ND	24	12	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	1.2	ug/kg	
79-01-6	Trichloroethylene	ND	6.0	1.2	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-110-10		
Lab Sample ID:	FA77178-1	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	59.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	6.0	1.2	ug/kg	
1330-20-7	Xylene (total)	ND	18	2.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-124%
17060-07-0	1,2-Dichloroethane-D4	101%		72-135%
2037-26-5	Toluene-D8	91%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TRIP BLANK 05		
Lab Sample ID:	FA77178-2	**Date Sampled:**	07/23/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10912.D	1	07/30/20 14:56	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane [b]	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide [b]	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	

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

Report of Analysis

Client Sample ID:	TRIP BLANK 05		
Lab Sample ID:	FA77178-2	**Date Sampled:**	07/23/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**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	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-124%
17060-07-0	1,2-Dichloroethane-D4	95%		72-135%
2037-26-5	Toluene-D8	92%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TRIP BLANK 06		
Lab Sample ID:	FA77178-3	**Date Sampled:**	07/23/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29184.D	1	07/27/20 11:14	CV	n/a	n/a	V1A1198
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK 06		
Lab Sample ID:	FA77178-3	**Date Sampled:**	07/23/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		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	104%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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: DPT-110-15
Lab Sample ID: FA77178-4
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/23/20
Date Received: 07/25/20
Percent Solids: 74.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10913.D	1	07/30/20 15:22	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	10.4 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	64	ug/kg	
71-43-2	Benzene	ND	3.2	0.78	ug/kg	
75-27-4	Bromodichloromethane	ND	3.2	0.64	ug/kg	
75-25-2	Bromoform	ND	3.2	0.64	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.2	0.64	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.2	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	3.2	0.64	ug/kg	
75-00-3	Chloroethane [b]	ND	3.2	1.3	ug/kg	
67-66-3	Chloroform	ND	3.2	0.85	ug/kg	
124-48-1	Dibromochloromethane	ND	3.2	0.64	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.2	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.2	0.64	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.2	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	0.95	3.2	0.88	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	3.2	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.2	0.64	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	0.64	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	0.64	ug/kg	
100-41-4	Ethylbenzene	ND	3.2	0.64	ug/kg	
591-78-6	2-Hexanone	ND	16	4.8	ug/kg	
74-83-9	Methyl Bromide [b]	ND	3.2	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.2	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.8	ug/kg	
100-42-5	Styrene	ND	3.2	0.64	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	0.64	ug/kg	
127-18-4	Tetrachloroethylene	34.3	3.2	0.82	ug/kg	
108-88-3	Toluene	ND	13	6.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.2	0.64	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.2	0.64	ug/kg	
79-01-6	Trichloroethylene	1.0	3.2	0.64	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-110-15		
Lab Sample ID:	FA77178-4	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	74.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.2	0.64	ug/kg	
1330-20-7	Xylene (total)	ND	9.6	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		75-124%
17060-07-0	1,2-Dichloroethane-D4	92%		72-135%
2037-26-5	Toluene-D8	94%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID: FD-SO-01
Lab Sample ID: FA77178-5
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/23/20
Date Received: 07/25/20
Percent Solids: 78.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10914.D	1	07/30/20 15:48	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	8.97 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	140	71	ug/kg	
71-43-2	Benzene	ND	3.6	0.87	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.71	ug/kg	
75-25-2	Bromoform	ND	3.6	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.2	ug/kg	
75-15-0	Carbon Disulfide	ND	3.6	0.71	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.6	0.73	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.71	ug/kg	
75-00-3	Chloroethane [b]	ND	3.6	1.4	ug/kg	
67-66-3	Chloroform	ND	3.6	0.95	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.71	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.98	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.71	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.71	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.71	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.71	ug/kg	
100-41-4	Ethylbenzene	ND	3.6	0.71	ug/kg	
591-78-6	2-Hexanone	ND	18	5.4	ug/kg	
74-83-9	Methyl Bromide [b]	ND	3.6	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.6	1.4	ug/kg	
75-09-2	Methylene Chloride	ND	14	7.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.4	ug/kg	
100-42-5	Styrene	ND	3.6	0.71	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.71	ug/kg	
127-18-4	Tetrachloroethylene	12.5	3.6	0.91	ug/kg	
108-88-3	Toluene	ND	14	7.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.71	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.71	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.71	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	FD-SO-01		
Lab Sample ID:	FA77178-5	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	78.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.6	0.71	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-124%
17060-07-0	1,2-Dichloroethane-D4	100%		72-135%
2037-26-5	Toluene-D8	91%		75-126%
460-00-4	4-Bromofluorobenzene	91%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-GW-110		
Lab Sample ID:	FA77178-6	**Date Sampled:**	07/23/20
Matrix:	AQ - Ground Water	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29205.D	50	07/27/20 20:17	CV	n/a	n/a	V1A1198
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	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	40.8	50	14	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	100	29	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	2900	50	11	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	
79-01-6	Trichloroethylene	25.1	50	17	ug/l	J

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

Report of Analysis

Client Sample ID:	DPT-GW-110		
Lab Sample ID:	FA77178-6	**Date Sampled:**	07/23/20
Matrix:	AQ - Ground Water	**Date Received:**	07/25/20
Method:	SW846 8260D	**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	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	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	104%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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: DPT-110-18
Lab Sample ID: FA77178-7
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/23/20
Date Received: 07/25/20
Percent Solids: 73.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10915.D	1	07/30/20 16:14	SP	n/a	n/a	V3C455
Run #2	3C10940.D	1	07/31/20 13:13	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.4 g	5.0 ml	
Run #2	10.3 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	66	ug/kg	
71-43-2	Benzene	ND	3.3	0.80	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.66	ug/kg	
75-25-2	Bromoform	ND	3.3	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.8	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.66	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.66	ug/kg	
75-00-3	Chloroethane [b]	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.87	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.66	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.66	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	5.1	3.3	0.91	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.66	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.66	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.66	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.66	ug/kg	
591-78-6	2-Hexanone	ND	16	4.9	ug/kg	
74-83-9	Methyl Bromide [b]	ND	3.3	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.9	ug/kg	
100-42-5	Styrene	ND	3.3	0.66	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.66	ug/kg	
127-18-4	Tetrachloroethylene	4450 [c]	260	66	ug/kg	
108-88-3	Toluene	ND	13	6.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.66	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.66	ug/kg	
79-01-6	Trichloroethylene	2.8	3.3	0.66	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-110-18		
Lab Sample ID:	FA77178-7	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	73.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.3	0.66	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	95%	93%	72-135%
2037-26-5	Toluene-D8	92%	93%	75-126%
460-00-4	4-Bromofluorobenzene	93%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-115-09		
Lab Sample ID:	FA77178-8	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	81.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10916.D	1	07/30/20 16:40	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	7.63 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	160	80	ug/kg	
71-43-2	Benzene	ND	4.0	0.98	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.80	ug/kg	
75-25-2	Bromoform	ND	4.0	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.8	ug/kg	
75-15-0	Carbon Disulfide	ND	4.0	0.80	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.0	0.82	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.80	ug/kg	
75-00-3	Chloroethane [b]	ND	4.0	1.6	ug/kg	
67-66-3	Chloroform	ND	4.0	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.80	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.80	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.80	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.80	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.80	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.80	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.80	ug/kg	
591-78-6	2-Hexanone	ND	20	6.0	ug/kg	
74-83-9	Methyl Bromide [b]	ND	4.0	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	4.0	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	6.0	ug/kg	
100-42-5	Styrene	ND	4.0	0.80	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	0.80	ug/kg	
127-18-4	Tetrachloroethylene	2.7	4.0	1.0	ug/kg	J
108-88-3	Toluene	ND	16	8.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.80	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.80	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.80	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-115-09		
Lab Sample ID:	FA77178-8	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	81.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.0	0.80	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%
2037-26-5	Toluene-D8	92%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID: DPT-115-14
Lab Sample ID: FA77178-9
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/23/20
Date Received: 07/25/20
Percent Solids: 84.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3C10917.D	1	07/30/20 17:06	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	5.66 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	210	100	ug/kg	
71-43-2	Benzene	ND	5.2	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	1.0	ug/kg	
75-25-2	Bromoform	ND	5.2	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	26	7.6	ug/kg	
75-15-0	Carbon Disulfide	ND	5.2	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.2	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	1.0	ug/kg	
75-00-3	Chloroethane [c]	ND	5.2	2.1	ug/kg	
67-66-3	Chloroform	ND	5.2	1.4	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	1.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.2	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.2	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	1.0	ug/kg	
591-78-6	2-Hexanone	ND	26	7.8	ug/kg	
74-83-9	Methyl Bromide [c]	ND	5.2	2.1	ug/kg	
74-87-3	Methyl Chloride	ND	5.2	2.1	ug/kg	
75-09-2	Methylene Chloride	ND	21	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	26	7.8	ug/kg	
100-42-5	Styrene	ND	5.2	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/kg	
127-18-4	Tetrachloroethylene	1.9	5.2	1.3	ug/kg	J
108-88-3	Toluene	ND	21	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	1.0	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-115-14		
Lab Sample ID:	FA77178-9	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	84.5
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.2	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	16	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		75-124%
17060-07-0	1,2-Dichloroethane-D4	94%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%

(a) Sample was prepared from a bulk container because preservative leaked out of field collected vials.
(b) Associated CCV outside of control limits low.
(c) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-115-16		
Lab Sample ID:	FA77178-10	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	83.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10941.D	1	07/31/20 13:40	SP	n/a	n/a	V3C456
Run #2	3C10942.D	1	07/31/20 14:06	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.7 g	5.0 ml	
Run #2	10.5 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	110	56	ug/kg	
71-43-2	Benzene	ND	2.8	0.68	ug/kg	
75-27-4	Bromodichloromethane	ND	2.8	0.56	ug/kg	
75-25-2	Bromoform	ND	2.8	0.56	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	4.1	ug/kg	
75-15-0	Carbon Disulfide	ND	2.8	0.56	ug/kg	
56-23-5	Carbon Tetrachloride	ND	2.8	0.57	ug/kg	
108-90-7	Chlorobenzene	ND	2.8	0.56	ug/kg	
75-00-3	Chloroethane	ND	2.8	1.1	ug/kg	
67-66-3	Chloroform	ND	2.8	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	2.8	0.56	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.8	0.99	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.8	0.56	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.8	0.56	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	4.4	2.8	0.77	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.8	0.56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.8	0.56	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.8	0.56	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.8	0.56	ug/kg	
100-41-4	Ethylbenzene	ND	2.8	0.56	ug/kg	
591-78-6	2-Hexanone	ND	14	4.2	ug/kg	
74-83-9	Methyl Bromide	ND	2.8	1.1	ug/kg	
74-87-3	Methyl Chloride	ND	2.8	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	11	6.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	14	4.2	ug/kg	
100-42-5	Styrene	ND	2.8	0.56	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.8	0.56	ug/kg	
127-18-4	Tetrachloroethylene	885 [b]	190	49	ug/kg	
108-88-3	Toluene	ND	11	5.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.8	0.56	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.8	0.56	ug/kg	
79-01-6	Trichloroethylene	2.8	2.8	0.56	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-115-16		
Lab Sample ID:	FA77178-10	**Date Sampled:**	07/23/20
Matrix:	SO - Soil	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	83.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	2.8	0.56	ug/kg	
1330-20-7	Xylene (total)	ND	8.4	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	92%	95%	72-135%
2037-26-5	Toluene-D8	91%	92%	75-126%
460-00-4	4-Bromofluorobenzene	93%	92%	71-133%

(a) Associated CCV outside of control limits low.
(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:	DPT-GW-115		
Lab Sample ID:	FA77178-11	**Date Sampled:**	07/23/20
Matrix:	AQ - Ground Water	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29206.D	50	07/27/20 20:42	CV	n/a	n/a	V1A1198
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	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	100	29	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	3360	50	11	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	
79-01-6	Trichloroethylene	21.5	50	17	ug/l	J

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

Report of Analysis

Client Sample ID:	DPT-GW-115		
Lab Sample ID:	FA77178-11	**Date Sampled:**	07/23/20
Matrix:	AQ - Ground Water	**Date Received:**	07/25/20
Method:	SW846 8260D	**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	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	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	101%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	EB-SO-02		
Lab Sample ID:	FA77178-12	**Date Sampled:**	07/23/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29186.D	1	07/27/20 12:06	CV	n/a	n/a	V1A1198
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide [b]	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.73	1.0	0.22	ug/l	J
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	EB-SO-02		
Lab Sample ID:	FA77178-12	**Date Sampled:**	07/23/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/25/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		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	103%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS PREM

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL 407-425-6700 FAX: 407-425-0707
www.sgs.com

FA77178

SGS - ORLANDO JOB # : PAGE 1 OF 2

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg IV Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916

Project Information

Project Name: WTC Relevan
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 125840 ACM

Sampler(s) Name(s) (Printed)
Sampler 1: ~~Randy Monyo~~ Sampler 2: Mariah Rockwell

Analytical Information

TCL VOCs 8260
% Moisture

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MeOH	LAB USE ONLY
1	DPT-110-10	7/23/20	1720	RM	SO	4	1	1						2	X	X
	DPT-110-10-MS	7/23/20	1730	RM	SO	4	1	1						2	X	X
1	DPT-110-10-MSD	7/23/20	1730	RM	SO	4	1	1						2	X	X
2	Trip Blank-05-Soil	7/23/20			SO	3		3							X	
3	Trip Blank-06-Aqueous	7/23/20			GW	2		2							X	
4	DPT-110-15	7/23/20	1750	MR	SO	4	1	1						2	X	X
5	FD-SO-01	7/23/20		MR	SO	4	1	1						2	X	X
6	DPT-GW-110	7/23/20	1835	RM	GW	3		3							X	
7	DPT-110-18	7/23/20	1830	MR	SO	4	1	1						2	X	X
8	DPT-115-09	7/23/20	1950	MR	SO	4	1	1						2	X	X
9	DPT-115-14	7/23/20	2010	MR	SO	4	1	1						2	X	X
10	DPT-115-16	7/23/20	2040	MR	SO	4	1	1						2	X	X

Turnaround Time (Business days)

~~10 Day (Business)~~
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Approved By: / Date:

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

INITIAL ASSESSMENT PC
DELIVERY VERIFICATION AG

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Randy Monyo	7/24/20 1145	2 FedEx	3 FedEx		4 Petra 7/25/20 900
Relinquished by Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only: Cooler Temperature (s) Celsius (corrected): 3.6

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (1) Rev 031318

FA77178: Chain of Custody
Page 1 of 3

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS PREM

FA77178

SGS - ORLANDO JOB # :

PAGE 1 OF 2

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr. Bldg VI Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Renee Alexander Email: renee.alexander@aecom.com
Phone #: 864-787-6910 Fax #:
Sampler(s) Name(s) (Printed) Sampler 1: Kenny Mongo Sampler 2: Marlon Rowell

Project Information

Project Name: UTC Delavan
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Client Purchase Order #: 1258940 ACM

Analytical Information

TCL VOCs 8260
8/8 Moisture

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
11	DUT-GW-115	7/23/20	2030	RM	GW	3		3								
12	EB-SO-02	7/23/20	2050	MR	GW	3		3								

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other

Approved By: / Date:

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Kenny Mongo	7/24/20 1145	2 Fed Ex	3 FX		4 PRWH 7/25/20 900
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only - Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (1) Rev 031318

SGS Sample Receipt Summary

Job Number: FA77178 **Client:** AECOM **Project:** UTC DELAVAN

Date / Time Received: 7/25/2020 9:00:00 AM **Delivery Method:** FX **Airbill #'s:** 1386 6598 0789

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: 7 Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 7/25/2020 9:00:00 AM Reviewer: _____ Date: _____

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-MB [a]	1A29183.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77178-3, FA77178-6, FA77178-11, FA77178-12

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

Method Blank Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-MB [a]	1A29183.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77178-3, FA77178-6, FA77178-11, FA77178-12

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	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	107%	83-118%

(a) Sample was treated with an anti-foaming agent.

Method Blank Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-MB	3C10908.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77178-1, FA77178-2, FA77178-4, FA77178-5, FA77178-7, FA77178-8, FA77178-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	4.4	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-MB	3C10908.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77178-1, FA77178-2, FA77178-4, FA77178-5, FA77178-7, FA77178-8, FA77178-9

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	94%	72-135%
2037-26-5	Toluene-D8	93%	75-126%
460-00-4	4-Bromofluorobenzene	93%	71-133%

Method Blank Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-MB	3C10939.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77178-7, FA77178-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	3.5	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-MB	3C10939.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77178-7, FA77178-10

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	98%	72-135%
2037-26-5	Toluene-D8	92%	75-126%
460-00-4	4-Bromofluorobenzene	94%	71-133%

Blank Spike Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-BS	1A29181.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77178-3, FA77178-6, FA77178-11, FA77178-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	142	114	50-147
71-43-2	Benzene	25	25.9	104	81-122
75-27-4	Bromodichloromethane	25	25.7	103	79-123
75-25-2	Bromoform	25	23.6	94	66-123
78-93-3	2-Butanone (MEK)	125	140	112	56-143
75-15-0	Carbon Disulfide	25	25.3	101	66-148
56-23-5	Carbon Tetrachloride	25	27.7	111	76-136
108-90-7	Chlorobenzene	25	24.5	98	82-124
75-00-3	Chloroethane	25	26.0	104	62-144
67-66-3	Chloroform	25	24.7	99	80-124
124-48-1	Dibromochloromethane	25	25.1	100	78-122
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
107-06-2	1,2-Dichloroethane	25	24.6	98	75-125
75-35-4	1,1-Dichloroethylene	25	27.1	108	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.9	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.0	104	76-127
78-87-5	1,2-Dichloropropane	25	25.7	103	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.8	103	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.9	104	80-120
100-41-4	Ethylbenzene	25	25.5	102	81-121
591-78-6	2-Hexanone	125	129	103	61-129
74-83-9	Methyl Bromide	25	20.4	82	59-143
74-87-3	Methyl Chloride	25	21.7	87	50-159
75-09-2	Methylene Chloride	25	22.6	90	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	117	94	66-122
100-42-5	Styrene	25	26.1	104	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.8	95	72-120
127-18-4	Tetrachloroethylene	25	25.6	102	76-135
108-88-3	Toluene	25	24.6	98	80-120
71-55-6	1,1,1-Trichloroethane	25	26.1	104	75-130
79-00-5	1,1,2-Trichloroethane	25	24.8	99	76-119
79-01-6	Trichloroethylene	25	25.6	102	81-126
75-01-4	Vinyl Chloride	25	24.9	100	69-159
1330-20-7	Xylene (total)	75	75.5	101	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1198-BS	1A29181.D	1	07/27/20	CV	n/a	n/a	V1A1198

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

FA77178-3, FA77178-6, FA77178-11, FA77178-12

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	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

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-BS	3C10907.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77178-1, FA77178-2, FA77178-4, FA77178-5, FA77178-7, FA77178-8, FA77178-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	254	102	61-152
71-43-2	Benzene	50	47.9	96	76-126
75-27-4	Bromodichloromethane	50	48.7	97	74-130
75-25-2	Bromoform	50	47.5	95	76-127
78-93-3	2-Butanone (MEK)	250	247	99	75-137
75-15-0	Carbon Disulfide	50	38.5	77	72-122
56-23-5	Carbon Tetrachloride	50	47.0	94	78-133
108-90-7	Chlorobenzene	50	49.3	99	81-129
75-00-3	Chloroethane	50	52.8	106	68-133
67-66-3	Chloroform	50	46.1	92	72-123
124-48-1	Dibromochloromethane	50	50.3	101	76-127
75-34-3	1,1-Dichloroethane	50	43.9	88	73-125
107-06-2	1,2-Dichloroethane	50	46.9	94	74-128
75-35-4	1,1-Dichloroethylene	50	41.5	83	81-136
156-59-2	cis-1,2-Dichloroethylene	50	47.5	95	74-126
156-60-5	trans-1,2-Dichloroethylene	50	42.8	86	70-127
78-87-5	1,2-Dichloropropane	50	47.6	95	74-125
10061-01-5	cis-1,3-Dichloropropene	50	48.1	96	80-123
10061-02-6	trans-1,3-Dichloropropene	50	47.4	95	75-131
100-41-4	Ethylbenzene	50	48.5	97	77-123
591-78-6	2-Hexanone	250	226	90	72-133
74-83-9	Methyl Bromide	50	53.5	107	65-139
74-87-3	Methyl Chloride	50	38.5	77	71-144
75-09-2	Methylene Chloride	50	43.6	87	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	210	84	76-132
100-42-5	Styrene	50	48.3	97	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.3	95	71-126
127-18-4	Tetrachloroethylene	50	49.3	99	79-130
108-88-3	Toluene	50	46.3	93	76-124
71-55-6	1,1,1-Trichloroethane	50	45.5	91	70-129
79-00-5	1,1,2-Trichloroethane	50	48.1	96	74-124
79-01-6	Trichloroethylene	50	50.0	100	75-128
75-01-4	Vinyl Chloride	50	41.7	83	76-141
1330-20-7	Xylene (total)	150	145	97	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-BS	3C10907.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77178-1, FA77178-2, FA77178-4, FA77178-5, FA77178-7, FA77178-8, FA77178-9

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%
2037-26-5	Toluene-D8	95%	75-126%
460-00-4	4-Bromofluorobenzene	97%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-BS	3C10937.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77178-7, FA77178-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	261	104	61-152
71-43-2	Benzene	50	48.2	96	76-126
75-27-4	Bromodichloromethane	50	48.3	97	74-130
75-25-2	Bromoform	50	46.7	93	76-127
78-93-3	2-Butanone (MEK)	250	266	106	75-137
75-15-0	Carbon Disulfide	50	38.0	76	72-122
56-23-5	Carbon Tetrachloride	50	46.5	93	78-133
108-90-7	Chlorobenzene	50	49.4	99	81-129
75-00-3	Chloroethane	50	53.6	107	68-133
67-66-3	Chloroform	50	46.7	93	72-123
124-48-1	Dibromochloromethane	50	50.1	100	76-127
75-34-3	1,1-Dichloroethane	50	44.9	90	73-125
107-06-2	1,2-Dichloroethane	50	47.0	94	74-128
75-35-4	1,1-Dichloroethylene	50	41.6	83	81-136
156-59-2	cis-1,2-Dichloroethylene	50	48.0	96	74-126
156-60-5	trans-1,2-Dichloroethylene	50	43.3	87	70-127
78-87-5	1,2-Dichloropropane	50	48.2	96	74-125
10061-01-5	cis-1,3-Dichloropropene	50	48.7	97	80-123
10061-02-6	trans-1,3-Dichloropropene	50	48.1	96	75-131
100-41-4	Ethylbenzene	50	48.1	96	77-123
591-78-6	2-Hexanone	250	240	96	72-133
74-83-9	Methyl Bromide	50	51.1	102	65-139
74-87-3	Methyl Chloride	50	37.0	74	71-144
75-09-2	Methylene Chloride	50	50.0	100	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	230	92	76-132
100-42-5	Styrene	50	48.7	97	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	48.0	96	71-126
127-18-4	Tetrachloroethylene	50	48.5	97	79-130
108-88-3	Toluene	50	46.6	93	76-124
71-55-6	1,1,1-Trichloroethane	50	46.0	92	70-129
79-00-5	1,1,2-Trichloroethane	50	48.3	97	74-124
79-01-6	Trichloroethylene	50	50.1	100	75-128
75-01-4	Vinyl Chloride	50	40.8	82	76-141
1330-20-7	Xylene (total)	150	145	97	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-BS	3C10937.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77178-7, FA77178-10

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%
2037-26-5	Toluene-D8	96%	75-126%
460-00-4	4-Bromofluorobenzene	97%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-10MS	1A29194.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10MSD	1A29195.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10 [a]	1A29188.D	5	07/27/20	CV	n/a	n/a	V1A1198

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

FA77178-3, FA77178-6, FA77178-11, FA77178-12

CAS No.	Compound	FA77062-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	691	111	625	729	117	5	50-147/21
71-43-2	Benzene	ND		125	131	105	125	133	106	2	81-122/14
75-27-4	Bromodichloromethane	ND		125	129	103	125	130	104	1	79-123/19
75-25-2	Bromoform	ND		125	115	92	125	120	96	4	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	636	102	625	676	108	6	56-143/18
75-15-0	Carbon Disulfide	ND		125	109	87	125	113	90	4	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	136	109	125	139	111	2	76-136/23
108-90-7	Chlorobenzene	ND		125	122	98	125	123	98	1	82-124/14
75-00-3	Chloroethane	ND		125	133	106	125	128	102	4	62-144/20
67-66-3	Chloroform	ND		125	124	99	125	126	101	2	80-124/15
124-48-1	Dibromochloromethane	ND		125	123	98	125	127	102	3	78-122/19
75-34-3	1,1-Dichloroethane	ND		125	129	103	125	130	104	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	125	100	125	126	101	1	75-125/14
75-35-4	1,1-Dichloroethylene	2.4	J	125	130	102	125	133	104	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	8.1		125	135	102	125	139	105	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	124	99	125	127	102	2	76-127/17
78-87-5	1,2-Dichloropropane	ND		125	128	102	125	130	104	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		125	128	102	125	130	104	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	129	103	125	131	105	2	80-120/22
100-41-4	Ethylbenzene	ND		125	126	101	125	127	102	1	81-121/14
591-78-6	2-Hexanone	ND		625	596	95	625	643	103	8	61-129/18
74-83-9	Methyl Bromide	ND		125	78.1	62	125	88.7	71	13	59-143/19
74-87-3	Methyl Chloride	ND		125	107	86	125	104	83	3	50-159/19
75-09-2	Methylene Chloride	ND		125	112	90	125	113	90	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	542	87	625	588	94	8	66-122/16
100-42-5	Styrene	ND		125	128	102	125	130	104	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	116	93	125	119	95	3	72-120/14
127-18-4	Tetrachloroethylene	305		125	400	76	125	402	78	0	76-135/16
108-88-3	Toluene	ND		125	121	97	125	123	98	2	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		125	130	104	125	132	106	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	124	99	125	126	101	2	76-119/14
79-01-6	Trichloroethylene	4.0	J	125	133	103	125	135	105	1	81-126/15
75-01-4	Vinyl Chloride	ND		125	122	98	125	122	98	0	69-159/18
1330-20-7	Xylene (total)	ND		375	369	98	375	374	100	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77062-10MS	1A29194.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10MSD	1A29195.D	5	07/27/20	CV	n/a	n/a	V1A1198
FA77062-10 [a]	1A29188.D	5	07/27/20	CV	n/a	n/a	V1A1198

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

FA77178-3, FA77178-6, FA77178-11, FA77178-12

CAS No.	Surrogate Recoveries	MS	MSD	FA77062-10	Limits
1868-53-7	Dibromofluoromethane	103%	104%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	97%	79-125%
2037-26-5	Toluene-D8	99%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	104%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77178-1MS	3C10930.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1MSD	3C10931.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1	3C10911.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77178-1, FA77178-2, FA77178-4, FA77178-5, FA77178-7, FA77178-8, FA77178-9

CAS No.	Compound	FA77178-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		412	330	80	413	354	86	7	61-152/27
71-43-2	Benzene	ND		82.5	78.7	95	82.6	80.6	98	2	76-126/26
75-27-4	Bromodichloromethane	ND		82.5	74.0	90	82.6	75.2	91	2	74-130/25
75-25-2	Bromoform	ND		82.5	66.0	80	82.6	67.4	82	2	76-127/26
78-93-3	2-Butanone (MEK)	ND		412	321	78	413	344	83	7	75-137/25
75-15-0	Carbon Disulfide	ND		82.5	66.3	80	82.6	69.8	84	5	72-122/29
56-23-5	Carbon Tetrachloride	ND		82.5	80.8	98	82.6	85.5	103	6	78-133/29
108-90-7	Chlorobenzene	ND		82.5	73.4	89	82.6	75.5	91	3	81-129/29
75-00-3	Chloroethane	ND		82.5	99.6	121	82.6	101	122	1	68-133/29
67-66-3	Chloroform	ND		82.5	76.7	93	82.6	77.7	94	1	72-123/26
124-48-1	Dibromochloromethane	ND		82.5	72.9	88	82.6	73.3	89	1	76-127/27
75-34-3	1,1-Dichloroethane	ND		82.5	74.4	90	82.6	76.8	93	3	73-125/27
107-06-2	1,2-Dichloroethane	ND		82.5	72.7	88	82.6	72.4	88	0	74-128/23
75-35-4	1,1-Dichloroethylene	ND		82.5	74.4	90	82.6	78.6	95	5	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		82.5	77.7	94	82.6	79.1	96	2	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		82.5	73.9	90	82.6	76.7	93	4	70-127/27
78-87-5	1,2-Dichloropropane	ND		82.5	75.9	92	82.6	76.8	93	1	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		82.5	71.8	87	82.6	72.1	87	0	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		82.5	68.8	83	82.6	69.8	84	1	75-131/28
100-41-4	Ethylbenzene	ND		82.5	73.4	89	82.6	75.7	92	3	77-123/31
591-78-6	2-Hexanone	ND		412	318	77	413	340	82	7	72-133/26
74-83-9	Methyl Bromide	ND		82.5	86.5	105	82.6	88.4	107	2	65-139/31
74-87-3	Methyl Chloride	ND		82.5	62.9	76	82.6	66.4	80	5	71-144/27
75-09-2	Methylene Chloride	ND		82.5	75.0	91	82.6	76.0	92	1	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		412	330	80	413	347	84	5	76-132/26
100-42-5	Styrene	ND		82.5	68.9	84	82.6	70.4	85	2	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		82.5	69.6	84	82.6	71.6	87	3	71-126/30
127-18-4	Tetrachloroethylene	9.2		82.5	79.9	86	82.6	83.5	90	4	79-130/31
108-88-3	Toluene	ND		82.5	73.5	89	82.6	75.6	91	3	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		82.5	78.3	95	82.6	82.2	99	5	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		82.5	73.3	89	82.6	74.4	90	1	74-124/28
79-01-6	Trichloroethylene	ND		82.5	80.9	98	82.6	83.8	101	4	75-128/27
75-01-4	Vinyl Chloride	ND		82.5	71.0	86	82.6	74.8	91	5	76-141/27
1330-20-7	Xylene (total)	ND		247	214	86	248	221	89	3	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77178-1MS	3C10930.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1MSD	3C10931.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1	3C10911.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77178-1, FA77178-2, FA77178-4, FA77178-5, FA77178-7, FA77178-8, FA77178-9

