

January 27, 2021

Mr. Brian Dietz  
Land Restoration Program  
Maryland Department of the Environment  
1800 Washington Boulevard  
Baltimore, MD 21230

RE: Hot Spot Investigation  
**Montgomery Brothers Dump (MD-137)**  
Inverness Drive, North East, MD  
CGS Project No. CG-09-0423.10

Dear Mr. Dietz:

Chesapeake GeoSciences, Inc. (CGS) is pleased to present this report which summarizes the activities performed during the Hot Spot Investigation at the Montgomery Brothers Dump site located off of Inverness Drive in North East, Maryland (Site) (**Figure 1**).

## 1.0 INTRODUCTION

### 1.1 Background

CGS performed subsurface investigation activities and groundwater and soil vapor sampling at the Site, on behalf of the Maryland Department of the Environment, Land Restoration Program (MDE-LRP), in October and November 2019. This work was performed as part of establishing the Site Monitoring Program (SMP) and conducting the first Semi-Annual Sampling Event. The data collected during this work demonstrated that a hot spot of soil, groundwater, and soil vapor contamination, primarily consisting of chlorinated volatile organic compounds (c-VOCs), exists at groundwater monitoring well SMP-MW-03 and vapor monitoring point SMP-VMP-03. As MDE-LRP specified in its Request for Proposal (RFP) for the Hot Spot Investigation, “The source of the hot spot contamination is currently unknown and there is speculation, based on historical site records, that it may represent an area of contaminated soil that was not removed during EPA’s Emergency Removal Action in the late 1980s. It is also possible that the contamination represents an area of preferential off-gassing from the dumpsite.”

The layout of the Site and the surrounding area and the area in which the Hot Spot Investigation was performed are shown on **Figure 2**. Work activities were performed on-site and on two off-site residential properties. MDE-LRP arranged access to each of the off-site residential properties where work activities were performed. Unless noted otherwise, the scope of work for the Hot Spot Investigation was performed as specified in the Work Plan included in CGS Proposal CG-P20-2535R, dated April 29, 2020.

## 1.2 Purpose and Areas of Concern (AOCs)

The purpose of the Hot Spot Investigation was to gather data to provide for the following:

1. Delineation of the vertical and lateral extent of the hot spot contamination in soil both on-site and on the adjacent residential properties located at 105 and 107 Inverness Drive;
2. Evaluation of the direct contact with surface/near surface soil potential exposure pathway on-site and at 105 and 107 Inverness Drive; and
3. Evaluation of the vapor intrusion/indoor inhalation potential exposure pathway at 105 and 107 Inverness Drive.

Work activities for the Hot Spot Investigation were performed in three AOCs. The AOCs are shown on **Figures 2 and 3** and are defined as follows.

- AOC-1 (Backyard of 105 Inverness Drive): A rectangular area delineated by the guardrail (to the southwest), the property's back fence (to the northwest and southeast), and extending approximately 30 feet northeast into the yard from the guardrail.
- AOC-2 (Backyard of 107 Inverness Drive): A rectangular area delineated by the guardrail (to the southwest), the property's back fence (to the northwest), the property line (to the southeast), and extending approximately 25 feet northeast into the yard from the guardrail.
- AOC-3 (Vicinity of SMP-MW-03 Hotspot Area): A rectangular area as delineated by the guardrail (to the northeast) and extending to just beyond MW-3 (to the northwest), just beyond MW-2 (to the southeast), and approximately 50 feet from the guardrail (to the southwest).

Note that the hatched area between the guardrail and the back fences on 105 and 107 Inverness Drive is thickly vegetated and/or very narrow. This area was not accessed during this investigation.

## 2.0 FIELD INVESTIGATION – METHODOLOGY, FIELD OBSERVATIONS, AND INTERIM RESULTS

The field investigation was initiated on August 6, 2020 and, for the most part, was completed on November 6, 2020. A site specific Health & Safety Plan (HASP) was developed for the field tasks performed during the field investigation. The field investigation was comprised of public utility clearances; a High Resolution Site Characterization (HRSC) Survey; collection of surface/near surface soil samples, groundwater samples, and subsurface soil samples; installation of four vapor monitoring point (VMPs); collection of soil vapor and crawl space/outdoor air samples; cap and rut repairs; and investigation derived waste (IDW) containment, waste characterization sampling, and IDW disposal. Pickup of the IDW was performed on January 8, 2021. Brief discussions of the field investigation methodologies, field observations, and interim results are presented below.

### 2.1 Pre-Field Mobilization Activities

#### Schedule Coordination

CGS coordinated scheduling of the various field investigation sub-tasks with the MDE-LRP project manager and the property owner/tenant for 105 Inverness Drive and the property owner representatives for 107 Inverness Drive.



## Utility Clearances

Prior to initiating subsurface investigation activities, CGS requested public utility clearances using the Miss Utility system for the on-site and off-site areas where subsurface activities were planned. Miss Utility clearance requests were updated as required as the project progressed.

## Site Visit

CGS conducted a site visit on August 6 to stake/flag the AOC outlines and perform other pre-field mobilization activities including opening sections of fencing on both 105 and 107 Inverness Drive and viewing/evaluating the crawl spaces beneath the mobile homes at 105 and 107 Inverness Drive in preparation for the crawl space air sampling.

## **2.2 High Resolution Site Characterization (HRSC) Survey**

### **2.2.1 HRSC Survey Methodology**

The HRSC Survey was conducted to gain data on the three-dimensional extent of contamination in the three AOCs. The survey was performed using a Geoprobe® 6620DT direct-push technology (DPT) rig, operated by Tidewater, Inc. (TW) of Elkridge, Maryland, and a state-of-the-art Membrane Interface Hydraulic Profiling Tool (MIHPT) probing system, operated by Cascade Technical Services (Cascade) of Jackson, New Jersey, and was supervised/directed on-site by a CGS geologist. The field work for the survey was originally initiated on August 10; however, due to a catastrophic equipment failure in the field, it could not be performed at that time. The equipment was repaired, and the survey was performed from September 8 through September 11. A total of 50 HRSC borings (HSI-HRSC-01 through HSI-HRSC-50) were advanced during the survey. The HRSC borings locations, presenting only the boring number for brevity, are shown on **Figure 4**.

A MIHPT probe is a 1.75-inch-diameter steel probe, which is driven into the subsurface using a Geoprobe® DPT rig. As the MIHPT probe advances through soil and groundwater, subsurface VOC concentrations are characterized using a lab grade gas chromatograph (GC) equipped with Electron Capture Detector (ECD), Halogenated Specific Detector (XSD), Photoionization Detector (PID), and Flame Ionization Detector (FID) sensors. The ECD and XSD are the primary instruments which detect chlorinated compounds, and the FID is the primary instrument which detects petroleum hydrocarbons. The PID detects both chlorinated compounds and petroleum hydrocarbons. When discussed collectively in this report, the ECD/XSD/PID/FID data will be referred to as Membrane Interface Probe (MIP) data.

The MIHPT probe is also equipped with an Electrical Conductivity (EC) sensor and a Hydraulic Profiling Tool (HPT) which are utilized to characterize soil types and hydraulic properties of the soil as the probe advances in the boring. EC values vary with respect to the grain size distribution of a formation. Water pressure and flow rate measurements acquired by the HPT can be used to estimate hydraulic properties of a formation. The vertical HRSC profiling was coupled with real time data collection to generate a log that was emailed to the CGS project manager at the completion of each boring.

The HRSC Survey was performed using a progressive approach. Under this approach, the survey was initiated on-site in areas of known contamination and then expanded outward from there to define the area where MIP response data were observed. Additional borings were then advanced to fill in the defined area. The survey was commenced on-site near MW-2 for initial setup and calibration (HSI-HRSC-01 and HSI-HRSC-02). The survey then progressed to the area of SMP-MW-03/SMP-VMP-03 (HSI-HRSC-03 through HSI-HRSC-06) to gain data in the hot spot area. HSI-HRSC-08 through HSI-HRSC-27 were advanced on 105 and 107 Inverness Drive in a rough grid pattern. Following the advancement of HSI-HRSC-27, the survey moved back on-site where HSI-HRSC-28 through HSI-HRSC-44 were advanced to continue the

rough grid pattern. HSI-HRSC-45 through HSI-HRSC-50 were advanced on-site for additional delineation in the hot spot area. The CGS project manager utilized the real time HRSC Survey data as they were received to choose the location of each successive HRSC boring, following the completion of HSI-HRSC-08, and conveyed the chosen location information to CGS' field geologist. Activities performed in the core of the hot spot area were conducted using Level C respiratory protection.

Most of the HRSC borings were advanced to depths ranging from 19 to 21 feet below grade (BG) (i.e., within a foot of the target boring depth of 20 feet BG). HSI-HRSC-03 and HSI-HRSC-13 were advanced to depths of 23.4 and 23.5 feet BG, respectively, to continue to characterize observed MIP responses at the target depth. HSI-HRSC-38 was terminated at a depth of 17.6 feet BG where refusal was encountered. HSI-HRSC-24 was terminated at a depth of 18.4 feet BG due to a lack of MIP responses and desire to use the time more productively elsewhere. All of the HRSC borings were advanced below the groundwater table. The depth to groundwater was gauged at depths of approximately 5 feet BG in SMP-MW-03 and approximately 12.5 feet BG in MW-2 on September 8.

The HRSC borings were abandoned using bentonite and capped with soil. The location of each boring was flagged, and global positioning system (GPS) coordinates were recorded for each boring.

Cascade's Final Data Report (**Attachment A**) presents additional technical details on the MIHPT probing system and provides the HRSC Survey data logs. CGS appended two additional sets of common scale logs, that were generated by Cascade and that present ECD and XSD data, to the end of Cascade's report.

## **2.2.2 HRSC Survey Data Evaluation, Sample Point Location Selection, and Follow-Up Site Visit**

CGS reviewed the HRSC Survey data logs and selected nine locations for surface/near surface soil sampling (discussed below in Section 2.3), four locations for grab groundwater sampling (discussed below in Section 2.4), six initial locations for subsurface soil sampling (discussed below in Section 2.5), and four locations for soil vapor sampling (discussed below in Section 2.6). CGS generated a table listing the rationale for each proposed sampling location and maps showing the proposed sampling locations and conferred with the MDE-LRP project manager who approved all of the proposed locations. Waypoints were then generated for each location, and CGS utilized a handheld differential global positioning system (DGPS) receiver to navigate to each set of waypoints and staked/flagged each location.

## **2.3 Surface/Near Surface Soil Sampling**

Sampling of surface soil and near surface soil was performed to gather data for the evaluation of the direct contact with surface/near surface soil potential exposure pathway. Surface/near surface soil samples were collected at nine locations. Each of the nine locations (HSI-SS-01 through HSI-SS-09) was chosen adjacent to a HRSC boring that appeared to demonstrate a MIP response in the top one foot of the boring. Three sampling locations were chosen in each AOC and across the extent of each AOC. The surface/near surface soil sampling locations are shown on **Figure 5**.

The soil samples were collected on September 25, using a hand auger and/or other hand tools, below the vegetative cover. Nine surface soil samples and one duplicate surface soil sample were collected between the depths of 0 and 0.5 foot BG for analysis of semi-volatile organic compounds (SVOCs) and target analyte list (TAL) metals. Nine co-located near surface soil samples and one duplicate near surface soil sample were collected between the depths of 0.5 and 1.0 foot BG for analysis of VOCs. Soil samples, for VOC analysis, were collected using Terra-Core samplers according to EPA Method 5035.

The soil samples were submitted, with an accompanying Chain-of-Custody (COC) form, to Hampton-Clarke, Inc. (Hampton-Clarke) in Fairfield, New Jersey for laboratory analysis of VOCs via EPA Method 8260 or SVOCs via EPA Method 8270 and TAL metals EPA Methods 6010/6020/7471.

## 2.4 Grab Groundwater Sampling

Groundwater sampling was performed to calibrate the magnitude of groundwater contamination between the hot spot and the mobile homes at 105 and 107 Inverness Drive. Grab groundwater samples were collected at four locations (HSI-GW-01 through HSI-GW-04) in AOC-1 and AOC-2 down-gradient from the hot spot. HSI-GW-01 through HSI-GW-03 were each advanced adjacent to a HRSC boring. HSI-GW-04 was advanced at the mid-point between two HRSC borings. The grab groundwater sampling locations are shown on **Figure 6**.

The grab groundwater sampling was performed on September 28 using TW's Geoprobe® rig. Because the stratigraphy at the Site contains significant intervals of silt and clay, soil borings were advanced first to enable identification of water bearing intervals from which grab groundwater samples could be obtained. The borings were advanced to the target depth of 20 feet BG. Continuous soil core was retrieved from the borings using a Macrocore sampler. The CGS geologist screened the soil core using a photoionization detector (PID) and logged the soil core according to the Unified Soil Classification System (USCS). PID readings in the soil core ranged from 0 to 368 parts per million (ppm). Handwritten soil boring logs are included in **Attachment B**.

A temporary one-inch diameter well was installed in each soil boring. A grab groundwater sample was collected from each temporary well using a peristaltic pump. Following the completion of sampling, the temporary wells were removed and the borings were abandoned using the excess soil core from that specific boring followed with bentonite as backfill and capped with soil.

The grab groundwater samples and one trip blank were submitted, with an accompanying COC form, to Hampton-Clarke for laboratory analysis of VOCs via EPA Method 8260.

## 2.5 Subsurface Soil Sampling

Subsurface soil sampling was performed to delineate the vertical and lateral extent of the hot spot soil contamination. Subsurface soil samples were collected from ten soil borings (HSI-SB-01 through HSI-SB-10) that were advanced in AOC-1 and AOC-3. HSI-SB-01 through HSI-SB-05 were advanced at locations that were pre-determined after the HRSC Survey had been completed as discussed above in Section 2.2.2. HSI-SB-01 was advanced in the core of the hot spot area between SMP-MW-03 and HRSC boring HSI-HRSC-45 where the highest MIP response was observed to calibrate the magnitude of the soil contamination at this location. HSI-SB-02 through HSI-SB-05 were each advanced adjacent to a HRSC boring located at the periphery of the hot spot area as defined during the HRSC Survey to calibrate the magnitude of the soil contamination in areas potentially representative of the edges of the hot spot area. HSI-SB-06 through HSI-SB-10 were advanced at additional locations chosen, as the subsurface soil sampling event progressed, to further define the periphery of the hot spot area. CGS conferred with the MDE-LRP project manager who approved the proposed locations for HSI-SB-06 through HSI-SB-10. The soil boring locations are shown on **Figure 7**.

The borings were advanced between September 28 and October 1 using TW's Geoprobe® rig to the target depth of 20 feet BG. Continuous soil core was retrieved from the borings using a Macrocore sampler. The CGS geologist screened the soil core using the PID and logged the soil core according to the USCS. PID readings in the soil core ranged from 0 to 15,000 ppm. 15,000 ppm is the highest reading that the PID, that was utilized, can register. Soil boring logs are included in **Attachment C**. Activities performed in the core of the hot spot area were conducted using Level C respiratory protection.

Between one and four soil samples were collected from each soil boring for analysis of VOCs. Samples for VOC analysis were chosen based on PID readings to characterize the top of the impact, the highest impact,

and the bottom of the impact. Only one soil sample was collected for VOC analysis from borings where the highest PID reading was relatively low (i.e., less than 40 ppm). Soil samples, for VOC analysis, were collected using Terra-Core samplers according to EPA Method 5035.

Additional samples were collected from select borings for analysis of SVOCs and TAL metals. These samples were chosen based primarily on field observations and secondarily on PID readings.

CGS conferred with the MDE-LRP project manager as the soil samples were being collected, and the process resulted in a list of samples that were approved for laboratory analysis. A total of 22 subsurface soil samples and two duplicate subsurface soil samples were chosen for analysis of VOCs. Six subsurface soil samples and one duplicate subsurface soil sample were chosen for analysis of SVOCs and TAL metals.

Following the completion of sampling, the borings were abandoned using the excess soil core from that specific boring followed with bentonite as backfill and capped with soil.

The soil samples were submitted, with an accompanying COC form, to Hampton-Clarke for laboratory analysis of VOCs via EPA Method 8260 or SVOCs via EPA Method 8270 and TAL metals EPA Methods 6010/6020/7471.

## **2.6 Vapor Monitoring Point (VMP) Installations**

Four new VMPs, which will be incorporated into SMP during future semi-annual sampling events, were installed during this investigation. Two VMPs (SMP-VMP-10 and SMP-VMP-11) were installed on 105 Inverness Drive, and two VMPs (SMP-VMP-12 and SMP-VMP-13) were installed on 107 Inverness Drive. The VMPs were installed at locations down-gradient from the hot spot beyond the point where MIP response data, that are deemed attributable to shallow soil vapor impacts, were observed. The VMP locations are shown on **Figure 8**.

Each VMP was constructed using a stainless steel screen implant (¼-inch x 6-inch) with Teflon tubing in a 4.5-inch diameter boring that had been advanced to a depth of 3 feet BG. #1 Silica Sand was placed around the screen implant. The annular space between the tubing and the wall of the borehole was sealed with hydrated bentonite. A small, flush-mounted manhole cover was installed at the top of each VMP in a concrete pad. A seal was placed on the end of the Teflon tubing inside the cover. The VMPs were completed on October 2.

## **2.7 Crawl Space and Outdoor Air Sample and VMP Soil Vapor Collection**

The collection of the crawl space and outdoor air samples and sampling of soil vapor from VMPs SMP-VMP-10 through SMP-VMP-13 were performed on October 6 and 7. The air sample locations and the VMP locations are shown on **Figure 8**.

### **2.7.1 Crawl Space and Outdoor Air Sampling**

The air sampling event was performed on October 6 and 7. The air samples were collected in pre-evacuated, pre-cleaned 6-liter Summa canisters. The Summa canister regulators were calibrated by the laboratory to collect air over a 24-hour period at a rate of 3.75 milliliters per minute (mL/min) for a target residual vacuum of approximately 3 inches of mercury (“Hg). A new pair of nitrile sampling gloves was donned prior to each sample setup.

One crawl space air sample was collected toward the rear of each crawl space, and the second crawl space air sample was collected near the middle of each crawl space. The outdoor air sample Summa canister was

set up on the railing of the porch for 107 Inverness Drive between the two properties at a height of approximately 5 feet above grade.

The crawl space beneath 105 Inverness Drive was accessed via a panel in the skirt that surrounded the space beneath the mobile home. The ground beneath the mobile home had been covered with plastic sheeting, and, although very dusty and dirty, the crawl space was free of debris. The CGS sampler donned a Tyvek suit each time that the crawl space beneath 105 Inverness Drive was accessed. The height of the crawl space at the middle location was sufficient to allow access via crawling; whereas the height of the crawl space at the rear location was too low for crawling. The sampler slid while flat to access the rear location.

The crawl space beneath 107 Inverness Drive was accessed via large openings in the skirt that partially surrounded the space beneath the mobile home. The crawl space beneath the mobile home contained considerable debris and other undesirable items, potentially including infestation and raw sewage, which precluded entry by CGS. CGS nestled the Summa canisters for the crawl space air samples in cardboard boxes and attached the boxes to snow sleds which were pushed beneath the mobile home to the approximate locations shown on **Figure 8**. Each sled was pulled out and then pushed back under the mobile home each time the Summa canisters were accessed.

The Summa canisters were setup on October 6 and retrieved on October 7. No items were identified during the August 6 site visit that were deemed to be potential VOC sources that required removal prior to sampling. CGS provided full-time coverage to conduct the sampling and to provide security for the Summa canisters. The Summa canisters for the outdoor air sample and crawl space air samples at 105 Inverness Drive were also secured with a cable and padlock to an immovable object for added security.

A parts per billion (ppb) level PID was used to monitor VOCs in the crawl space air at 105 Inverness Drive and in the outdoor air during sample setup and retrieval, and no PID readings above background levels were measured. Pre-sample and post-sample Summa canister vacuums were measured using the canister and regulator vacuum gauges and recorded on the sample setup and retrieval forms. The regulator vacuum readings are summarized below in **Table A**.

All samples were set up according to routine procedures. The vacuum gauges on the Summa canisters were monitored three or more times after setup to confirm that the canister vacuums were decreasing, and to confirm that the change in vacuum over time was proceeding at the appropriate rate. After the first routine check, CGS noted that one of the crawl space air samples (HSI-105M-CSA) was being collected at a rate slightly more rapid than anticipated. CGS tightened the connection between the canister and regulator but continued to note a similar sample collection rate. CGS determined that the canister would fill over a time period of approximately 19 and a half hours at the calculated rate. The CGS project manager deemed this sample collection duration to be sufficient to meet the project objectives. On the sample retrieval date, CGS found that one of the crawl space air samples (HSI-107R-CSA) and outdoor air sample were lagging behind the anticipated sample collection rate. CGS allowed the sample for HSI-107R-CSA to continue collection for 4 hours longer than the planned 24-hour period. CGS allowed the outdoor air sample to continue collection for 2 hours longer at which point a grab sample was collected until a residual vacuum within the desired target range was reached.

The samples were shipped at the completion of the sampling event, with an accompanying COC form, to Enthalpy Analytical (Enthalpy) in Richmond, Virginia for laboratory analysis of VOCs via EPA Method TO-15 Low Level. Low Level sample analysis was requested to obtain low analyte method detection limits (MDLs).

**Table A** below also includes the vacuum readings recorded at the laboratory upon sample receipt. The laboratory recorded vacuums on each of the Summa canisters that ranged from 0 to 8 “Hg. As shown in **Table A**, three of the canisters were measured by the laboratory to have no residual vacuum. The lack of

residual vacuum raises concern about the sample collection duration and the possibility of air leaking into the canister after sampling. CGS was aware that the sample collection duration for HSI-105M-CSA was less than 24 hours and anticipated a zero residual vacuum for this sample. CGS is confident however, based on the series of vacuum gauge readings recorded on the field data sheets, that all of these samples were collected over sample collection durations that are sufficient to meet the project objectives. CGS' meticulous sampling protocol includes double checking to ensure that the valves are tight before the canisters are removed from the sampling locations to ensure that no air entered the canisters after sampling was completed.

**Table A**  
**Crawl Space and Outdoor Air Samples**  
**Pre-sample and Post-sample Vacuum Readings (inches of Mercury)**

Address	105 Inverness Drive Samples		107 Inverness Drive Samples		Outdoor Air Sample
Sample ID	HSI-105M-CSA	HSI-105R-CSA	HSI-107M-CSA	HSI-107R-CSA	HSI-OAA
Sample Type	Crawl Space Air	Crawl Space Air	Crawl Space Air	Crawl Space Air	Outdoor Air
Sample Location	Beneath the mid-point of the mobile home	Beneath the rear of the mobile home	Beneath the mid-point of the mobile home	Beneath the rear of the mobile home	On the railing for the porch at 107 Inverness Drive (between the two residences)
<b>Vacuum Readings</b>					
<b>Pre-sample</b>	>30	>>30	30	28	28.5
<b>Post-sample</b>	2	3	1	3.5	4
<b>Laboratory receipt</b>	0	0	0	4	8

### 2.7.2 Inert Tracer Gas Monitoring

Inert tracer gas monitoring was performed on October 6 to monitor for leaks around the surface seal of each VMP. The monitoring was performed using the methodology described in Section 2.7.5 of the New York State Department of Health, Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOE, 2006) (NYSDOH Guidance Document). Helium was utilized as the inert tracer gas for the monitoring. The helium monitoring was performed using an Ion Science GasCheck Helium Leak Detector. For each test, a plastic container, with a foam gasket on its open end, was placed over each VMP. VMP tubing was then extended through a small hole that had been drilled through the container, and the interior space of the container was enriched with helium through a second small hole in the container. 1.5 to 2.5 liters of soil vapor were then purged from each VMP using a peristaltic pump. Monitoring was performed to determine pre-test background helium readings in ambient air, pre-test readings in each VMP, the enriched container readings, and post-purge readings in each VMP.

Background helium readings in ambient air ranged from 0.033 to 0.222%. Pre-test helium readings in the VMPs ranged from 0.035 to 0.357%. The helium reading in the enriched container exceeded the range of the helium detector at 99.99% during each test. According to the NYSDOH Guidance Document, post-purge helium readings in the VMPs of less than 10% of that in the enriched container demonstrate surface seal integrity. Post-purge helium readings in the monitored VMPs ranged from 0.018 to 0.199%, thereby demonstrating surface seal integrity at each VMP.

Soil vapor purge rates achieved during the monitoring indicated that the formation screened at SMP-VMP-12 is less permeable than the formation screened at the three remaining new VMPs.

### 2.7.3 Soil Vapor Sampling

The soil vapor sampling was performed on October 7. The VMPs were purged using a peristaltic pump prior to sampling. SMP-VMP-12 was purged of approximately 1.25 liters of soil vapor, and the remaining VMPs were purged of approximately 2 liters of soil vapor. A Swagelok® valve, which had been connected to the Teflon tubing at each VMP, was utilized to ensure that ambient air did not re-enter the VMP following purging.

The soil vapor samples were collected in pre-evacuated, pre-cleaned 6-liter Summa canisters. The Summa canister regulators were calibrated by the laboratory to collect soil vapor over a 4-hour period at an average rate of 22.5 mL/min for a target residual vacuum of approximately 3“Hg. A new pair of nitrile sampling gloves was donned prior to each sample setup.

The VMP canisters were connected to the Swagelok® valve at each VMP using additional Teflon tubing and a Swagelok® fitting. A duplicate sample (SMP-VMP-D) was collected, using a T-splitter, from SMP-VMP-11. The vacuum gauges on the Summa canisters were periodically monitored after setup to confirm that the canister vacuums were decreasing, and to confirm that the change in vacuum over time was proceeding at the appropriate rate. The vacuum readings were recorded on the sample setup and retrieval forms. The pre-sample and post-sample vacuum readings are summarized below in **Table B**.

During the course of vacuum gauge monitoring, two conditions were noted.

- The vacuum gauges on the Summa canister for SMP-VMP-12 did not change between setup and the first check. The regulator was removed to allow unrestricted flow into the canister. Water droplets were observed in the VMP tubing during the third check, and the sampling was immediately terminated. Accordingly, a high residual vacuum, indicative of a low sample volume, remained on the canister.
- It was determined that the parent sample from SMP-VMP-11 was being collected too rapidly. The canister and regulator were quickly replaced without disturbing the duplicate sample which was being properly collected.

**Table B**  
**Soil Vapor Samples**  
**Pre-sample and Post-sample Vacuum Readings (inches of Mercury)**

Sample ID	SMP-VMP-10	SMP-VMP-11	SMP-VMP-11 [SMP-VMP-D]	SMP-VMP-12	SMP-VMP-13
<b>Vacuum Readings</b>					
<b>Pre-sample</b>	>30	>30	>30	28	29
<b>Post-sample</b>	3	4	1	26	2
<b>Laboratory receipt</b>	2	3	1	26	2

The samples were shipped at the completion of the sampling event, with an accompanying COC form, to Enthalpy for laboratory analysis of VOCs via EPA Method TO-15 Low Level.

## 2.8 Restoration Activities

### Fence Repairs

The sections of fencing on the property lines on both 105 and 107 Inverness Drive that were opened during the field investigation were closed prior to the completion of all sampling activities. Per the owner of 105

Inverness Drive, the interior fencing that had been located in the back yard did not require re-installation. Given the vacancy at 107 Inverness Drive, the interior fencing was also not re-installed.

All stakes and flags that had been placed in the backyards of 105 and 107 Inverness Drive were removed at the completion of all sampling activities.

### Cap Repairs

Repairs to the cap, that were noted as being needed at part of the Spring 2020 Semi-Annual Sampling Event, were performed on November 6. Top soil was placed in the area near SMP-SW-02 and at the southwestern corner of the guardrail where the clay cap had become exposed. Grass seed and straw were then spread in these areas. Additional grass seed and straw were spread in other areas above the cap where bare topsoil was exposed.

### Rut Repairs

Repairs to the driveway entrance to the Site were also performed on November 6. Geofabric and stone were placed in areas of the driveway where ruts had developed as a result of vehicles repeatedly entering and exiting the Site.

## **2.9 IDW Containment, Waste Characterization, and Disposal**

This section discusses the containment, waste characterization sampling, and disposal of the IDW generated during the hot spot investigation as well as the IDW generated during the Spring 2020 and Fall 2020 Semi-Annual Sampling Events. The IDW from these three events was collectively disposed of following completion of the groundwater sampling portion of the Fall 2020 Semi-Annual Sampling Event. This joint discussion is included in this report to simplify its presentation.

The drums containing non-hazardous waste were labeled as containing controlled waste. The drum containing hazardous waste was labeled as containing hazardous waste. All drums were staged on-site between generation and the time of pick-up.

### **2.9.1 Water IDW Containment and Waste Characterization**

The water IDW was contained in 55-gallon drums. Prior groundwater analytical data were used to characterize the water IDW. Purge water from the wells other than SMP-MW-03 and small-equipment decontamination water characterized as non-hazardous. Purge water from SMP-MW-03 characterized as hazardous. The purge water from SMP-MW-03 generated during both sampling events was contained separately from the purge water from the remaining wells. The water used for small-equipment cleaning during the hot spot investigation was drummed along with the non-hazardous purge water that had been generated during the Spring 2020 Semi-Annual Sampling Event. It should be noted that the drum containing the hazardous purge water that had been generated during the Spring 2020 Semi-Annual Sampling Event had been removed from the Site by unauthorized personnel soon after it was generated.

### **2.9.2 Soil IDW Containment and Waste Characterization Sampling and Results**

Excess soil core generated during the hot spot investigation that was not used for boring abandonment was placed into a separate 55-gallon drum.

CGS collected aliquots for the creation of two composite waste characterization soil samples to characterize the drummed soil IDW that was generated during the hot spot investigation and to pre-characterize soil in the hot spot area for disposal in anticipation of a potential upcoming soil removal remedial response. One



composite waste characterization soil sample was generated from the excess soil core that had been drummed and where field evidence of impact suggested likely non-hazardous waste characterization (HSI-WC-NH). The second composite waste characterization soil sample was generated from the soil core collected from areas where field evidence of impact suggests possible hazardous waste characterization (HSI-WC-H).

The composite waste characterization soil samples were submitted, with an accompanying COC form, to Hampton-Clarke for laboratory analysis of the Toxicity Characteristic Leaching Procedure (TCLP) for VOCs, SVOCs, and Metals via EPA Methods 1311/8260/8270/6010-7470 respectively, polychlorinated biphenyls (PCBs) via EPA Method 8082, Total Petroleum Hydrocarbon-Gasoline Range Organics (TPH-GRO) and TPH-Diesel Range Organics (TPH-DRO) via EPA Method 8015, and Percent Solids via Method SM2540. The laboratory report and COC documentation that includes the waste characterization soil samples is discussed below in Section 3.5.

HSI-WC-NH (representative of the drummed soil) characterized as non-hazardous waste. HSI-WC-H (representative of the soil in the core of the hot spot that may be excavated in the future) characterized as hazardous waste.

### 2.9.3 IDW Disposal

CGS arranged for the removal and proper disposal of the IDW, listed below in **Table C**, with Environmental Waste Specialists, Inc. (EWSI) of Manassas, Virginia. Because some of the waste was being disposed of as hazardous, the MDE-LRP project manager arranged for a permanent EPA hazardous waste generator identification number for the Site. Shipping manifests were signed by MDE-LRP as the agent for an unknown generator.

**Table C**  
**Drum Inventory**

<b>Contents</b>	<b>Number of Drums</b>	<b>Waste Characterization</b>
Excess soil core generated during the hot spot investigation	1	Non-Hazardous
Purge water from wells other than SMP-MW-03 and small-equipment decontamination water	2	Non-Hazardous
Purge water from SMP-MW-03	1	Hazardous

The drums were transported to ECOFLO, Inc.’s permitted disposal facility in Greensboro, North Carolina by ECOFLO, on January 8, 2021. The IDW disposal documentation is included in **Attachment D**.

### 3.0 LABORATORY ANALYTICAL RESULTS

The analytical results for the detected analytes in the soil samples, groundwater samples, soil vapor samples, and air samples are presented in **Tables 1 through 7**. Full analytical results are presented in **Tables E-1 through E-7** in **Attachment E**. The results are reported in the data tables in milligrams per kilogram (mg/kg or ppm) for the soil samples, in micrograms per liter [ $\mu\text{g/L}$  or parts per billion (ppb)] for the groundwater samples, and in micrograms per cubic meter ( $\mu\text{g/m}^3$ ) for the vapor and air samples. Concentrations for detected analytes are shown on the tables in bold text. Method Detection Limits (MDLs) for analytes that were not detected in a particular sample are shown in the tables in gray text and qualified with a “U”. Any analyte detected in the samples at a concentration above the MDL, but below the Reporting Limit (RL) (for the soil and groundwater samples) or the Limit of Quantitation (LOQ) (for the soil vapor and air samples) is presented in the tables with a “J” qualifier, indicating that the result is considered an estimated concentration. Concentrations denoted in the data tables with a “B” qualifier indicate that the analyte was detected in the Method Blank and in the sample. Concentrations denoted in the data tables with a “D”

qualifier were analyzed at a higher dilution factor to allow quantitation within the calibration range of the instrument. The laboratory reports and COC documentation are included in **Attachments F and G**.

### 3.1 Analytical Laboratory Results Screening Methodology

The analytical results were compared to generic risk-based screening levels (RBSLs) to preliminarily identify analytes and associated concentrations that may be of potential concern for the Site and/or off-site properties.

Details of the screening are as follows:

- The soil analytical data were compared to the MDE Residential Soil Cleanup Standards (RSCSs) (MDE, October 2018). These screening levels were developed for residential receptors based on the dermal contact, incidental ingestion, and inhalation of volatiles/fugitive dust (in open air) exposure routes and are applicable for the evaluation of the direct contact with surface/near surface soil potential exposure pathway. While not directly applicable for the subsurface soil (i.e., direct contact with the subsurface soil is not anticipated given its depth), use of the MDE RSCSs provides a conservative means of highlighting concentrations that may be of potential concern in the event of a complete direct contact exposure pathway. The soil metals analytical data were also compared to the MDE Anticipated Typical Concentrations (ATCs) for Central Maryland (MDE, October 2018).
- The groundwater analytical data were compared to the EPA Residential Groundwater Vapor Intrusion Screening Levels (VISLs) corresponding to a Cancer Risk of  $1 \times 10^{-5}$  or a Hazard Quotient of 1 (EPA, May 2020) for the evaluation of the vapor intrusion/indoor inhalation potential exposure pathway.
- The soil vapor analytical data were compared to the MDE Residential Soil Gas Tier 1 and Tier 2 Remediation Goals (RGs) (MDE, September 2019) for the evaluation of the vapor intrusion/indoor inhalation potential exposure pathway. These RGs were developed by MDE based on the May 2019 EPA Residential Indoor Air Regional Screening Levels (RSLs), a Cancer Risk of  $1 \times 10^{-5}$  or a Hazard Quotient of 1, and Attenuation Factors (AFs) 20 for Tier 1 and 100 for Tier 2.
- The crawl space air analytical data were compared to the EPA Residential Indoor Air RSLs corresponding to a Cancer Risk of  $1 \times 10^{-5}$  or a Hazard Quotient of 1 (EPA, May 2020) for the evaluation of the vapor intrusion/indoor inhalation potential exposure pathway.

The results of the screening are shown in **Tables 1 through 7** and in **Tables E-1 through E-7 in Attachment E**. Detected analyte concentrations or MDLs which exceed the respective primary RBSLs (i.e., MDE RSCSs, EPA VISLs, MDE Tier 1 RGs, and EPA RSLs) are underlined. Red text is used to highlight detected VOC and SVOC concentrations which exceed the primary RBSLs. Red text is also used to highlight detected metals concentrations in soil which exceed both the primary RBSLs (i.e., MDE RSCSs) and the secondary RBSLs (i.e., MDE ATCs). Asterisks are used to denote detected VOC concentrations in soil vapor which also exceed the secondary RBSLs (i.e., MDE Tier 2 RGs). Brief summaries of the analytical results and the results of the screening are included below in Sections 3.2 through 3.7. A more detailed interpretation of the analytical results is included below in Section 4.2.

### 3.2 Surface/Near Surface Soil Sample Analytical Results

The analytical results for the surface/near surface soil samples are presented in **Tables 1 and 2** (detected analytes) and in **Tables E-1 and E-2 in Attachment E** (full data table). The laboratory report is included in **Attachment F**.

As shown in **Table 1**, 13 VOCs were detected in the soil samples. (Note: Total xylenes was not included in this accounting because its isomers were reported.) No VOCs were detected at concentrations that exceed the MDE RSCSs.

As shown in **Table 2**, 12 SVOCs were detected in the soil samples. No SVOCs were detected at concentrations that exceed the MDE RSCSs.

The detection of 22 metals were reported in the soil samples (**Table 2**). This is as expected given that metals are naturally occurring elements. Arsenic, iron, manganese, thallium, and vanadium were detected at concentrations that exceed the MDE RSCSs. Only arsenic and vanadium were detected at concentrations that also exceed the MDE ATCs.

### **3.3 Grab Groundwater Sample Analytical Results**

The analytical results for the grab groundwater samples are presented in **Table 3** and in **Table E-3**. The laboratory report is included in **Attachment G**.

Eighteen (18) VOCs were detected in the groundwater samples. 1,2-Dichloroethane, benzene, chlorobenzene, trichloroethene (TCE), and vinyl chloride (VC) were detected at concentrations that exceed the EPA Residential Groundwater VISLs.

### **3.4 Subsurface Soil Sample Analytical Results**

The analytical results for the subsurface soil samples are presented in **Tables 4 and 5** and in **Tables E-4 and E-5**. The laboratory report is included in **Attachment G**.

As shown in **Table 4**, 25 VOCs were detected in the subsurface soil samples. 1,1,2,2-Tetrachloroethane, 1,2-dichloroethane, benzene, chlorobenzene, cis-1,2-dichloroethene, ethylbenzene, m&p-xylene, methylene chloride, tetrachloroethene (PCE), toluene, TCE, VC, and total xylenes were detected at concentrations that exceed the MDE RSCSs.

As shown in **Table 5**, nine SVOCs were detected in the subsurface soil samples. bis(2-Ethylhexyl) phthalate and naphthalene were detected at concentrations that exceed the MDE RSCSs.

The detection of 22 metals were reported in the subsurface soil samples (**Table 5**). Arsenic, cadmium, and iron were detected at concentrations that exceed the MDE RSCSs. Only cadmium was detected at a concentration that also exceed the MDE ATC.

### **3.5 Waste Characterization Sample Analytical Results**

As discussed above in Section 2.9.2, the soil waste characterization samples were analyzed for TCLP-VOCs, TCLP-SVOCs, TCLP-metals, PCBs, TPH-GRO, TPH-DRO, and percent solids. The laboratory report which presents the waste characterization sample analytical results is included in **Attachment G**. The results of the waste characterization analyses are presented above in Section 2.9.2.

### **3.6 Soil Vapor Sample Analytical Results**

The analytical results for the soil vapor samples are presented in **Table 6** and in **Table E-6**. The laboratory report is included in **Attachment H**.

Forty-four (44) VOCs were detected in the soil vapor samples. 1,1,2,2-Tetrachloroethane, 1,1,2-trichloroethane, acrolein, bromodichloromethane, chloroform, and TCE were detected at concentrations

that exceed the MDE Residential Soil Gas Tier 1 RGs. 1,1,2,2-Tetrachloroethane, chloroform, and TCE were detected at concentrations that also exceed the MDE Residential Soil Gas Tier 2 RGs.

### **3.7 Crawl Space Air and Outdoor Air Sample Analytical Results**

The analytical results for the crawl space air and outdoor air samples are presented in **Table 7** and in **Table E-7**. The laboratory report is included in **Attachment H**.

Twenty (20) VOCs were detected in the crawl space air and outdoor air samples. Acrolein and naphthalene were detected at concentrations that exceed the EPA Residential Indoor Air RSLs.

## **4.0 SITE CHARACTERIZATION DISCUSSION**

Previous site data were utilized in combination with the data generated during this investigation to gain additional understanding of the hydrogeologic and contaminant conditions within the investigation area as discussed below in Sections 4.1 and 4.2, respectively.

### **4.1 Hydrogeologic Data Discussion**

The stratigraphy encountered in the soil borings, advanced as discussed above in Sections 2.4 and 2.5, consisted primarily of damp, medium stiff to stiff, clayey silt/silt or damp, medium dense to dense, silty or clayey sand. Occasional intervals predominately containing other fractions (e.g., gravel, gravelly sand, sand, and silty clay) and/or softer/looser fractions were also encountered in the borings. Intervals identified as fill or reworked material were encountered in all of the borings to depths ranging from 1.5 to 13 feet BG. At times, the fill contained debris such as plastic sheeting, plastic, brick fragments, glass, rubber, ceramics, or trash. Some borings contained intervals of organic/swamp sediments and or wood fragments. Soil core obtained below depths ranging from 5 to 14.5 feet BG often exhibited a weathered bedrock texture. Weathered bedrock was encountered in HSI-GW-02 at a depth of 11 feet BG and in HSI-GW-04 at a depth of 16.5 feet BG. Refusal was encountered at a depth of 17.6 feet BG in HSI-HRSC-38.

Sustained wet conditions were observed in the soil core from only one of the borings [i.e., HSI-SB-04 (12-20 feet BG)]. Wet conditions were observed in discrete intervals in the soil core from five of the remaining 13 borings [i.e., HSI-GW-01 (13-15 feet BG), HSI-GW-04 (perched interval at 2 to 3 feet BG), HSI-SB-05 (9-9.5 feet BG), HSI-SB-06 (13 feet BG), and HSI-SB-09 (16-17 feet BG)]. In five of the remaining eight borings, indications of possible groundwater were observed on occasional as thin slightly moist/moist zones. Damp conditions only were observed in the soil core from three of the borings. Groundwater accumulated in all four of the temporary wells (HSI-GW-01 through HSI-GW-04) to depths ranging from 8.88 feet BG at HSI-GW-04 to 16.28 feet BG at HSI-GW-02.

Historic gauging data, from the three wells located within AOC-3 and listed geographically from northwest to southeast, are summarized below in Table D. Note that near drought conditions occurred during the Fall 2019 Semi-Annual Sampling Event as reflected in the gauging data collected on October 31, 2019.

**Table D**  
**Historic Gauging Data (feet BG)**

Well	11/7/2001	3/16/2016	10/31/2019	5/5/2020	9/8/2020
MW-3	5.7	0.8	6.3	1.5	Not Gauged
SMP-MW-03	Not yet installed		9.6	5.8	5
MW-2	16.2	9.1	17.3	8.4	12.5

The groundwater/surface water contour map generated during the Spring 2020 Semi-Annual Sampling Event indicates that the direction of groundwater flow from the hot spot area is toward the east-northeast.

As discussed above in Section 2.7.3, the low permeability of the shallow subsurface soil, and the presence of water in the interstitial pore spaces, impacted the collection of the soil vapor sample from SMP-VMP-12. This condition was also observed during VMP sampling events conducted at/near the Site during both of the Semi-Annual Sampling Events performed to date. This condition occurred in two of the VMPs during the Fall 2019 event and in seven of the VMPs during the Spring 2020 event.

#### 4.2 Contaminant Site Characterization

**Figures 9 through 13** were generated to illustrate the distribution of analytes detected in the various media that were sampled. **Figures 14 through 22** were generated to illustrate data that were acquired during the HRSC Survey. The process used to generate **Figures 14 through 22** is discussed below in Section 4.2.1. Discussion of the data illustrated in these figures, relative to the goals of the Hot Spot Investigation (discussed above in Section 1.2), is presented below in Sections 4.2.2 through 4.2.4.

The VOCs detected, in the subsurface media that were sampled, at concentrations above the respective RBSLs (**Tables 3, 4, and 6**) fall into the following three categories:

- Chlorinated VOCs (c-VOCs): 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,2-dichloroethane, bromodichloromethane, chlorobenzene, chloroform, cis-1,2-dichloroethene (cis-1,2-DCE), methylene chloride, PCE, TCE, and VC.
- Petroleum VOCs (p-VOCs): benzene, ethylbenzene, toluene, xylenes, and naphthalene (as a SVOC); and
- Other VOCs: acrolein.

##### 4.2.1 Generation and Viewing of the HRSC Survey Graphics (Figures 10 through 22)

HRSC data are collected 20 times per foot (i.e., once every 0.05 foot) of boring advancement. Logs presenting these data are included in Cascade’s Final Data Report (**Attachment A**). Cascade utilized sophisticated software to laterally interpolate the HRSC data between the borings and generate two and three dimensional graphics from the data.

As discussed above in Section 2.2.1, the ECD and XSD are the primary instruments which detect c-VOCs. The results of the Semi-Annual Sampling Events demonstrate that c-VOCs are the primary constituents of potential concern (COPCs) for the Site. Accordingly, site characterization discussion of the HRSC Survey data will focus on the ECD and XSD responses.

Cascade provided CGS with a series of graphics files that provide two and three dimensional views of the ECD and XSD data and two dimensional views of the EC and HTP pressure data. Each of the graphics is interactive so that it can be viewed from any angle or magnification.

The three dimensional models present views at three different response levels. The two dimensional models (i.e., vertical cross-sections and horizontal cross-sections) can be viewed as a progressing slide show or “short movie.” The slide shows can also be progressed one slide at a time, and screen shots of individual slides (also referred to as “slices”) can be captured.

Cascade generated its graphics using CGS’ **Figure 4** as its base map and the GPS data that were recorded for each boring. Vertical distances are depicted as elevation amsl. Horizontal distances are depicted in feet in the Maryland State Plane coordinate system.

CGS captured screen shots of individual slides from the ECD, XSD, EC, and HTP pressure graphics to generate the figures. Each screen shot was selected to best illustrate the vertical and the lateral extent of the contamination within the area included in the HRSC Survey. Data are presented in the graphics using color gradients. The color gradient scale for each image presented in the figures is included for reference. **Figures 14 through 19** were generated from the three dimensional models of the ECD and XSD data and each present four views from these models. View A (i.e., **Figure 14A**, **Figure 15A**, etc.) presents a two dimensional plan view of the three dimensional data for the respective sensor and response levels. Views B, C, and D present three dimensional views from the west, south, and northwest respectively for the respective sensor and response levels. **Figure 20** presents a Cross-Section Location Map. **Figures 21 and 22** were generated from the two dimensional models of the ECD, XSD, EC, and HTP pressure data. **Figure 21** presents a cross-section that intersects in the vicinity of HSI-HRSC-44, HSI-HRSC-48, HSI-HRSC-45, and HSI-HRSC-22. **Figure 22** presents a cross-section that intersects in the vicinity of HSI-HRSC-49, HSI-HRSC-03, and HSI-HRSC-39.

As discussed in Cascade’s Final Data Report (**Attachment A**), the ECD and XSD respond to halogenated compounds (i.e., chlorinated, fluorinated, brominated) only. The ECD is more sensitive to compounds that are more highly halogenated and provides a greater response to PCE and TCE versus cis-1,2-DCE and VC; whereas the XSD provides a greater response to cis-1,2-DCE and VC. The ECD is highly sensitive and can go over-range in areas of very high concentrations. The ECD can become over-saturated at these times and often requires additional time before the instrument clears. This can result in a carry down of high ECD responses to deeper depths. As shown in the logs included in Cascade’s Final Data Report (**Attachment A**), carry down of high ECD responses to the bottom of the borings may have occurred at HSI-HRSC-03 and HSI-HRSC-45. Carry down of XSD responses was not observed at these locations.

#### 4.2.2 Hot Spot Area Soil Contamination Delineation

##### VOC Data Evaluation

**Table 4** presents the analytical results for the VOCs detected in the subsurface soil samples collected from HSI-SB-01 through HSI-SB-10. **Figures 11, 14 through 19, 21, and 22** were generated to illustrate data collected in the hot spot area.

**Figures 16A and 19A** illustrate four areas where the highest ECD and XSD responses were detected. The first area (i.e., the hot spot area) includes HSI-HRSC-03, HSI-HRSC-04, HSI-HRSC-10, HSI-HRSC-39, HSI-HRSC-40, HSI-HRSC-45, HSI-HRSC-46, HSI-HRSC-47, HSI-HRSC-49, and HSI-HRSC-50; the second area includes HSI-HRSC-22; the third area includes HSI-HRSC-33 and HSI-HRSC-34; and the fourth area, shown on **Figure 16A** only, includes HSI-HRSC-02 and HSI-HRSC-28. Comparison of **Figure 16A** with **Figures 14A and 15A** and of **Figure 19A** with **Figures 17A and 18A** demonstrate that the hot spot area that was known to exist at SMP-MW-03 and SMP-VMP-03 is segregated from other areas where the highest ECD and XSD responses were detected by areas where lower ECD and XSD responses were detected. Comparison of **Figure 16C** with **Figures 14C and 15C** and of **Figure 19C** with **Figures 17C and 18C** demonstrate that the areas where the highest ECD and XSD responses were detected outside of the hot spot area are limited in extent relative to the extent of the hot spot area.

As per the purpose of this section, discussion herein will focus on the hot spot area only. **Figures 16B, C, and D and 19 B, C, and D** illustrate three dimensional views of the hot spot area where the highest ECD and XSD responses were detected. **Figures 21A, 21B, 22A, and 22B** illustrate two dimensional views of the hot spot area where the highest ECD and XSD responses were detected. It should be noted that the MIP sensors detect contamination in subsurface vapor (vapor-phased contamination), in subsurface soil (adsorbed-phased contamination), and in groundwater (dissolved-phased contamination) without distinction of media. As discussed above in Section 2.2.1, groundwater was gauged at a depth of approximately 5 feet BG in SMP-MW-03 on the first day of the HRSC Survey. Accordingly, the ECD and XSD responses detected at depths of 5 feet BG or less in this immediate area may reflect vapor-phased and/or adsorbed-phased contamination; whereas the ECD and XSD responses detected at depths of 5 feet BG or greater may reflect adsorbed-phased and/or dissolved-phased contamination. The HRSC Survey graphics demonstrate high levels of contamination in the hot spot area to depths exceeding 20 feet BG.

The HRSC Survey graphics, and **Figures 22A and 22B** in particular, demonstrate an area of shallow contamination centered at HSI-HRSC-39 that starts at a depth of approximately 1.5 feet BG which diminishes vertically downward at this location but connects laterally toward HSI-HRSC-03 where deep responses were recorded.

As shown in **Table 4** and illustrated on **Figure 11**, eight c-VOCs (1,1,2,2-tetrachloroethane, 1,2-dichloroethane, chlorobenzene, cis-1,2-DCE, methylene chloride, PCE, TCE, and VC) and four p-VOCs (benzene, ethylbenzene, toluene, and xylenes) were detected at concentrations that exceed the MDE RSCSs in the subsurface soil samples collected from HSI-SB-01 between the depths of 2.5 and 10.5 feet BG. The highest VOC concentrations were detected in one of the soil samples collected from HSI-SB-01 between the depths of 6 and 6.5 feet BG (i.e., below the then current groundwater table) where a PID reading of 12,950 ppm was recorded. The variation in the VOC concentrations detected in the two samples collected from this interval reflect the non-homogeneous nature of soil samples. This depth corresponds with the depths where the highest XSD responses were detected in HSI-HRSC-03 (approximately 6.5 to 9 feet BG) and in HSI-HRSC-45 (approximately 4.5 to 9.5 feet BG). No VOCs were detected at concentrations that exceed the MDE RSCSs in the subsurface soil sample collected from HSI-SB-01 between the depths of 14.5 and 15 feet BG where a PID reading of 132 ppm was recorded. As shown in the soil boring log for HSI-SB-01, PID readings higher than this level were recorded to depths ranging to 18.5 feet BG.

As shown in **Table 4** and illustrated on **Figure 11**, only two c-VOCs (either TCE or VC) were detected at concentrations that exceed the MDE RSCSs in subsurface soil samples collected from HSI-SB-03, HSI-SB-04, HSI-SB-05, HSI-SB-06, HSI-SB-08, and HSI-SB-10. These samples were collected between the depths of 3.5 and 13 feet BG. No VOCs were detected at concentrations that exceed the MDE RSCSs in subsurface soil samples collected from HSI-SB-02, HSI-SB-07, and HSI-SB-09.

#### SVOC and Metals Data Evaluation

As shown in **Table 5** and illustrated on **Figure 12**, two SVOCs [bis(2-ethylhexyl)phthalate and naphthalene] and three metals (arsenic, cadmium, and iron) were detected in the subsurface soil samples at concentrations that exceed the MDE RSCSs. Only cadmium was detected at a concentration that also exceed the MDE ATC. The bis(2-ethylhexyl)phthalate, naphthalene, and cadmium concentrations were detected in the same sample interval discussed above where the highest VOC concentrations were detected (i.e., from HSI-SB-01 between the depths of 6 and 6.5 feet BG). No other SVOC or metals concentrations that may be of concern were detected in the subsurface soil samples submitted for these analyses.

## Summary

The data collected during the Hot Spot Investigation fulfilled the goal of delineating the vertical and lateral extent of soil contamination in the hot spot area both on-site and on the adjacent residential properties. The data collected during the HRSC Survey were critical in developing this understanding. The data demonstrate that the hot spot area is fairly limited in extent and that the core of the hot spot area is located at SMP-MW-03, HSI-HRSC-03, HSI-HRSC-45, and HSI-SB-10. Soil contamination in the hot spot area extends to depths below the groundwater table. The edge of the hot spot area contamination extends into the backyard of 105 Inverness Drive at HSI-HRSC-03 and HSI-SB-10. It should be noted that the backyards of 105 and 107 Inverness Drive extend past the property line to the location of the on-site guardrail. **Figure 7** demonstrates that HSI-HRSC-03 and HSI-SB-10 are located within the on-site property boundary.

### **4.2.3 Evaluation of the Direct Contact with Surface/Near Surface Soil Potential Exposure Pathway**

#### VOC and SVOC Data Evaluation

As shown in **Tables 1 and 2** and illustrated on **Figure 9**, no VOC or SVOC concentrations that exceed the MDE RSCSs were detected in the surface/near surface soil samples. This includes the near surface soil sample collected at HSI-SS-07 located adjacent to HSI-HRSC-39 where shallow contamination that starts at a depth of approximately 1.5 feet BG was detected

#### Metals Data Evaluation

As shown in **Table 2** and illustrated on **Figure 9**, five metals (arsenic, iron, manganese, thallium, and vanadium) were detected at concentrations that exceed the MDE RSCSs. Arsenic and iron were detected at concentrations that exceed the MDE RSCSs at all nine of the sampling locations. Manganese, thallium, and vanadium were detected at concentrations that exceed the MDE RSCSs at one sampling location each. However, only arsenic and vanadium, at one location each, were detected at concentrations that also exceed the MDE ATCs. Consultation with MDE's toxicologist indicates that they are not a cause for concern.

#### Summary

The data collected during the Hot Spot Investigation fulfilled the goal of providing data for use in evaluating the direct contact with surface/near surface soil potential exposure pathway both on-site and at 105 and 107 Inverness Drive. No VOC, SVOC, or metals concentrations, that may be of concern for this potential exposure pathway, were detected in the surface/near surface soil samples.

### **4.2.4 Evaluation of the Vapor Intrusion/Indoor Inhalation Potential Exposure Pathway**

#### Data Evaluation

**Tables 3, 6, and 7** present the grab groundwater, soil vapor, and crawl space and outdoor air analytical results used in the evaluation of the vapor intrusion/indoor inhalation potential exposure pathway. **Figures 10, 13, 14 through 19, and 21** were generated to illustrate data used in this evaluation. Discussion included herein will focus on data acquired at HRSC Survey borings HSI-HRSC-13, HSI-HRSC-14, HSI-HRSC-15, and HSI-HRSC-22 located in the backyard of 105 Inverness Drive closest to the mobile home and at the grab groundwater, soil vapor, and crawl space and outdoor air sampling locations.

**Figures 16A and 19A** show the areas where the highest ECD and XSD responses were detected. As noted above, one of those areas includes HSI-HRSC-22. **Figures 21A and 21B** present a cross-sectional view that includes the hot spot area and HSI-HRSC-22 and illustrate the ECD and XSD responses in this slice. **Figure 14A** shows that ECD responses above 3,000,000 microVolts ( $\mu\text{V}$ ) were recorded at HSI-HRSC-15 in addition to HSI-HRSC-22. **Figure 17A** shows that XSD responses above 3,000  $\mu\text{V}$  were recorded at



HSI-HRSC-13 and HSI-HRSC-14 in addition to HSI-HRSC-22 and several other of the HRSC borings advanced in the backyard of 105 Inverness Drive. The D view of **Figures 14 through 19** (i.e., **Figure 14D, 15D**, etc.) present three dimensional views of the ECD and XSD responses in the area of HSI-HRSC-13, HSI-HRSC-14, HSI-HRSC-15, and HSI-HRSC-22 (i.e., the three dimensional shapes on the left side of the diagrams left of the hot spot three dimensional shapes).

HSI-HRSC-22 is located directly down-gradient of the hot spot area. The grade elevation at HSI-HRSC-22 is lower than the grade elevation at SMP-MW-03. The profile log for HSI-HRSC-22 demonstrates that the highest ECD and XSD responses were detected at a depth of approximately 3.5 feet BG at this location. These ECD and XSD responses are depicted on **Figures 21A and 21B**. Perched groundwater was encountered at a depth of 2 to 3 feet BG in a more permeable interval in the boring for HSI-GW-04. It follows that the ECD and XSD responses detected at 3.5 feet BG and deeper in HSI-HRSC-22 (and in HSI-HRSC-13, HSI-HRSC-14, and HSI-HRSC-15) likely result from dissolved-phased migration from the hot spot area through more permeable intervals as opposed to vapor-phased migration. **Figures 21A and 21B** present the EC and HTP pressure data for this cross-section and exhibit inter-fingering of varying soil types and hydraulic properties. EC responses on the orange end of the scale reflect coarser grained sediments, and EC responses on the grey end of the scale reflect finer grained sediments. HTP pressure responses on the blue end of the scale reflect more permeable intervals, and HTP pressure responses on the grey end of the scale reflect less permeable intervals.

**Figures 21A and 21B** demonstrate that the XSD response at HSI-HRSC-22 extends deeper than the ECD response. This suggests higher cis-1,2-DCE and VC concentrations and lower PCE and TCE concentrations in groundwater at this location, which is consistent with the analytical data for HSI-GW-02 and with the analytical data for HSI-GW-01, HSI-GW-03, and HSI-GW-04 as well (**Table 3**).

As shown in **Tables 3 and 6**, VOCs, likely attributable to the on-site contamination, were detected in all of the grab groundwater samples and in three of the four soil vapor samples (i.e., SMP-VMP-10, SMP-VMP-11, and SMP-VMP-13) at concentrations that exceed the respective EPA Residential Groundwater VISLs or MDE Residential Soil Gas Tier 1 RGs. These VOCs include 1,2-dichloroethane, benzene, chlorobenzene, TCE, and VC in groundwater and 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, and TCE in soil vapor. [Note that detections of acrolein, bromodichloromethane, and chloroform often result from anthropogenic sources not related to subsurface contamination.] 1,1,2,2-Tetrachloroethane and TCE were detected in soil vapor at concentrations that also exceed the MDE Residential Soil Gas Tier 2 RGs. These results suggest that vapor intrusion would be a potential concern in the event that structures with slab-on-grade construction or with basements were located on these properties.

The results of the crawl space air and outdoor air sampling are presented in **Table 7**. The results demonstrate general consistency between the outdoor air sample and the four crawl space air samples. All of the analytes detected in these samples, including acrolein and naphthalene that were detected at concentrations that exceed the EPA Residential Indoor Air RSLs, can be attributed to anthropogenic sources not related to subsurface contamination. The crawl space air analytical data do not suggest potential impact from vapor intrusion, likely due to a high degree of ventilation in the crawl space area beneath both mobile homes.

### Summary

The data collected during the Hot Spot Investigation fulfilled the goal of providing data for use in evaluating the vapor intrusion/indoor inhalation potential exposure pathway at 105 and 107 Inverness Drive. The groundwater and soil vapor analytical data suggest that vapor intrusion might be a potential concern in the event that structures with slab-on-grade construction or with basements were located on these properties. However, the crawl space air and outdoor air analytical data do not suggest potential impact from vapor intrusion, likely due to a high degree of ventilation in the crawl space area beneath both mobile homes. Consultation with MDE's toxicologist confirms this interpretation.

## 5.0 CONCLUSIONS

CGS has performed a Hot Spot Investigation at the Montgomery Brothers Dump site located off of Inverness Drive in North East, Maryland. The Hot Spot Investigation was performed to delineate the vertical and lateral extent of the soil contamination in the hot spot and to evaluate the direct contact with surface/near surface soil and the vapor intrusion/indoor inhalation potential exposure pathways. Among other activities, the Hot Spot Investigation included a HRSC survey; collection of surface/near surface soil samples, groundwater samples, and subsurface soil samples; installation of four VMPs; and collection of soil vapor and crawl space/outdoor air samples. Based on data obtained during this investigation, CGS concludes the following:

- The data collected during the Hot Spot Investigation fulfilled the goal of delineating the vertical and lateral extent of soil contamination in the hot spot area both on-site and on the adjacent residential properties. The data demonstrate that the hot spot area is fairly limited in extent and has a well-defined core. Soil contamination in the hot spot area extends to depths below the groundwater table. The edge of the hot spot area extends approximately 10 feet into the backyard of 105 Inverness Drive; however, this area is located within the on-site property line.
- The data collected during the Hot Spot Investigation fulfilled the goal of providing data for use in evaluating the direct contact with surface/near surface soil potential exposure pathway both on-site and at 105 and 107 Inverness Drive. No VOC, SVOC, or metals concentrations, that may be of concern for this potential exposure pathway, were detected in the surface/near surface soil samples.
- The data collected during the Hot Spot Investigation fulfilled the goal of providing data for use in evaluating the vapor intrusion/indoor inhalation potential exposure pathway at 105 and 107 Inverness Drive. The groundwater and soil vapor analytical data suggest that vapor intrusion might be a potential concern in the event that structures with slab-on-grade construction or with basements were located on these properties. However, the crawl space air and outdoor air analytical data do not suggest potential impact from vapor intrusion, likely due to a high degree of ventilation in the crawl space area beneath both mobile homes. Consultation with MDE's toxicologist confirms this interpretation.

## 6.0 LIMITATIONS

The work performed in conjunction with this project, and the data developed, are intended as a description of available information at the sample locations indicated and the dates specified. Generally accepted industry standards were used in the preparation of this report.

Laboratory data are intended to approximate actual conditions at the time of sampling. Results from future sampling and testing may vary significantly as a result of natural conditions, a changing environment, or the limits of analytical capabilities. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a specific location not investigated. The limited sampling conducted is intended to approximate conditions by extrapolation between data points. Actual conditions may vary.

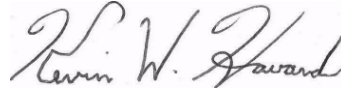
CGS has based its characterization on observable conditions and analytical results from independent analytical laboratories that are solely responsible for the accuracy of their methods and results.

CGS is pleased to be assisting the Maryland Department of the Environment on this project. If you have any questions, please contact our office in Columbia, Maryland at (410) 740-1911 or via email. The undersigned can be reached at extension 106 or [nlove@cgs.us.com](mailto:nlove@cgs.us.com) or at extension 103 or [khoward@cgs.us.com](mailto:khoward@cgs.us.com).

Sincerely,  
Chesapeake GeoSciences, Inc.