CAS No.	Surrogate Recoveries	MS	MSD	FA77178-1	Limits
1868-53-7	Dibromofluoromethane	97%	96%	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	88%	101%	72-135%
2037-26-5	Toluene-D8	96%	96%	91%	75-126%
460-00-4	4-Bromofluorobenzene	94%	94%	92%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-3MS	3C10961.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3MSD	3C10962.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3	3C10955.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77178-7, FA77178-10

CAS No.	Compound	FA77253-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		337	211	63	318	186	59*	13	61-152/27
71-43-2	Benzene	ND		67.5	62.7	93	63.5	55.2	87	13	76-126/26
75-27-4	Bromodichloromethane	ND		67.5	60.6	90	63.5	53.2	84	13	74-130/25
75-25-2	Bromoform	ND		67.5	54.1	80	63.5	45.0	71*	18	76-127/26
78-93-3	2-Butanone (MEK)	ND		337	222	66*	318	192	60*	14	75-137/25
75-15-0	Carbon Disulfide	ND		67.5	46.6	69*	63.5	44.9	71*	4	72-122/29
56-23-5	Carbon Tetrachloride	ND		67.5	60.7	90	63.5	55.4	87	9	78-133/29
108-90-7	Chlorobenzene	ND		67.5	63.9	95	63.5	50.1	79*	24	81-129/29
75-00-3	Chloroethane	ND		67.5	64.3	95	63.5	67.9	107	5	68-133/29
67-66-3	Chloroform	ND		67.5	61.3	91	63.5	54.1	85	12	72-123/26
124-48-1	Dibromochloromethane	ND		67.5	60.8	90	63.5	51.2	81	17	76-127/27
75-34-3	1,1-Dichloroethane	ND		67.5	57.2	85	63.5	52.9	83	8	73-125/27
107-06-2	1,2-Dichloroethane	ND		67.5	57.5	85	63.5	50.3	79	13	74-128/23
75-35-4	1,1-Dichloroethylene	ND		67.5	52.1	77*	63.5	51.0	80*	2	81-136/28
156-59-2	cis-1,2-Dichloroethylene	167		67.5	219	77	63.5	228	96	4	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		67.5	55.4	82	63.5	50.9	80	8	70-127/27
78-87-5	1,2-Dichloropropane	ND		67.5	61.1	91	63.5	53.3	84	14	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		67.5	59.4	88	63.5	50.0	79*	17	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		67.5	48.9	72*	63.5	38.2	60*	25	75-131/28
100-41-4	Ethylbenzene	ND		67.5	64.4	95	63.5	48.5	76*	28	77-123/31
591-78-6	2-Hexanone	ND		337	226	67*	318	193	61*	16	72-133/26
74-83-9	Methyl Bromide	ND		67.5	58.8	87	63.5	59.3	93	1	65-139/31
74-87-3	Methyl Chloride	ND		67.5	36.4	54*	63.5	39.1	62*	7	71-144/27
75-09-2	Methylene Chloride	ND		67.5	55.3	82	63.5	49.9	79	10	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		337	219	65*	318	186	59*	16	76-132/26
100-42-5	Styrene	ND		67.5	61.7	91	63.5	46.9	74*	27	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		67.5	54.9	81	63.5	46.5	73	17	71-126/30
127-18-4	Tetrachloroethylene	1160	E	67.5	999	-239* [a]	63.5	1070	-142* [a]	7	79-130/31
108-88-3	Toluene	ND		67.5	60.7	90	63.5	49.9	79	20	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		67.5	60.2	89	63.5	55.1	87	9	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		67.5	59.6	88	63.5	51.0	80	16	74-124/28
79-01-6	Trichloroethylene	23.5		67.5	82.5	87	63.5	75.8	82	8	75-128/27
75-01-4	Vinyl Chloride	ND		67.5	42.1	62*	63.5	45.9	72*	9	76-141/27
1330-20-7	Xylene (total)	ND		202	191	94	191	143	75*	29	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77178
Account: UTC United Technologies Corporation
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-3MS	3C10961.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3MSD	3C10962.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3	3C10955.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77178-7, FA77178-10

CAS No.	Surrogate Recoveries	MS	MSD	FA77253-3	Limits
1868-53-7	Dibromofluoromethane	96%	97%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	86%	87%	89%	72-135%
2037-26-5	Toluene-D8	96%	95%	93%	75-126%
460-00-4	4-Bromofluorobenzene	96%	96%	93%	71-133%

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

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Raytheon Technologies

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60578249.01

SGS Job Number: FA77253

Sampling Date: 07/27/20

Report to:

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Total number of pages in report: **111**

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

Norm Farmer
Technical Director

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

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SGS North America Inc.

Sample Summary

Raytheon Technologies

Job No: FA77253

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60578249.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77253-1	07/27/20	11:50	MRRM	07/29/20	SO	Soil	DPT-123-7
FA77253-2	07/27/20	12:00	MRRM	07/29/20	SO	Soil	DPT-123-12
FA77253-3	07/27/20	12:10	MRRM	07/29/20	SO	Soil	DPT-123-18
FA77253-3D	07/27/20	12:10	MRRM	07/29/20	SO	Soil Dup/MSD	DPT-123-18
FA77253-3S	07/27/20	12:10	MRRM	07/29/20	SO	Soil Matrix Spike	DPT-123-18
FA77253-4	07/27/20	12:20	MRRM	07/29/20	SO	Soil	DPT-123-20
FA77253-5	07/27/20	12:40	MRRM	07/29/20	AQ	Ground Water	DPT-GW-123
FA77253-6	07/27/20	12:30	MRRM	07/29/20	SO	Soil	DPT-123-29
FA77253-7	07/27/20	14:00	MRRM	07/29/20	SO	Soil	DPT-117-9
FA77253-8	07/27/20	14:10	MRRM	07/29/20	SO	Soil	DPT-117-13
FA77253-9	07/27/20	14:20	MRRM	07/29/20	SO	Soil	DPT-117-17
FA77253-10	07/27/20	14:30	MRRM	07/29/20	SO	Soil	DPT-117-23

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Raytheon Technologies

Job No: FA77253

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60578249.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77253-11	07/27/20	14:35	MRRM	07/29/20	SO	Soil	DPT-117-27
FA77253-12	07/27/20	14:40	MRRM	07/29/20	AQ	Ground Water	DPT-GW-117
FA77253-13	07/27/20	17:00	MRRM	07/29/20	SO	Soil	DPT-105-9
FA77253-14	07/27/20	17:10	MRRM	07/29/20	SO	Soil	DPT-105-14
FA77253-15	07/27/20	17:20	MRRM	07/29/20	SO	Soil	DPT-105-16
FA77253-16	07/27/20	17:30	MRRM	07/29/20	SO	Soil	DPT-105-23
FA77253-17	07/27/20	17:40	MRRM	07/29/20	SO	Soil	DPT-105-30
FA77253-18	07/27/20	17:50	MRRM	07/29/20	SO	Soil	DPT-105-32
FA77253-19	07/27/20	17:45	MRRM	07/29/20	AQ	Ground Water	DPT-GW-105
FA77253-20	07/27/20	16:40	MRRM	07/29/20	AQ	Equipment Blank	EB-SO-03
FA77253-21	07/27/20	19:50	MRRM	07/29/20	AQ	Ground Water	DPT-GW-102
FA77253-22	07/27/20	19:40	MRRM	07/29/20	SO	Soil	DPT-102-28
FA77253-23	07/27/20	19:00	MRRM	07/29/20	SO	Soil	DPT-102-9

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Raytheon Technologies

Job No: FA77253

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60578249.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77253-24	07/27/20	19:05	MRRM	07/29/20	SO	Soil	DPT-102-12
FA77253-25	07/27/20	19:15	MRRM	07/29/20	SO	Soil	DPT-102-16
FA77253-26	07/27/20	19:30	MRRM	07/29/20	SO	Soil	DPT-102-24
FA77253-27	07/27/20	20:50	MRRM	07/29/20	SO	Soil	IDW-01
FA77253-27L	07/27/20	20:50	MRRM	07/29/20	SO	Soil	IDW-01
FA77253-28	07/27/20	20:55	MRRM	07/29/20	SO	Soil	IDW-02
FA77253-28L	07/27/20	20:55	MRRM	07/29/20	SO	Soil	IDW-02
FA77253-29	07/27/20	21:00	MRRM	07/29/20	AQ	Ground Water	IDW-03
FA77253-29L	07/27/20	21:00	MRRM	07/29/20	AQ	Ground Water	IDW-03
FA77253-30	07/27/20	21:05	MRRM	07/29/20	AQ	Ground Water	IDW-04
FA77253-30L	07/27/20	21:05	MRRM	07/29/20	AQ	Ground Water	IDW-04
FA77253-31	07/27/20	21:10	MRRM	07/29/20	AQ	Ground Water	IDW-05
FA77253-31L	07/27/20	21:10	MRRM	07/29/20	AQ	Ground Water	IDW-05

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Raytheon Technologies

Job No: FA77253

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60578249.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77253-32	07/27/20	00:00	MRRM	07/29/20	SO	Trip Blank Soil	TRIP BLANK
FA77253-33	07/27/20	00:00	MRRM	07/29/20	AQ	Trip Blank Water	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Raytheon Technologies **Job No:** FA77253

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC **Report Date** 8/19/2020 1:16:31

28 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 07/27/2020 and were received at SGS North America Inc - Orlando on 07/29/2020 properly preserved, at 4.4 Deg. C and intact. These Samples received an SGS Orlando job number of FA77253. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1A1206

All samples were analyzed within the recommended method holding time.

Sample(s) FA77172-2MS, FA77172-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for Methyl Bromide are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Methyl Bromide are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Methyl Bromide are outside control limits for sample FA77172-2MSD. Probable cause is due to sample non-homogeneity.

FA77253-5 for Methyl Bromide: Associated CCV outside of control limits low.

FA77253-5: Sample was not preserved to a pH < 2.

FA77253-12 for Methyl Bromide: Associated CCV outside of control limits low.

FA77253-12: Sample was not preserved to a pH < 2.

FA77253-19 for Methyl Bromide: Associated CCV outside of control limits low.

FA77253-19: Sample was not preserved to a pH < 2.

FA77253-20 for Methyl Bromide: Associated CCV outside of control limits low.

FA77253-20: Sample was not preserved to a pH < 2.

FA77253-21 for Methyl Bromide: Associated CCV outside of control limits low.

FA77253-21: Sample was not preserved to a pH < 2.

Matrix: AQ **Batch ID:** V1A1207

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77253-21MS, FA77253-21MSD were used as the QC samples indicated.

FA77253-21: Sample was not preserved to a pH < 2.

Matrix: AQ **Batch ID:** VP2905

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

FA77253-33: Sample was not preserved to a pH < 2.

Matrix: SO **Batch ID:** V3C455

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77178-1MS, FA77178-1MSD were used as the QC samples indicated.

FA77253-16 for Acetone: Associated CCV outside of control limits low.

FA77253-16 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-16 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-17 for Acetone: Associated CCV outside of control limits low.

FA77253-17 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-17 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-18 for Acetone: Associated CCV outside of control limits low.

FA77253-18 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-18 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-22 for Acetone: Associated CCV outside of control limits low.

FA77253-22 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-22 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-23 for Acetone: Associated CCV outside of control limits low.

FA77253-23 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-23 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-24 for Acetone: Associated CCV outside of control limits low.

FA77253-24 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-24 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-25 for Acetone: Associated CCV outside of control limits low.

FA77253-25 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-25 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-26 for Acetone: Associated CCV outside of control limits low.

FA77253-26 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-26 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

FA77253-32 for Acetone: Associated CCV outside of control limits low.

FA77253-32 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-32 for Methyl Bromide: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** V3C456

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77253-3MS, FA77253-3MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,1-Dichloroethylene, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Carbon Disulfide, Methyl Chloride, trans-1,3-Dichloropropene, Vinyl Chloride, Tetrachloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Bromoform, Carbon Disulfide, Chlorobenzene, cis-1,3-Dichloropropene, Ethylbenzene, Methyl Chloride, Styrene, Tetrachloroethylene, trans-1,3-Dichloropropene, Vinyl Chloride, Xylene (total) are outside control limits. Probable cause is due to matrix interference.

FA77253-1 for Acetone: Associated CCV outside of control limits low.

FA77253-2 for Acetone: Associated CCV outside of control limits low.

FA77253-3 for Acetone: Associated CCV outside of control limits low.

FA77253-4 for Acetone: Associated CCV outside of control limits low.

FA77253-6 for Acetone: Associated CCV outside of control limits low.

FA77253-8 for Acetone: Associated CCV outside of control limits low.

FA77253-9 for Acetone: Associated CCV outside of control limits low.

Matrix: SO **Batch ID:** V3C457

All samples were analyzed within the recommended method holding time.

Sample(s) FA77253-13MS, FA77253-13MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for Bromoform are outside control limits. Probable cause is due to matrix interference.

FA77253-7 for Acetone: Associated CCV outside of control limits low.

FA77253-7 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-10 for Acetone: Associated CCV outside of control limits low.

FA77253-10 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-11 for Acetone: Associated CCV outside of control limits low.

FA77253-11 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-13 for Acetone: Associated CCV outside of control limits low.

FA77253-13 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-14 for Acetone: Associated CCV outside of control limits low.

FA77253-14 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

FA77253-15 for Acetone: Associated CCV outside of control limits low.

FA77253-15 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85795

Sample(s) FA77253-16DUP, FA77253-3DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN85816

Sample(s) FA77351-1DUP were used as the QC samples for Solids, Percent.

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

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA77253
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/27/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77253-1	**DPT-123-7**					
No hits reported in this sample.						
FA77253-2	**DPT-123-12**					
cis-1,2-Dichloroethylene		7.3	4.1	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		121	4.1	1.1	ug/kg	SW846 8260D
Trichloroethylene		3.7 J	4.1	0.83	ug/kg	SW846 8260D
FA77253-3	**DPT-123-18**					
cis-1,2-Dichloroethylene		167	6.2	1.7	ug/kg	SW846 8260D
Tetrachloroethylene		2340	550	140	ug/kg	SW846 8260D
Trichloroethylene		23.5	6.2	1.2	ug/kg	SW846 8260D
FA77253-4	**DPT-123-20**					
1,1-Dichloroethylene		8.0	6.0	1.2	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		2510	590	160	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		10.3	6.0	1.2	ug/kg	SW846 8260D
Tetrachloroethylene		4250	590	150	ug/kg	SW846 8260D
Trichloroethylene		154	6.0	1.2	ug/kg	SW846 8260D
Vinyl Chloride		2.1 J	6.0	1.2	ug/kg	SW846 8260D
FA77253-5	**DPT-GW-123**					
cis-1,2-Dichloroethylene [a]		1100	50	14	ug/l	SW846 8260D
Tetrachloroethylene [a]		3570	50	11	ug/l	SW846 8260D
Trichloroethylene [a]		122	50	17	ug/l	SW846 8260D
FA77253-6	**DPT-123-29**					
1,1-Dichloroethylene		1.6 J	3.4	0.68	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		44.6	3.4	0.94	ug/kg	SW846 8260D
Tetrachloroethylene		398	280	70	ug/kg	SW846 8260D
Trichloroethylene		12.6	3.4	0.68	ug/kg	SW846 8260D
FA77253-7	**DPT-117-9**					
No hits reported in this sample.						
FA77253-8	**DPT-117-13**					
cis-1,2-Dichloroethylene		4.6	4.2	1.2	ug/kg	SW846 8260D

Summary of Hits

Job Number: FA77253
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/27/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Tetrachloroethylene		51.2	4.2	1.1	ug/kg	SW846 8260D
Trichloroethylene		2.1 J	4.2	0.84	ug/kg	SW846 8260D
FA77253-9	**DPT-117-17**					
cis-1,2-Dichloroethylene		10.3	4.6	1.3	ug/kg	SW846 8260D
Tetrachloroethylene		798	400	100	ug/kg	SW846 8260D
Trichloroethylene		7.1	4.6	0.92	ug/kg	SW846 8260D
FA77253-10	**DPT-117-23**					
cis-1,2-Dichloroethylene		183 J	280	77	ug/kg	SW846 8260D
Tetrachloroethylene		314	280	72	ug/kg	SW846 8260D
Trichloroethylene		27.9	3.8	0.75	ug/kg	SW846 8260D
FA77253-11	**DPT-117-27**					
1,1-Dichloroethylene		3.5	2.6	0.53	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		1430	220	62	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		0.54 J	2.6	0.53	ug/kg	SW846 8260D
Tetrachloroethylene		12.4	2.6	0.68	ug/kg	SW846 8260D
Trichloroethylene		0.71 J	2.6	0.53	ug/kg	SW846 8260D
Vinyl Chloride		1.2 J	2.6	0.53	ug/kg	SW846 8260D
FA77253-12	**DPT-GW-117**					
cis-1,2-Dichloroethylene [a]		3830	50	14	ug/l	SW846 8260D
Tetrachloroethylene [a]		66.6	50	11	ug/l	SW846 8260D
FA77253-13	**DPT-105-9**					
No hits reported in this sample.						
FA77253-14	**DPT-105-14**					
cis-1,2-Dichloroethylene		32.7	3.2	0.87	ug/kg	SW846 8260D
Tetrachloroethylene		104	3.2	0.81	ug/kg	SW846 8260D
1,1,1-Trichloroethane		1.1 J	3.2	0.63	ug/kg	SW846 8260D
Trichloroethylene		34.6	3.2	0.63	ug/kg	SW846 8260D
FA77253-15	**DPT-105-16**					
1,1-Dichloroethylene		1.3 J	3.9	0.79	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		23.3	3.9	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		2630	280	71	ug/kg	SW846 8260D

Summary of Hits

Job Number: FA77253
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/27/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1,1-Trichloroethane		2.7 J	3.9	0.79	ug/kg	SW846 8260D
Trichloroethylene		18.8	3.9	0.79	ug/kg	SW846 8260D
FA77253-16	**DPT-105-23**					
1,1-Dichloroethylene		5.7	4.0	0.80	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		258 J	350	97	ug/kg	SW846 8260D
Tetrachloroethylene		4740	350	90	ug/kg	SW846 8260D
1,1,1-Trichloroethane		3.7 J	4.0	0.80	ug/kg	SW846 8260D
Trichloroethylene		118	4.0	0.80	ug/kg	SW846 8260D
FA77253-17	**DPT-105-30**					
1,1-Dichloroethylene		7.1	3.1	0.62	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		48.3	3.1	0.85	ug/kg	SW846 8260D
Tetrachloroethylene		3420	240	62	ug/kg	SW846 8260D
1,1,1-Trichloroethane		12.4	3.1	0.62	ug/kg	SW846 8260D
Trichloroethylene		40.8	3.1	0.62	ug/kg	SW846 8260D
FA77253-18	**DPT-105-32**					
1,1-Dichloroethylene		9.5	5.3	1.1	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		52.8	5.3	1.5	ug/kg	SW846 8260D
Tetrachloroethylene		3090	420	110	ug/kg	SW846 8260D
1,1,1-Trichloroethane		6.3	5.3	1.1	ug/kg	SW846 8260D
Trichloroethylene		38.2	5.3	1.1	ug/kg	SW846 8260D
FA77253-19	**DPT-GW-105**					
1,1-Dichloroethylene [a]		19.7 J	25	8.1	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		61.5	25	6.9	ug/l	SW846 8260D
Tetrachloroethylene [a]		1850	25	5.4	ug/l	SW846 8260D
Trichloroethylene [a]		38.7	25	8.6	ug/l	SW846 8260D
FA77253-20	**EB-SO-03**					
No hits reported in this sample.						
FA77253-21	**DPT-GW-102**					
1,1-Dichloroethylene [a]		59.9	50	16	ug/l	SW846 8260D
Tetrachloroethylene [a]		25800	500	110	ug/l	SW846 8260D
1,1,1-Trichloroethane [a]		138	50	12	ug/l	SW846 8260D

Summary of Hits

Job Number: FA77253
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/27/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77253-22	**DPT-102-28**					
1,1-Dichloroethylene		32.3	2.9	0.58	ug/kg	SW846 8260D
Tetrachloroethylene		2390	910	230	ug/kg	SW846 8260D
1,1,1-Trichloroethane		45.8	2.9	0.58	ug/kg	SW846 8260D
Trichloroethylene		1.1 J	2.9	0.58	ug/kg	SW846 8260D
FA77253-23	**DPT-102-9**					
Tetrachloroethylene		973000	70000	18000	ug/kg	SW846 8260D
1,1,1-Trichloroethane		181 J	350	70	ug/kg	SW846 8260D
Trichloroethylene		163 J	350	70	ug/kg	SW846 8260D
FA77253-24	**DPT-102-12**					
Ethylbenzene		210 J	310	62	ug/kg	SW846 8260D
Tetrachloroethylene		587000	62000	16000	ug/kg	SW846 8260D
1,1,1-Trichloroethane		711	310	62	ug/kg	SW846 8260D
Trichloroethylene		284 J	310	62	ug/kg	SW846 8260D
Xylene (total)		2520	940	130	ug/kg	SW846 8260D
FA77253-25	**DPT-102-16**					
1,1-Dichloroethylene		9.9	3.7	0.74	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		2.0 J	3.7	1.0	ug/kg	SW846 8260D
Tetrachloroethylene		3900	460	120	ug/kg	SW846 8260D
1,1,1-Trichloroethane		17.7	3.7	0.74	ug/kg	SW846 8260D
Trichloroethylene		3.2 J	3.7	0.74	ug/kg	SW846 8260D
FA77253-26	**DPT-102-24**					
1,1-Dichloroethylene		26.6	4.1	0.81	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		2.5 J	4.1	1.1	ug/kg	SW846 8260D
Tetrachloroethylene		1290	410	110	ug/kg	SW846 8260D
Trichloroethylene		0.99 J	4.1	0.81	ug/kg	SW846 8260D
FA77253-27	**IDW-01**					
No hits reported in this sample.						
FA77253-28	**IDW-02**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA77253
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 07/27/20

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

FA77253-32 TRIP BLANK

No hits reported in this sample.

FA77253-33 TRIP BLANK

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:	DPT-123-7		
Lab Sample ID:	FA77253-1	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	74.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10953.D	1	07/31/20 18:57	SP	n/a	n/a	V3C456
Run #2							

	Initial Weight	Final Volume
Run #1	7.22 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	190	94	ug/kg	
71-43-2	Benzene	ND	4.7	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.94	ug/kg	
75-25-2	Bromoform	ND	4.7	0.94	ug/kg	
78-93-3	2-Butanone (MEK)	ND	23	6.8	ug/kg	
75-15-0	Carbon Disulfide	ND	4.7	0.94	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.7	0.95	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.94	ug/kg	
75-00-3	Chloroethane	ND	4.7	1.9	ug/kg	
67-66-3	Chloroform	ND	4.7	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.94	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.7	0.94	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.7	0.94	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.7	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.7	0.94	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.94	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.94	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.94	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	0.94	ug/kg	
591-78-6	2-Hexanone	ND	23	7.0	ug/kg	
74-83-9	Methyl Bromide	ND	4.7	1.9	ug/kg	
74-87-3	Methyl Chloride	ND	4.7	1.9	ug/kg	
75-09-2	Methylene Chloride	ND	19	10	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	23	7.0	ug/kg	
100-42-5	Styrene	ND	4.7	0.94	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.94	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.7	1.2	ug/kg	
108-88-3	Toluene	ND	19	9.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.94	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.94	ug/kg	
79-01-6	Trichloroethylene	ND	4.7	0.94	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-123-7		
Lab Sample ID:	FA77253-1	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	74.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.7	0.94	ug/kg	
1330-20-7	Xylene (total)	ND	14	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		75-124%
17060-07-0	1,2-Dichloroethane-D4	93%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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: DPT-123-12
Lab Sample ID: FA77253-2
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/27/20
Date Received: 07/29/20
Percent Solids: 71.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10954.D	1	07/31/20 19:23	SP	n/a	n/a	V3C456
Run #2							

	Initial Weight	Final Volume
Run #1	8.38 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	170	83	ug/kg	
71-43-2	Benzene	ND	4.1	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	4.1	0.83	ug/kg	
75-25-2	Bromoform	ND	4.1	0.83	ug/kg	
78-93-3	2-Butanone (MEK)	ND	21	6.0	ug/kg	
75-15-0	Carbon Disulfide	ND	4.1	0.83	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.1	0.85	ug/kg	
108-90-7	Chlorobenzene	ND	4.1	0.83	ug/kg	
75-00-3	Chloroethane	ND	4.1	1.7	ug/kg	
67-66-3	Chloroform	ND	4.1	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.1	0.83	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.1	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.1	0.83	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.1	0.83	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	7.3	4.1	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.1	0.83	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.1	0.83	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.1	0.83	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.1	0.83	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	0.83	ug/kg	
591-78-6	2-Hexanone	ND	21	6.2	ug/kg	
74-83-9	Methyl Bromide	ND	4.1	1.7	ug/kg	
74-87-3	Methyl Chloride	ND	4.1	1.7	ug/kg	
75-09-2	Methylene Chloride	ND	17	9.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	21	6.2	ug/kg	
100-42-5	Styrene	ND	4.1	0.83	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.1	0.83	ug/kg	
127-18-4	Tetrachloroethylene	121	4.1	1.1	ug/kg	
108-88-3	Toluene	ND	17	8.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.1	0.83	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.1	0.83	ug/kg	
79-01-6	Trichloroethylene	3.7	4.1	0.83	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-123-12		
Lab Sample ID:	FA77253-2	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	71.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.1	0.83	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		75-124%
17060-07-0	1,2-Dichloroethane-D4	92%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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: DPT-123-18
Lab Sample ID: FA77253-3
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/27/20
Date Received: 07/29/20
Percent Solids: 50.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10955.D	1	07/31/20 19:49	SP	n/a	n/a	V3C456
Run #2	3C10977.D	1	08/03/20 15:49	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.91 g	5.0 ml	
Run #2	8.12 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	250	120	ug/kg	
71-43-2	Benzene	ND	6.2	1.5	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	1.2	ug/kg	
75-25-2	Bromoform	ND	6.2	1.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	31	9.1	ug/kg	
75-15-0	Carbon Disulfide	ND	6.2	1.2	ug/kg	
56-23-5	Carbon Tetrachloride	ND	6.2	1.3	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	1.2	ug/kg	
75-00-3	Chloroethane	ND	6.2	2.5	ug/kg	
67-66-3	Chloroform	ND	6.2	1.7	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	2.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.2	1.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.2	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	167	6.2	1.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.2	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.2	1.2	ug/kg	
591-78-6	2-Hexanone	ND	31	9.4	ug/kg	
74-83-9	Methyl Bromide	ND	6.2	2.5	ug/kg	
74-87-3	Methyl Chloride	ND	6.2	2.5	ug/kg	
75-09-2	Methylene Chloride	ND	25	14	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	31	9.4	ug/kg	
100-42-5	Styrene	ND	6.2	1.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	1.2	ug/kg	
127-18-4	Tetrachloroethylene	2340 [b]	550	140	ug/kg	
108-88-3	Toluene	ND	25	12	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	1.2	ug/kg	
79-01-6	Trichloroethylene	23.5	6.2	1.2	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-123-18		
Lab Sample ID:	FA77253-3	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	50.7
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	6.2	1.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	2.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	89%	97%	72-135%
2037-26-5	Toluene-D8	93%	92%	75-126%
460-00-4	4-Bromofluorobenzene	93%	91%	71-133%

(a) Associated CCV outside of control limits low.
(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:	DPT-123-20		
Lab Sample ID:	FA77253-4	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	47.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10956.D	1	07/31/20 20:15	SP	n/a	n/a	V3C456
Run #2	3C10978.D	1	08/03/20 16:15	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.70 g	5.0 ml	
Run #2	8.34 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	240	120	ug/kg	
71-43-2	Benzene	ND	6.0	1.5	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	1.2	ug/kg	
75-25-2	Bromoform	ND	6.0	1.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	30	8.7	ug/kg	
75-15-0	Carbon Disulfide	ND	6.0	1.2	ug/kg	
56-23-5	Carbon Tetrachloride	ND	6.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	1.2	ug/kg	
75-00-3	Chloroethane	ND	6.0	2.4	ug/kg	
67-66-3	Chloroform	ND	6.0	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	2.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	1.2	ug/kg	
75-35-4	1,1-Dichloroethylene	8.0	6.0	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	2510 [b]	590	160	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	10.3	6.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	1.2	ug/kg	
591-78-6	2-Hexanone	ND	30	9.0	ug/kg	
74-83-9	Methyl Bromide	ND	6.0	2.4	ug/kg	
74-87-3	Methyl Chloride	ND	6.0	2.4	ug/kg	
75-09-2	Methylene Chloride	ND	24	13	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	30	9.0	ug/kg	
100-42-5	Styrene	ND	6.0	1.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	1.2	ug/kg	
127-18-4	Tetrachloroethylene	4250 [b]	590	150	ug/kg	
108-88-3	Toluene	ND	24	12	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	1.2	ug/kg	
79-01-6	Trichloroethylene	154	6.0	1.2	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-123-20		
Lab Sample ID:	FA77253-4	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	47.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	2.1	6.0	1.2	ug/kg	J
1330-20-7	Xylene (total)	ND	18	2.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	85%	94%	72-135%
2037-26-5	Toluene-D8	94%	93%	75-126%
460-00-4	4-Bromofluorobenzene	92%	91%	71-133%

(a) Associated CCV outside of control limits low.
(b) Result is from Run# 2

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:	DPT-GW-123		
Lab Sample ID:	FA77253-5	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29388.D	50	07/31/20 18:06	CV	n/a	n/a	V1A1206
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	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1100	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	100	29	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	3570	50	11	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	
79-01-6	Trichloroethylene	122	50	17	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:	DPT-GW-123		
Lab Sample ID:	FA77253-5	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**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	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	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	93%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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: DPT-123-29
Lab Sample ID: FA77253-6
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/27/20
Date Received: 07/29/20
Percent Solids: 76.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10957.D	1	07/31/20 20:41	SP	n/a	n/a	V3C456
Run #2	3C10979.D	1	08/03/20 16:41	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.62 g	5.0 ml	
Run #2	8.29 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	140	68	ug/kg	
71-43-2	Benzene	ND	3.4	0.83	ug/kg	
75-27-4	Bromodichloromethane	ND	3.4	0.68	ug/kg	
75-25-2	Bromoform	ND	3.4	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	5.0	ug/kg	
75-15-0	Carbon Disulfide	ND	3.4	0.68	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.4	0.69	ug/kg	
108-90-7	Chlorobenzene	ND	3.4	0.68	ug/kg	
75-00-3	Chloroethane	ND	3.4	1.4	ug/kg	
67-66-3	Chloroform	ND	3.4	0.91	ug/kg	
124-48-1	Dibromochloromethane	ND	3.4	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.4	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.4	0.68	ug/kg	
75-35-4	1,1-Dichloroethylene	1.6	3.4	0.68	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	44.6	3.4	0.94	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.4	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.4	0.68	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
100-41-4	Ethylbenzene	ND	3.4	0.68	ug/kg	
591-78-6	2-Hexanone	ND	17	5.1	ug/kg	
74-83-9	Methyl Bromide	ND	3.4	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.4	1.4	ug/kg	
75-09-2	Methylene Chloride	ND	14	7.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.1	ug/kg	
100-42-5	Styrene	ND	3.4	0.68	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.68	ug/kg	
127-18-4	Tetrachloroethylene	398 [b]	280	70	ug/kg	
108-88-3	Toluene	ND	14	6.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.4	0.68	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.4	0.68	ug/kg	
79-01-6	Trichloroethylene	12.6	3.4	0.68	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-123-29		
Lab Sample ID:	FA77253-6	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	76.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.4	0.68	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	92%	98%	72-135%
2037-26-5	Toluene-D8	91%	93%	75-126%
460-00-4	4-Bromofluorobenzene	92%	90%	71-133%

(a) Associated CCV outside of control limits low.
(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: DPT-117-9
Lab Sample ID: FA77253-7
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/27/20
Date Received: 07/29/20
Percent Solids: 78.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10980.D	1	08/03/20 17:07	SP	n/a	n/a	V3C457
Run #2							

	Initial Weight	Final Volume
Run #1	8.91 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	140	72	ug/kg	
71-43-2	Benzene	ND	3.6	0.88	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.72	ug/kg	
75-25-2	Bromoform	ND	3.6	0.72	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.2	ug/kg	
75-15-0	Carbon Disulfide	ND	3.6	0.72	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.6	0.73	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.72	ug/kg	
75-00-3	Chloroethane [b]	ND	3.6	1.4	ug/kg	
67-66-3	Chloroform	ND	3.6	0.96	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.72	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.99	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.72	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.72	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.72	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.72	ug/kg	
100-41-4	Ethylbenzene	ND	3.6	0.72	ug/kg	
591-78-6	2-Hexanone	ND	18	5.4	ug/kg	
74-83-9	Methyl Bromide	ND	3.6	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.6	1.4	ug/kg	
75-09-2	Methylene Chloride	ND	14	7.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.4	ug/kg	
100-42-5	Styrene	ND	3.6	0.72	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.72	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.6	0.92	ug/kg	
108-88-3	Toluene	ND	14	7.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.72	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.72	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.72	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-117-9		
Lab Sample ID:	FA77253-7	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	78.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.6	0.72	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		75-124%
17060-07-0	1,2-Dichloroethane-D4	97%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-117-13		
Lab Sample ID:	FA77253-8	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	80.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10959.D	1	07/31/20 21:33	SP	n/a	n/a	V3C456
Run #2							

	Initial Weight	Final Volume
Run #1	7.38 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	170	84	ug/kg	
71-43-2	Benzene	ND	4.2	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	4.2	0.84	ug/kg	
75-25-2	Bromoform	ND	4.2	0.84	ug/kg	
78-93-3	2-Butanone (MEK)	ND	21	6.1	ug/kg	
75-15-0	Carbon Disulfide	ND	4.2	0.84	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.2	0.86	ug/kg	
108-90-7	Chlorobenzene	ND	4.2	0.84	ug/kg	
75-00-3	Chloroethane	ND	4.2	1.7	ug/kg	
67-66-3	Chloroform	ND	4.2	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.2	0.84	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.2	1.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.2	0.84	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.2	0.84	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	4.6	4.2	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.2	0.84	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.2	0.84	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	0.84	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	0.84	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	0.84	ug/kg	
591-78-6	2-Hexanone	ND	21	6.3	ug/kg	
74-83-9	Methyl Bromide	ND	4.2	1.7	ug/kg	
74-87-3	Methyl Chloride	ND	4.2	1.7	ug/kg	
75-09-2	Methylene Chloride	ND	17	9.3	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	21	6.3	ug/kg	
100-42-5	Styrene	ND	4.2	0.84	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	0.84	ug/kg	
127-18-4	Tetrachloroethylene	51.2	4.2	1.1	ug/kg	
108-88-3	Toluene	ND	17	8.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.2	0.84	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.2	0.84	ug/kg	
79-01-6	Trichloroethylene	2.1	4.2	0.84	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-117-13		
Lab Sample ID:	FA77253-8	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	80.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.2	0.84	ug/kg	
1330-20-7	Xylene (total)	ND	13	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		75-124%
17060-07-0	1,2-Dichloroethane-D4	93%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-117-17		
Lab Sample ID:	FA77253-9	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	61.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10960.D	1	07/31/20 22:00	SP	n/a	n/a	V3C456
Run #2	3C10981.D	1	08/03/20 17:33	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.77 g	5.0 ml	
Run #2	8.20 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	180	92	ug/kg	
71-43-2	Benzene	ND	4.6	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	4.6	0.92	ug/kg	
75-25-2	Bromoform	ND	4.6	0.92	ug/kg	
78-93-3	2-Butanone (MEK)	ND	23	6.7	ug/kg	
75-15-0	Carbon Disulfide	ND	4.6	0.92	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.6	0.94	ug/kg	
108-90-7	Chlorobenzene	ND	4.6	0.92	ug/kg	
75-00-3	Chloroethane	ND	4.6	1.8	ug/kg	
67-66-3	Chloroform	ND	4.6	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	4.6	0.92	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.6	1.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.6	0.92	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.6	0.92	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	10.3	4.6	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.6	0.92	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.6	0.92	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.6	0.92	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.6	0.92	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	0.92	ug/kg	
591-78-6	2-Hexanone	ND	23	6.9	ug/kg	
74-83-9	Methyl Bromide	ND	4.6	1.8	ug/kg	
74-87-3	Methyl Chloride	ND	4.6	1.8	ug/kg	
75-09-2	Methylene Chloride	ND	18	10	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	23	6.9	ug/kg	
100-42-5	Styrene	ND	4.6	0.92	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.6	0.92	ug/kg	
127-18-4	Tetrachloroethylene	798 [b]	400	100	ug/kg	
108-88-3	Toluene	ND	18	9.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.6	0.92	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.6	0.92	ug/kg	
79-01-6	Trichloroethylene	7.1	4.6	0.92	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-117-17		
Lab Sample ID:	FA77253-9	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	61.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.6	0.92	ug/kg	
1330-20-7	Xylene (total)	ND	14	1.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	90%	96%	72-135%
2037-26-5	Toluene-D8	93%	93%	75-126%
460-00-4	4-Bromofluorobenzene	93%	90%	71-133%

(a) Associated CCV outside of control limits low.
(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:	DPT-117-23		
Lab Sample ID:	FA77253-10	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	71.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10971.D	1	08/03/20 13:13	SP	n/a	n/a	V3C457
Run #2	3C10987.D	1	08/03/20 20:10	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.27 g	5.0 ml	
Run #2	9.54 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	150	75	ug/kg	
71-43-2	Benzene	ND	3.8	0.92	ug/kg	
75-27-4	Bromodichloromethane	ND	3.8	0.75	ug/kg	
75-25-2	Bromoform	ND	3.8	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	5.5	ug/kg	
75-15-0	Carbon Disulfide	ND	3.8	0.75	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.8	0.77	ug/kg	
108-90-7	Chlorobenzene	ND	3.8	0.75	ug/kg	
75-00-3	Chloroethane [b]	ND	3.8	1.5	ug/kg	
67-66-3	Chloroform	ND	3.8	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	3.8	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.8	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.8	0.75	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.8	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	183 [c]	280	77	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	3.8	0.75	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.8	0.75	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.8	0.75	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.8	0.75	ug/kg	
100-41-4	Ethylbenzene	ND	3.8	0.75	ug/kg	
591-78-6	2-Hexanone	ND	19	5.6	ug/kg	
74-83-9	Methyl Bromide	ND	3.8	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.8	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.3	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	19	5.6	ug/kg	
100-42-5	Styrene	ND	3.8	0.75	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	0.75	ug/kg	
127-18-4	Tetrachloroethylene	314 [c]	280	72	ug/kg	
108-88-3	Toluene	ND	15	7.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.8	0.75	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.8	0.75	ug/kg	
79-01-6	Trichloroethylene	27.9	3.8	0.75	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-117-23		
Lab Sample ID:	FA77253-10	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	71.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.8	0.75	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	87%	97%	72-135%
2037-26-5	Toluene-D8	95%	92%	75-126%
460-00-4	4-Bromofluorobenzene	92%	91%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-117-27		
Lab Sample ID:	FA77253-11	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	79.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10972.D	1	08/03/20 13:39	SP	n/a	n/a	V3C457
Run #2	3C10988.D	1	08/03/20 20:37	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.8 g	5.0 ml	
Run #2	9.76 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	110	53	ug/kg	
71-43-2	Benzene	ND	2.6	0.65	ug/kg	
75-27-4	Bromodichloromethane	ND	2.6	0.53	ug/kg	
75-25-2	Bromoform	ND	2.6	0.53	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.8	ug/kg	
75-15-0	Carbon Disulfide	ND	2.6	0.53	ug/kg	
56-23-5	Carbon Tetrachloride	ND	2.6	0.54	ug/kg	
108-90-7	Chlorobenzene	ND	2.6	0.53	ug/kg	
75-00-3	Chloroethane [b]	ND	2.6	1.1	ug/kg	
67-66-3	Chloroform	ND	2.6	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.6	0.53	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.6	0.94	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.6	0.53	ug/kg	
75-35-4	1,1-Dichloroethylene	3.5	2.6	0.53	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	1430 [c]	220	62	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	0.54	2.6	0.53	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	2.6	0.53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.6	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.6	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	2.6	0.53	ug/kg	
591-78-6	2-Hexanone	ND	13	4.0	ug/kg	
74-83-9	Methyl Bromide	ND	2.6	1.1	ug/kg	
74-87-3	Methyl Chloride	ND	2.6	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	11	5.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	13	4.0	ug/kg	
100-42-5	Styrene	ND	2.6	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	0.53	ug/kg	
127-18-4	Tetrachloroethylene	12.4	2.6	0.68	ug/kg	
108-88-3	Toluene	ND	11	5.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.6	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.6	0.53	ug/kg	
79-01-6	Trichloroethylene	0.71	2.6	0.53	ug/kg	J

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

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

Report of Analysis

Client Sample ID:	DPT-117-27		
Lab Sample ID:	FA77253-11	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	79.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	1.2	2.6	0.53	ug/kg	J
1330-20-7	Xylene (total)	ND	7.9	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	95%	75-124%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	72-135%
2037-26-5	Toluene-D8	94%	92%	75-126%
460-00-4	4-Bromofluorobenzene	90%	90%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-GW-117		
Lab Sample ID:	FA77253-12	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29389.D	50	07/31/20 18:32	CV	n/a	n/a	V1A1206
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	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3830	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	100	29	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	66.6	50	11	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	
79-01-6	Trichloroethylene	ND	50	17	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:	DPT-GW-117		
Lab Sample ID:	FA77253-12	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**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	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	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	95%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-9		
Lab Sample ID:	FA77253-13	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	86.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10989.D	1	08/03/20 21:03	SP	n/a	n/a	V3C457
Run #2							

	Initial Weight	Final Volume
Run #1	8.84 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	65	ug/kg	
71-43-2	Benzene	ND	3.3	0.79	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.65	ug/kg	
75-25-2	Bromoform	ND	3.3	0.65	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.65	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.65	ug/kg	
75-00-3	Chloroethane [b]	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.87	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.65	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.65	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.3	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.65	ug/kg	
591-78-6	2-Hexanone	ND	16	4.9	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.9	ug/kg	
100-42-5	Styrene	ND	3.3	0.65	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.65	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.3	0.83	ug/kg	
108-88-3	Toluene	ND	13	6.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.65	ug/kg	
79-01-6	Trichloroethylene	ND	3.3	0.65	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-9		
Lab Sample ID:	FA77253-13	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	86.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.3	0.65	ug/kg	
1330-20-7	Xylene (total)	ND	9.8	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		75-124%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%
2037-26-5	Toluene-D8	92%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-105-14		
Lab Sample ID:	FA77253-14	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	84.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10974.D	1	08/03/20 14:31	SP	n/a	n/a	V3C457
Run #2							

	Initial Weight	Final Volume
Run #1	9.42 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	63	ug/kg	
71-43-2	Benzene	ND	3.2	0.77	ug/kg	
75-27-4	Bromodichloromethane	ND	3.2	0.63	ug/kg	
75-25-2	Bromoform	ND	3.2	0.63	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.6	ug/kg	
75-15-0	Carbon Disulfide	ND	3.2	0.63	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.2	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	3.2	0.63	ug/kg	
75-00-3	Chloroethane [b]	ND	3.2	1.3	ug/kg	
67-66-3	Chloroform	ND	3.2	0.84	ug/kg	
124-48-1	Dibromochloromethane	ND	3.2	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.2	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.2	0.63	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.2	0.63	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	32.7	3.2	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.2	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.2	0.63	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	0.63	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	0.63	ug/kg	
100-41-4	Ethylbenzene	ND	3.2	0.63	ug/kg	
591-78-6	2-Hexanone	ND	16	4.7	ug/kg	
74-83-9	Methyl Bromide	ND	3.2	1.3	ug/kg	
74-87-3	Methyl Chloride	ND	3.2	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	13	6.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.7	ug/kg	
100-42-5	Styrene	ND	3.2	0.63	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	0.63	ug/kg	
127-18-4	Tetrachloroethylene	104	3.2	0.81	ug/kg	
108-88-3	Toluene	ND	13	6.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	1.1	3.2	0.63	ug/kg	J
79-00-5	1,1,2-Trichloroethane	ND	3.2	0.63	ug/kg	
79-01-6	Trichloroethylene	34.6	3.2	0.63	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-14		
Lab Sample ID:	FA77253-14	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	84.2
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.2	0.63	ug/kg	
1330-20-7	Xylene (total)	ND	9.5	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		75-124%
17060-07-0	1,2-Dichloroethane-D4	94%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	DPT-105-16		
Lab Sample ID:	FA77253-15	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	72.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10975.D	1	08/03/20 14:57	SP	n/a	n/a	V3C457
Run #2	3C10990.D	1	08/03/20 21:29	SP	n/a	n/a	V3C457

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.83 g	5.0 ml	
Run #2	9.50 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	160	79	ug/kg	
71-43-2	Benzene	ND	3.9	0.96	ug/kg	
75-27-4	Bromodichloromethane	ND	3.9	0.79	ug/kg	
75-25-2	Bromoform	ND	3.9	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.9	0.79	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.9	0.80	ug/kg	
108-90-7	Chlorobenzene	ND	3.9	0.79	ug/kg	
75-00-3	Chloroethane [b]	ND	3.9	1.6	ug/kg	
67-66-3	Chloroform	ND	3.9	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	3.9	0.79	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.9	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.9	0.79	ug/kg	
75-35-4	1,1-Dichloroethylene	1.3	3.9	0.79	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	23.3	3.9	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.9	0.79	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.9	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.9	0.79	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.79	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.79	ug/kg	
591-78-6	2-Hexanone	ND	20	5.9	ug/kg	
74-83-9	Methyl Bromide	ND	3.9	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	3.9	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	5.9	ug/kg	
100-42-5	Styrene	ND	3.9	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.9	0.79	ug/kg	
127-18-4	Tetrachloroethylene	2630 [c]	280	71	ug/kg	
108-88-3	Toluene	ND	16	7.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	2.7	3.9	0.79	ug/kg	J
79-00-5	1,1,2-Trichloroethane	ND	3.9	0.79	ug/kg	
79-01-6	Trichloroethylene	18.8	3.9	0.79	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-16		
Lab Sample ID:	FA77253-15	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	72.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.9	0.79	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	102%	94%	72-135%
2037-26-5	Toluene-D8	91%	93%	75-126%
460-00-4	4-Bromofluorobenzene	91%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-105-23		
Lab Sample ID:	FA77253-16	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	65.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10919.D	1	07/30/20 17:58	SP	n/a	n/a	V3C455
Run #2	3C10943.D	1	07/31/20 14:36	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.56 g	5.0 ml	
Run #2	8.86 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	160	80	ug/kg	
71-43-2	Benzene	ND	4.0	0.98	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.80	ug/kg	
75-25-2	Bromoform	ND	4.0	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.8	ug/kg	
75-15-0	Carbon Disulfide	ND	4.0	0.80	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.0	0.82	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.80	ug/kg	
75-00-3	Chloroethane [b]	ND	4.0	1.6	ug/kg	
67-66-3	Chloroform	ND	4.0	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.80	ug/kg	
75-35-4	1,1-Dichloroethylene	5.7	4.0	0.80	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	258 [c]	350	97	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.80	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.80	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.80	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.80	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.80	ug/kg	
591-78-6	2-Hexanone	ND	20	6.0	ug/kg	
74-83-9	Methyl Bromide [b]	ND	4.0	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	4.0	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	6.0	ug/kg	
100-42-5	Styrene	ND	4.0	0.80	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	0.80	ug/kg	
127-18-4	Tetrachloroethylene	4740 [c]	350	90	ug/kg	
108-88-3	Toluene	ND	16	8.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	3.7	4.0	0.80	ug/kg	J
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.80	ug/kg	
79-01-6	Trichloroethylene	118	4.0	0.80	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-23		
Lab Sample ID:	FA77253-16	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	65.0
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.0	0.80	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	96%	95%	72-135%
2037-26-5	Toluene-D8	93%	93%	75-126%
460-00-4	4-Bromofluorobenzene	92%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID: DPT-105-30
Lab Sample ID: FA77253-17
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/27/20
Date Received: 07/29/20
Percent Solids: 74.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10920.D	1	07/30/20 18:24	SP	n/a	n/a	V3C455
Run #2	3C10944.D	1	07/31/20 15:02	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	5.0 ml	
Run #2	10.6 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	120	62	ug/kg	
71-43-2	Benzene	ND	3.1	0.76	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.62	ug/kg	
75-25-2	Bromoform	ND	3.1	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	4.5	ug/kg	
75-15-0	Carbon Disulfide	ND	3.1	0.62	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.1	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.62	ug/kg	
75-00-3	Chloroethane [b]	ND	3.1	1.2	ug/kg	
67-66-3	Chloroform	ND	3.1	0.82	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.62	ug/kg	
75-35-4	1,1-Dichloroethylene	7.1	3.1	0.62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	48.3	3.1	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.1	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	0.62	ug/kg	
591-78-6	2-Hexanone	ND	15	4.6	ug/kg	
74-83-9	Methyl Bromide [b]	ND	3.1	1.2	ug/kg	
74-87-3	Methyl Chloride	ND	3.1	1.2	ug/kg	
75-09-2	Methylene Chloride	ND	12	6.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	15	4.6	ug/kg	
100-42-5	Styrene	ND	3.1	0.62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.62	ug/kg	
127-18-4	Tetrachloroethylene	3420 [c]	240	62	ug/kg	
108-88-3	Toluene	ND	12	6.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	12.4	3.1	0.62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.62	ug/kg	
79-01-6	Trichloroethylene	40.8	3.1	0.62	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-30		
Lab Sample ID:	FA77253-17	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	74.6
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.1	0.62	ug/kg	
1330-20-7	Xylene (total)	ND	9.3	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	89%	96%	72-135%
2037-26-5	Toluene-D8	94%	92%	75-126%
460-00-4	4-Bromofluorobenzene	92%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-105-32		
Lab Sample ID:	FA77253-18	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	54.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10921.D	1	07/30/20 18:50	SP	n/a	n/a	V3C455
Run #2	3C10945.D	1	07/31/20 15:28	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.64 g	5.0 ml	
Run #2	10.7 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	210	110	ug/kg	
71-43-2	Benzene	ND	5.3	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	1.1	ug/kg	
75-25-2	Bromoform	ND	5.3	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	26	7.7	ug/kg	
75-15-0	Carbon Disulfide	ND	5.3	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.3	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	1.1	ug/kg	
75-00-3	Chloroethane [b]	ND	5.3	2.1	ug/kg	
67-66-3	Chloroform	ND	5.3	1.4	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	1.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.3	1.1	ug/kg	
75-35-4	1,1-Dichloroethylene	9.5	5.3	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	52.8	5.3	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.3	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	1.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.3	1.1	ug/kg	
591-78-6	2-Hexanone	ND	26	7.9	ug/kg	
74-83-9	Methyl Bromide [b]	ND	5.3	2.1	ug/kg	
74-87-3	Methyl Chloride	ND	5.3	2.1	ug/kg	
75-09-2	Methylene Chloride	ND	21	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	26	7.9	ug/kg	
100-42-5	Styrene	ND	5.3	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/kg	
127-18-4	Tetrachloroethylene	3090 [c]	420	110	ug/kg	
108-88-3	Toluene	ND	21	11	ug/kg	
71-55-6	1,1,1-Trichloroethane	6.3	5.3	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	1.1	ug/kg	
79-01-6	Trichloroethylene	38.2	5.3	1.1	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-105-32		
Lab Sample ID:	FA77253-18	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	54.9
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	5.3	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	16	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	95%	72-135%
2037-26-5	Toluene-D8	92%	92%	75-126%
460-00-4	4-Bromofluorobenzene	93%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-GW-105		
Lab Sample ID:	FA77253-19	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29390.D	25	07/31/20 18:57	CV	n/a	n/a	V1A1206
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	630	250	ug/l	
71-43-2	Benzene	ND	25	7.8	ug/l	
75-27-4	Bromodichloromethane	ND	25	6.1	ug/l	
75-25-2	Bromoform	ND	25	10	ug/l	
78-93-3	2-Butanone (MEK)	ND	130	50	ug/l	
75-15-0	Carbon Disulfide	ND	50	13	ug/l	
56-23-5	Carbon Tetrachloride	ND	25	8.9	ug/l	
108-90-7	Chlorobenzene	ND	25	5.0	ug/l	
75-00-3	Chloroethane	ND	50	17	ug/l	
67-66-3	Chloroform	ND	25	7.5	ug/l	
124-48-1	Dibromochloromethane	ND	25	6.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	25	8.5	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	7.8	ug/l	
75-35-4	1,1-Dichloroethylene	19.7	25	8.1	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	61.5	25	6.9	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	25	5.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	25	11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	7.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	25	5.4	ug/l	
100-41-4	Ethylbenzene	ND	25	8.9	ug/l	
591-78-6	2-Hexanone	ND	250	50	ug/l	
74-83-9	Methyl Bromide [b]	ND	50	15	ug/l	
74-87-3	Methyl Chloride	ND	50	13	ug/l	
75-09-2	Methylene Chloride	ND	130	50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	130	25	ug/l	
100-42-5	Styrene	ND	25	5.6	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	7.5	ug/l	
127-18-4	Tetrachloroethylene	1850	25	5.4	ug/l	
108-88-3	Toluene	ND	25	7.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	25	6.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	25	12	ug/l	
79-01-6	Trichloroethylene	38.7	25	8.6	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:	DPT-GW-105		
Lab Sample ID:	FA77253-19	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**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	25	10	ug/l	
1330-20-7	Xylene (total)	ND	75	18	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	92%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	EB-SO-03		
Lab Sample ID:	FA77253-20	**Date Sampled:**	07/27/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29391.D	1	07/31/20 19:23	CV	n/a	n/a	V1A1206
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	EB-SO-03		
Lab Sample ID:	FA77253-20	**Date Sampled:**	07/27/20
Matrix:	AQ - Equipment Blank	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		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	102%		83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration 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:	DPT-GW-102		
Lab Sample ID:	FA77253-21	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29392.D	50	07/31/20 19:49	CV	n/a	n/a	V1A1206
Run #2 [a]	1A29408.D	500	08/03/20 13:16	CV	n/a	n/a	V1A1207

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

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1300	500	ug/l	
71-43-2	Benzene	ND	50	16	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	20	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	100	ug/l	
75-15-0	Carbon Disulfide	ND	100	27	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	18	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	33	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
124-48-1	Dibromochloromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	17	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	16	ug/l	
75-35-4	1,1-Dichloroethylene	59.9	50	16	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	50	14	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	11	ug/l	
100-41-4	Ethylbenzene	ND	50	18	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
74-83-9	Methyl Bromide [b]	ND	100	29	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/l	
100-42-5	Styrene	ND	50	11	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	15	ug/l	
127-18-4	Tetrachloroethylene	25800 [c]	500	110	ug/l	
108-88-3	Toluene	ND	50	15	ug/l	
71-55-6	1,1,1-Trichloroethane	138	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	23	ug/l	
79-01-6	Trichloroethylene	ND	50	17	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:	DPT-GW-102		
Lab Sample ID:	FA77253-21	**Date Sampled:**	07/27/20
Matrix:	AQ - Ground Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**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	50	20	ug/l	
1330-20-7	Xylene (total)	ND	150	36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	95%	79-125%
2037-26-5	Toluene-D8	96%	100%	85-112%
460-00-4	4-Bromofluorobenzene	103%	103%	83-118%

(a) Sample was not preserved to a pH < 2.
(b) Associated CCV outside of control limits low.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-102-28		
Lab Sample ID:	FA77253-22	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	69.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10922.D	1	07/30/20 19:16	SP	n/a	n/a	V3C455
Run #2	3C10946.D	1	07/31/20 15:54	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	12.5 g	5.0 ml	
Run #2	15.6 g	5.0 ml	25.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	120	58	ug/kg	
71-43-2	Benzene	ND	2.9	0.70	ug/kg	
75-27-4	Bromodichloromethane	ND	2.9	0.58	ug/kg	
75-25-2	Bromoform	ND	2.9	0.58	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	4.2	ug/kg	
75-15-0	Carbon Disulfide	ND	2.9	0.58	ug/kg	
56-23-5	Carbon Tetrachloride	ND	2.9	0.59	ug/kg	
108-90-7	Chlorobenzene	ND	2.9	0.58	ug/kg	
75-00-3	Chloroethane [b]	ND	2.9	1.2	ug/kg	
67-66-3	Chloroform	ND	2.9	0.77	ug/kg	
124-48-1	Dibromochloromethane	ND	2.9	0.58	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.9	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.9	0.58	ug/kg	
75-35-4	1,1-Dichloroethylene	32.3	2.9	0.58	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.9	0.80	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.9	0.58	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.9	0.58	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.9	0.58	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.9	0.58	ug/kg	
100-41-4	Ethylbenzene	ND	2.9	0.58	ug/kg	
591-78-6	2-Hexanone	ND	14	4.3	ug/kg	
74-83-9	Methyl Bromide [b]	ND	2.9	1.2	ug/kg	
74-87-3	Methyl Chloride	ND	2.9	1.2	ug/kg	
75-09-2	Methylene Chloride	ND	12	6.3	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	14	4.3	ug/kg	
100-42-5	Styrene	ND	2.9	0.58	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.9	0.58	ug/kg	
127-18-4	Tetrachloroethylene	2390 [c]	910	230	ug/kg	
108-88-3	Toluene	ND	12	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	45.8	2.9	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.9	0.58	ug/kg	
79-01-6	Trichloroethylene	1.1	2.9	0.58	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-102-28		
Lab Sample ID:	FA77253-22	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	69.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	2.9	0.58	ug/kg	
1330-20-7	Xylene (total)	ND	8.7	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	89%	95%	72-135%
2037-26-5	Toluene-D8	97%	93%	75-126%
460-00-4	4-Bromofluorobenzene	90%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-102-9		
Lab Sample ID:	FA77253-23	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	73.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10923.D	1	07/30/20 19:42	SP	n/a	n/a	V3C455
Run #2	3C10947.D	10	07/31/20 16:20	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.59 g	5.0 ml	100 ul
Run #2	6.59 g	5.0 ml	5.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	14000	7000	ug/kg	
71-43-2	Benzene	ND	350	86	ug/kg	
75-27-4	Bromodichloromethane	ND	350	70	ug/kg	
75-25-2	Bromoform	ND	350	70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1800	510	ug/kg	
75-15-0	Carbon Disulfide	ND	350	70	ug/kg	
56-23-5	Carbon Tetrachloride	ND	350	72	ug/kg	
108-90-7	Chlorobenzene	ND	350	70	ug/kg	
75-00-3	Chloroethane [b]	ND	350	140	ug/kg	
67-66-3	Chloroform	ND	350	93	ug/kg	
124-48-1	Dibromochloromethane	ND	350	70	ug/kg	
75-34-3	1,1-Dichloroethane	ND	350	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	350	70	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	350	70	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	350	97	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	350	70	ug/kg	
78-87-5	1,2-Dichloropropane	ND	350	70	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	350	70	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	350	70	ug/kg	
100-41-4	Ethylbenzene	ND	350	70	ug/kg	
591-78-6	2-Hexanone	ND	1800	530	ug/kg	
74-83-9	Methyl Bromide [b]	ND	350	140	ug/kg	
74-87-3	Methyl Chloride	ND	350	140	ug/kg	
75-09-2	Methylene Chloride	ND	1400	770	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1800	530	ug/kg	
100-42-5	Styrene	ND	350	70	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	350	70	ug/kg	
127-18-4	Tetrachloroethylene	973000 [c]	70000	18000	ug/kg	
108-88-3	Toluene	ND	1400	700	ug/kg	
71-55-6	1,1,1-Trichloroethane	181	350	70	ug/kg	J
79-00-5	1,1,2-Trichloroethane	ND	350	70	ug/kg	
79-01-6	Trichloroethylene	163	350	70	ug/kg	J