Nancy D. Love, PG  
Principal



Kevin W. Howard, PG  
President

cc: Project File

Attachments:

#### Figures

- Figure 1: Site Location Map
- Figure 2: Hot Spot Investigation Base Map
- Figure 3: Hot Spot Investigation Area
- Figure 4: HRSC Boring Location Map
- Figure 5: Surface/Near Surface Soil Sample Location Map
- Figure 6: Grab Groundwater Sample Location Map
- Figure 7: Soil Boring Location Map
- Figure 8: VMP and Crawl Space/Outdoor Air Sample Location Map
- Figure 9: Surface/Near Surface Soil Contaminant Distribution Map - Detected Analytes
- Figure 10: Grab Groundwater Contaminant Distribution Map - Detected VOCs
- Figure 11: Subsurface Soil Contaminant Distribution Map - Detected VOCs
- Figure 12: Subsurface Soil Contaminant Distribution Map - Detected SVOCs and Metals
- Figure 13: Soil Vapor and Crawl Space/Outdoor Air Contaminant Distribution Map - Detected VOCs
- Figure 14: HRSC Survey - Three Dimensional Model - ECD at 3,000,000  $\mu$ V
- Figure 15: HRSC Survey - Three Dimensional Model - ECD at 4,000,000  $\mu$ V
- Figure 16: HRSC Survey - Three Dimensional Model - ECD at 6,000,000  $\mu$ V
- Figure 17: HRSC Survey - Three Dimensional Model - XSD at 3,000  $\mu$ V
- Figure 18: HRSC Survey - Three Dimensional Model - XSD at 5,000  $\mu$ V
- Figure 19: HRSC Survey - Three Dimensional Model - XSD at 12,000  $\mu$ V
- Figure 20: HRSC Survey - Cross-Section Location Map
- Figure 21: HRSC Survey - Cross-Section A-A' Northing: 711383 Intersecting: 44, 48, 45, and 22
- Figure 22: HRSC Survey - Cross-Section B-B' Easting: 1606313 Intersecting: 49, 03, and 39

#### Tables

- Table 1: Surface/Near Surface Soil Sample Analytical Results - Detected Analytes - VOCs
- Table 2: Surface/Near Surface Soil Sample Analytical Results - Detected Analytes - SVOCs and Metals
- Table 3: Grab Groundwater Sample Analytical Results - Detected Analytes - VOCs
- Table 4: Subsurface Soil Sample Analytical Results - Detected Analytes - VOCs
- Table 5: Subsurface Soil Sample Analytical Results - Detected Analytes - SVOCs and Metals
- Table 6: Soil Vapor Sample Analytical Results - Detected Analytes - VOCs
- Table 7: Crawl Space/Outdoor Air Sample Analytical Results - Detected Analytes - VOCs

Attachments

Attachment A: Cascade HRSC Data Report

Attachment B: Groundwater Sample Soil Boring Logs

Attachment C: Soil Sample Soil Boring Logs

Attachment D: IDW Disposal Documents

Attachment E: Full Laboratory Analytical Data Tables

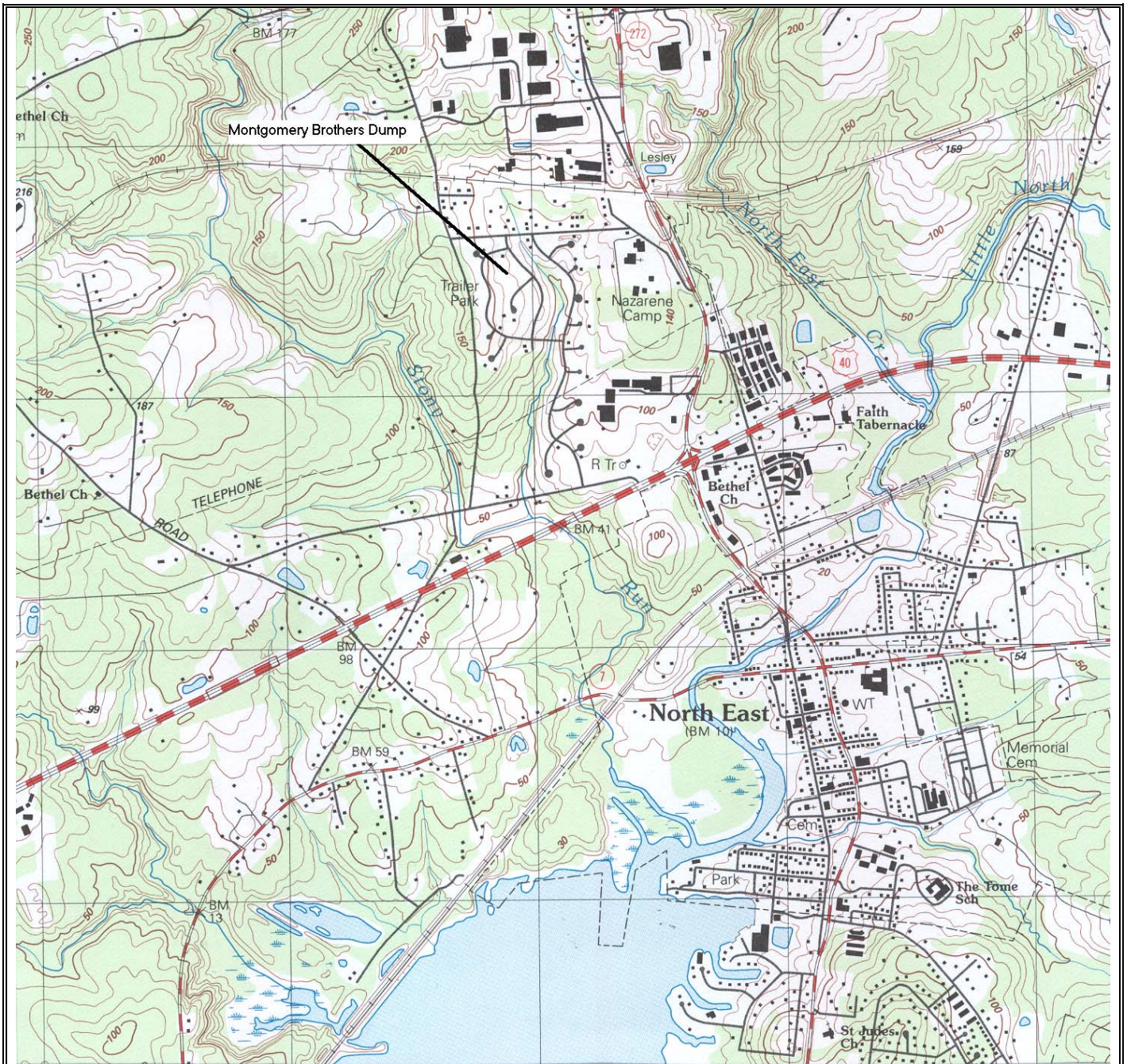
Attachment F: Surface/Near Surface Soil Sample Laboratory Analytical Report

Attachment G: Groundwater, Subsurface Soil, and Waste Characterization Sample Laboratory Analytical Reports

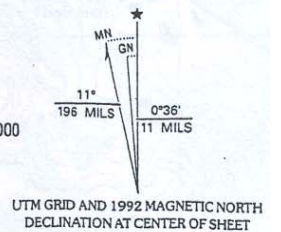
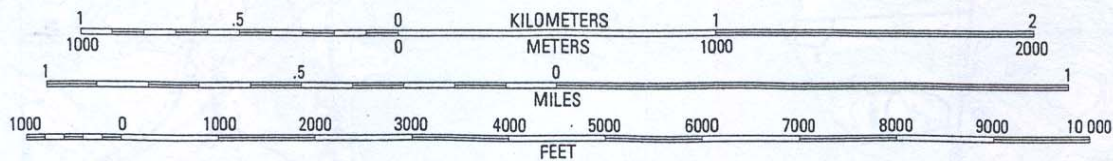
Attachment H: Crawl Space Air, Outdoor Air, and Soil Vapor Sample Laboratory Analytical Report

## **FIGURES**





SCALE 1:24 000



CONTOUR INTERVAL 10 FEET  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

Drawn By: **R.L.R.**  
 Date: **2-12-16**  
 Job #: **CG-09-0423**  
 Proj. Mang.: **K. Howard**

**CGS** Chesapeake  
 GeoSciences, Inc.

5405 Twin Knolls Rd., Suite 1  
 Columbia, MD 21045  
 Phone (410) 740-1911  
 FAX (410) 740-3299

**Figure 1: Site Location Map**



**FIGURE 2**

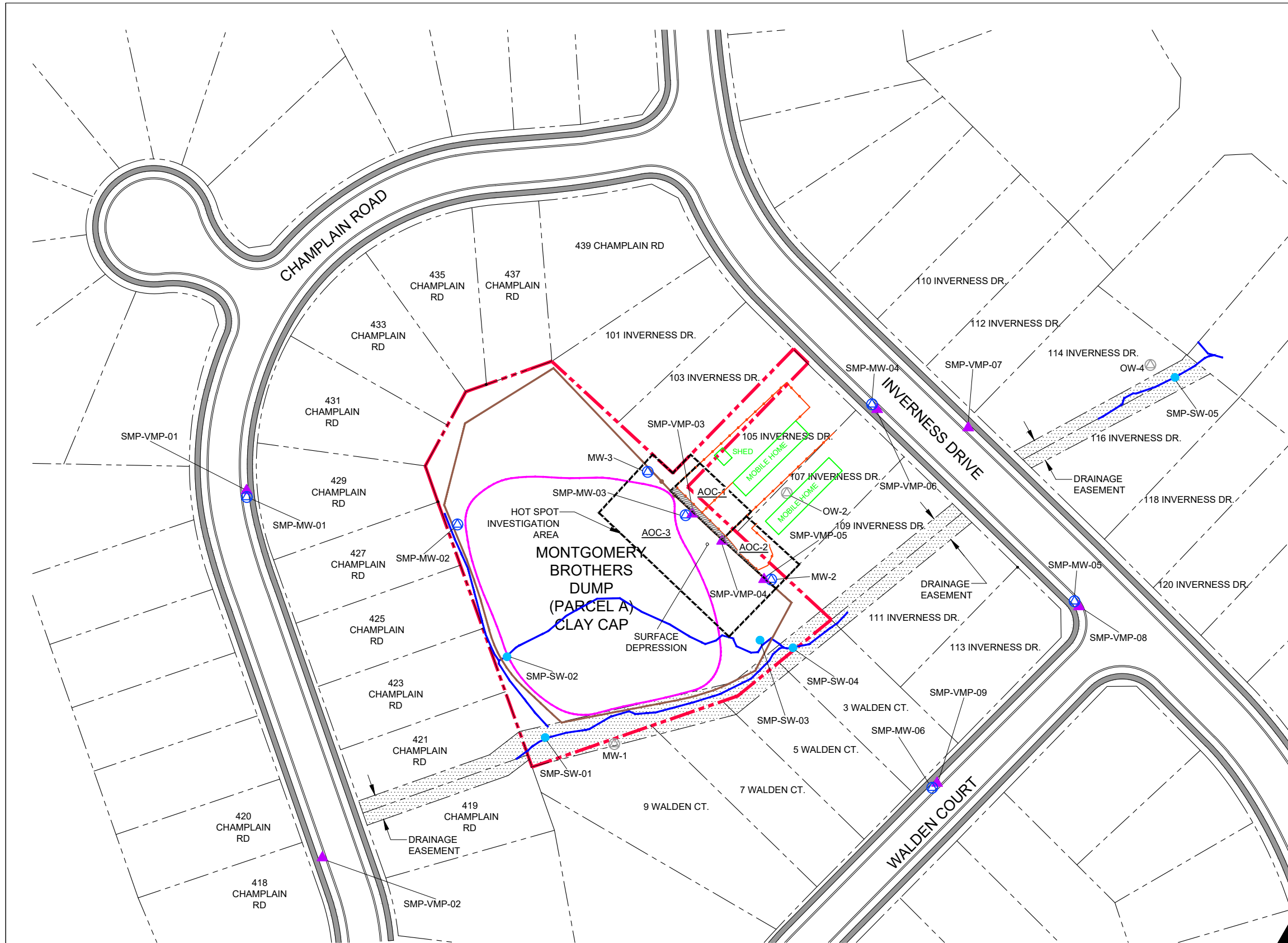
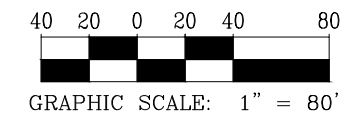
**HOT SPOT  
INVESTIGATION  
BASE MAP**

**Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901**

**CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020**

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Side walk
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- ⊕ Groundwater Monitoring Well
- ▲ Vapor Monitoring Point
- Surface Water Monitoring Station
- ⊖ Abandoned Groundwater Monitoring Well
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



**FIGURE 3**

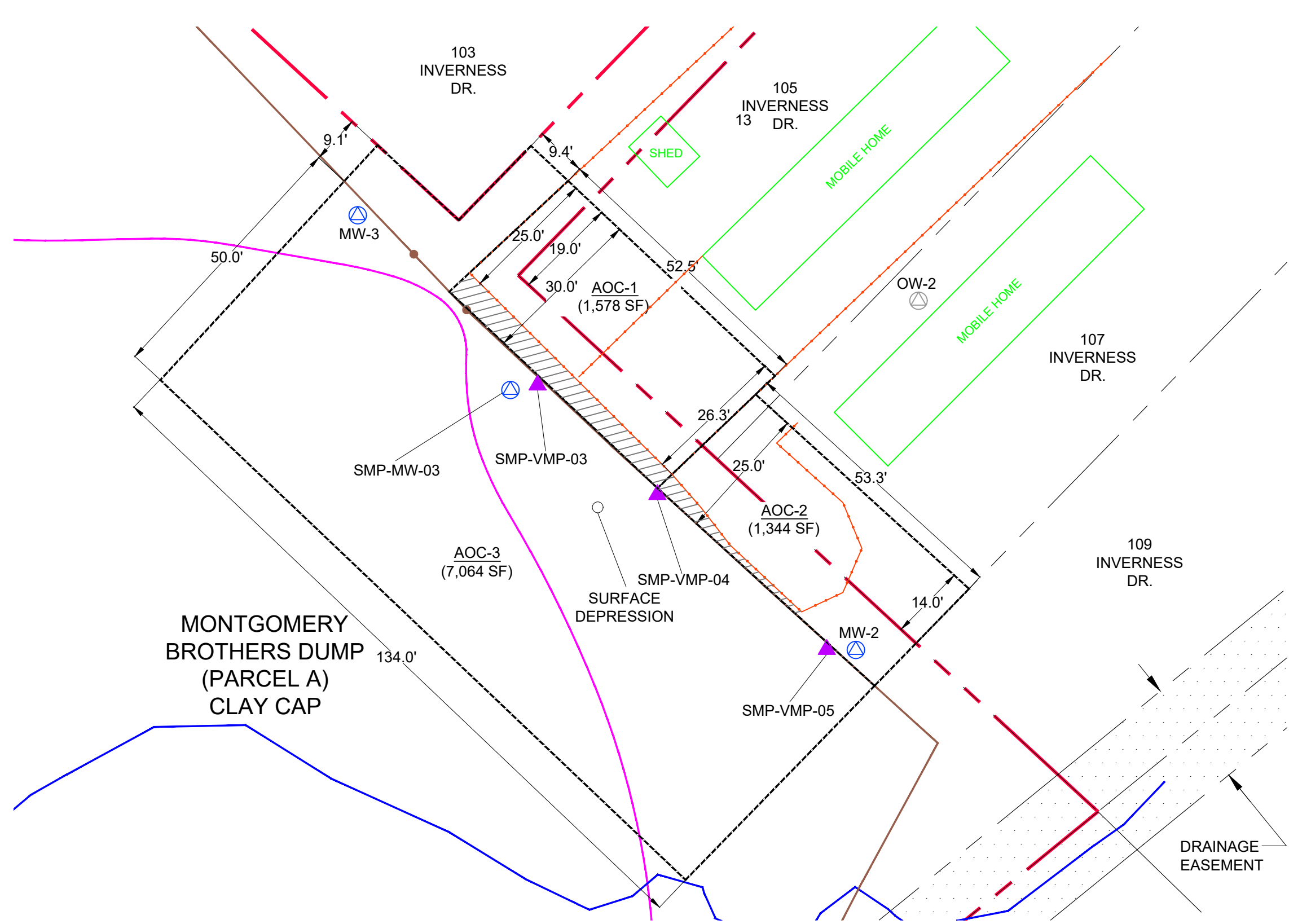
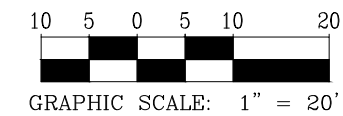
**HOT SPOT  
INVESTIGATION  
AREA**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- ⊕ Groundwater Monitoring Well
- ▲ Vapor Monitoring Point
- ⊕ Abandoned Groundwater Monitoring Well
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area





**FIGURE 4**

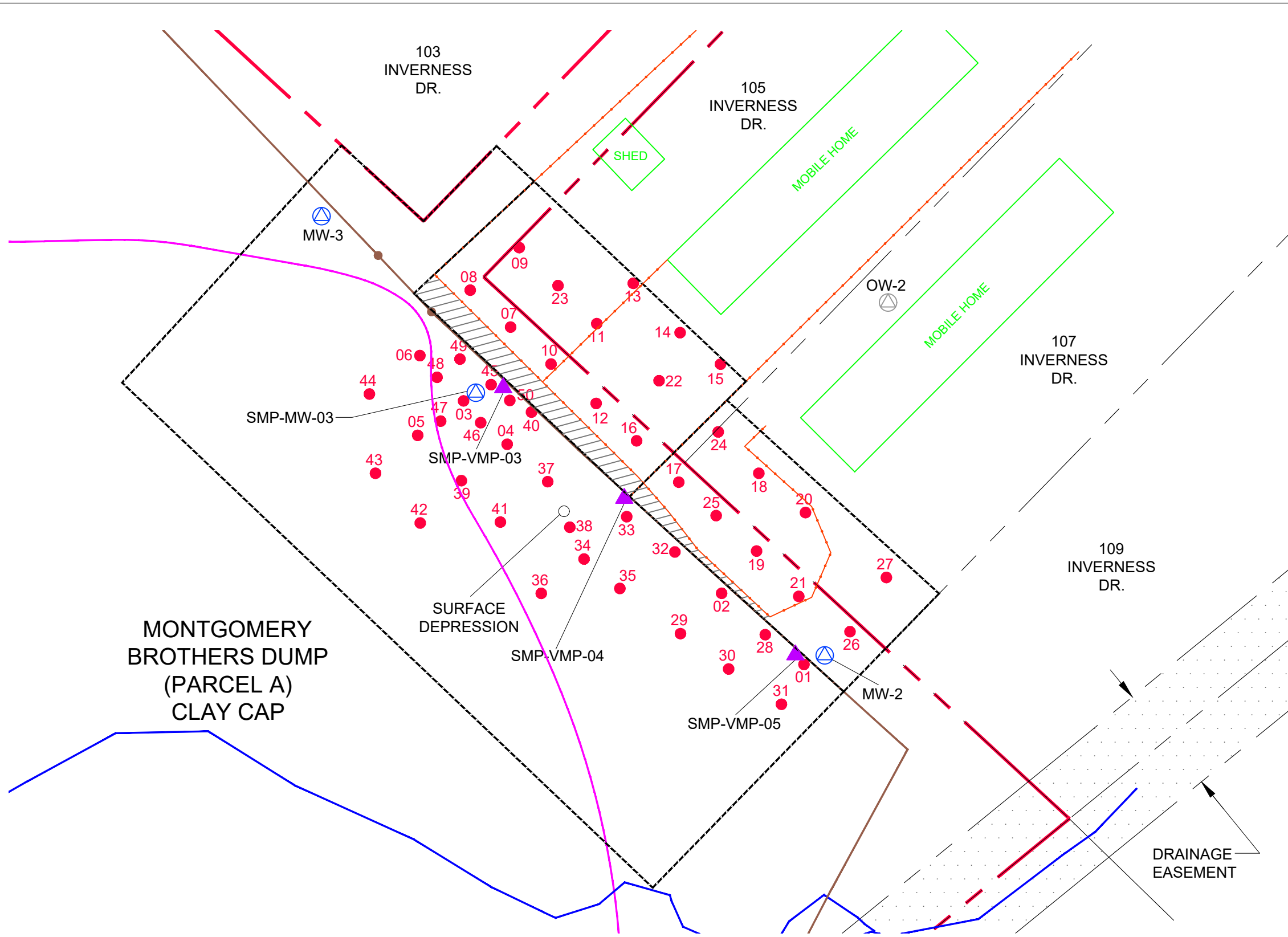
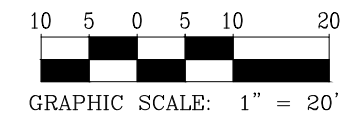
**HRSC BORING  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Abandoned Groundwater Monitoring Well
- HRSC Boring Location
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



MONTGOMERY BROTHERS DUMP  
(PARCEL A)  
CLAY CAP

SURFACE DEPRESSION

DRAINAGE EASEMENT

**FIGURE 5**

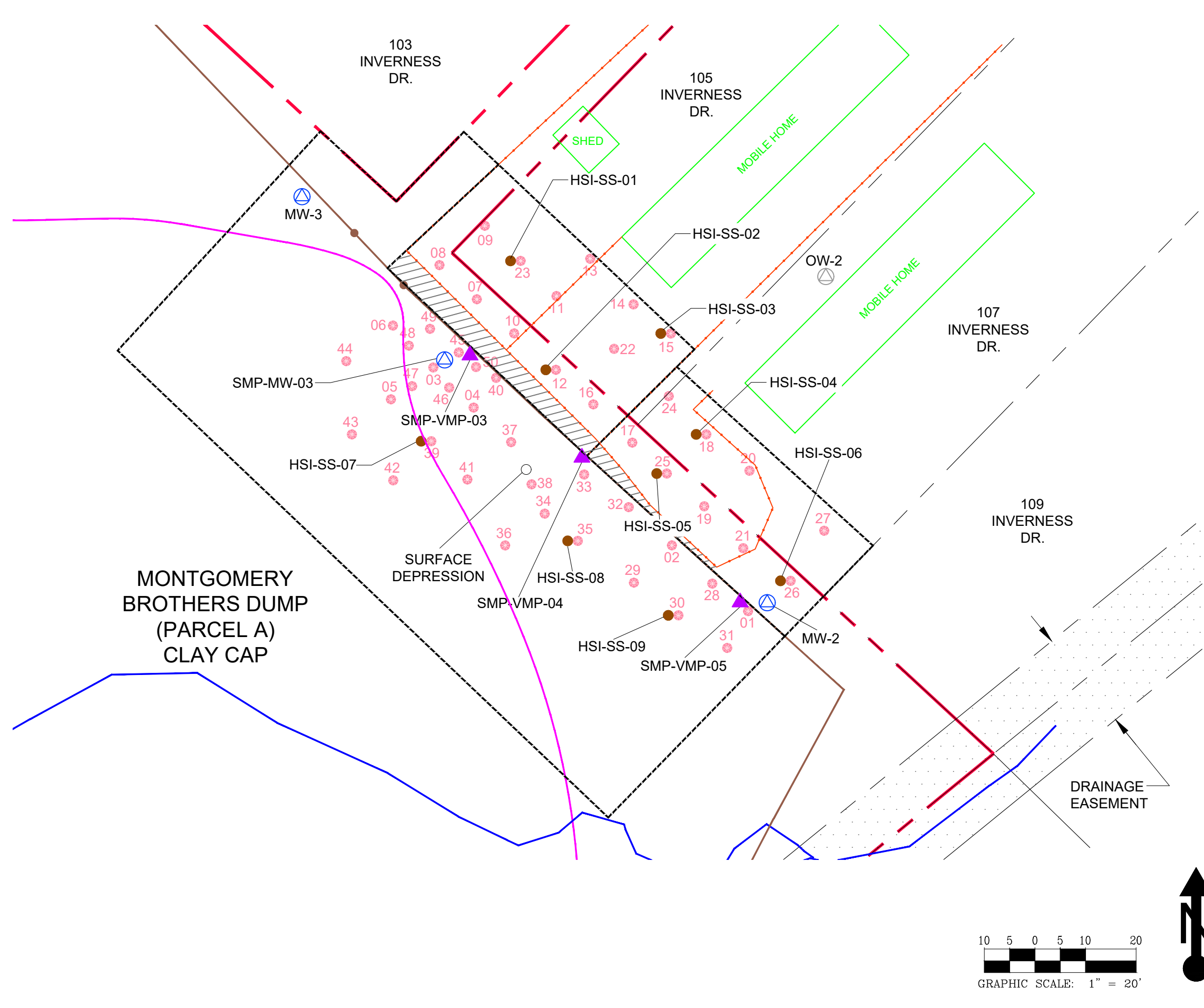
**SURFACE/NEAR SURFACE  
SOIL SAMPLE  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Abandoned Groundwater Monitoring Well
- 01 HRSC Boring Location
- Surface/Near Surface Soil Sampling Location
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



**FIGURE 6**

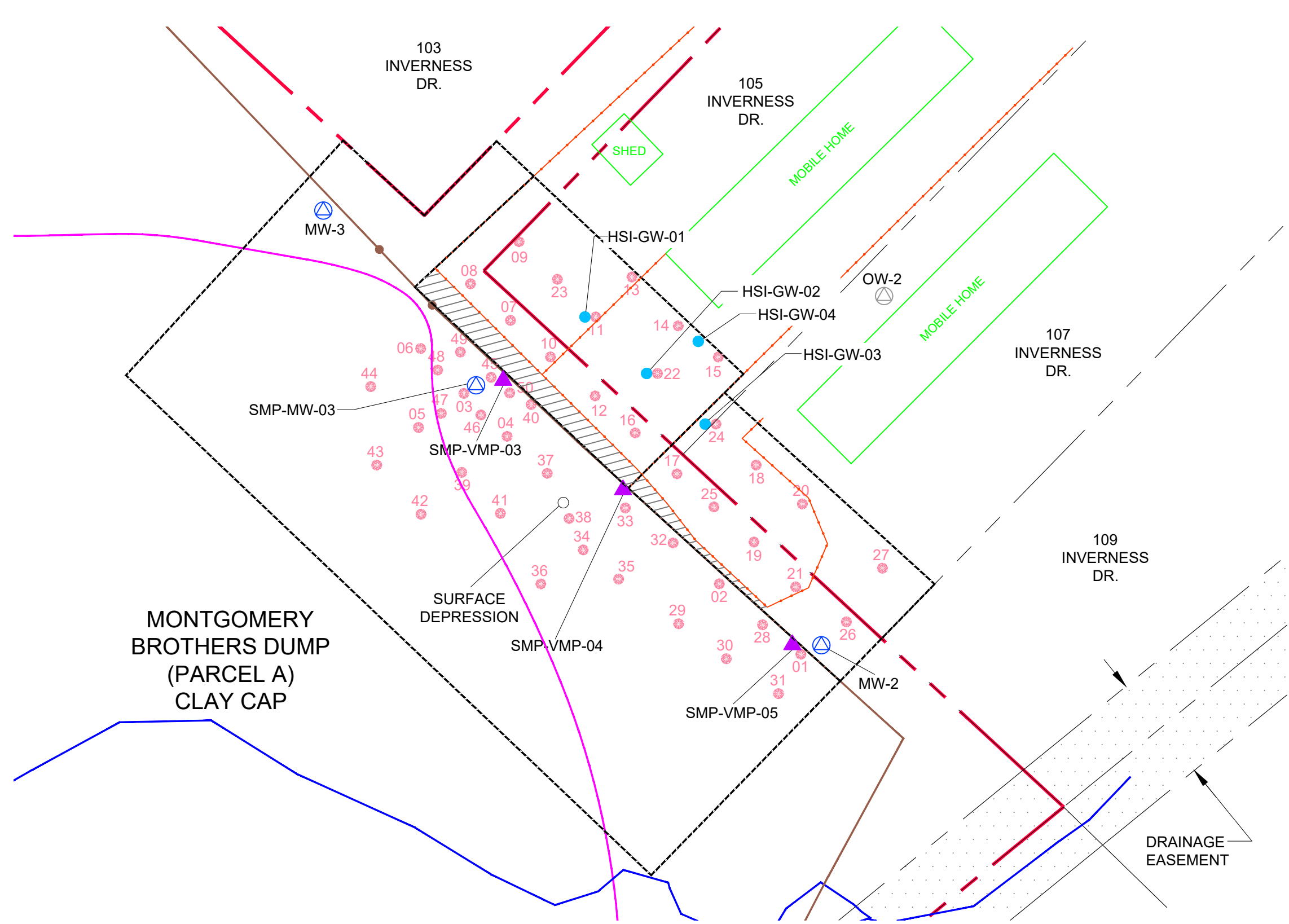
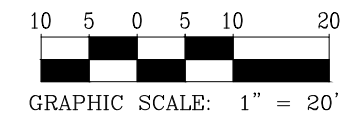
**GRAB GROUNDWATER  
SAMPLE  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

**LEGEND**

- - - Site Property Boundary
- Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Abandoned Groundwater Monitoring Well
- 01 HRSC Boring Location
- Grab Groundwater Sampling Location
- Fencing Related to 105 and 107 Inverness
- AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



**FIGURE 7**

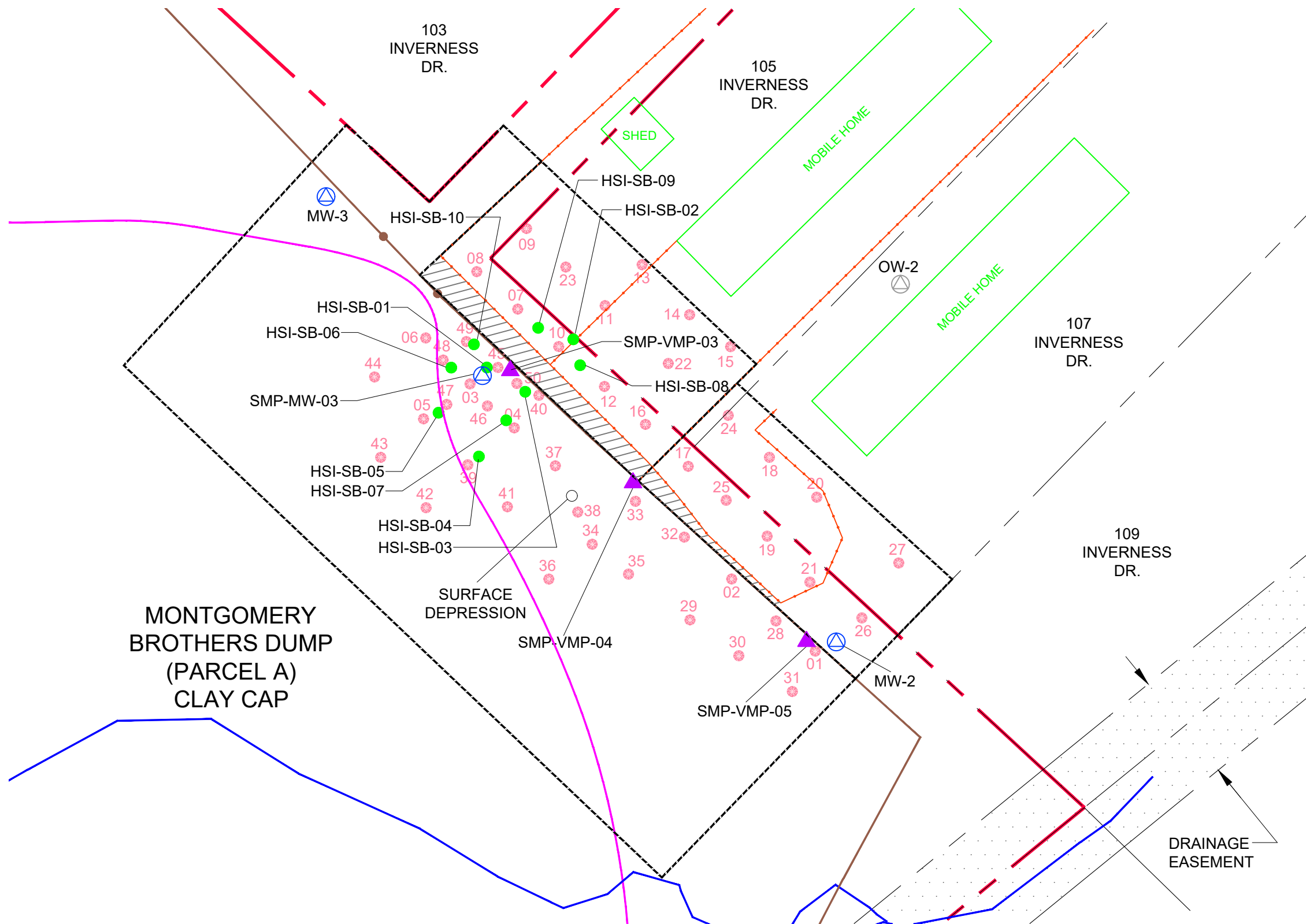
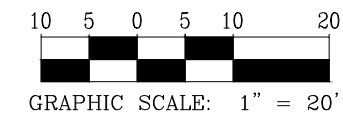
**SOIL BORING  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Abandoned Groundwater Monitoring Well
- 01 HRSC Boring Location
- Soil Boring Location
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



**MONTGOMERY  
BROTHERS DUMP  
(PARCEL A)  
CLAY CAP**

DRAINAGE  
EASEMENT



**FIGURE 8**

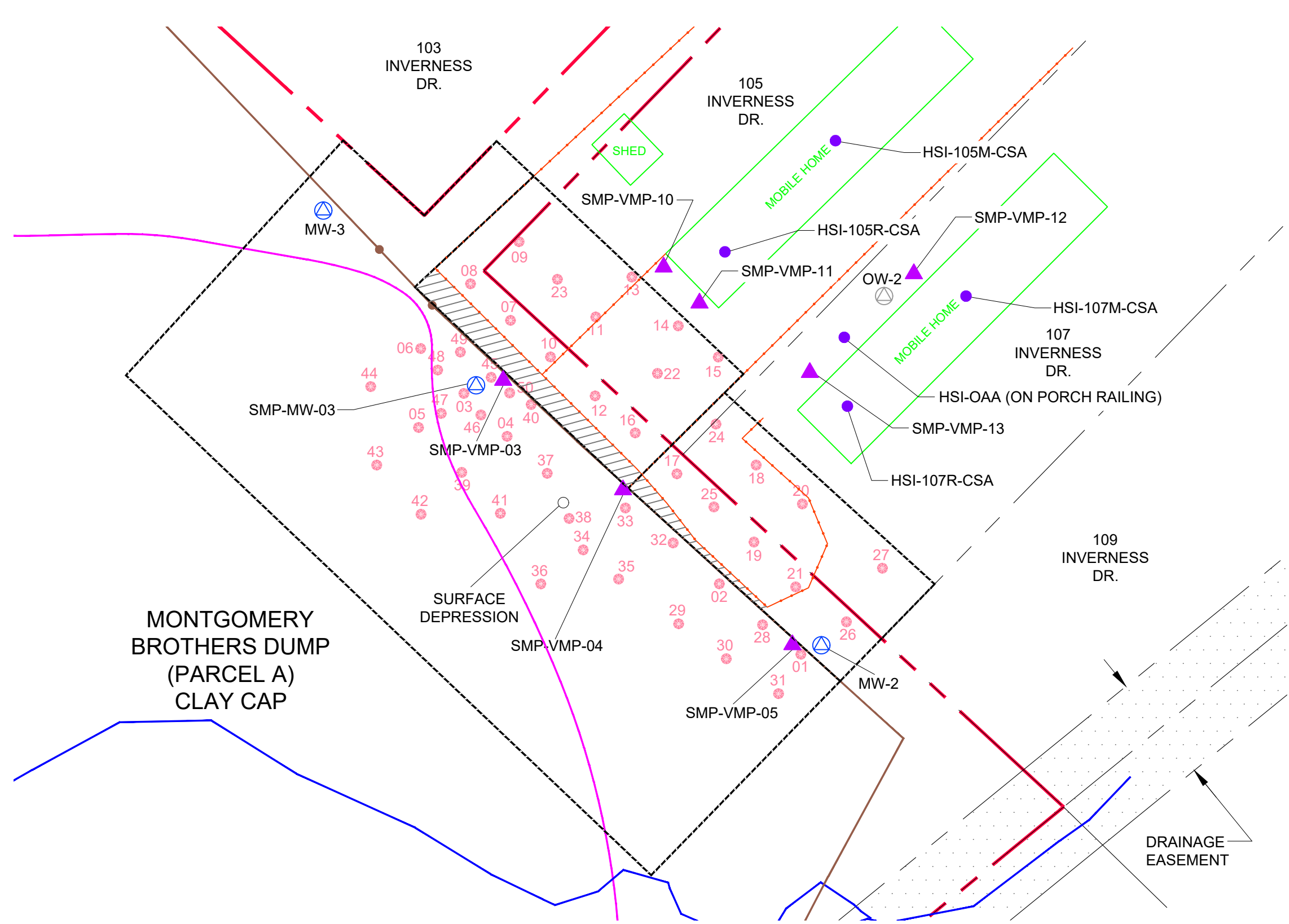
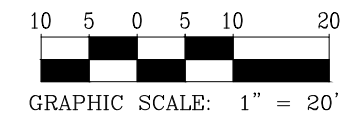
**VMP AND CRAWL  
SPACE/OUTDOOR AIR  
SAMPLE  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

**LEGEND**

- - - Site Property Boundary
- - - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Abandoned Groundwater Monitoring Well
- 01 HRSC Boring Location
- Air Sampling Location
- - - Fencing Related to 105 and 107 Inverness
- - - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



**FIGURE 9**

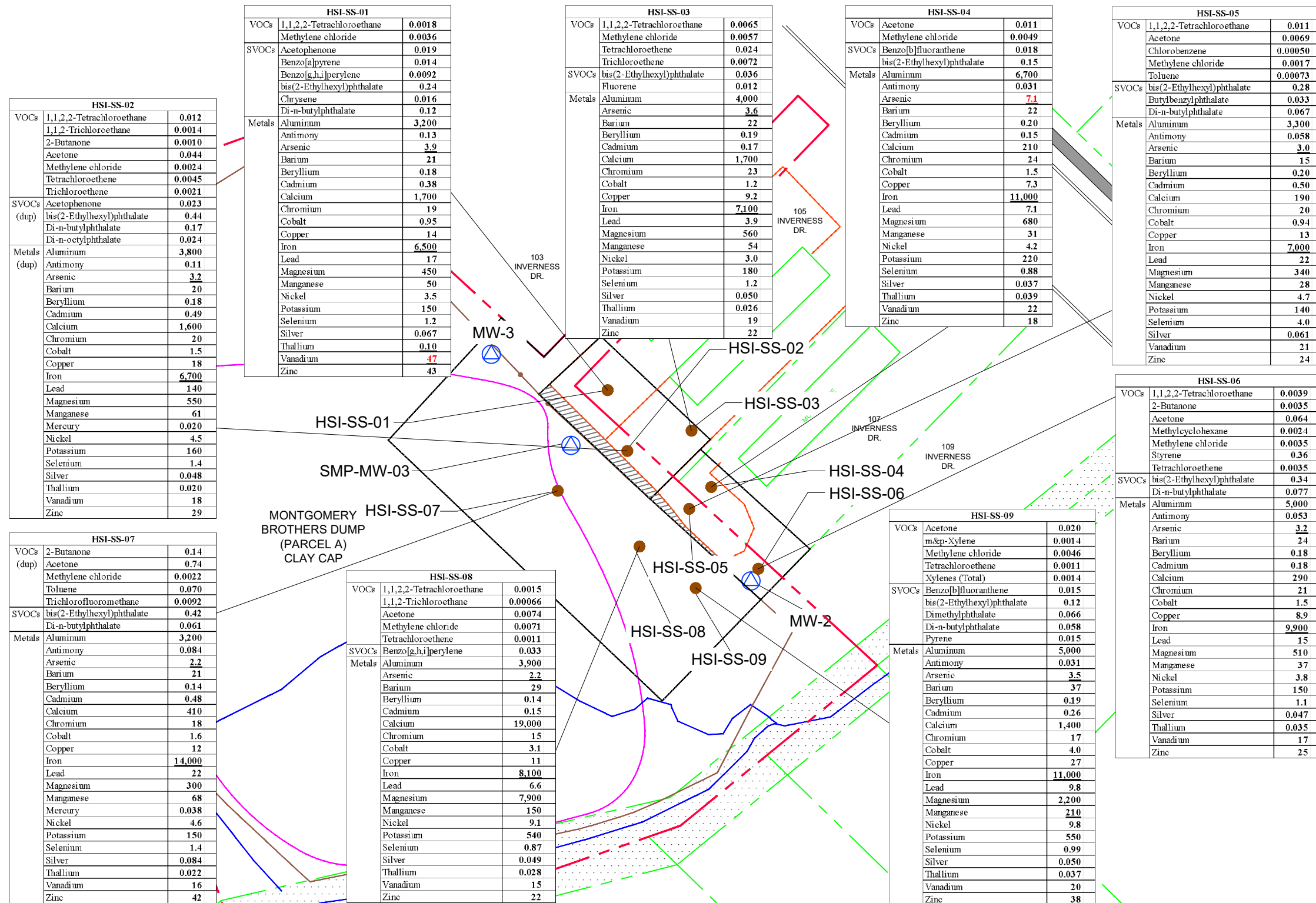
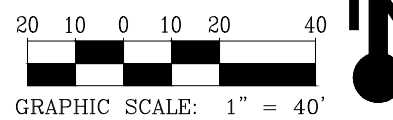
**SURFACE/NEAR SURFACE  
SOIL CONTAMINANT  
DISTRIBUTION MAP -  
DETECTED ANALYTES**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 01-20-2021

**LEGEND**

- - - - Site Property Boundary
- - - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Surface/Near Surface Soil Sampling Location
- - - - Fencing Related to 105 and 107 Inverness
- - - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



**Data Legend**

**0.0018** Detected Analyte Concentration (ppm)

(dup) Duplicate sample collected. Higher concentration reported herein.

Samples for VOC analysis were collected between the depths of 0.5-1' BG.  
Samples for SVOC and Metals analyses were collected between the depths of 0-0.5' BG.

Sampling Date: September 25, 2020

VOCs and SVOCs  
No detected analyte concentrations exceed the respective MDE Residential Soil Clean-up Standard.

Metals  
Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.

**3.9**

**47**

Detected analyte concentration exceeds the MDE Residential Soil Clean-up Standard and the ATC for Central Maryland.

**FIGURE 10**

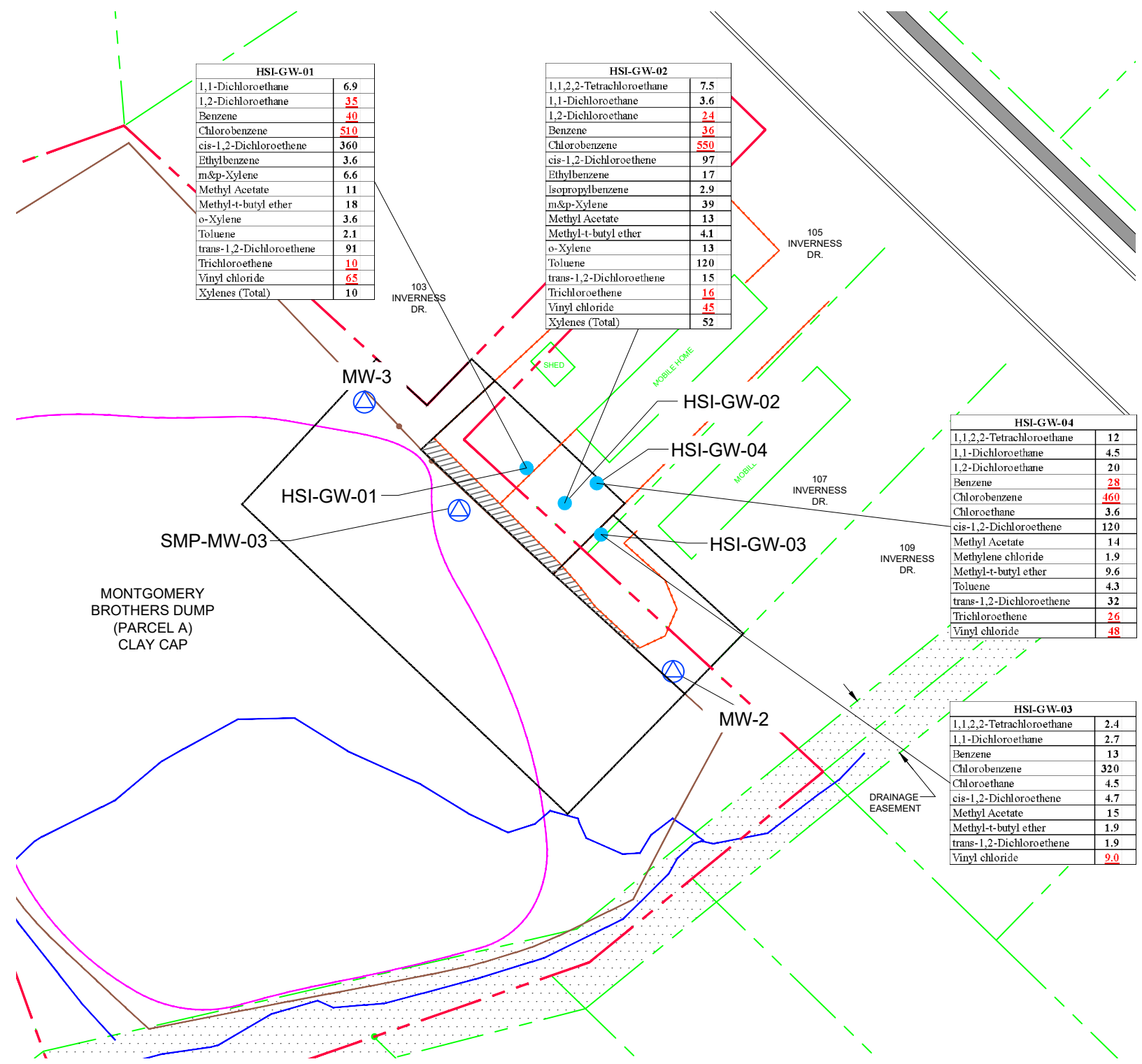
**GRAB GROUNDWATER  
CONTAMINANT  
DISTRIBUTION MAP -  
DETECTED VOCs**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Grab Groundwater Sampling Location
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



HSI-GW-01	
1,1-Dichloroethane	6.9
1,2-Dichloroethane	35
Benzene	40
Chlorobenzene	510
cis-1,2-Dichloroethene	360
Ethylbenzene	3.6
m&p-Xylene	6.6
Methyl Acetate	11
Methyl-t-butyl ether	18
o-Xylene	3.6
Toluene	2.1
trans-1,2-Dichloroethene	91
Trichloroethene	10
Vinyl chloride	65
Xylenes (Total)	10

HSI-GW-02	
1,1,2,2-Tetrachloroethane	7.5
1,1-Dichloroethane	3.6
1,2-Dichloroethane	24
Benzene	36
Chlorobenzene	550
cis-1,2-Dichloroethene	97
Ethylbenzene	17
Isopropylbenzene	2.9
m&p-Xylene	39
Methyl Acetate	13
Methyl-t-butyl ether	4.1
o-Xylene	13
Toluene	120
trans-1,2-Dichloroethene	15
Trichloroethene	16
Vinyl chloride	45
Xylenes (Total)	52

HSI-GW-04	
1,1,2,2-Tetrachloroethane	12
1,1-Dichloroethane	4.5
1,2-Dichloroethane	20
Benzene	28
Chlorobenzene	460
Chloroethane	3.6
cis-1,2-Dichloroethene	120
Methyl Acetate	1.4
Methylene chloride	1.9
Methyl-t-butyl ether	9.6
Toluene	4.3
trans-1,2-Dichloroethene	32
Trichloroethene	26
Vinyl chloride	48

HSI-GW-03	
1,1,2,2-Tetrachloroethane	2.4
1,1-Dichloroethane	2.7
Benzene	13
Chlorobenzene	320
Chloroethane	4.5
cis-1,2-Dichloroethene	4.7
Methyl Acetate	1.5
Methyl-t-butyl ether	1.9
trans-1,2-Dichloroethene	1.9
Vinyl chloride	9.0

**Data Legend**

6.9 Detected Analyte Concentration (ppb)

35 Detected analyte concentration exceeds the respective EPA Residential Groundwater VISL.

Sampling Date: September 28, 2020





**FIGURE 11**  
**SUBSURFACE SOIL**  
**CONTAMINANT**  
**DISTRIBUTION MAP -**  
**DETECTED VOCs**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

- Site Property Boundary
- Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- SubSurface Soil Sampling Location
- Fencing Related to 105 and 107 Inverness
- AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area

HSI-SB-01		
2.5-3'	1,1,2,2-Tetrachloroethane	2.7
	1,1,2-Trichloroethane	0.031
	1,2-Dichloroethane	1.8
	4-Methyl-2-pentanone	0.59
	Benzene	0.034
	Chlorobenzene	1.5
	cis-1,2-Dichloroethene	0.35
	m&p-Xylene	0.11
	Methylene chloride	2.3
	Tetrachloroethene	0.21
	Toluene	0.75
	trans-1,2-Dichloroethene	0.088
	Trichloroethene	4.4
	Xylenes (Total)	0.11
6-6.5' (dup)	1,1,2,2-Tetrachloroethane	200
	1,2-Dichloroethane	74
	4-Methyl-2-pentanone	76
	Benzene	9.7
	Chlorobenzene	1,200
	cis-1,2-Dichloroethene	33
	Ethylbenzene	44
	Isopropylbenzene	5.0
	m&p-Xylene	200
	Methylcyclohexane	1.8
	Methylene chloride	160
	o-Xylene	46
	Tetrachloroethene	95
	Toluene	2,200
	trans-1,2-Dichloroethene	12
	Trichloroethene	1,700
	Xylenes (Total)	250
10-10.5'	1,1,2,2-Tetrachloroethane	0.0011
	1,1-Dichloroethane	0.0016
	4-Methyl-2-pentanone	0.0040
	Acetone	0.0080
	Benzene	0.0086
	cis-1,2-Dichloroethene	0.052
	Ethylbenzene	0.0028
	m&p-Xylene	0.0024
	Methylcyclohexane	0.00093
	Methylene chloride	0.0031
	o-Xylene	0.0019
	Toluene	0.0094
	trans-1,2-Dichloroethene	0.0027
	Trichloroethene	0.030
	Vinyl chloride	0.084
	Xylenes (Total)	0.0043
14.5-15'	1,1,2,2-Tetrachloroethane	0.0024
	1,2-Dichloroethane	0.010
	4-Methyl-2-pentanone	0.00081
	Acetone	0.012
	Benzene	0.0030
	Chlorobenzene	0.065
	cis-1,2-Dichloroethene	0.014
	Ethylbenzene	0.00070
	m&p-Xylene	0.0013
	Methylene chloride	0.022
	Methyl-t-butyl ether	0.0012
	Toluene	0.035
	trans-1,2-Dichloroethene	0.0027
	Trichloroethene	0.040
	Vinyl chloride	0.0075
	Xylenes (Total)	0.0013

HSI-SB-09		
14-14.5'	1,2-Dichloroethane	0.0047
	Benzene	0.0039
	Chlorobenzene	0.064
	cis-1,2-Dichloroethene	0.040
	Methyl-t-butyl ether	0.0022
	Toluene	0.0038
	trans-1,2-Dichloroethene	0.010
	Trichloroethene	0.0062
	Vinyl chloride	0.0057

HSI-SB-02		
3.5-4'	Chlorobenzene	9.1
	Ethylbenzene	0.78
	m&p-Xylene	4.1
	o-Xylene	1.3
	Toluene	0.31
	Xylenes (Total)	5.4
10-10.5'	1,1,2,2-Tetrachloroethane	0.0063
	1,1-Dichloroethane	0.0011
	1,2-Dichlorobenzene	0.0016
	1,4-Dichlorobenzene	0.00075
	2-Butanone	0.0093
	4-Methyl-2-pentanone	0.0042
	Acetone	0.034
	Benzene	0.083
	Ethylbenzene	0.074
	Isopropylbenzene	0.035
	m&p-Xylene	0.29
	Methylcyclohexane	0.0025
	Methylene chloride	0.0024
	o-Xylene	0.12
	Toluene	0.17
	Xylenes (Total)	0.41
11-11.5'	Benzene	0.098
	Ethylbenzene	0.046
	Toluene	1.2
	Xylenes (Total)	0.14

HSI-SB-08		
3.5-4'	1,2-Dichlorobenzene	0.029
	Chlorobenzene	1.3
	Ethylbenzene	0.11
	m&p-Xylene	0.47
	o-Xylene	0.14
	Toluene	0.49
	Trichloroethene	0.030
	Xylenes (Total)	0.61
8-8.5'	Benzene	0.040
	Chlorobenzene	1.0
	Ethylbenzene	0.15
	m&p-Xylene	0.56
	o-Xylene	0.18
	Toluene	0.053
	Xylenes (Total)	0.74
12-13' (dup)	4-Methyl-2-pentanone	4.1
	Benzene	0.13
	Chlorobenzene	3.7
	cis-1,2-Dichloroethene	0.40
	Ethylbenzene	0.069
	m&p-Xylene	0.27
	o-Xylene	0.076
	Toluene	5.4
	trans-1,2-Dichloroethene	0.068
	Vinyl chloride	1.1
	Xylenes (Total)	0.34
13-13.5'	Benzene	0.0086
	Chlorobenzene	0.20
	Ethylbenzene	0.0019
	m&p-Xylene	0.0071
	Methyl-t-butyl ether	0.0016
	o-Xylene	0.0019
	Toluene	0.0035
	Trichloroethene	0.0033
	Xylenes (Total)	0.0090

HSI-SB-06		
4.5-5'	Chlorobenzene	1.4
	cis-1,2-Dichloroethene	0.17
	Ethylbenzene	0.044
	m&p-Xylene	0.16
	o-Xylene	0.067
	Tetrachloroethene	0.028
	Toluene	0.39
	Trichloroethene	0.54
	Xylenes (Total)	0.23

HSI-SB-05		
4.5-5'	1,2-Dichloroethane	0.10
	Chlorobenzene	0.050
	cis-1,2-Dichloroethene	0.34
	Tetrachloroethene	0.059
	trans-1,2-Dichloroethene	0.076
	Trichloroethene	0.85

HSI-SB-04		
9.5-10'	1,1-Dichloroethane	0.0014
	1,2-Dichloroethane	0.0028
	Benzene	0.0072
	Chlorobenzene	0.097
	cis-1,2-Dichloroethene	0.030
	m&p-Xylene	0.0010
	Methylene chloride	0.0022
	Methyl-t-butyl ether	0.00070
	o-Xylene	0.0014
	Toluene	0.0049
	trans-1,2-Dichloroethene	0.0033
	Trichloroethene	0.0012
	Vinyl chloride	0.14
	Xylenes (Total)	0.0024

HSI-SB-07		
4.5-5'	1,1,2,2-Tetrachloroethane	0.17
	1,2-Dichloroethane	0.087
	Trichloroethene	0.11

HSI-SB-03		
3.5-4'	1,1,2,2-Tetrachloroethane	0.43
	1,1,2-Trichloroethane	0.025
	1,2-Dichloroethane	0.39
	Chlorobenzene	0.057
	cis-1,2-Dichloroethene	0.18
	Tetrachloroethene	0.17
	Toluene	0.042
	Trichloroethene	2.3
10-10.5'	Chlorobenzene	0.33
	Toluene	0.37
11-11.5'	Chlorobenzene	0.19
	cis-1,2-Dichloroethene	0.079
	Toluene	0.082
	Trichloroethene	0.032

HSI-SB-10		
5.5-6'	1,1,2,2-Tetrachloroethane	0.052
	1,2-Dichloroethane	0.070
	Chlorobenzene	0.17
	cis-1,2-Dichloroethene	0.40
	Ethylbenzene	0.053
	m&p-Xylene	0.099
	o-Xylene	0.054
	Tetrachloroethene	0.028
	Toluene	0.040
	Trichloroethene	0.24
	Xylenes (Total)	0.15
7-7.5'	Benzene	0.031
	Chlorobenzene	0.81
	cis-1,2-Dichloroethene	0.81
	Ethylbenzene	0.045
	Toluene	0.063
	Vinyl chloride	0.75
8-8.5'	1,1,2,2-Tetrachloroethane	0.028
	1,1,2-Trichloroethane	0.0043
	1,2-Dichloroethane	0.018
	Acetone	0.019
	Benzene	0.0018
	Chlorobenzene	0.052
	cis-1,2-Dichloroethene	0.059
	Tetrachloroethene	0.0035
	Toluene	0.0030
	trans-1,2-Dichloroethene	0.0019
	Trichloroethene	0.061
	Vinyl chloride	0.010

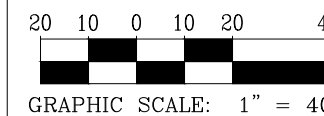
**Data Legend**

**0.031** Detected Analyte Concentration (ppm)

(dup) Duplicate sample collected. Higher concentration reported herein.

**2.7** Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.

Sampling Dates: September 28 - October 1, 2020





**FIGURE 12**  
**SUBSURFACE SOIL**  
**CONTAMINANT**  
**DISTRIBUTION MAP -**  
**DETECTED SVOCs AND**  
**METALS**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 01-20-2021

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- SubSurface Soil Sampling Location
- - - Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area

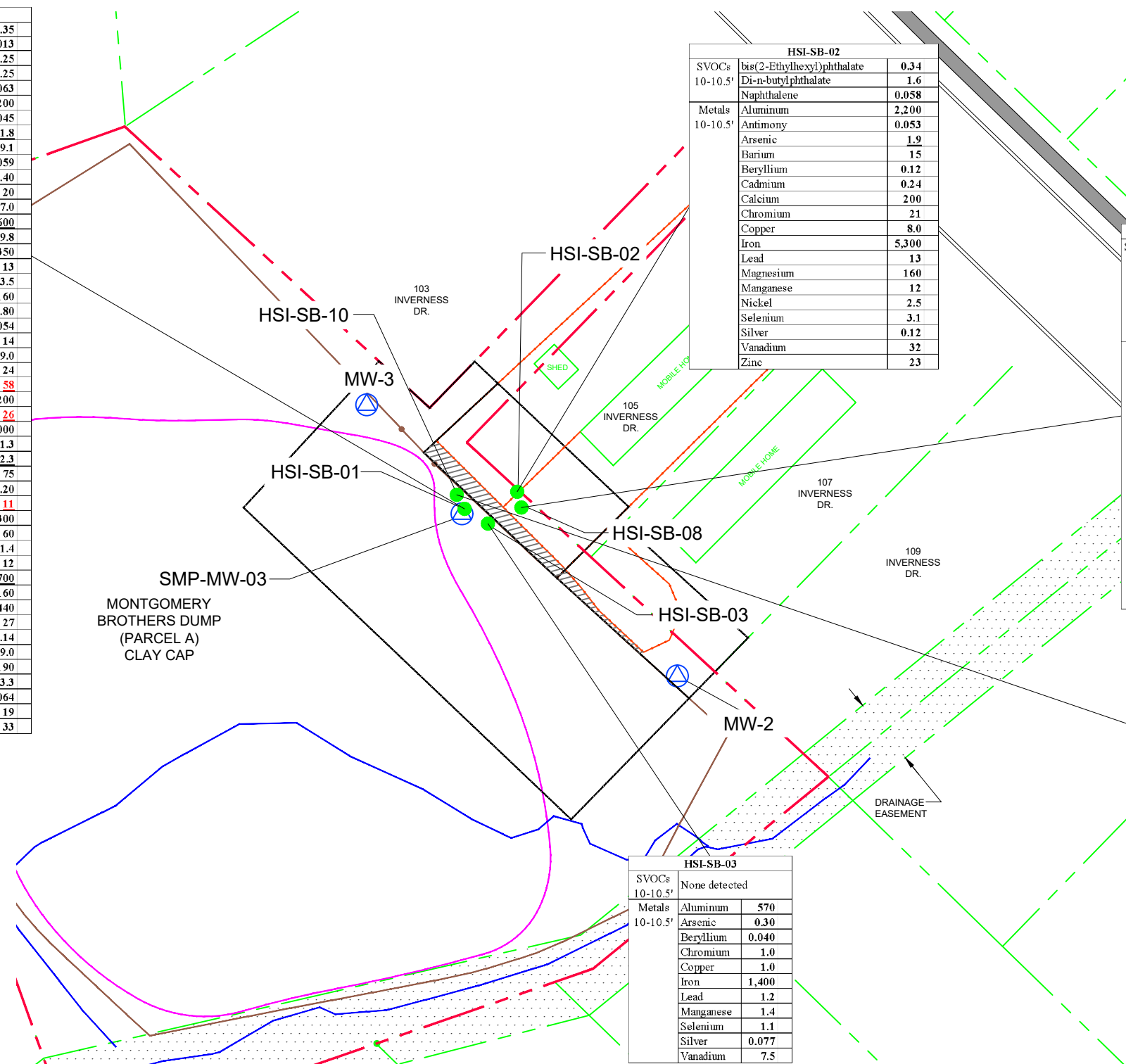
HSI-SB-01		
SVOCs	2-Chlorophenol	0.35
2.5-3'	2-Methylphenol	0.013
	bis(2-Ethylhexyl)phthalate	0.25
	Di-n-butylphthalate	0.25
	Naphthalene	0.063
Metals	Aluminum	4,200
2.5-3'	Antimony	0.045
	Arsenic	1.8
	Barium	9.1
	Beryllium	0.059
	Cadmium	0.40
	Chromium	20
	Copper	7.0
	Iron	7,600
	Lead	9.8
	Magnesium	350
	Manganese	13
	Nickel	3.5
	Potassium	160
	Selenium	0.80
	Silver	0.054
	Vanadium	14
	Zinc	9.0
SVOCs	2-Chlorophenol	24
6-6.5'	bis(2-Ethylhexyl)phthalate	58
(dup)	Di-n-butylphthalate	1,200
	Naphthalene	26
Metals	Aluminum	5,000
6-6.5'	Antimony	1.3
(dup)	Arsenic	2.3
	Barium	75
	Beryllium	0.20
	Cadmium	11
	Calcium	1,300
	Chromium	60
	Cobalt	1.4
	Copper	12
	Iron	9,700
	Lead	160
	Magnesium	440
	Manganese	27
	Mercury	0.14
	Nickel	9.0
	Potassium	190
	Selenium	3.3
	Silver	0.064
	Vanadium	19
	Zinc	33

HSI-SB-02		
SVOCs	bis(2-Ethylhexyl)phthalate	0.34
10-10.5'	Di-n-butylphthalate	1.6
	Naphthalene	0.058
Metals	Aluminum	2,200
10-10.5'	Antimony	0.053
	Arsenic	1.9
	Barium	15
	Beryllium	0.12
	Cadmium	0.24
	Calcium	200
	Chromium	21
	Copper	8.0
	Iron	5,300
	Lead	13
	Magnesium	160
	Manganese	12
	Nickel	2.5
	Selenium	3.1
	Silver	0.12
	Vanadium	32
	Zinc	23

HSI-SB-08		
SVOCs	1,1'-Biphenyl	0.10
3.5-4'	2-Methylnaphthalene	0.12
	3&4-Methylphenol	0.021
	bis(2-Ethylhexyl)phthalate	0.38
	Di-n-butylphthalate	0.064
	Naphthalene	0.10
	Phenanthrene	0.019
Metals	Aluminum	4,000
3.5-4'	Arsenic	3.7
	Barium	20
	Beryllium	0.18
	Cadmium	0.21
	Chromium	19
	Copper	10
	Iron	8,200
	Lead	7.1
	Magnesium	390
	Manganese	16
	Nickel	3.3
	Potassium	150
	Selenium	2.6
	Silver	0.045
	Thallium	0.021
	Vanadium	20
	Zinc	7.7

HSI-SB-10		
SVOCs	None detected	
5.5-6'		
Metals	Aluminum	5,900
5.5-6'	Arsenic	1.5
	Barium	28
	Beryllium	0.22
	Cadmium	0.020
	Calcium	120
	Chromium	21
	Cobalt	2.1
	Copper	8.1
	Iron	6,900
	Lead	4.4
	Magnesium	940
	Manganese	36
	Nickel	7.6
	Potassium	280
	Selenium	1.3
	Silver	0.042
	Thallium	0.021
	Vanadium	20
	Zinc	12

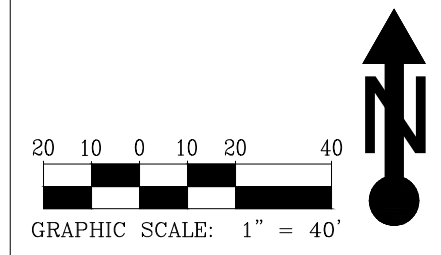
HSI-SB-03		
SVOCs	None detected	
10-10.5'		
Metals	Aluminum	570
10-10.5'	Arsenic	0.30
	Beryllium	0.040
	Chromium	1.0
	Copper	1.0
	Iron	1,400
	Lead	1.2
	Manganese	1.4
	Selenium	1.1
	Silver	0.077
	Vanadium	7.5



**Data Legend**

- 0.35** Detected Analyte Concentration (ppm)
- (dup) Duplicate sample collected. Higher concentration reported herein.
- 58** SVOCs Detected analyte concentrations exceed the respective MDE Residential Soil Clean-up Standard.
- 1.8** Metals Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.
- 11** Detected analyte concentration exceeds the MDE Residential Soil Clean-up Standard and the ATC for Central Maryland.