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

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

Report of Analysis

Client Sample ID:	DPT-102-9		
Lab Sample ID:	FA77253-23	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	73.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	350	70	ug/kg	
1330-20-7	Xylene (total)	ND	1100	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	93%	93%	72-135%
2037-26-5	Toluene-D8	94%	92%	75-126%
460-00-4	4-Bromofluorobenzene	83%	90%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-102-12		
Lab Sample ID:	FA77253-24	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	74.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10924.D	1	07/30/20 20:08	SP	n/a	n/a	V3C455
Run #2	3C10948.D	10	07/31/20 16:47	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.34 g	5.0 ml	100 ul
Run #2	7.34 g	5.0 ml	5.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	12000	6200	ug/kg	
71-43-2	Benzene	ND	310	76	ug/kg	
75-27-4	Bromodichloromethane	ND	310	62	ug/kg	
75-25-2	Bromoform	ND	310	62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1600	450	ug/kg	
75-15-0	Carbon Disulfide	ND	310	62	ug/kg	
56-23-5	Carbon Tetrachloride	ND	310	64	ug/kg	
108-90-7	Chlorobenzene	ND	310	62	ug/kg	
75-00-3	Chloroethane [b]	ND	310	120	ug/kg	
67-66-3	Chloroform	ND	310	83	ug/kg	
124-48-1	Dibromochloromethane	ND	310	62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	310	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	310	62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	310	62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	310	86	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	310	62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	310	62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	310	62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	310	62	ug/kg	
100-41-4	Ethylbenzene	210	310	62	ug/kg	J
591-78-6	2-Hexanone	ND	1600	470	ug/kg	
74-83-9	Methyl Bromide [b]	ND	310	120	ug/kg	
74-87-3	Methyl Chloride	ND	310	120	ug/kg	
75-09-2	Methylene Chloride	ND	1200	690	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1600	470	ug/kg	
100-42-5	Styrene	ND	310	62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	310	62	ug/kg	
127-18-4	Tetrachloroethylene	587000 [c]	62000	16000	ug/kg	
108-88-3	Toluene	ND	1200	620	ug/kg	
71-55-6	1,1,1-Trichloroethane	711	310	62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	310	62	ug/kg	
79-01-6	Trichloroethylene	284	310	62	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-102-12		
Lab Sample ID:	FA77253-24	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	74.8
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	310	62	ug/kg	
1330-20-7	Xylene (total)	2520	940	130	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	91%	95%	72-135%
2037-26-5	Toluene-D8	95%	92%	75-126%
460-00-4	4-Bromofluorobenzene	92%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID: DPT-102-16
Lab Sample ID: FA77253-25
Matrix: SO - Soil
Method: SW846 8260D
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 07/27/20
Date Received: 07/29/20
Percent Solids: 78.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10925.D	1	07/30/20 20:34	SP	n/a	n/a	V3C455
Run #2	3C10949.D	1	07/31/20 17:13	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.64 g	5.0 ml	
Run #2	9.84 g	5.0 ml	50.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	150	74	ug/kg	
71-43-2	Benzene	ND	3.7	0.90	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.74	ug/kg	
75-25-2	Bromoform	ND	3.7	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.4	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	0.74	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.74	ug/kg	
75-00-3	Chloroethane [b]	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.98	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.74	ug/kg	
75-35-4	1,1-Dichloroethylene	9.9	3.7	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	2.0	3.7	1.0	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.74	ug/kg	
591-78-6	2-Hexanone	ND	18	5.5	ug/kg	
74-83-9	Methyl Bromide [b]	ND	3.7	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.5	ug/kg	
100-42-5	Styrene	ND	3.7	0.74	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.74	ug/kg	
127-18-4	Tetrachloroethylene	3900 [c]	460	120	ug/kg	
108-88-3	Toluene	ND	15	7.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	17.7	3.7	0.74	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.74	ug/kg	
79-01-6	Trichloroethylene	3.2	3.7	0.74	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-102-16		
Lab Sample ID:	FA77253-25	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	78.5
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	3.7	0.74	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	92%	96%	72-135%
2037-26-5	Toluene-D8	93%	91%	75-126%
460-00-4	4-Bromofluorobenzene	93%	92%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	DPT-102-24		
Lab Sample ID:	FA77253-26	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	60.5
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10926.D	1	07/30/20 21:00	SP	n/a	n/a	V3C455
Run #2	3C10950.D	1	07/31/20 17:39	SP	n/a	n/a	V3C456

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.2 g	5.0 ml	
Run #2	8.24 g	5.0 ml	100 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	160	81	ug/kg	
71-43-2	Benzene	ND	4.1	0.99	ug/kg	
75-27-4	Bromodichloromethane	ND	4.1	0.81	ug/kg	
75-25-2	Bromoform	ND	4.1	0.81	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.9	ug/kg	
75-15-0	Carbon Disulfide	ND	4.1	0.81	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.1	0.83	ug/kg	
108-90-7	Chlorobenzene	ND	4.1	0.81	ug/kg	
75-00-3	Chloroethane [b]	ND	4.1	1.6	ug/kg	
67-66-3	Chloroform	ND	4.1	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	4.1	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.1	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.1	0.81	ug/kg	
75-35-4	1,1-Dichloroethylene	26.6	4.1	0.81	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	2.5	4.1	1.1	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	ND	4.1	0.81	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.1	0.81	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.1	0.81	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.1	0.81	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	0.81	ug/kg	
591-78-6	2-Hexanone	ND	20	6.1	ug/kg	
74-83-9	Methyl Bromide [b]	ND	4.1	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	4.1	1.6	ug/kg	
75-09-2	Methylene Chloride	ND	16	8.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	6.1	ug/kg	
100-42-5	Styrene	ND	4.1	0.81	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.1	0.81	ug/kg	
127-18-4	Tetrachloroethylene	1290 [c]	410	110	ug/kg	
108-88-3	Toluene	ND	16	8.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.1	0.81	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.1	0.81	ug/kg	
79-01-6	Trichloroethylene	0.99	4.1	0.81	ug/kg	J

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

Report of Analysis

Client Sample ID:	DPT-102-24		
Lab Sample ID:	FA77253-26	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	60.5
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl Chloride	ND	4.1	0.81	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	96%	75-124%
17060-07-0	1,2-Dichloroethane-D4	87%	95%	72-135%
2037-26-5	Toluene-D8	93%	92%	75-126%
460-00-4	4-Bromofluorobenzene	92%	91%	71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	IDW-01		
Lab Sample ID:	FA77253-27	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
		Percent Solids:	84.1
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	84.1		%	1	08/01/20 16:37	JB	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	IDW-02		
Lab Sample ID:	FA77253-28	**Date Sampled:**	07/27/20
Matrix:	SO - Soil	**Date Received:**	07/29/20
		Percent Solids:	87.3
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	87.3		%	1	08/01/20 16:37	JB	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA77253-32	**Date Sampled:**	07/27/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C10929.D	1	07/30/20 22:18	SP	n/a	n/a	V3C455
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane [b]	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide [b]	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA77253-32	**Date Sampled:**	07/27/20
Matrix:	SO - Trip Blank Soil	**Date Received:**	07/29/20
Method:	SW846 8260D	**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	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
17060-07-0	1,2-Dichloroethane-D4	95%		72-135%
2037-26-5	Toluene-D8	92%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA77253-33	**Date Sampled:**	07/27/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P73218.D	1	08/01/20 13:26	SP	n/a	n/a	VP2905
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA77253-33	**Date Sampled:**	07/27/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/29/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

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

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

FA77253

SGS - ORLANDO JOB #:

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4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg 6 Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed)
Sampler 1: M. Rockwell Sampler 2: R. Morgan

Project Information

Project Name: MC Delaware HIRSC
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 125840 ACM

Analytical Information

TCL VOCs (8260D) | % moisture | TCLP VOCs 8260B | TCLP SVOCs 8270D | TCLP RCRA Metals

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	TCL VOCs (8260D)	% moisture	TCLP VOCs 8260B	TCLP SVOCs 8270D	TCLP RCRA Metals	LAB USE ONLY
1	DPT-123-7	7.27	1150	MR	SO	4		3	1							X	X				
2	DPT-123-12		1200	MR	SO	4		3	1							X	X				
3	DPT-123-18		1210	MR	SO	4		3	1							X	X				
4	DPT-123-18-MS		1210	MR	SO	4		3	1							X	X				
5	DPT-123-18-MSD		1210	MR	SO	4		3	1							X	X				
6	DPT-123-20		1220	MR	SO	4		3	1							X	X				
7	DPT-GW-123		1240	MR	GW	3		3								X					
8	DPT-123-29		1230	MR	SO	4		3	1							X	X				
9	DPT-117-9		1400	MR	SO	4		3	1							X	X				
10	DPT-117-13		1410	MR	SO	4		3	1							X	X				
11	DPT-117-17		1420	MR	SO	4		3	1							X	X				
12	DPT-117-23		1430	MR	SO	4		3	1							X	X				

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- COMMERCIAL "A" (RESULTS ONLY)
- COMMERCIAL "B" (RESULTS PLUS QC)
- REDT1 (EPA LEVEL 3)
- FULLT1 (EPA LEVEL 4)
- EDD'S

Frozen 07/28/20 11:48

Comments / Remarks

B6
A6

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Mark Rockwell AECOM	7/28/20	2	3	07/29/20	4 10.30
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only: Cooler Temperature (s) Celsius (corrected): 4.4

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

FA77253

SGS - ORLANDO JOB # : PAGE 2 OF 3

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg E Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916
Sampler(s) Name(s) (Printed) Sampler 1: M. Rockell Sampler 2:

Project Information

Project Name: WC Dekalb HRSC
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60628179
Fax #:
Client Purchase Order #: 125840 ACM

Analytical Information

TCL VOCs (8260B) | % Moisture

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	MeOH+ZnAc	DI WATER	MEOH	TCL VOCs (8260B)	% Moisture	LAB USE ONLY
~~13~~	DPT-117-27	7-27-20	1435	MR	SO	4		3	1							X	X	
~~14~~	DPT-GW-117	7-27-20	1440	MK	GW	3		3								X		
~~15~~	DPT-105-9	7-27-20	1700	MK	SO	4		3	1							X	X	
~~16~~	DPT-105-14	7-27-20	1710	MR	SO	4		3	1							X	X	
~~17~~	DPT-105-16	7-27-20	1720	MK	SO	4		3	1							X	X	
~~18~~	DPT-105-23	7-27-20	1730	MK	SO	4		3	1							X	X	
~~19~~	DPT-105-30	7-27-20	1740	MK	SO	4		3	1							X	X	
~~20~~	DPT-105-32	7-27-20	1750	MK	SO	4		3	1							X	X	
~~21~~	DPT-GW-105	7-27-20	1745	MR	GW	3		3								X	X	
~~8~~	EB-SO-03	7-27-20	1640	MK	W	3		3								X		
21	DPT-GW-102	7-27-20	1950	MK	GW	2		2								X		
22	DPT-102-28	7-27-20	1940	MR	SO	4		3	1							X	X	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Mark Rockell	7-27-20 1400	2	3	07/29/20	4 10:30
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

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SGS North America Inc - Orlando
Chain of Custody

FA77253

SGS - ORLANDO JOB # : PAGE 3 OF 3

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr Bldg 6 Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander
Phone #: 864-787-6916

Project Information

Project Name: UTC Delaware HRSC
Street: 4334 Main Hwy
City: Greenville State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 125840 ACM

Sampler(s) Name(s) (Printed)
Sampler 1: M. Rockwell Sampler 2:

Analytical Information

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZNA	DI WATER	MEOH	TCL VOCs (8260D)	% moisture	TCLP VOCs	TCLP SVOCs	TCLP PP13 metals	LAB USE ONLY
29	DPT-102-9	7.27	1900	MK	SO	4		3	1							X	X				
24	DPT-102-12	7.27	1905	MK	SO	4		3	1							X	X				
25	DPT-102-16	7.27	1915	MK	SO	4		3	1							X	X				
26	DPT-102-24	7.27	1930	MK	SO	4		3	1							X	X				
27	IDW-01	7.27	2050	MK	SO	4		3	1							X	X	X	X	X	
28	IDW-02	7.27	2055	MK	SO	4		3	1							X	X	X	X	X	
29	IDW-03	7.27	2100	MK	GW	3		3								X		X	X		
30	IDW-04	7.27	2105	MK	GW	3		3								X		X	X		
31	IDW-05	7.27	2110	MK	GW	3		3								X		X	X		
32	Trip Blank				SO	3															
33	Trip Blank				GW	2															

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Mark Rockwell	7.28.20 1400	2	3	07/29/20	10:30
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

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5.1 5

SGS Sample Receipt Summary

Job Number: FA77253 **Client:** AECOM **Project:** UTC DELAWAN HRSC

Date / Time Received: 7/29/2020 10:30:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 1002284324210003281100138666003554

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.6);

Cooler Temps (Corrected) °C: Cooler 1: (4.4);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments All vials of DPT-105-9 are missing the '9' on their sample ID labels.

SM001
Rev. Date 05/24/17

Technician: AKARIG Date: 7/29/2020 10:30:00 A Reviewer: _____ Date: _____

Job Change Order: FA77253

Requested Date:	8/19/2020	**Received Date:**	7/29/2020
Account Name:	Raytheon Technologies	**Due Date:**	8/19/2020
Project Description:	AECOMSCG: Delavan Spray Technologies; Bambe	**Deliverable:**	COMMBN
CSR:	HW	**TAT (Days):**	14

==========

Sample #: FA77253-27-31

Dept:

TAT: 14

Change:
Cancel Analysis client will re-sample

==========

Above Changes Per: Leslee Alexander-AECOM **Date/Time:** 8/19/2020 12:53:12 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

MS Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-MB	3C10908.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26, FA77253-32

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	4.4	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-MB	3C10908.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26, FA77253-32

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	94%	72-135%
2037-26-5	Toluene-D8	93%	75-126%
460-00-4	4-Bromofluorobenzene	93%	71-133%

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-MB	3C10939.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77253-1, FA77253-2, FA77253-3, FA77253-4, FA77253-6, FA77253-8, FA77253-9, FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	3.5	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-MB	3C10939.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77253-1, FA77253-2, FA77253-3, FA77253-4, FA77253-6, FA77253-8, FA77253-9, FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	98%	72-135%
2037-26-5	Toluene-D8	92%	75-126%
460-00-4	4-Bromofluorobenzene	94%	71-133%

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1206-MB	1A29387.D	1	07/31/20	CV	n/a	n/a	V1A1206

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

FA77253-5, FA77253-12, FA77253-19, FA77253-20, FA77253-21

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

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1206-MB	1A29387.D	1	07/31/20	CV	n/a	n/a	V1A1206

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

FA77253-5, FA77253-12, FA77253-19, FA77253-20, FA77253-21

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

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2905-MB	P73217.D	1	08/01/20	SP	n/a	n/a	VP2905

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

FA77253-33

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
74-83-9	Methyl Bromide	0.63	2.0	0.59	ug/l	J
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2905-MB	P73217.D	1	08/01/20	SP	n/a	n/a	VP2905

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

FA77253-33

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

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1207-MB	1A29405.D	1	08/03/20	CV	n/a	n/a	V1A1207

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

FA77253-21

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C457-MB	3C10969.D	1	08/03/20	SP	n/a	n/a	V3C457

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

FA77253-3, FA77253-4, FA77253-6, FA77253-7, FA77253-9, FA77253-10, FA77253-11, FA77253-13, FA77253-14, FA77253-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
74-83-9	Methyl Bromide	2.6	5.0	2.0	ug/kg	J
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene Chloride	ND	20	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	20	10	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

Method Blank Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C457-MB	3C10969.D	1	08/03/20	SP	n/a	n/a	V3C457

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

FA77253-3, FA77253-4, FA77253-6, FA77253-7, FA77253-9, FA77253-10, FA77253-11, FA77253-13, FA77253-14, FA77253-15

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	98%	72-135%
2037-26-5	Toluene-D8	93%	75-126%
460-00-4	4-Bromofluorobenzene	94%	71-133%

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-BS	3C10907.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26, FA77253-32

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	254	102	61-152
71-43-2	Benzene	50	47.9	96	76-126
75-27-4	Bromodichloromethane	50	48.7	97	74-130
75-25-2	Bromoform	50	47.5	95	76-127
78-93-3	2-Butanone (MEK)	250	247	99	75-137
75-15-0	Carbon Disulfide	50	38.5	77	72-122
56-23-5	Carbon Tetrachloride	50	47.0	94	78-133
108-90-7	Chlorobenzene	50	49.3	99	81-129
75-00-3	Chloroethane	50	52.8	106	68-133
67-66-3	Chloroform	50	46.1	92	72-123
124-48-1	Dibromochloromethane	50	50.3	101	76-127
75-34-3	1,1-Dichloroethane	50	43.9	88	73-125
107-06-2	1,2-Dichloroethane	50	46.9	94	74-128
75-35-4	1,1-Dichloroethylene	50	41.5	83	81-136
156-59-2	cis-1,2-Dichloroethylene	50	47.5	95	74-126
156-60-5	trans-1,2-Dichloroethylene	50	42.8	86	70-127
78-87-5	1,2-Dichloropropane	50	47.6	95	74-125
10061-01-5	cis-1,3-Dichloropropene	50	48.1	96	80-123
10061-02-6	trans-1,3-Dichloropropene	50	47.4	95	75-131
100-41-4	Ethylbenzene	50	48.5	97	77-123
591-78-6	2-Hexanone	250	226	90	72-133
74-83-9	Methyl Bromide	50	53.5	107	65-139
74-87-3	Methyl Chloride	50	38.5	77	71-144
75-09-2	Methylene Chloride	50	43.6	87	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	210	84	76-132
100-42-5	Styrene	50	48.3	97	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.3	95	71-126
127-18-4	Tetrachloroethylene	50	49.3	99	79-130
108-88-3	Toluene	50	46.3	93	76-124
71-55-6	1,1,1-Trichloroethane	50	45.5	91	70-129
79-00-5	1,1,2-Trichloroethane	50	48.1	96	74-124
79-01-6	Trichloroethylene	50	50.0	100	75-128
75-01-4	Vinyl Chloride	50	41.7	83	76-141
1330-20-7	Xylene (total)	150	145	97	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C455-BS	3C10907.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26, FA77253-32

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%
2037-26-5	Toluene-D8	95%	75-126%
460-00-4	4-Bromofluorobenzene	97%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1206-BS	1A29370.D	1	07/31/20	CV	n/a	n/a	V1A1206

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

FA77253-5, FA77253-12, FA77253-19, FA77253-20, FA77253-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	104	83	50-147
71-43-2	Benzene	25	27.0	108	81-122
75-27-4	Bromodichloromethane	25	26.9	108	79-123
75-25-2	Bromoform	25	21.3	85	66-123
78-93-3	2-Butanone (MEK)	125	102	82	56-143
75-15-0	Carbon Disulfide	25	27.3	109	66-148
56-23-5	Carbon Tetrachloride	25	29.0	116	76-136
108-90-7	Chlorobenzene	25	24.8	99	82-124
75-00-3	Chloroethane	25	28.5	114	62-144
67-66-3	Chloroform	25	25.9	104	80-124
124-48-1	Dibromochloromethane	25	24.3	97	78-122
75-34-3	1,1-Dichloroethane	25	27.5	110	81-122
107-06-2	1,2-Dichloroethane	25	25.1	100	75-125
75-35-4	1,1-Dichloroethylene	25	28.0	112	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.9	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.3	109	76-127
78-87-5	1,2-Dichloropropane	25	26.7	107	76-124
10061-01-5	cis-1,3-Dichloropropene	25	26.8	107	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.4	102	80-120
100-41-4	Ethylbenzene	25	25.9	104	81-121
591-78-6	2-Hexanone	125	96.2	77	61-129
74-83-9	Methyl Bromide	25	20.1	80	59-143
74-87-3	Methyl Chloride	25	23.1	92	50-159
75-09-2	Methylene Chloride	25	23.7	95	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	93.0	74	66-122
100-42-5	Styrene	25	26.2	105	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	21.6	86	72-120
127-18-4	Tetrachloroethylene	25	25.6	102	76-135
108-88-3	Toluene	25	25.0	100	80-120
71-55-6	1,1,1-Trichloroethane	25	27.1	108	75-130
79-00-5	1,1,2-Trichloroethane	25	24.1	96	76-119
79-01-6	Trichloroethylene	25	26.8	107	81-126
75-01-4	Vinyl Chloride	25	25.9	104	69-159
1330-20-7	Xylene (total)	75	76.1	101	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1206-BS	1A29370.D	1	07/31/20	CV	n/a	n/a	V1A1206

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

FA77253-5, FA77253-12, FA77253-19, FA77253-20, FA77253-21

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-BS	3C10937.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77253-1, FA77253-2, FA77253-3, FA77253-4, FA77253-6, FA77253-8, FA77253-9, FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	261	104	61-152
71-43-2	Benzene	50	48.2	96	76-126
75-27-4	Bromodichloromethane	50	48.3	97	74-130
75-25-2	Bromoform	50	46.7	93	76-127
78-93-3	2-Butanone (MEK)	250	266	106	75-137
75-15-0	Carbon Disulfide	50	38.0	76	72-122
56-23-5	Carbon Tetrachloride	50	46.5	93	78-133
108-90-7	Chlorobenzene	50	49.4	99	81-129
75-00-3	Chloroethane	50	53.6	107	68-133
67-66-3	Chloroform	50	46.7	93	72-123
124-48-1	Dibromochloromethane	50	50.1	100	76-127
75-34-3	1,1-Dichloroethane	50	44.9	90	73-125
107-06-2	1,2-Dichloroethane	50	47.0	94	74-128
75-35-4	1,1-Dichloroethylene	50	41.6	83	81-136
156-59-2	cis-1,2-Dichloroethylene	50	48.0	96	74-126
156-60-5	trans-1,2-Dichloroethylene	50	43.3	87	70-127
78-87-5	1,2-Dichloropropane	50	48.2	96	74-125
10061-01-5	cis-1,3-Dichloropropene	50	48.7	97	80-123
10061-02-6	trans-1,3-Dichloropropene	50	48.1	96	75-131
100-41-4	Ethylbenzene	50	48.1	96	77-123
591-78-6	2-Hexanone	250	240	96	72-133
74-83-9	Methyl Bromide	50	51.1	102	65-139
74-87-3	Methyl Chloride	50	37.0	74	71-144
75-09-2	Methylene Chloride	50	50.0	100	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	230	92	76-132
100-42-5	Styrene	50	48.7	97	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	48.0	96	71-126
127-18-4	Tetrachloroethylene	50	48.5	97	79-130
108-88-3	Toluene	50	46.6	93	76-124
71-55-6	1,1,1-Trichloroethane	50	46.0	92	70-129
79-00-5	1,1,2-Trichloroethane	50	48.3	97	74-124
79-01-6	Trichloroethylene	50	50.1	100	75-128
75-01-4	Vinyl Chloride	50	40.8	82	76-141
1330-20-7	Xylene (total)	150	145	97	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C456-BS	3C10937.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77253-1, FA77253-2, FA77253-3, FA77253-4, FA77253-6, FA77253-8, FA77253-9, FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%
2037-26-5	Toluene-D8	96%	75-126%
460-00-4	4-Bromofluorobenzene	97%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2905-BS	P73214.D	1	08/01/20	SP	n/a	n/a	VP2905

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

FA77253-33

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	129	103	50-147
71-43-2	Benzene	25	24.9	100	81-122
75-27-4	Bromodichloromethane	25	24.9	100	79-123
75-25-2	Bromoform	25	23.4	94	66-123
78-93-3	2-Butanone (MEK)	125	122	98	56-143
75-15-0	Carbon Disulfide	25	24.2	97	66-148
56-23-5	Carbon Tetrachloride	25	24.9	100	76-136
108-90-7	Chlorobenzene	25	24.5	98	82-124
75-00-3	Chloroethane	25	23.1	92	62-144
67-66-3	Chloroform	25	24.1	96	80-124
124-48-1	Dibromochloromethane	25	25.3	101	78-122
75-34-3	1,1-Dichloroethane	25	24.3	97	81-122
107-06-2	1,2-Dichloroethane	25	23.5	94	75-125
75-35-4	1,1-Dichloroethylene	25	24.4	98	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.3	97	78-120
156-60-5	trans-1,2-Dichloroethylene	25	24.8	99	76-127
78-87-5	1,2-Dichloropropane	25	25.4	102	76-124
10061-01-5	cis-1,3-Dichloropropene	25	25.6	102	75-118
10061-02-6	trans-1,3-Dichloropropene	25	26.2	105	80-120
100-41-4	Ethylbenzene	25	25.7	103	81-121
591-78-6	2-Hexanone	125	121	97	61-129
74-83-9	Methyl Bromide	25	26.3	105	59-143
74-87-3	Methyl Chloride	25	25.5	102	50-159
75-09-2	Methylene Chloride	25	22.8	91	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	118	94	66-122
100-42-5	Styrene	25	25.4	102	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	24.4	98	72-120
127-18-4	Tetrachloroethylene	25	25.0	100	76-135
108-88-3	Toluene	25	24.3	97	80-120
71-55-6	1,1,1-Trichloroethane	25	24.9	100	75-130
79-00-5	1,1,2-Trichloroethane	25	25.8	103	76-119
79-01-6	Trichloroethylene	25	24.5	98	81-126
75-01-4	Vinyl Chloride	25	24.5	98	69-159
1330-20-7	Xylene (total)	75	78.4	105	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2905-BS	P73214.D	1	08/01/20	SP	n/a	n/a	VP2905

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

FA77253-33

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1207-BS	1A29403.D	1	08/03/20	CV	n/a	n/a	V1A1207

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

FA77253-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	26.8	107	76-135

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C457-BS	3C10968.D	1	08/03/20	SP	n/a	n/a	V3C457

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

FA77253-3, FA77253-4, FA77253-6, FA77253-7, FA77253-9, FA77253-10, FA77253-11, FA77253-13, FA77253-14, FA77253-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	267	107	61-152
71-43-2	Benzene	50	52.7	105	76-126
75-27-4	Bromodichloromethane	50	55.1	110	74-130
75-25-2	Bromoform	50	55.7	111	76-127
78-93-3	2-Butanone (MEK)	250	260	104	75-137
75-15-0	Carbon Disulfide	50	45.1	90	72-122
56-23-5	Carbon Tetrachloride	50	52.5	105	78-133
108-90-7	Chlorobenzene	50	52.6	105	81-129
75-00-3	Chloroethane	50	59.2	118	68-133
67-66-3	Chloroform	50	50.9	102	72-123
124-48-1	Dibromochloromethane	50	59.1	118	76-127
75-34-3	1,1-Dichloroethane	50	49.5	99	73-125
107-06-2	1,2-Dichloroethane	50	52.6	105	74-128
75-35-4	1,1-Dichloroethylene	50	47.2	94	81-136
156-59-2	cis-1,2-Dichloroethylene	50	52.1	104	74-126
156-60-5	trans-1,2-Dichloroethylene	50	48.4	97	70-127
78-87-5	1,2-Dichloropropane	50	53.2	106	74-125
10061-01-5	cis-1,3-Dichloropropene	50	54.3	109	80-123
10061-02-6	trans-1,3-Dichloropropene	50	54.6	109	75-131
100-41-4	Ethylbenzene	50	51.3	103	77-123
591-78-6	2-Hexanone	250	246	98	72-133
74-83-9	Methyl Bromide	50	56.2	112	65-139
74-87-3	Methyl Chloride	50	47.8	96	71-144
75-09-2	Methylene Chloride	50	49.9	100	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	247	99	76-132
100-42-5	Styrene	50	51.1	102	78-125
79-34-5	1,1,2,2-Tetrachloroethane	50	56.2	112	71-126
127-18-4	Tetrachloroethylene	50	51.9	104	79-130
108-88-3	Toluene	50	50.9	102	76-124
71-55-6	1,1,1-Trichloroethane	50	50.1	100	70-129
79-00-5	1,1,2-Trichloroethane	50	55.9	112	74-124
79-01-6	Trichloroethylene	50	53.9	108	75-128
75-01-4	Vinyl Chloride	50	48.8	98	76-141
1330-20-7	Xylene (total)	150	156	104	80-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C457-BS	3C10968.D	1	08/03/20	SP	n/a	n/a	V3C457

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

FA77253-3, FA77253-4, FA77253-6, FA77253-7, FA77253-9, FA77253-10, FA77253-11, FA77253-13, FA77253-14, FA77253-15

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	96%	72-135%
2037-26-5	Toluene-D8	98%	75-126%
460-00-4	4-Bromofluorobenzene	102%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77178-1MS	3C10930.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1MSD	3C10931.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1	3C10911.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26, FA77253-32

CAS No.	Compound	FA77178-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		412	330	80	413	354	86	7	61-152/27
71-43-2	Benzene	ND		82.5	78.7	95	82.6	80.6	98	2	76-126/26
75-27-4	Bromodichloromethane	ND		82.5	74.0	90	82.6	75.2	91	2	74-130/25
75-25-2	Bromoform	ND		82.5	66.0	80	82.6	67.4	82	2	76-127/26
78-93-3	2-Butanone (MEK)	ND		412	321	78	413	344	83	7	75-137/25
75-15-0	Carbon Disulfide	ND		82.5	66.3	80	82.6	69.8	84	5	72-122/29
56-23-5	Carbon Tetrachloride	ND		82.5	80.8	98	82.6	85.5	103	6	78-133/29
108-90-7	Chlorobenzene	ND		82.5	73.4	89	82.6	75.5	91	3	81-129/29
75-00-3	Chloroethane	ND		82.5	99.6	121	82.6	101	122	1	68-133/29
67-66-3	Chloroform	ND		82.5	76.7	93	82.6	77.7	94	1	72-123/26
124-48-1	Dibromochloromethane	ND		82.5	72.9	88	82.6	73.3	89	1	76-127/27
75-34-3	1,1-Dichloroethane	ND		82.5	74.4	90	82.6	76.8	93	3	73-125/27
107-06-2	1,2-Dichloroethane	ND		82.5	72.7	88	82.6	72.4	88	0	74-128/23
75-35-4	1,1-Dichloroethylene	ND		82.5	74.4	90	82.6	78.6	95	5	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		82.5	77.7	94	82.6	79.1	96	2	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		82.5	73.9	90	82.6	76.7	93	4	70-127/27
78-87-5	1,2-Dichloropropane	ND		82.5	75.9	92	82.6	76.8	93	1	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		82.5	71.8	87	82.6	72.1	87	0	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		82.5	68.8	83	82.6	69.8	84	1	75-131/28
100-41-4	Ethylbenzene	ND		82.5	73.4	89	82.6	75.7	92	3	77-123/31
591-78-6	2-Hexanone	ND		412	318	77	413	340	82	7	72-133/26
74-83-9	Methyl Bromide	ND		82.5	86.5	105	82.6	88.4	107	2	65-139/31
74-87-3	Methyl Chloride	ND		82.5	62.9	76	82.6	66.4	80	5	71-144/27
75-09-2	Methylene Chloride	ND		82.5	75.0	91	82.6	76.0	92	1	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		412	330	80	413	347	84	5	76-132/26
100-42-5	Styrene	ND		82.5	68.9	84	82.6	70.4	85	2	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		82.5	69.6	84	82.6	71.6	87	3	71-126/30
127-18-4	Tetrachloroethylene	9.2		82.5	79.9	86	82.6	83.5	90	4	79-130/31
108-88-3	Toluene	ND		82.5	73.5	89	82.6	75.6	91	3	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		82.5	78.3	95	82.6	82.2	99	5	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		82.5	73.3	89	82.6	74.4	90	1	74-124/28
79-01-6	Trichloroethylene	ND		82.5	80.9	98	82.6	83.8	101	4	75-128/27
75-01-4	Vinyl Chloride	ND		82.5	71.0	86	82.6	74.8	91	5	76-141/27
1330-20-7	Xylene (total)	ND		247	214	86	248	221	89	3	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77178-1MS	3C10930.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1MSD	3C10931.D	1	07/30/20	SP	n/a	n/a	V3C455
FA77178-1	3C10911.D	1	07/30/20	SP	n/a	n/a	V3C455

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

FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26, FA77253-32

CAS No.	Surrogate Recoveries	MS	MSD	FA77178-1	Limits
1868-53-7	Dibromofluoromethane	97%	96%	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	88%	88%	101%	72-135%
2037-26-5	Toluene-D8	96%	96%	91%	75-126%
460-00-4	4-Bromofluorobenzene	94%	94%	92%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77172-2MS	1A29385.D	250	07/31/20	CV	n/a	n/a	V1A1206
FA77172-2MSD	1A29386.D	250	07/31/20	CV	n/a	n/a	V1A1206
FA77172-2	1A29377.D	250	07/31/20	CV	n/a	n/a	V1A1206

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

FA77253-5, FA77253-12, FA77253-19, FA77253-20, FA77253-21

CAS No.	Compound	FA77172-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		31300	28400	91	31300	27300	87	4	50-147/21
71-43-2	Benzene	ND		6250	6710	107	6250	6640	106	1	81-122/14
75-27-4	Bromodichloromethane	ND		6250	6650	106	6250	6620	106	0	79-123/19
75-25-2	Bromoform	ND		6250	5490	88	6250	5480	88	0	66-123/21
78-93-3	2-Butanone (MEK)	ND		31300	28600	92	31300	27400	88	4	56-143/18
75-15-0	Carbon Disulfide	ND		6250	6520	104	6250	6540	105	0	66-148/23
56-23-5	Carbon Tetrachloride	ND		6250	7050	113	6250	7070	113	0	76-136/23
108-90-7	Chlorobenzene	ND		6250	6090	97	6250	6130	98	1	82-124/14
75-00-3	Chloroethane	ND		6250	7290	117	6250	7620	122	4	62-144/20
67-66-3	Chloroform	115	J	6250	6470	102	6250	6430	101	1	80-124/15
124-48-1	Dibromochloromethane	ND		6250	6060	97	6250	6200	99	2	78-122/19
75-34-3	1,1-Dichloroethane	ND		6250	6790	109	6250	6750	108	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		6250	6310	101	6250	6200	99	2	75-125/14
75-35-4	1,1-Dichloroethylene	701		6250	7620	111	6250	7570	110	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	826		6250	7700	110	6250	7720	110	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		6250	6520	104	6250	6510	104	0	76-127/17
78-87-5	1,2-Dichloropropane	ND		6250	6670	107	6250	6650	106	0	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		6250	6540	105	6250	6650	106	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		6250	6410	103	6250	6450	103	1	80-120/22
100-41-4	Ethylbenzene	ND		6250	6390	102	6250	6400	102	0	81-121/14
591-78-6	2-Hexanone	ND		31300	27300	87	31300	26200	84	4	61-129/18
74-83-9	Methyl Bromide	ND		6250	1690	27*	6250	2350	38*	33*	59-143/19
74-87-3	Methyl Chloride	ND		6250	5410	87	6250	5550	89	3	50-159/19
75-09-2	Methylene Chloride	ND		6250	5940	95	6250	5910	95	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		31300	25800	83	31300	25600	82	1	66-122/16
100-42-5	Styrene	ND		6250	6440	103	6250	6490	104	1	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		6250	5700	91	6250	5390	86	6	72-120/14
127-18-4	Tetrachloroethylene	10300		6250	17000	107	6250	16800	104	1	76-135/16
108-88-3	Toluene	112	J	6250	6250	98	6250	6250	98	0	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		6250	6730	108	6250	6670	107	1	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		6250	6120	98	6250	6090	97	0	76-119/14
79-01-6	Trichloroethylene	24100		6250	31100	112	6250	30700	106	1	81-126/15
75-01-4	Vinyl Chloride	ND		6250	6220	100	6250	6320	101	2	69-159/18
1330-20-7	Xylene (total)	227	J	18800	19000	100	18800	19100	101	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77172-2MS	1A29385.D	250	07/31/20	CV	n/a	n/a	V1A1206
FA77172-2MSD	1A29386.D	250	07/31/20	CV	n/a	n/a	V1A1206
FA77172-2	1A29377.D	250	07/31/20	CV	n/a	n/a	V1A1206

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

FA77253-5, FA77253-12, FA77253-19, FA77253-20, FA77253-21

CAS No.	Surrogate Recoveries	MS	MSD	FA77172-2	Limits
1868-53-7	Dibromofluoromethane	102%	103%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	96%	79-125%
2037-26-5	Toluene-D8	98%	100%	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	99%	104%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-3MS	3C10961.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3MSD	3C10962.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3	3C10955.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77253-1, FA77253-2, FA77253-3, FA77253-4, FA77253-6, FA77253-8, FA77253-9, FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26

CAS No.	Compound	FA77253-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		337	211	63	318	186	59*	13	61-152/27
71-43-2	Benzene	ND		67.5	62.7	93	63.5	55.2	87	13	76-126/26
75-27-4	Bromodichloromethane	ND		67.5	60.6	90	63.5	53.2	84	13	74-130/25
75-25-2	Bromoform	ND		67.5	54.1	80	63.5	45.0	71*	18	76-127/26
78-93-3	2-Butanone (MEK)	ND		337	222	66*	318	192	60*	14	75-137/25
75-15-0	Carbon Disulfide	ND		67.5	46.6	69*	63.5	44.9	71*	4	72-122/29
56-23-5	Carbon Tetrachloride	ND		67.5	60.7	90	63.5	55.4	87	9	78-133/29
108-90-7	Chlorobenzene	ND		67.5	63.9	95	63.5	50.1	79*	24	81-129/29
75-00-3	Chloroethane	ND		67.5	64.3	95	63.5	67.9	107	5	68-133/29
67-66-3	Chloroform	ND		67.5	61.3	91	63.5	54.1	85	12	72-123/26
124-48-1	Dibromochloromethane	ND		67.5	60.8	90	63.5	51.2	81	17	76-127/27
75-34-3	1,1-Dichloroethane	ND		67.5	57.2	85	63.5	52.9	83	8	73-125/27
107-06-2	1,2-Dichloroethane	ND		67.5	57.5	85	63.5	50.3	79	13	74-128/23
75-35-4	1,1-Dichloroethylene	ND		67.5	52.1	77*	63.5	51.0	80*	2	81-136/28
156-59-2	cis-1,2-Dichloroethylene	167		67.5	219	77	63.5	228	96	4	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		67.5	55.4	82	63.5	50.9	80	8	70-127/27
78-87-5	1,2-Dichloropropane	ND		67.5	61.1	91	63.5	53.3	84	14	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		67.5	59.4	88	63.5	50.0	79*	17	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		67.5	48.9	72*	63.5	38.2	60*	25	75-131/28
100-41-4	Ethylbenzene	ND		67.5	64.4	95	63.5	48.5	76*	28	77-123/31
591-78-6	2-Hexanone	ND		337	226	67*	318	193	61*	16	72-133/26
74-83-9	Methyl Bromide	ND		67.5	58.8	87	63.5	59.3	93	1	65-139/31
74-87-3	Methyl Chloride	ND		67.5	36.4	54*	63.5	39.1	62*	7	71-144/27
75-09-2	Methylene Chloride	ND		67.5	55.3	82	63.5	49.9	79	10	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		337	219	65*	318	186	59*	16	76-132/26
100-42-5	Styrene	ND		67.5	61.7	91	63.5	46.9	74*	27	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		67.5	54.9	81	63.5	46.5	73	17	71-126/30
127-18-4	Tetrachloroethylene	1160	E	67.5	999	-239* [a]	63.5	1070	-142* [a]	7	79-130/31
108-88-3	Toluene	ND		67.5	60.7	90	63.5	49.9	79	20	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		67.5	60.2	89	63.5	55.1	87	9	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		67.5	59.6	88	63.5	51.0	80	16	74-124/28
79-01-6	Trichloroethylene	23.5		67.5	82.5	87	63.5	75.8	82	8	75-128/27
75-01-4	Vinyl Chloride	ND		67.5	42.1	62*	63.5	45.9	72*	9	76-141/27
1330-20-7	Xylene (total)	ND		202	191	94	191	143	75*	29	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-3MS	3C10961.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3MSD	3C10962.D	1	07/31/20	SP	n/a	n/a	V3C456
FA77253-3	3C10955.D	1	07/31/20	SP	n/a	n/a	V3C456

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

FA77253-1, FA77253-2, FA77253-3, FA77253-4, FA77253-6, FA77253-8, FA77253-9, FA77253-16, FA77253-17, FA77253-18, FA77253-22, FA77253-23, FA77253-24, FA77253-25, FA77253-26

CAS No.	Surrogate Recoveries	MS	MSD	FA77253-3	Limits
1868-53-7	Dibromofluoromethane	96%	97%	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	86%	87%	89%	72-135%
2037-26-5	Toluene-D8	96%	95%	93%	75-126%
460-00-4	4-Bromofluorobenzene	96%	96%	93%	71-133%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-21MS	1A29416.D	500	08/03/20	CV	n/a	n/a	V1A1207
FA77253-21MSD	1A29417.D	500	08/03/20	CV	n/a	n/a	V1A1207
FA77253-21 [a]	1A29408.D	500	08/03/20	CV	n/a	n/a	V1A1207

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

FA77253-21

CAS No.	Compound	FA77253-21 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	25800		12500	39200	107	12500	39000	106	1	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA77253-21	Limits
1868-53-7	Dibromofluoromethane	103%	104%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	95%	79-125%
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	98%	99%	103%	83-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-13MS	3C10991.D	1	08/03/20	SP	n/a	n/a	V3C457
FA77253-13MSD	3C10992.D	1	08/03/20	SP	n/a	n/a	V3C457
FA77253-13	3C10989.D	1	08/03/20	SP	n/a	n/a	V3C457

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

FA77253-3, FA77253-4, FA77253-6, FA77253-7, FA77253-9, FA77253-10, FA77253-11, FA77253-13, FA77253-14, FA77253-15

CAS No.	Compound	FA77253-13 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		294	280	95	294	313	106	11	61-152/27
71-43-2	Benzene	ND		58.8	60.2	102	58.8	63.3	108	5	76-126/26
75-27-4	Bromodichloromethane	ND		58.8	53.7	91	58.8	58.6	100	9	74-130/25
75-25-2	Bromoform	ND		58.8	44.1	75*	58.8	51.4	87	15	76-127/26
78-93-3	2-Butanone (MEK)	ND		294	277	94	294	313	106	12	75-137/25
75-15-0	Carbon Disulfide	ND		58.8	51.9	88	58.8	54.9	93	6	72-122/29
56-23-5	Carbon Tetrachloride	ND		58.8	55.1	94	58.8	60.8	103	10	78-133/29
108-90-7	Chlorobenzene	ND		58.8	55.8	95	58.8	59.6	101	7	81-129/29
75-00-3	Chloroethane	ND		58.8	70.3	120	58.8	72.6	124	3	68-133/29
67-66-3	Chloroform	ND		58.8	57.3	97	58.8	60.2	102	5	72-123/26
124-48-1	Dibromochloromethane	ND		58.8	51.2	87	58.8	59.1	101	14	76-127/27
75-34-3	1,1-Dichloroethane	ND		58.8	57.5	98	58.8	59.9	102	4	73-125/27
107-06-2	1,2-Dichloroethane	ND		58.8	56.4	96	58.8	59.0	100	5	74-128/23
75-35-4	1,1-Dichloroethylene	ND		58.8	57.4	98	58.8	59.6	101	4	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		58.8	58.6	100	58.8	62.2	106	6	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		58.8	56.3	96	58.8	59.8	102	6	70-127/27
78-87-5	1,2-Dichloropropane	ND		58.8	58.9	100	58.8	61.3	104	4	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		58.8	55.5	94	58.8	59.4	101	7	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		58.8	53.9	92	58.8	57.9	99	7	75-131/28
100-41-4	Ethylbenzene	ND		58.8	56.3	96	58.8	60.4	103	7	77-123/31
591-78-6	2-Hexanone	ND		294	267	91	294	298	101	11	72-133/26
74-83-9	Methyl Bromide	ND		58.8	62.8	107	58.8	65.2	111	4	65-139/31
74-87-3	Methyl Chloride	ND		58.8	55.8	95	58.8	58.0	99	4	71-144/27
75-09-2	Methylene Chloride	ND		58.8	57.4	98	58.8	59.5	101	4	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		294	270	92	294	297	101	10	76-132/26
100-42-5	Styrene	ND		58.8	52.9	90	58.8	57.3	97	8	78-125/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		58.8	55.6	95	58.8	60.2	102	8	71-126/30
127-18-4	Tetrachloroethylene	ND		58.8	58.8	100	58.8	64.6	110	9	79-130/31
108-88-3	Toluene	ND		58.8	56.8	97	58.8	61.0	104	7	76-124/30
71-55-6	1,1,1-Trichloroethane	ND		58.8	58.2	99	58.8	61.9	105	6	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		58.8	57.9	99	58.8	61.7	105	6	74-124/28
79-01-6	Trichloroethylene	ND		58.8	61.5	105	58.8	65.0	111	6	75-128/27
75-01-4	Vinyl Chloride	ND		58.8	59.6	101	58.8	61.1	104	2	76-141/27
1330-20-7	Xylene (total)	ND		176	167	95	176	181	103	8	80-129/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77253
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77253-13MS	3C10991.D	1	08/03/20	SP	n/a	n/a	V3C457
FA77253-13MSD	3C10992.D	1	08/03/20	SP	n/a	n/a	V3C457
FA77253-13	3C10989.D	1	08/03/20	SP	n/a	n/a	V3C457

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

FA77253-3, FA77253-4, FA77253-6, FA77253-7, FA77253-9, FA77253-10, FA77253-11, FA77253-13, FA77253-14, FA77253-15

CAS No.	Surrogate Recoveries	MS	MSD	FA77253-13	Limits
1868-53-7	Dibromofluoromethane	97%	98%	100%	75-124%
17060-07-0	1,2-Dichloroethane-D4	91%	91%	102%	72-135%
2037-26-5	Toluene-D8	98%	99%	92%	75-126%
460-00-4	4-Bromofluorobenzene	98%	100%	92%	71-133%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Raytheon Technologies

AECOMSCG: Delavan Spray Technologies; Bamberg, SC

60620179

SGS Job Number: FA77945

Sampling Date: 08/17/20

Report to:

AECOM Environment
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Greenville, SC 29615
doria.cullom@aecom.com

ATTN: Doria Cullom

Total number of pages in report: **93**

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

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

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

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SGS North America Inc.

Sample Summary

Raytheon Technologies

Job No: FA77945

AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Project No: 60620179

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FA77945-1	08/17/20	16:15	CS	08/19/20	AQ	Ground Water	IDW-01
FA77945-2	08/17/20	16:45	CS	08/19/20	AQ	Ground Water	IDW-02
FA77945-3	08/17/20	17:15	CS	08/19/20	SO	Soil	IDW-03
FA77945-4	08/17/20	17:30	CS	08/19/20	SO	Soil	IDW-04
FA77945-5	08/17/20	17:40	CS	08/19/20	AQ	Trip Blank Water	TRIP BLANK-IDW

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Raytheon Technologies **Job No:** FA77945

Site: AECOMSCG: Delavan Spray Technologies; Bamberg, SC **Report Date** 9/2/2020 12:29:42 PM

4 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 08/17/2020 and were received at SGS North America Inc - Orlando on 08/19/2020 properly preserved, at 1.8 Deg. C and intact. These Samples received an SGS Orlando job number of FA77945. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B

Matrix: LEACHATE **Batch ID:** VP2947

Sample(s) FA77945-3DUP, FA78133-1LMS, FA78133-1LMSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Benzene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for Duplicate for Tetrachloroethylene are outside control limits for sample FA77945-3DUP. Probable cause is due to sample non-homogeneity.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1A1224

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77872-15MS, FA77872-15MSD were used as the QC samples indicated.

FA77945-5: Sample was not preserved to a pH < 2.

Matrix: AQ **Batch ID:** V1A1226

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77964-20MS, FA77964-20MSD were used as the QC samples indicated.

FA77945-1: Sample was not preserved to a pH < 2.

FA77945-2: Sample was not preserved to a pH < 2.

MS Semi-volatiles By Method SW846 8270D

Matrix: LEACHATE **Batch ID:** OP81746

Sample(s) FA77945-3DUP, FA77945-4MS, FA77945-4MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Hexachlorobenzene, Pentachlorophenol are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2,4,5-Trichlorophenol, Hexachlorobenzene, Pentachlorophenol are outside control limits. Probable cause is due to matrix interference.

FA77945-4 for Pentachlorophenol: Associated CCV outside control limits low.

FA77945-3 for Pentachlorophenol: Associated CCV outside control limits low.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP81704

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) FA77945-1MS, FA77945-1MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene are outside control limits.

Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene are outside control limits. Probable cause is due to matrix interference.

FA77945-1 for Di-n-octyl Phthalate: Associated CCV outside of control limits high, sample was ND.

FA77945-1 for 2,4-Dinitrophenol: Associated BS recovery outside control limits.

FA77945-1 for 4,6-Dinitro-o-cresol: Associated BS recovery outside control limits.

FA77945-1 for Hexachlorocyclopentadiene: Associated BS recovery outside control limits.

FA77945-2 for 2,4-Dinitrophenol: Associated BS recovery outside control limits.

FA77945-2 for 4,6-Dinitro-o-cresol: Associated BS recovery outside control limits.

FA77945-2 for Hexachlorocyclopentadiene: Associated BS recovery outside control limits.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP37712

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) FA77682-3DUP, FA77682-3MS, FA77682-3MSD, FA77682-3PS, FA77682-3SDL, were used as the QC samples for metals.

RPD(s) for Duplicate for Antimony, Nickel are outside control limits for sample MP37712-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Antimony, Nickel are outside control limits for sample MP37712-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: LEACHATE **Batch ID:** MP37743

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) FA77945-3DUP, FA77945-3MS, FA77945-3MSD, FA77945-3SDL, FA77945-4DUP, were used as the QC samples for metals.

RPD(s) for Duplicate for Antimony, Thallium are outside control limits for sample MP37743-D1, MP37743-D2. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Copper, Nickel, Thallium, Zinc are outside control limits for sample MP37743-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP37731

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) FA77803-11DUP, FA77803-11MS, FA77803-11MSD, FA77803-11SDL were used as the QC samples for metals.

Matrix: AQ **Batch ID:** MP37744

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) FA78125-5DUP, FA78125-5MS, FA78125-5MSD, FA78125-5SDL were used as the QC samples for metals.

Matrix: LEACHATE **Batch ID:** MP37732

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) FA77851-1DUP, FA77851-1MS, FA77851-1MSD, FA77851-1SDL were used as the QC samples for metals.

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

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA77945
Account: Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC
Collected: 08/17/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77945-1	**IDW-01**					
Beryllium		7.1	4.0	0.20	ug/l	SW846 6010D
Cadmium		1.6 J	5.0	0.20	ug/l	SW846 6010D
Chromium		109	10	1.0	ug/l	SW846 6010D
Copper		21.7 J	25	1.0	ug/l	SW846 6010D
Lead		9.3	5.0	1.1	ug/l	SW846 6010D
Mercury		0.048 J	0.50	0.030	ug/l	SW846 7470A
Nickel		38.4 J	40	0.40	ug/l	SW846 6010D
Zinc		237	20	4.4	ug/l	SW846 6010D
FA77945-2	**IDW-02**					
Antimony		2.0 J	6.0	1.0	ug/l	SW846 6010D
Arsenic		2.7 J	10	1.3	ug/l	SW846 6010D
Beryllium		1.0 J	4.0	0.20	ug/l	SW846 6010D
Cadmium		0.29 J	5.0	0.20	ug/l	SW846 6010D
Chromium		206	10	1.0	ug/l	SW846 6010D
Copper		1270	25	1.0	ug/l	SW846 6010D
Lead		35.2	5.0	1.1	ug/l	SW846 6010D
Mercury		0.46 J	0.50	0.030	ug/l	SW846 7470A
Nickel		101	40	0.40	ug/l	SW846 6010D
Zinc		479	20	4.4	ug/l	SW846 6010D
FA77945-3	**IDW-03**					
Tetrachloroethylene		0.0047 J	0.010	0.0022	mg/l	SW846 8260B
Copper		0.035 J	0.25	0.010	mg/l	SW846 6010D
Lead		0.056	0.050	0.011	mg/l	SW846 6010D
Nickel		0.015 J	0.40	0.0040	mg/l	SW846 6010D
FA77945-4	**IDW-04**					
1,2-Dichloroethane		0.0132	0.010	0.0031	mg/l	SW846 8260B
Antimony		0.019 J	0.060	0.010	mg/l	SW846 6010D
Copper		0.014 J	0.25	0.010	mg/l	SW846 6010D
Lead		0.024 J	0.050	0.011	mg/l	SW846 6010D
FA77945-5	**TRIP BLANK-IDW**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	IDW-01		
Lab Sample ID:	FA77945-1	**Date Sampled:**	08/17/20
Matrix:	AQ - Ground Water	**Date Received:**	08/19/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29799.D	1	08/24/20 14:02	CV	n/a	n/a	V1A1226
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	IDW-01		
Lab Sample ID:	FA77945-1	**Date Sampled:**	08/17/20
Matrix:	AQ - Ground Water	**Date Received:**	08/19/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

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

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

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

Report of Analysis

Client Sample ID: IDW-01
Lab Sample ID: FA77945-1
Matrix: AQ - Ground Water
Method: SW846 8270E SW846 3510C
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 08/17/20
Date Received: 08/19/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06739.D	1	08/24/20 19:39	MV	08/24/20 12:30	OP81704	S6F260
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.5	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	4.8	0.56	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.60	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.80	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.70	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	24	4.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	9.5	1.9	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.53	ug/l	
	3&4-Methylphenol	ND	4.8	0.93	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.81	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	0.70	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.72	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.60	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.61	ug/l	
120-12-7	Anthracene	ND	4.8	0.76	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.72	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.75	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.74	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.78	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.82	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.58	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	4.8	0.81	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	4.8	0.95	ug/l	
86-74-8	Carbazole	ND	4.8	0.57	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.60	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.77	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.70	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	4.8	0.72	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-01
Lab Sample ID: FA77945-1 **Date Sampled:** 08/17/20
Matrix: AQ - Ground Water **Date Received:** 08/19/20
Method: SW846 8270E SW846 3510C **Percent Solids:** n/a
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	0.51	ug/l	
218-01-9	Chrysene	ND	4.8	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.77	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.57	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.48	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.61	ug/l	
84-66-2	Diethyl Phthalate	ND	4.8	0.95	ug/l	
131-11-3	Dimethyl Phthalate	ND	4.8	0.95	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	4.8	0.95	ug/l	
117-84-0	Di-n-octyl Phthalate [b]	ND	4.8	0.95	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.77	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.68	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	0.95	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.53	ug/l	
86-73-7	Fluorene	ND	4.8	0.67	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.48	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	4.8	1.7	ug/l	
67-72-1	Hexachloroethane	ND	4.8	1.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.68	ug/l	
78-59-1	Isophorone	ND	4.8	0.74	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.57	ug/l	
91-20-3	Naphthalene	ND	4.8	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	1.7	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.84	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	1.1	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.89	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	4.8	0.64	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.77	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.82	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	23%		14-67%
4165-62-2	Phenol-d5	17%		10-50%
118-79-6	2,4,6-Tribromophenol	60%		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-01		
Lab Sample ID:	FA77945-1	**Date Sampled:**	08/17/20
Matrix:	AQ - Ground Water	**Date Received:**	08/19/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	54%		42-108%
321-60-8	2-Fluorobiphenyl	60%		40-106%
1718-51-0	Terphenyl-d14	82%		39-121%

(a) Associated BS recovery outside control limits.
(b) Associated CCV outside of control limits high, sample was ND.

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-01
Lab Sample ID: FA77945-1
Matrix: AQ - Ground Water
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 08/17/20
Date Received: 08/19/20
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	1.0 U	6.0	1.0	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Arsenic	1.3 U	10	1.3	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Beryllium	7.1	4.0	0.20	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Cadmium	1.6 J	5.0	0.20	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Chromium	109	10	1.0	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Copper	21.7 J	25	1.0	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Lead	9.3	5.0	1.1	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Mercury	0.048 J	0.50	0.030	ug/l	1	08/26/20	08/26/20	JC	SW846 7470A [1]	SW846 7470A [4]
Nickel	38.4 J	40	0.40	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Selenium	2.9 U	10	2.9	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Silver	0.70 U	10	0.70	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Thallium	1.4 U	10	1.4	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]
Zinc	237	20	4.4	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA17006
(2) Instrument QC Batch: MA17007
(3) Prep QC Batch: MP37712
(4) Prep QC Batch: MP37731

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:	IDW-02		
Lab Sample ID:	FA77945-2	**Date Sampled:**	08/17/20
Matrix:	AQ - Ground Water	**Date Received:**	08/19/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29800.D	1	08/24/20 14:28	CV	n/a	n/a	V1A1226
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	IDW-02		
Lab Sample ID:	FA77945-2	**Date Sampled:**	08/17/20
Matrix:	AQ - Ground Water	**Date Received:**	08/19/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

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

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

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

Report of Analysis

Client Sample ID: IDW-02
Lab Sample ID: FA77945-2 **Date Sampled:** 08/17/20
Matrix: AQ - Ground Water **Date Received:** 08/19/20
Method: SW846 8270E SW846 3510C **Percent Solids:** n/a
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072536.D	1	08/25/20 16:42	MV	08/24/20 12:30	OP81704	SX2957
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.5	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	4.8	0.56	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.60	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.80	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.70	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	24	4.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	9.5	1.9	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.53	ug/l	
	3&4-Methylphenol	ND	4.8	0.93	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.81	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	0.70	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.72	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.60	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.61	ug/l	
120-12-7	Anthracene	ND	4.8	0.76	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.72	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.75	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.74	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.78	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.82	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.58	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	4.8	0.81	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	4.8	0.95	ug/l	
86-74-8	Carbazole	ND	4.8	0.57	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.60	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.77	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.70	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	4.8	0.72	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-02
Lab Sample ID: FA77945-2 **Date Sampled:** 08/17/20
Matrix: AQ - Ground Water **Date Received:** 08/19/20
Method: SW846 8270E SW846 3510C **Percent Solids:** n/a
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	0.51	ug/l	
218-01-9	Chrysene	ND	4.8	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.77	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.57	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.48	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.48	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.61	ug/l	
84-66-2	Diethyl Phthalate	ND	4.8	0.95	ug/l	
131-11-3	Dimethyl Phthalate	ND	4.8	0.95	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	4.8	0.95	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	4.8	0.95	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.77	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.68	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	0.95	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.53	ug/l	
86-73-7	Fluorene	ND	4.8	0.67	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.48	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	4.8	1.7	ug/l	
67-72-1	Hexachloroethane	ND	4.8	1.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.68	ug/l	
78-59-1	Isophorone	ND	4.8	0.74	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.57	ug/l	
91-20-3	Naphthalene	ND	4.8	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	1.7	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.84	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	1.1	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.89	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	4.8	0.64	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.77	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.82	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	17%		14-67%
4165-62-2	Phenol-d5	11%		10-50%
118-79-6	2,4,6-Tribromophenol	61%		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-02		
Lab Sample ID:	FA77945-2	**Date Sampled:**	08/17/20
Matrix:	AQ - Ground Water	**Date Received:**	08/19/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	46%		42-108%
321-60-8	2-Fluorobiphenyl	48%		40-106%
1718-51-0	Terphenyl-d14	66%		39-121%

(a) Associated BS recovery outside control limits.