Sampling Dates: September 28 - October 1, 2020



**FIGURE 13**

**SOIL VAPOR AND CRAWL SPACE/OUTDOOR AIR CONTAMINANT DISTRIBUTION MAP - DETECTED VOCs**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Air Sampling Location
- Fencing Related to 105 and 107 Inverness
- AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area

SMP-VMP-11 (dup)	
1,1,2,2-Tetrachloroethane	31
1,1,2-Trichloroethane	1.5
1,2,4-Trichlorobenzene	1.9
1,2,4-Trimethylbenzene	7.9
1,2-Dichlorotetrafluoroethane	2.3
1,3,5-Trimethylbenzene	3.5
1,4-Dichlorobenzene	2.9
2-Butanone (MEK)	2.3
4-Methyl-2-pentanone (MIBK)	4.1
Acetone	12
Acrolein	0.58
Bromodichloromethane	21
Carbon Disulfide	6.4
Chlorobenzene	2.3
Chloroform	140 *
Dibromochloromethane	2.0
Dichlorodifluoromethane	1.7
Ethanol	2.4
Ethylbenzene	6.0
Isopropyl alcohol	2.1
Isopropylbenzene	1.9
m+p-Xylenes	2.5
Methylene chloride	1.1
Naphthalene	5.2
n-Pentane (C5)	1.8
n-Propylbenzene	1.5
o-Xylene	10
Propylene	1.0
tert-Butyl alcohol (TBA)	0.73
Tetrachloroethylene (PCE)	530
Tetrahydrofuran	9.8
Toluene	6.8
Trichloroethylene	15
Trichlorofluoromethane	1.8
Xylenes, Total	35

SMP-VMP-10	
1,1,2,2-Tetrachloroethane	120 *
1,1,2-Trichloroethane	3.2
1,2,4-Trimethylbenzene	4.0
1,2-Dichlorotetrafluoroethane	2.4
2-Butanone (MEK)	1.5
Acetone	6.9
Bromodichloromethane	5.8
Carbon Disulfide	4.7
Chloroform	31
Dichlorodifluoromethane	1.5
Ethanol	2.5
Ethylbenzene	1.2
m+p-Xylenes	4.0
Naphthalene	2.3
n-Pentane (C5)	0.89
o-Xylene	3.7
tert-Butyl alcohol (TBA)	1.9
Tetrachloroethylene (PCE)	590
Tetrahydrofuran	2.4
Toluene	2.0
Trichloroethylene	19
Trichlorofluoromethane	1.2
Xylenes, Total	7.7

HSI-105R-CSA	
2-Butanone (MEK)	0.72
Acetone	11
Acrolein	0.40
Carbon Disulfide	2.3
Chloromethane	0.99
Dichlorodifluoromethane	2.2
Ethanol	1.6
Hexane	0.59
Isopropyl alcohol	1.0
Methylene chloride	1.4
Naphthalene	1.2
n-Pentane (C5)	1.3
Propylene	1.1
Toluene	0.83
Trichlorofluoromethane	1.2

HSI-105M-CSA	
2-Butanone (MEK)	0.68
Acetone	8.2
Carbon Disulfide	0.44
Chloromethane	0.99
Dichlorodifluoromethane	2.3
Ethanol	3.2
Hexane	0.49
Isopropyl alcohol	0.55
Methylene chloride	1.2
Naphthalene	1.1
n-Pentane (C5)	1.1
Toluene	0.88
Trichlorofluoromethane	1.2

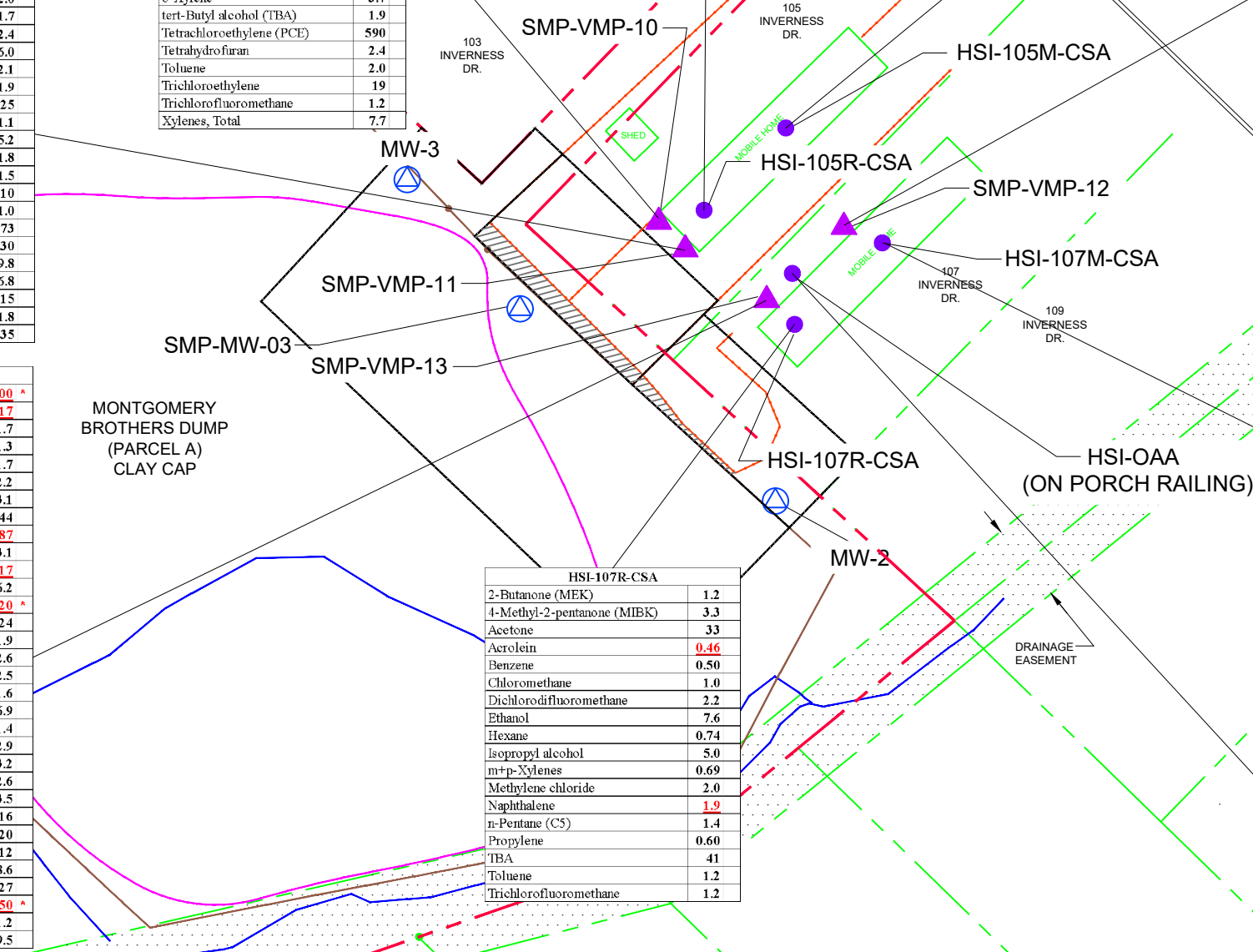
SMP-VMP-12	
1,2,4-Trimethylbenzene	6.3
1,2-Dichloroethane	4.6
1-Ethyl-4-methyl benzene	12
2-Butanone (MEK)	2.8
4-Methyl-2-pentanone (MIBK)	1.7
Benzene	7.6
Bromodichloromethane	4.5
Carbon Disulfide	5.3
Chlorobenzene	3.9
Chloroform	120 *
cis-1,2-Dichloroethylene	35
Ethanol	2.1
Ethylbenzene	18
Heptane	3.9
Hexane	1.7
Isooctane	3.6
m+p-Xylenes	42
Methylene chloride	12
Methyl-t-butyl ether (MTBE)	12
Naphthalene	8.3
n-Pentane (C5)	44
o-Xylene	11
Propylene	71
Tetrachloroethylene (PCE)	6.2
Tetrahydrofuran	3.1
Toluene	2.5
trans-1,2-Dichloroethylene	3.0
Trichloroethylene	7.0
Vinyl chloride	2.9
Xylenes, Total	53

SMP-VMP-13	
1,1,2,2-Tetrachloroethane	400 *
1,1,2-Trichloroethane	17
1,2,4-Trimethylbenzene	1.7
1,2-Dichloroethane	1.3
1,4-Dichlorobenzene	1.7
2-Butanone (MEK)	2.2
4-Methyl-2-pentanone (MIBK)	3.1
Acetone	44
Acrolein	0.87
Benzene	3.1
Bromodichloromethane	17
Carbon Disulfide	6.2
Chloroform	120 *
cis-1,2-Dichloroethylene	24
Dichlorodifluoromethane	1.9
Ethanol	2.6
Ethylbenzene	2.5
Isopropyl alcohol	1.6
m+p-Xylenes	6.9
Methylene chloride	1.4
Naphthalene	2.9
n-Pentane (C5)	3.2
o-Xylene	2.6
Propylene	3.5
tert-Butyl alcohol (TBA)	16
Tetrachloroethylene (PCE)	120
Tetrahydrofuran	12
Toluene	8.6
trans-1,2-Dichloroethylene	27
Trichloroethylene	250 *
Trichlorofluoromethane	1.2
Xylenes, Total	9.5

HSI-107R-CSA	
2-Butanone (MEK)	1.2
4-Methyl-2-pentanone (MIBK)	3.3
Acetone	33
Acrolein	0.46
Benzene	0.50
Chloromethane	1.0
Dichlorodifluoromethane	2.2
Ethanol	7.6
Hexane	0.74
Isopropyl alcohol	5.0
m+p-Xylenes	0.69
Methylene chloride	2.0
Naphthalene	1.9
n-Pentane (C5)	1.4
Propylene	0.60
TBA	41
Toluene	1.2
Trichlorofluoromethane	1.2

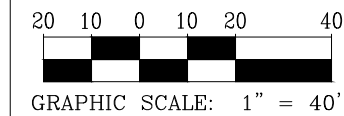
HSI-107M-CSA	
2-Butanone (MEK)	0.81
4-Methyl-2-pentanone (MIBK)	1.6
Acetone	21
Acrolein	0.46
Chloromethane	1.1
Dichlorodifluoromethane	2.2
Ethanol	5.6
Hexane	0.58
Isopropyl alcohol	3.2
Methylene chloride	1.3
Naphthalene	1.2
n-Pentane (C5)	1.4
Propylene	0.34
TBA	14
Toluene	0.86
Trichlorofluoromethane	1.2

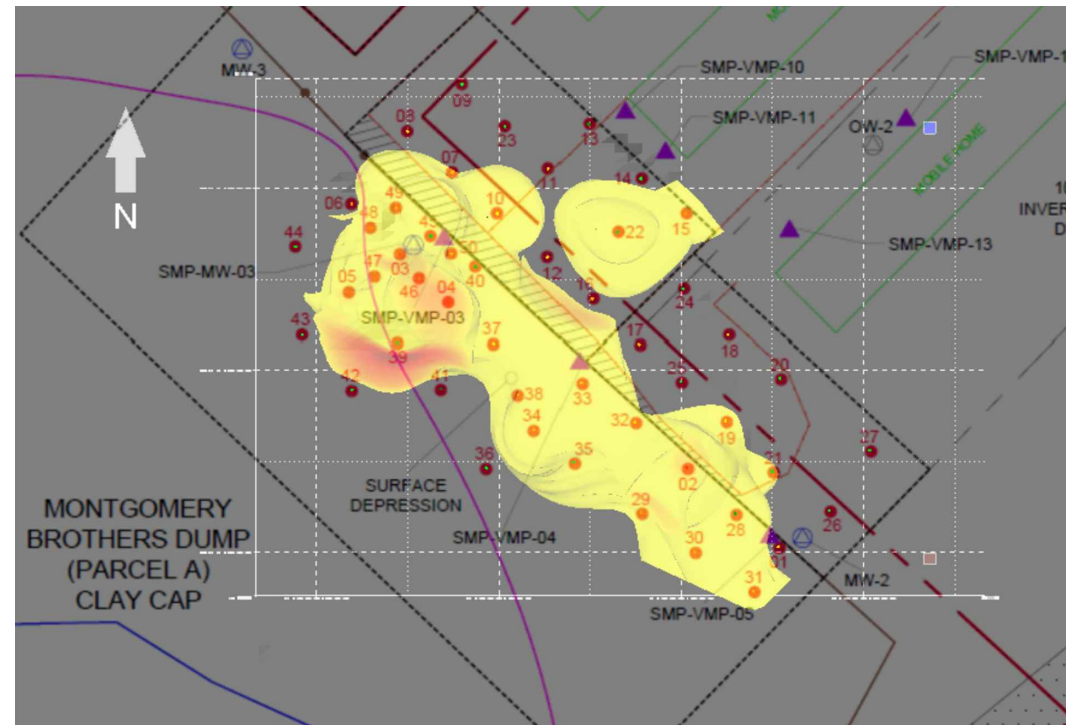
HSI-OAA	
2-Butanone (MEK)	0.95
2-Hexanone (MBK)	0.72
4-Methyl-2-pentanone (MIBK)	2.0
Acetone	21
Acrolein	0.37
Benzene	0.45
Chloromethane	1.1
Dichlorodifluoromethane	2.1
Ethanol	5.1
Hexane	0.72
Isopropyl alcohol	1.1
m+p-Xylenes	0.84
Methylene chloride	1.5
Naphthalene	1.2
n-Pentane (C5)	1.5
Propylene	0.54
TBA	100
Toluene	1.2
Trichlorofluoromethane	1.1



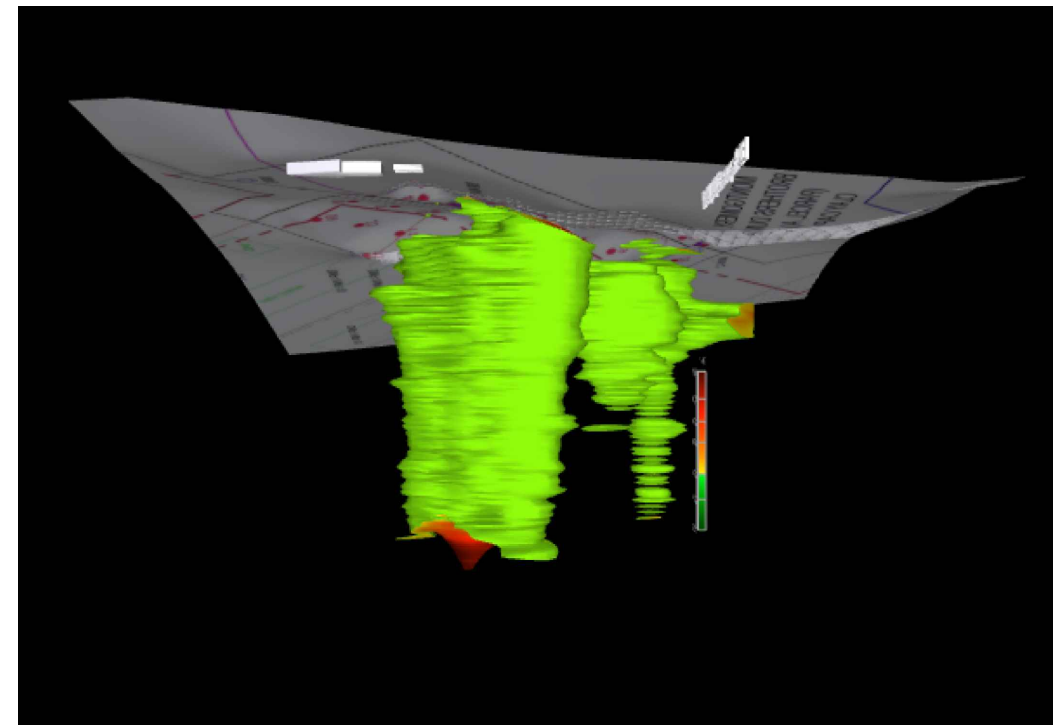
**Data Legend**

- 3.2** Detected Analyte Concentration ( $\mu\text{g}/\text{m}^3$ )
- (dup)** Duplicate sample collected. Higher concentration reported herein.
- 1.1** Air: Detected analyte concentration exceeds the respective EPA Residential Indoor Air RSL.
- 120** Soil Vapor: Detected analyte concentration exceeds the respective MDE Residential Soil Gas Tier 1 RG.
- \*** Soil Vapor: Detected analyte concentration exceeds the respective MDE Residential Soil Gas Tier 2 RG.

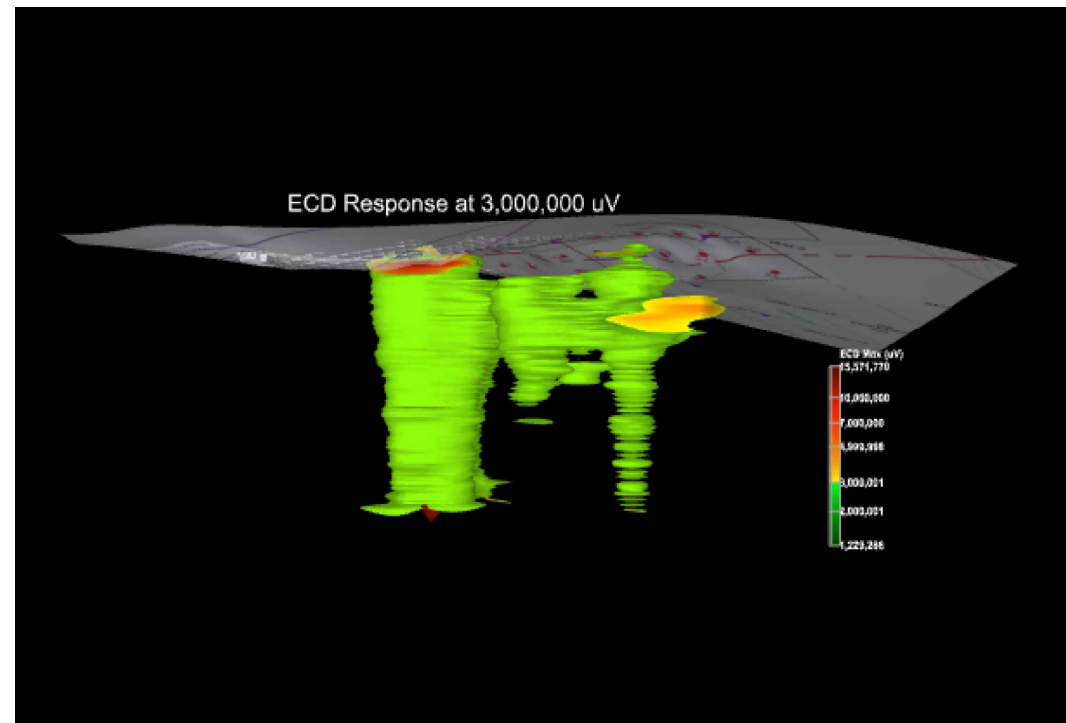




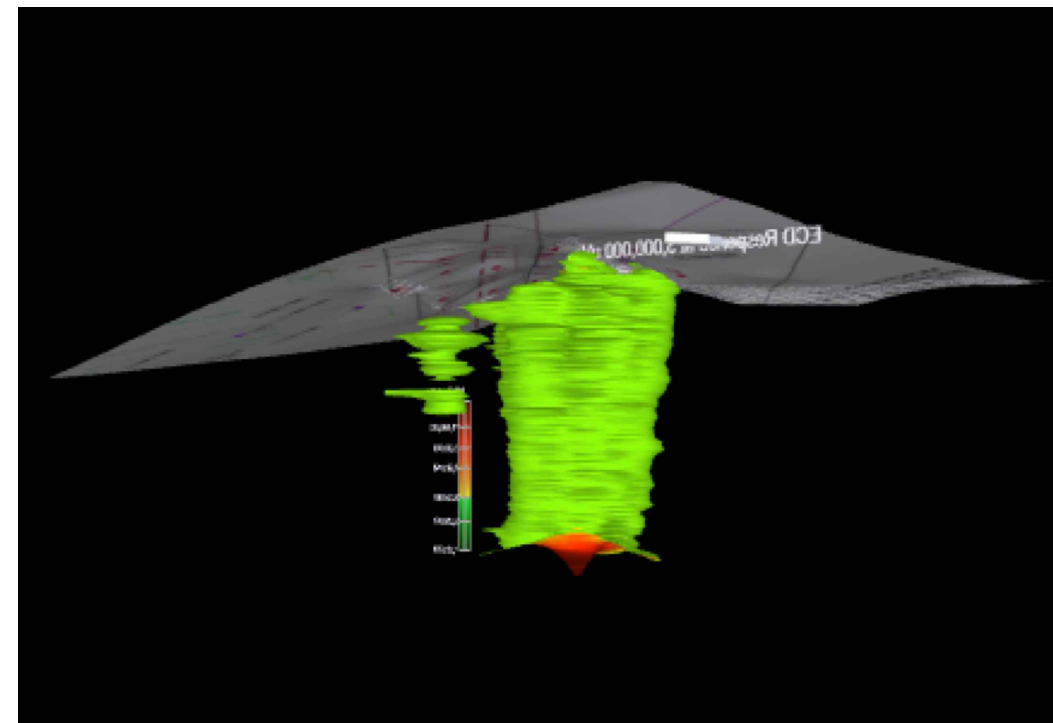
**FIGURE 14A: PLAN VIEW**



**FIGURE 14B: VIEW FROM WEST**



**FIGURE 14C: VIEW FROM SOUTH**



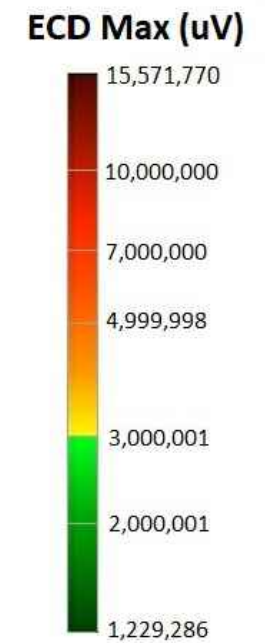
**FIGURE 14D: VIEW FROM NORTHWEST**

**FIGURE 14**  
**HRSC SURVEY**  
**THREE DIMENSIONAL**  
**MODEL**  
**ECD AT 3,000,000  $\mu$ V**

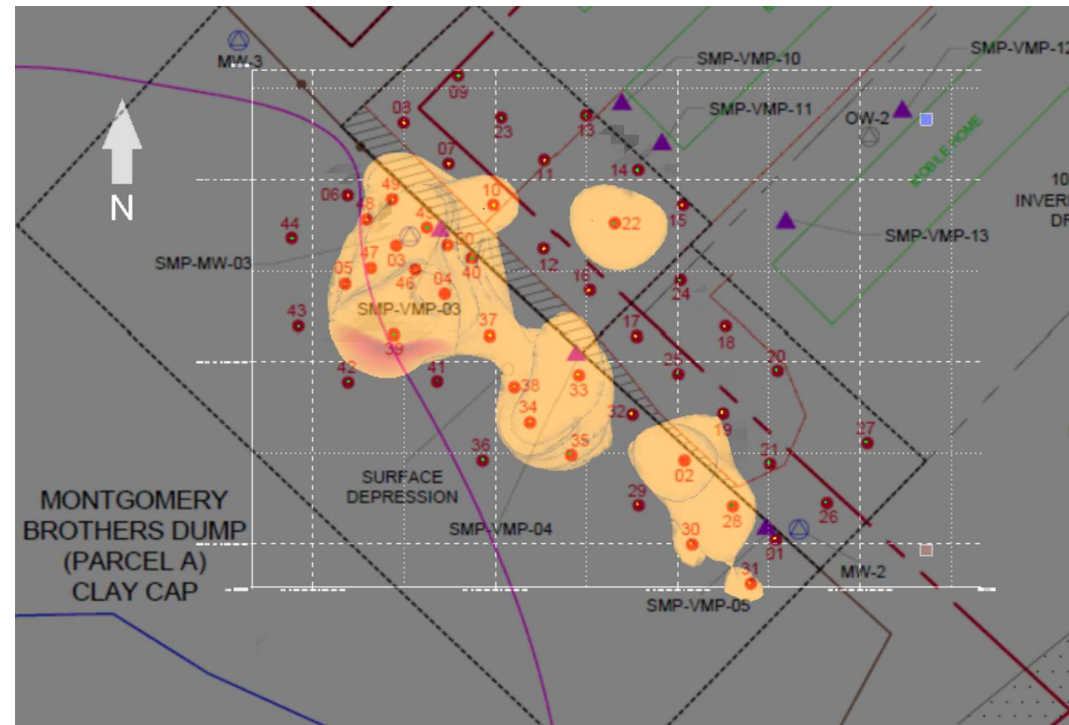
Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

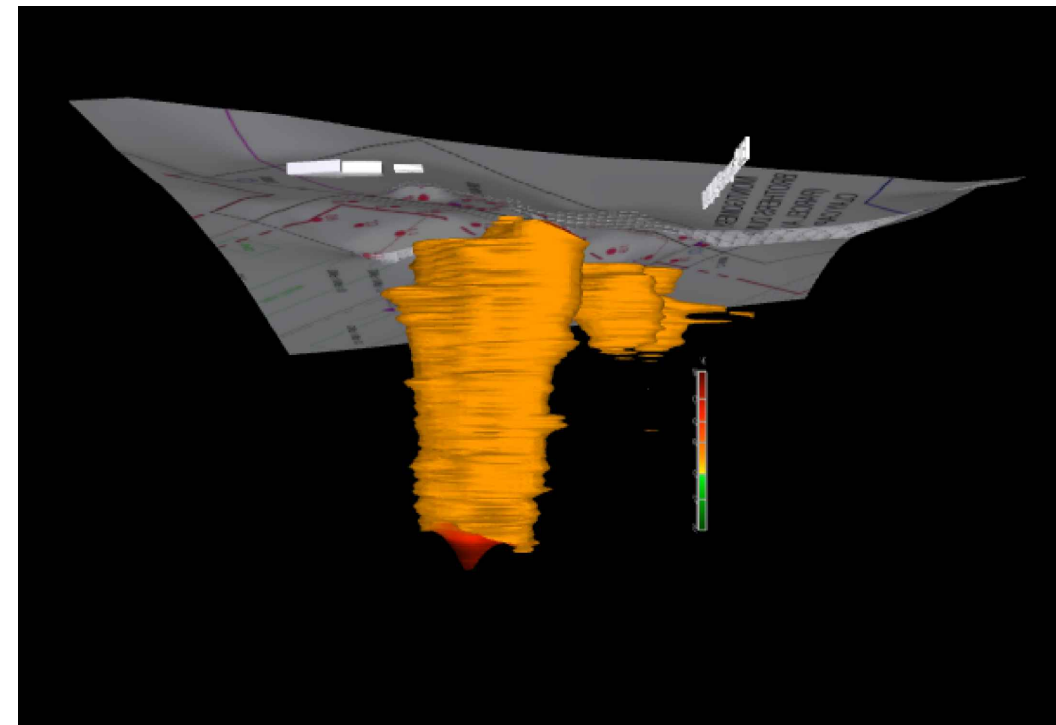
**LEGEND**



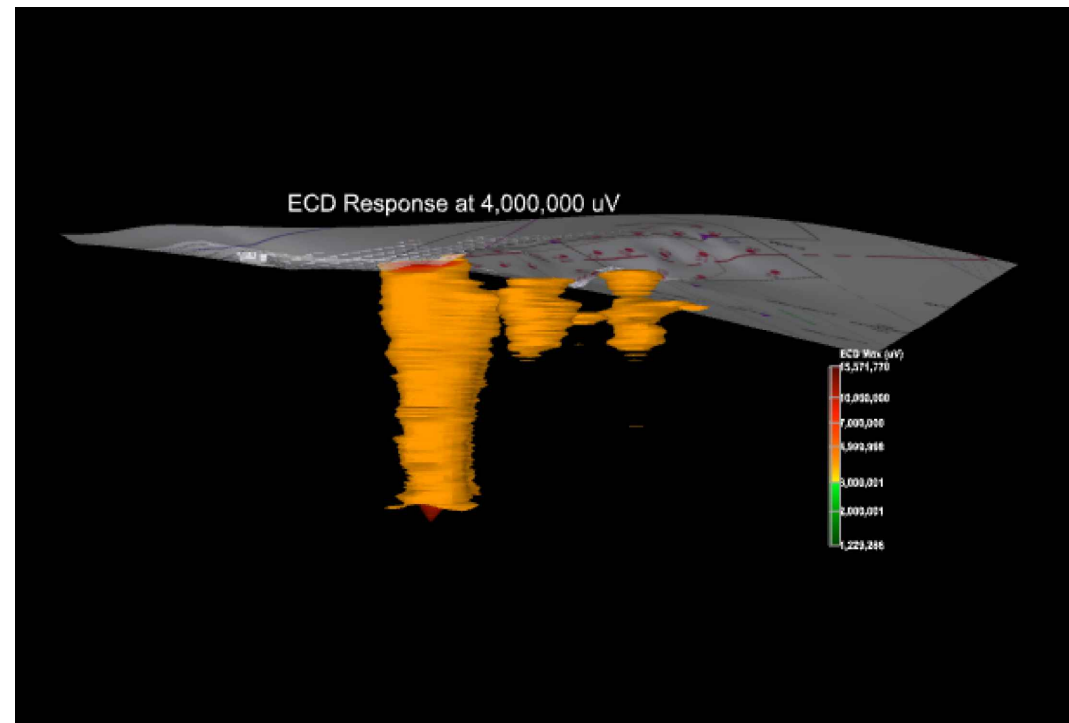




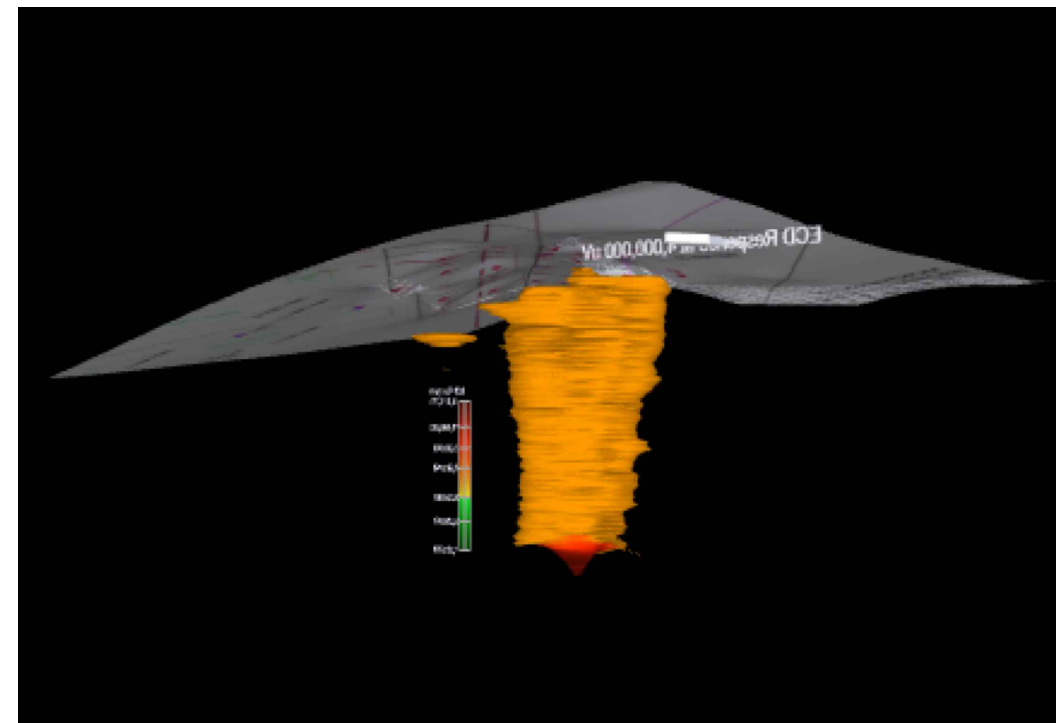
**FIGURE 15A: PLAN VIEW**



**FIGURE 15B: VIEW FROM WEST**



**FIGURE 15C: VIEW FROM SOUTH**



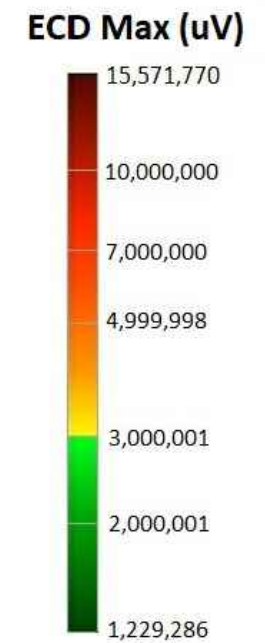
**FIGURE 15D: VIEW FROM NORTHWEST**

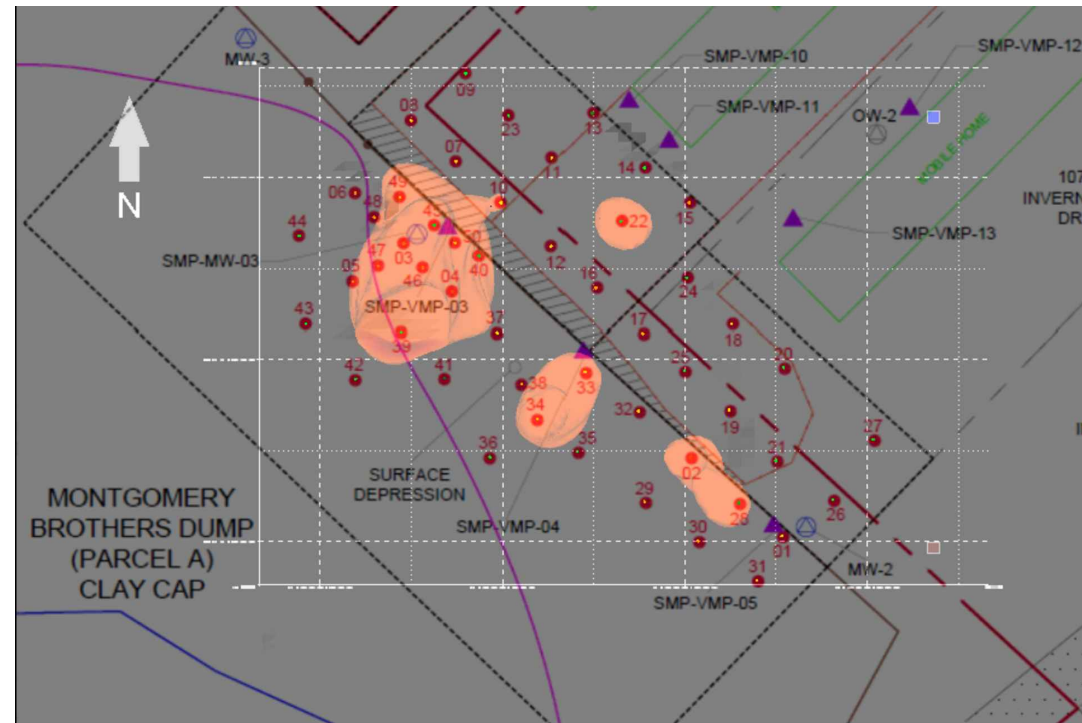
**FIGURE 15**  
**HRSC SURVEY**  
**THREE DIMENSIONAL**  
**MODEL**  
**ECD AT 4,000,000  $\mu$ V**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

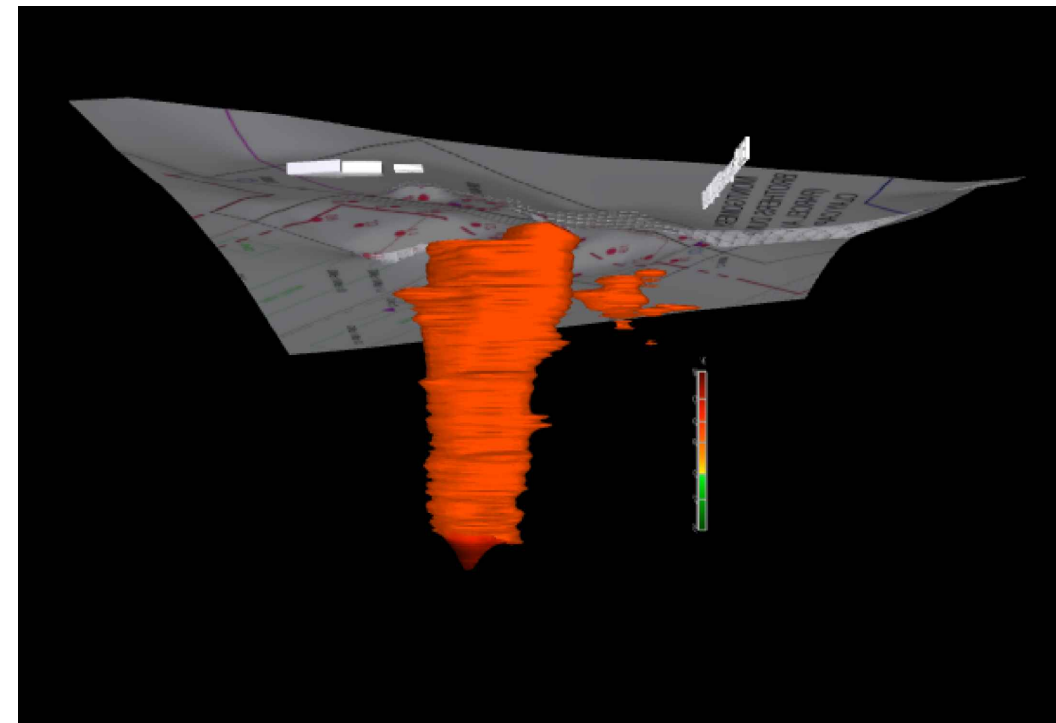
CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

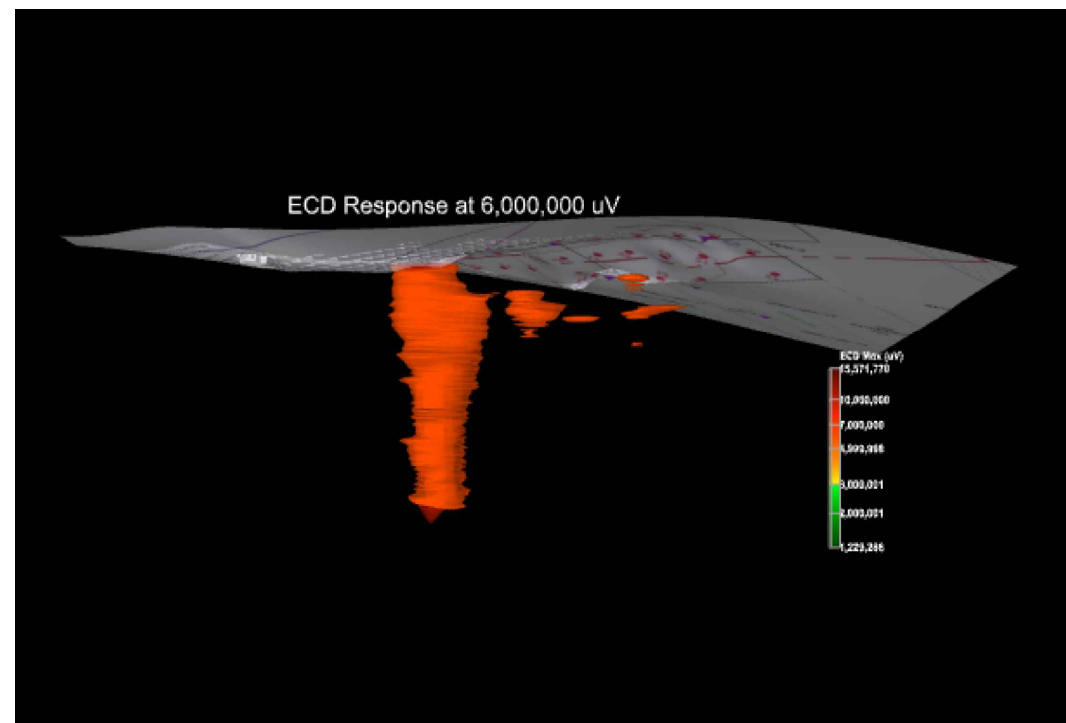




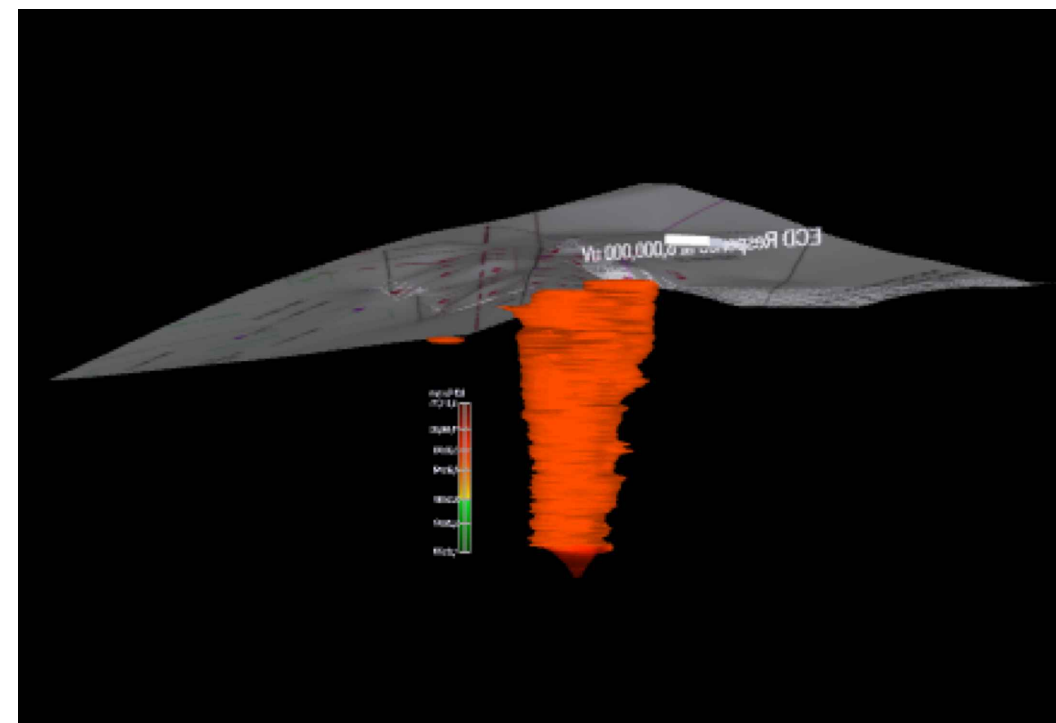
**FIGURE 16A: PLAN VIEW**



**FIGURE 16B: VIEW FROM WEST**



**FIGURE 16C: VIEW FROM SOUTH**



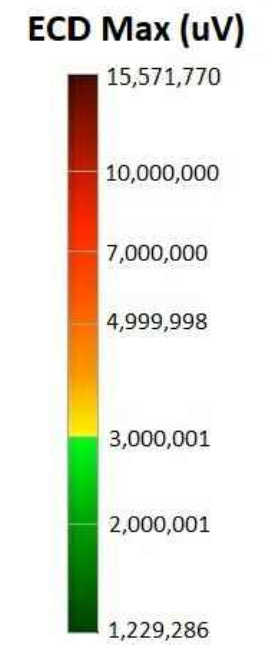
**FIGURE 16D: VIEW FROM NORTHWEST**

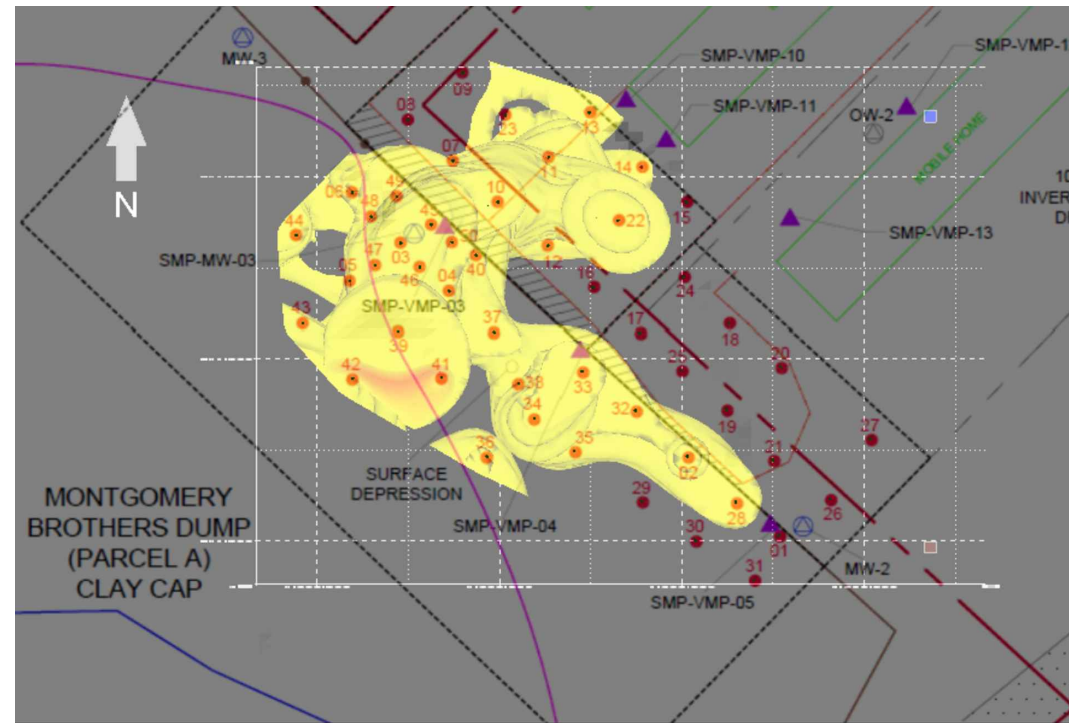
**FIGURE 16**  
**HRSC SURVEY**  
**THREE DIMENSIONAL**  
**MODEL**  
**ECD AT 6,000,000  $\mu$ V**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

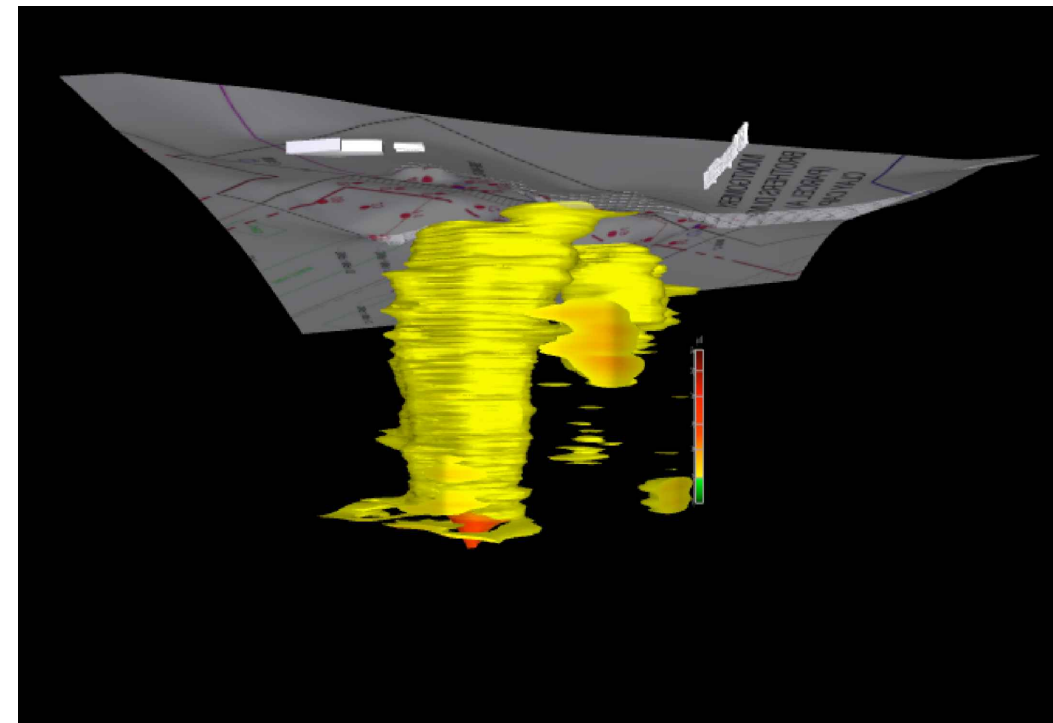
CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

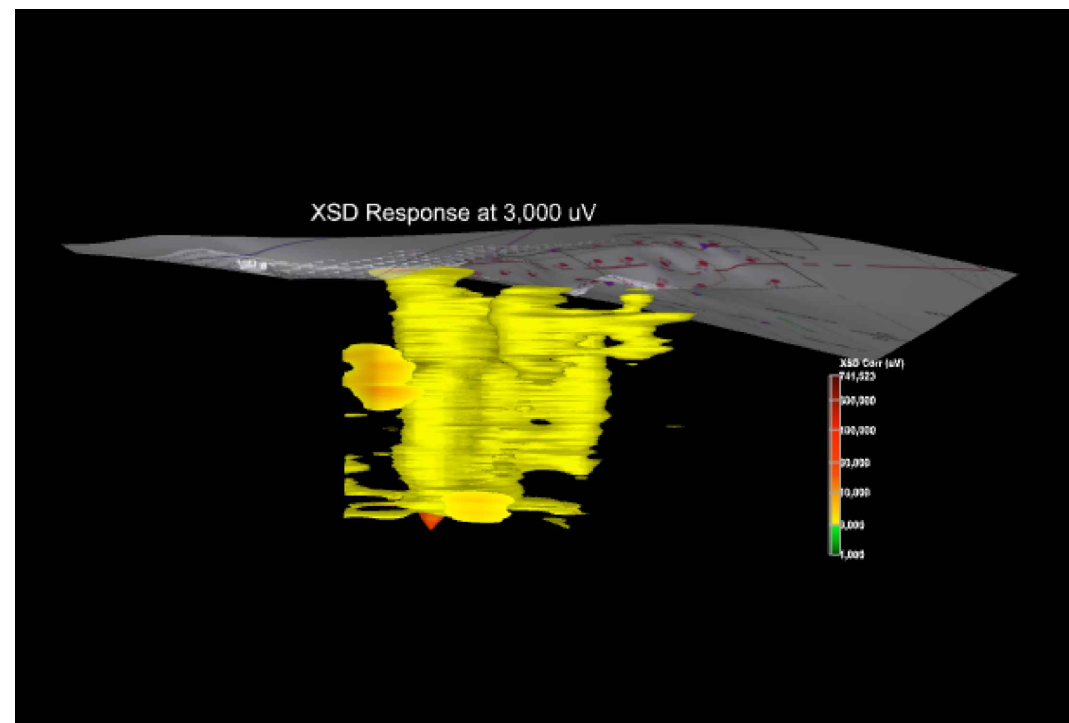




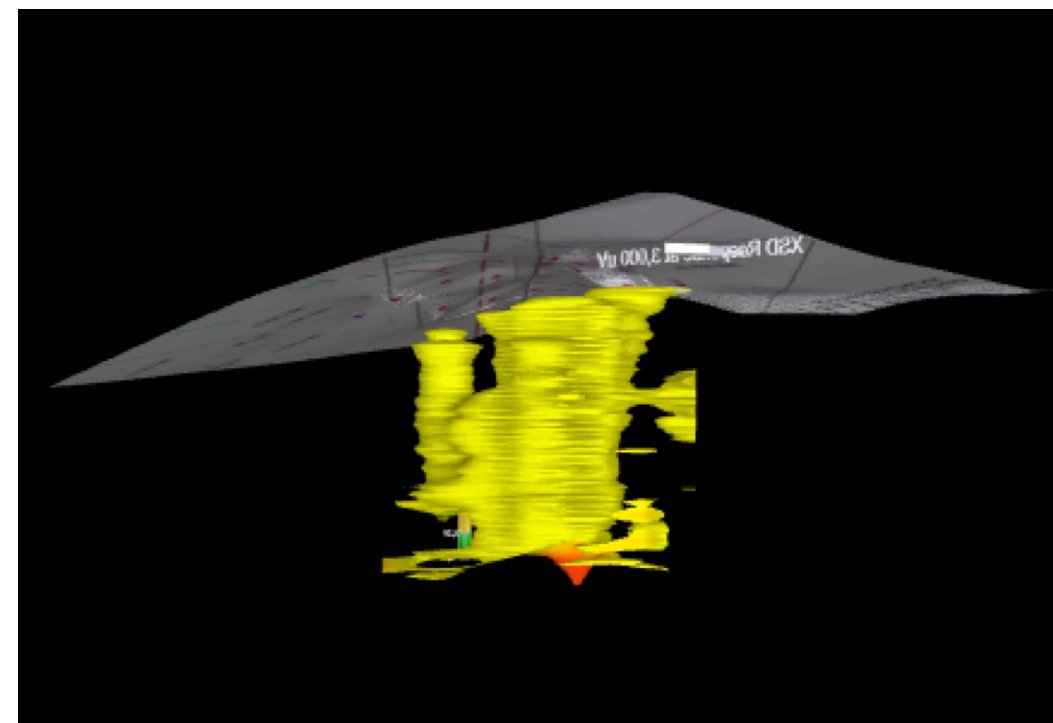
**FIGURE 17A: PLAN VIEW**



**FIGURE 17B: VIEW FROM WEST**



**FIGURE 17C: VIEW FROM SOUTH**



**FIGURE 17D: VIEW FROM NORTHWEST**

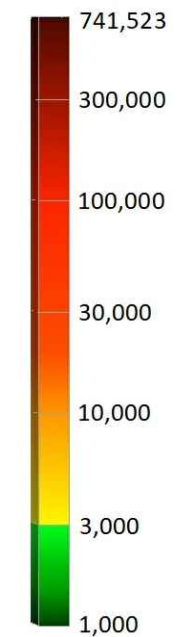
**FIGURE 17**  
**HRSC SURVEY**  
**THREE DIMENSIONAL**  
**MODEL**  
**XSD AT 3,000  $\mu$ V**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

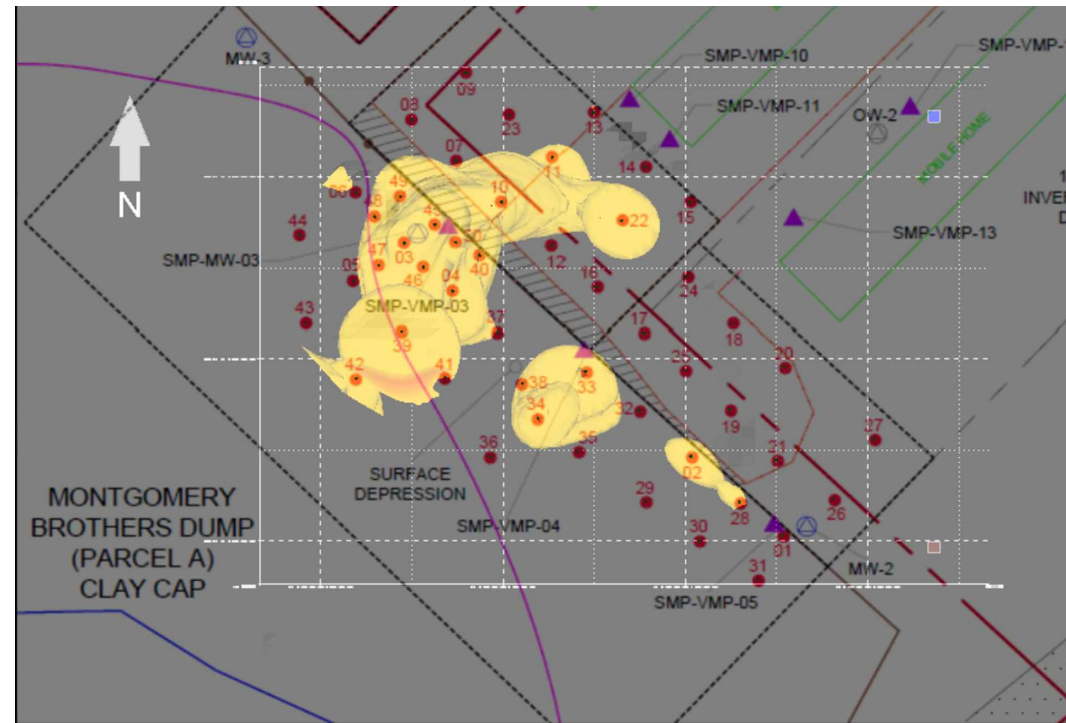
CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

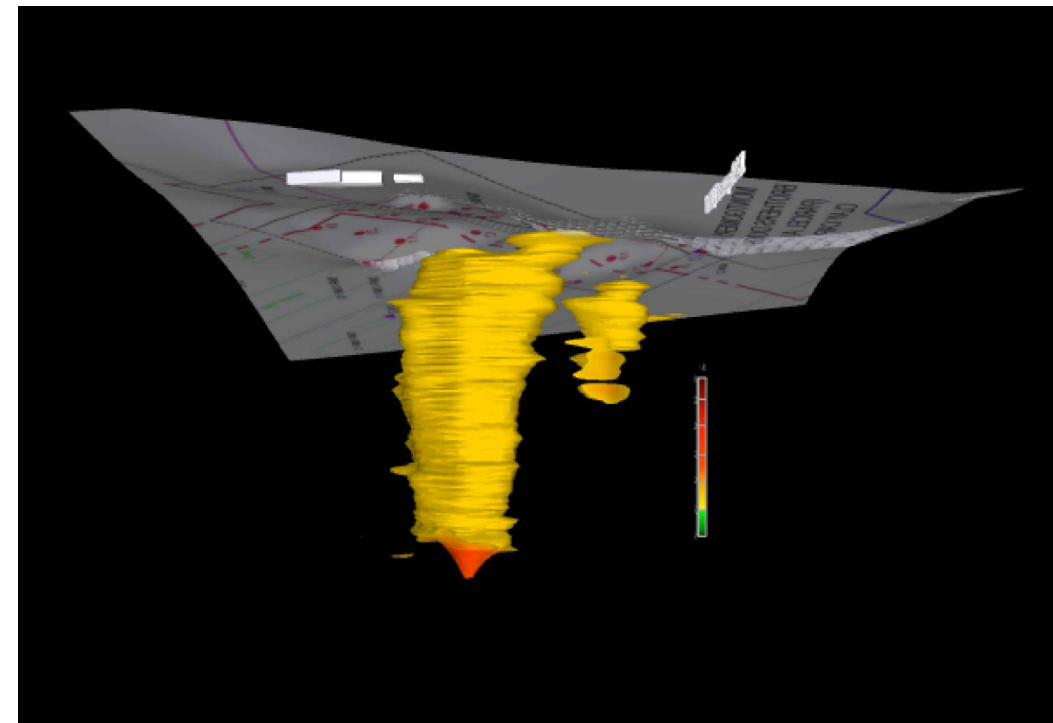
XSD Corr (uV)



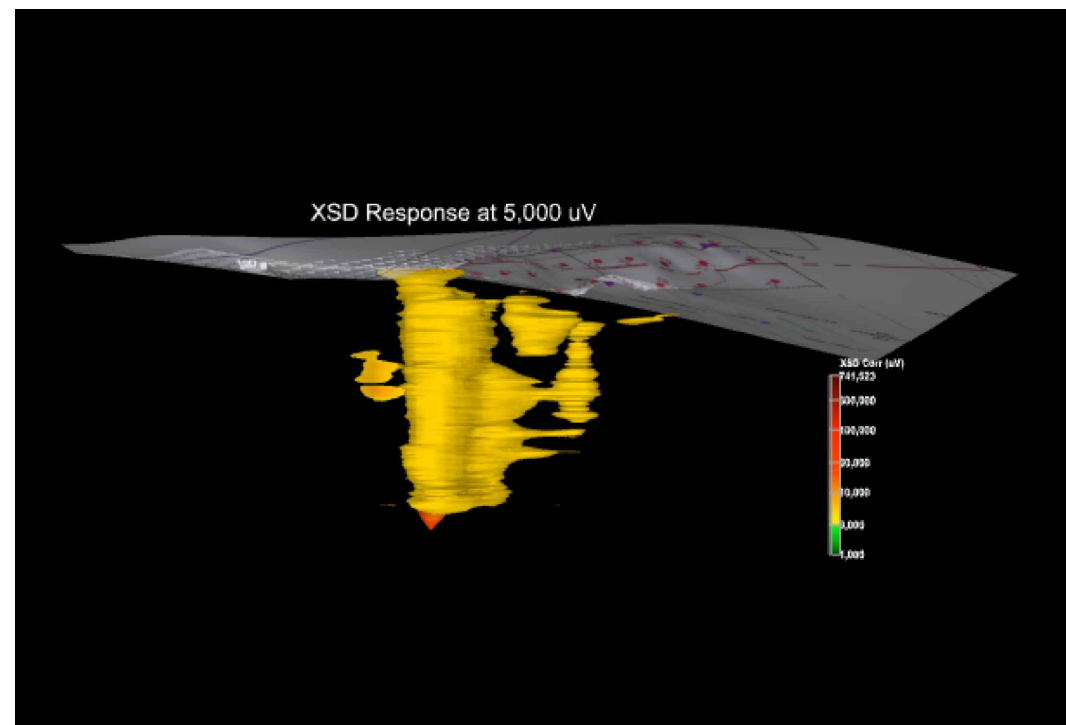




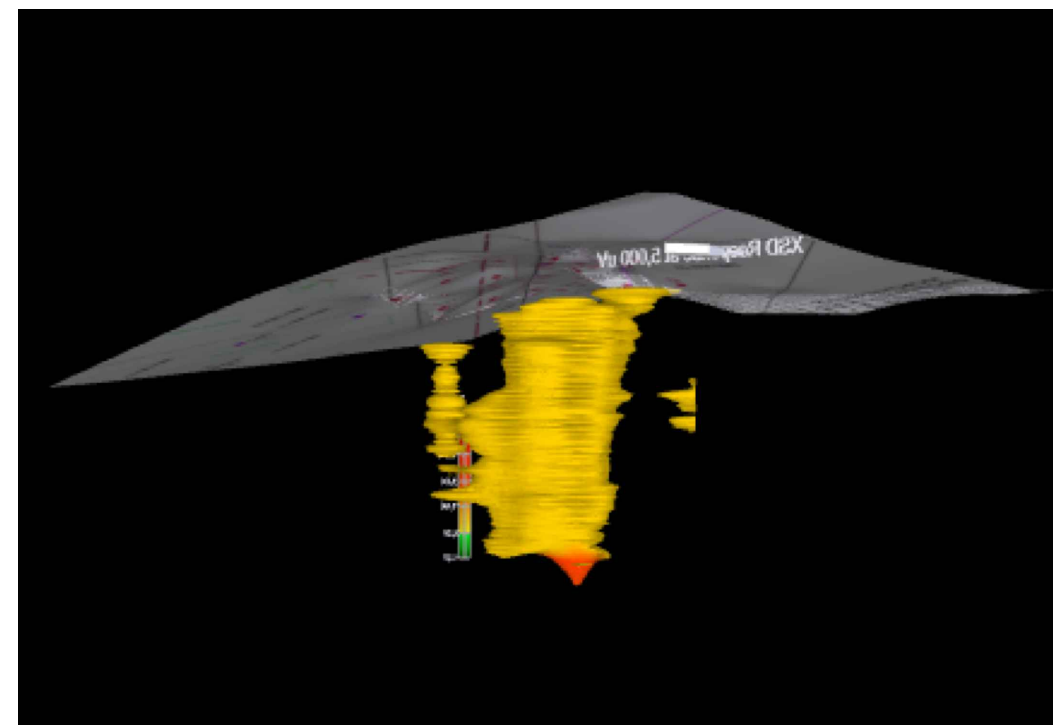
**FIGURE 18A: PLAN VIEW**



**FIGURE 18B: VIEW FROM WEST**



**FIGURE 18C: VIEW FROM SOUTH**



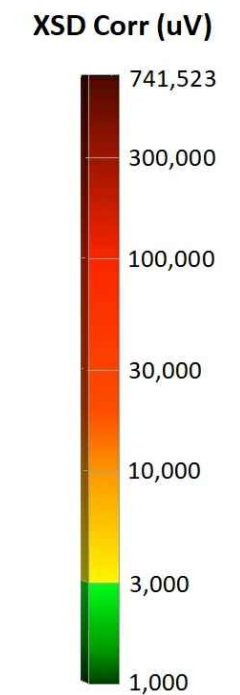
**FIGURE 18D: VIEW FROM NORTHWEST**

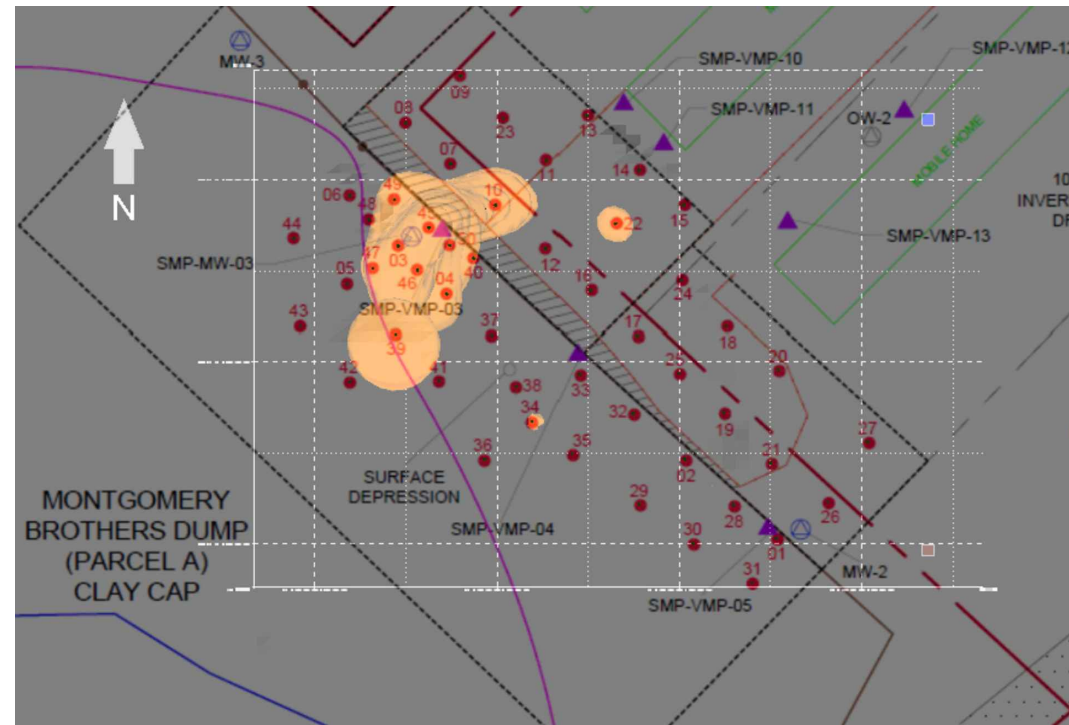
**FIGURE 18**  
**HRSC SURVEY**  
**THREE DIMENSIONAL**  
**MODEL**  
**XSD AT 5,000  $\mu$ V**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

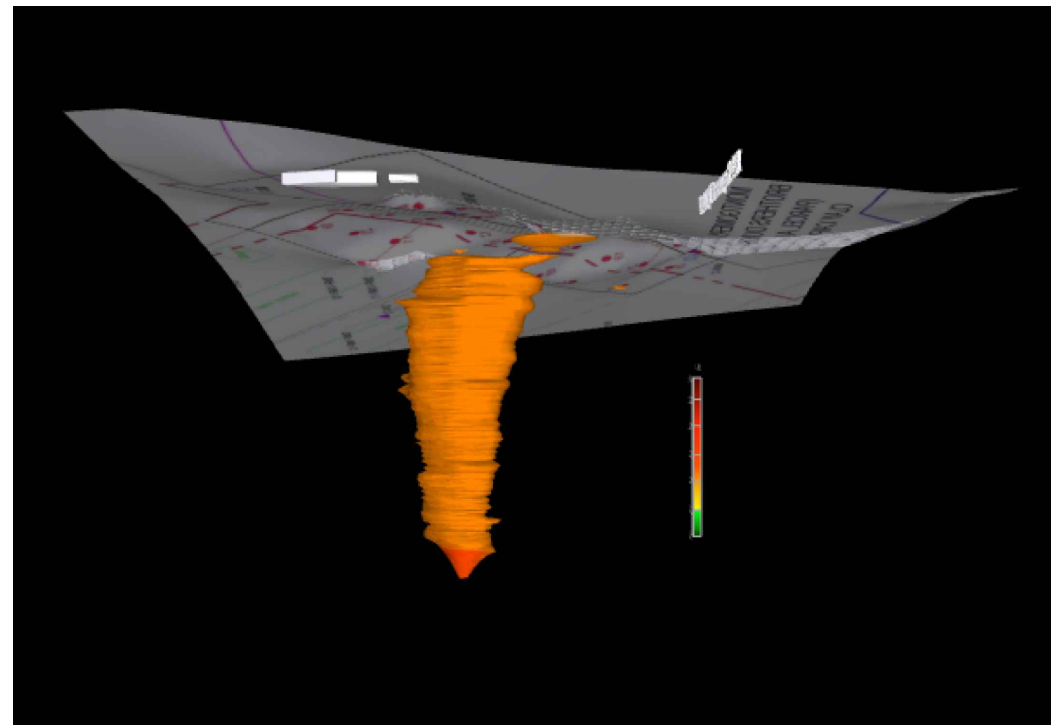
CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

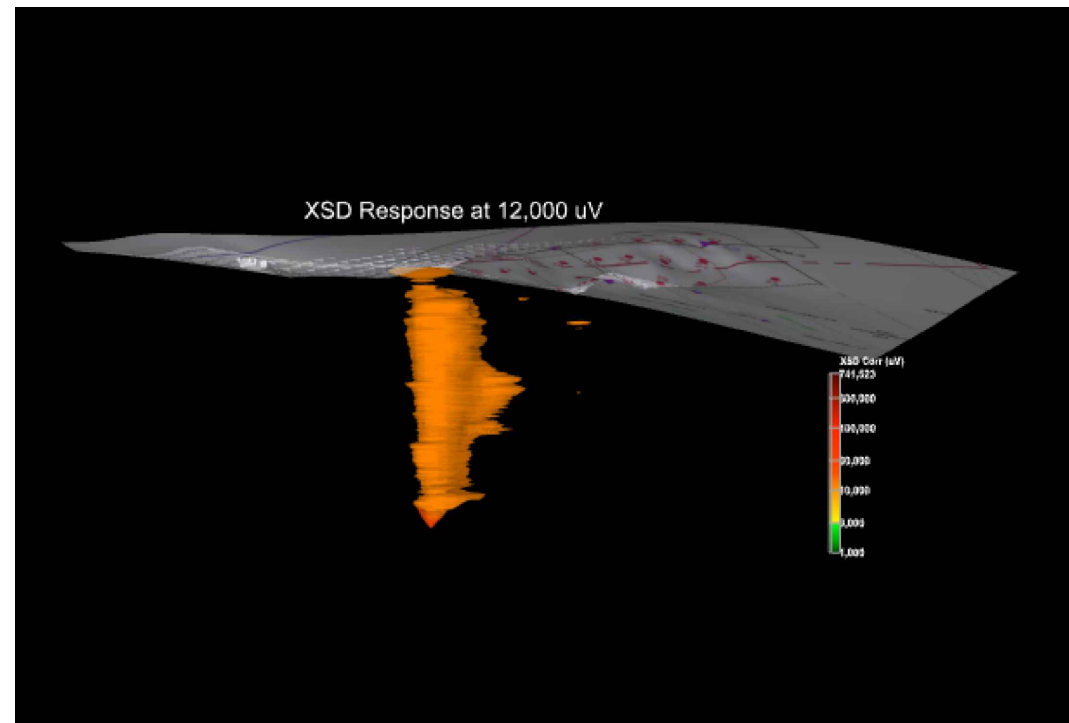




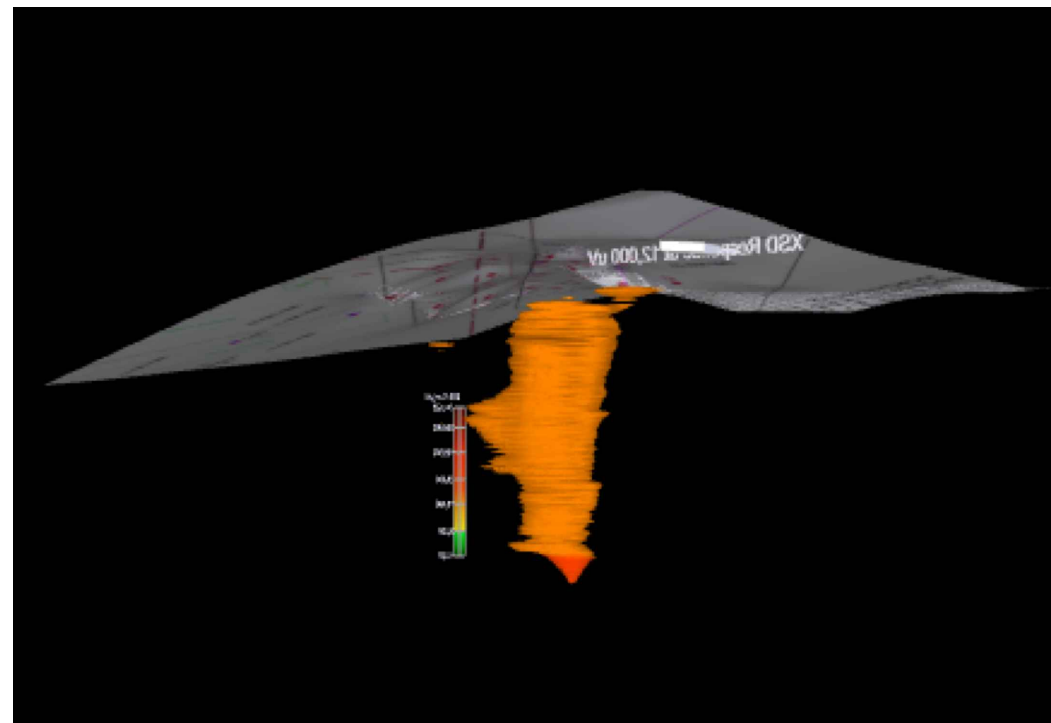
**FIGURE 19A: PLAN VIEW**



**FIGURE 19B:VIEW FROM WEST**



**FIGURE 19C: VIEW FROM SOUTH**



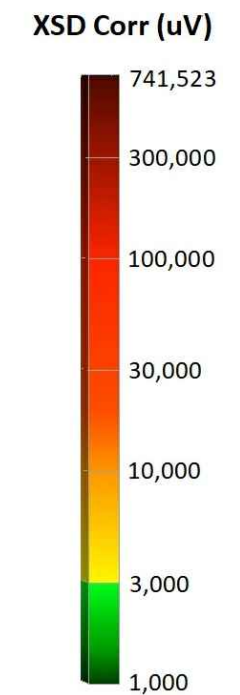
**FIGURE 19D: VIEW FROM NORTHWEST**

**FIGURE 19**  
**HRSC SURVEY**  
**THREE DIMENSIONAL**  
**MODEL**  
**XSD AT 12,000  $\mu$ V**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**





**FIGURE 20**

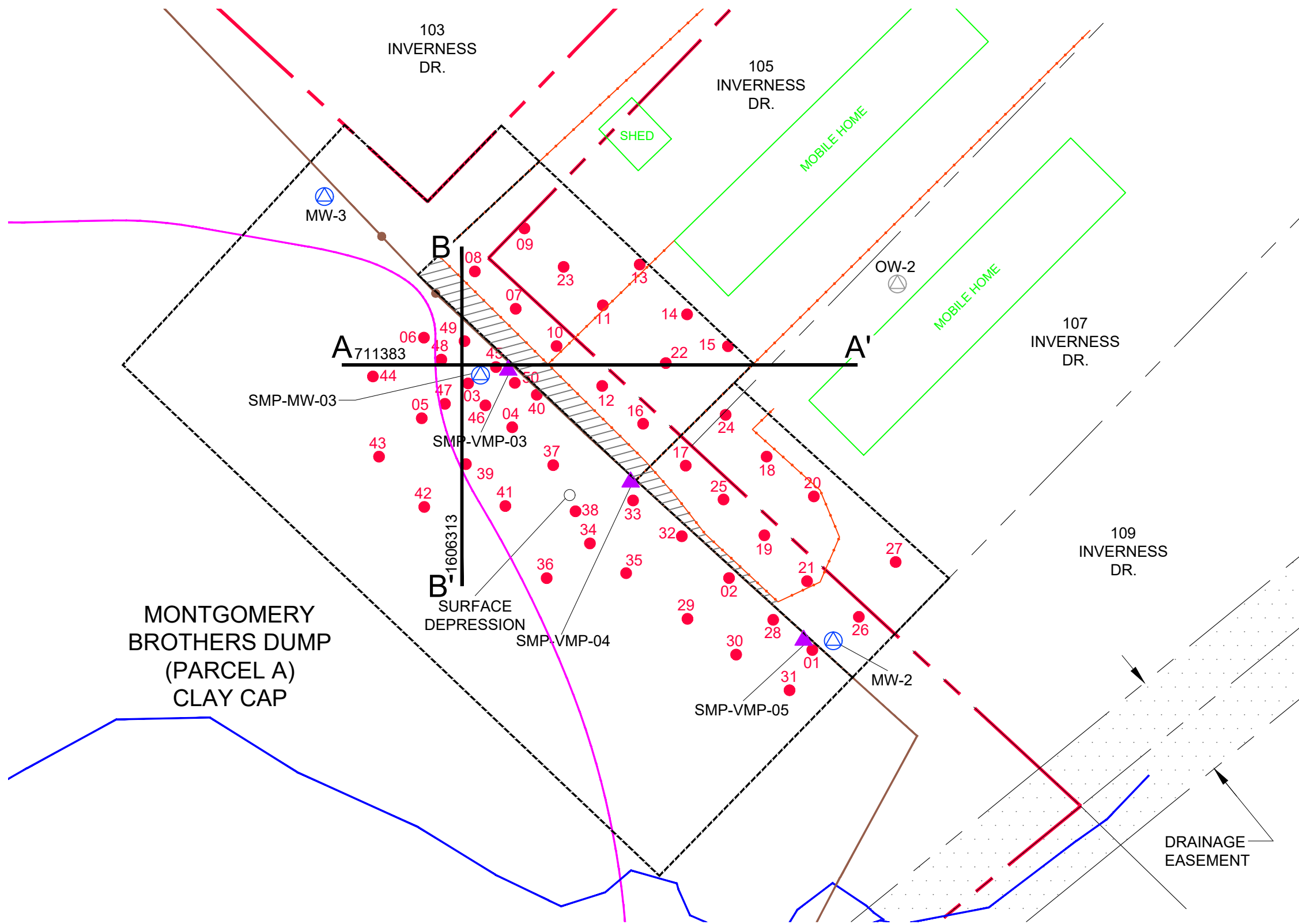
**HRSC SURVEY  
CROSS-SECTION  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020

**LEGEND**

- - - - Site Property Boundary
- - - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- ⊕ Groundwater Monitoring Well
- ▲ Vapor Monitoring Point
- ⊕ Abandoned Groundwater Monitoring Well
- 01 HRSC Boring Location
- - - - Fencing Related to 105 and 107 Inverness
- - - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



MONTGOMERY BROTHERS DUMP  
(PARCEL A)  
CLAY CAP

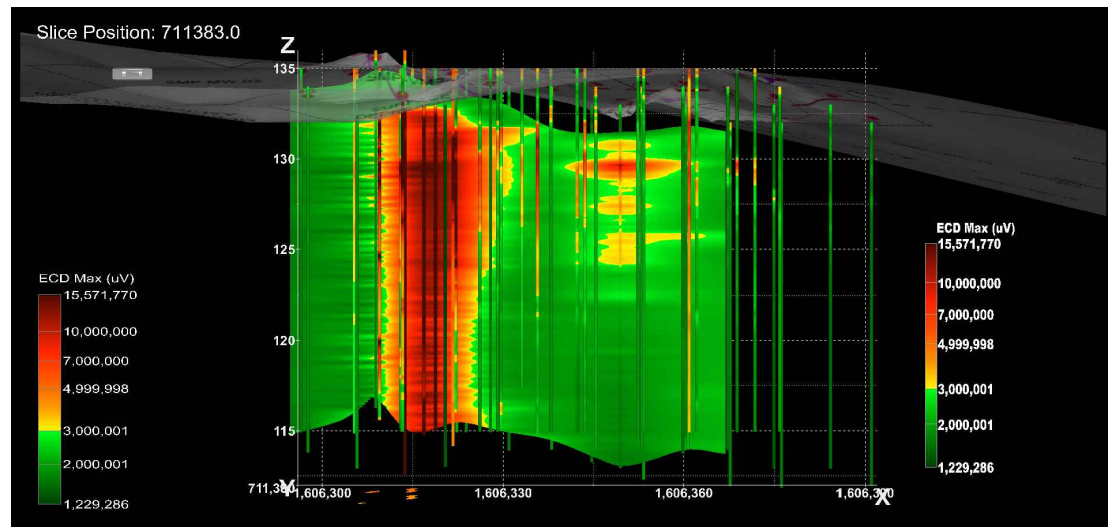


**FIGURE 21**

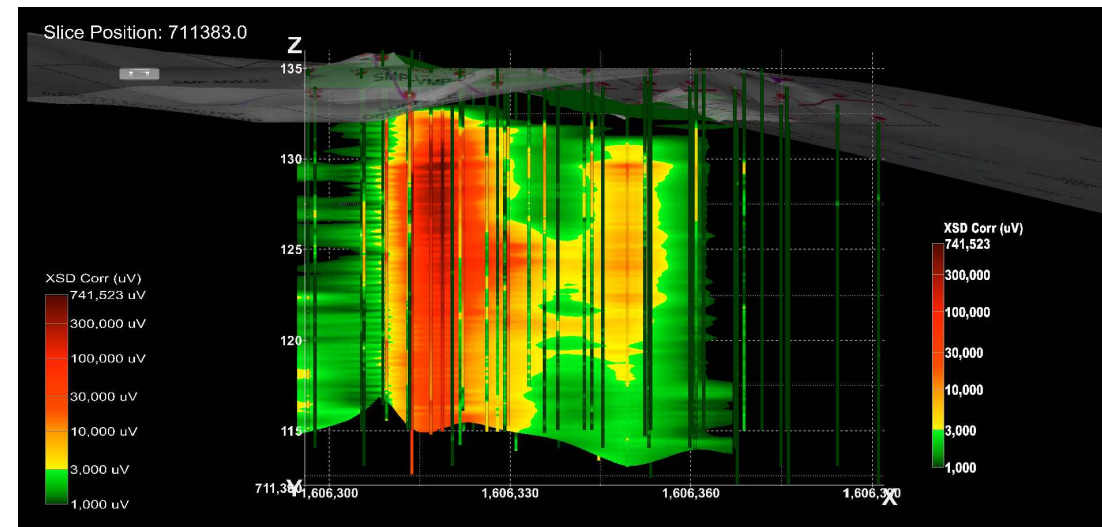
**HRSC SURVEY  
CROSS-SECTION  
A-A'  
NORTHING: 711383  
INTERSECTING: 44, 48, 45  
AND 22**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

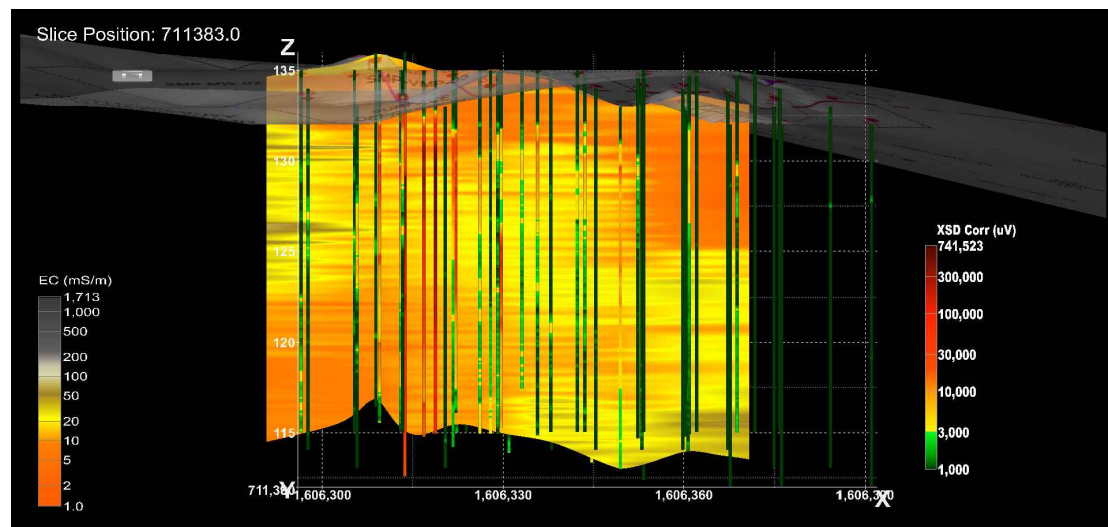
CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020



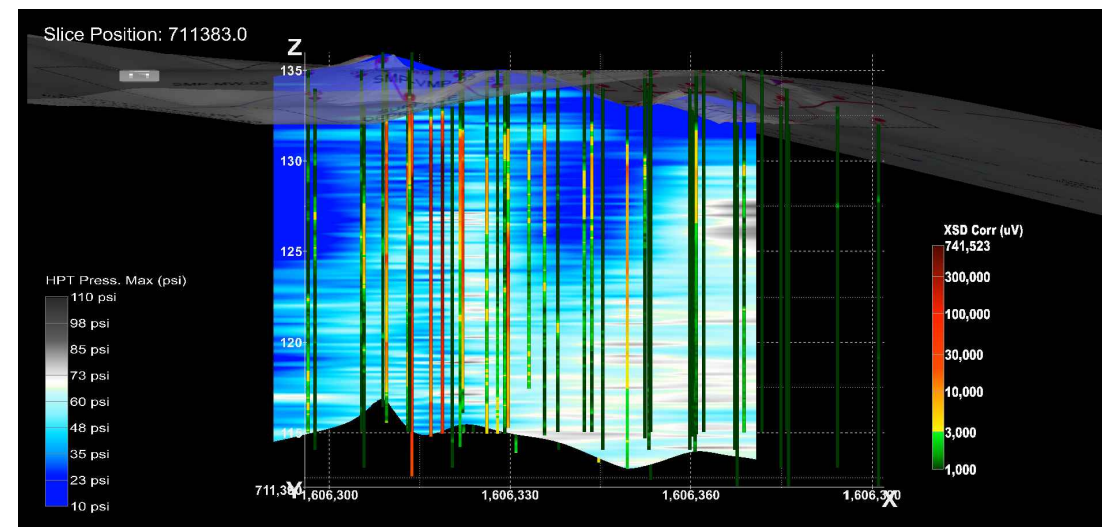
**FIGURE 21A: ECD**



**FIGURE 21B: XSD**



**FIGURE 21C: EC**



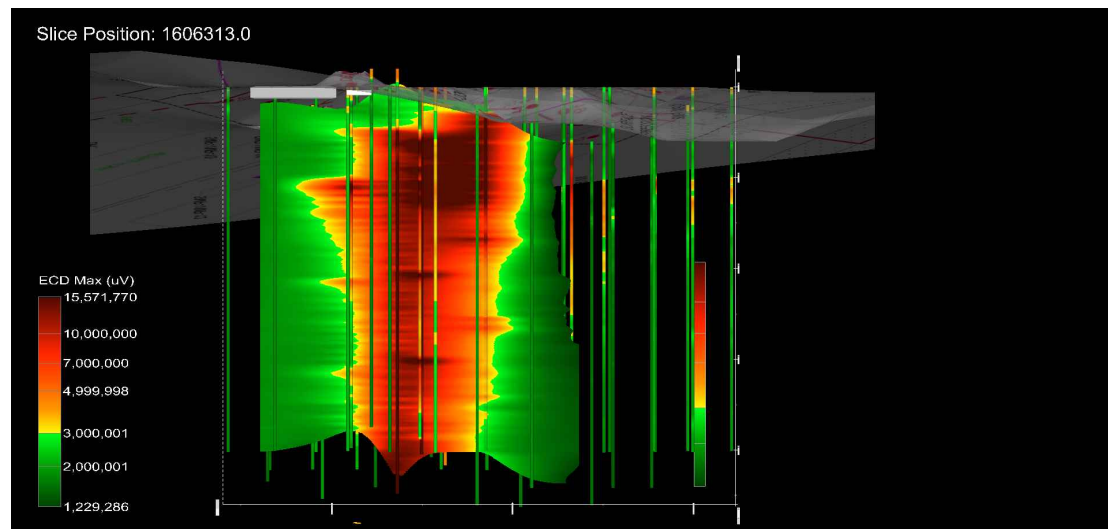
**FIGURE 21D: HTP PRESSURE**

**FIGURE 22**

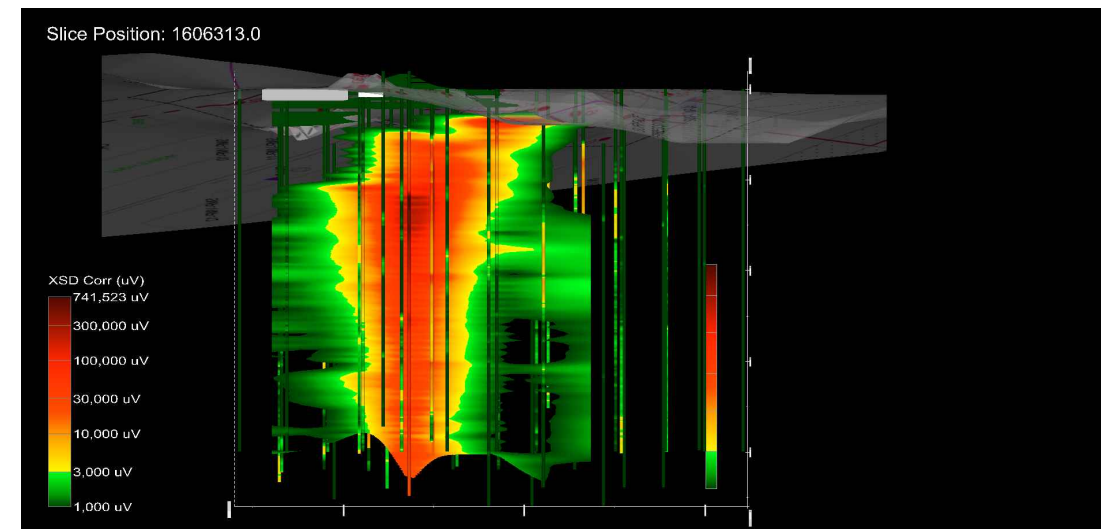
**HRSC SURVEY  
CROSS-SECTION  
B-B'  
EASTING: 1606313  
INTERSECTING: 49, 03  
AND 39**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

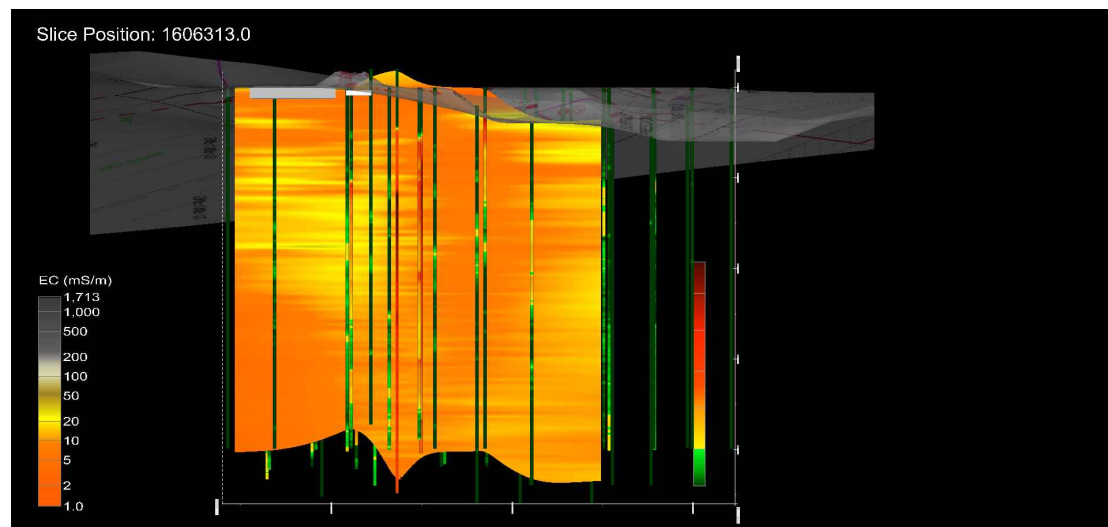
CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-24-2020



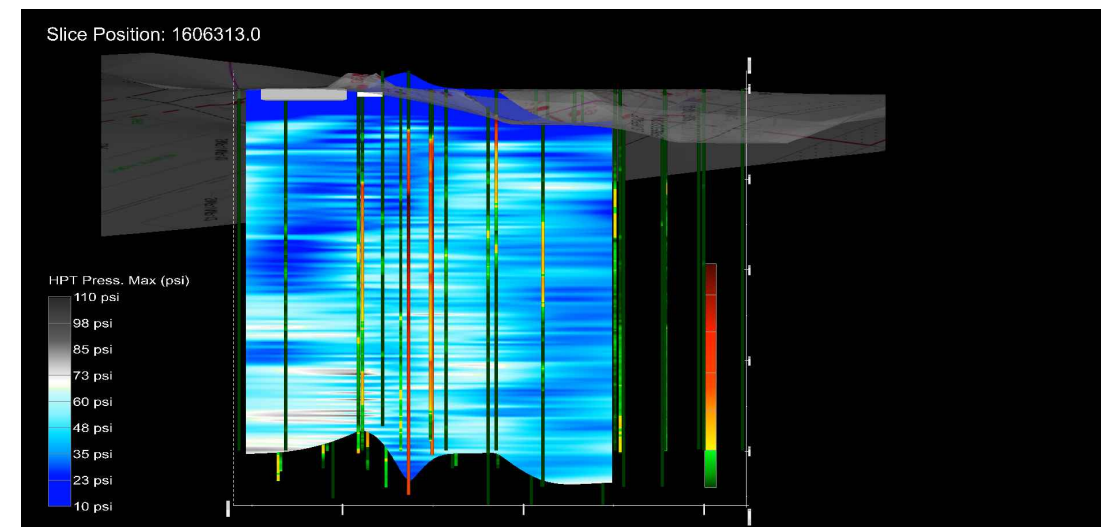
**FIGURE 22A: ECD**



**FIGURE 22B: XSD**



**FIGURE 22C: EC**



**FIGURE 22D: HTP PRESSURE**

## **TABLES**

**Table 1**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Surface/Near Surface Soil Sample Analytical Results - Detected Analytes**  
**September 25, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	HSI-SS-01 (0.5-1')	HSI-SS-02 (0.5-1')	HSI-SS-03 (0.5-1')	HSI-SS-04 (0.5-1')	HSI-SS-05 (0.5-1')	HSI-SS-06 (0.5-1')	HSI-SS-07 (0.5-1')	HSI-SS-07 (0.5-1') [HSI-SS-D (0.5-1')]	HSI-SS-08 (0.5-1')	HSI-SS-09 (0.5-1')	MDE Residential Soil Standards
<b>Dilution Factor</b>	<b>0.752</b>	<b>0.74</b>	<b>0.883</b>	<b>0.824</b>	<b>0.723</b>	<b>0.919</b>	<b>0.816</b>	<b>0.74</b>	<b>0.766</b>	<b>1.03</b>	
<b>Analyte Name</b>	<b>Concentration (mg/kg)</b>										
1,1,2,2-Tetrachloroethane	<b>0.0018</b>	<b>0.012</b>	<b>0.0065</b>	0.00041 U	<b>0.011</b>	<b>0.0039</b>	0.00052 U	0.00042 U	<b>0.0015 J</b>	0.00050 U	6.0E-01
1,1,2-Trichloroethane	0.00038 U	<b>0.0014 J</b>	0.00050 U	0.00042 U	0.00037 U	0.00046 U	0.00053 U	0.00043 U	<b>0.00066 J</b>	0.00051 U	1.5E-01
2-Butanone	0.00098 U	<b>0.0010 J</b>	0.0013 U	0.0011 U	0.00096 U	<b>0.0035</b>	<b>0.14</b>	0.0011 U	0.0010 U	0.0013 U	2.7E+03
Acetone	0.0055 U	<b>0.044</b>	0.0074 U	<b>0.011</b>	<b>0.0069 J</b>	<b>0.064</b>	<b>0.74</b>	0.0063 U	<b>0.0074 J</b>	<b>0.020</b>	6.1E+03
Chlorobenzene	0.00051 U	0.00050 U	0.00068 U	0.00056 U	<b>0.00050 J</b>	0.00063 U	0.00071 U	0.00058 U	0.00053 U	0.00069 U	2.8E+01
m&p-Xylene	0.00098 U	0.00098 U	0.0013 U	0.0011 U	0.00096 U	0.0012 U	0.0014 U	0.0011 U	0.0010 U	<b>0.0014</b>	5.8E+01
Methylcyclohexane	0.00074 U	0.00073 U	0.00098 U	0.00081 U	0.00072 U	<b>0.0024</b>	0.0010 U	0.00084 U	0.00077 U	0.0010 U	na
Methylene chloride	<b>0.0036</b>	<b>0.0024</b>	<b>0.0057</b>	<b>0.0049</b>	<b>0.0017</b>	<b>0.0035</b>	<b>0.0022 J</b>	0.00070 U	<b>0.0071</b>	<b>0.0046</b>	3.5E+01
Styrene	0.00045 U	0.00045 U	0.00060 U	0.00050 U	0.00044 U	<b>0.36</b>	0.00063 U	0.00051 U	0.00047 U	0.00061 U	6.0E+02
Tetrachloroethene	0.00080 U	<b>0.0045</b>	<b>0.024</b>	0.00089 U	0.00079 U	<b>0.0035</b>	0.0011 U	0.00092 U	<b>0.0011 J</b>	<b>0.0011 J</b>	8.1E+00
Toluene	0.00054 U	0.00054 U	0.00072 U	0.00060 U	<b>0.00073 J</b>	0.00067 U	<b>0.070</b>	0.00062 U	0.00057 U	0.00073 U	4.9E+02
Trichloroethene	0.00067 U	<b>0.0021</b>	<b>0.0072</b>	0.00074 U	0.00066 U	0.00083 U	0.00094 U	0.00077 U	0.00071 U	0.00091 U	4.1E-01
Trichlorofluoromethane	0.00096 U	0.00096 U	0.0013 U	0.0011 U	0.00095 U	0.0012 U	<b>0.0092</b>	<b>0.0034</b>	0.0010 U	0.0013 U	na
Xylenes (Total)	0.00058 U	0.00058 U	0.00077 U	0.00064 U	0.00057 U	0.00072 U	0.00082 U	0.00066 U	0.00061 U	<b>0.0014</b>	5.8E+01

**Table Notes:**

VOCs Analytical Method: EPA Method 8260C

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

**Screening Evaluation Notes:**

No detected analyte concentrations exceed the respective SL.

No MDLs exceed the respective SLs

**Additional Screening Level Notes:**

<u>Analyte</u>	<u>MDE Residential Soil Standard</u>
m+p-Xylenes	Total Xylenes
o-Xylene	Total Xylenes



**Table 2**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Surface/Near Surface Soil Sample Analytical Results - Detected Analytes**  
**September 25, 2020**  
**Semi-Volatile Organic Compounds (SVOCs) and Metals**

Analytical Suite	Sample ID	HSI-SS-01 (0-0.5')	HSI-SS-02 (0-0.5')	HSI-SS-02 (0-0.5') [HSI-SS-D (0-0.5')]	HSI-SS-03 (0-0.5')	HSI-SS-04 (0-0.5')	HSI-SS-05 (0-0.5')	HSI-SS-06 (0-0.5')	HSI-SS-07 (0-0.5')	HSI-SS-08 (0-0.5')	HSI-SS-09 (0-0.5')	MDE Residential Soil Standards	MDE ATC
	Dilution Factor (SVOCs)	1	1	1	1	1	1	1	1	3	1		
	Dilution Factor (Metals)	1	1	1	1	1	1	1	1	1	1		
Analyte Name	Concentration (mg/kg)												
SVOCs	Acetophenone	0.019 J	0.023 J	0.013 U	0.015 U	0.013 U	0.014 U	0.013 U	0.015 U	0.038 U	0.013 U	na	na
	Benzo[a]pyrene	0.014 J	0.012 U	0.012 U	0.014 U	0.013 U	0.013 U	0.012 U	0.014 U	0.036 U	0.012 U	1.1E-01	na
	Benzo[b]fluoranthene	0.013 U	0.013 U	0.013 U	0.015 U	0.018 J	0.014 U	0.013 U	0.015 U	0.038 U	0.015 J	1.1E+00	na
	Benzo[g,h,i]perylene	0.0092 J	0.00025 U	0.00025 U	0.00028 U	0.00026 U	0.00026 U	0.00025 U	0.00028 U	0.033 J	0.00025 U	na	na
	bis(2-Ethylhexyl)phthalate	0.24	0.44	0.38	0.036 J	0.15	0.28	0.34	0.42	0.094 U	0.12	3.9E+01	na
	Butylbenzylphthalate	0.028 U	0.028 U	0.028 U	0.031 U	0.028 U	0.033 J	0.028 U	0.031 U	0.082 U	0.027 U	na	na
	Chrysene	0.016 J	0.012 U	0.012 U	0.014 U	0.013 U	0.013 U	0.012 U	0.014 U	0.036 U	0.012 U	1.1E+02	na
	Dimethylphthalate	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U	0.011 U	0.010 U	0.011 U	0.030 U	0.066	na	na
	Di-n-butylphthalate	0.12	0.16	0.17	0.047 U	0.042 U	0.067	0.077	0.061	0.12 U	0.058	na	na
	Di-n-octylphthalate	0.025 U	0.024 U	0.024 J	0.027 U	0.025 U	0.025 U	0.024 U	0.027 U	0.070 U	0.024 U	na	na
	Fluorene	0.010 U	0.010 U	0.0099 U	0.012 J	0.010 U	0.010 U	0.0099 U	0.011 U	0.029 U	0.0098 U	2.4E+02	na
Pyrene	0.013 U	0.012 U	0.012 U	0.014 U	0.013 U	0.013 U	0.012 U	0.014 U	0.036 U	0.015 J	1.8E+02	na	
Metals	Aluminum	3,200	3,800	3,700	4,000	6,700	3,300	5,000	3,200	3,900	5,000	7.7E+03	1.9E+04
	Antimony	0.13 J	0.11 J	0.063 J	0.027 U	0.031 J	0.058 J	0.053 J	0.084 J	0.024 U	0.031 J	3.1E+00	6.8E+00
	Arsenic	3.9 B	3.2 B	3.0 B	3.6 B	7.1 B	3.0 B	3.2 B	2.2 B	2.2 B	3.5 B	6.8E-01	4.9E+00
	Barium	21	20	20	22	22	15	24	21	29	37	1.5E+03	9.9E+01
	Beryllium	0.18 J	0.18 J	0.17 J	0.19 J	0.20 J	0.20 J	0.18 J	0.14 J	0.14 J	0.19 J	1.6E+01	1.6E+00
	Cadmium	0.38 J	0.49	0.39 J	0.17 J	0.15 J	0.50	0.18 J	0.48 J	0.15 J	0.26 J	7.1E+00	1.1E+00
	Calcium	1,700	1,600	1,400	1,700	210 J	190 J	290 J	410 J	19,000	1,400	na	1.2E+04
	Chromium	19 B	20 B	17 B	23 B	24 B	20 B	21 B	18 B	15 B	17 B	na	3.0E+01
	Cobalt	0.95 J	1.4 J	1.5 J	1.2 J	1.5 J	0.94 J	1.5 J	1.6 J	3.1	4.0	na	3.3E+01
	Copper	14 B	18 B	16 B	9.2 B	7.3 B	13 B	8.9 B	12 B	11 B	27 B	3.1E+02	4.2E+01
	Iron	6,500 B	6,700 B	6,500 B	7,100 B	11,000 B	7,000 B	9,900 B	14,000 B	8,100 B	11,000 B	5.5E+03	2.6E+04
	Lead	17	23	140	3.9 J	7.1	22	15	22	6.6	9.8	2.0E+02	6.1E+01
	Magnesium	450 J	540 J	550	560 J	680	340 J	510 J	300 J	7,900	2,200	na	3.7E+03
	Manganese	50	61	56	54	31	28	37	68	150	210	1.8E+02	1.4E+03
	Mercury	0.014 U	0.020 J	0.014 J	0.015 U	0.014 U	0.015 U	0.014 U	0.038 J	0.013 U	0.014 U	1.1E+00	1.4E-01
	Nickel	3.5 J	4.5 J	3.8 J	3.0 J	4.2 J	4.7 J	3.8 J	4.6 J	9.1	9.8	1.5E+02	2.2E+01
	Potassium	150 J	160 J	160 J	180 J	220 J	140 J	150 J	150 J	540	550	na	2.6E+03
	Selenium	1.2 JB	1.4 JB	1.3 JB	1.2 JB	0.88 JB	4.0 B	1.1 JB	1.4 JB	0.87 JB	0.99 JB	3.9E+01	1.0E+00
	Silver	0.067 JB	0.048 JB	0.041 JB	0.050 JB	0.037 JB	0.061 JB	0.047 JB	0.084 JB	0.049 JB	0.050 JB	3.9E+01	1.0E+00
	Sodium	140 U	140 U	140 U	150 U	140 U	140 U	140 U	140 U	130 U	140 U	na	2.3E+02
Thallium	0.10 J	0.020 J	0.019 U	0.026 J	0.039 J	0.061 U	0.035 J	0.022 J	0.028 J	0.037 J	7.8E-02	1.5E+00	
Vanadium	47 B	18 B	18 B	19 B	22 B	21 B	17 B	16 B	15 B	20 B	3.9E+01	3.5E+01	
Zinc	43 B	29 B	26 B	22 B	18 B	24 B	25 B	42 B	22 B	38 B	2.3E+03	7.3E+01	

**Table Notes:**

SVOCs Analytical Method: EPA Method 8270D

Target Analyte List (TAL) Metals Analytical Methods: EPA Method 6010D, 6020B, and 7471B

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

B - Indicates analyte was present in the Method Blank and sample.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

MDE Anticipated Typical Concentration (ATC) for Central Maryland (October 2018)

**Screening Evaluation Notes:**

SVOCs: No detected analyte concentrations or MDLs exceed the respective MDE Residential Soil Clean-up Standard.

Metals: **Bold and underline** - Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.

**Red, bold, and underline** - Detected analyte concentration exceeds the MDE Residential Soil Clean-up Standard and the ATC for Central Maryland.

No MDLs exceed the respective MDE Residential Soil Clean-up Standard.

**Additional Screening Level Notes:**

**Analyte**      **MDE Residential Soil Standard**

Total Mercury      Mercury (elemental)

**Table 3**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Grab Groundwater Sample Analytical Results - Detected Analytes**  
**September 28, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	HSI-GW-01	HSI-GW-02	HSI-GW-03	HSI-GW-04	HSI-TB-01	EPA Residential Groundwater VISLs
Dilution Factor	5	5	5	5	1	
Sample Type	Groundwater				Blank	
Analyte Name	Concentration (ug/L)					
1,1,2,2-Tetrachloroethane	2.2 U	7.5	2.4 J	12	0.45 U	3.2E+01
1,1-Dichloroethane	6.9	3.6 J	2.7 J	4.5 J	0.43 U	7.6E+01
1,2-Dichloroethane	<u>35</u>	<u>24</u>	3.2 U	20	0.64 U	2.2E+01
Benzene	<u>40</u>	<u>36</u>	13	<u>28</u>	0.30 U	1.6E+01
Chlorobenzene	<u>510</u>	<u>550</u>	320	<u>460</u>	0.33 U	4.1E+02
Chloroethane	2.9 U	2.9 U	4.5 J	3.6 J	0.58 U	na
cis-1,2-Dichloroethane	360	97	4.7 J	120	0.64 U	na
Ethylbenzene	3.6 J	17	2.3 U	2.3 U	0.47 U	3.5E+01
Isopropylbenzene	2.5 U	2.9 J	2.5 U	2.5 U	0.49 U	8.9E+02
m&p-Xylene	6.6	39	4.2 U	4.2 U	0.85 U	3.9E+02
Methyl Acetate	11 B	13 B	15 B	14 B	0.70 U	na
Methylene chloride	1.5 U	1.5 U	1.5 U	1.9 J	0.29 U	4.7E+03
Methyl-t-butyl ether	18	4.1	1.9 J	9.6	0.31 U	4.5E+03
o-Xylene	3.6 J	13	3.4 U	3.4 U	0.68 U	4.9E+02
Toluene	2.1 J	120	1.6 U	4.3 J	0.33 U	1.9E+04
trans-1,2-Dichloroethene	91	15	1.9 J	32	0.31 U	na
Trichloroethene	<u>10</u>	<u>16</u>	1.7 U	<u>26</u>	0.35 U	5.2E+00
Vinyl chloride	<u>65</u>	<u>45</u>	<u>9.0</u>	<u>48</u>	0.71 U	1.5E+00
Xylenes (Total)	10	52	3.4 U	3.4 U	0.68 U	3.9E+02

**Table Notes:**

VOCs Analytical Method: EPA Method 8260D  
ug/L - micrograms per liter or parts per billion (ppb)  
U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.  
B - Indicates analyte was present in the Method Blank and sample.  
na - not applicable  
**Bold** - Detected analyte concentration

**Residential Screening Levels (SLs):**

EPA Residential Groundwater Vapor Intrusion Screening Levels (VISLs) (May 2020)  
(at CR = 1x10<sup>-5</sup> or HI = 1)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.  
No MDLs exceed the respective SLs

**Additional Screening Level Notes**

<u>Analyte</u>	<u>EPA VISLs</u>
m+p-Xylenes	Total Xylenes
o-Xylene	o-Xylene

Table 4  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Subsurface Soil Sample Analytical Results - Detected Analytes  
 September 28 - October 1, 2020  
 Volatile Organic Compounds (VOCs)

Sample ID	HSI-SB-01 (2.5-3)	HSI-SB-01 (6-6.5)	HSI-SB-01 (6-6.5) [HSI-SB-D1]	HSI-SB-01 (10-10.5)	HSI-SB-01 (14.5-15)	HSI-SB-02 (3.5-4)	HSI-SB-02 (10-10.5)	HSI-SB-02 (11-11.5)	HSI-SB-03 (3.5-4)	HSI-SB-03 (10-10.5)	HSI-SB-03 (11-11.5)	HSI-SB-04 (9.5-10)	HSI-SB-05 (4.5-5)
Dilution Factor	63.5	1220	6590	0.616	0.71	74.5	0.687	56.9	65.2	65.2	69.1	0.665	68.8
Sample Collection Date	09/29/20	09/29/20	09/29/20	09/29/20	09/29/20	09/28/20	09/28/20	09/28/20	09/29/20	09/29/20	09/29/20	09/29/20	09/30/20
Analyte Name	Concentration (mg/kg)												
1,1,2,2-Tetrachloroethane	<u>2.7</u>	<u>58</u>	<u>200</u>	0.0011 J	0.0024	0.040 U	0.0063	0.032 U	0.43	0.035 U	0.039 U	0.00037 U	0.036 U
1,1,2-Trichloroethane	0.031 J	0.47 U	2.5 U	0.00035 U	0.00041 U	0.029 U	0.00039 U	0.023 U	0.025 J	0.025 U	0.028 U	0.00038 U	0.026 U
1,1-Dichloroethane	0.031 U	0.63 U	3.4 U	0.00097 J	0.00077 U	0.038 U	0.0011 J	0.031 U	0.032 U	0.033 U	0.037 U	0.0014 J	0.034 U
1,1-Dichloroethene	0.039 U	0.78 U	4.2 U	0.0016	0.0010 U	0.048 U	0.00099 U	0.038 U	0.040 U	0.041 U	0.046 U	0.00094 U	0.043 U
1,2-Dichlorobenzene	0.024 U	0.48 U	2.5 U	0.00038 U	0.00045 U	0.029 U	0.0016 J	0.023 U	0.025 U	0.025 U	0.028 U	0.00042 U	0.026 U
1,2-Dichloroethane	<u>1.8</u>	<u>19</u>	<u>74</u>	0.0073	0.010	0.057 U	0.00035 U	0.046 U	0.39	0.050 U	0.055 U	0.0028	0.10
1,4-Dichlorobenzene	0.027 U	0.54 U	2.9 U	0.00040 U	0.00047 U	0.033 U	0.00075 J	0.026 U	0.028 U	0.028 U	0.032 U	0.00044 U	0.029 U
2-Butanone	0.055 U	1.1 U	5.9 U	0.00090 U	0.0011 U	0.067 U	0.0093	0.054 U	0.057 U	0.058 U	0.065 U	0.00099 U	0.060 U
4-Methyl-2-pentanone	0.59	14	76	0.0040	0.00081 J	0.044 U	0.0042	0.035 U	0.037 U	0.038 U	0.042 U	0.00048 U	0.039 U
Acetone	0.33 U	6.7 U	36 U	0.0080	0.012	0.41 U	0.034	0.33 U	0.35 U	0.36 U	0.40 U	0.0056 U	0.37 U
Benzene	0.034 J	<u>2.4</u>	<u>9.7</u>	0.0086	0.0030	0.027 U	0.083	0.098	0.022 U	0.023 U	0.026 U	0.0072	0.024 U
Chlorobenzene	1.5	<u>320</u>	<u>1,200</u>	0.18	0.065	9.1	0.00053 U	2.7	0.057 J	0.33	0.19	0.097	0.050 J
cis-1,2-Dichloroethene	0.35	9.9	<u>33</u>	0.052	0.014	0.057 U	0.00070 U	0.046 U	0.18	0.049 U	0.079 J	0.030	0.34
Ethylbenzene	0.034 U	<u>12</u>	<u>44</u>	0.0028	0.00070 J	0.78	0.074	0.046 J	0.035 U	0.036 U	0.040 U	0.00057 U	0.037 U
Isopropylbenzene	0.036 U	1.2 J	5.0 J	0.00062 U	0.00074 U	0.044 U	0.035	0.035 U	0.037 U	0.038 U	0.042 U	0.00068 U	0.039 U
m&p-Xylene	0.11	57	<u>200</u>	0.0024	0.0013	4.1	0.29	0.14	0.064 U	0.066 U	0.073 U	0.0010	0.068 U
Methylcyclohexane	0.045 U	1.8	4.8 U	0.00093 J	0.00080 U	0.055 U	0.0025	0.044 U	0.047 U	0.048 U	0.053 U	0.00074 U	0.049 U
Methylene chloride	2.3	<u>49</u>	<u>160</u>	0.0031	0.022	0.026 U	0.0024	0.021 U	0.022 U	0.023 U	0.025 U	0.0022	0.024 U
Methyl-t-butyl ether	0.023 U	0.46 U	2.4 U	0.00041 U	0.0012	0.028 U	0.00046 U	0.022 U	0.024 U	0.024 U	0.027 U	0.00070 J	0.025 U
o-Xylene	0.050 U	13	46	0.0019	0.00063 U	1.3	0.12	0.049 U	0.052 U	0.053 U	0.059 U	0.0014	0.055 U
Tetrachloroethene	0.21	<u>29</u>	<u>95</u>	0.00074 U	0.00087 U	0.032 U	0.00084 U	0.026 U	0.17	0.028 U	0.031 U	0.00080 U	0.059 J
Toluene	0.75	<u>570</u>	<u>2,200</u>	0.0094	0.035	0.31	0.17	1.2	0.042 J	0.37	0.082 J	0.0049	0.026 U
trans-1,2-Dichloroethene	0.088	3.4	12	0.0027	0.0027	0.028 U	0.0010 U	0.022 U	0.023 U	0.024 U	0.027 U	0.0033	0.076 J
Trichloroethene	<u>4.4</u>	<u>460</u>	<u>1,700</u>	0.030	0.040	0.031 U	0.00070 U	0.025 U	<u>2.3</u>	0.027 U	0.032 J	0.0012 J	<u>0.85</u>
Vinyl chloride	0.052 U	1.0 U	5.5 U	0.084	0.0075	0.063 U	0.0010 U	0.051 U	0.054 U	0.055 U	0.061 U	0.14	0.056 U
Xylenes (Total)	0.11	<u>70</u>	<u>250</u>	0.0043	0.0013	5.4	0.41	0.14	0.052 U	0.053 U	0.059 U	0.0024	0.055 U

**Table Notes:**

VOCs Analytical Method: EPA Method 8260D

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.

Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes:**

Analyte	MDE Residential Soil Standard
m+p-Xylenes	Total Xylenes
o-Xylene	Total Xylenes



Table 4  
Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
Hot Spot Investigation

Subsurface Soil Sample Analytical Results - Detected Analytes  
September 28 - October 1, 2020  
Volatile Organic Compounds (VOCs)

Sample ID	HSI-SB-06 (4.5-5)	HSI-SB-07 (4.5-5)	HSI-SB-08 (3.5-4)	HSI-SB-08 (8-8.5)	HSI-SB-08 (12-13)	HSI-SB-08 (12-13) [HSI-SB-D2]	HSI-SB-08 (13-13.5)	HSI-SB-09 (14-14.5)	HSI-SB-10 (5.5-6)	HSI-SB-10 (7-7.5)	HSI-SB-10 (8-8.5)	MDE Residential Soil Standards
Dilution Factor	67.5	70.8	64.7	66.2	69.4	70.7	0.681	0.697	63.2	61.7	0.679	
Sample Collection Date	09/30/20	09/30/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	
Analyte Name	Concentration (mg/kg)											
1,1,2,2-Tetrachloroethane	0.036 U	<b>0.17</b>	0.033 U	0.036 U	0.041 U	0.042 U	0.00040 U	0.00039 U	<b>0.052 J</b>	0.033 U	<b>0.028</b>	6.0E-01
1,1,2-Trichloroethane	0.025 U	0.026 U	0.024 U	0.026 U	0.029 U	0.030 U	0.00041 U	0.00040 U	0.023 U	0.024 U	<b>0.0043</b>	1.5E-01
1,1-Dichloroethane	0.034 U	0.035 U	0.032 U	0.035 U	0.039 U	0.040 U	0.00077 U	0.00076 U	0.030 U	0.032 U	0.00072 U	3.6E+00
1,1-Dichloroethene	0.042 U	0.044 U	0.040 U	0.043 U	0.049 U	0.050 U	0.0010 U	0.0010 U	0.038 U	0.040 U	0.00095 U	2.3E+01
1,2-Dichlorobenzene	0.026 U	0.027 U	<b>0.029 J</b>	0.026 U	0.030 U	0.030 U	0.00045 U	0.00044 U	0.023 U	0.024 U	0.00042 U	1.8E+02
1,2-Dichloroethane	0.051 U	<b>0.087</b>	0.047 U	0.052 U	0.058 U	0.059 U	0.00036 U	<b>0.0047</b>	<b>0.070</b>	0.047 U	<b>0.018</b>	4.6E-01
1,4-Dichlorobenzene	0.029 U	0.030 U	0.027 U	0.030 U	0.033 U	0.034 U	0.00047 U	0.00046 U	0.026 U	0.027 U	0.00044 U	2.6E+00
2-Butanone	0.059 U	0.062 U	0.056 U	0.060 U	0.068 U	0.070 U	0.0011 U	0.0010 U	0.053 U	0.056 U	0.00099 U	2.7E+03
4-Methyl-2-pentanone	0.039 U	0.040 U	0.036 U	0.039 U	0.044 U	<b>4.1</b>	0.00051 U	0.00051 U	0.035 U	0.036 U	0.00048 U	3.3E+03
Acetone	0.36 U	0.38 U	0.34 U	0.37 U	0.42 U	0.43 U	0.0060 U	0.0059 U	0.33 U	0.34 U	<b>0.019</b>	6.1E+03
Benzene	0.023 U	0.024 U	0.022 U	<b>0.040 J</b>	<b>0.13</b>	<b>0.12</b>	<b>0.0086</b>	<b>0.0039</b>	0.021 U	<b>0.031 J</b>	<b>0.0018</b>	1.2E+00
Chlorobenzene	<b>1.4</b>	0.027 U	<b>1.3</b>	<b>1.0</b>	<b>3.7</b>	<b>3.7</b>	<b>0.20</b>	<b>0.064</b>	<b>0.17</b>	<b>0.81</b>	<b>0.052</b>	2.8E+01
cis-1,2-Dichloroethene	<b>0.17</b>	0.052 U	0.047 U	0.051 U	0.058 U	<b>0.40</b>	0.00072 U	<b>0.040</b>	<b>0.40</b>	<b>0.81</b>	<b>0.059</b>	1.6E+01
Ethylbenzene	<b>0.044 J</b>	0.038 U	<b>0.11</b>	<b>0.15</b>	<b>0.065 J</b>	<b>0.069 J</b>	<b>0.0019</b>	0.00060 U	<b>0.053 J</b>	<b>0.045 J</b>	0.00057 U	5.8E+00
Isopropylbenzene	0.039 U	0.041 U	0.037 U	0.040 U	0.045 U	0.046 U	0.00073 U	0.00072 U	0.035 U	0.037 U	0.00069 U	1.9E+02
m&p-Xylene	<b>0.16</b>	0.070 U	<b>0.47</b>	<b>0.56</b>	<b>0.27</b>	<b>0.25</b>	<b>0.0071</b>	0.0010 U	<b>0.099</b>	0.063 U	0.00099 U	5.8E+01
Methylcyclohexane	0.049 U	0.051 U	0.046 U	0.050 U	0.056 U	0.057 U	0.00080 U	0.00078 U	0.044 U	0.046 U	0.00075 U	na
Methylene chloride	0.023 U	0.024 U	0.022 U	0.024 U	0.027 U	0.027 U	0.00066 U	0.00065 U	0.021 U	0.022 U	0.00062 U	3.5E+01
Methyl-t-butyl ether	0.025 U	0.026 U	0.023 U	0.025 U	0.029 U	0.029 U	<b>0.0016</b>	<b>0.0022</b>	0.022 U	0.023 U	0.00045 U	4.7E+01
o-Xylene	<b>0.067 J</b>	0.056 U	<b>0.14</b>	<b>0.18</b>	<b>0.068 J</b>	<b>0.076 J</b>	<b>0.0019</b>	0.00062 U	<b>0.054 J</b>	0.051 U	0.00059 U	5.8E+01
Tetrachloroethene	<b>0.028 J</b>	0.029 U	0.027 U	0.029 U	0.033 U	0.033 U	0.00087 U	0.00085 U	<b>0.028 J</b>	0.027 U	<b>0.0035</b>	8.1E+00
Toluene	<b>0.39</b>	0.027 U	<b>0.49</b>	<b>0.053 J</b>	<b>1.1</b>	<b>5.4</b>	<b>0.0035</b>	<b>0.0038</b>	<b>0.040 J</b>	<b>0.063 J</b>	<b>0.0030</b>	4.9E+02
trans-1,2-Dichloroethene	0.025 U	0.025 U	0.023 U	0.025 U	0.028 U	<b>0.068 J</b>	0.0011 U	<b>0.010</b>	0.022 U	0.023 U	<b>0.0019</b>	1.6E+02
Trichloroethene	<b>0.54</b>	<b>0.11</b>	<b>0.030 J</b>	0.028 U	0.032 U	0.032 U	<b>0.0033</b>	<b>0.0062</b>	<b>0.24</b>	0.026 U	<b>0.061</b>	4.1E-01
Vinyl chloride	0.056 U	0.058 U	0.053 U	0.057 U	<u>0.065 U</u>	<b>1.1</b>	0.0011 U	<b>0.0057</b>	0.050 U	<b>0.75</b>	<b>0.010</b>	5.9E-02
Xylenes (Total)	<b>0.23</b>	0.056 U	<b>0.61</b>	<b>0.74</b>	<b>0.34</b>	<b>0.33</b>	<b>0.0090</b>	0.00062 U	<b>0.15</b>	0.051 U	0.00059 U	5.8E+01

**Table Notes:**

VOCs Analytical Method: EPA Method 8260D

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.

Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes:**

**Analyte**                      **MDE Residential Soil Standard**

m+p-Xylenes                Total Xylenes

o-Xylene                     Total Xylenes

**Table 5**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Subsurface Soil Sample Analytical Results - Detected Analytes**  
**September 28 - October 1, 2020**  
**Semi-Volatile Organic Compounds (SVOCs) and Metals**

Analytical Suite	Sample ID	HSI-SB-01 (2.5-3)	HSI-SB-01 (6-6.5)	HSI-SB-01 (6-6.5) [HSI-SB-D1]	HSI-SB-02 (10-10.5)	HSI-SB-03 (10-10.5)	HSI-SB-08 (3.5-4)	HSI-SB-10 (5.5-6)	MDE Residential Soil Standards	MDE ATC
	Dilution Factor (SVOCs)	1	200	400	1	1	1	1		
	Dilution Factor (Metals)	1	1	1	1/3	1	1	1		
	Sample Collection Date	09/29/20	09/29/20	09/29/20	09/28/20	09/29/20	10/01/20	10/01/20		
Analyte Name		Concentration (mg/kg)								
SVOCs	1,1'-Biphenyl	0.011 U	2.3 U	4.6 U	0.012 U	0.011 U	<b>0.10</b>	0.011 U	na	na
	2-Chlorophenol	<b>0.35</b>	<b>13</b>	<b>24</b>	0.014 U	0.013 U	0.013 U	0.012 U	3.9E+01	na
	2-Methylnaphthalene	0.012 U	2.5 U	4.9 U	0.013 U	0.012 U	<b>0.12</b>	0.012 U	2.4E+01	na
	2-Methylphenol	<b>0.013</b>	2.3 U	4.6 U	0.012 U	0.011 U	0.011 U	0.011 U	3.2E+02	na
	3&4-Methylphenol	0.011 U	2.3 U	4.6 U	0.012 U	0.012 U	<b>0.021</b>	0.011 U	6.3E+02	na
	bis(2-Ethylhexyl)phthalate	<b>0.25</b>	<b>50</b>	<b>58</b>	<b>0.34</b>	0.035 U	<b>0.38</b>	0.033 U	3.9E+01	na
	Di-n-butylphthalate	<b>0.25</b>	<b>720</b>	<b>1,200</b>	<b>1.6</b>	0.046 U	<b>0.064</b>	0.043 U	na	na
	Naphthalene	<b>0.063</b>	<b>16</b>	<b>26</b>	<b>0.058</b>	0.011 U	<b>0.10</b>	0.011 U	3.8E+00	na
Phenanthrene	0.012 U	2.6 U	5.1 U	0.013 U	0.013 U	<b>0.019 J</b>	0.012 U	1.8E+02	na	
Metals	Aluminum	<b>4,200</b>	<b>4,200</b>	<b>5,000</b>	<b>2,200</b>	<b>570</b>	<b>4,000</b>	<b>5,900</b>	7.7E+03	1.9E+04
	Antimony	<b>0.045 J</b>	<b>0.84 J</b>	<b>1.3</b>	<b>0.053 J</b>	0.027 U	0.026 U	0.025 U	3.1E+00	6.8E+00
	Arsenic	<b>1.8</b>	<b>2.3</b>	<b>2.3</b>	<b>1.9</b>	<b>0.30</b>	<b>3.7</b>	<b>1.5</b>	6.8E-01	4.9E+00
	Barium	<b>9.1 J</b>	<b>75</b>	<b>37</b>	<b>15</b>	0.80 U	<b>20</b>	<b>28</b>	1.5E+03	9.9E+01
	Beryllium	<b>0.059 J</b>	<b>0.20 J</b>	<b>0.17 J</b>	<b>0.12 JD</b>	<b>0.040 J</b>	<b>0.18 J</b>	<b>0.22 J</b>	1.6E+01	1.6E+00
	Cadmium	<b>0.40 J</b>	<b>11</b>	<b>6.2</b>	<b>0.24 J</b>	0.017 U	<b>0.21 J</b>	<b>0.020 J</b>	7.1E+00	1.1E+00
	Calcium	120 U	<b>290 J</b>	<b>1,300</b>	<b>200 J</b>	120 U	120 U	<b>120 J</b>	na	1.2E+04
	Chromium	<b>20</b>	<b>60</b>	<b>49</b>	<b>21</b>	<b>1.0 J</b>	<b>19</b>	<b>21</b>	na	3.0E+01
	Cobalt	0.82 U	<b>1.3 J</b>	<b>1.4 J</b>	0.89 U	0.85 U	0.82 U	<b>2.1 J</b>	na	3.3E+01
	Copper	<b>7.0</b>	<b>12</b>	<b>12</b>	<b>8.0</b>	<b>1.0 J</b>	<b>10</b>	<b>8.1</b>	3.1E+02	4.2E+01
	Iron	<b>7,600</b>	<b>8,200</b>	<b>9,700</b>	<b>5,300</b>	<b>1,400</b>	<b>8,200</b>	<b>6,900</b>	5.5E+03	2.6E+04
	Lead	<b>9.8</b>	<b>160</b>	<b>140</b>	<b>13</b>	<b>1.2 J</b>	<b>7.1</b>	<b>4.4 J</b>	2.0E+02	6.1E+01
	Magnesium	<b>350 J</b>	<b>420 J</b>	<b>440 J</b>	<b>160 J</b>	23 U	<b>390 JB</b>	<b>940 B</b>	na	3.7E+03
	Manganese	<b>13</b>	<b>27</b>	<b>27</b>	<b>12 J</b>	<b>1.4 J</b>	<b>16</b>	<b>36</b>	1.8E+02	1.4E+03
	Mercury	0.015 U	<b>0.063 J</b>	<b>0.14</b>	0.016 U	0.015 U	0.015 U	0.014 U	1.1E+00	1.4E-01
	Nickel	<b>3.5 J</b>	<b>8.1</b>	<b>9.0</b>	<b>2.5 J</b>	1.3 U	<b>3.3 J</b>	<b>7.6</b>	1.5E+02	2.2E+01
	Potassium	<b>160 J</b>	<b>160 J</b>	<b>190 J</b>	120 U	120 U	<b>150 J</b>	<b>280 J</b>	na	2.6E+03
	Selenium	<b>0.80 J</b>	<b>3.3</b>	<b>2.8</b>	<b>3.1</b>	<b>1.1 J</b>	<b>2.6</b>	<b>1.3 J</b>	3.9E+01	1.0E+00
	Silver	<b>0.054 J</b>	<b>0.062 J</b>	<b>0.064 J</b>	<b>0.12 J</b>	<b>0.077 J</b>	<b>0.045 JB</b>	<b>0.042 JB</b>	3.9E+01	1.0E+00
	Sodium	140 U	150 U	150 U	160 U	150 U	140 U	140 U	na	2.3E+02
Thallium	0.020 U	0.021 U	0.021 U	0.066 UD	0.021 U	<b>0.021 J</b>	<b>0.021 J</b>	7.8E-02	1.5E+00	
Vanadium	<b>14</b>	<b>18</b>	<b>19</b>	<b>32</b>	<b>7.5</b>	<b>20 B</b>	<b>20 B</b>	3.9E+01	3.5E+01	
Zinc	<b>9.0 J</b>	<b>33</b>	<b>31</b>	<b>23</b>	1.8 U	<b>7.7 J</b>	<b>12</b>	2.3E+03	7.3E+01	

**Table Notes:**

SVOCs Analytical Method: EPA Method 8270E  
 Target Analyte List (TAL) Metals Analytical Methods: EPA Method 6010D, 6020B, and 7471B [Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.  
 mg/kg - milligrams per kilogram or parts per million (ppm)  
 U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
 J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.  
 B - Indicates analyte was present in the Method Blank and sample.  
 D - Sample analyzed at a higher dilution factor to allow calibration of this analyte.  
 na - not applicable  
**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)  
 MDE Anticipated Typical Concentration (ATC) for Central Maryland (October 2018)

**Screening Evaluation Notes:**

SVOCs: **Red, bold, and underline** - Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.  
 No MDLs exceed the respective MDE Residential Soil Clean-up Standard.  
 Metals: **Bold and underline** - Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.  
**Red, bold, and underline** - Detected analyte concentration exceeds the MDE Residential Soil Clean-up Standard and the ATC for Central Maryland.  
 No MDLs exceed the respective MDE Residential Soil Clean-up Standard.