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

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

Report of Analysis

Client Sample ID: IDW-02
Lab Sample ID: FA77945-2
Matrix: AQ - Ground Water
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 08/17/20
Date Received: 08/19/20
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	2.0 J	6.0	1.0	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Arsenic	2.7 J	10	1.3	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Beryllium	1.0 J	4.0	0.20	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Cadmium	0.29 J	5.0	0.20	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Chromium	206	10	1.0	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Copper	1270	25	1.0	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Lead	35.2	5.0	1.1	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Mercury	0.46 J	0.50	0.030	ug/l	1	08/28/20	08/28/20	JC	SW846 7470A [2]	SW846 7470A [4]
Nickel	101	40	0.40	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Selenium	2.9 U	10	2.9	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Silver	0.70 U	10	0.70	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Thallium	1.4 U	10	1.4	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]
Zinc	479	20	4.4	ug/l	1	08/24/20	08/26/20	LM	SW846 6010D [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA17007
(2) Instrument QC Batch: MA17012
(3) Prep QC Batch: MP37712
(4) Prep QC Batch: MP37744

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: IDW-03
Lab Sample ID: FA77945-3
Matrix: SO - Soil
Method: SW846 8260B SW846 1311
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 08/17/20
Date Received: 08/19/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P74033.D	10	09/01/20 16:38	SO	08/20/20 11:40	OP81638	VP2947
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP List **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0031	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.050	0.020	mg/l	
56-23-5	Carbon Tetrachloride	ND	D019	0.50	0.010	0.0036	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.010	0.0020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.010	0.0030	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.010	0.0026	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.010	0.0031	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.010	0.0032	mg/l	
127-18-4	Tetrachloroethylene	0.0047	D039	0.70	0.010	0.0022	mg/l	J
79-01-6	Trichloroethylene	ND	D040	0.50	0.010	0.0035	mg/l	
75-01-4	Vinyl Chloride	ND	D043	0.20	0.010	0.0041	mg/l	

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

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) 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-03		
Lab Sample ID:	FA77945-3	**Date Sampled:**	08/17/20
Matrix:	SO - Soil	**Date Received:**	08/19/20
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072570.D	1	08/26/20 18:36	MV	08/26/20 12:30	OP81746	SX2958
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP List **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.0056	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.0098	mg/l	
87-86-5	Pentachlorophenol [a]	ND	D037	100	0.25	0.050	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.0074	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0075	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.0050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.0081	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.0069	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.016	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.0093	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.10	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		14-67%
4165-62-2	Phenol-d5	19%		10-50%
118-79-6	2,4,6-Tribromophenol	57%		33-118%
4165-60-0	Nitrobenzene-d5	56%		42-108%
321-60-8	2-Fluorobiphenyl	54%		40-106%
1718-51-0	Terphenyl-d14	64%		39-121%

(a) Associated CCV outside control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) 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-03
Lab Sample ID: FA77945-3
Matrix: SO - Soil
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 08/17/20
Date Received: 08/19/20
Percent Solids: n/a

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed	By	Method
Antimony	0.010 U			0.060	0.010	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Arsenic	0.013 U	D004	5.0	0.10	0.013	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Beryllium	0.0020 U			0.040	0.0020	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Cadmium	0.0020 U	D006	1.0	0.050	0.0020	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Chromium	0.010 U	D007	5.0	0.10	0.010	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Copper	0.035 J			0.25	0.010	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Lead	0.056	D008	5.0	0.050	0.011	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Mercury	0.00050 U	D009	0.20	0.0050	0.00050	mg/l	1	08/26/20	08/26/20	JC	SW846 7470A [1]
Nickel	0.015 J			0.40	0.0040	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Selenium	0.029 U	D010	1.0	0.10	0.029	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Silver	0.0070 U	D011	5.0	0.10	0.0070	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Thallium	0.014 U			0.10	0.014	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Zinc	0.10 U			0.20	0.10	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]

(1) Instrument QC Batch: MA17006
(2) Instrument QC Batch: MA17014
(3) Prep QC Batch: MP37732
(4) Prep QC Batch: MP37743

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	IDW-04		
Lab Sample ID:	FA77945-4	**Date Sampled:**	08/17/20
Matrix:	SO - Soil	**Date Received:**	08/19/20
Method:	SW846 8260B SW846 1311	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P74035.D	10	09/01/20 17:28	SO	08/20/20 11:40	OP81638	VP2947
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP List **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0031	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.050	0.020	mg/l	
56-23-5	Carbon Tetrachloride	ND	D019	0.50	0.010	0.0036	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.010	0.0020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.010	0.0030	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.010	0.0026	mg/l	
107-06-2	1,2-Dichloroethane	0.0132	D028	0.50	0.010	0.0031	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.010	0.0032	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.010	0.0022	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.010	0.0035	mg/l	
75-01-4	Vinyl Chloride	ND	D043	0.20	0.010	0.0041	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	105%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) 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-04		
Lab Sample ID:	FA77945-4	**Date Sampled:**	08/17/20
Matrix:	SO - Soil	**Date Received:**	08/19/20
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072572.D	1	08/26/20 19:29	MV	08/26/20 12:30	OP81746	SX2958
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP List **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.0056	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.0098	mg/l	
87-86-5	Pentachlorophenol [a]	ND	D037	100	0.25	0.050	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.0074	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0075	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.0050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.0081	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.0069	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.0050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.016	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.0093	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.10	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	28%		14-67%
4165-62-2	Phenol-d5	19%		10-50%
118-79-6	2,4,6-Tribromophenol	55%		33-118%
4165-60-0	Nitrobenzene-d5	58%		42-108%
321-60-8	2-Fluorobiphenyl	57%		40-106%
1718-51-0	Terphenyl-d14	61%		39-121%

(a) Associated CCV outside control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) 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-04
Lab Sample ID: FA77945-4
Matrix: SO - Soil
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Date Sampled: 08/17/20
Date Received: 08/19/20
Percent Solids: n/a

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed	By	Method
Antimony	0.019 J			0.060	0.010	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Arsenic	0.013 U	D004	5.0	0.10	0.013	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Beryllium	0.0020 U			0.040	0.0020	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Cadmium	0.0020 U	D006	1.0	0.050	0.0020	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Chromium	0.010 U	D007	5.0	0.10	0.010	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Copper	0.014 J			0.25	0.010	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Lead	0.024 J	D008	5.0	0.050	0.011	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Mercury	0.00050 U	D009	0.20	0.0050	0.00050	mg/l	1	08/26/20	08/26/20	JC	SW846 7470A [1]
Nickel	0.0040 U			0.40	0.0040	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Selenium	0.029 U	D010	1.0	0.10	0.029	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Silver	0.0070 U	D011	5.0	0.10	0.0070	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Thallium	0.014 U			0.10	0.014	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]
Zinc	0.10 U			0.20	0.10	mg/l	1	08/28/20	08/28/20	LM	SW846 6010D [2]

(1) Instrument QC Batch: MA17006
(2) Instrument QC Batch: MA17014
(3) Prep QC Batch: MP37732
(4) Prep QC Batch: MP37743

RL = Reporting Limit MDL = Method Detection Limit U = Indicates a result < MDL
MCL = Maximum Contamination Level (40 CFR 261 7/1/11) J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK-IDW		
Lab Sample ID:	FA77945-5	**Date Sampled:**	08/17/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/19/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1A29768.D	1	08/21/20 11:14	CV	n/a	n/a	V1A1224
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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

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

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

Report of Analysis

Client Sample ID:	TRIP BLANK-IDW		
Lab Sample ID:	FA77945-5	**Date Sampled:**	08/17/20
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/19/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	AECOMSCG: Delavan Spray Technologies; Bamberg, SC		

VOA TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA77945

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # :

PAGE 1 OF 1

SGS - ORLANDO Quote #

SKIFF #

Client / Reporting Information

Company Name: AECOM
Address: 10 Patewood Dr., Bldg 6, Suite 500
City: Greenville State: SC Zip: 29615
Project Contact: Leslee Alexander Email: leslee.alexander@aecom.com
Phone #: 864-787-6916

Project Information

Project Name: UTC Delavan HRSC
Street: 4334 Main Hwy
City: Bamberg State: SC
Project #: 60620179
Fax #:
Client Purchase Order #: 125840 ACM

Sampler(s) Name(s) (Printed)
Sampler 1: C. Suddeth Sampler 2:

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	MeOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	TCL VOCs (8260 B)	TCL SVOCs (8270 D)	PP Metals (6010C/7470B)	TCLP VOCs (8260 B)	TCLP SVOCs (8270 D)	TCLP PP Metals (6010C/7470B)	LAB USE ONLY
1	IDW-01	8/17/20	1615	CKS	GW	6		5			1					X	X	X				
2	IDW-02	8/17/20	1645	CKS	GW	6		5			1					X	X	X				
3	IDW-03	8/17/20	1715	CKS	SO	2		2											X	X	X	
4	IDW-04	8/17/20	1730	CKS	SO	2		2											X	X	X	
5	Trip Blank-IDW	8/17/20	1740	CKS	GW	2			2							X						

INITIAL ASSESSMENT BG
QA VERIFICATION DO

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other

Approved By: / Date:

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

** GW VOCs are unpreserved - 7 day hold time
Sample containers in two separate coolers

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Charles K Suddeth	8/18/20 1715	2 Fedex	3 Fedex	8/19/20	4 0000
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only: Cooler Temperature (s) Celsius (corrected): 4.8, 1.8

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

SGS Sample Receipt Summary

Job Number: FA77945 **Client:** AECOM **Project:** UTC DELAVAN HRSC

Date / Time Received: 8/19/2020 10:00:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 138666007696

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0); Cooler 2: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (1.8); Cooler 2: (1.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: BRYANG Date: 8/19/2020 10:00:00 A Reviewer: _____ Date: _____

5.1

5

FA77945: Chain of Custody
Page 2 of 2

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1224-MB	1A29767.D	1	08/21/20	CV	n/a	n/a	V1A1224

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

FA77945-5

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

Method Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1224-MB	1A29767.D	1	08/21/20	CV	n/a	n/a	V1A1224

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

FA77945-5

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

Method Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1226-MB	1A29797.D	1	08/24/20	CV	n/a	n/a	V1A1226

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

FA77945-1, FA77945-2

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

Method Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1226-MB	1A29797.D	1	08/24/20	CV	n/a	n/a	V1A1226

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

FA77945-1, FA77945-2

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

Leachate Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81638-LB	P74036.D	10	09/01/20	SO	08/20/20	OP81638	VP2947

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

FA77945-3, FA77945-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	10	3.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	2.6	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
79-01-6	Trichloroethylene	ND	10	3.5	ug/l	
75-01-4	Vinyl Chloride	ND	10	4.1	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	110%	79-125%
2037-26-5	Toluene-D8	104%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1224-BS	1A29765.D	1	08/21/20	CV	n/a	n/a	V1A1224

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

FA77945-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	115	92	50-147
71-43-2	Benzene	25	23.0	92	81-122
75-27-4	Bromodichloromethane	25	22.8	91	79-123
75-25-2	Bromoform	25	21.4	86	66-123
78-93-3	2-Butanone (MEK)	125	113	90	56-143
75-15-0	Carbon Disulfide	25	22.5	90	66-148
56-23-5	Carbon Tetrachloride	25	23.5	94	76-136
108-90-7	Chlorobenzene	25	22.4	90	82-124
75-00-3	Chloroethane	25	25.0	100	62-144
67-66-3	Chloroform	25	22.2	89	80-124
124-48-1	Dibromochloromethane	25	22.5	90	78-122
75-34-3	1,1-Dichloroethane	25	23.4	94	81-122
107-06-2	1,2-Dichloroethane	25	22.7	91	75-125
75-35-4	1,1-Dichloroethylene	25	23.1	92	78-137
156-59-2	cis-1,2-Dichloroethylene	25	22.7	91	78-120
156-60-5	trans-1,2-Dichloroethylene	25	22.9	92	76-127
78-87-5	1,2-Dichloropropane	25	23.5	94	76-124
10061-01-5	cis-1,3-Dichloropropene	25	23.7	95	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.5	98	80-120
100-41-4	Ethylbenzene	25	23.4	94	81-121
591-78-6	2-Hexanone	125	114	91	61-129
74-83-9	Methyl Bromide	25	26.6	106	59-143
74-87-3	Methyl Chloride	25	25.3	101	50-159
75-09-2	Methylene Chloride	25	20.4	82	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	112	90	66-122
100-42-5	Styrene	25	23.4	94	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	22.3	89	72-120
127-18-4	Tetrachloroethylene	25	22.5	90	76-135
108-88-3	Toluene	25	23.1	92	80-120
71-55-6	1,1,1-Trichloroethane	25	22.8	91	75-130
79-00-5	1,1,2-Trichloroethane	25	22.6	90	76-119
79-01-6	Trichloroethylene	25	22.8	91	81-126
75-01-4	Vinyl Chloride	25	25.8	103	69-159
1330-20-7	Xylene (total)	75	69.8	93	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1224-BS	1A29765.D	1	08/21/20	CV	n/a	n/a	V1A1224

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

FA77945-5

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1226-BS	1A29795.D	1	08/24/20	CV	n/a	n/a	V1A1226

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

FA77945-1, FA77945-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	120	96	50-147
71-43-2	Benzene	25	23.2	93	81-122
75-27-4	Bromodichloromethane	25	23.3	93	79-123
75-25-2	Bromoform	25	22.4	90	66-123
78-93-3	2-Butanone (MEK)	125	121	97	56-143
75-15-0	Carbon Disulfide	25	22.6	90	66-148
56-23-5	Carbon Tetrachloride	25	23.9	96	76-136
108-90-7	Chlorobenzene	25	22.5	90	82-124
75-00-3	Chloroethane	25	25.3	101	62-144
67-66-3	Chloroform	25	22.7	91	80-124
124-48-1	Dibromochloromethane	25	23.1	92	78-122
75-34-3	1,1-Dichloroethane	25	23.8	95	81-122
107-06-2	1,2-Dichloroethane	25	23.1	92	75-125
75-35-4	1,1-Dichloroethylene	25	23.3	93	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	78-120
156-60-5	trans-1,2-Dichloroethylene	25	23.0	92	76-127
78-87-5	1,2-Dichloropropane	25	23.9	96	76-124
10061-01-5	cis-1,3-Dichloropropene	25	24.4	98	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.0	100	80-120
100-41-4	Ethylbenzene	25	23.6	94	81-121
591-78-6	2-Hexanone	125	124	99	61-129
74-83-9	Methyl Bromide	25	26.2	105	59-143
74-87-3	Methyl Chloride	25	25.9	104	50-159
75-09-2	Methylene Chloride	25	20.8	83	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	119	95	66-122
100-42-5	Styrene	25	23.6	94	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	23.5	94	72-120
127-18-4	Tetrachloroethylene	25	22.7	91	76-135
108-88-3	Toluene	25	23.2	93	80-120
71-55-6	1,1,1-Trichloroethane	25	22.9	92	75-130
79-00-5	1,1,2-Trichloroethane	25	23.0	92	76-119
79-01-6	Trichloroethylene	25	23.0	92	81-126
75-01-4	Vinyl Chloride	25	26.8	107	69-159
1330-20-7	Xylene (total)	75	70.3	94	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A1226-BS	1A29795.D	1	08/24/20	CV	n/a	n/a	V1A1226

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

FA77945-1, FA77945-2

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP2947-BS	P74016.D	10	09/01/20	SO	n/a	n/a	VP2947

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

FA77945-3, FA77945-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	261	104	81-122
78-93-3	2-Butanone (MEK)	1250	1150	92	56-143
56-23-5	Carbon Tetrachloride	250	252	101	76-136
108-90-7	Chlorobenzene	250	247	99	82-124
67-66-3	Chloroform	250	249	100	80-124
106-46-7	1,4-Dichlorobenzene	250	233	93	78-120
107-06-2	1,2-Dichloroethane	250	265	106	75-125
75-35-4	1,1-Dichloroethylene	250	263	105	78-137
127-18-4	Tetrachloroethylene	250	243	97	76-135
79-01-6	Trichloroethylene	250	257	103	81-126
75-01-4	Vinyl Chloride	250	272	109	69-159

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77872-15MS	1A29776.D	100	08/21/20	CV	n/a	n/a	V1A1224
FA77872-15MSD	1A29777.D	100	08/21/20	CV	n/a	n/a	V1A1224
FA77872-15	1A29769.D	100	08/21/20	CV	n/a	n/a	V1A1224

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

FA77945-5

CAS No.	Compound	FA77872-15 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	U	12500	13100	105	12500	13800	110	5	50-147/21
71-43-2	Benzene	606		2500	3010	96	2500	3070	99	2	81-122/14
75-27-4	Bromodichloromethane	100	U	2500	2300	92	2500	2380	95	3	79-123/19
75-25-2	Bromoform	100	U	2500	2150	86	2500	2300	92	7	66-123/21
78-93-3	2-Butanone (MEK)	500	U	12500	13000	104	12500	13600	109	5	56-143/18
75-15-0	Carbon Disulfide	200	U	2500	2160	86	2500	2250	90	4	66-148/23
56-23-5	Carbon Tetrachloride	100	U	2500	2320	93	2500	2420	97	4	76-136/23
108-90-7	Chlorobenzene	100	U	2500	2260	90	2500	2340	94	3	82-124/14
75-00-3	Chloroethane	200	U	2500	2520	101	2500	2530	101	0	62-144/20
67-66-3	Chloroform	100	U	2500	2230	89	2500	2290	92	3	80-124/15
124-48-1	Dibromochloromethane	100	U	2500	2200	88	2500	2310	92	5	78-122/19
75-34-3	1,1-Dichloroethane	100	U	2500	2340	94	2500	2410	96	3	81-122/15
107-06-2	1,2-Dichloroethane	100	U	2500	2350	94	2500	2380	95	1	75-125/14
75-35-4	1,1-Dichloroethylene	100	U	2500	2280	91	2500	2350	94	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	100	U	2500	2210	88	2500	2300	92	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	100	U	2500	2240	90	2500	2350	94	5	76-127/17
78-87-5	1,2-Dichloropropane	100	U	2500	2330	93	2500	2440	98	5	76-124/14
10061-01-5	cis-1,3-Dichloropropene	100	U	2500	2340	94	2500	2450	98	5	75-118/23
10061-02-6	trans-1,3-Dichloropropene	100	U	2500	2430	97	2500	2530	101	4	80-120/22
100-41-4	Ethylbenzene	2250		2500	4740	100	2500	4840	104	2	81-121/14
591-78-6	2-Hexanone	1000	U	12500	13000	104	12500	13700	110	5	61-129/18
74-83-9	Methyl Bromide	200	U	2500	1970	79	2500	2040	82	3	59-143/19
74-87-3	Methyl Chloride	200	U	2500	2430	97	2500	2430	97	0	50-159/19
75-09-2	Methylene Chloride	500	U	2500	2050	82	2500	2100	84	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	500	U	12500	12400	99	12500	13000	104	5	66-122/16
100-42-5	Styrene	100	U	2500	2290	92	2500	2360	94	3	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	100	U	2500	2420	97	2500	2570	103	6	72-120/14
127-18-4	Tetrachloroethylene	100	U	2500	2180	87	2500	2250	90	3	76-135/16
108-88-3	Toluene	7650		2500	9940	92	2500	10000	94	1	80-120/14
71-55-6	1,1,1-Trichloroethane	100	U	2500	2260	90	2500	2350	94	4	75-130/16
79-00-5	1,1,2-Trichloroethane	100	U	2500	2280	91	2500	2350	94	3	76-119/14
79-01-6	Trichloroethylene	100	U	2500	2280	91	2500	2350	94	3	81-126/15
75-01-4	Vinyl Chloride	100	U	2500	2550	102	2500	2570	103	1	69-159/18
1330-20-7	Xylene (total)	11600		7500	19500	105	7500	19600	107	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77872-15MS	1A29776.D	100	08/21/20	CV	n/a	n/a	V1A1224
FA77872-15MSD	1A29777.D	100	08/21/20	CV	n/a	n/a	V1A1224
FA77872-15	1A29769.D	100	08/21/20	CV	n/a	n/a	V1A1224

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

FA77945-5

CAS No.	Surrogate Recoveries	MS	MSD	FA77872-15	Limits
1868-53-7	Dibromofluoromethane	101%	101%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	106%	101%	79-125%
2037-26-5	Toluene-D8	100%	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	101%	102%	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77964-20MS	1A29807.D	200	08/24/20	CV	n/a	n/a	V1A1226
FA77964-20MSD	1A29808.D	200	08/24/20	CV	n/a	n/a	V1A1226
FA77964-20	1A29801.D	200	08/24/20	CV	n/a	n/a	V1A1226

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

FA77945-1, FA77945-2

CAS No.	Compound	FA77964-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		25000	24200	97	25000	24300	97	0	50-147/21
71-43-2	Benzene	3720		5000	8830	102	5000	8830	102	0	81-122/14
75-27-4	Bromodichloromethane	ND		5000	4440	89	5000	4610	92	4	79-123/19
75-25-2	Bromoform	ND		5000	3570	71	5000	4200	84	16	66-123/21
78-93-3	2-Butanone (MEK)	ND		25000	24600	98	25000	24400	98	1	56-143/18
75-15-0	Carbon Disulfide	ND		5000	4110	82	5000	4270	85	4	66-148/23
56-23-5	Carbon Tetrachloride	ND		5000	4490	90	5000	4650	93	4	76-136/23
108-90-7	Chlorobenzene	ND		5000	4310	86	5000	4420	88	3	82-124/14
75-00-3	Chloroethane	ND		5000	4860	97	5000	4800	96	1	62-144/20
67-66-3	Chloroform	ND		5000	4350	87	5000	4430	89	2	80-124/15
124-48-1	Dibromochloromethane	ND		5000	4000	80	5000	4330	87	8	78-122/19
75-34-3	1,1-Dichloroethane	ND		5000	4620	92	5000	4680	94	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		5000	4760	95	5000	4770	95	0	75-125/14
75-35-4	1,1-Dichloroethylene	ND		5000	4400	88	5000	4530	91	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		5000	4240	85	5000	4420	88	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		5000	4340	87	5000	4440	89	2	76-127/17
78-87-5	1,2-Dichloropropane	ND		5000	4610	92	5000	4730	95	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		5000	4510	90	5000	4680	94	4	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		5000	4580	92	5000	4780	96	4	80-120/22
100-41-4	Ethylbenzene	2800		5000	7540	95	5000	7700	98	2	81-121/14
591-78-6	2-Hexanone	ND		25000	24500	98	25000	24500	98	0	61-129/18
74-83-9	Methyl Bromide	ND		5000	3690	74	5000	4260	85	14	59-143/19
74-87-3	Methyl Chloride	ND		5000	4760	95	5000	4780	96	0	50-159/19
75-09-2	Methylene Chloride	ND		5000	4040	81	5000	4120	82	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25000	23800	95	25000	23700	95	0	66-122/16
100-42-5	Styrene	ND		5000	4290	86	5000	4750	95	10	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		5000	4760	95	5000	4790	96	1	72-120/14
127-18-4	Tetrachloroethylene	ND		5000	4130	83	5000	4310	86	4	76-135/16
108-88-3	Toluene	19700		5000	24400	94	5000	24500	96	0	80-120/14
71-55-6	1,1,1-Trichloroethane	ND		5000	4410	88	5000	4530	91	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		5000	4480	90	5000	4550	91	2	76-119/14
79-01-6	Trichloroethylene	ND		5000	4440	89	5000	4560	91	3	81-126/15
75-01-4	Vinyl Chloride	ND		5000	4960	99	5000	4940	99	0	69-159/18
1330-20-7	Xylene (total)	15700		15000	30500	99	15000	31000	102	2	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77964-20MS	1A29807.D	200	08/24/20	CV	n/a	n/a	V1A1226
FA77964-20MSD	1A29808.D	200	08/24/20	CV	n/a	n/a	V1A1226
FA77964-20	1A29801.D	200	08/24/20	CV	n/a	n/a	V1A1226

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

FA77945-1, FA77945-2

CAS No.	Surrogate Recoveries	MS	MSD	FA77964-20	Limits
1868-53-7	Dibromofluoromethane	103%	103%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	111%	109%	101%	79-125%
2037-26-5	Toluene-D8	100%	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	102%	107%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78133-1LMS	P74037.D	10	09/01/20	SO	n/a	n/a	VP2947
FA78133-1LMSD	P74038.D	10	09/01/20	SO	n/a	n/a	VP2947
FA78133-1L	P74021.D	10	09/01/20	SO	08/26/20	OP81751	VP2947

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

FA77945-3, FA77945-4

CAS No.	Compound	FA78133-1L ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		250	312	125*	250	286	114	9	81-122/14
78-93-3	2-Butanone (MEK)	ND		1250	1490	119	1250	1360	109	9	56-143/18
56-23-5	Carbon Tetrachloride	ND		250	301	120	250	280	112	7	76-136/23
108-90-7	Chlorobenzene	ND		250	294	118	250	269	108	9	82-124/14
67-66-3	Chloroform	ND		250	302	121	250	272	109	10	80-124/15
106-46-7	1,4-Dichlorobenzene	ND		250	274	110	250	252	101	8	78-120/15
107-06-2	1,2-Dichloroethane	ND		250	311	124	250	285	114	9	75-125/14
75-35-4	1,1-Dichloroethylene	ND		250	304	122	250	283	113	7	78-137/18
127-18-4	Tetrachloroethylene	ND		250	287	115	250	263	105	9	76-135/16
79-01-6	Trichloroethylene	ND		250	305	122	250	280	112	9	81-126/15
75-01-4	Vinyl Chloride	ND		250	301	120	250	302	121	0	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78133-1L	Limits
1868-53-7	Dibromofluoromethane	101%	99%	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	105%	106%	79-125%
2037-26-5	Toluene-D8	97%	99%	104%	85-112%
460-00-4	4-Bromofluorobenzene	97%	98%	103%	83-118%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77945-3DUP	P74034.D	10	09/01/20	SO	n/a	n/a	VP2947
FA77945-3	P74033.D	10	09/01/20	SO	08/20/20	OP81638	VP2947

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

FA77945-3, FA77945-4

CAS No.	Compound	FA77945-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
71-43-2	Benzene	ND		ND		nc	14
78-93-3	2-Butanone (MEK)	ND		ND		nc	18
56-23-5	Carbon Tetrachloride	ND		ND		nc	23
108-90-7	Chlorobenzene	ND		ND		nc	14
67-66-3	Chloroform	ND		ND		nc	15
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	15
107-06-2	1,2-Dichloroethane	ND		ND		nc	14
75-35-4	1,1-Dichloroethylene	ND		ND		nc	18
127-18-4	Tetrachloroethylene	4.7	J	ND		200*	16
79-01-6	Trichloroethylene	ND		ND		nc	15
75-01-4	Vinyl Chloride	ND		ND		nc	18

CAS No.	Surrogate Recoveries	DUP	FA77945-3	Limits
1868-53-7	Dibromofluoromethane	108%	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	105%	79-125%
2037-26-5	Toluene-D8	104%	105%	85-112%
460-00-4	4-Bromofluorobenzene	102%	103%	83-118%

* = Outside of Control Limits.