**Additional Screening Level Notes:**

<b>Analyte</b>	<b>MDE Residential Soil Standard</b>
Total Mercury	Mercury (elemental)

**Table 6**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Soil Vapor Sample Analytical Results - Detected Analytes**  
**October 7, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	SMP-VMP-10	SMP-VMP-11	SMP-VMP-11 [SMP-VMP-D]	SMP-VMP-12	SMP-VMP-13	MDE Residential Soil Gas Tier 1 RGs	MDE Residential Soil Gas Tier 2 RGs
<b>Dilution Factor</b>	2/20	2/20	2/20	6.67	2/20		
<b>Analyte Name</b>	<b>Concentration (ug/m<sup>3</sup>)</b>						
1,1,2,2-Tetrachloroethane	<b>120</b> *	<b>28</b>	<b>31</b>	4.6 U	<b>400</b> D *	8.4E+00	4.2E+01
1,1,2-Trichloroethane	<b>3.2</b>	<b>1.5</b> J	<b>1.4</b> J	3.6 U	<b>17</b>	4.2E+00	2.1E+01
1,2,4-Trichlorobenzene	1.5 U	1.5 U	<b>1.9</b> J	4.9 U	1.5 U	4.2E+01	2.1E+02
1,2,4-Trimethylbenzene	<b>4.0</b>	<b>7.8</b>	<b>7.9</b>	<b>6.3</b> J	<b>1.7</b> J	1.3E+03	6.3E+03
1,2-Dichloroethane	0.81 U	0.81 U	0.81 U	<b>4.6</b> J	<b>1.3</b> J	1.9E+01	9.4E+01
1,2-Dichlorotetrafluoroethane	<b>2.4</b> J	<b>2.2</b> J	<b>2.3</b> J	4.7 U	1.4 U	na	na
1,3,5-Trimethylbenzene	0.98 U	<b>3.5</b>	<b>3.3</b>	3.3 U	0.98 U	1.3E+03	6.3E+03
1,4-Dichlorobenzene	1.2 U	<b>1.2</b> J	<b>2.9</b>	4.0 U	<b>1.7</b> J	4.6E+01	2.3E+02
1-Ethyl-4-methyl benzene	0.98 U	0.98 U	0.98 U	<b>12</b>	0.98 U	na	na
2-Butanone (MEK)	<b>1.5</b>	<b>1.1</b> J	<b>2.3</b>	<b>2.8</b> J	<b>2.2</b>	1.1E+05	5.3E+05
4-Methyl-2-pentanone (MIBK)	2.3 U	2.3 U	<b>4.1</b> J	<b>17</b>	<b>3.1</b> J	6.4E+04	3.2E+05
Acetone	<b>6.9</b>	<b>7.3</b>	<b>12</b>	1.6 U	<b>44</b>	6.6E+05	3.3E+06
Acrolein	<u>0.46</u> U	<u>0.46</u> U	<b>0.58</b> J	<u>1.5</u> U	<b>0.87</b> J	4.2E-01	2.1E+00
Benzene	0.64 U	0.64 U	0.64 U	<b>7.6</b>	<b>3.1</b>	6.4E+01	3.2E+02
Bromodichloromethane	<b>5.8</b>	<b>21</b>	<b>21</b>	<b>4.5</b> J	<b>17</b>	1.3E+01	6.6E+01
Carbon Disulfide	<b>4.7</b>	<b>6.4</b>	<b>6.2</b>	<b>5.3</b> J	<b>6.2</b>	1.5E+04	7.3E+04
Chlorobenzene	0.92 U	<b>2.3</b>	<b>2.3</b>	<b>3.9</b> J	0.92 U	1.1E+03	5.3E+03
Chloroform	<b>31</b>	<b>140</b> *	<b>140</b> *	<b>120</b> *	<b>120</b> *	2.2E+01	1.1E+02
cis-1,2-Dichloroethylene	0.79 U	0.79 U	0.79 U	<b>35</b>	<b>24</b>	7.4E+02	3.7E+03
Dibromochloromethane	1.7 U	<b>1.9</b> J	<b>2.0</b> J	5.7 U	1.7 U	1.8E+01	9.1E+01
Dichlorodifluoromethane	<b>1.5</b> J	<b>1.5</b> J	<b>1.7</b> J	3.3 U	<b>1.9</b> J	2.1E+03	1.1E+04
Ethanol	<b>2.5</b>	<b>1.4</b> J	<b>2.4</b>	<b>2.1</b> J	<b>2.6</b>	na	na
Ethylbenzene	<b>1.2</b> J	<b>4.7</b>	<b>6.0</b>	<b>18</b>	<b>2.5</b>	2.0E+02	1.0E+03
Heptane	0.82 U	0.82 U	0.82 U	<b>3.9</b> J	0.82 U	8.4E+03	4.2E+04
Hexane	0.70 U	0.70 U	0.70 U	<b>17</b>	0.70 U	1.5E+04	7.3E+04
Isooctane	0.93 U	0.93 U	0.93 U	<b>3.6</b> J	0.93 U	na	na
Isopropyl alcohol	0.49 U	<b>0.80</b> J	<b>2.1</b> J	1.6 U	<b>1.6</b> J	4.2E+03	2.1E+04
Isopropylbenzene	0.98 U	<b>1.6</b> J	<b>1.9</b> J	3.3 U	0.98 U	8.4E+03	4.2E+04
m+p-Xylenes	<b>4.0</b>	<b>22</b>	<b>25</b>	<b>42</b>	<b>6.9</b>	2.1E+03	1.1E+04
Methylene chloride	0.69 U	<b>1.1</b> J	<b>1.1</b> J	<b>12</b> J	<b>1.4</b> J	1.3E+04	6.3E+04
Methyl-t-butyl ether (MTBE)	0.72 U	0.72 U	0.72 U	<b>12</b>	0.72 U	1.9E+03	9.4E+03
Naphthalene	<b>2.3</b>	<b>3.9</b>	<b>5.2</b>	<b>8.3</b>	<b>2.9</b>	1.4E+01	7.2E+01
n-Pentane (C5)	<b>0.89</b> J	<b>1.7</b>	<b>1.8</b>	<b>44</b>	<b>3.2</b>	2.1E+04	1.1E+05
n-Propylbenzene	0.98 U	<b>1.1</b> J	<b>1.5</b> J	3.3 U	0.98 U	2.1E+04	1.1E+05
o-Xylene	<b>3.7</b>	<b>9.1</b>	<b>10</b>	<b>11</b>	<b>2.6</b>	2.1E+03	1.1E+04
Propylene	0.34 U	<b>0.90</b>	<b>1.0</b>	<b>71</b>	<b>3.5</b>	6.4E+04	3.2E+05
tert-Butyl alcohol (TBA)	<b>1.9</b> J	<b>0.67</b> J	<b>0.73</b> J	2.0 U	<b>16</b>	na	na
Tetrachloroethylene (PCE)	<b>590</b> D	<b>500</b> D	<b>530</b> D	<b>6.2</b> J	<b>120</b>	8.4E+02	4.2E+03
Tetrahydrofuran	<b>2.4</b>	<b>9.8</b>	<b>8.5</b>	<b>3.1</b> J	<b>12</b>	4.2E+04	2.1E+05
Toluene	<b>2.0</b>	<b>5.1</b>	<b>6.8</b>	<b>25</b>	<b>8.6</b>	1.1E+05	5.3E+05
trans-1,2-Dichloroethylene	0.79 U	0.79 U	0.79 U	<b>3.0</b> J	<b>27</b>	1.5E+03	7.4E+03
Trichloroethylene	<b>19</b>	<b>12</b>	<b>15</b>	<b>7.0</b> J	<b>250</b> D *	4.2E+01	2.1E+02
Trichlorofluoromethane	<b>1.2</b> J	<b>1.8</b> J	<b>1.8</b> J	3.7 U	<b>1.2</b> J	1.5E+04	7.3E+04
Vinyl chloride	0.51 U	0.51 U	0.51 U	<b>2.9</b> J	0.51 U	3.4E+01	1.7E+02
Xylenes, Total	<b>7.7</b>	<b>31</b>	<b>35</b>	<b>53</b>	<b>9.5</b>	2.1E+03	1.1E+04

**Table Notes:**

VOC Analytical Method: EPA TO-15 Low Level  
 [Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

ug/m<sup>3</sup> - micrograms per cubic meter

RG - Remediation Goal

CR - Cancer Risk

HI - Hazard Index

AF - Attenuation Factor

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Limit of Quantitation (LOQ); therefore, result is an estimated concentration.

D - Sample analyzed at a higher dilution factor to allow calibration of this analyte.

na - not applicable

**Bold** - Detected analyte concentration

**Residential Screening Levels (SLs):**

Primary SL: MDE Residential Soil Gas Tier 1 RGs (Sept 2019) (at CR = 1x10<sup>-5</sup> or HI = 1 and AF of 20)  
 Secondary SL: MDE Residential Soil Gas Tier 2 RGs (Sept 2019) (at CR = 1x10<sup>-5</sup> or HI = 1 and AF of 100)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective Primary SL.

\* - Detected analyte concentration exceeds the respective Secondary SL.

Underline - MDL exceeds the respective Primary SL.

**Additional Screening Level Notes**

Analyte	MDE RGs
m+p-Xylenes	Total Xylenes
o-Xylene	o-Xylene

**Table 7**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Crawl Space Air and Outdoor Air Sample Analytical Results - Detected Analytes**  
**October 6 - 7, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	HSI-105M-CSA	HSI-105R-CSA	HSI-107M-CSA	HSI-107R-CSA [HSI-107R-CSA]	HSI-OAA	EPA Residential Indoor Air RSLs
<b>Dilution Factor</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>	<b>1.25/5</b>	
<b>Sample Type</b>	Crawl Space Air				Outdoor Air	
<b>Analyte Name</b>	Concentration (ug/m <sup>3</sup> )					
2-Butanone (MEK)	<b>0.68 J</b>	<b>0.72 J</b>	<b>0.81</b>	<b>1.2</b>	<b>0.95</b>	5.2E+03
2-Hexanone (MBK)	0.51 U	0.51 U	0.51 U	0.51 U	<b>0.72 J</b>	3.1E+01
4-Methyl-2-pentanone (MIBK)	1.4 U	1.4 U	<b>1.6 J</b>	<b>3.3</b>	<b>2.0 J</b>	3.1E+03
Acetone	<b>8.2</b>	<b>11</b>	<b>21</b>	<b>33</b>	<b>21</b>	3.2E+04
Acrolein	<u>0.29 U</u>	<b>0.40 J</b>	<b>0.46 J</b>	<b>0.46 J</b>	<b>0.37 J</b>	2.1E-02
Benzene	0.40 U	0.40 U	0.40 U	<b>0.50 J</b>	<b>0.45 J</b>	3.6E+00
Carbon Disulfide	<b>0.44 J</b>	<b>2.3</b>	0.39 U	0.39 U	0.39 U	7.3E+02
Chloromethane	<b>0.99</b>	<b>0.99</b>	<b>1.1</b>	<b>1.0</b>	<b>1.1</b>	9.4E+01
Dichlorodifluoromethane	<b>2.3 J</b>	<b>2.2 J</b>	<b>2.2 J</b>	<b>2.2 J</b>	<b>2.1 J</b>	1.0E+02
Ethanol	<b>3.2</b>	<b>1.6</b>	<b>5.6</b>	<b>7.6</b>	<b>5.1</b>	na
Hexane	<b>0.49 J</b>	<b>0.59 J</b>	<b>0.58 J</b>	<b>0.74 J</b>	<b>0.72 J</b>	1.4E+02
Isopropyl alcohol	<b>0.55 J</b>	<b>1.0 J</b>	<b>3.2</b>	<b>5.0</b>	<b>1.1 J</b>	2.1E+02
m+p-Xylenes	0.54 U	0.54 U	0.54 U	<b>0.69 J</b>	<b>0.84 J</b>	1.0E+02
Methylene chloride	<b>1.2 J</b>	<b>1.4 J</b>	<b>1.3 J</b>	<b>2.0 J</b>	<b>1.5 J</b>	6.3E+02
Naphthalene	<b>1.1 J</b>	<b>1.2 J</b>	<b>1.2 J</b>	<b>1.9</b>	<b>1.2 J</b>	8.3E-01
n-Pentane (C5)	<b>1.1</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>	<b>1.5</b>	1.0E+03
Propylene	0.22 U	<b>1.1</b>	<b>0.34 J</b>	<b>0.60</b>	<b>0.54</b>	3.1E+03
tert-Butyl alcohol (TBA)	0.38 U	0.38 U	<b>14</b>	<b>41</b>	<b>100 D</b>	na
Toluene	<b>0.88 J</b>	<b>0.83 J</b>	<b>0.86 J</b>	<b>1.2</b>	<b>1.2</b>	5.2E+03
Trichlorofluoromethane	<b>1.2 J</b>	<b>1.2 J</b>	<b>1.2 J</b>	<b>1.2 J</b>	<b>1.1 J</b>	na

**Table Notes:**

VOC Analytical Method: EPA TO-15 Low Level  
 [Sample ID] - Incorrect Sample Identification as shown on the COC and in the Lab Report.  
 ug/m<sup>3</sup> - micrograms per cubic meter  
 U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
 J - Detected above the MDL but below the Limit of Quantitation (LOQ); therefore, result is an estimated concentration.  
 D - Sample analyzed at a higher dilution factor to allow calibration of this analyte.  
 na - not applicable  
**Bold** - Detected analyte concentration

**Residential Screening Levels (SLs):**

EPA Residential Indoor Air Regional Screening Levels (RSLs) (May 2020) (at CR = 1x10<sup>-5</sup> or HI = 1)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.  
Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes**

<b>Analyte</b>	<b>EPA RSLs</b>
m+p-Xylenes	Total Xylenes
o-Xylene	o-Xylene

**ATTACHMENT A**  
**CASCADE HRSC DATA REPORT**



10/19/2020

# **FINAL DATA REPORT**

## **High Resolution Site Characterization**

### **Membrane Interface Probe – Hydraulic Profiling Tool (MIHPT)**

Montgomery Brothers Dump

North East, Maryland

202201119

**Prepared for:**

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## PROGRAM NARRATIVE

Cascade Technical Services (Cascade) is pleased to present this data report to CGS for the Membrane Interface Probe – Hydraulic Profiling Tool (MIHPT) services provided between September 08 and September 11, 2020 at the site in North East, Maryland.

In total, Cascade advanced 50 MIHPT investigation borings to depths up to approximately 20 feet below ground surface (bgs). The locations are shown on the attached site plan. For each of these locations, Cascade generated a continuous log of the electrical conductivity (EC), and relative (semi-quantitative) concentration of volatile organic compounds versus depth. Those logs are attached to this report.

All field work, including the operation of the MIP, HPT, and EC probes, was conducted by trained professionals and all quality assurance/quality control (QA/QC) measurements associated with these data were found to be within the tolerances set forth in the Standard Operating Procedures with no exceptions.

Additional information regarding the MIP, HPT, and EC systems is provided in the reference material included in this report.

I certify that the data package is in compliance with the terms and conditions of the contract and meets Cascade's data quality standards, with the exceptions detailed above (if any). Release of the data contained in this package has been authorized by the data manager or his/her designee, as verified by the following signature.

Brad Carlson  
Regional Manager, Site Characterization

## QA/QC SUMMARY TABLE

Provided below is a summary of QA/QC information and any deviations from the standard operating procedure that occurred during the field activities.

Location	Date	Time	Total Depth (ft bgs)	Response Test	Comments / Deviations
HSI-HRSC-01	September 8, 2020	09:43:57	19.15	Pass	None
HSI-HRSC-02	September 8, 2020	10:12:52	20.1	Pass	None
HSI-HRSC-03	September 8, 2020	10:48:34	23.4	Pass	None
HSI-HRSC-04	September 8, 2020	11:17:54	20.85	Pass	None
HSI-HRSC-05	September 8, 2020	11:41:44	20.25	Pass	None
HSI-HRSC-06	September 8, 2020	12:46:09	20.2	Pass	None
HSI-HRSC-07	September 8, 2020	13:28:08	20.1	Pass	None
HSI-HRSC-08	September 8, 2020	14:10:45	20.1	Pass	None
HSI-HRSC-09	September 8, 2020	14:38:20	20.1	Pass	None
HSI-HRSC-10	September 8, 2020	15:01:53	20.25	Pass	None
HSI-HRSC-11	September 8, 2020	15:23:41	20.1	Pass	None
HSI-HRSC-12	September 8, 2020	15:46:24	20.1	Pass	None
HSI-HRSC-13	September 9, 2020	08:43:49	23.5	Pass	None
HSI-HRSC-14	September 9, 2020	09:04:14	20.05	Pass	None
HSI-HRSC-15	September 9, 2020	09:31:46	20.05	Pass	None
HSI-HRSC-16	September 9, 2020	10:00:30	20.05	Pass	None
HSI-HRSC-17	September 9, 2020	10:31:59	20.15	Pass	None
HSI-HRSC-18	September 9, 2020	11:01:10	20.05	Pass	None
HSI-HRSC-19	September 9, 2020	11:32:45	20.1	Pass	None
HSI-HRSC-20	September 9, 2020	12:01:47	20.15	Pass	None
HSI-HRSC-21	September 9, 2020	13:15:57	20.1	Pass	None
HSI-HRSC-22	September 9, 2020	13:45:30	20.05	Pass	None
HSI-HRSC-23	September 9, 2020	14:13:42	20.1	Pass	None
HSI-HRSC-24	September 9, 2020	14:40:52	18.4	Pass	None
HSI-HRSC-25	September 9, 2020	15:07:26	20.25	Pass	None
HSI-HRSC-26	September 9, 2020	15:34:09	20.1	Pass	None
HSI-HRSC-27	September 9, 2020	15:52:58	20.05	Pass	None
HSI-HRSC-28	September 10, 2020	08:52:30	20.1	Pass	None
HSI-HRSC-29	September 10, 2020	09:33:09	22.2	Pass	None
HSI-HRSC-30	September 10, 2020	10:00:36	20.1	Pass	None
HSI-HRSC-31	September 10, 2020	10:29:13	20.05	Pass	None

## CASCADE HIGH RESOLUTION SITE CHARACTERIZATION

HSI-HRSC-32	September 10, 2020	10:54:22	20.45	Pass	None
HSI-HRSC-33	September 10, 2020	11:17:18	20.05	Pass	None
HSI-HRSC-34	September 10, 2020	11:41:48	20.2	Pass	None
HSI-HRSC-35	September 10, 2020	12:52:43	20.15	Pass	None
HSI-HRSC-36	September 10, 2020	13:17:17	20.1	Pass	None
HSI-HRSC-37	September 10, 2020	13:43:22	20.05	Pass	None
HSI-HRSC-38	September 10, 2020	14:50:13	17.6	Pass	None
HSI-HRSC-39	September 10, 2020	15:19:52	20.05	Pass	None
HSI-HRSC-40	September 10, 2020	15:44:18	20.05	Pass	None
HSI-HRSC-41	September 11, 2020	08:42:16	20	Pass	None
HSI-HRSC-42	September 11, 2020	09:05:39	20.1	Pass	None
HSI-HRSC-43	September 11, 2020	09:29:18	20.2	Pass	None
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HSI-HRSC-45	September 11, 2020	10:21:43	20.05	Pass	None
HSI-HRSC-46	September 11, 2020	10:48:06	20.25	Pass	None
HSI-HRSC-47	September 11, 2020	12:33:29	19.45	Pass	None
HSI-HRSC-48	September 11, 2020	12:59:12	20.8	Pass	None
HSI-HRSC-49	September 11, 2020	13:23:41	20.6	Pass	None
HSI-HRSC-50	September 11, 2020	14:09:01	19	Pass	None

## PROJECT DETAILS

This section provides information regarding the Cascade and Tidewater personnel present at the site during the field activities and the specific equipment used during field activities.

### Cascade Personnel

The following personnel were present during field activities at the Site:

- Nick King, HRSC Specialist
- Alfredo Garcia and Devin Murdock, Tidewater DPT Rig Operators

### Cascade Equipment

The following HRSC equipment was utilized during field activities at the Site:

- Geoprobe 66 Series direct push drill rig
- 1.75-inch O.D. MH6534 MIHPT probe
- Geoprobe MP6500 MIP Controller (Nitrogen Flow and Heater)
- Geoprobe K6300 HPT Controller
- Geoprobe FI 6000 Computer
- HP 5890 Gas Chromatograph
- Electrical Conductivity
- Electron Capture Detector (ECD)
- Halogen Specific Detector (XSD)
- Photoionization Detector (PID) with 10.6 eV Lamp
- Flame Ionization Detector (FID)
- 150-foot MIHPT trunkline
- 1.75-inch O.D. drive rods
- Ultra-High Purity Nitrogen
- Ultra-High Purity Hydrogen

## **INTERPRETATION AND RECOMMENDATIONS**

This section provides a summary of the data collected during this investigation program, Cascade's recommendations for updating the conceptual site model, and suggestions for next steps in the site management process, including remediation, if appropriate.

### **Data Interpretation**

Interpretation of this data set was not included in the contracted scope of work.

### **Recommendations**

Additional recommendations were not included in this scope of work. Please contact the Cascade Project Manager if you would like to discuss further investigation or remediation alternatives. We would be excited to continue to learn about this site and assist you in meeting your site management goals.

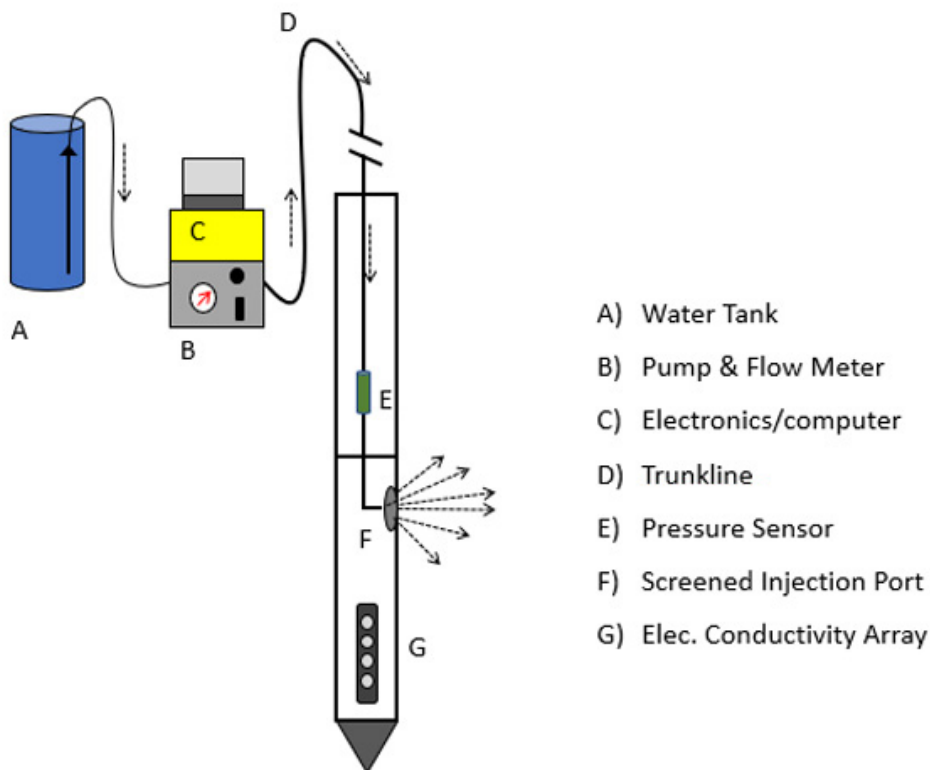


## REFERENCE MATERIAL

This section provides information useful in understanding and interpreting the data logs generated as part of this HRSC investigation.

### HPT System Overview

The hydraulic profiling tool creates a log of the relative formation permeability versus depth in real time as the probe is advanced into the subsurface. It operates by injecting clean water at a constant flow rate from an aboveground reservoir through the direct push rods and out into the surrounding soil via an injection port on the side of the probe. Simultaneously, sensors record the flow rate, the back pressure required by the pump to maintain that flow rate, and the current depth of the probe. These measurements are collected by the onboard software and an estimated hydraulic conductivity (K) value is calculated and plotted alongside the other measurements in real time.



Generalized schematic of the HPT tool. Source: Geoprobe HPT Standard Operating Procedure

## Reference Testing and Dissipation Tests

Reference testing is conducted to ensure that the HPT pressure transducer is working correctly and to evaluate the condition of the HPT injection screen. The HPT reference test also calculates atmospheric pressure which is required to obtain static water level readings and to determine the estimated K values for the log. The reference test utilizes an apparatus consisting of a tube with a valve located 6 inches above the HPT injection screen and the top of the tube located another 6 inches above the valve. When the tube is filled completely with water, the 12 inches of water will supply an additional 0.433 pounds per square inch (psi) of pressure on the injection screen (in addition to atmospheric pressure). When the valve is opened that additional pressure drops to 0.217 psi at the HPT injection screen. The accuracy of the pressure transducer can be assessed by comparing the pressure readings when the tube is filled and when the tube is filled only to the valve; this is done both with and without the pump running. A tolerance of plus or minus 10 percent is applied for a passing test.

Dissipation tests are conducted to determine the hydrostatic pressure of the water column above the transducer during logging. To conduct a dissipation test, advancement of the tooling is stopped, the HPT pump is stopped, and flow drops to zero. The pressure applied to the HPT pressure transducer by the injection of water into the formation begins to dissipate. This pressure should dissipate to a value equal to atmospheric pressure plus the hydrostatic pressure applied by water in the formation. In post-processing of the HPT log, the dissipation value and the atmospheric pressure determined during reference testing can be used to remove the influence of atmospheric and hydrostatic pressures from the values recorded by the transducer. These adjustments result in the corrected HPT pressure log which is a measure of the properties of the subsurface material.

## HPT Data Interpretation

An HPT log typically includes several types of data, many of which are reduced by the software to generate the estimated K values. The dissipation testing results conducted by the operator during the advancement of the tool are used to adjust the HPT back pressure values to account for the hydrostatic pressure of the water column above the probe during advancement. This adjustment results in the corrected HPT pressure data set. Subsequently, the corrected HPT pressure and the HPT flow data sets are used to calculate the estimated K values.

The most useful measurement from the HPT is the estimated K log, which as noted above, is a measure of the relative permeability of the formation versus depth. Despite the fact that these data are presented in units typical of traditional hydraulic conductivity (feet per day), they are not traditional K values and should not be used in many of the applications where a traditional K value would be appropriate. The accuracy of the estimated K values is typically one to two orders of magnitude, which would clearly generate a significant amount of uncertainty if used for any seepage velocity or risk-based calculations. The estimated K values are, however, extremely useful for understanding what zones of the subsurface are exhibiting higher or lower relative permeability.

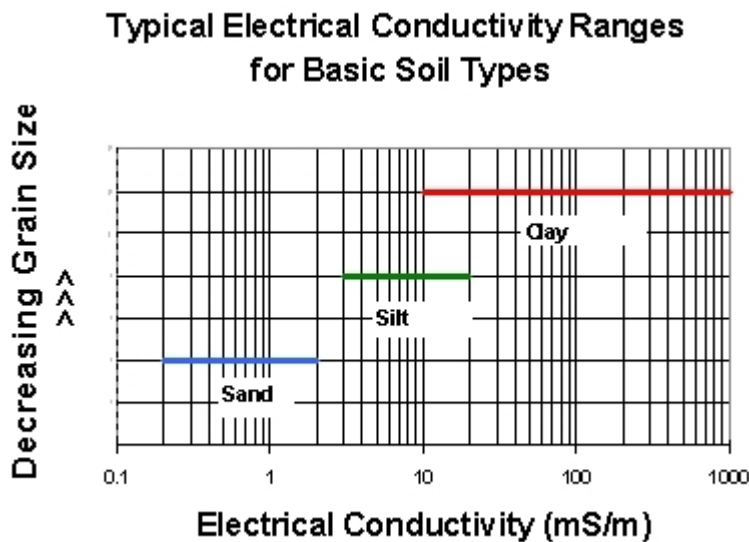
As a secondary data set from this tool, the HPT back pressure can be helpful in the design of injected remedies. The back pressure is a measure of the level of difficulty faced injecting the

## CASCADE HIGH RESOLUTION SITE CHARACTERIZATION

clean water from the HPT system into the formation; this is analogous to level of success an injection may achieve at the same depths.

### EC Data Interpretation

In a general sense, the electrical conductivity of a soil varies with grain size. This correlation can be utilized to gather an understanding of the subsurface from the EC data. The EC measured in the subsurface can also vary based on changes in mineralogy, groundwater geochemistry, and contamination. It is important, then, to confirm the accuracy of the EC data for this use by collecting confirmatory soil borings from your site.



Relationship between electrical conductivity and grain size. Source: Geoprobe Electrical Conductivity System Standard Operating Procedure

### MIP System Overview

The MIP is commonly used for quickly determining the locations of volatile organic compound (VOC) source zones and plumes. The MIP is most valuable in terms of its ability to provide “spatial correspondence”, meaning that where the MIP detector responses show peaks, there is likely to be elevated soil and groundwater concentrations. The MIP can also be used to provide extremely valuable data to streamline subsequent investigative tasks and improve the overall efficiency and accuracy of the site investigation. Vertical profiles, cross-sectional views and three-dimensional images of contaminant distribution can all be produced from the electronic data generated by the MIP logs. The capability of providing reliable, real-time information allows for informed and timely decision making in the field. The MIP works by heating the soils and groundwater adjacent to the probe to 120 degrees Celsius. This volatilizes the VOCs and allows them to transfer through a Teflon membrane via a combination of concentration and pressure gradients. These VOC are then swept into a nitrogen gas loop that carries them to a series of detectors housed at ground surface. Continuous chemical profiles are generated from each hole. The electrical conductivity of the soil is also measured, and these logs can be compared to the chemical logs to better understand the relationship between the lithology and the contaminant distribution. The MIP is also commonly deployed with an integrated Hydraulic

## CASCADE HIGH RESOLUTION SITE CHARACTERIZATION

Profiling Tool (HPT) which uses an injection logging system to generate a continuous log of relative formation permeability versus depth. The following section discusses the various detection systems that are commonly used with the MIP system.



An MIHPT probe and trunkline. Source: Geoprobe

### Halogen Specific Detector

Responds to halogenated compounds (i.e., chlorinated, fluorinated, brominated) only.

The XSD converts compounds containing halogens to their oxidation products and free halogen atoms by oxidative pyrolysis. These halogen atoms are adsorbed onto the activated platinum surface of the detector probe assembly resulting in an increase thermionic emission. This emission current provides a corresponding voltage that is measured via an electrometer circuit in the detector controller.

### Electron Capture Detector

Responds to halogenated compounds (i.e., chlorinated, fluorinated, brominated) only, and is more sensitive to compounds that are more highly halogenated. This results in a greater response to compounds like tetrachloroethene and trichloroethene versus cis-1,2-dichloroethene and vinyl chloride.

The ECD uses a radioactive beta emitter to ionize some of the carrier gas and produce a current between a biased pair of electrodes. When organic molecules contain electronegative functional groups, such as halogens, phosphorous, and nitro groups pass by the detector, they capture some of the electrons and reduce the current measured between the electrodes.

### **Photoionization Detector**

Responds to all VOCs, including chlorinated compounds and petroleum hydrocarbons.

The PID sample stream flows through the detector's reaction chamber where it is continuously irradiated with high energy ultraviolet light. When compounds are present that have a lower ionization potential than that of the irradiation energy (10.6 electron volts with standard lamp), they are ionized. The ions formed are collected in an electrical field, producing an ion current that is proportional to compound concentration. The ion current is amplified and output by the gas chromatograph's electrometer.

### **Flame Ionization Detector**

Responds to combustible VOCs only (i.e., petroleum hydrocarbons).

The FID consists of a hydrogen / air flame and a collector plate. The effluent from the gas chromatograph (trunkline) passes through the flame, which breaks down organic molecules and produces ions. The ions are collected on a biased electrode and produce an electric signal.

### **Response Testing**

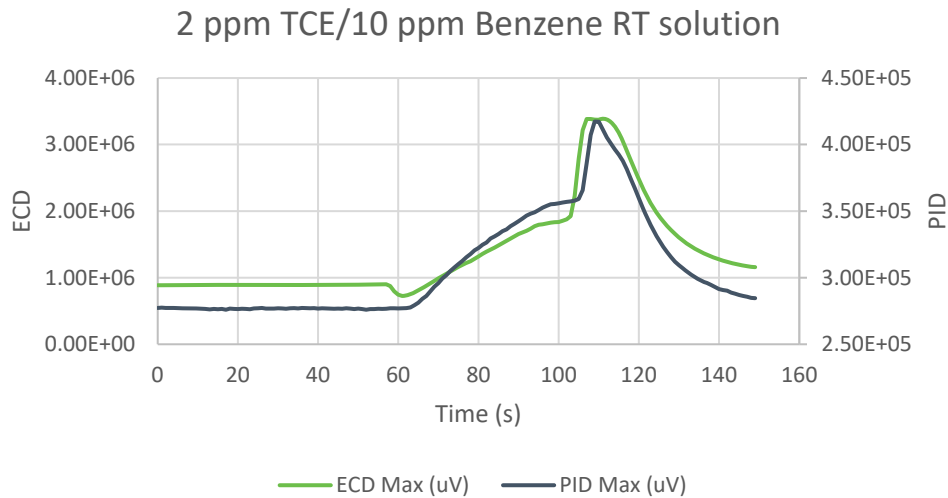
Response testing (RT) is an integral part of ensuring the quality of data from the MIP system. Response testing is conducted before and after each log to ensure the validity of the data and the integrity of the system. The RT provides a traceable indication that the MIP system detectors are adequately responding and allows the carrier gas trip time to be calculated on the physical components of the system.

Cascade uses acceptance criteria to evaluate the RTs as described in the manufacturer's SOP. The acceptable criteria for an RT is defined for specified concentrations of RT solution and a specified carrier gas trunkline flow rate. Documenting the RTs provides a level of quality assurance for each MIP project and allows operators and data reviewers to identify systems in need of maintenance.



## CASCADE HIGH RESOLUTION SITE CHARACTERIZATION

The trip time is measured by recording the time between the moment when the testing vial is placed over the membrane and the response of the detectors, as viewed on the MIP data acquisition unit. The baseline and peak response value are also recorded for comparison with other MIP response tests. The trip time is entered manually into the data acquisition system account for the time it takes for compounds in the subsurface to travel the length of the trunkline during the MIP boring, thereby increasing the accuracy of depth measurements.



An example response test for trichloroethene and benzene

## MIP Data Interpretation

Detector responses, measured in microVolts ( $\mu\text{V}$ ), are a semi-quantitative indication of relative contaminant concentrations. Minimum and maximum detector responses are collected at each depth interval. A comparison of the responses of the four detectors at each interval is necessary to gather the most information about the compounds present. In general, responses on the XSD, ECD, and PID indicate the presence of chlorinated compounds (i.e., no response on the FID). Responses only on the PID and FID indicate that petroleum hydrocarbons are present. In some cases, comparison of the magnitudes of the XSD and ECD responses can indicate whether the mix of chlorinated compounds is more degraded (e.g., lower ECD responses than those on the XSD) or more source-enriched (e.g., higher ECD responses than those on the XSD). Similar comparison can be accomplished with the PID and FID data: higher responses on the FID indicate the presence of a higher percentage of combustible hydrocarbon compounds.

Confirmatory soil borings are recommended following each MIP investigation. The confirmatory program should be designed to include a small number of boring locations advanced in the immediate vicinity of the MIP locations. The design of this confirmatory boring program will be dependent on the goals of the overall investigation and the specific site conditions. Generally, areas with high detector responses should be targeted for soil sample collection, as well as areas on the boundary of the impacted zone where there are important considerations (nearby receptors, property boundaries, important design considerations for future remediation, etc.).



## SITE PLAN

**FIGURE 4**

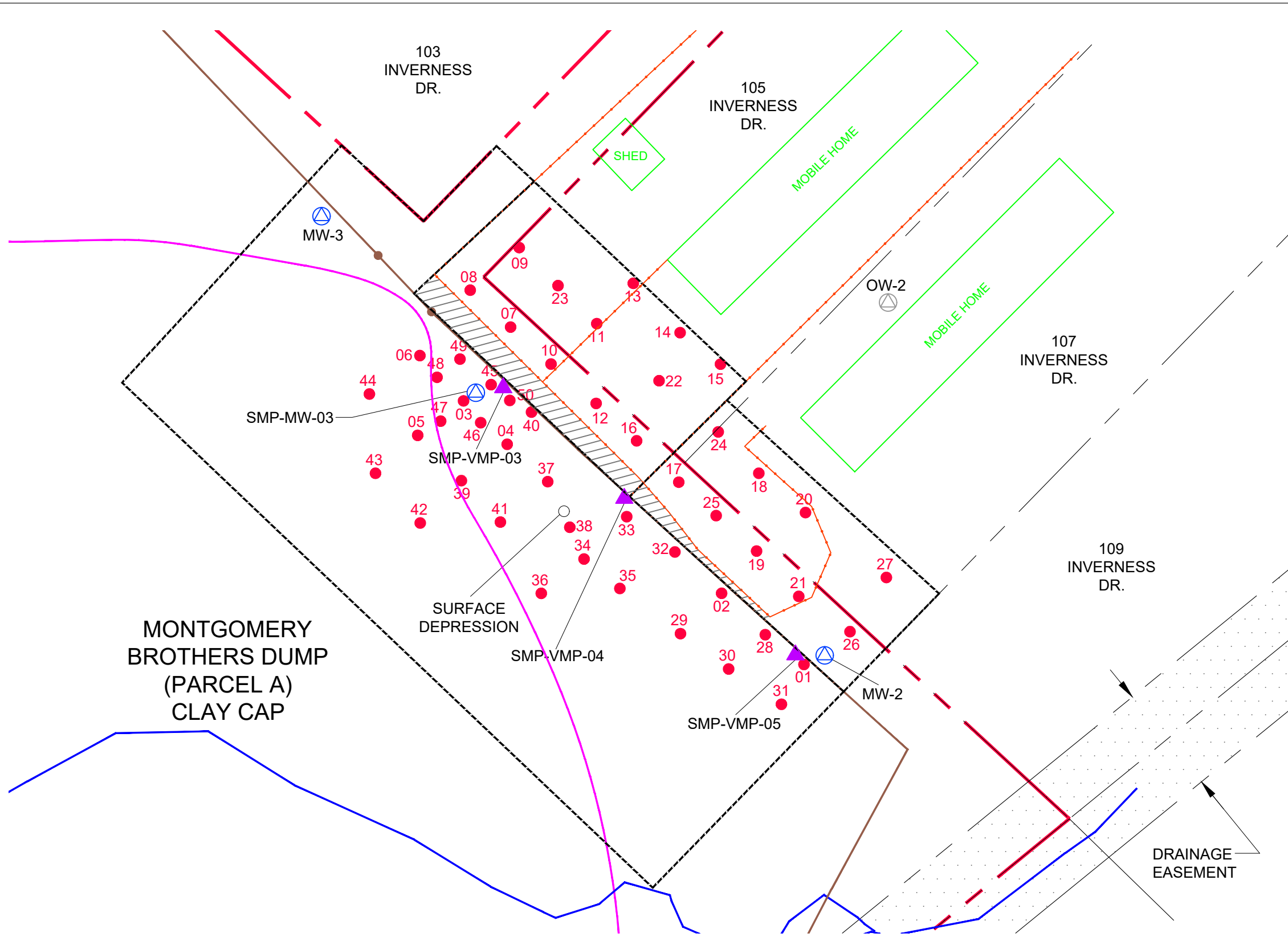
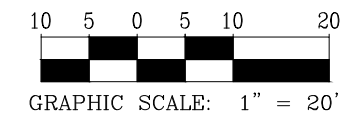
**HRSC BORING  
LOCATION MAP**

Montgomery Brothers Dump  
Inverness Drive  
North East, MD 21901

CGS Project No. CG-09-0423.10  
Prepared by: M. Walsh  
Date: 11-06-2020

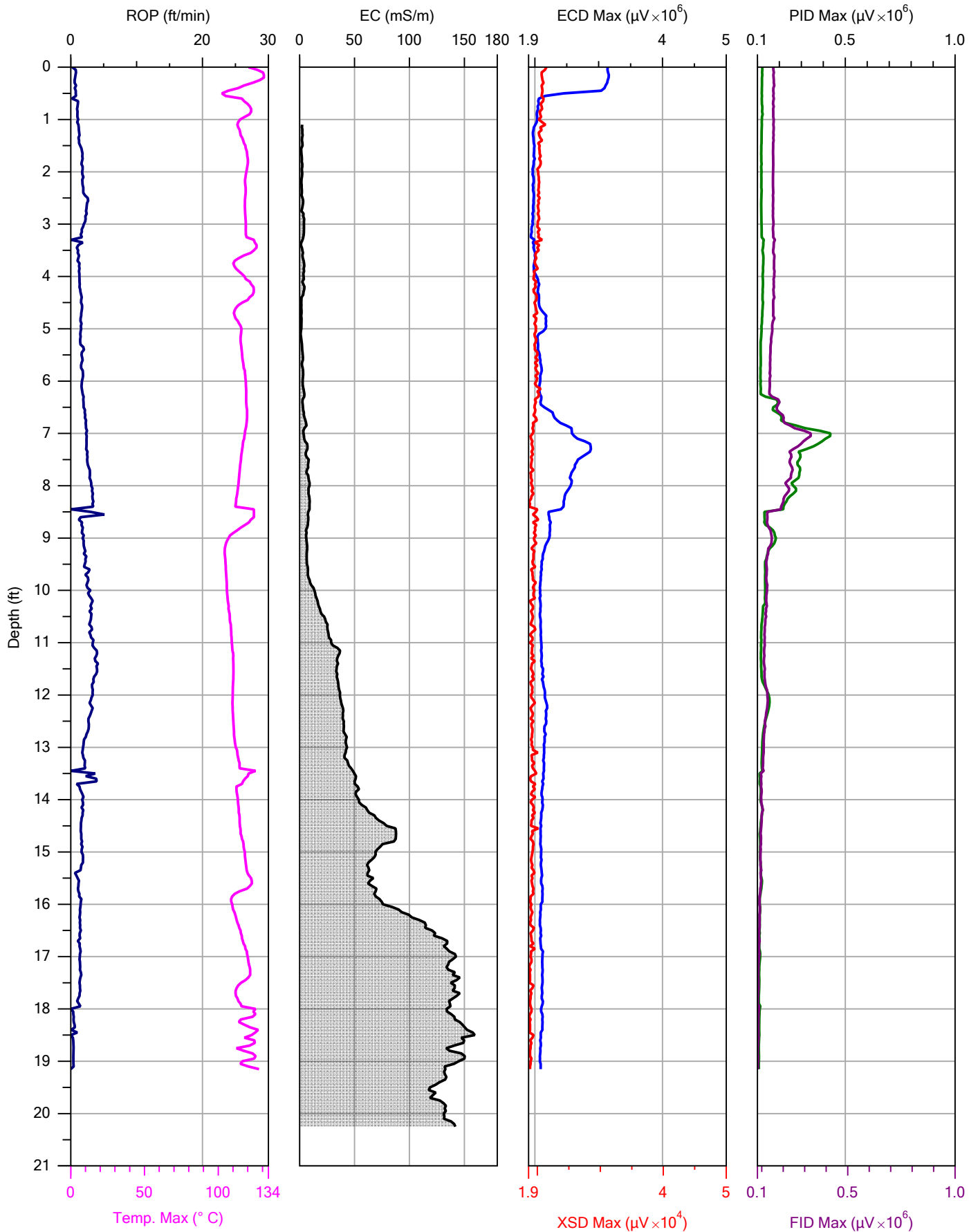
**LEGEND**

- - - Site Property Boundary
- - - Other Property Boundary
- Limits of Clay Cap Installed in 2007
- Drainage Easement
- Guard Rail
- Mapped Center Line of Stream Segment
- Groundwater Monitoring Well
- Vapor Monitoring Point
- Abandoned Groundwater Monitoring Well
- 01 HRSC Boring Location
- Fencing Related to 105 and 107 Inverness
- - - AOC Outline
- Existing structure on 105 and 107 Inverness
- Limited Access Area



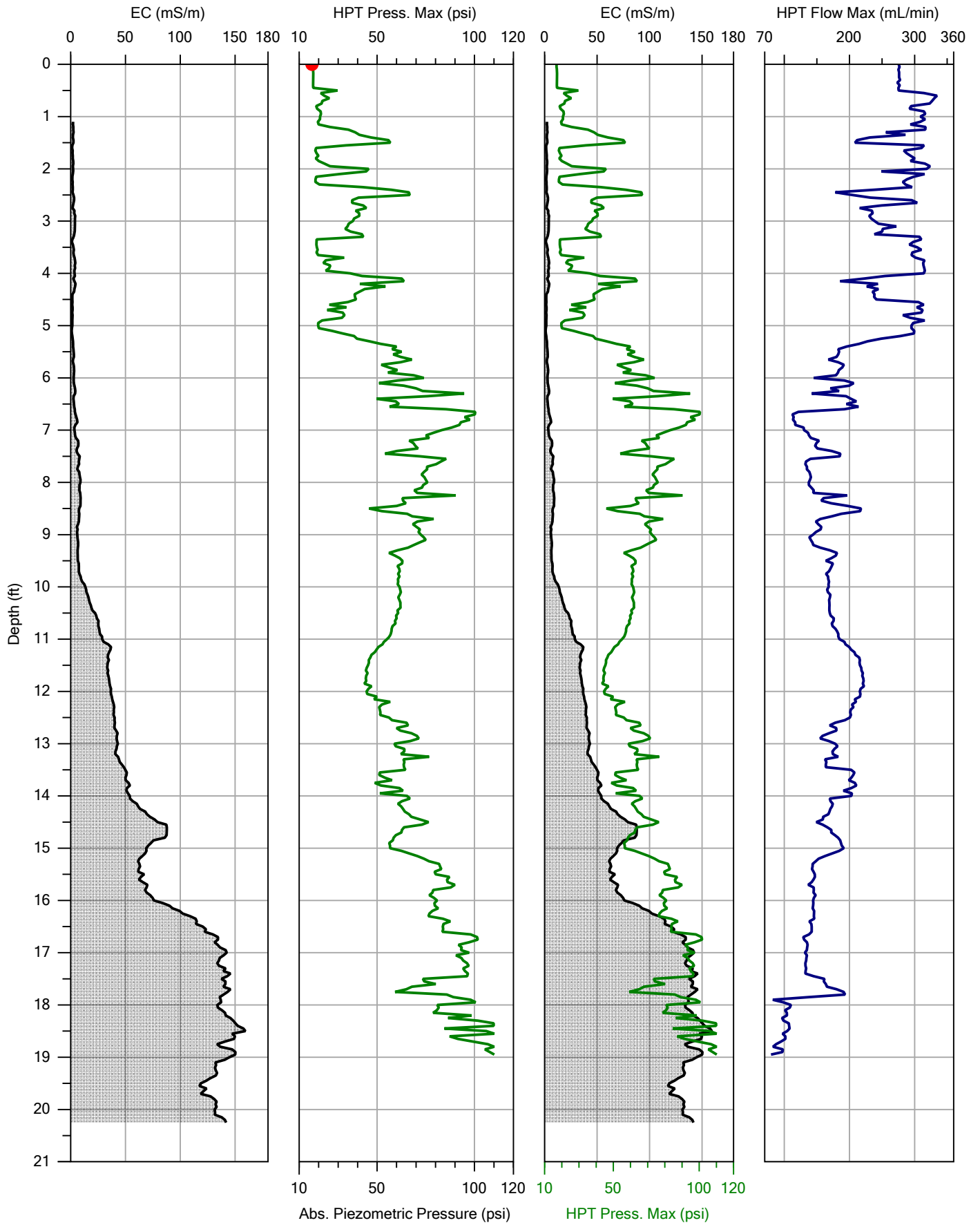


## **INVESTIGATION DATA PLOTS**



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-01.MHP
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				Location:	northeast

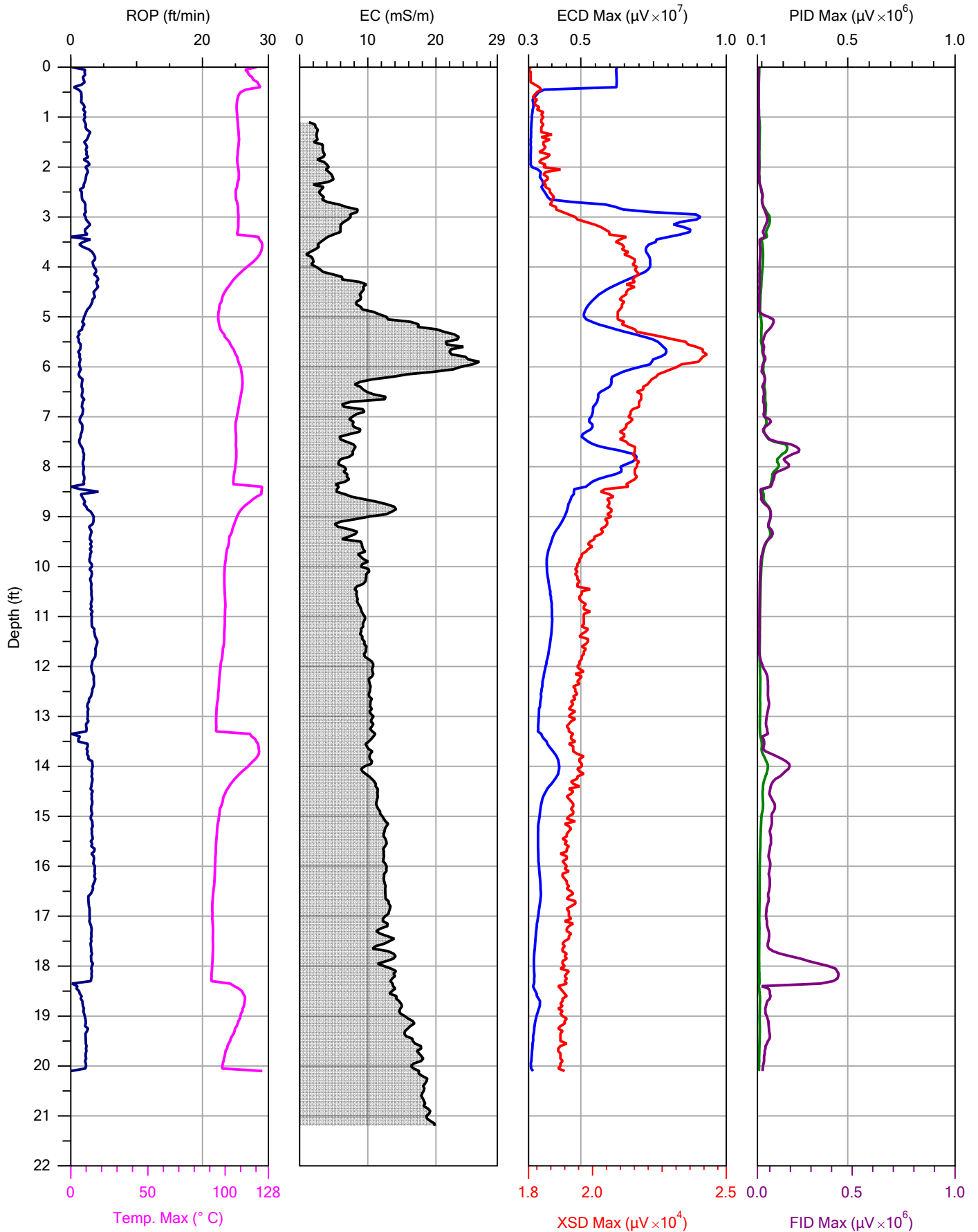




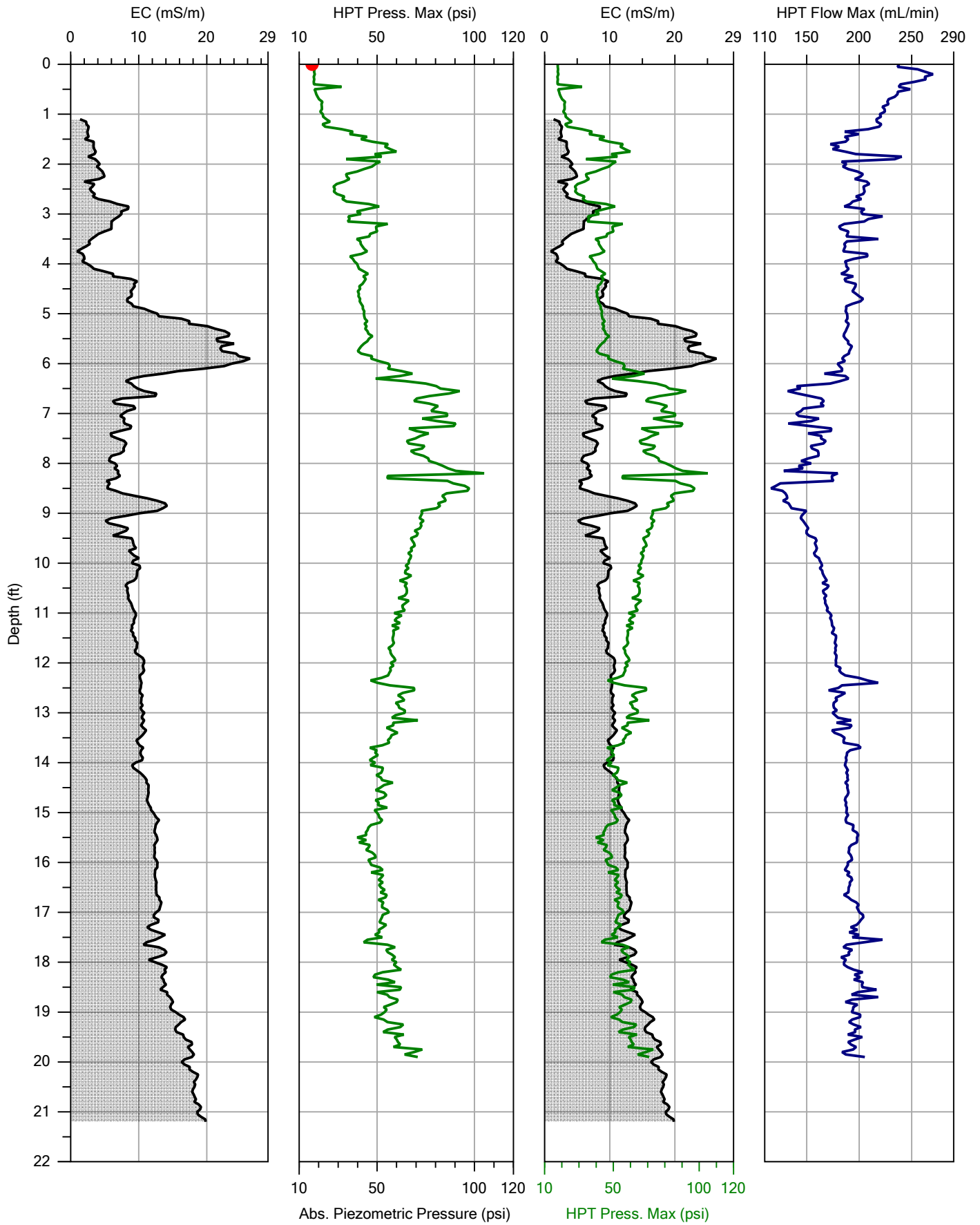
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Location:	northeast



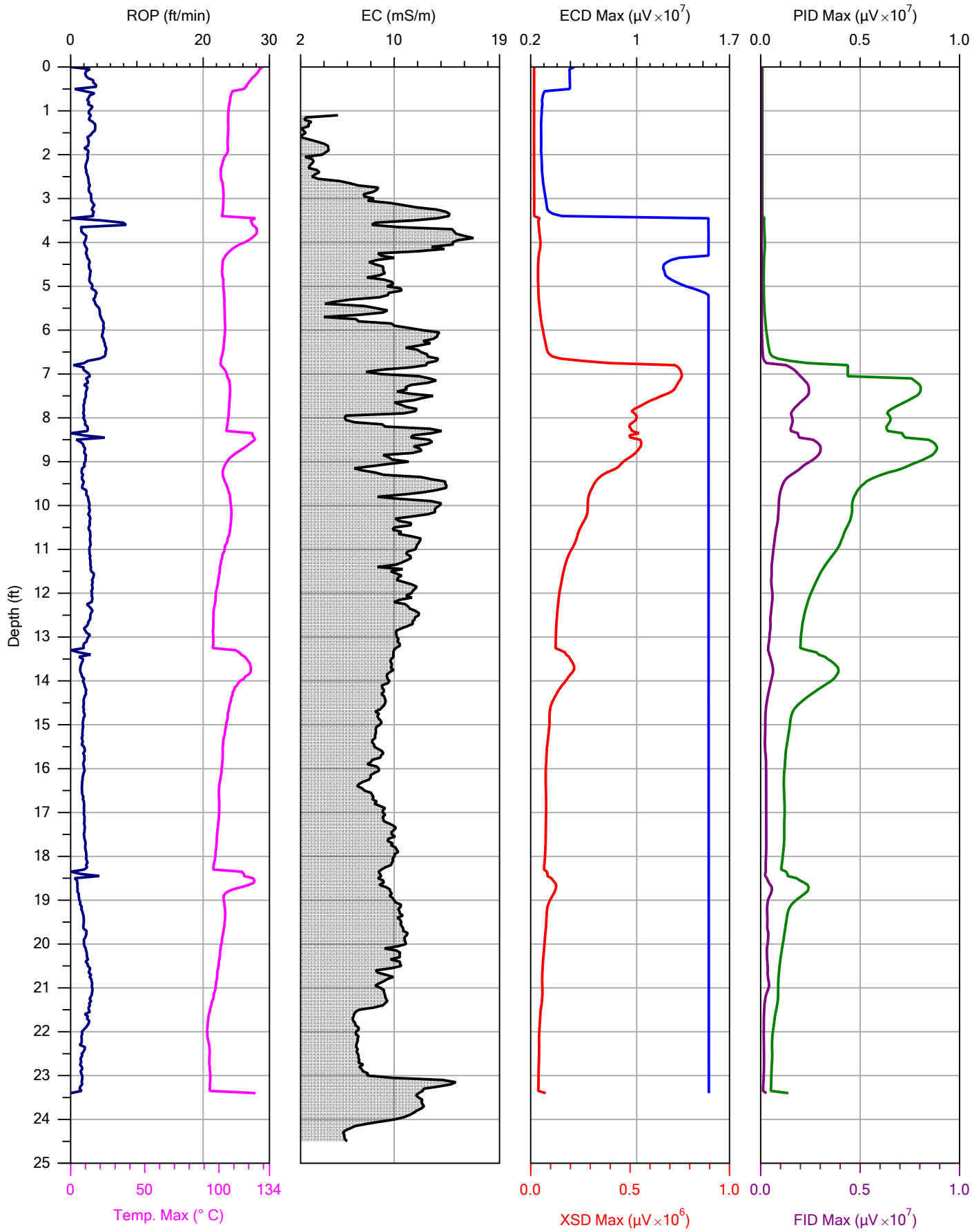
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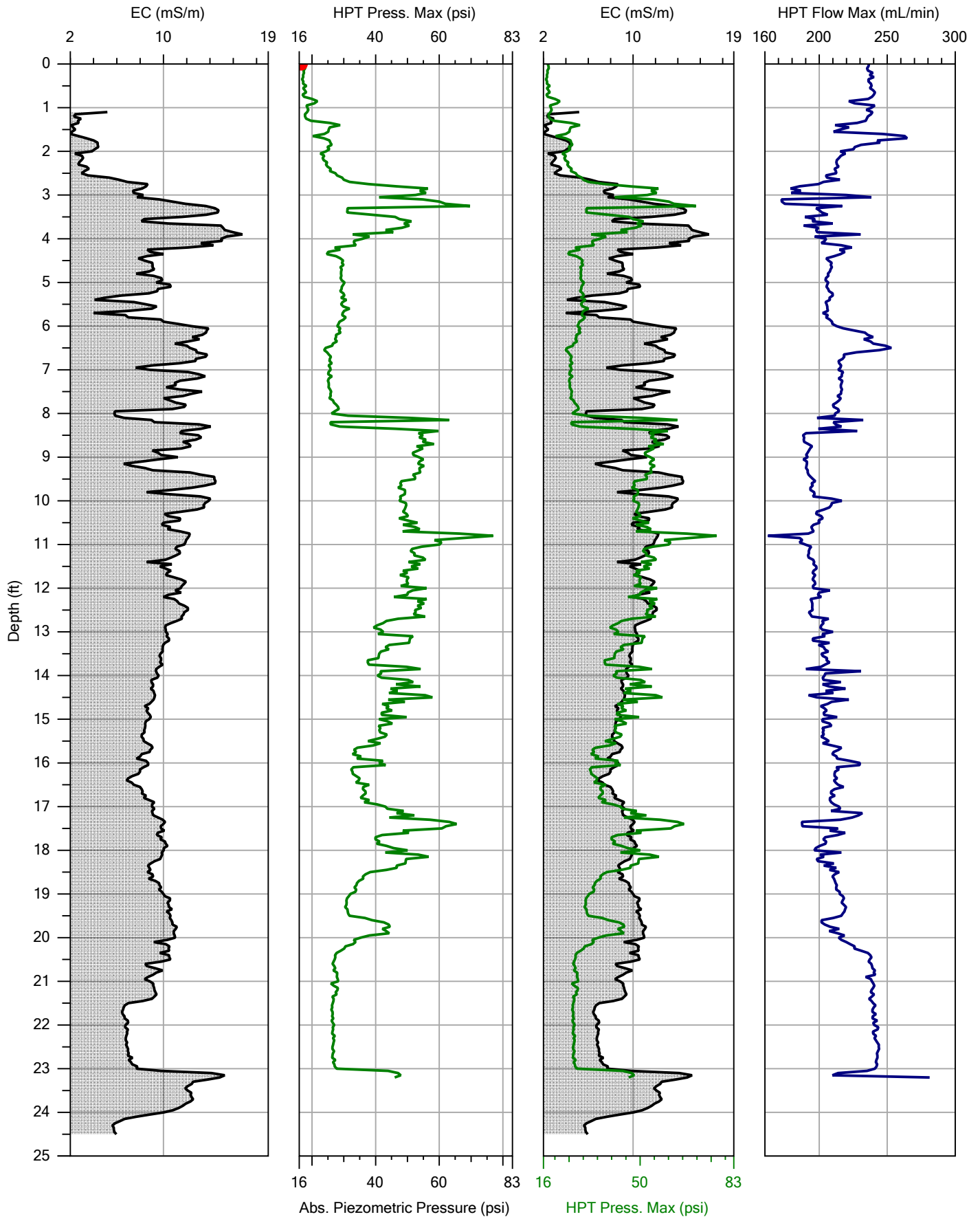
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 Client: tidewater

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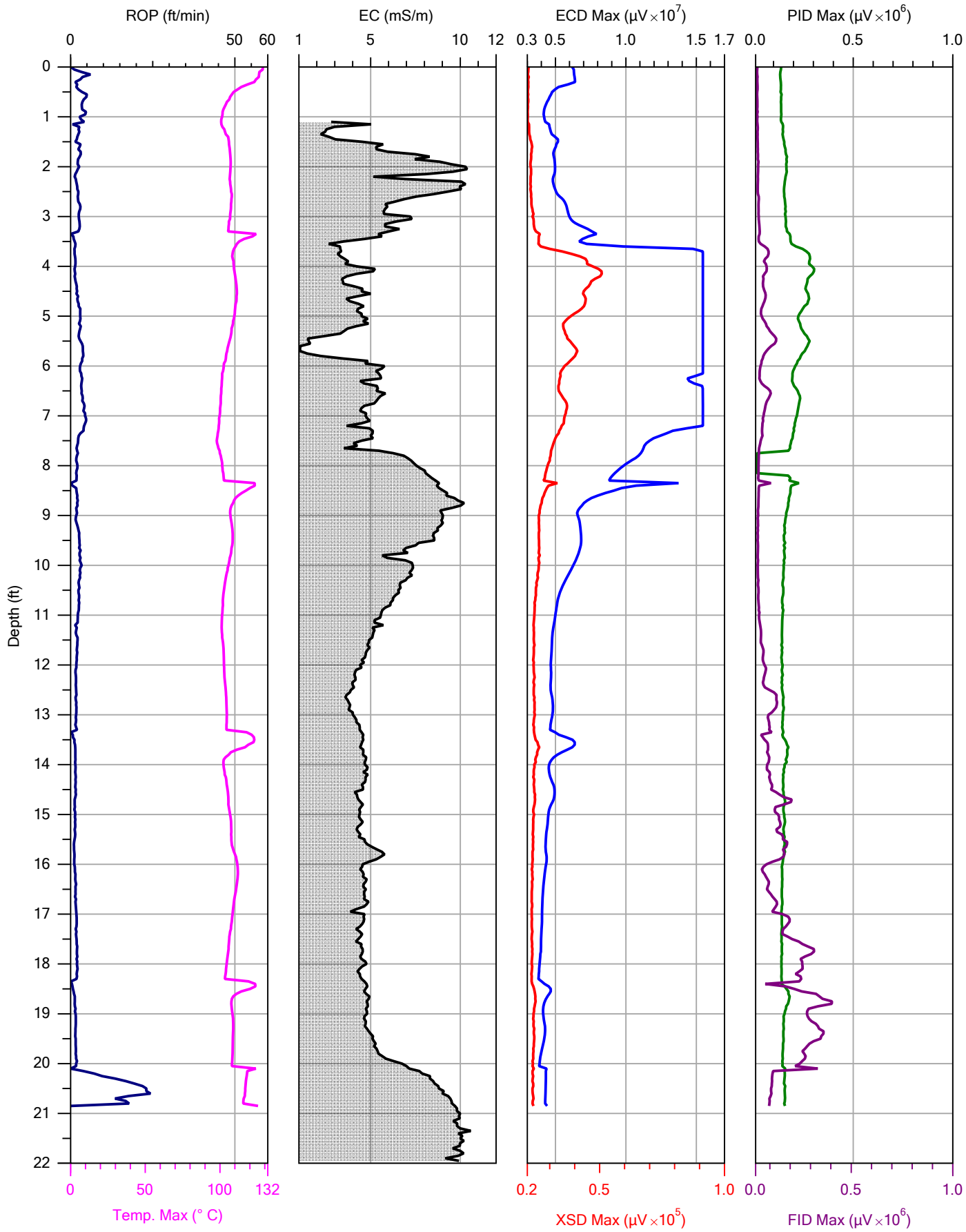


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 Client: tidewater

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Date:	09/08/20
Location:	northeast



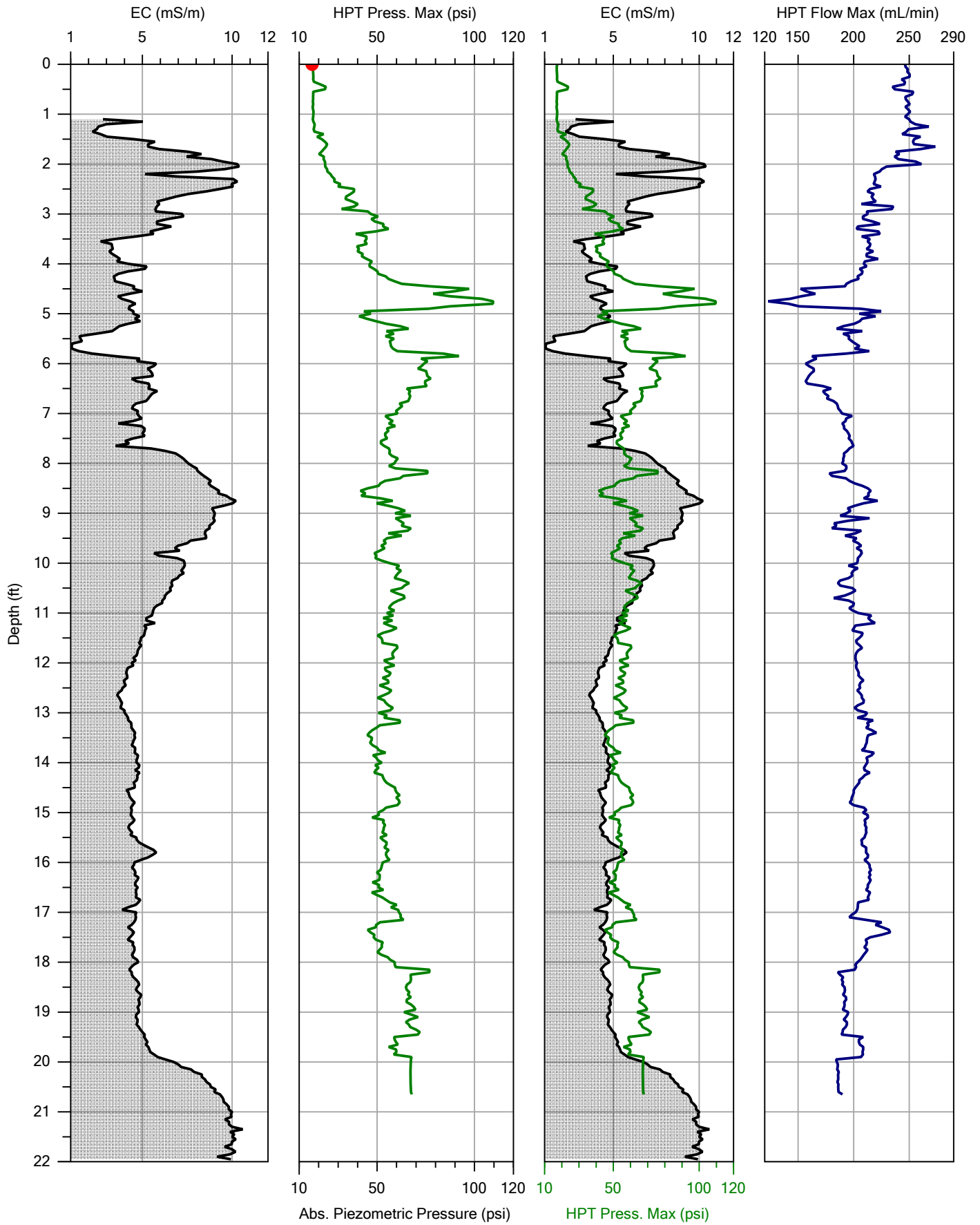


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 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

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Date:	09/08/20
Location:	northeast

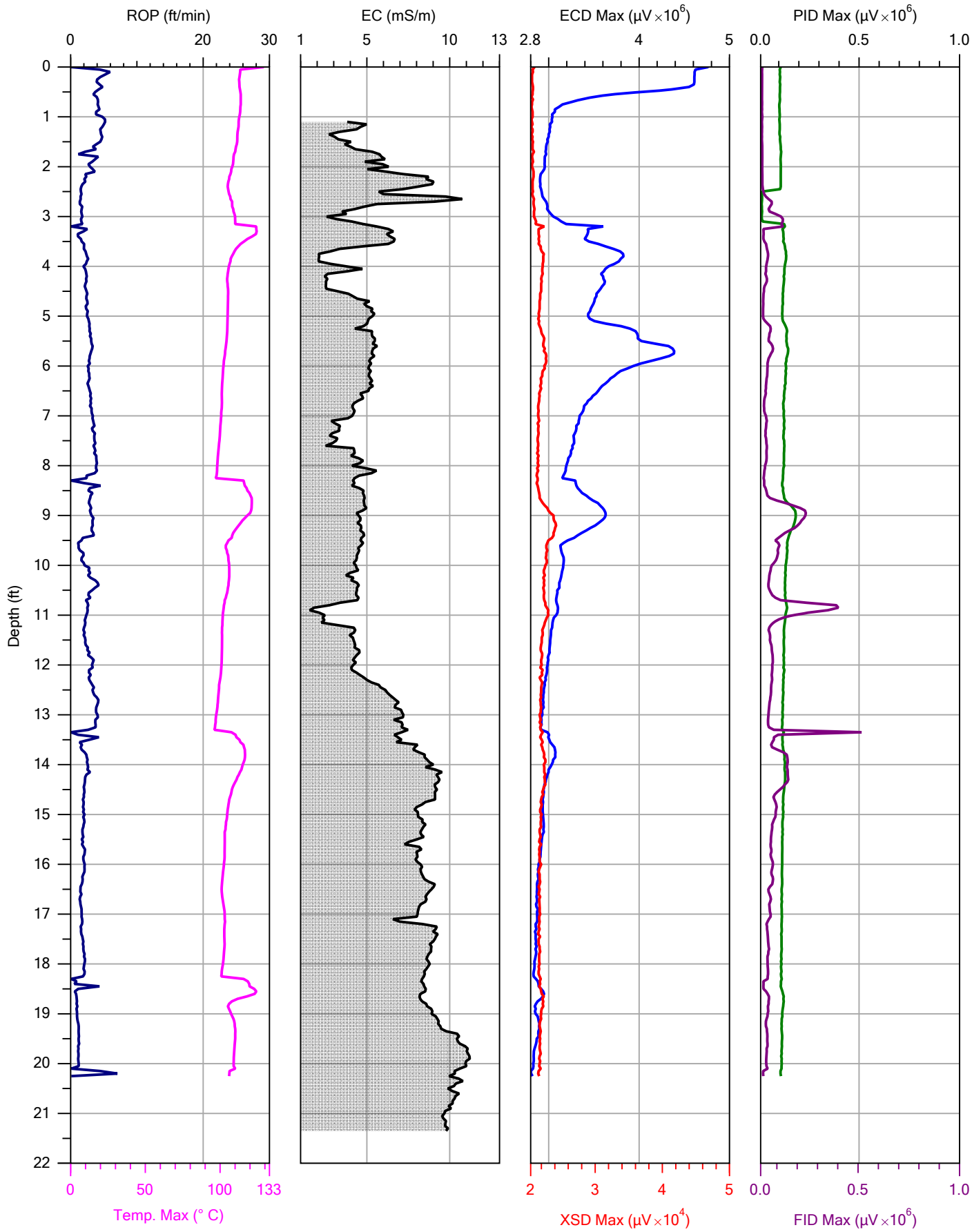




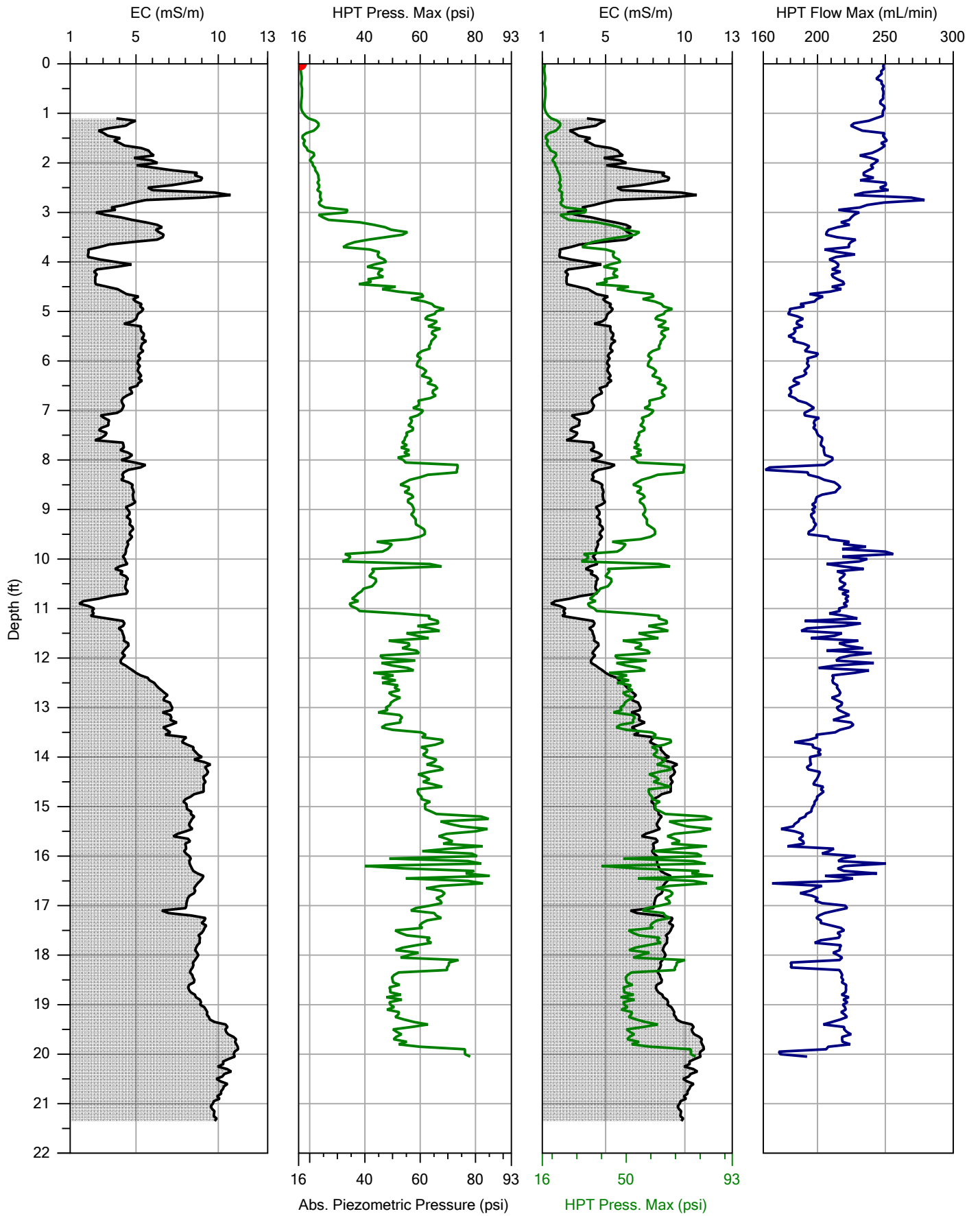
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Operator: Nick K  
 Client: tidewater

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Location:	northeast



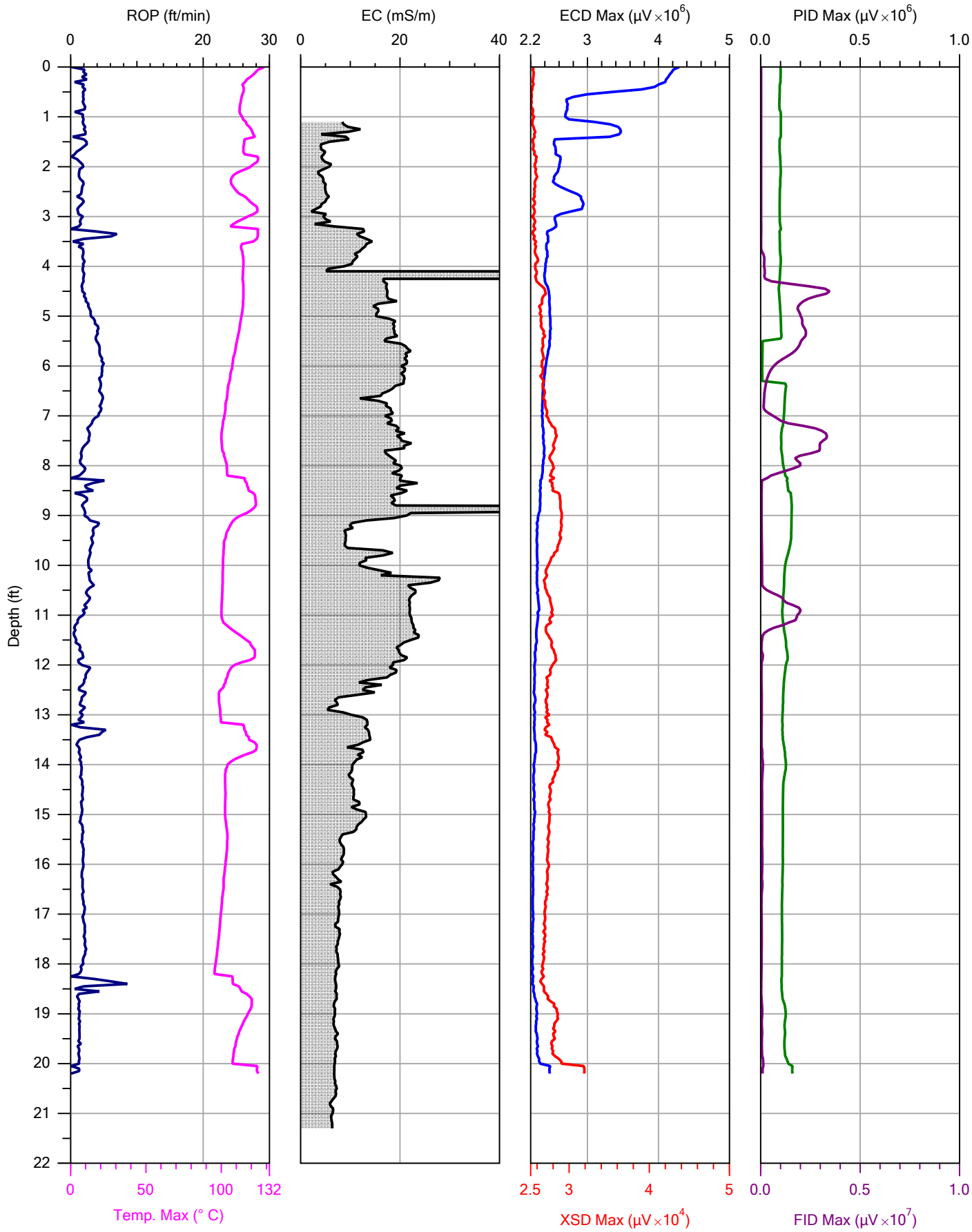
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				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

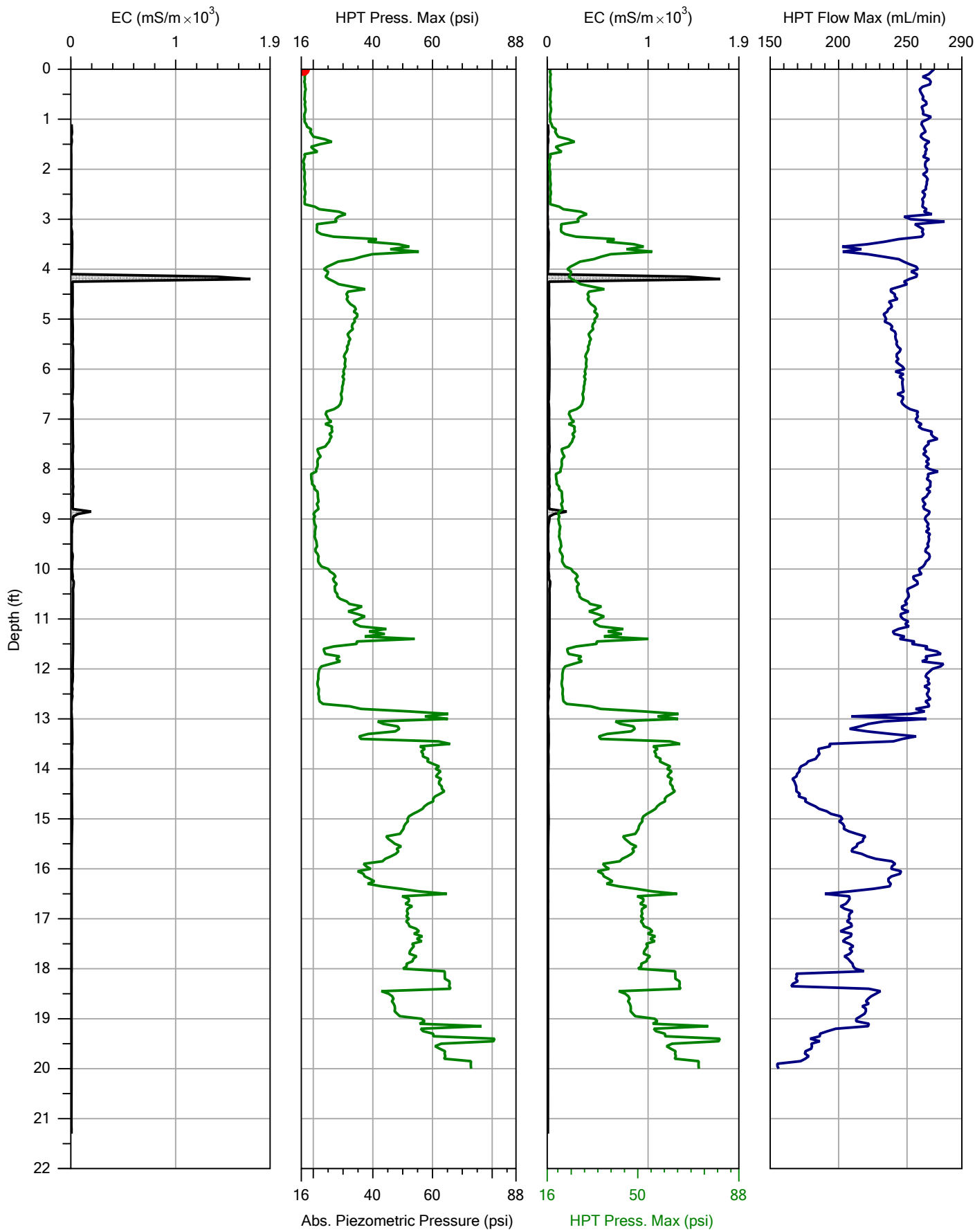
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Company: Cascade  
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Operator: Nick K  
 Client: tidewater

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Location:	northeast



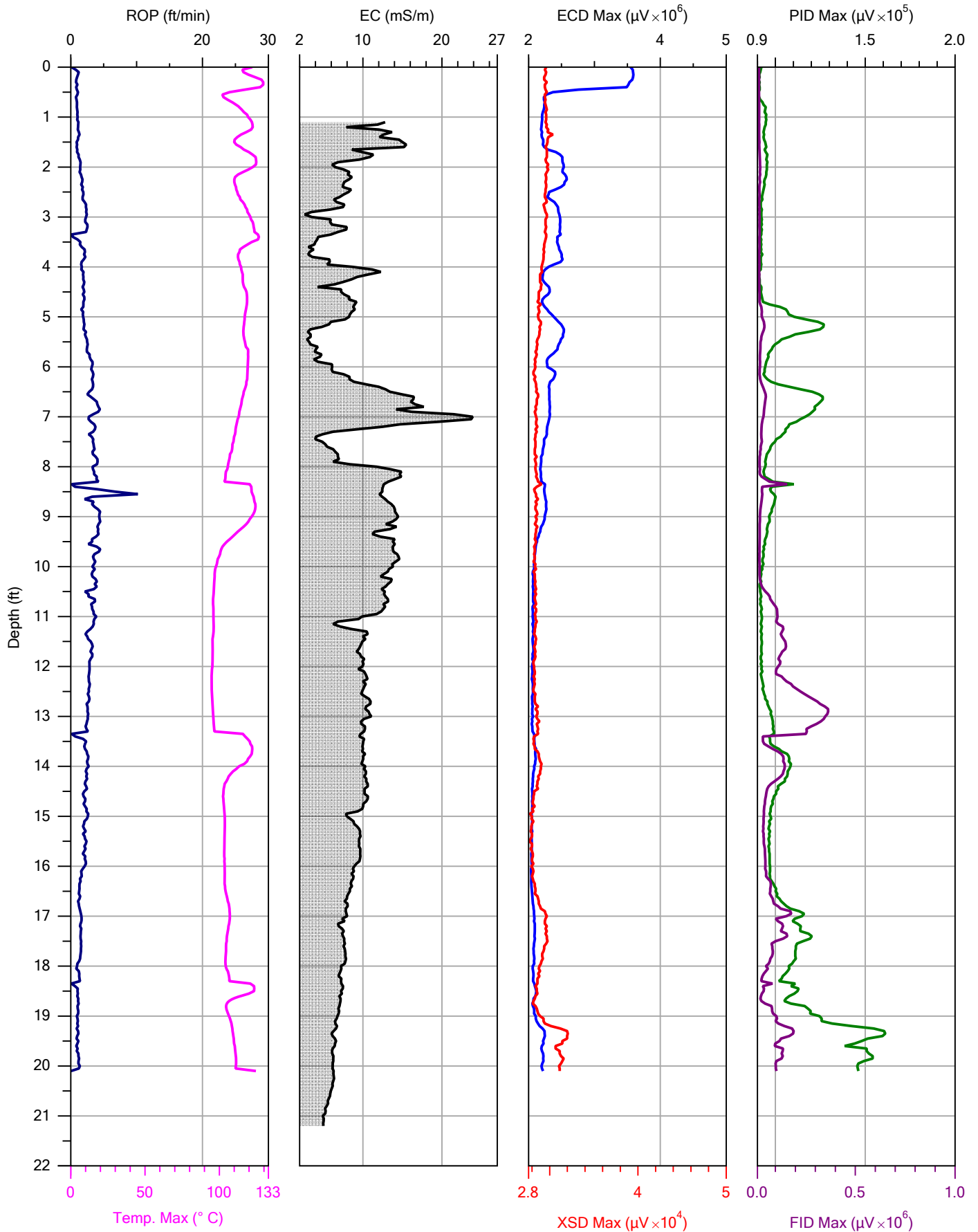
Abs. Piezometric Pressure (psi)      HPT Press. Max (psi)



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

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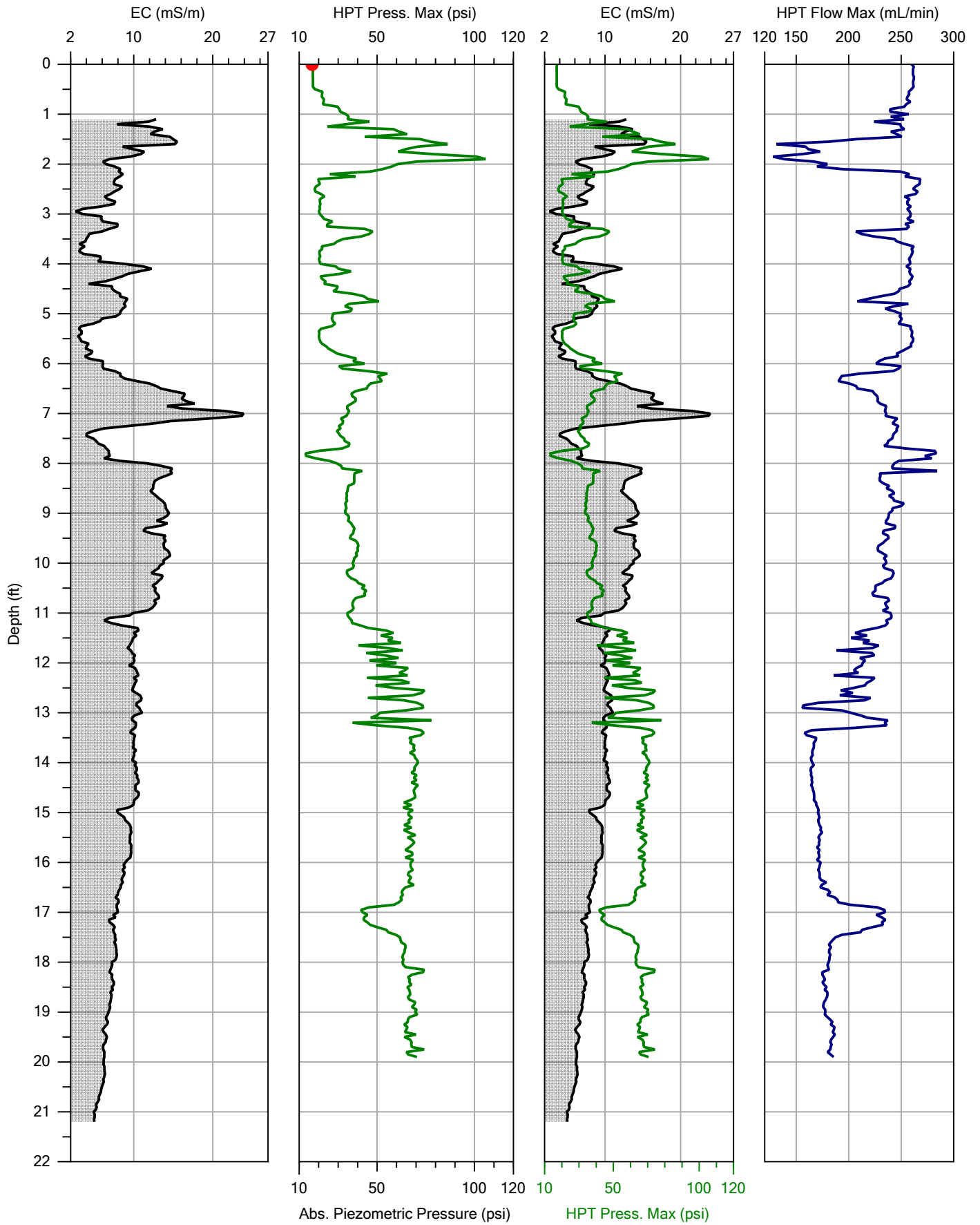


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Client:	tidewater

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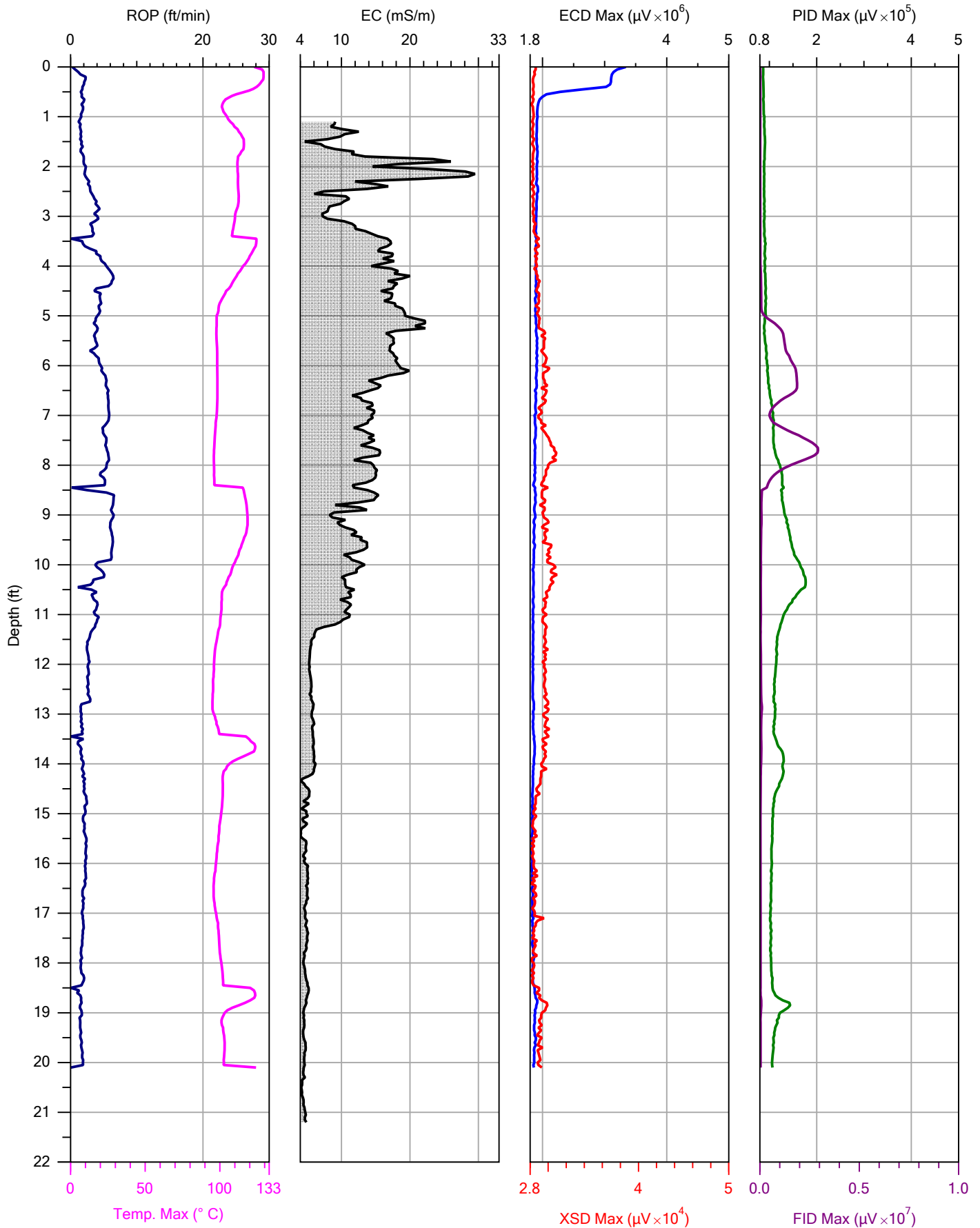




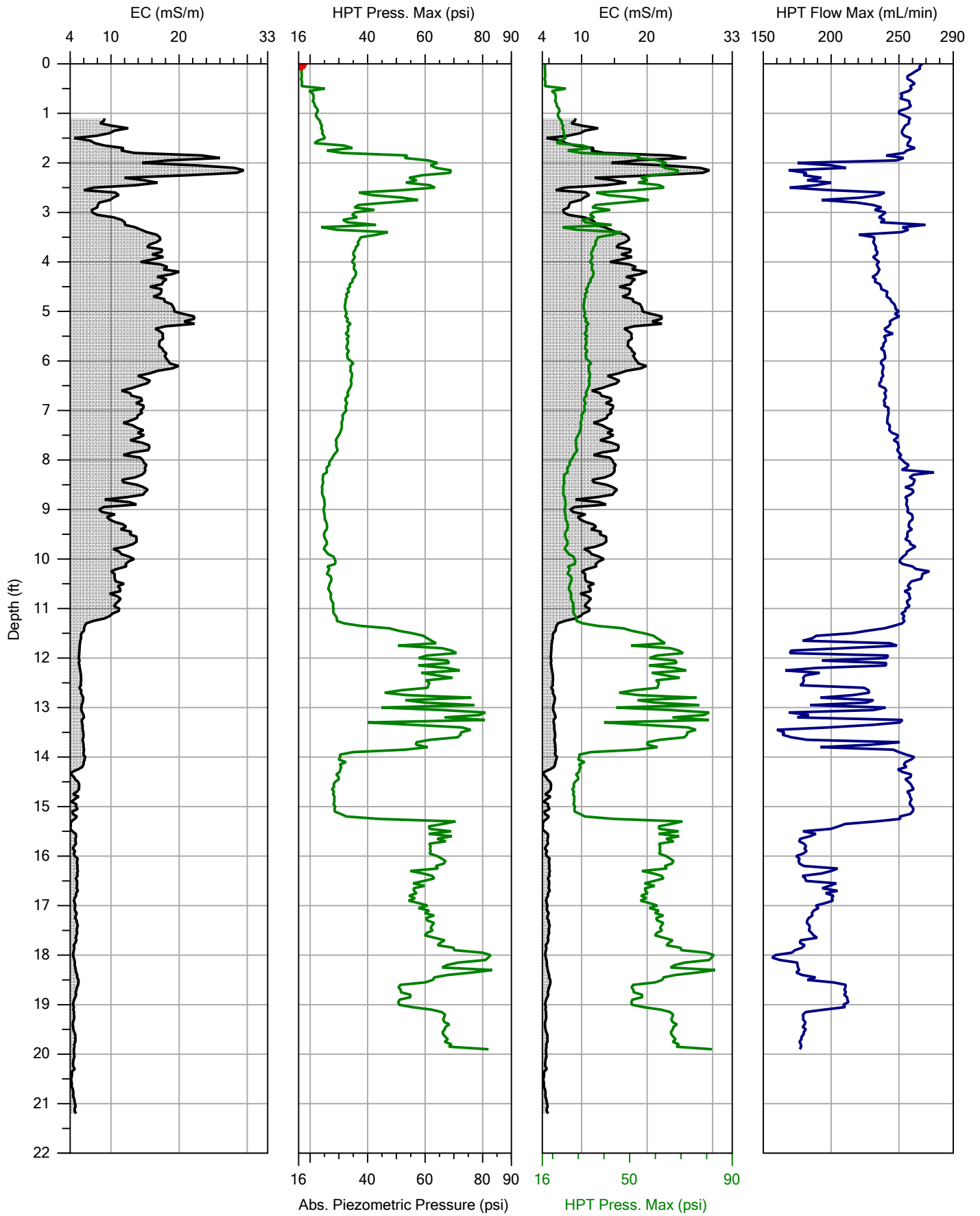
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 Client: tidewater

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Location:	northeast



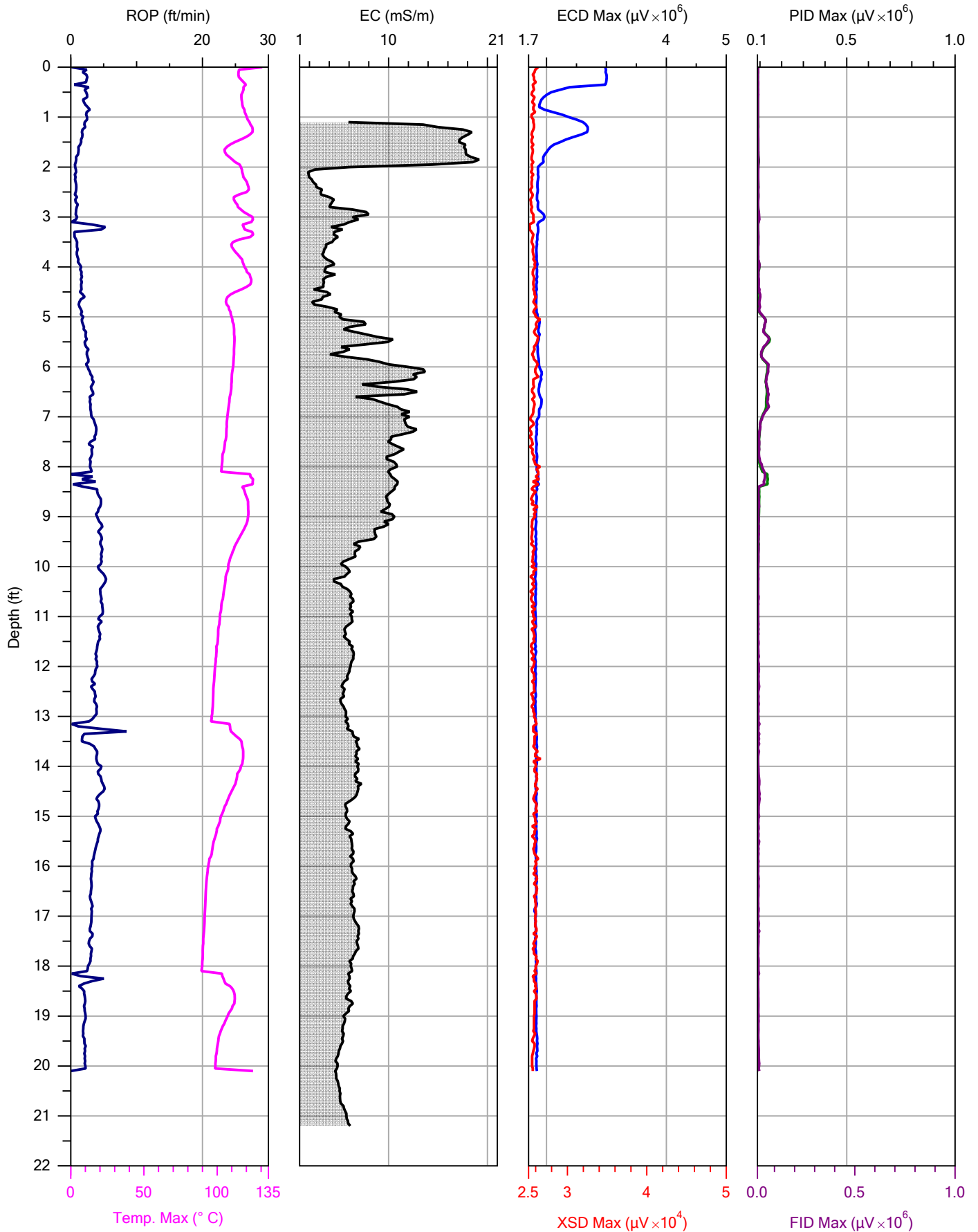
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 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

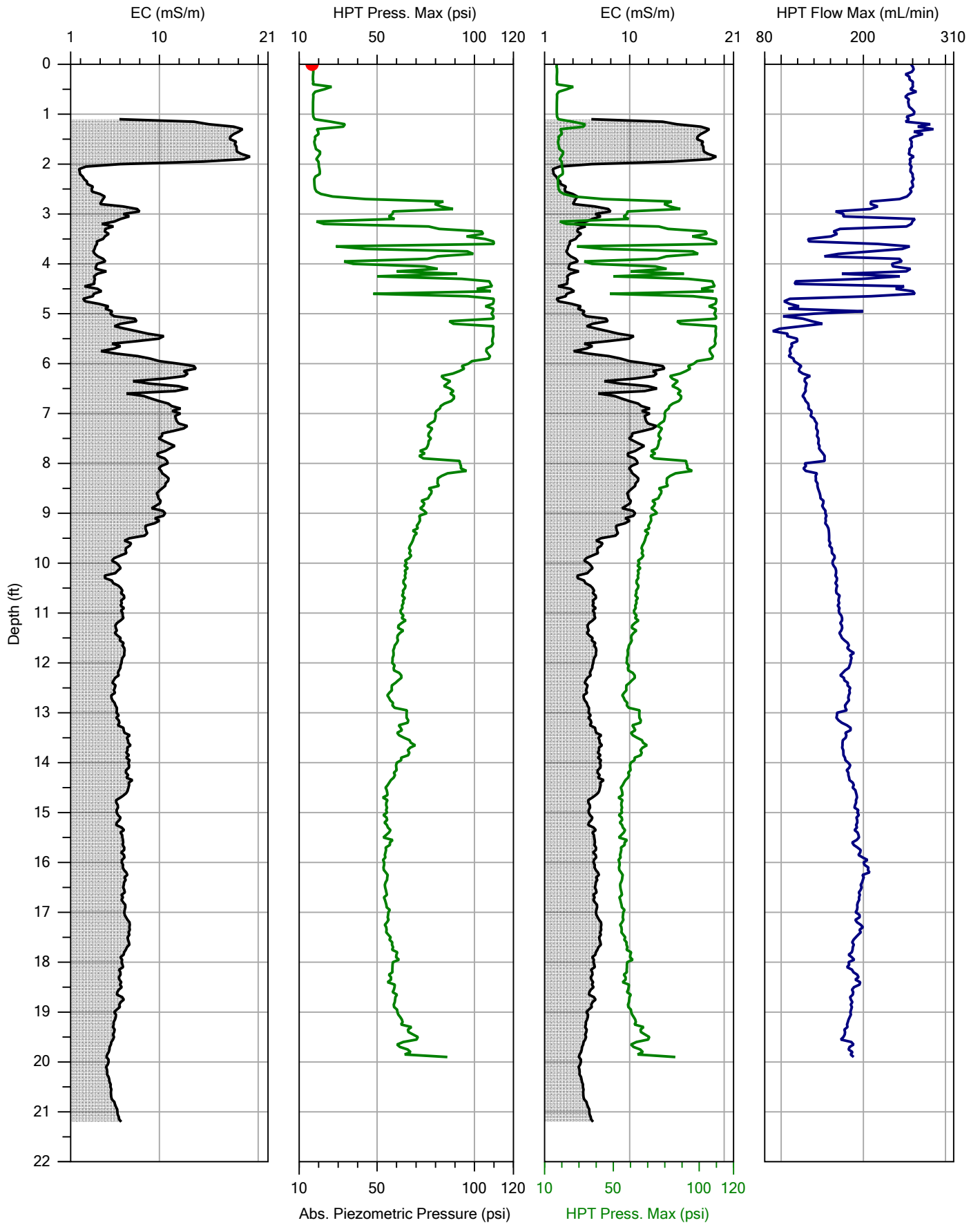
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Location:	northeast



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Operator: Nick K  
 Client: tidewater

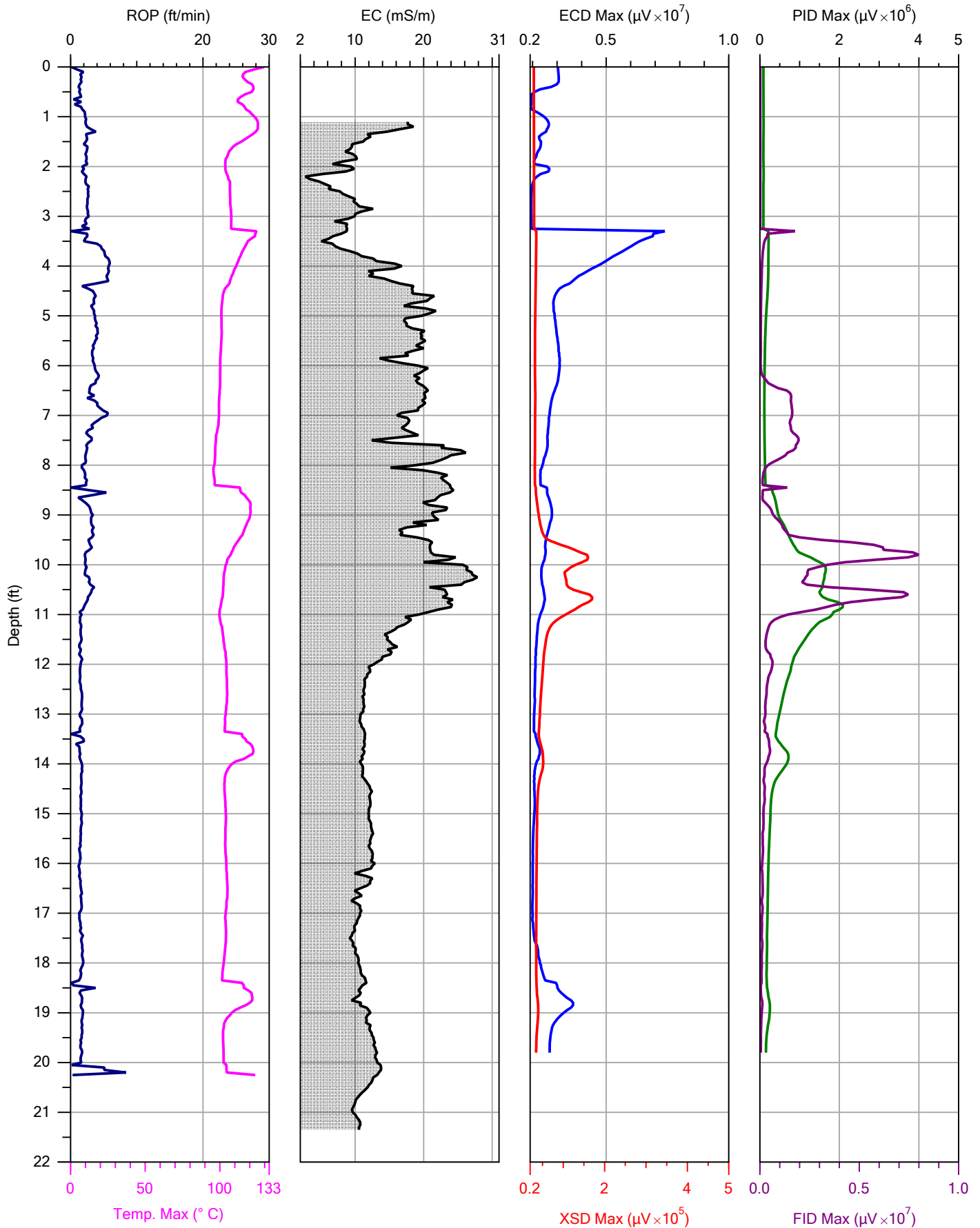
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Date:	09/08/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

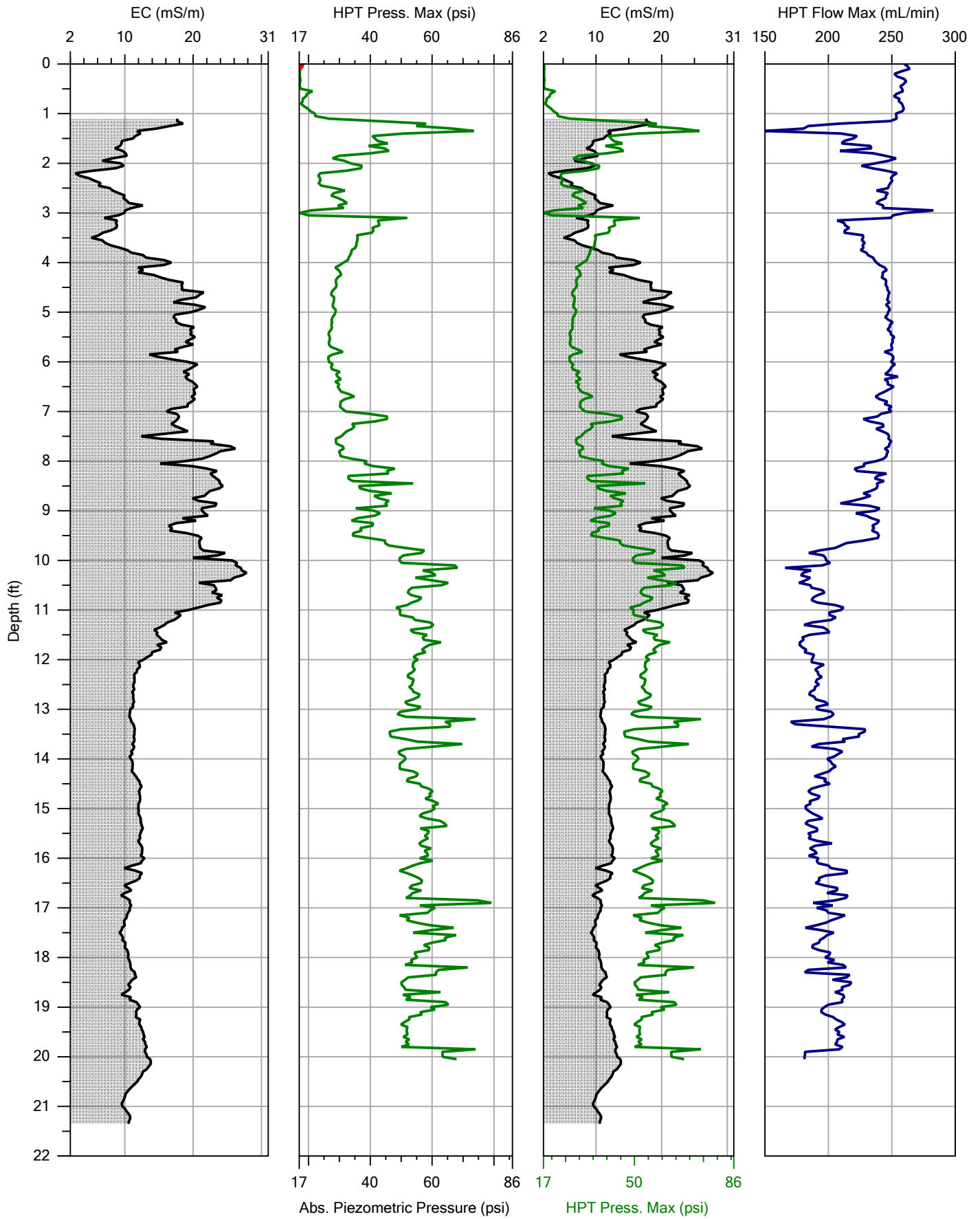
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-09.MHP
Date:	09/08/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-10.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast

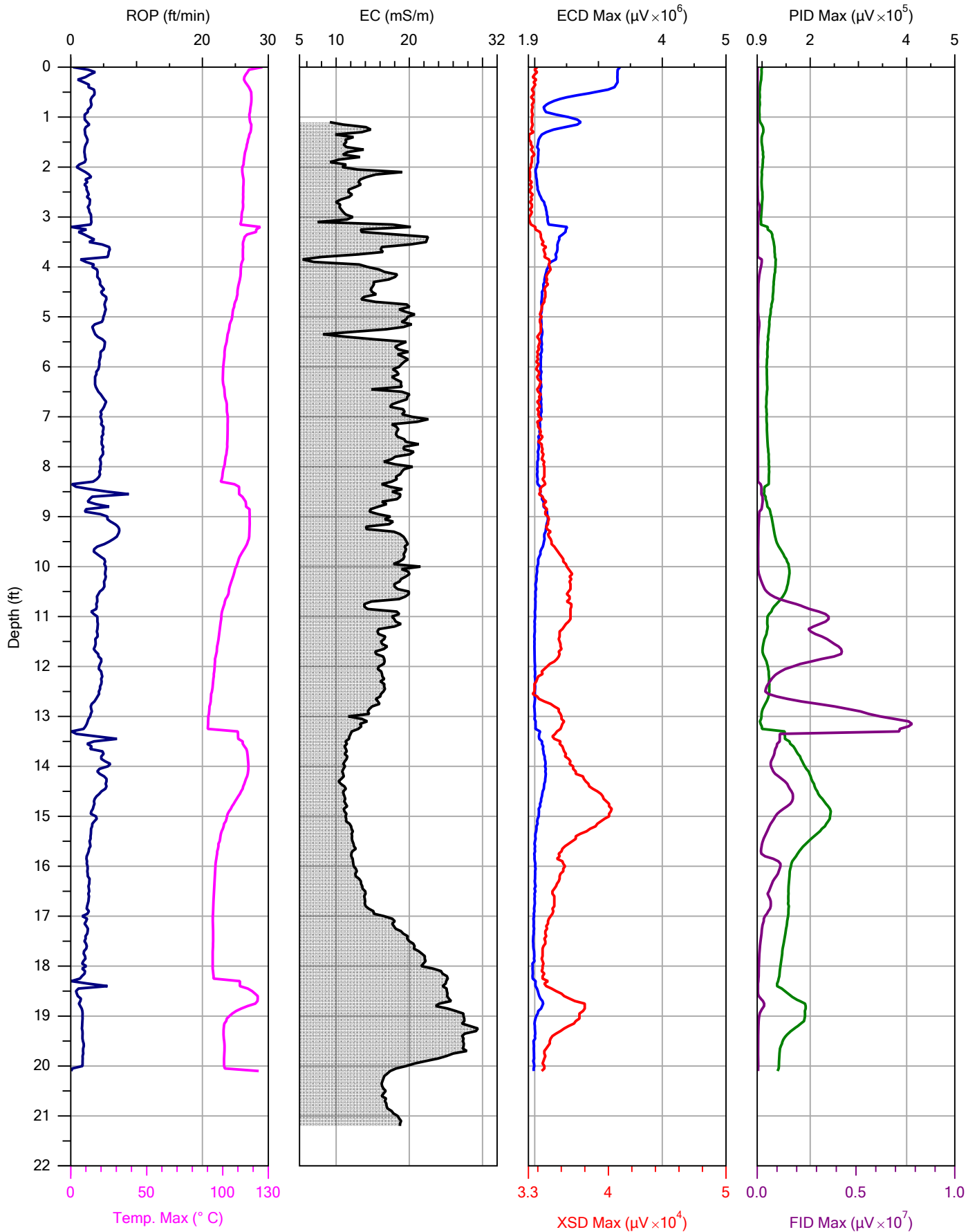




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

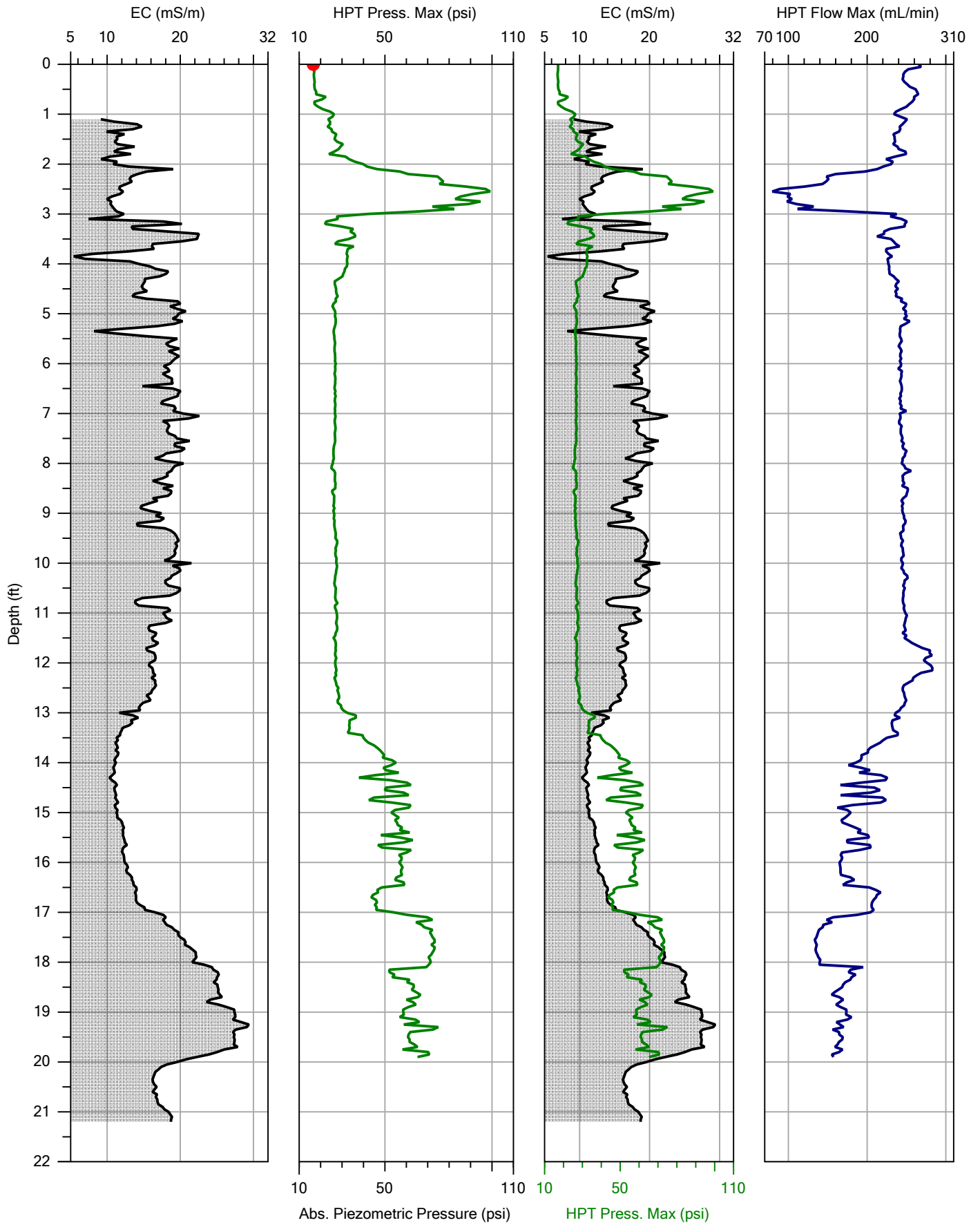
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Date:	09/08/20
Location:	northeast



Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

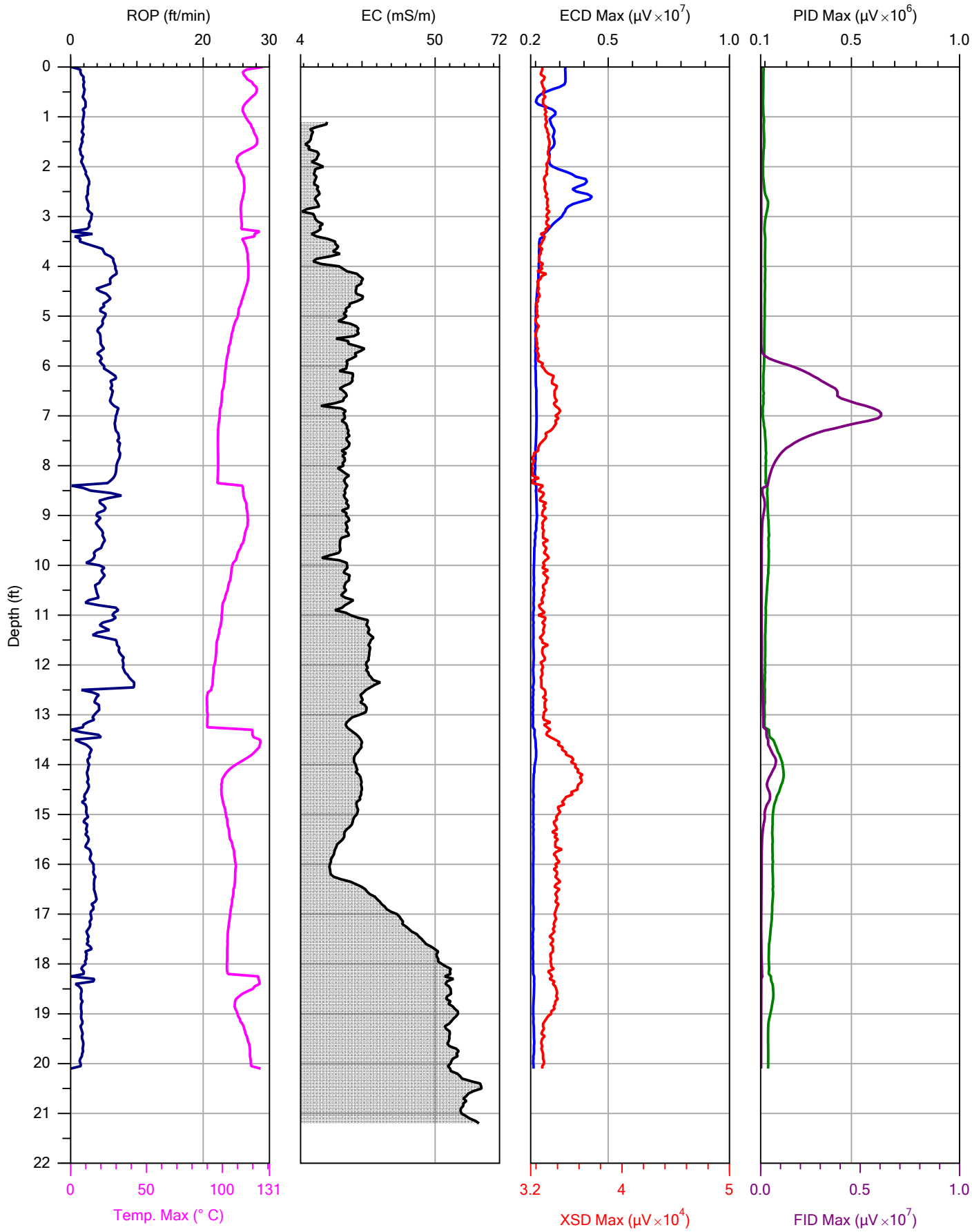
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Date:	09/08/20
Location:	northeast



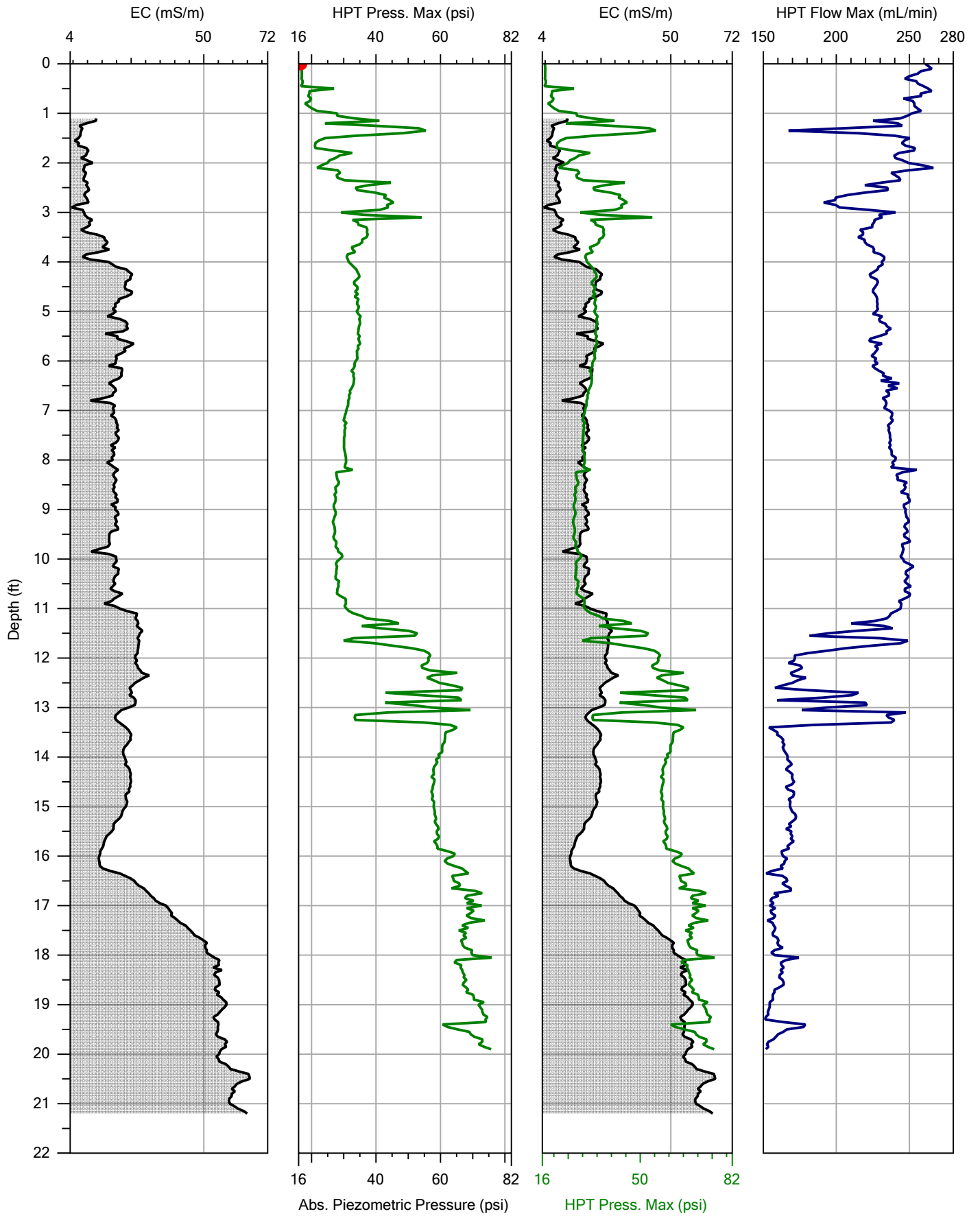
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-11.MHP
Date:	09/08/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-12.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
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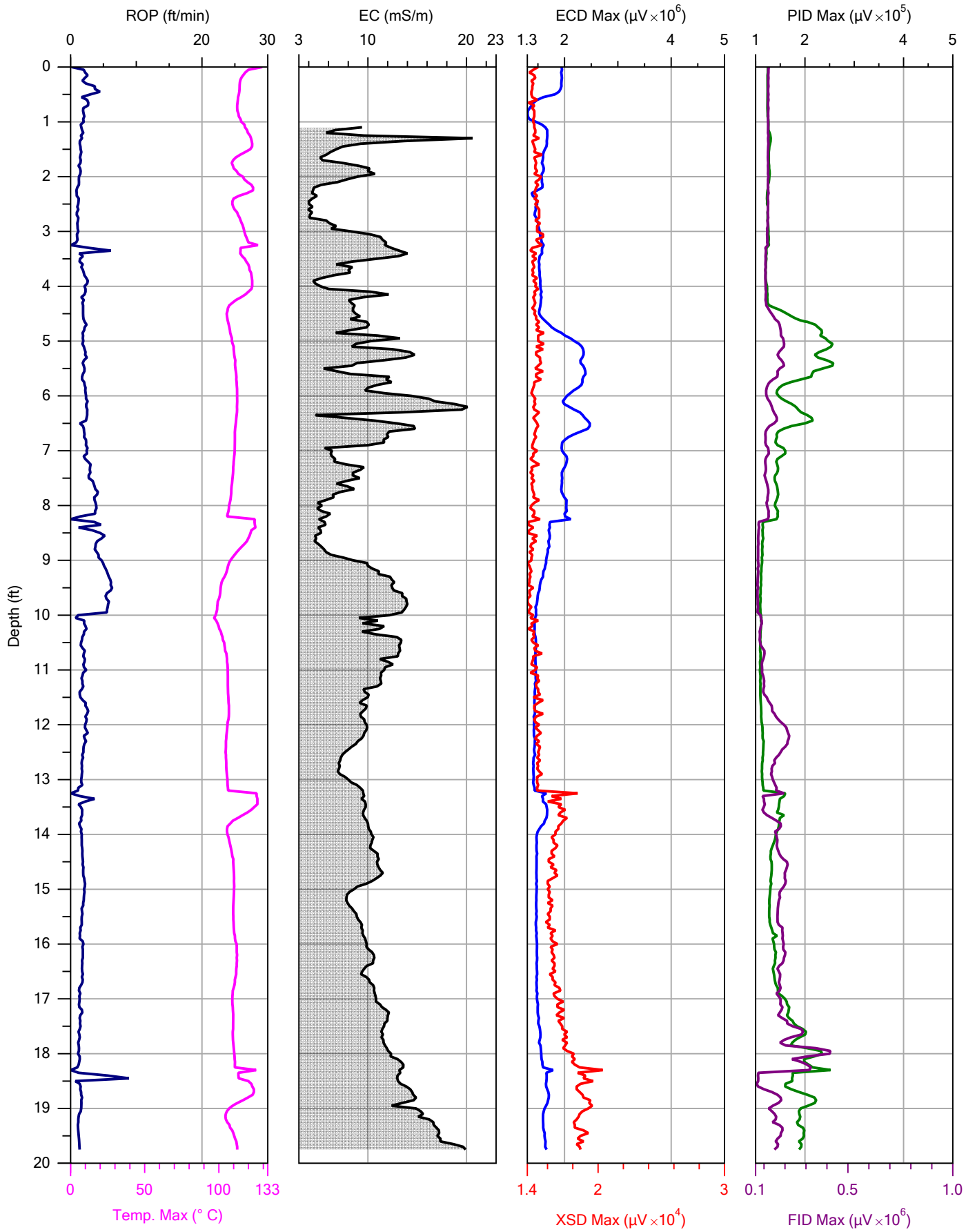


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-12.MHP
Date:	09/08/20
Location:	northeast