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

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-MB	6F06738.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	5.0	0.59	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.63	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.84	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.56	ug/l	
	3&4-Methylphenol	ND	5.0	0.98	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.85	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.75	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.63	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.64	ug/l	
120-12-7	Anthracene	ND	5.0	0.80	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.76	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.78	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.78	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.82	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.61	ug/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	5.0	0.85	ug/l	
85-68-7	Butyl Benzyl Phthalate	ND	5.0	1.0	ug/l	
86-74-8	Carbazole	ND	5.0	0.60	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.81	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.73	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	5.0	0.76	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.50	ug/l	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	5.0	0.54	ug/l	
218-01-9	Chrysene	ND	5.0	0.85	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.80	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.60	ug/l	

Method Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-MB	6F06738.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.64	ug/l	
84-66-2	Diethyl Phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl Phthalate	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl Phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl Phthalate	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.81	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.71	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.55	ug/l	
86-73-7	Fluorene	ND	5.0	0.70	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	1.8	ug/l	
67-72-1	Hexachloroethane	ND	5.0	1.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.71	ug/l	
78-59-1	Isophorone	ND	5.0	0.78	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.60	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.8	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.88	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.93	ug/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	5.0	0.67	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.81	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.86	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	33%	14-67%
4165-62-2	Phenol-d5	24%	10-50%

Method Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-MB	6F06738.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Surrogate Recoveries		Limits
118-79-6	2,4,6-Tribromophenol	67%	33-118%
4165-60-0	Nitrobenzene-d5	69%	42-108%
321-60-8	2-Fluorobiphenyl	74%	40-106%
1718-51-0	Terphenyl-d14	87%	39-121%

Leachate Blank Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81746-LB	X072566.D	1	08/26/20	MV	08/26/20	OP81746	SX2958

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

FA77945-3, FA77945-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	50	5.6	ug/l	
	3&4-Methylphenol	ND	50	9.8	ug/l	
87-86-5	Pentachlorophenol	ND	250	50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	7.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	7.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	8.1	ug/l	
118-74-1	Hexachlorobenzene	ND	50	6.9	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	5.0	ug/l	
67-72-1	Hexachloroethane	ND	50	16	ug/l	
98-95-3	Nitrobenzene	ND	50	9.3	ug/l	
110-86-1	Pyridine	ND	100	20	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	32%	14-67%
4165-62-2	Phenol-d5	22%	10-50%
118-79-6	2,4,6-Tribromophenol	61%	33-118%
4165-60-0	Nitrobenzene-d5	61%	42-108%
321-60-8	2-Fluorobiphenyl	58%	40-106%
1718-51-0	Terphenyl-d14	63%	39-121%

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81746-LBS	X072565.D	1	08/26/20	MV	08/26/20	OP81746	SX2958

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

FA77945-3, FA77945-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	250	50	43-90
	3&4-Methylphenol	1000	476	48	36-88
87-86-5	Pentachlorophenol	1000	677	68	61-115
95-95-4	2,4,5-Trichlorophenol	500	364	73	62-109
88-06-2	2,4,6-Trichlorophenol	500	364	73	59-107
106-46-7	1,4-Dichlorobenzene	500	329	66	45-98
121-14-2	2,4-Dinitrotoluene	500	397	79	61-110
118-74-1	Hexachlorobenzene	500	337	67	63-108
87-68-3	Hexachlorobutadiene	500	341	68	42-102
67-72-1	Hexachloroethane	500	323	65	42-100
98-95-3	Nitrobenzene	500	342	68	50-104
110-86-1	Pyridine	500	168	34	23-74

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	33%	14-67%
4165-62-2	Phenol-d5	23%	10-50%
118-79-6	2,4,6-Tribromophenol	68%	33-118%
4165-60-0	Nitrobenzene-d5	67%	42-108%
321-60-8	2-Fluorobiphenyl	65%	40-106%
1718-51-0	Terphenyl-d14	62%	39-121%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-BS	6F06737.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	22.8	23	10-69
59-50-7	4-Chloro-3-methyl Phenol	50	36.9	74	54-103
95-57-8	2-Chlorophenol	50	33.1	66	52-98
120-83-2	2,4-Dichlorophenol	50	38.0	76	53-103
105-67-9	2,4-Dimethylphenol	50	35.4	71	43-90
51-28-5	2,4-Dinitrophenol	100	10.6	11*	44-112
534-52-1	4,6-Dinitro-o-cresol	100	16.1	16*	66-121
95-48-7	2-Methylphenol	50	27.1	54	43-90
	3&4-Methylphenol	100	52.5	53	36-88
88-75-5	2-Nitrophenol	50	37.9	76	53-102
100-02-7	4-Nitrophenol	100	31.1	31	18-62
87-86-5	Pentachlorophenol	100	66.1	66	61-115
108-95-2	Phenol	50	13.5	27	19-56
95-95-4	2,4,5-Trichlorophenol	50	41.7	83	62-109
88-06-2	2,4,6-Trichlorophenol	50	41.9	84	59-107
83-32-9	Acenaphthene	50	38.6	77	61-107
208-96-8	Acenaphthylene	50	42.2	84	60-104
120-12-7	Anthracene	50	37.8	76	65-108
56-55-3	Benzo(a)anthracene	50	43.0	86	66-111
50-32-8	Benzo(a)pyrene	50	43.5	87	62-107
205-99-2	Benzo(b)fluoranthene	50	43.8	88	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.7	87	66-116
207-08-9	Benzo(k)fluoranthene	50	41.2	82	65-114
100-51-6	Benzyl Alcohol	50	32.4	65	46-94
101-55-3	4-Bromophenyl Phenyl Ether	50	39.0	78	65-109
85-68-7	Butyl Benzyl Phthalate	50	49.0	98	65-112
86-74-8	Carbazole	50	40.0	80	59-113
106-47-8	4-Chloroaniline	50	35.2	70	49-105
111-91-1	bis(2-Chloroethoxy)methane	50	36.0	72	51-102
111-44-4	bis(2-Chloroethyl)ether	50	36.4	73	53-100
108-60-1	2,2'-Oxybis(1-chloropropane)	50	34.0	68	45-106
91-58-7	2-Chloronaphthalene	50	38.3	77	57-103
7005-72-3	4-Chlorophenyl Phenyl Ether	50	39.2	78	62-105
218-01-9	Chrysene	50	43.5	87	66-111
53-70-3	Dibenzo(a,h)anthracene	50	42.7	85	66-119
132-64-9	Dibenzofuran	50	39.5	79	61-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-BS	6F06737.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	36.0	72	48-97
541-73-1	1,3-Dichlorobenzene	50	36.1	72	45-95
106-46-7	1,4-Dichlorobenzene	50	35.6	71	45-98
91-94-1	3,3'-Dichlorobenzidine	50	46.4	93	46-117
84-66-2	Diethyl Phthalate	50	40.3	81	64-108
131-11-3	Dimethyl Phthalate	50	40.4	81	63-106
84-74-2	Di-n-butyl Phthalate	50	39.8	80	65-107
117-84-0	Di-n-octyl Phthalate	50	51.1	102	62-118
121-14-2	2,4-Dinitrotoluene	50	40.9	82	61-110
606-20-2	2,6-Dinitrotoluene	50	40.2	80	63-108
117-81-7	bis(2-Ethylhexyl)phthalate	50	46.4	93	61-117
206-44-0	Fluoranthene	50	37.8	76	63-106
86-73-7	Fluorene	50	40.3	81	62-108
118-74-1	Hexachlorobenzene	50	34.3	69	63-108
87-68-3	Hexachlorobutadiene	50	39.3	79	42-102
77-47-4	Hexachlorocyclopentadiene	50	11.4	23*	39-102
67-72-1	Hexachloroethane	50	29.3	59	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.5	91	64-119
78-59-1	Isophorone	50	38.6	77	43-87
91-57-6	2-Methylnaphthalene	50	38.4	77	51-102
91-20-3	Naphthalene	50	37.5	75	47-100
88-74-4	2-Nitroaniline	50	39.6	79	54-128
99-09-2	3-Nitroaniline	50	43.4	87	56-106
100-01-6	4-Nitroaniline	50	40.1	80	55-120
98-95-3	Nitrobenzene	50	36.2	72	50-104
621-64-7	N-Nitrosodi-n-propylamine	50	35.3	71	52-104
86-30-6	N-Nitrosodiphenylamine	50	37.9	76	64-108
85-01-8	Phenanthrene	50	38.6	77	66-110
129-00-0	Pyrene	50	48.4	97	64-113
120-82-1	1,2,4-Trichlorobenzene	50	38.0	76	45-97

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	41%	14-67%
4165-62-2	Phenol-d5	30%	10-50%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-BS	6F06737.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	65%	33-118%
4165-60-0	Nitrobenzene-d5	72%	42-108%
321-60-8	2-Fluorobiphenyl	76%	40-106%
1718-51-0	Terphenyl-d14	84%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81746-MS	X072573.D	1	08/26/20	MV	08/26/20	OP81746	SX2958
OP81746-MSD	X072574.D	1	08/26/20	MV	08/26/20	OP81746	SX2958
FA77945-4	X072572.D	1	08/26/20	MV	08/26/20	OP81746	SX2958

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

FA77945-3, FA77945-4

CAS No.	Compound	FA77945-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND		500	215	43	500	220	44	2	43-90/28
	3&4-Methylphenol	ND		1000	416	42	1000	417	42	0	36-88/28
87-86-5	Pentachlorophenol	ND		1000	593	59*	1000	556	56*	6	61-115/26
95-95-4	2,4,5-Trichlorophenol	ND		500	313	63	500	307	61*	2	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		500	309	62	500	308	62	0	59-107/23
106-46-7	1,4-Dichlorobenzene	ND		500	280	56	500	291	58	4	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		500	356	71	500	342	68	4	61-110/21
118-74-1	Hexachlorobenzene	ND		500	307	61*	500	297	59*	3	63-108/22
87-68-3	Hexachlorobutadiene	ND		500	289	58	500	292	58	1	42-102/28
67-72-1	Hexachloroethane	ND		500	279	56	500	287	57	3	42-100/29
98-95-3	Nitrobenzene	ND		500	291	58	500	295	59	1	50-104/28
110-86-1	Pyridine	ND		500	150	30	500	159	32	6	23-74/34

CAS No.	Surrogate Recoveries	MS	MSD	FA77945-4	Limits
367-12-4	2-Fluorophenol	28%	28%	28%	14-67%
4165-62-2	Phenol-d5	21%	20%	19%	10-50%
118-79-6	2,4,6-Tribromophenol	61%	60%	55%	33-118%
4165-60-0	Nitrobenzene-d5	55%	57%	58%	42-108%
321-60-8	2-Fluorobiphenyl	56%	56%	57%	40-106%
1718-51-0	Terphenyl-d14	57%	57%	61%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-MS	6F06740.D	1	08/24/20	MV	08/24/20	OP81704	S6F260
OP81704-MSD	6F06741.D	1	08/24/20	MV	08/24/20	OP81704	S6F260
FA77945-1	6F06739.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Compound	FA77945-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		192	49.2	26	192	53.6	28	9	10-69/39
59-50-7	4-Chloro-3-methyl Phenol	ND		96.2	66.9	70	96.2	71.6	74	7	54-103/23
95-57-8	2-Chlorophenol	ND		96.2	54.5	57	96.2	62.6	65	14	52-98/25
120-83-2	2,4-Dichlorophenol	ND		96.2	64.0	67	96.2	70.1	73	9	53-103/26
105-67-9	2,4-Dimethylphenol	ND		96.2	59.4	62	96.2	66.8	69	12	43-90/27
51-28-5	2,4-Dinitrophenol	ND		192	26.2	14*	192	32.8	17*	22	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		192	36.1	19*	192	42.9	22*	17	66-121/23
95-48-7	2-Methylphenol	ND		96.2	46.9	49	96.2	52.8	55	12	43-90/28
	3&4-Methylphenol	ND		192	92.5	48	192	103	54	11	36-88/28
88-75-5	2-Nitrophenol	ND		96.2	61.1	64	96.2	70.4	73	14	53-102/29
100-02-7	4-Nitrophenol	ND		192	67.3	35	192	70.6	37	5	18-62/33
87-86-5	Pentachlorophenol	ND		192	127	66	192	131	68	3	61-115/26
108-95-2	Phenol	ND		96.2	28.6	30	96.2	32.6	34	13	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		96.2	74.0	77	96.2	80.2	83	8	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		96.2	71.8	75	96.2	78.8	82	9	59-107/23
83-32-9	Acenaphthene	ND		96.2	69.6	72	96.2	74.8	78	7	61-107/22
208-96-8	Acenaphthylene	ND		96.2	76.2	79	96.2	82.1	85	7	60-104/22
120-12-7	Anthracene	ND		96.2	74.4	77	96.2	76.6	80	3	65-108/20
56-55-3	Benzo(a)anthracene	ND		96.2	82.9	86	96.2	86.4	90	4	66-111/22
50-32-8	Benzo(a)pyrene	ND		96.2	85.4	89	96.2	86.2	90	1	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		96.2	86.7	90	96.2	87.6	91	1	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		96.2	85.5	89	96.2	87.2	91	2	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		96.2	79.9	83	96.2	81.1	84	1	65-114/24
100-51-6	Benzyl Alcohol	ND		96.2	57.2	59	96.2	64.0	67	11	46-94/27
101-55-3	4-Bromophenyl Phenyl Ether	ND		96.2	75.0	78	96.2	79.0	82	5	65-109/23
85-68-7	Butyl Benzyl Phthalate	ND		96.2	92.5	96	96.2	95.6	99	3	65-112/24
86-74-8	Carbazole	ND		96.2	79.7	83	96.2	81.4	85	2	59-113/21
106-47-8	4-Chloroaniline	ND		96.2	63.1	66	96.2	68.5	71	8	49-105/27
111-91-1	bis(2-Chloroethoxy)methane	ND		96.2	61.1	64	96.2	68.4	71	11	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		96.2	60.4	63	96.2	68.8	72	13	53-100/27
108-60-1	2,2'-Oxybis(1-chloropropane)	ND		96.2	57.1	59	96.2	64.7	67	12	45-106/26
91-58-7	2-Chloronaphthalene	ND		96.2	65.7	68	96.2	72.4	75	10	57-103/23
7005-72-3	4-Chlorophenyl Phenyl Ether	ND		96.2	71.9	75	96.2	76.8	80	7	62-105/20
218-01-9	Chrysene	ND		96.2	83.4	87	96.2	85.9	89	3	66-111/22
53-70-3	Dibenzo(a,h)anthracene	ND		96.2	80.8	84	96.2	85.5	89	6	66-119/24
132-64-9	Dibenzofuran	ND		96.2	72.1	75	96.2	76.4	79	6	61-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-MS	6F06740.D	1	08/24/20	MV	08/24/20	OP81704	S6F260
OP81704-MSD	6F06741.D	1	08/24/20	MV	08/24/20	OP81704	S6F260
FA77945-1	6F06739.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Compound	FA77945-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		96.2	59.8	62	96.2	68.3	71	13	48-97/24
541-73-1	1,3-Dichlorobenzene	ND		96.2	59.4	62	96.2	68.1	71	14	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		96.2	59.4	62	96.2	67.8	71	13	45-98/25
91-94-1	3,3'-Dichlorobenzidine	ND		96.2	86.4	90	96.2	90.5	94	5	46-117/29
84-66-2	Diethyl Phthalate	ND		96.2	77.1	80	96.2	80.4	84	4	64-108/21
131-11-3	Dimethyl Phthalate	ND		96.2	75.1	78	96.2	80.3	84	7	63-106/22
84-74-2	Di-n-butyl Phthalate	ND		96.2	78.4	82	96.2	80.3	84	2	65-107/21
117-84-0	Di-n-octyl Phthalate	ND		96.2	99.1	103	96.2	100	104	1	62-118/24
121-14-2	2,4-Dinitrotoluene	ND		96.2	77.3	80	96.2	82.7	86	7	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		96.2	75.5	79	96.2	81.0	84	7	63-108/21
117-81-7	bis(2-Ethylhexyl)phthalate	ND		96.2	88.0	92	96.2	91.1	95	3	61-117/23
206-44-0	Fluoranthene	ND		96.2	75.6	79	96.2	78.2	81	3	63-106/21
86-73-7	Fluorene	ND		96.2	75.0	78	96.2	80.2	83	7	62-108/20
118-74-1	Hexachlorobenzene	ND		96.2	65.5	68	96.2	69.1	72	5	63-108/22
87-68-3	Hexachlorobutadiene	ND		96.2	65.1	68	96.2	74.1	77	13	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		96.2	18.9	20*	96.2	23.5	24*	22	39-102/29
67-72-1	Hexachloroethane	ND		96.2	48.5	50	96.2	56.2	58	15	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		96.2	90.0	94	96.2	91.2	95	1	64-119/24
78-59-1	Isophorone	ND		96.2	66.4	69	96.2	73.5	76	10	43-87/25
91-57-6	2-Methylnaphthalene	ND		96.2	66.4	69	96.2	72.7	76	9	51-102/26
91-20-3	Naphthalene	ND		96.2	63.3	66	96.2	71.4	74	12	47-100/29
88-74-4	2-Nitroaniline	ND		96.2	74.4	77	96.2	94.4	98	24	54-128/24
99-09-2	3-Nitroaniline	ND		96.2	83.0	86	96.2	86.1	90	4	56-106/27
100-01-6	4-Nitroaniline	ND		96.2	80.0	83	96.2	81.6	85	2	55-120/24
98-95-3	Nitrobenzene	ND		96.2	61.0	63	96.2	68.4	71	11	50-104/28
621-64-7	N-Nitrosodi-n-propylamine	ND		96.2	60.7	63	96.2	67.0	70	10	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		96.2	73.8	77	96.2	75.8	79	3	64-108/23
85-01-8	Phenanthrene	ND		96.2	75.7	79	96.2	78.4	82	4	66-110/21
129-00-0	Pyrene	ND		96.2	91.1	95	96.2	95.2	99	4	64-113/23
120-82-1	1,2,4-Trichlorobenzene	ND		96.2	64.1	67	96.2	72.6	76	12	45-97/28

CAS No.	Surrogate Recoveries	MS	MSD	FA77945-1	Limits
367-12-4	2-Fluorophenol	36%	42%	23%	14-67%
4165-62-2	Phenol-d5	29%	32%	17%	10-50%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81704-MS	6F06740.D	1	08/24/20	MV	08/24/20	OP81704	S6F260
OP81704-MSD	6F06741.D	1	08/24/20	MV	08/24/20	OP81704	S6F260
FA77945-1	6F06739.D	1	08/24/20	MV	08/24/20	OP81704	S6F260

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

FA77945-1, FA77945-2

CAS No.	Surrogate Recoveries	MS	MSD	FA77945-1	Limits
118-79-6	2,4,6-Tribromophenol	63%	64%	60%	33-118%
4165-60-0	Nitrobenzene-d5	62%	69%	54%	42-108%
321-60-8	2-Fluorobiphenyl	67%	73%	60%	40-106%
1718-51-0	Terphenyl-d14	81%	81%	82%	39-121%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA77945
Account: UTC Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81746-DUP	X072571.D	1	08/26/20	MV	08/26/20	OP81746	SX2958
FA77945-3	X072570.D	1	08/26/20	MV	08/26/20	OP81746	SX2958

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

FA77945-3, FA77945-4

CAS No.	Compound	FA77945-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
95-48-7	2-Methylphenol	ND		ND		nc	28
	3&4-Methylphenol	ND		ND		nc	28
87-86-5	Pentachlorophenol	ND		ND		nc	26
95-95-4	2,4,5-Trichlorophenol	ND		ND		nc	22
88-06-2	2,4,6-Trichlorophenol	ND		ND		nc	23
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	25
121-14-2	2,4-Dinitrotoluene	ND		ND		nc	21
118-74-1	Hexachlorobenzene	ND		ND		nc	22
87-68-3	Hexachlorobutadiene	ND		ND		nc	28
67-72-1	Hexachloroethane	ND		ND		nc	29
98-95-3	Nitrobenzene	ND		ND		nc	28
110-86-1	Pyridine	ND		ND		nc	34

CAS No.	Surrogate Recoveries	DUP	FA77945-3	Limits
367-12-4	2-Fluorophenol	28%	27%	14-67%
4165-62-2	Phenol-d5	19%	19%	10-50%
118-79-6	2,4,6-Tribromophenol	58%	57%	33-118%
4165-60-0	Nitrobenzene-d5	57%	56%	42-108%
321-60-8	2-Fluorobiphenyl	55%	54%	40-106%
1718-51-0	Terphenyl-d14	59%	64%	39-121%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37712
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/24/20

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1	0.20	<6.0
Arsenic	10	1.3	1.3	-1.3	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2	-0.060	<4.0
Cadmium	5.0	.2	.2	-0.010	<5.0
Calcium	1000	50	50		
Chromium	10	1	1	0.10	<10
Cobalt	50	.2	.2		
Copper	25	1	1	0.40	<25
Iron	300	17	17		
Lead	5.0	1	1.1	-0.30	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4	-0.10	<40
Potassium	10000	200	200		
Selenium	10	2.4	2.9	0.30	<10
Silver	10	.7	.7	-0.40	<10
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4	0.90	<10
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4	0.30	<20

Associated samples MP37712: FA77945-1, FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37712
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date:			08/24/20					08/24/20	
Metal	FA77682-3 Original	DUP	RPD	QC Limits	FA77682-3 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	3.3	0.0	200.0(a)	0-20	3.3	509	500	101.1	80-120
Arsenic	0.0	0.0	NC	0-20	0.0	1940	2000	97.0	80-120
Barium	anr								
Beryllium	0.0	0.0	NC	0-20	0.0	49.2	50	98.4	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	49.6	50	99.2	80-120
Calcium	anr								
Chromium	0.0	0.0	NC	0-20	0.0	199	200	99.5	80-120
Cobalt									
Copper	0.0	0.0	NC	0-20	0.0	249	250	99.6	80-120
Iron	anr								
Lead	0.0	0.0	NC	0-20	0.0	464	500	92.8	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	0.40	0.0	200.0(a)	0-20	0.40	499	500	99.7	80-120
Potassium									
Selenium	0.0	0.0	NC	0-20	0.0	1920	2000	96.0	80-120
Silver	0.0	0.0	NC	0-20	0.0	48.1	50	96.2	80-120
Sodium	anr								
Strontium									
Thallium	0.0	0.0	NC	0-20	0.0	1860	2000	93.0	80-120
Tin									
Titanium									
Vanadium	anr								
Zinc	0.0	0.0	NC	0-20	0.0	491	500	98.2	80-120

Associated samples MP37712: FA77945-1, FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37712
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/24/20

Metal	FA77682-3 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	3.3	506	500	100.5	0.6	20
Arsenic	0.0	1910	2000	95.5	1.6	20
Barium	anr					
Beryllium	0.0	48.7	50	97.4	1.0	20
Cadmium	0.0	49.0	50	98.0	1.2	20
Calcium	anr					
Chromium	0.0	198	200	99.0	0.5	20
Cobalt						
Copper	0.0	247	250	98.8	0.8	20
Iron	anr					
Lead	0.0	460	500	92.0	0.9	20
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	0.40	496	500	99.1	0.6	20
Potassium						
Selenium	0.0	1900	2000	95.0	1.0	20
Silver	0.0	47.6	50	95.2	1.0	20
Sodium	anr					
Strontium						
Thallium	0.0	1860	2000	93.0	0.0	20
Tin						
Titanium						
Vanadium	anr					
Zinc	0.0	489	500	97.8	0.4	20

Associated samples MP37712: FA77945-1, FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37712
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/24/20

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	504	500	100.8	80-120
Arsenic	1930	2000	96.5	80-120
Barium	anr			
Beryllium	49.4	50	98.8	80-120
Cadmium	49.6	50	99.2	80-120
Calcium	anr			
Chromium	201	200	100.5	80-120
Cobalt				
Copper	252	250	100.8	80-120
Iron	anr			
Lead	470	500	94.0	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	505	500	101.0	80-120
Potassium				
Selenium	1910	2000	95.5	80-120
Silver	48.3	50	96.6	80-120
Sodium	anr			
Strontium				
Thallium	1890	2000	94.5	80-120
Tin				
Titanium				
Vanadium	anr			
Zinc	498	500	99.6	80-120

Associated samples MP37712: FA77945-1, FA77945-2

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37712
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/24/20

Metal	FA77682-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	3.30	0.00	100.0(a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	0.00	0.00	NC	0-10
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	0.400	0.00	100.0(a)	0-10
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	anr			
Zinc	0.00	0.00	NC	0-10

Associated samples MP37712: FA77945-1, FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37712
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/24/20

Metal	Sample ml	Final ml	FA77682-3 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10	3.3	3.234	105.4	0.2	5	100	102.2	80-120
Arsenic	9.8	10			101.3	0.2	5	100	101.3	80-120
Barium										
Beryllium	9.8	10			50	0.2	2.5	50	100.0	80-120
Cadmium	9.8	10			51.23	0.2	2.5	50	102.5	80-120
Calcium										
Chromium	9.8	10			51.5	0.2	2.5	50	103.0	80-120
Cobalt										
Copper	9.8	10			101.2	0.2	5	100	101.2	80-120
Iron										
Lead	9.8	10			46.9	0.2	2.5	50	93.8	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10	.4	.392	103.4	0.2	5	100	103.0	80-120
Potassium										
Selenium	9.8	10			96.1	0.2	5	100	96.1	80-120
Silver	9.8	10			51.1	0.2	2.5	50	102.2	80-120
Sodium										
Strontium										
Thallium	9.8	10			92.3	0.2	5	100	92.3	80-120
Tin										
Titanium										
Vanadium										
Zinc	9.8	10			253.3	0.2	12.5	250	101.3	80-120

Associated samples MP37712: FA77945-1, FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37731 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/26/20

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.0096	<0.50

Associated samples MP37731: FA77945-1

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37731 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/26/20 08/26/20

Metal	FA77803-11 Original	DUP	RPD	QC Limits	FA77803-11 Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	2.6	3	86.7	80-120

Associated samples MP37731: FA77945-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37731 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/26/20

Metal	FA77803-11 Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.7	3	90.0	3.8	20

Associated samples MP37731: FA77945-1

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37731
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 08/26/20

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	2.9	3	96.7	80-120

Associated samples MP37731: FA77945-1

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37731 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/26/20

	FA77803-11			QC
Metal	Original	SDL 1:5	%DIF	Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP37731: FA77945-1

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date:				08/26/20		08/26/20		08/26/20	
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Mercury	0.00050	.00003	.00005	-0.0000046	<0.00050	-0.00012	<0.0050	-0.00029	<0.0050

Associated samples MP37732: FA77945-3, FA77945-4

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 08/26/20

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.00050	.00003	.00005	-0.00018	<0.0050

Associated samples MP37732: FA77945-3, FA77945-4

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 08/26/20 08/26/20

Metal	FA77851-1 Original	DUP	RPD	QC Limits	FA77851-1 Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.029	0.030	96.7	80-120

Associated samples MP37732: FA77945-3, FA77945-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 08/26/20

Metal	FA77851-1 Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.028	0.030	93.3	3.5	20

Associated samples MP37732: FA77945-3, FA77945-4

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

8.3.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732 Methods: SW846 7470A
Matrix Type: LEACHATE Units: mg/l

Prep Date: 08/26/20 08/26/20

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0028	0.0030	93.3	80-120	0.029	0.030	96.7	80-120

Associated samples MP37732: FA77945-3, FA77945-4

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date:			08/26/20				08/26/20	
Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.028	0.030	93.3	80-120	0.028	0.030	93.3	80-120

Associated samples MP37732: FA77945-3, FA77945-4

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37732 Methods: SW846 7470A
Matrix Type: LEACHATE Units: ug/l

Prep Date: 08/26/20

Metal	FA77851-1 Original	SDL 1:5	%DIF	QC Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP37732: FA77945-3, FA77945-4

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date:					08/28/20		08/28/20		08/28/20
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	0.20	.014	.014						
Antimony	0.0060	.001	.001	0.0014	<0.0060	-0.0070	<0.060	0.016	<0.060
Arsenic	0.010	.0013	.0013	-0.0010	<0.010	-0.0070	<0.10	-0.0070	<0.10
Barium	0.20	.001	.005						
Beryllium	0.0040	.0002	.0002	0.0	<0.0040	0.0	<0.040	0.0	<0.040
Cadmium	0.0050	.0002	.0002	-0.00010	<0.0050	-0.0020	<0.050	-0.0020	<0.050
Calcium	1.0	.05	.05						
Chromium	0.010	.001	.001	-0.00030	<0.010	0.0010	<0.10	-0.0010	<0.10
Cobalt	0.050	.0002	.0002						
Copper	0.025	.001	.001	-0.00020	<0.025	0.0010	<0.25	0.0040	<0.25
Iron	0.30	.017	.017						
Lead	0.0050	.001	.0011	-0.00090	<0.0050	-0.0040	<0.050	0.0030	<0.050
Magnesium	5.0	.035	.035						
Manganese	0.015	.0005	.001						
Molybdenum	0.050	.0003	.0003						
Nickel	0.040	.0004	.0004	0.00010	<0.040	0.0	<0.40	0.0020	<0.40
Potassium	10	.2	.2						
Selenium	0.010	.0024	.0029	-0.0011	<0.010	-0.013	<0.10	-0.0040	<0.10
Silver	0.010	.0007	.0007	-0.00020	<0.010	-0.0010	<0.10	-0.0020	<0.10
Sodium	10	.5	.5						
Strontium	0.010	.0005	.0005						
Thallium	0.010	.0011	.0014	0.00010	<0.010	-0.0090	<0.10	0.0020	<0.10
Tin	0.050	.0009	.001						
Titanium	0.010	.0005	.001						
Vanadium	0.050	.0005	.0006						
Zinc	0.020	.003	.01	0.00080	<0.020	0.015	<0.20	0.017	<0.20

Associated samples MP37743: FA77945-3, FA77945-4

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date:				08/28/20		08/28/20	
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	0.20	.014	.014				
Antimony	0.0060	.001	.001	0.014	<0.060	0.0080	<0.060
Arsenic	0.010	.0013	.0013	-0.012	<0.10	-0.013	<0.10
Barium	0.20	.001	.005				
Beryllium	0.0040	.0002	.0002	0.0	<0.040	0.0	<0.040
Cadmium	0.0050	.0002	.0002	-0.0020	<0.050	-0.0010	<0.050
Calcium	1.0	.05	.05				
Chromium	0.010	.001	.001	-0.0010	<0.10	-0.0020	<0.10
Cobalt	0.050	.0002	.0002				
Copper	0.025	.001	.001	0.0050	<0.25	0.0050	<0.25
Iron	0.30	.017	.017				
Lead	0.0050	.001	.0011	0.0040	<0.050	-0.0090	<0.050
Magnesium	5.0	.035	.035				
Manganese	0.015	.0005	.001				
Molybdenum	0.050	.0003	.0003				
Nickel	0.040	.0004	.0004	0.0010	<0.40	0.0010	<0.40
Potassium	10	.2	.2				
Selenium	0.010	.0024	.0029	-0.013	<0.10	-0.0080	<0.10
Silver	0.010	.0007	.0007	-0.0030	<0.10	-0.0020	<0.10
Sodium	10	.5	.5				
Strontium	0.010	.0005	.0005				
Thallium	0.010	.0011	.0014	0.0	<0.10	-0.0050	<0.10
Tin	0.050	.0009	.001				
Titanium	0.010	.0005	.001				
Vanadium	0.050	.0005	.0006				
Zinc	0.020	.003	.01	0.013	<0.20	0.014	<0.20

Associated samples MP37743: FA77945-3, FA77945-4

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date:			08/28/20					08/28/20	
Metal	FA77945-3 Original	DUP	RPD	QC Limits	FA77945-3 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	0.0	0.016	200.0(a)	0-20	0.0	5.0	5.0	100.0	80-120
Arsenic	0.0	0.0	NC	0-20	0.0	18.9	20.0	94.5	80-120
Barium	anr								
Beryllium	0.0	0.0	NC	0-20	0.0	0.46	0.50	92.0	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	0.46	0.50	92.0	80-120
Calcium									
Chromium	0.0	0.0	NC	0-20	0.0	1.9	2.0	95.0	80-120
Cobalt									
Copper	0.035	0.033	5.9	0-20	0.035	2.4	2.5	94.6	80-120
Iron									
Lead	0.056	0.054	3.6	0-20	0.056	4.4	5.0	86.9	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel	0.015	0.015	0.0	0-20	0.015	4.8	5.0	95.7	80-120
Potassium									
Selenium	0.0	0.0	NC	0-20	0.0	18.8	20.0	94.0	80-120
Silver	0.0	0.0	NC	0-20	0.0	0.47	0.50	94.0	80-120
Sodium									
Strontium									
Thallium	0.012	0.014	15.4	0-20	0.012	17.1	20.0	85.4	80-120
Tin									
Titanium									
Vanadium									
Zinc	0.067	0.069	2.9	0-20	0.067	4.7	5.0	92.7	80-120