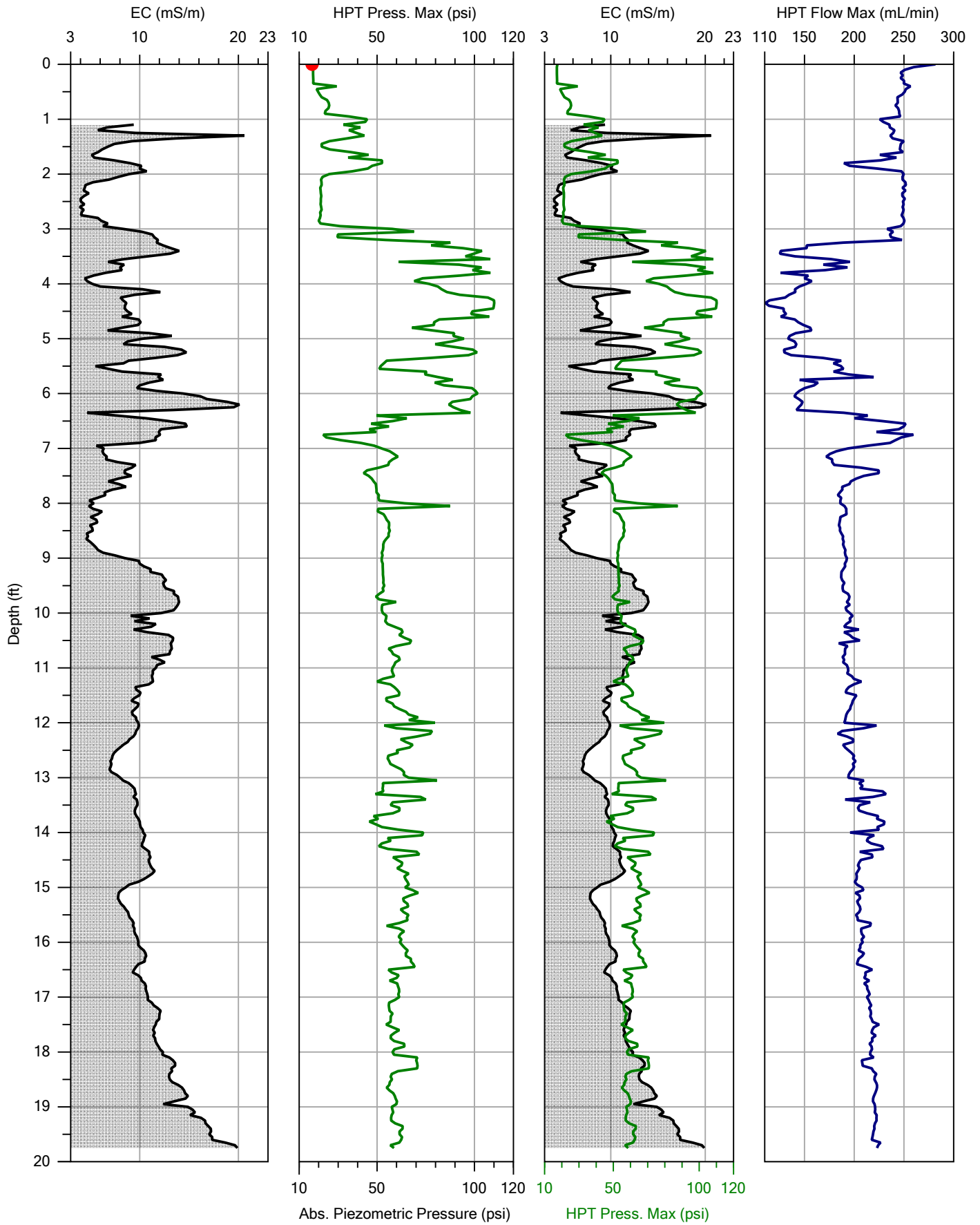


Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

File:	HSI-HRSC-13.MHP
Date:	09/09/20
Location:	northeast

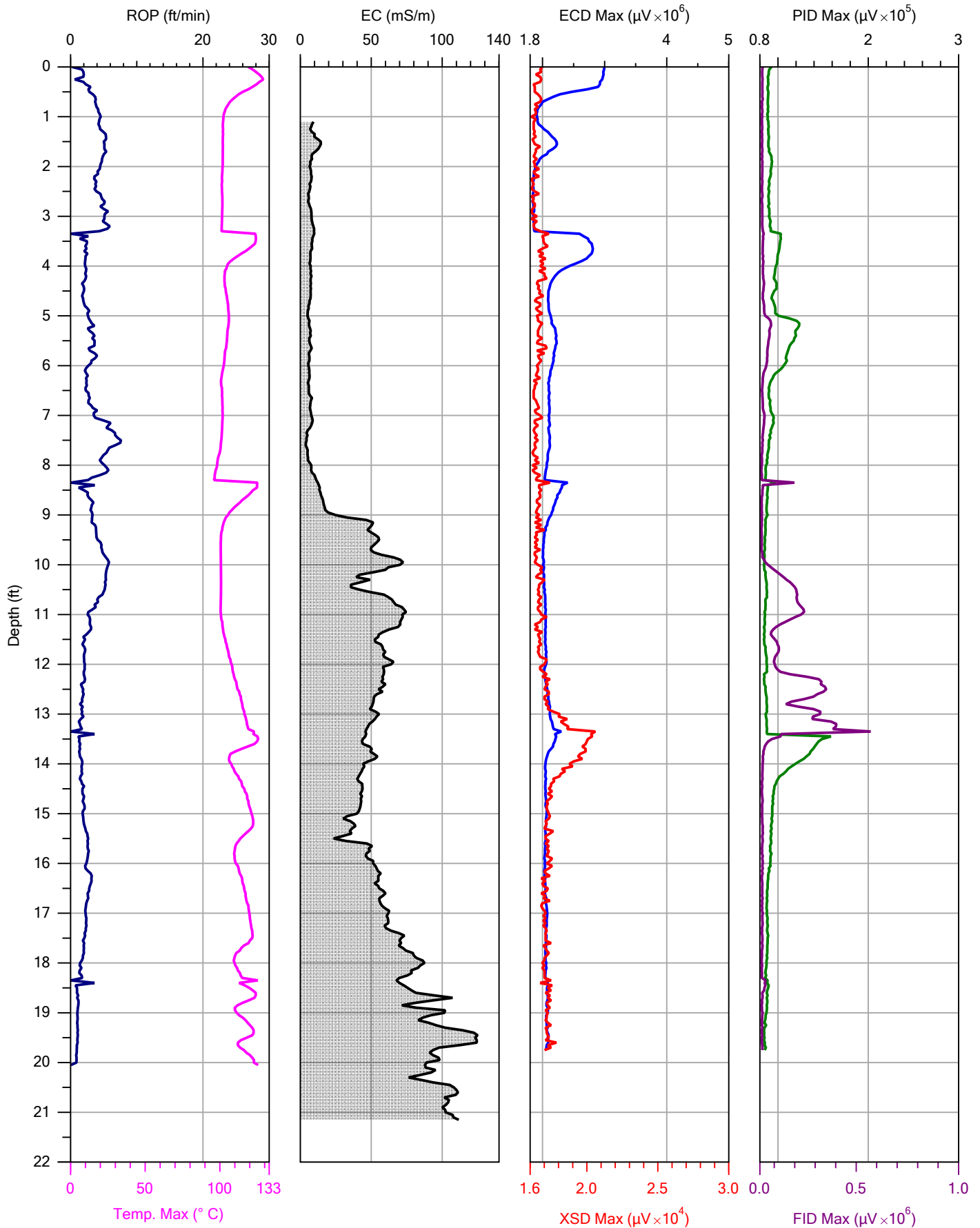




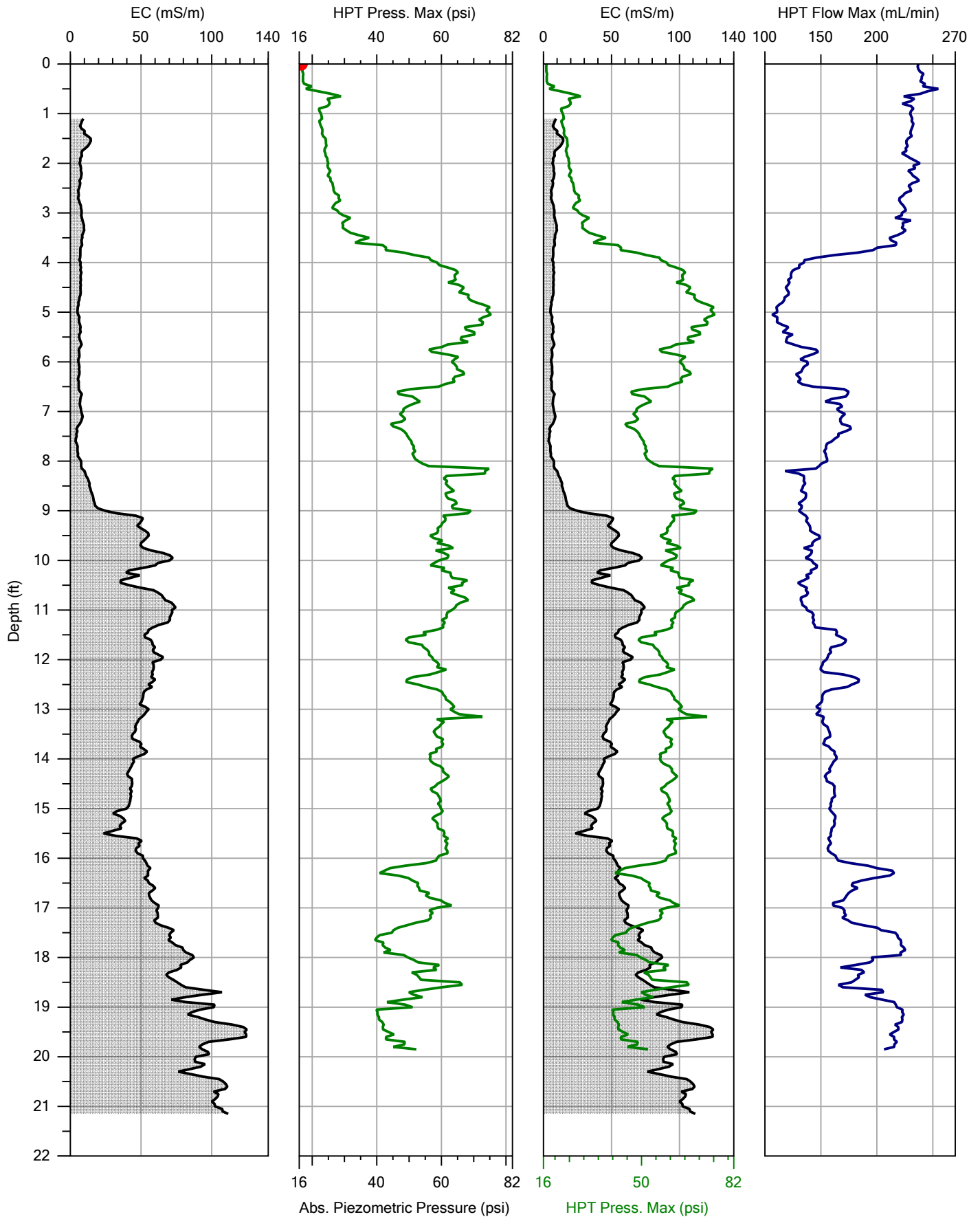
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 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-13.MHP
Date:	09/09/20
Location:	northeast



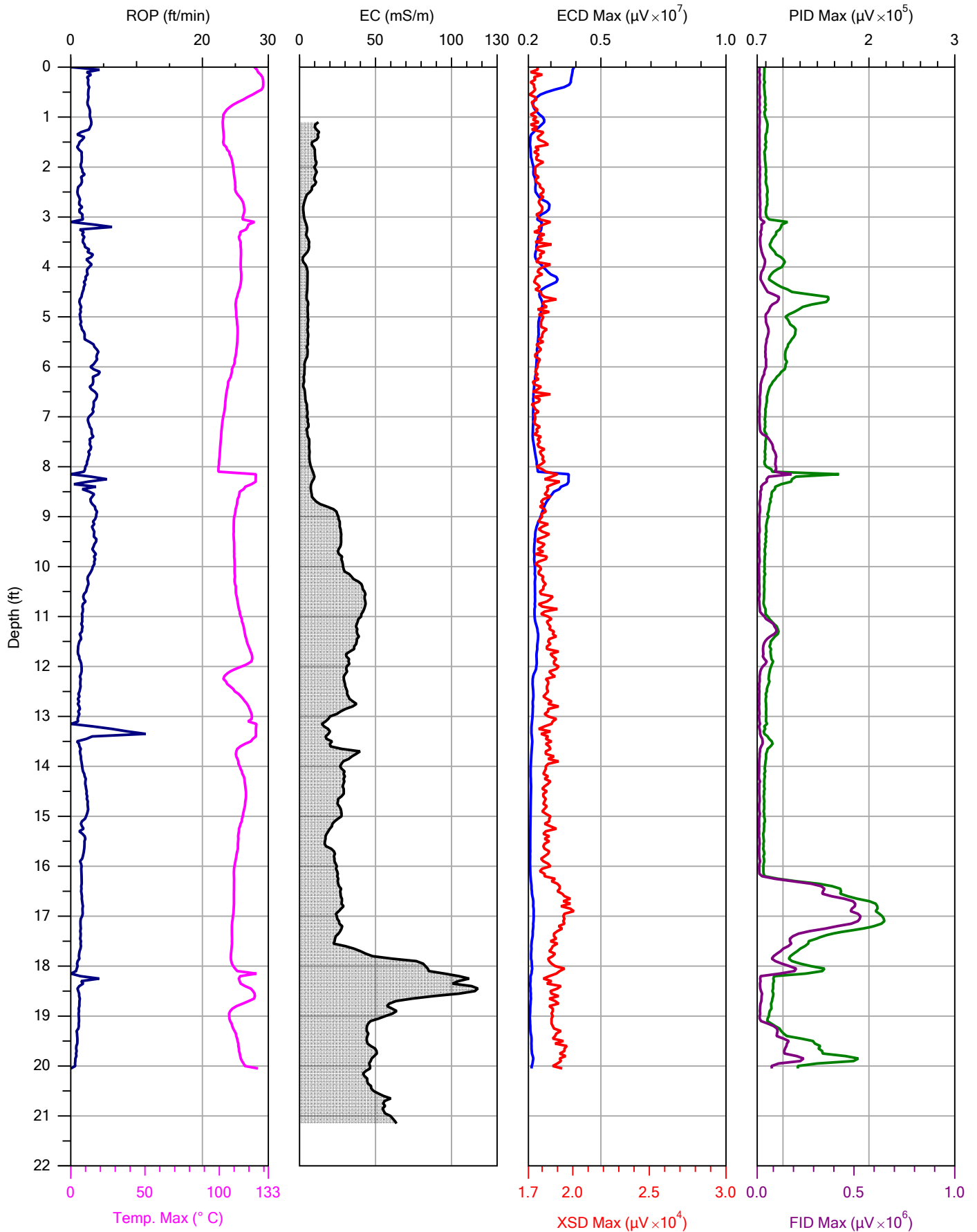
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

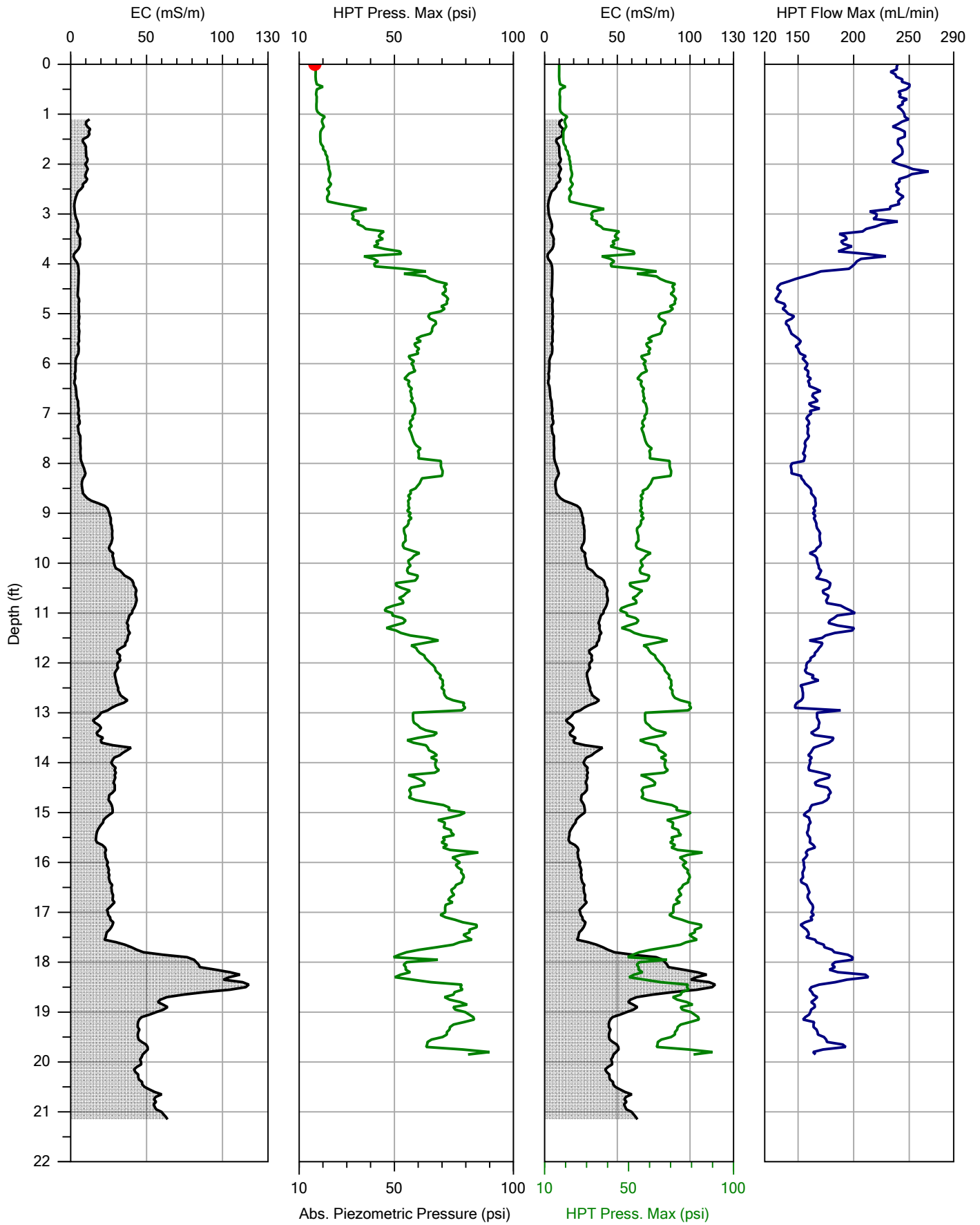
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Date:	09/09/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

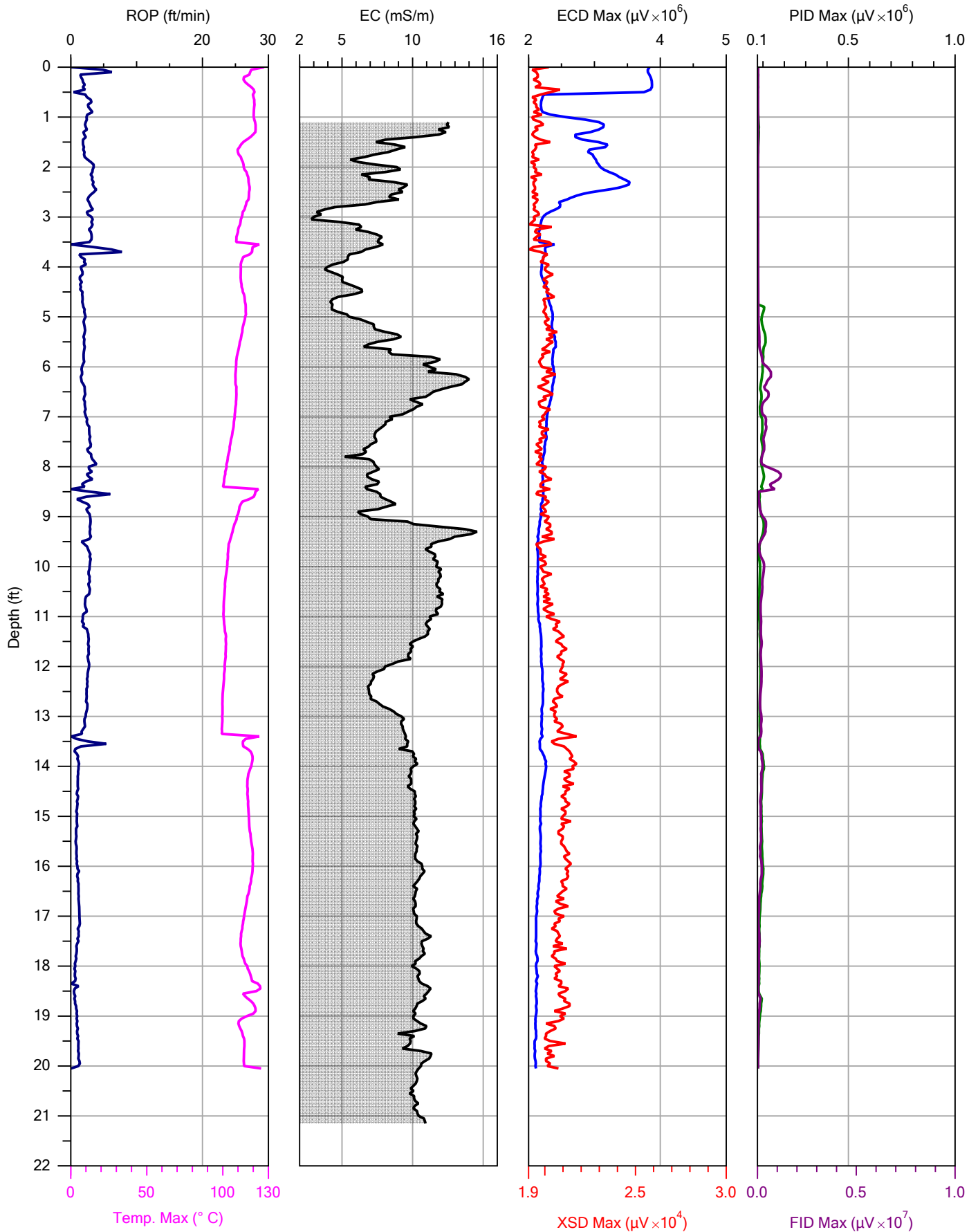
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Date:	09/09/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

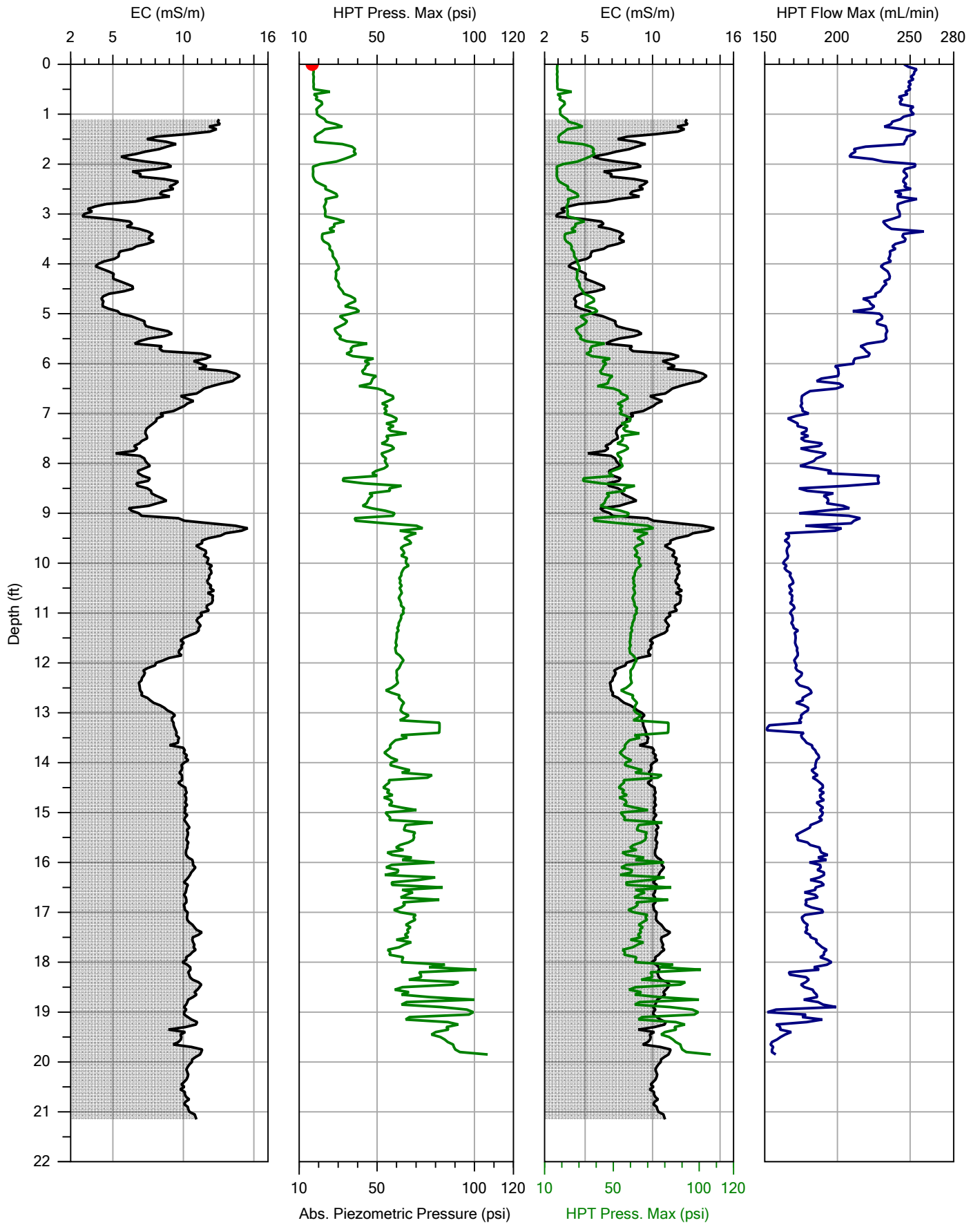
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-15.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-16.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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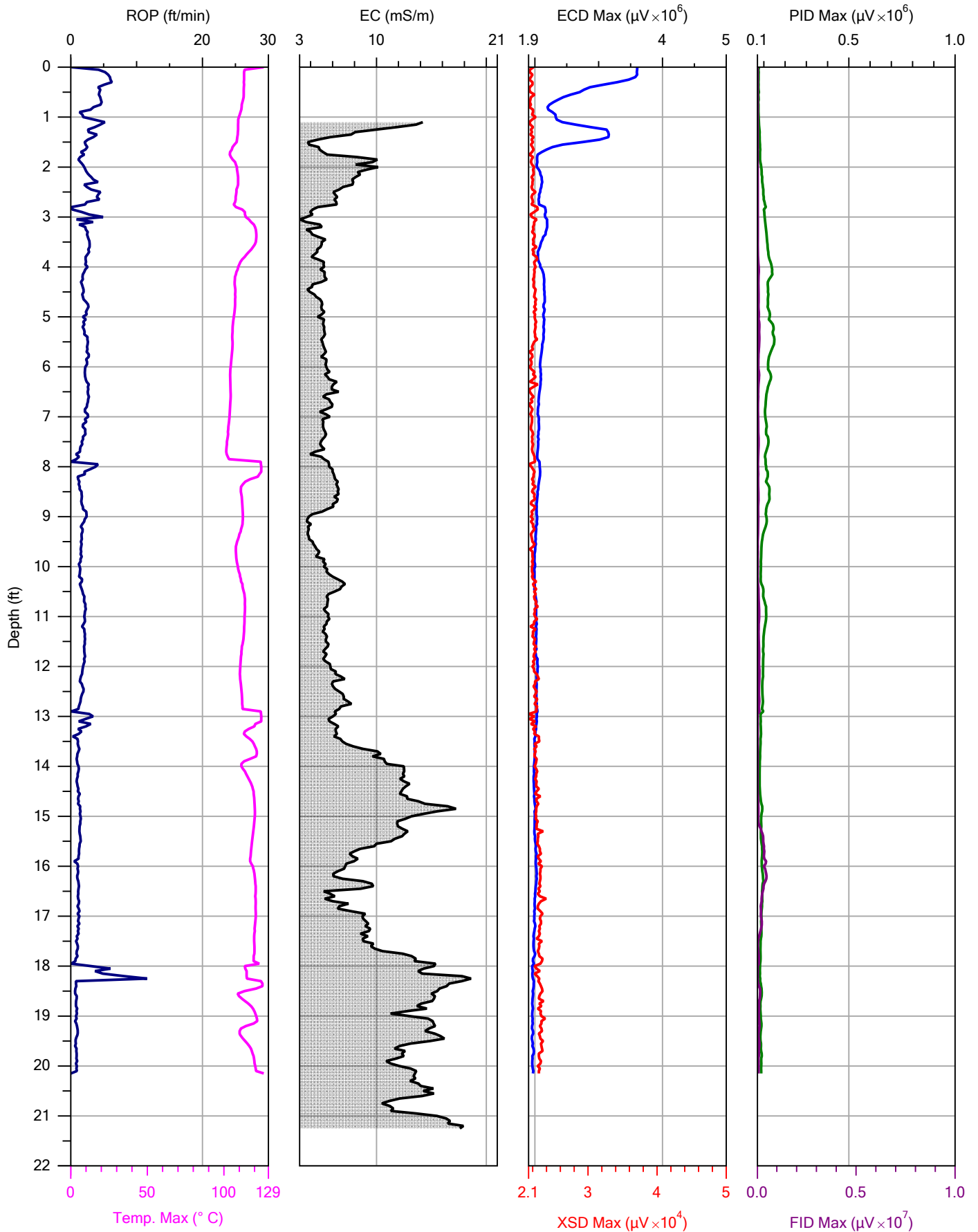




Company: Cascade  
 Project ID: 2022001119

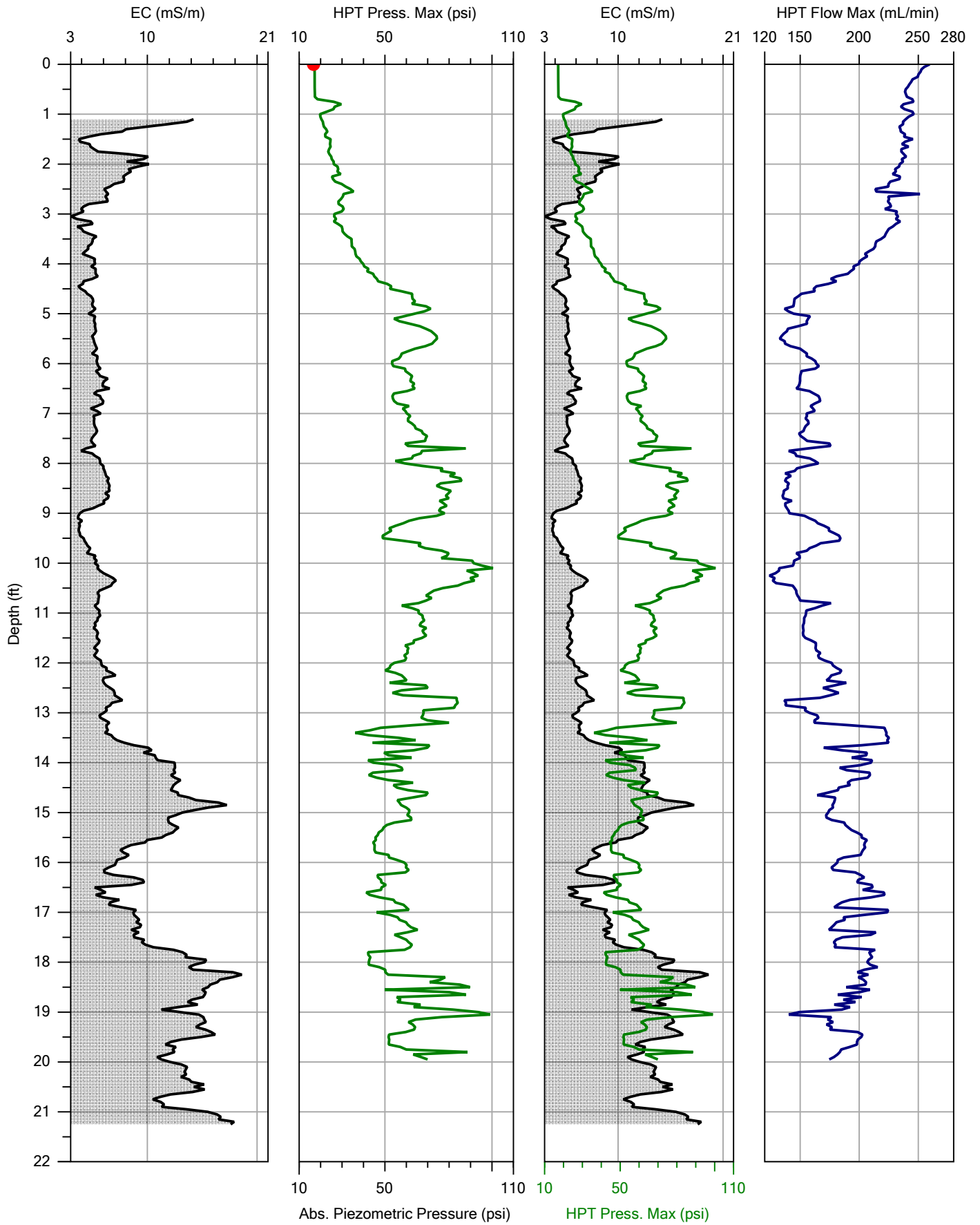
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-16.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

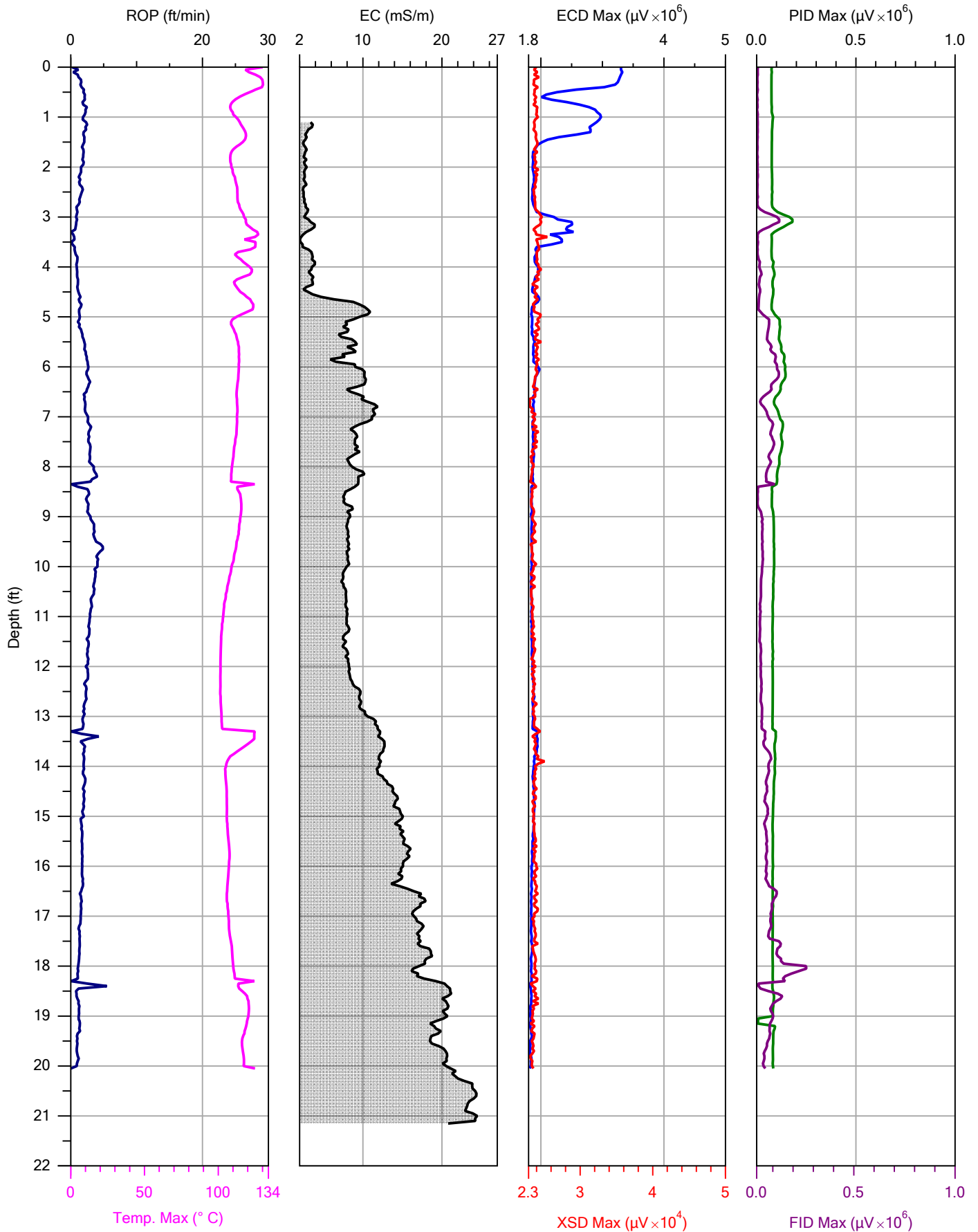
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Date:	09/09/20
Location:	northeast



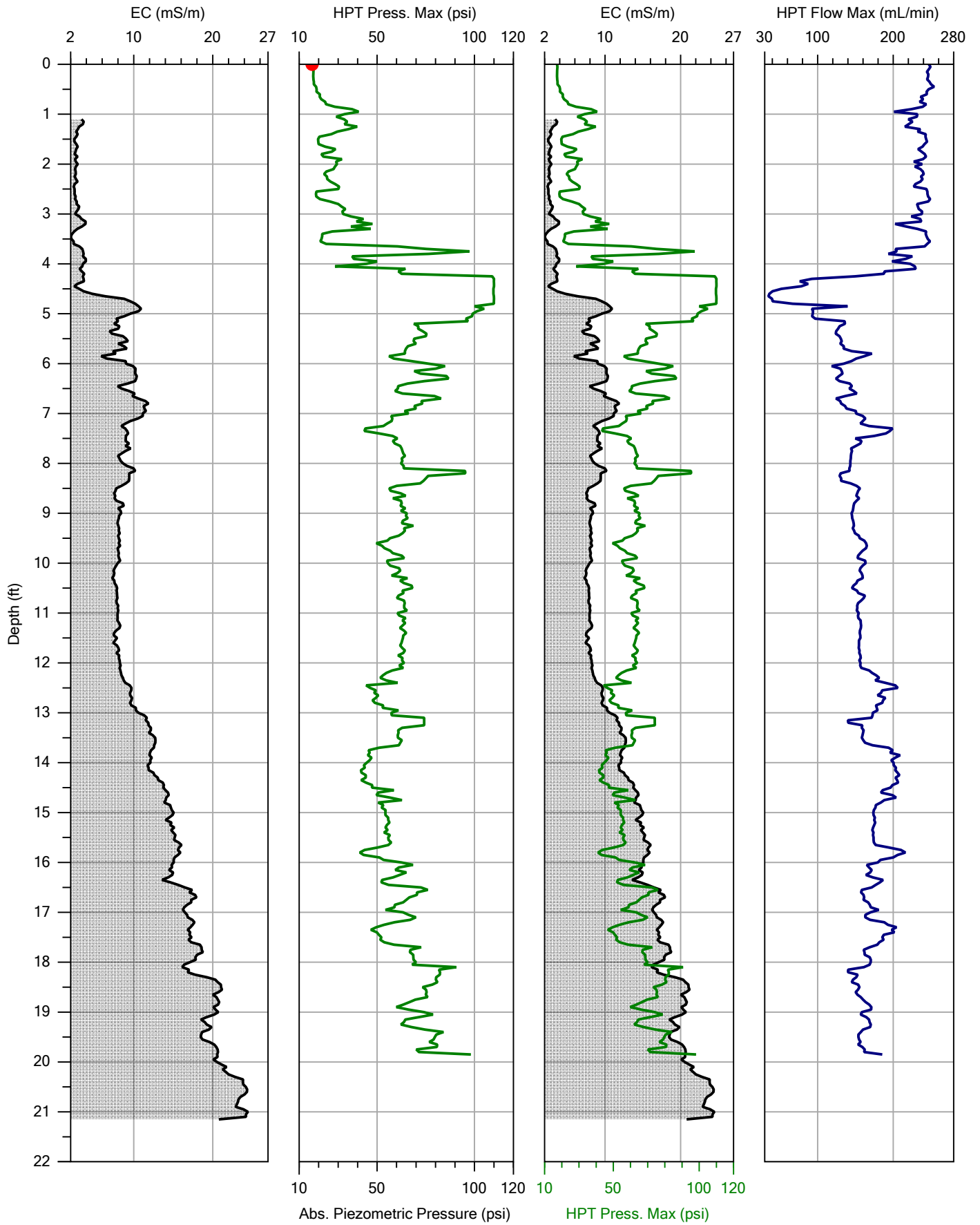
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-17.MHP
Date:	09/09/20
Location:	northeast



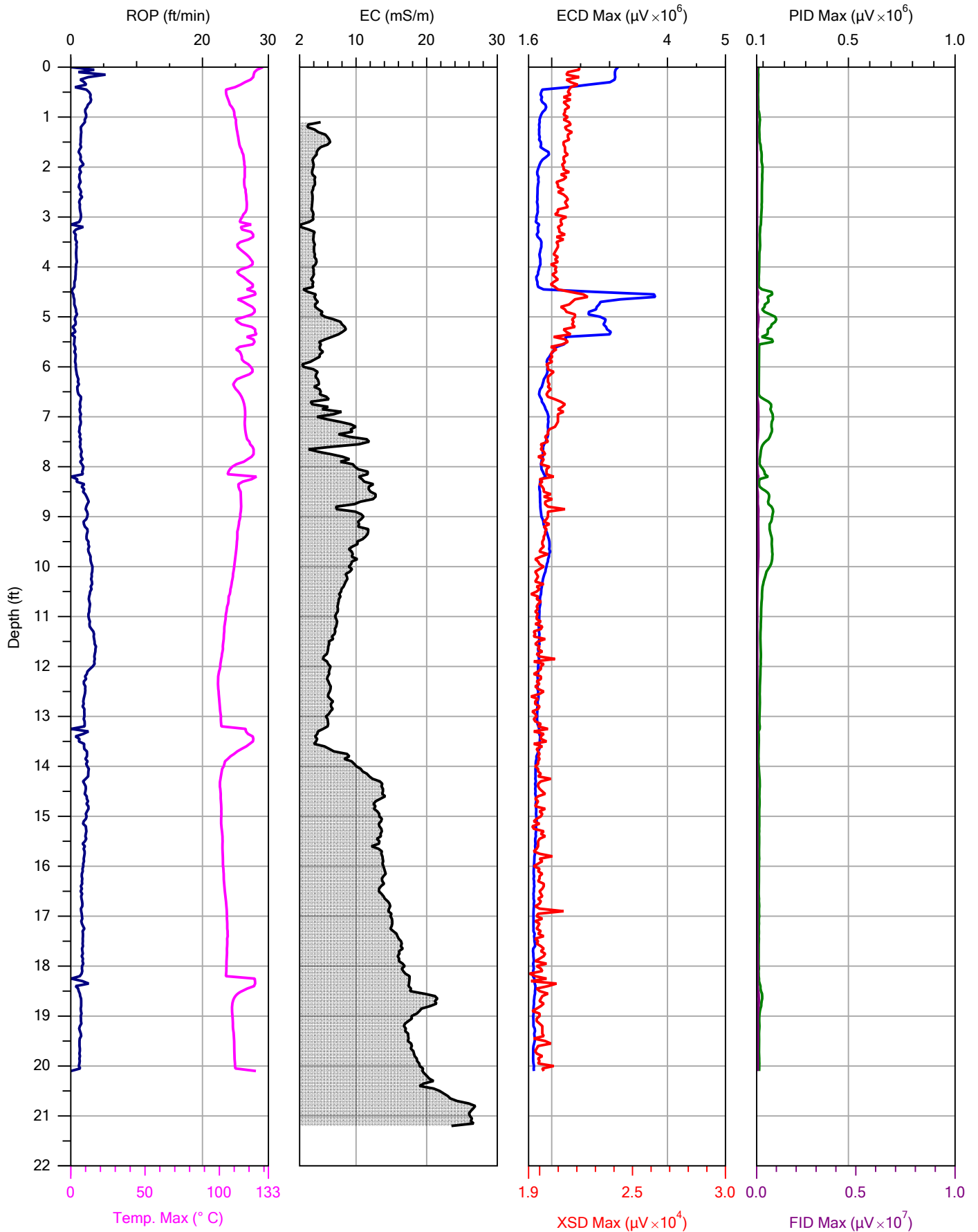
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

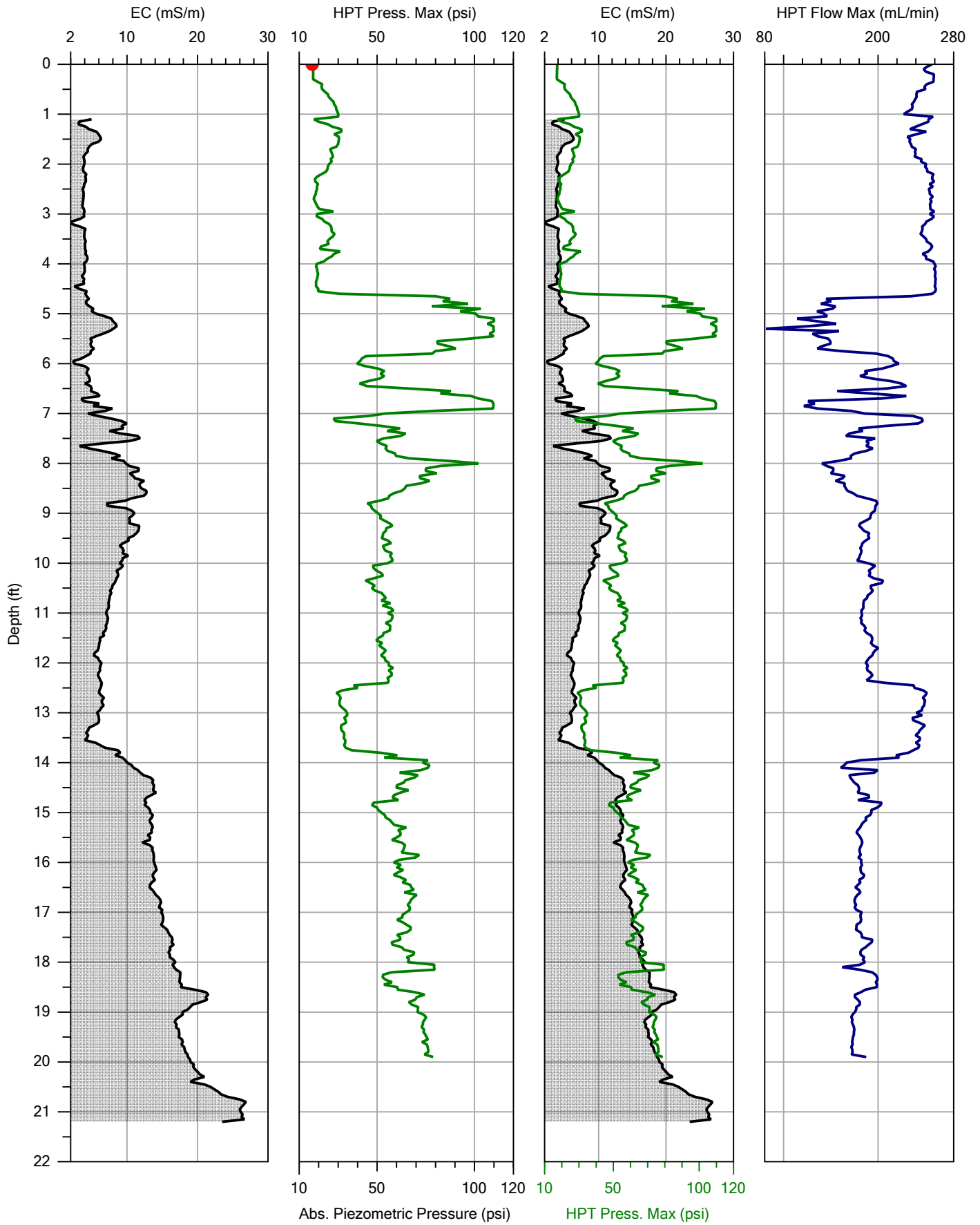
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-18.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-19.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast

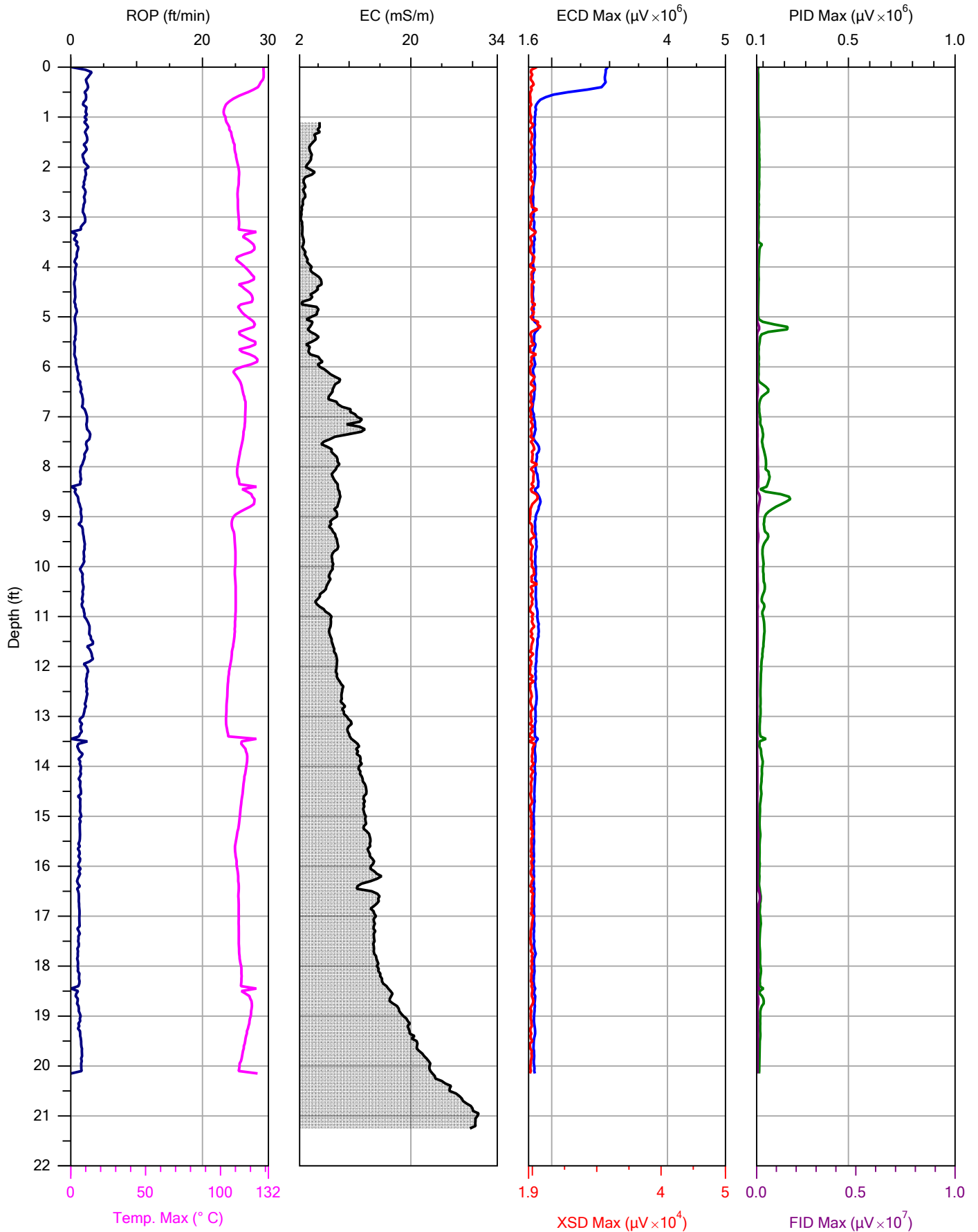




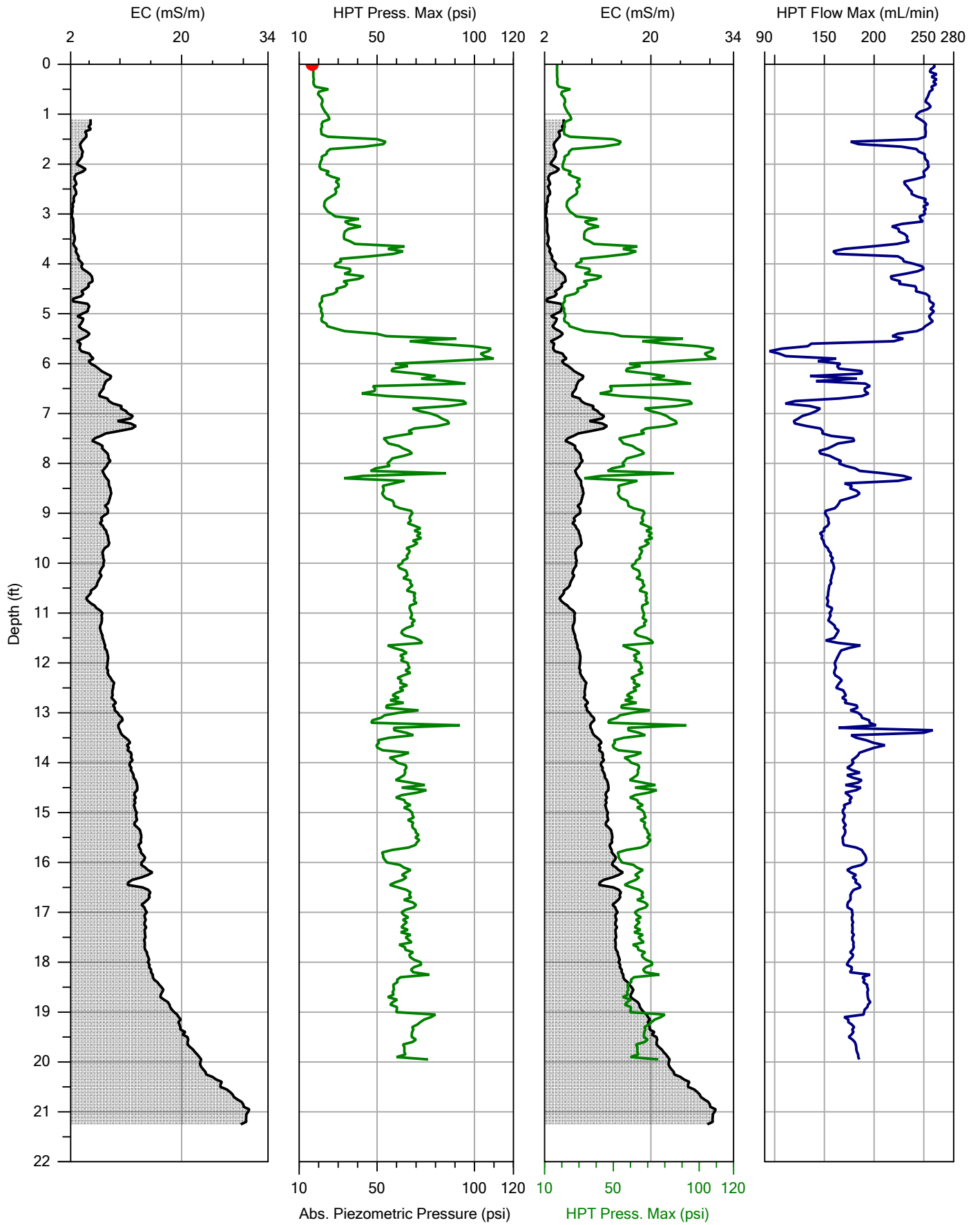
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-19.MHP
Date:	09/09/20
Location:	northeast



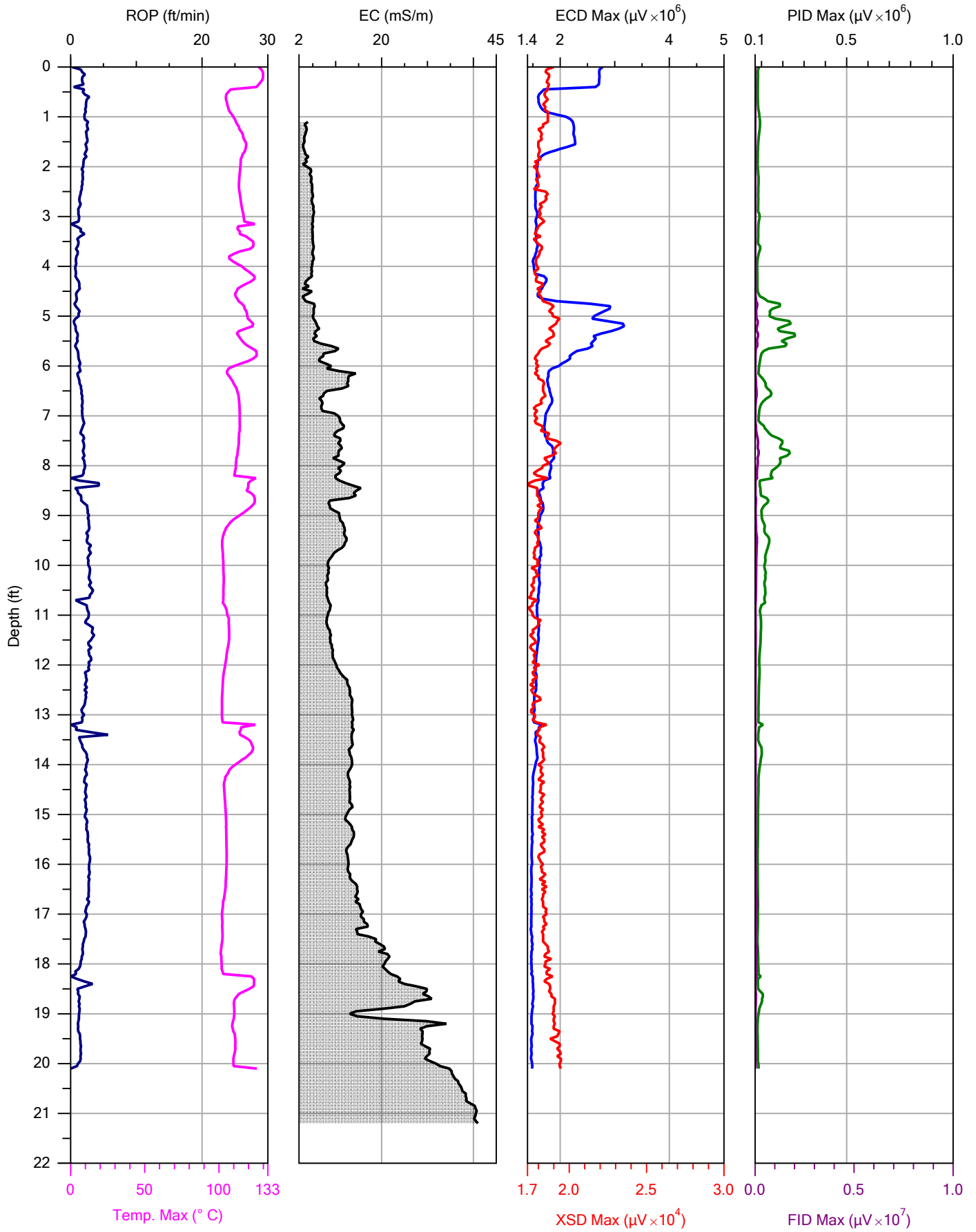
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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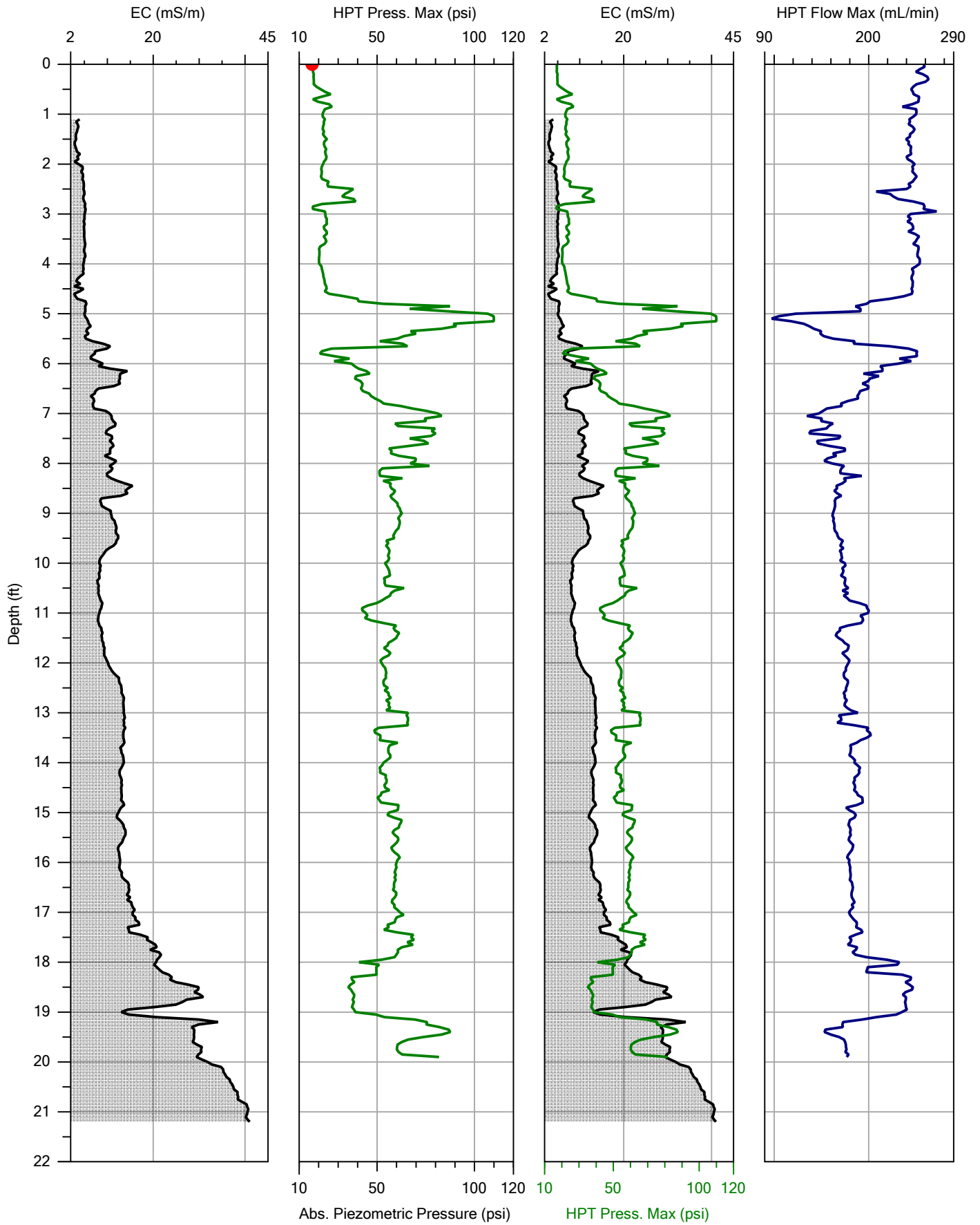
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-20.MHP
Date:	09/09/20
Location:	northeast



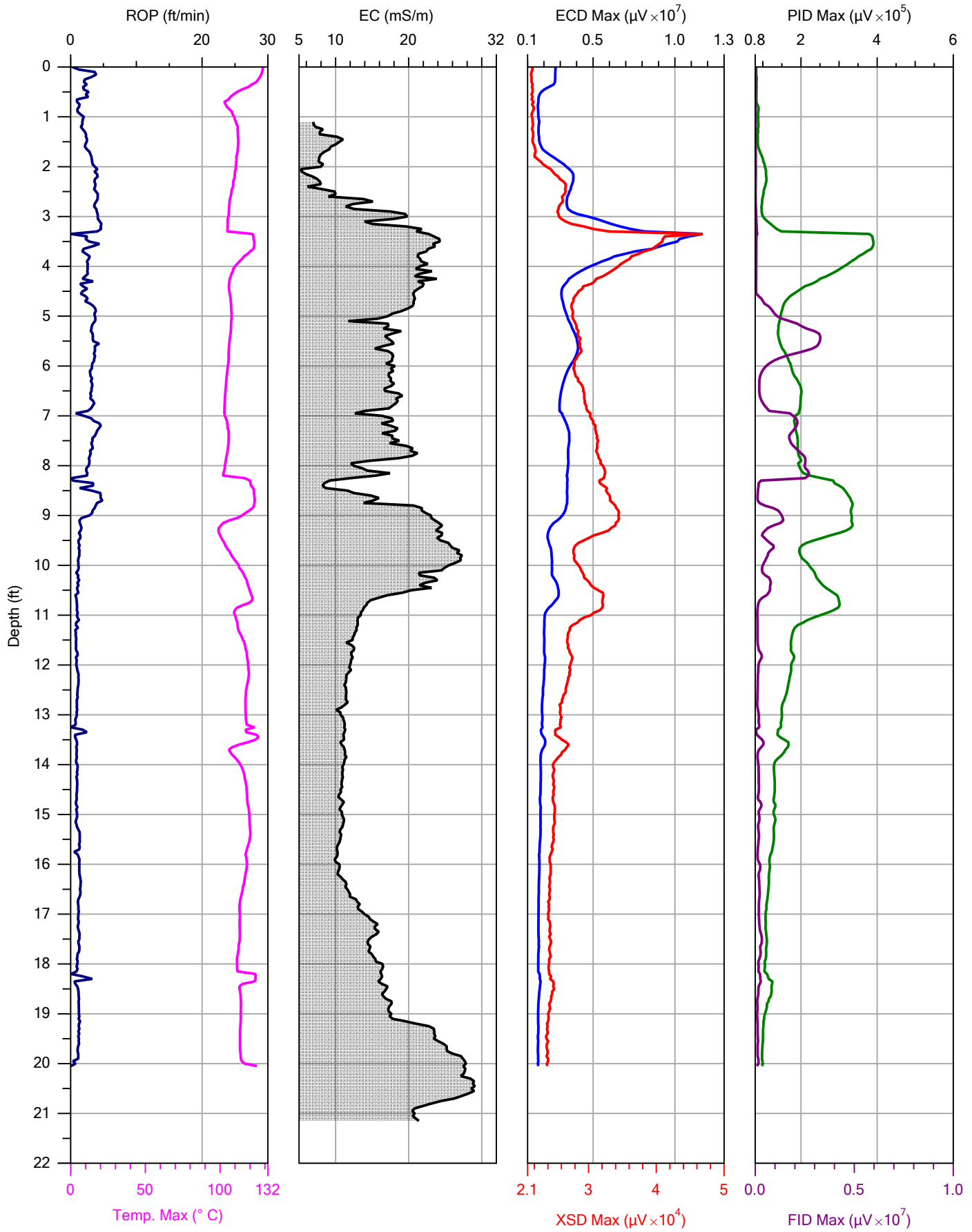
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-21.MHP
Date:	09/09/20
Location:	northeast