Associated samples MP37743: FA77945-3, FA77945-4

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date:					08/28/20				08/28/20	
Metal	FA77945-3 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit	FA77945-4 Original	DUP	RPD	QC Limits
Aluminum										
Antimony	0.0	5.0	5.0	100.0	0.0	20	0.019	0.020	5.1	0-20
Arsenic	0.0	19.0	20.0	95.0	0.5	20	0.0	0.0	NC	0-20
Barium	anr									
Beryllium	0.0	0.47	0.50	94.0	2.2	20	0.0	0.0	NC	0-20
Cadmium	0.0	0.46	0.50	92.0	0.0	20	0.0	0.0	NC	0-20
Calcium										
Chromium	0.0	1.9	2.0	95.0	0.0	20	0.0	0.0	NC	0-20
Cobalt										
Copper	0.035	2.4	2.5	94.6	0.0	20	0.014	0.013	7.4	0-20
Iron										
Lead	0.056	4.4	5.0	86.9	0.0	20	0.024	0.025	4.1	0-20
Magnesium										
Manganese										
Molybdenum										
Nickel	0.015	4.8	5.0	95.7	0.0	20	0.0	0.0	NC	0-20
Potassium										
Selenium	0.0	18.9	20.0	94.5	0.5	20	0.0	0.0	NC	0-20
Silver	0.0	0.46	0.50	92.0	2.2	20	0.0	0.0	NC	0-20
Sodium										
Strontium										
Thallium	0.012	17.1	20.0	85.4	0.0	20	0.011	0.0	200.0(a)	0-20
Tin										
Titanium										
Vanadium										
Zinc	0.067	4.7	5.0	92.7	0.0	20	0.088	0.085	3.5	0-20

Associated samples MP37743: FA77945-3, FA77945-4

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.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date:		08/28/20				08/28/20	
Metal	BSP Result	Spikelot MPFLICP2 % Rec	QC Limits	BSP Result	Spikelot MPFLICP2 % Rec	QC Limits	
Aluminum							
Antimony	0.50	0.50	100.0	80-120	5.1	5.0	102.0	80-120
Arsenic	1.9	2.0	95.0	80-120	19.2	20.0	96.0	80-120
Barium	anr							
Beryllium	0.048	0.050	96.0	80-120	0.48	0.50	96.0	80-120
Cadmium	0.047	0.050	94.0	80-120	0.47	0.50	94.0	80-120
Calcium							
Chromium	0.19	0.20	95.0	80-120	1.9	2.0	95.0	80-120
Cobalt							
Copper	0.24	0.25	96.0	80-120	2.4	2.5	96.0	80-120
Iron							
Lead	0.44	0.50	88.0	80-120	4.4	5.0	88.0	80-120
Magnesium							
Manganese							
Molybdenum							
Nickel	0.50	0.50	100.0	80-120	4.9	5.0	98.0	80-120
Potassium							
Selenium	1.9	2.0	95.0	80-120	19.1	20.0	95.5	80-120
Silver	0.047	0.050	94.0	80-120	0.47	0.50	94.0	80-120
Sodium							
Strontium							
Thallium	1.8	2.0	90.0	80-120	17.0	20.0	85.0	80-120
Tin							
Titanium							
Vanadium							
Zinc	0.48	0.50	96.0	80-120	4.8	5.0	96.0	80-120

Associated samples MP37743: FA77945-3, FA77945-4

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date:		08/28/20				08/28/20	
Metal	BSP Result	Spikelot MPFLICP2 % Rec	QC Limits	BSP Result	Spikelot MPFLICP2 % Rec	QC Limits	
Aluminum							
Antimony	5.1	5.0	102.0	80-120	4.9	5.0	98.0	80-120
Arsenic	19.3	20.0	96.5	80-120	18.7	20.0	93.5	80-120
Barium	anr							
Beryllium	0.48	0.50	96.0	80-120	0.47	0.50	94.0	80-120
Cadmium	0.47	0.50	94.0	80-120	0.46	0.50	92.0	80-120
Calcium							
Chromium	1.9	2.0	95.0	80-120	1.9	2.0	95.0	80-120
Cobalt							
Copper	2.4	2.5	96.0	80-120	2.3	2.5	92.0	80-120
Iron							
Lead	4.5	5.0	90.0	80-120	4.4	5.0	88.0	80-120
Magnesium							
Manganese							
Molybdenum							
Nickel	4.9	5.0	98.0	80-120	4.8	5.0	96.0	80-120
Potassium							
Selenium	19.2	20.0	96.0	80-120	18.6	20.0	93.0	80-120
Silver	0.47	0.50	94.0	80-120	0.46	0.50	92.0	80-120
Sodium							
Strontium							
Thallium	17.4	20.0	87.0	80-120	17.1	20.0	85.5	80-120
Tin							
Titanium							
Vanadium							
Zinc	4.9	5.0	98.0	80-120	4.8	5.0	96.0	80-120

Associated samples MP37743: FA77945-3, FA77945-4

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: mg/l

Prep Date: 08/28/20

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	5.0	5.0	100.0	80-120
Arsenic	19.0	20.0	95.0	80-120
Barium	anr			
Beryllium	0.47	0.50	94.0	80-120
Cadmium	0.47	0.50	94.0	80-120
Calcium				
Chromium	1.9	2.0	95.0	80-120
Cobalt				
Copper	2.4	2.5	96.0	80-120
Iron				
Lead	4.5	5.0	90.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	4.8	5.0	96.0	80-120
Potassium				
Selenium	18.9	20.0	94.5	80-120
Silver	0.47	0.50	94.0	80-120
Sodium				
Strontium				
Thallium	17.3	20.0	86.5	80-120
Tin				
Titanium				
Vanadium				
Zinc	4.8	5.0	96.0	80-120

Associated samples MP37743: FA77945-3, FA77945-4

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37743
Matrix Type: LEACHATE

Methods: SW846 6010D
Units: ug/l

Prep Date: 08/28/20

Metal	FA77945-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	8.50	NC	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	3.50	0.00	100.0(a)	0-10
Iron				
Lead	5.60	5.50	1.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	1.50	2.30	53.3 (a)	0-10
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	1.20	14.8	1133.3(a	0-10
Tin				
Titanium				
Vanadium				
Zinc	6.70	0.00	100.0(a)	0-10

Associated samples MP37743: FA77945-3, FA77945-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37744
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 08/28/20

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.019	<0.50

Associated samples MP37744: FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37744 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date:			08/28/20					08/28/20	
Metal	FA78125-5 Original	DUP	RPD	QC Limits	FA78125-5 Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	2.6	3	86.7	80-120

Associated samples MP37744: FA77945-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37744 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/28/20

Metal	FA78125-5 Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.6	3	86.7	0.0	20

Associated samples MP37744: FA77945-2

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: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37744 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/28/20

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	3.0	3	100.0	80-120

Associated samples MP37744: FA77945-2

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA77945
Account: UTC - Raytheon Technologies
Project: AECOMSCG: Delavan Spray Technologies; Bamberg, SC

QC Batch ID: MP37744 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/28/20

Metal	FA78125-5 Original	SDL 1:5	%DIF	QC Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP37744: FA77945-2

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

Attachment D

TOD Results Summary

REDOX TECH, LLC

"Providing Innovative In Situ Soil and Groundwater Treatment"

TOTAL OXIDANT DEMAND (TOD) SAMPLE ANALYSIS

Company: AECOM
Project: 60620179 UTC Delavan

Samples prepared: July 17, 2020
Samples titrated: July 21, 2020
Oxidant: Sodium Persulfate, Potassium Permanganate

Sample	Dose (g/Kg)	Total Oxidant Demand – Na Persulfate (g/kg Water/Soil)	Total Oxidant Demand – K Permanganate (g/kg Water/Soil)
DPT-GW-101	5	0.23	0.02
DPT-GW-101	10	0.46	NA
DPT-101-19	5	1.30	0.67
DPT-101-19	10	2.75	2.29

Samples were dosed at 5, and 10 g/Kg. Only the most appropriate results were reported.

TOD is reported in grams of oxidant per kilogram of groundwater sample. TOD testing for sodium persulfate completed per Haselow *et al., 2003.* Estimating the Total Oxidant Demand for In Situ Chemical Oxidation Design, Remediation, Autumn, 2003.

Attachment E

QA/QC Data Summary Tables

Table E-1
Summary of Analytical Results for Primary and Field Duplicate Samples in Groundwater
Delavan Spray Technologies
Bamberg, South Carolina

Sample ID	DPT-GW-101		FD-GW-01		**Relative**
Lab Sample ID	FA76926-19		FA76926-18		**Percent**
Date Collected	07/16/20		07/16/20		**Difference**
Volatile Organic Compounds by Method 8260D (µg/L)					
1,1-Dichloroethylene	**49.4**		**46.2**		**6.7**
cis-1,2-Dichloroethylene	**18.5**		**17.9**		**3.3**
Tetrachloroethylene	**1350**		**1290**		**4.5**
Trichloroethylene	**6.6**	**J//**	**7**	**J//**	NC
Manganese by Method 6010D (µg/L)					
Manganese	**525**		NA		NC
Manganese (Dissolved)	**61.3**		NA		NC

Notes:
NA - Not Analyzed
NC - Not Calculated
µg/L - micrograms per liter (parts per billion)
Bold font and shading indicate the concentration is detected.
See Table 6 for explanation of data qualifiers.

Table E-2
Summary of Analytical Results for Primary and Field Duplicate Samples in Soil
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	DPT-104-24	FD-SO-02	**Relative**	DPT-110-15	FD-SO-01	**Relative**
Lab Sample ID	FA76926-7	FA76926-10	**Percent**	FA77178-4	FA77178-5	**Percent**
Date Collected	07/15/20	07/15/20	**Difference**	07/23/20	07/23/20	**Difference**
Volatile Organic Compounds by Method 8260D (µg/kg)						
1,1,1-Trichloroethane	< 0.87	< 1.1	NC	< 0.64	< 0.71	NC
1,1-Dichloroethylene	**1.1 J//**	**1.3 J//**	NC	< 0.64	< 0.71	NC
cis-1,2-Dichloroethylene	< 1.2	< 1.5	NC	**0.95 J//**	< 0.98	NC
Ethylbenzene	< 0.87	< 1.1	NC	< 0.64	< 0.71	NC
Tetrachloroethylene	**326 J//**	**492**	NC	**34.3 /JB/AV**	**12.5 /B/V**	**93.2**
trans-1,2-Dichloroethylene	< 0.87	< 1.1	NC	< 0.64	< 0.71	NC
Trichloroethylene	< 0.87	< 1.1	NC	**1 J//**	< 0.71	NC
Vinyl Chloride	< 0.87	< 1.1	NC	< 0.64	< 0.71	NC
Xylene (total)	< 1.8	< 2.2	NC	< 1.3	< 1.5	NC

Sample ID	DPT-129-16	FD-SO-03	**Relative**
Lab Sample ID	FA77062-5	FA77062-6	**Percent**
Date Collected	07/21/20	07/21/20	**Difference**
Volatile Organic Compounds by Method 8260D (µg/kg)			
1,1,1-Trichloroethane	< 0.88	< 0.99	NC
1,1-Dichloroethylene	< 0.88	< 0.99	NC
cis-1,2-Dichloroethylene	< 1.2	< 1.4	NC
Ethylbenzene	< 0.88	< 0.99	NC
Tetrachloroethylene	**2250**	**2730**	**19.3**
trans-1,2-Dichloroethylene	< 0.88	< 0.99	NC
Trichloroethylene	< 0.88	< 0.99	NC
Vinyl Chloride	< 0.88	< 0.99	NC
Xylene (total)	< 1.8	< 2.1	NC

Notes:
NC - Not Calculated
µg/kg - micrograms per kilogram (parts per billion)
Bold font and shading indicate the concentration is detected.
See Table 6 for explanation of data qualifiers.

Table E-3
Summary of Analytical Results in Trip Blank Samples
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	TRIP BLANK	TRIP BLANK 01	TRIP BLANK 04	TRIP BLANK 06	TRIP BLANK WATER
Lab Sample ID	FA77253-33	FA76926-1	FA77062-3	FA77178-3	FA76719-9
Date Collected	07/27/20	07/15/20	07/21/20	07/23/20	07/08/20
Volatile Organic Compounds by Method 8260D (µg/L)					
1,1,1-Trichloroethane	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
1,2-Dichloroethane	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	< 2	< 2	< 2	< 2	< 2
2-Hexanone	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	< 1	< 1	< 1	< 1	< 1
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	< 0.53	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	< 0.67	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
cis-1,3-Dichloropropene	< 0.29	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	< 0.59	< 0.59	< 0.59	< 0.59	< 0.59
Methyl Chloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	< 2	< 2	< 2	< 2	< 2
Styrene	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Toluene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35
Vinyl Chloride	< 0.41	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72

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

Table E-4
Summary of Analytical Results in Soil Trip Blank Samples
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	TRIP BLANK	TRIP BLANK 02	TRIP BLANK 03	TRIP BLANK 05	TRIP BLANK SOIL
Lab Sample ID	FA77253-32	FA76926-2	FA77062-2	FA77178-2	FA76719-8
Date Collected	07/27/20	07/15/20	07/21/20	07/23/20	07/08/20
Volatile Organic Compounds by Method 8260D (µg/kg)					
1,1,1-Trichloroethane	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1,1-Dichloroethylene	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	< 7.3	< 7.3	< 7.3	< 7.3	< 7.3
2-Hexanone	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5
4-Methyl-2-pentanone (MIBK)	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5
Acetone	< 100	< 100	< 100	< 100	< 100
Benzene	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Bromodichloromethane	< 1	< 1	< 1	< 1	< 1
Bromoform	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	< 1	< 1	< 1	< 1	< 1
Chloroethane	< 2	< 2	< 2	< 2	< 2
Chloroform	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
cis-1,2-Dichloroethylene	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
cis-1,3-Dichloropropene	< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	< 1	< 1	< 1	< 1	< 1
Methyl Bromide	< 2	< 2	< 2	< 2	< 2
Methyl Chloride	< 2	< 2	< 2	< 2	< 2
Methylene Chloride	< 11	< 11	< 11	< 11	< 11
Styrene	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Toluene	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethylene	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 1	< 1	< 1	< 1	< 1
Trichloroethylene	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	< 1	< 1	< 1	< 1	< 1
Xylene (total)	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1

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

Table E-5
Summary of Analytical Results in Equipment Blank Samples
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	EB-GW-01	EB-SO-01	EB-SO-02	EB-SO-03
Lab Sample ID	FA76926-17	FA76926-20	FA77178-12	FA77253-20
Date Collected	07/16/20	07/16/20	07/23/20	07/27/20
Volatile Organic Compounds by Method 8260D (µg/L)				
1,1,1-Trichloroethane	< 0.25	< 0.25	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	< 0.47	< 0.47	< 0.47	< 0.47
1,1-Dichloroethane	< 0.34	< 0.34	< 0.34	< 0.34
1,1-Dichloroethylene	< 0.32	< 0.32	< 0.32	< 0.32
1,2-Dichloroethane	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dichloropropane	< 0.43	< 0.43	< 0.43	< 0.43
2-Butanone (MEK)	< 2	< 2	< 2	< 2
2-Hexanone	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone (MIBK)	< 1	< 1	< 1	< 1
Acetone	< 10	< 10	< 10	< 10
Benzene	< 0.31	< 0.31	< 0.31	< 0.31
Bromodichloromethane	< 0.24	< 0.24	< 0.24	< 0.24
Bromoform	< 0.41	< 0.41	< 0.41	< 0.41
Carbon Disulfide	< 0.53	< 0.53	< 0.53	< 0.53
Carbon Tetrachloride	< 0.36	< 0.36	< 0.36	< 0.36
Chlorobenzene	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	< 0.67	< 0.67	< 0.67	< 0.67
Chloroform	< 0.3	< 0.3	< 0.3	< 0.3
cis-1,2-Dichloroethylene	< 0.28	< 0.28	< 0.28	< 0.28
cis-1,3-Dichloropropene	< 0.29	< 0.29	< 0.29	< 0.29
Dibromochloromethane	< 0.28	< 0.28	< 0.28	< 0.28
Ethylbenzene	< 0.36	< 0.36	< 0.36	< 0.36
Methyl Bromide	**0.96 J//**	< 0.59	< 0.59	< 0.59
Methyl Chloride	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	< 2	< 2	< 2	< 2
Styrene	< 0.22	< 0.22	< 0.22	< 0.22
Tetrachloroethylene	< 0.22	< 0.22	**0.73 J//**	< 0.22
Toluene	< 0.3	< 0.3	< 0.3	< 0.3
trans-1,2-Dichloroethylene	< 0.22	< 0.22	< 0.22	< 0.22
trans-1,3-Dichloropropene	< 0.21	< 0.21	< 0.21	< 0.21
Trichloroethylene	< 0.35	< 0.35	< 0.35	< 0.35
Vinyl Chloride	< 0.41	< 0.41	< 0.41	< 0.41
Xylene (total)	< 0.72	< 0.72	< 0.72	< 0.72

Notes:
µg/L - micrograms per liter (parts per billion)
Bold font and shading indicate the concentration is detected.
See Table 6 for explanation of data qualifiers.

Attachment F

Summary of IDW Sample Results

Table F-1
Summary of Analytical Results in Aqueous IDW
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	IDW-01	IDW-02
Lab Sample ID	Toxicity	FA77945-1	FA77945-2
Date Collected	Characteristic	8/17/2020	8/17/2020
Volatile Organic Compounds by Method 8260D (µg/L)			
1,1,1-Trichloroethane	—	< 0.25	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3	< 0.3
1,1,2-Trichloroethane	—	< 0.47	< 0.47
1,1-Dichloroethane	—	< 0.34	< 0.34
1,1-Dichloroethylene	700	< 0.32	< 0.32
1,2-Dichloroethane	500	< 0.31	< 0.31
1,2-Dichloropropane	—	< 0.43	< 0.43
2-Butanone (MEK)	200,000	< 2	< 2
2-Hexanone	—	< 2	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1	< 1
Acetone	—	< 10	< 10
Benzene	500	< 0.31	< 0.31
Bromodichloromethane	—	< 0.24	< 0.24
Bromoform	—	< 0.41	< 0.41
Carbon Disulfide	—	< 0.53	< 0.53
Carbon Tetrachloride	500	< 0.36	< 0.36
Chlorobenzene	100,000	< 0.2	< 0.2
Chloroethane	—	< 0.67	< 0.67
Chloroform	6,000	< 0.3	< 0.3
cis-1,2-Dichloroethylene	—	< 0.28	< 0.28
cis-1,3-Dichloropropene	—	< 0.29	< 0.29
Dibromochloromethane	—	< 0.28	< 0.28
Ethylbenzene	—	< 0.36	< 0.36
Methyl Bromide	—	< 0.59	< 0.59
Methyl Chloride	—	< 0.5	< 0.5
Methylene Chloride	—	< 2	< 2
Styrene	—	< 0.22	< 0.22
Tetrachloroethylene	700	< 0.22	< 0.22
Toluene	—	< 0.3	< 0.3
trans-1,2-Dichloroethylene	—	< 0.22	< 0.22
trans-1,3-Dichloropropene	—	< 0.21	< 0.21
Trichloroethylene	500	< 0.35	< 0.35
Vinyl Chloride	200	< 0.41	< 0.41
Xylene (total)	—	< 0.72	< 0.72
Semivolatile Organic Compounds by Method 8270E (µg/L)			
1,2,4-Trichlorobenzene	—	< 1	< 1
1,2-Dichlorobenzene	—	< 0.48	< 0.48
1,3-Dichlorobenzene	—	< 0.48	< 0.48
1,4-Dichlorobenzene	7,500	< 0.48	< 0.48
2,2'-Oxybis(1-chloropropane)	—	< 0.72	< 0.72
2,4,5-Trichlorophenol	400,000	< 0.7	< 0.7
2,4,6-Trichlorophenol	2,000	< 0.72	< 0.72
2,4-Dichlorophenol	—	< 0.8	< 0.8
2,4-Dimethylphenol	—	< 0.7	< 0.7
2,4-Dinitrophenol	—	< 4.8	< 4.8
2,4-Dinitrotoluene	130	< 0.77	< 0.77
2,6-Dinitrotoluene	—	< 0.68	< 0.68
2-Chloronaphthalene	—	< 0.48	< 0.48
2-Chlorophenol	—	< 0.6	< 0.6
2-Methylnaphthalene	—	< 0.57	< 0.57
2-Methylphenol	200,000	< 0.53	< 0.53
2-Nitroaniline	—	< 1.7	< 1.7
2-Nitrophenol	—	< 0.81	< 0.81
3&4-Methylphenol	200,000	< 0.93	< 0.93
3,3'-Dichlorobenzidine	—	< 0.61	< 0.61
3-Nitroaniline	—	< 0.84	< 0.84
4,6-Dinitro-o-cresol	—	< 1.9	< 1.9
4-Bromophenyl Phenyl Ether	—	< 0.81	< 0.81
4-Chloro-3-methyl Phenol	—	< 0.56	< 0.56
4-Chloroaniline	—	< 0.6	< 0.6
4-Chlorophenyl Phenyl Ether	—	< 0.51	< 0.51
4-Nitroaniline	—	< 1.1	< 1.1

Table F-1
Summary of Analytical Results in Aqueous IDW
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	IDW-01		IDW-02	
Lab Sample ID	Toxicity	FA77945-1		FA77945-2	
Date Collected	Characteristic	8/17/2020		8/17/2020	
Semivolatile Organic Compounds by Method 8270E (µg/L)					
4-Nitrophenol	—	< 4.8		< 4.8	
Acenaphthene	—	< 0.6		< 0.6	
Acenaphthylene	—	< 0.61		< 0.61	
Anthracene	—	< 0.76		< 0.76	
Benzo(a)anthracene	—	< 0.72		< 0.72	
Benzo(a)pyrene	—	< 0.75		< 0.75	
Benzo(b)fluoranthene	—	< 0.74		< 0.74	
Benzo(g,h,i)perylene	—	< 0.78		< 0.78	
Benzo(k)fluoranthene	—	< 0.82		< 0.82	
Benzoic Acid	—	< 9.5		< 9.5	
Benzyl Alcohol	—	< 0.58		< 0.58	
bis(2-Chloroethoxy)methane	—	< 0.77		< 0.77	
bis(2-Chloroethyl)ether	—	< 0.7		< 0.7	
bis(2-Ethylhexyl)phthalate	—	< 0.95		< 0.95	
Butyl Benzyl Phthalate	—	< 0.95		< 0.95	
Carbazole	—	< 0.57		< 0.57	
Chrysene	—	< 0.81		< 0.81	
Di-n-butyl Phthalate	—	< 0.95		< 0.95	
Di-n-octyl Phthalate	—	< 0.95		< 0.95	
Dibenzo(a,h)anthracene	—	< 0.77		< 0.77	
Dibenzofuran	—	< 0.57		< 0.57	
Diethyl Phthalate	—	< 0.95		< 0.95	
Dimethyl Phthalate	—	< 0.95		< 0.95	
Fluoranthene	—	< 0.53		< 0.53	
Fluorene	—	< 0.67		< 0.67	
Hexachlorobenzene	130	< 0.66		< 0.66	
Hexachlorobutadiene	500	< 0.48		< 0.48	
Hexachlorocyclopentadiene	—	< 1.7		< 1.7	
Hexachloroethane	3,000	< 1.6		< 1.6	
Indeno(1,2,3-cd)pyrene	—	< 0.68		< 0.68	
Isophorone	—	< 0.74		< 0.74	
N-Nitrosodi-n-propylamine	—	< 0.64		< 0.64	
N-Nitrosodiphenylamine	—	< 0.77		< 0.77	
Naphthalene	—	< 0.48		< 0.48	
Nitrobenzene	2,000	< 0.89		< 0.89	
Pentachlorophenol	100,000	< 4.8		< 4.8	
Phenanthrene	—	< 0.82		< 0.82	
Phenol	—	< 0.48		< 0.48	
Pyrene	—	< 0.65		< 0.65	
Metals by Method 6010D (µg/L)					
Antimony	—	< 1		**2**	**J**
Arsenic	5,000	< 1.3		**2.7**	**J**
Beryllium	—	**7.1**		**1**	**J**
Cadmium	1,000	**1.6**	**J**	**0.29**	**J**
Chromium	5,000	**109**		**206**	
Copper	—	**21.7**	**J**	**1270**	
Lead	5,000	**9.3**		**35.2**	
Nickel	—	**38.4**	**J**	**101**	
Selenium	1,000	< 2.9		< 2.9	
Silver	5,000	< 0.7		< 0.7	
Thallium	—	< 1.4		< 1.4	
Zinc	—	**237**		**479**	
Mercury by Method 7470A (µg/L)					
Mercury	200	**0.048**	**J**	**0.46**	**J**

Notes:
— - No Standard
IDW - Investigation Derived Waste
NA - Not analyzed
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.
J - The analyte was positively identified. The quantitation is an estimation.

Table F-2
Summary of TCLP Analytical Results for Soil IDW
Delavan Spray Technologies Site
Bamberg, South Carolina

Sample ID	USEPA	IDW-03			IDW-04		
Lab Sample ID	Toxicity	FA77945-3			FA77945-4		
Date Collected	Characteristic	8/17/2020			8/17/2020		
Volatile Organic Compounds by Method 8260B (µg/L)							
1,1-Dichloroethylene	700	<	3.2		<	3.2	
1,2-Dichloroethane	500	<	3.1			**13.2**	
1,4-Dichlorobenzene	7500	<	2.6		<	2.6	
2-Butanone (MEK)	200,000	<	20		<	20	
Benzene	500	<	3.1		<	3.1	
Carbon Tetrachloride	500	<	3.6		<	3.6	
Chlorobenzene	100,000	<	2		<	2	
Chloroform	6,000	<	3		<	3	
Tetrachloroethylene	700		**4.7**	**J**	<	2.2	
Trichloroethylene	500	<	3.5		<	3.5	
Vinyl Chloride	200	<	4.1		<	4.1	
Semivolatile Organic Compounds by Method 8270D (µg/L)							
1,4-Dichlorobenzene	7,500	<	5		<	5	
2,4,5-Trichlorophenol	400,000	<	7.4		<	7.4	
2,4,6-Trichlorophenol	2,000	<	7.5		<	7.5	
2,4-Dinitrotoluene	130	<	8.1		<	8.1	
2-Methylphenol	200,000	<	5.6		<	5.6	
3&4-Methylphenol	200,000	<	9.8		<	9.8	
Hexachlorobenzene	130	<	6.9		<	6.9	
Hexachlorobutadiene	500	<	5		<	5	
Hexachloroethane	3,000	<	16		<	16	
Nitrobenzene	2,000	<	9.3		<	9.3	
Pentachlorophenol	100,000	<	50		<	50	
Pyridine	5000	<	20		<	20	
Metals by Method 6010D (µg/L)							
Antimony	—	<	10			**19**	**J**
Arsenic	5,000	<	13		<	13	
Beryllium	—	<	2		<	2	
Cadmium	1,000	<	2		<	2	
Chromium	5,000	<	10		<	10	
Copper	—		**35**	**J**		**14**	**J**
Lead	5,000		**56**			**24**	**J**
Nickel	—		**15**	**J**	<	4	
Selenium	1,000	<	29		<	29	
Silver	5,000	<	7		<	7	
Thallium	—	<	14		<	14	
Zinc	—	<	100		<	100	
Mercury by Method 7470A (µg/L)							
Mercury	200	<	0.5		<	0.5	

Notes:
— - No Standard
IDW - Investigation Derived Waste
NA - Not analyzed
µg/L - micrograms per liter (parts per billion)
TCLP - Toxicity Characteristic Leaching Procedure
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.
J - The analyte was positively identified. The quantitation is an estimation.

Table F-3
Summary of Analytical Results in IDW Trip Blank
UTC Delavan
Bamberg, South Carolina

Sample ID **Lab Sample ID** **Date Collected**	USEPA Toxicity Characteristic	TRIP BLANK-IDW FA77945-5 8/17/2020
Volatile Organic Compounds by Method 8260D (µg/L)		
1,1,1-Trichloroethane	—	< 0.25
1,1,2,2-Tetrachloroethane	—	< 0.3
1,1,2-Trichloroethane	—	< 0.47
1,1-Dichloroethane	—	< 0.34
1,1-Dichloroethylene	700	< 0.32
1,2-Dichloroethane	500	< 0.31
1,2-Dichloropropane	—	< 0.43
2-Butanone (MEK)	200,000	< 2
2-Hexanone	—	< 2
4-Methyl-2-pentanone (MIBK)	—	< 1
Acetone	—	< 10
Benzene	500	< 0.31
Bromodichloromethane	—	< 0.24
Bromoform	—	< 0.41
Carbon Disulfide	—	< 0.53
Carbon Tetrachloride	500	< 0.36
Chlorobenzene	100,000	< 0.2
Chloroethane	—	< 0.67
Chloroform	6,000	< 0.3
cis-1,2-Dichloroethylene	—	< 0.28
cis-1,3-Dichloropropene	—	< 0.29
Dibromochloromethane	—	< 0.28
Ethylbenzene	—	< 0.36
Methyl Bromide	—	< 0.59
Methyl Chloride	—	< 0.5
Methylene Chloride	—	< 2
Styrene	—	< 0.22
Tetrachloroethylene	700	< 0.22
Toluene	—	< 0.3
trans-1,2-Dichloroethylene	—	< 0.22
trans-1,3-Dichloropropene	—	< 0.21
Trichloroethylene	500	< 0.35
Vinyl Chloride	200	< 0.41
Xylene (total)	—	< 0.72

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).