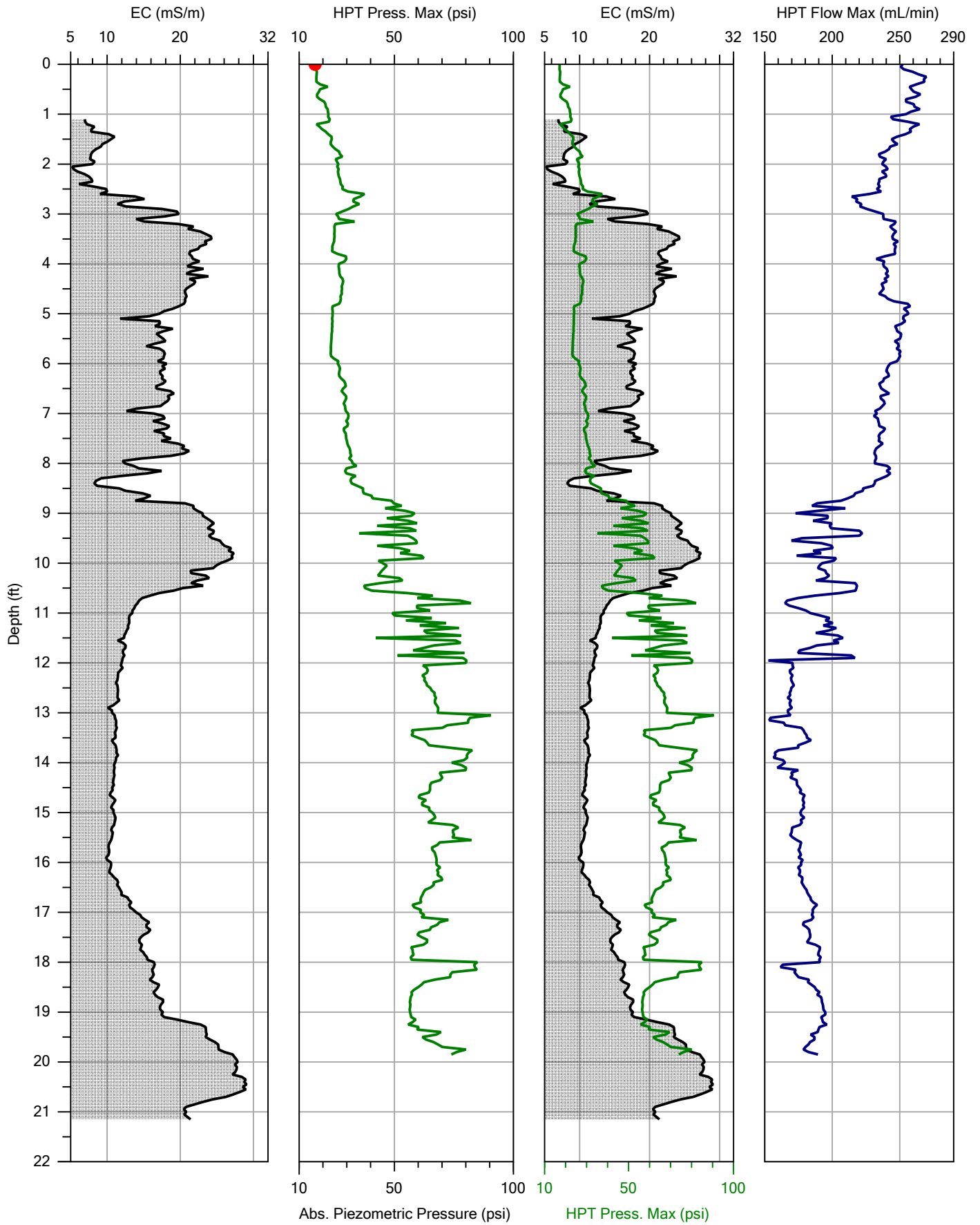


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-22.MHP
Date:	09/09/20
Location:	northeast

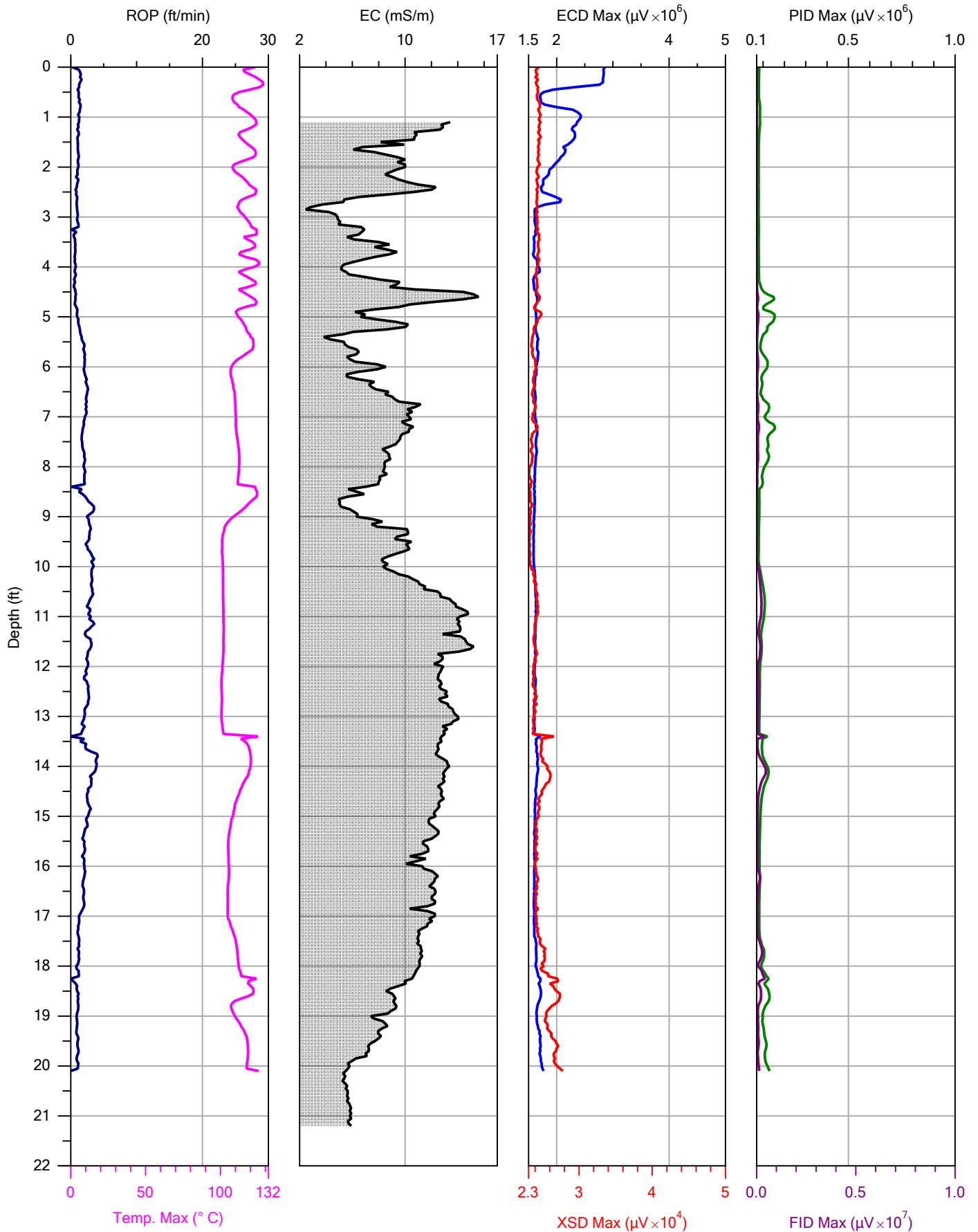




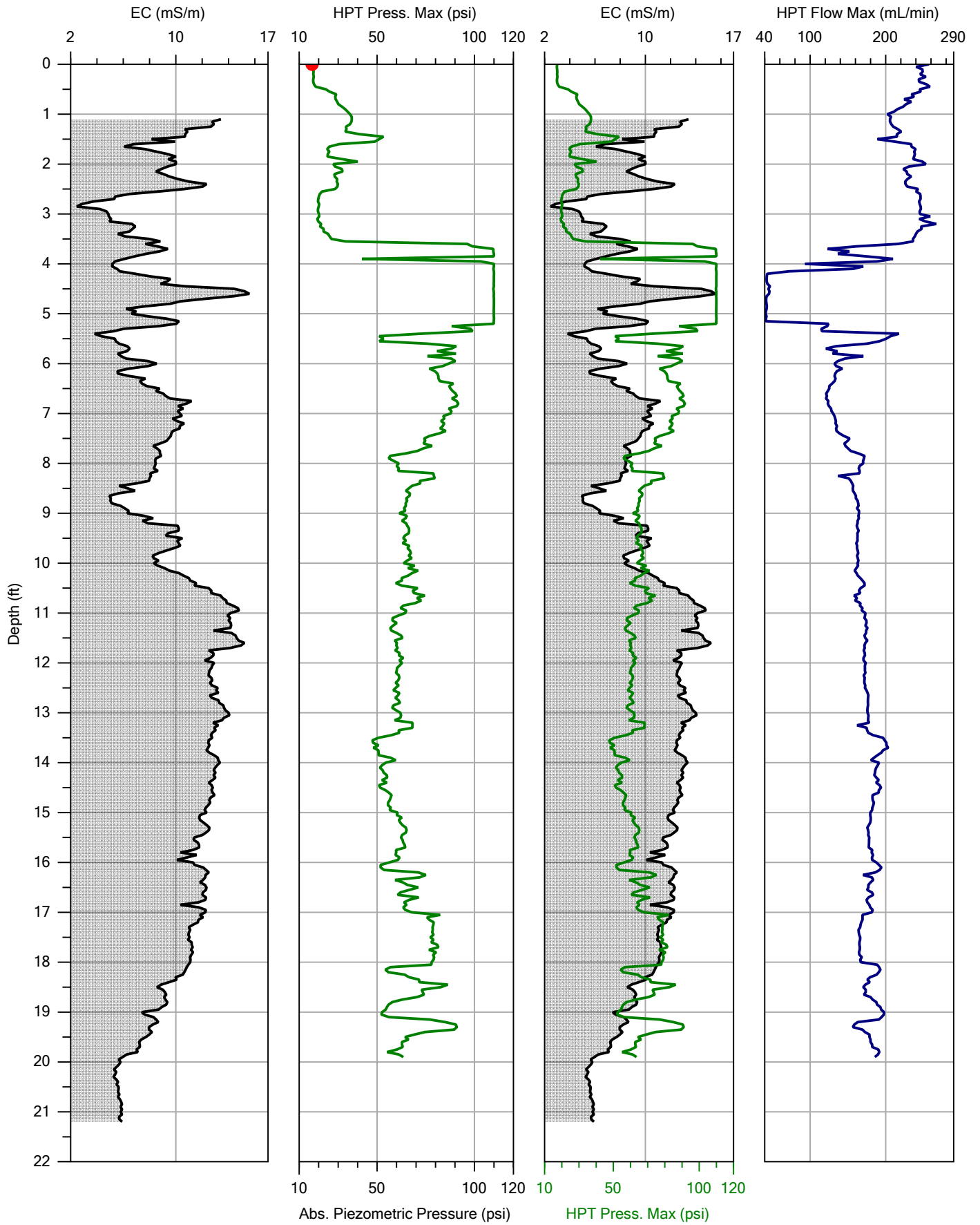
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-22.MHP
Date:	09/09/20
Location:	northeast



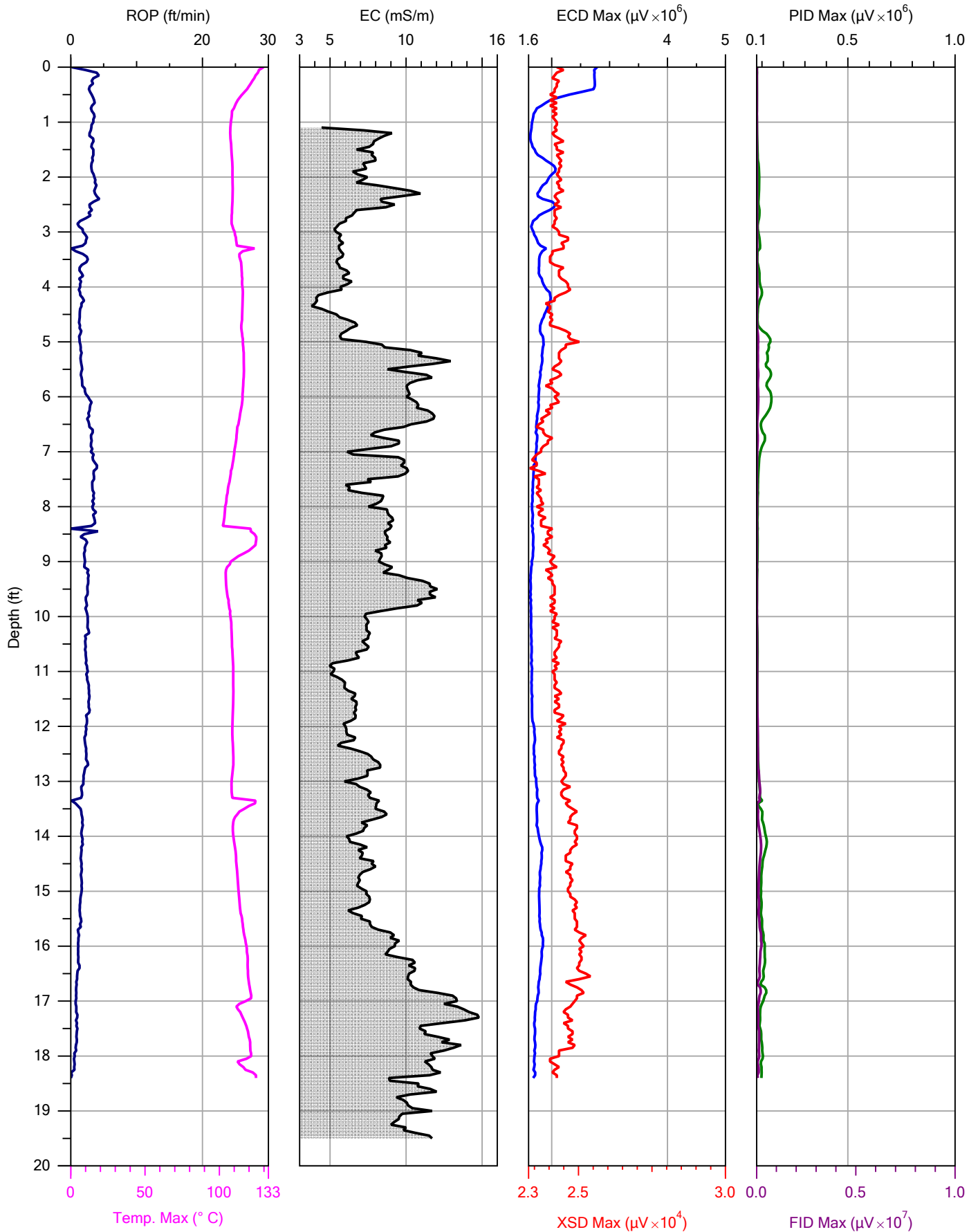
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



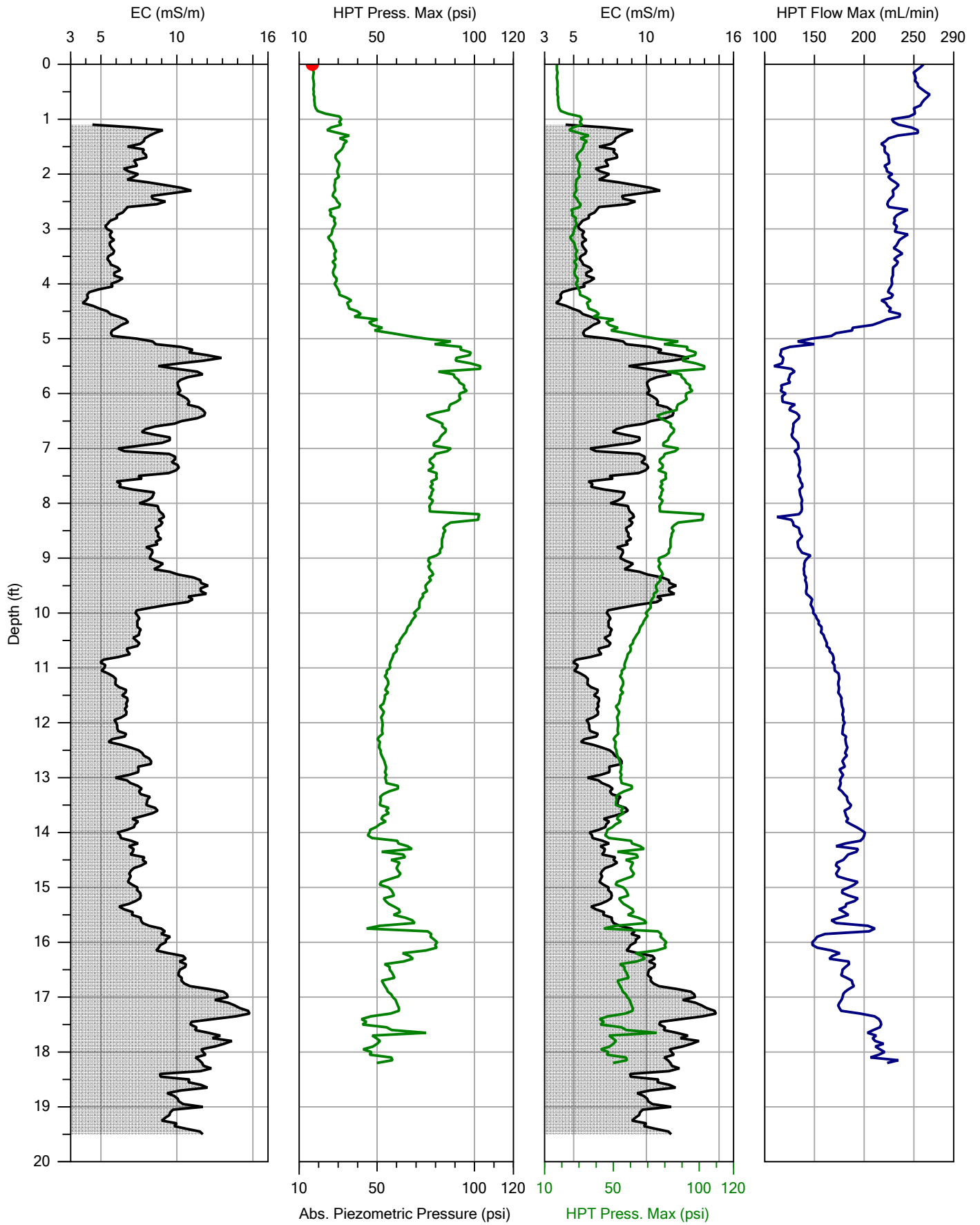
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-23.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-24.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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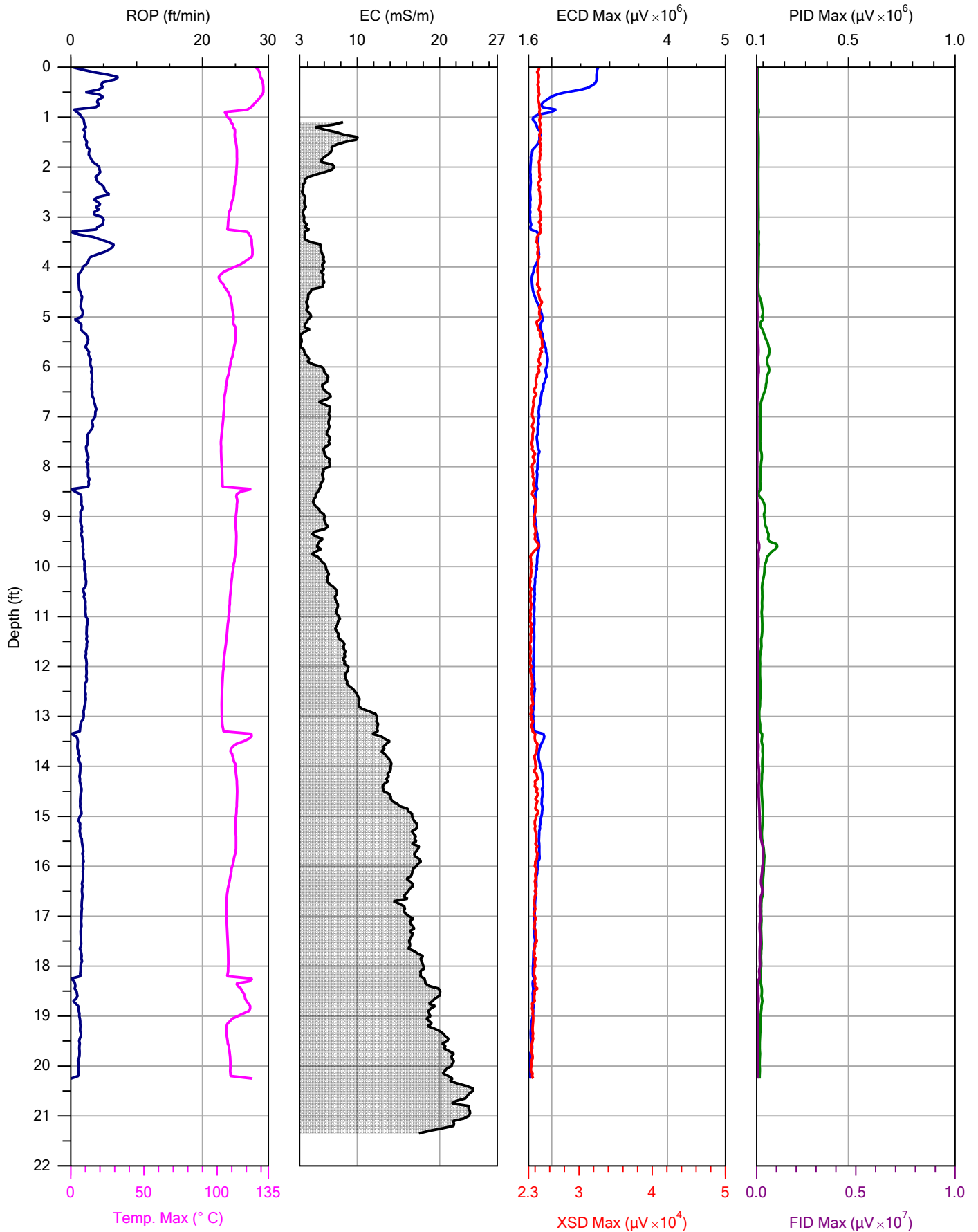


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

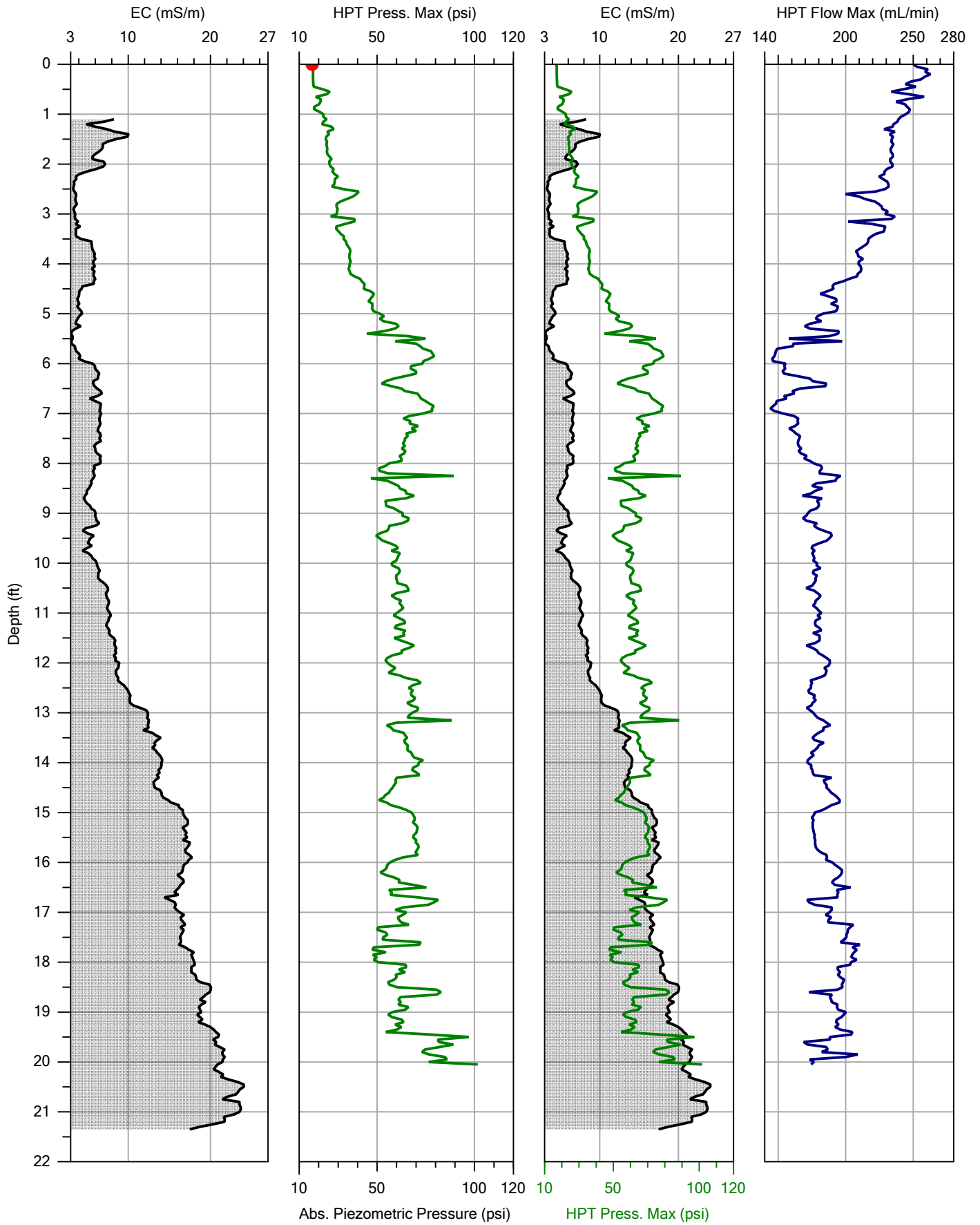
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Date:	09/09/20
Location:	northeast





Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-25.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast

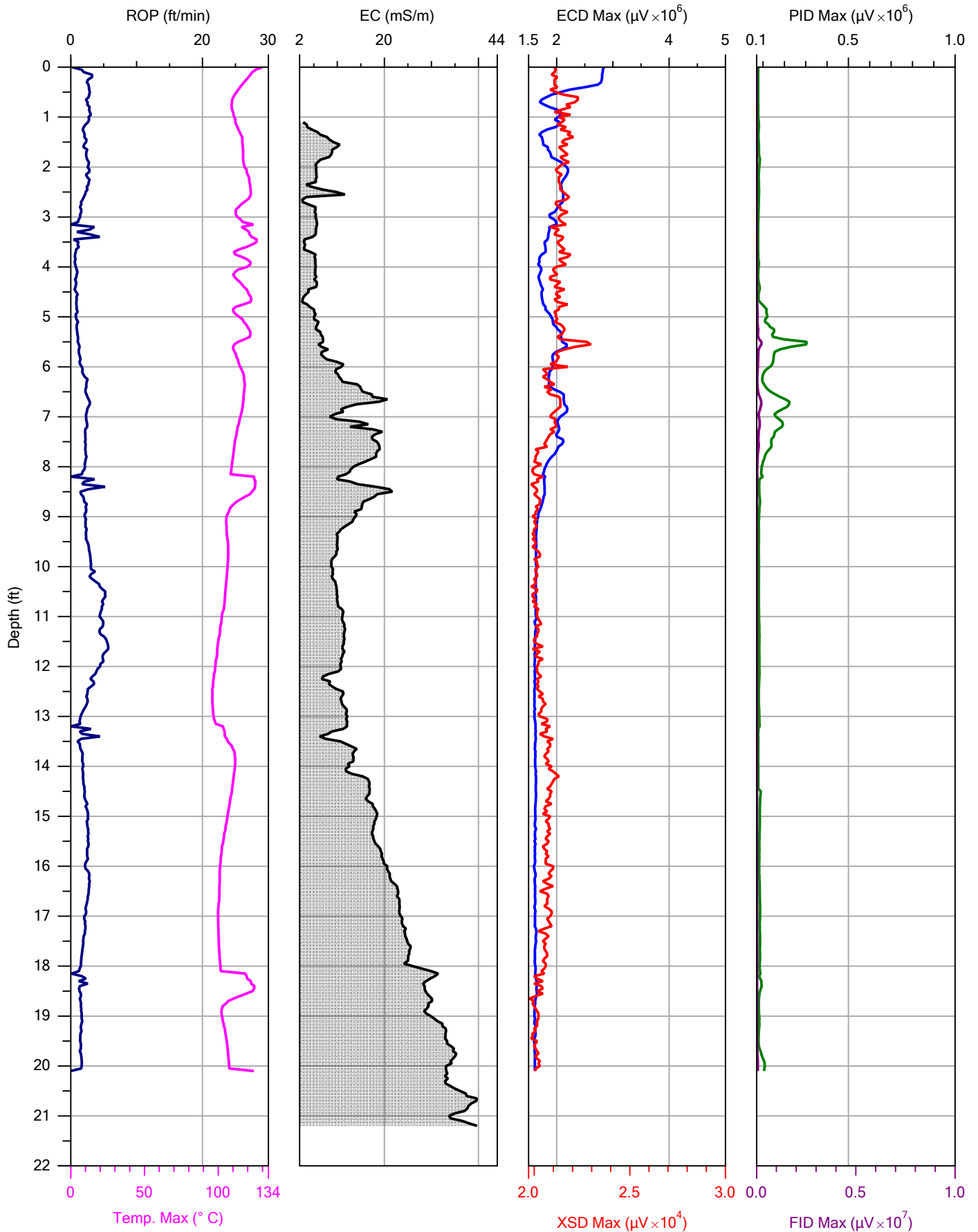




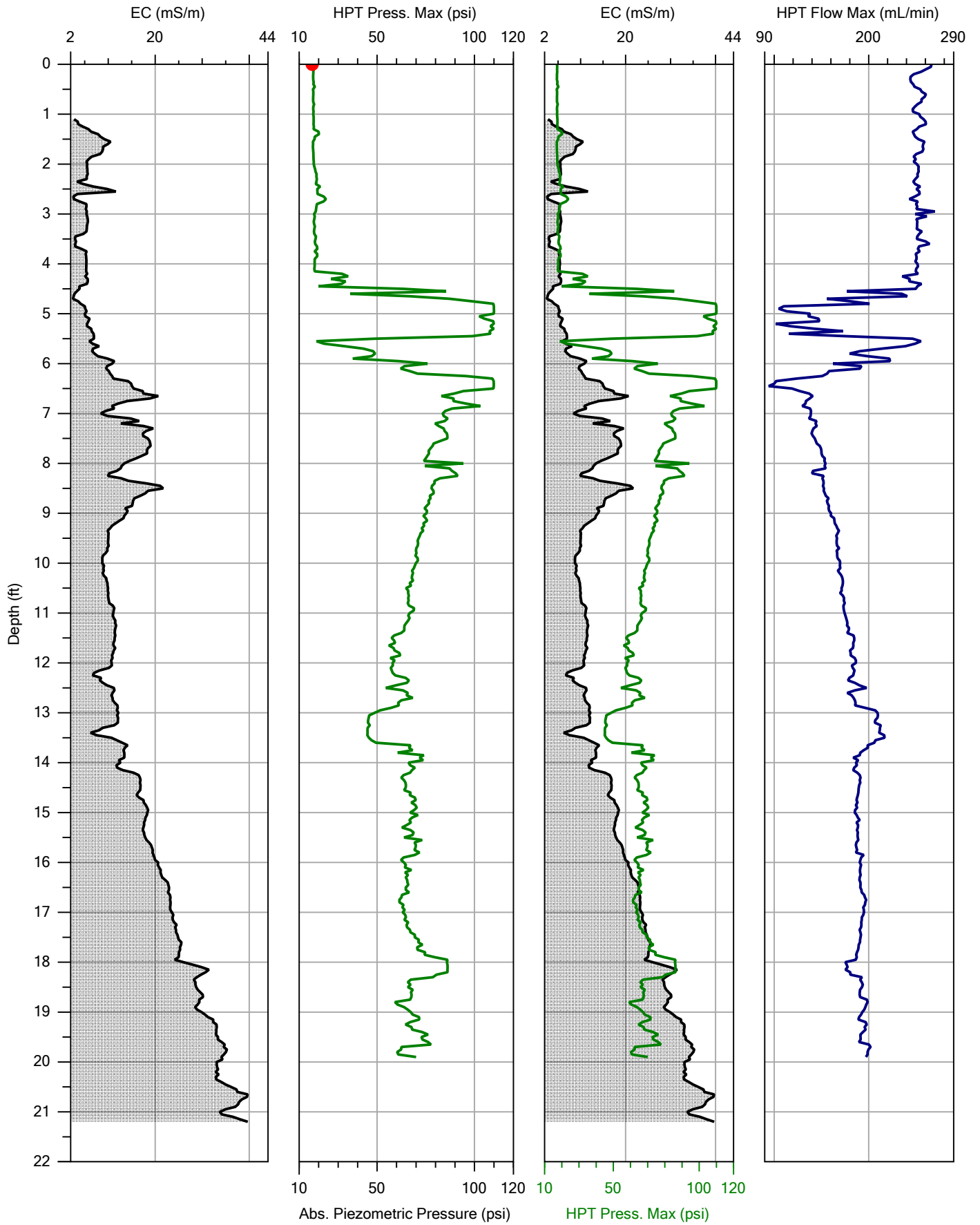
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-25.MHP
Date:	09/09/20
Location:	northeast



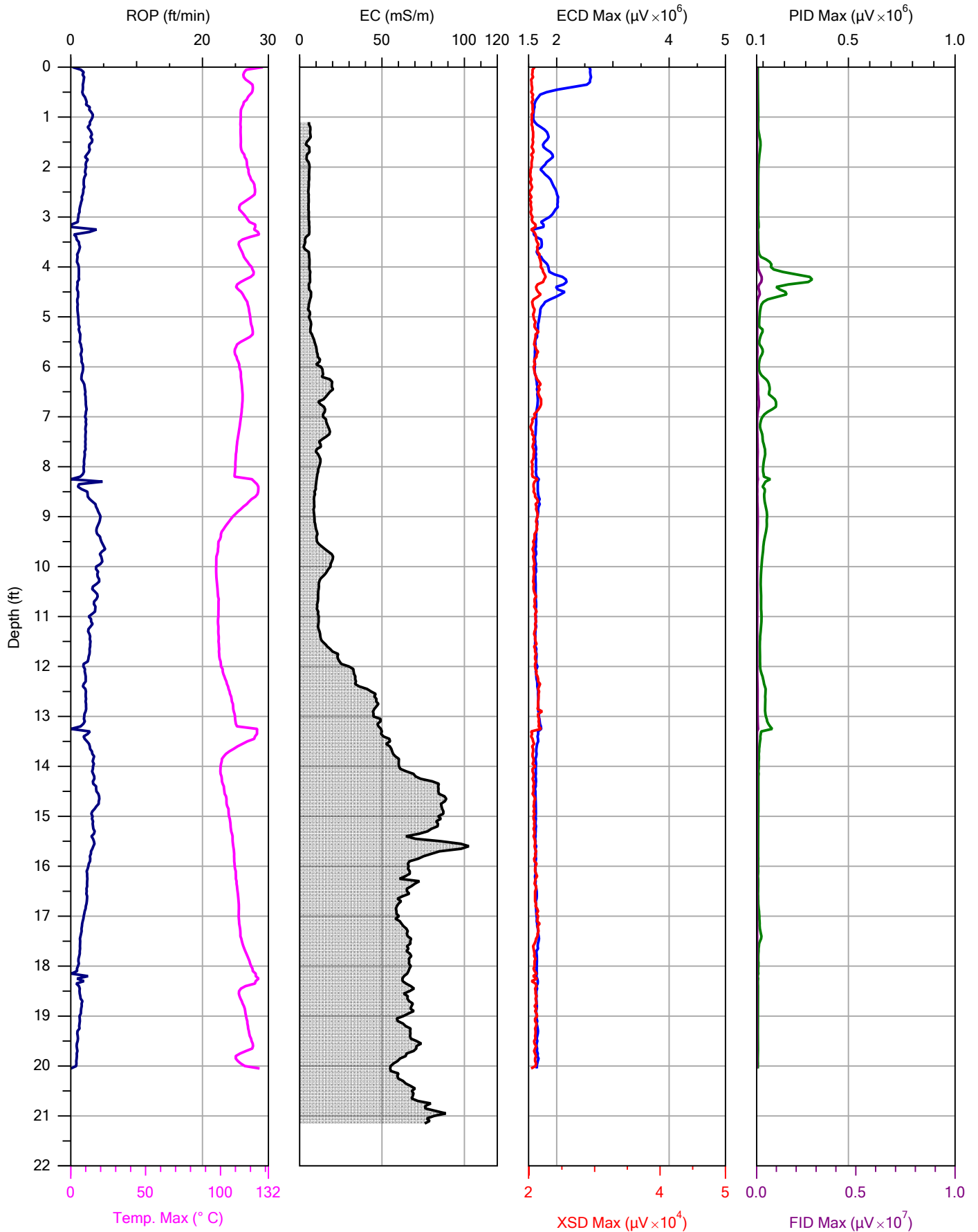
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-26.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



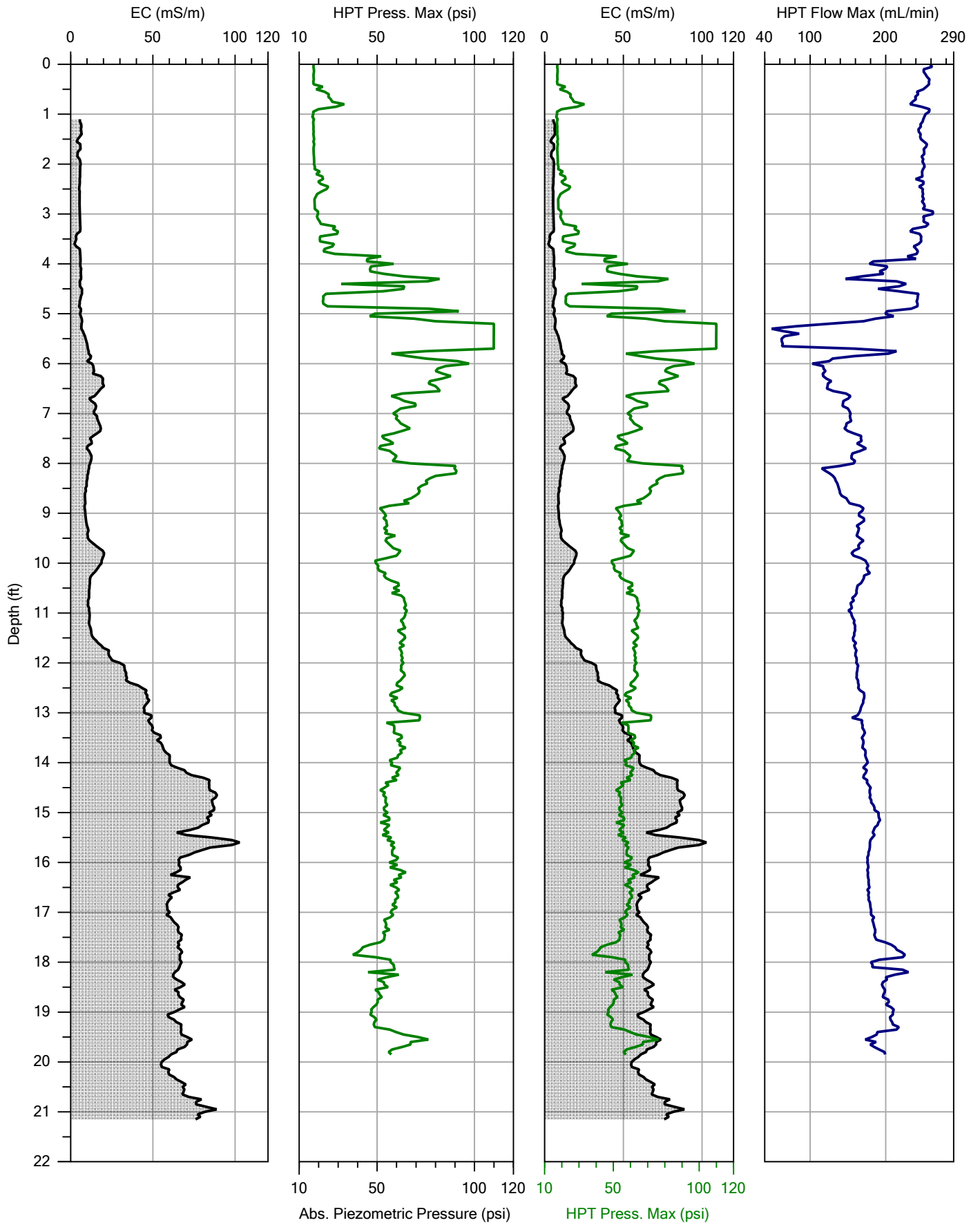
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-26.MHP
Date:	09/09/20
Location:	northeast



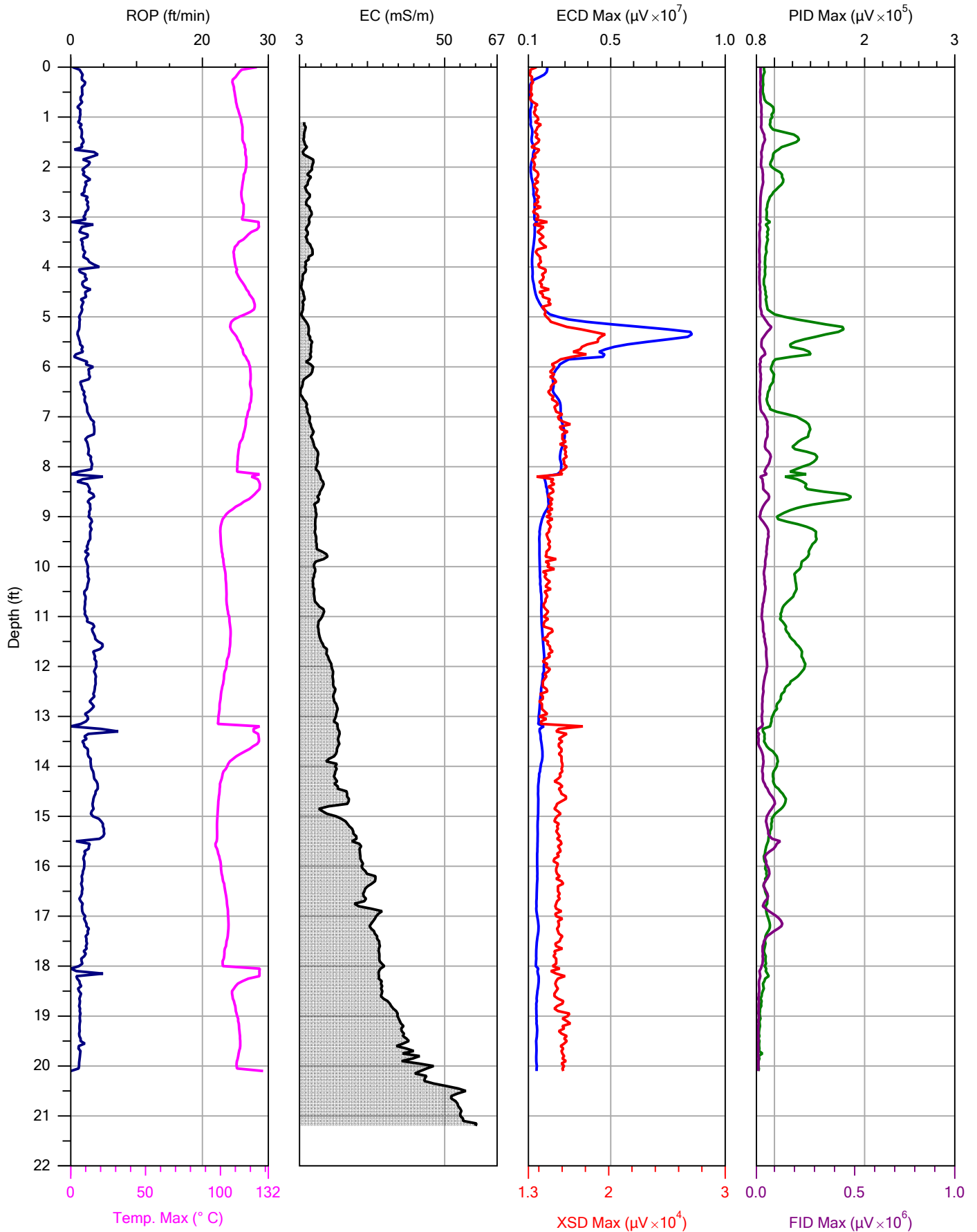
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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Company: Cascade  
 Project ID: 2022001119

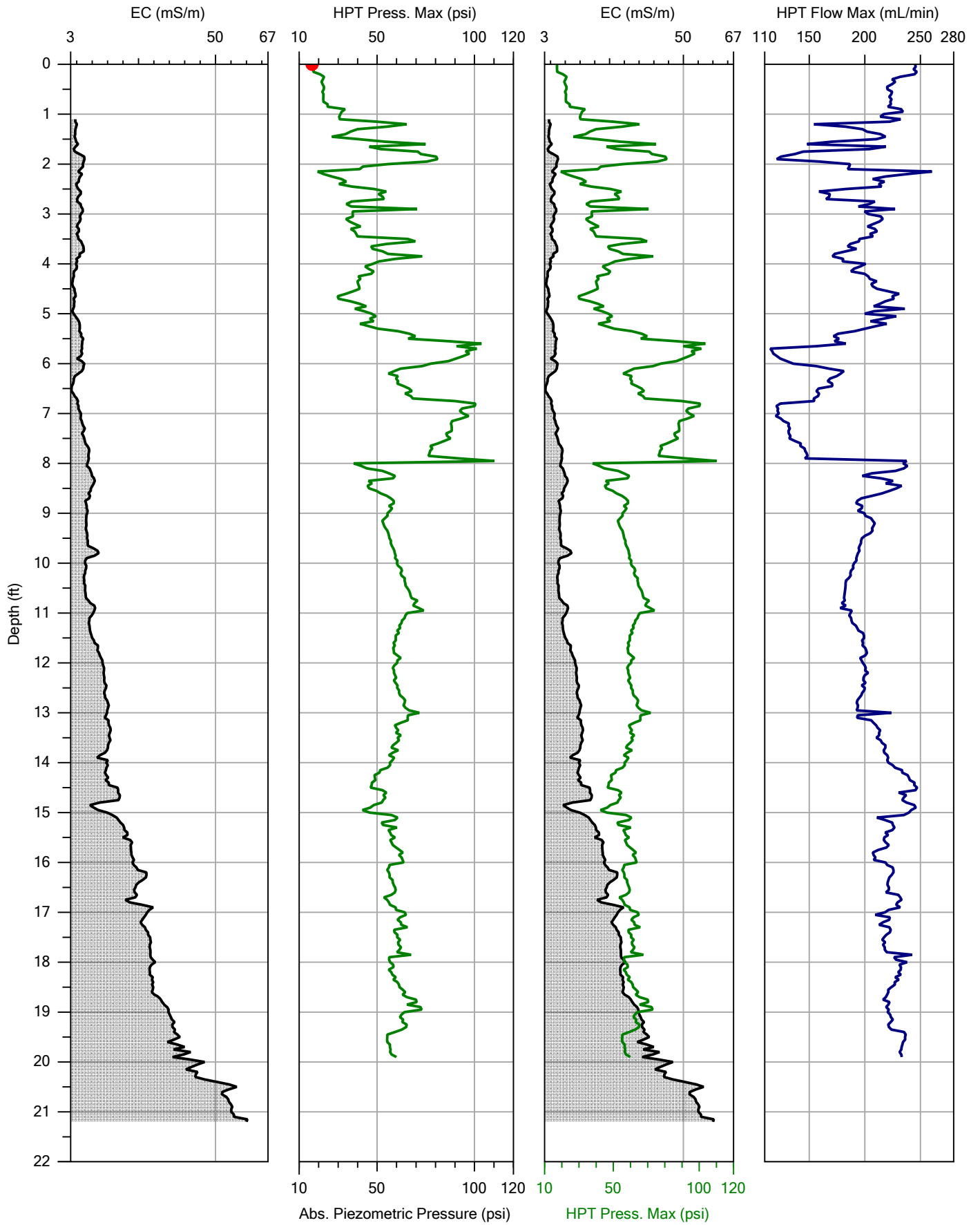
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-27.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-28.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast

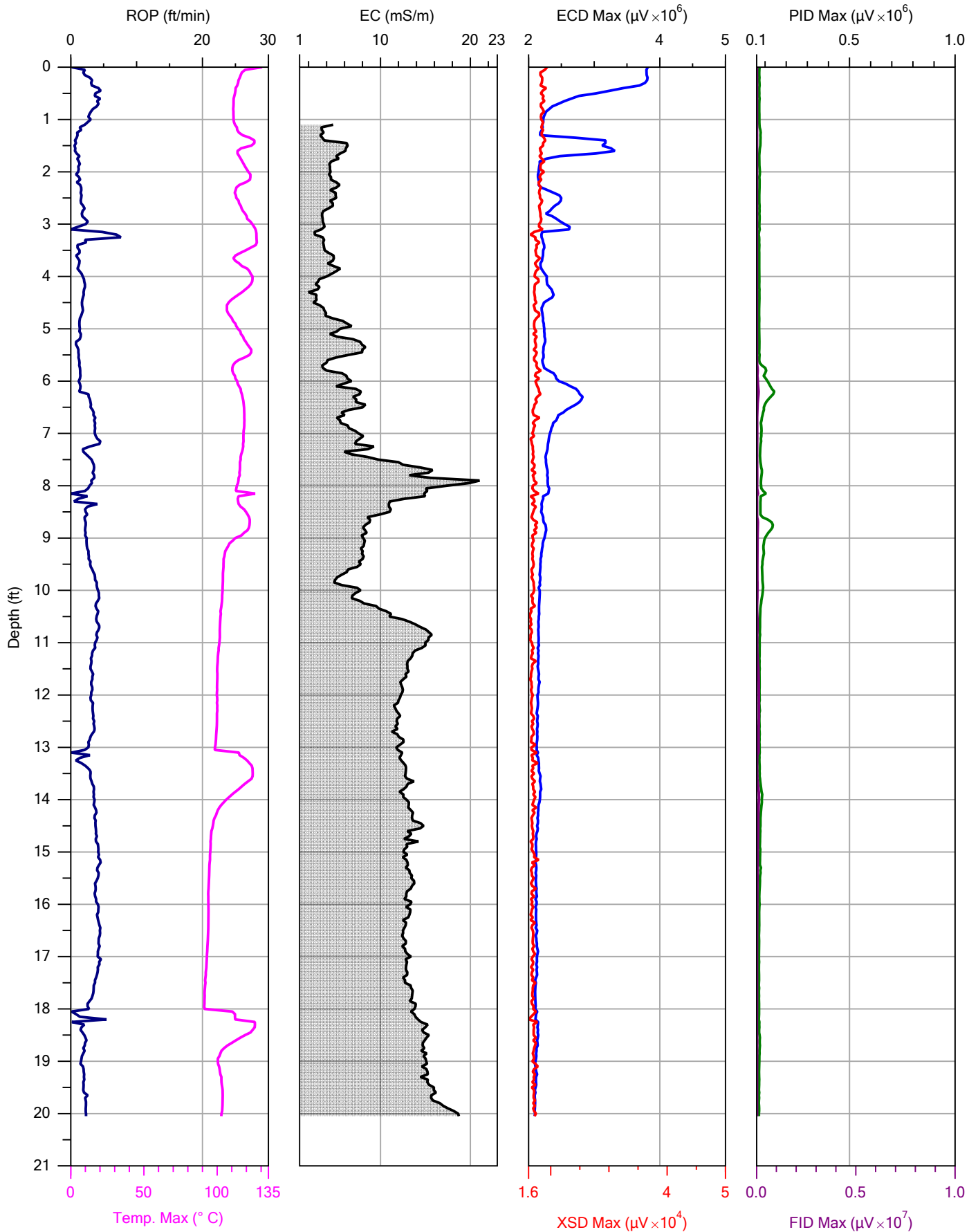




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

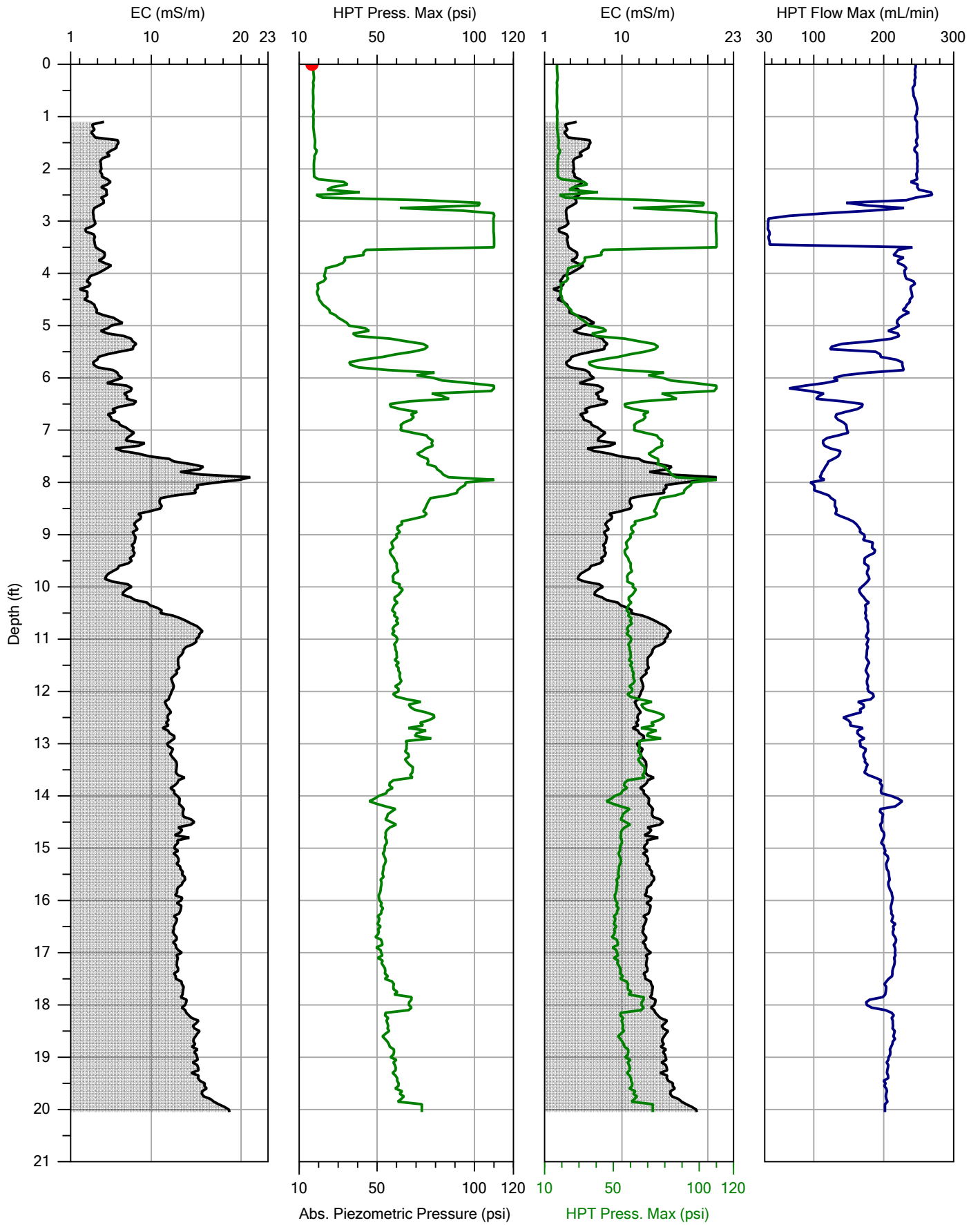
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Date:	09/10/20
Location:	northeast



Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

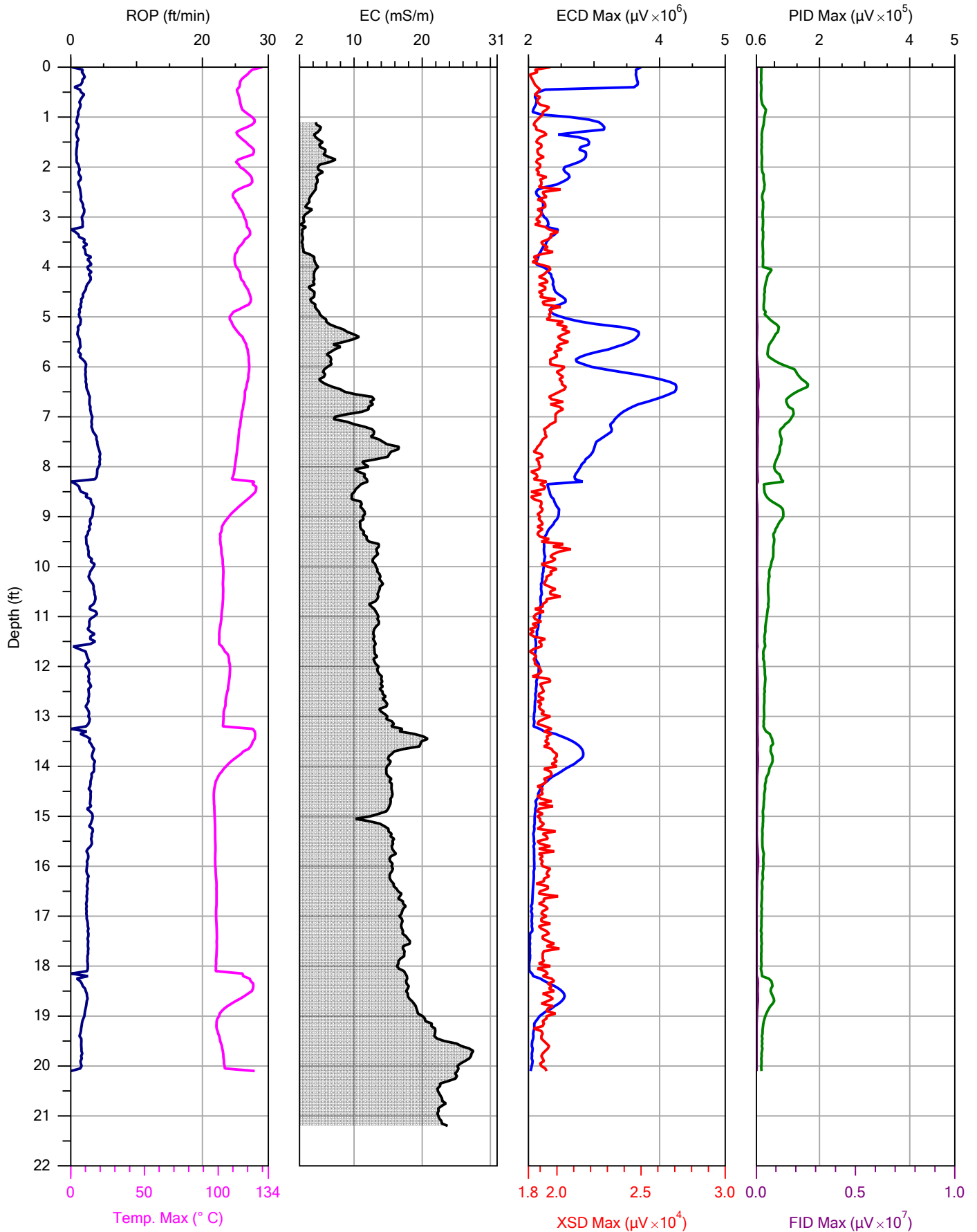
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

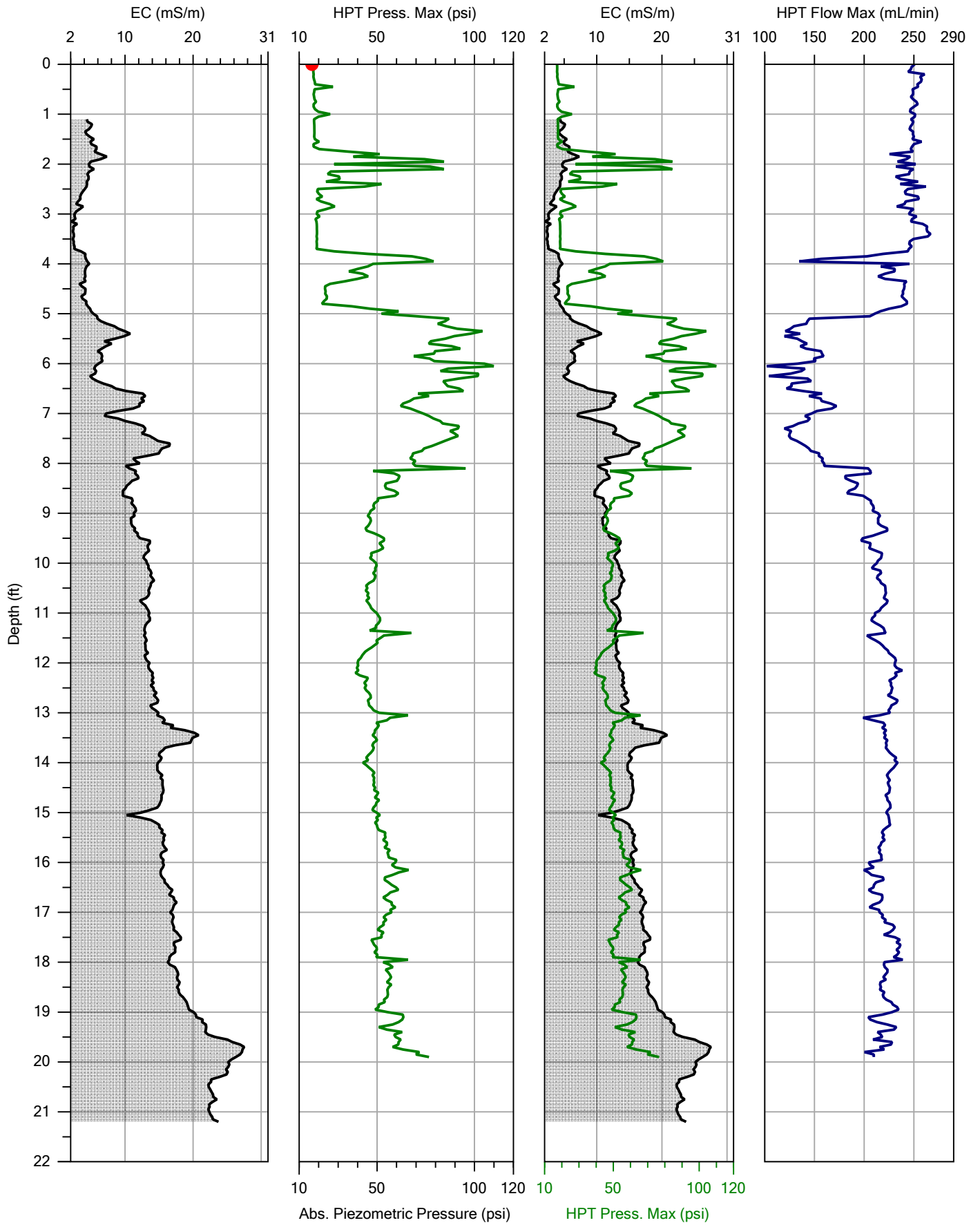
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

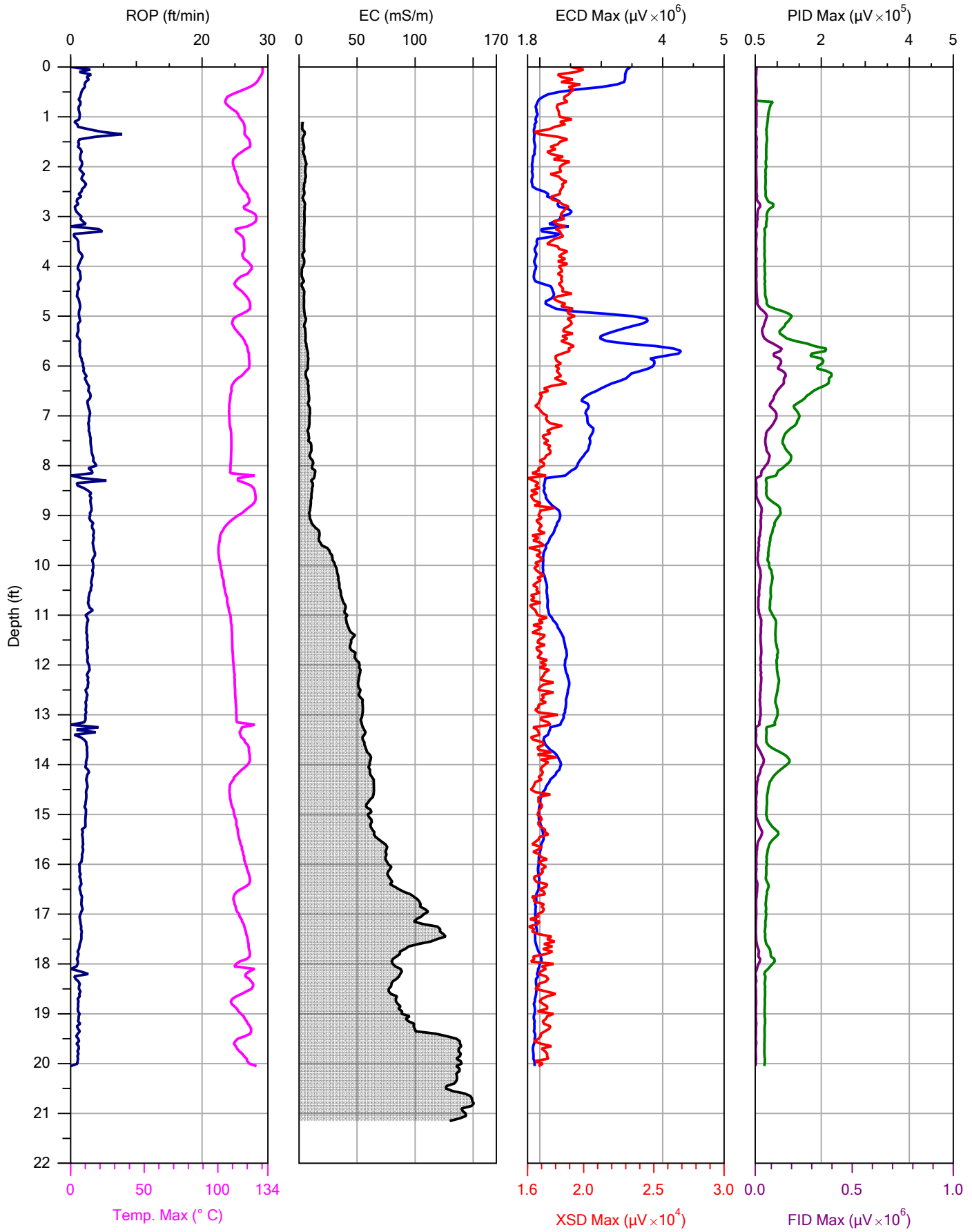
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-30.MHP
Date:	09/10/20
Location:	northeast

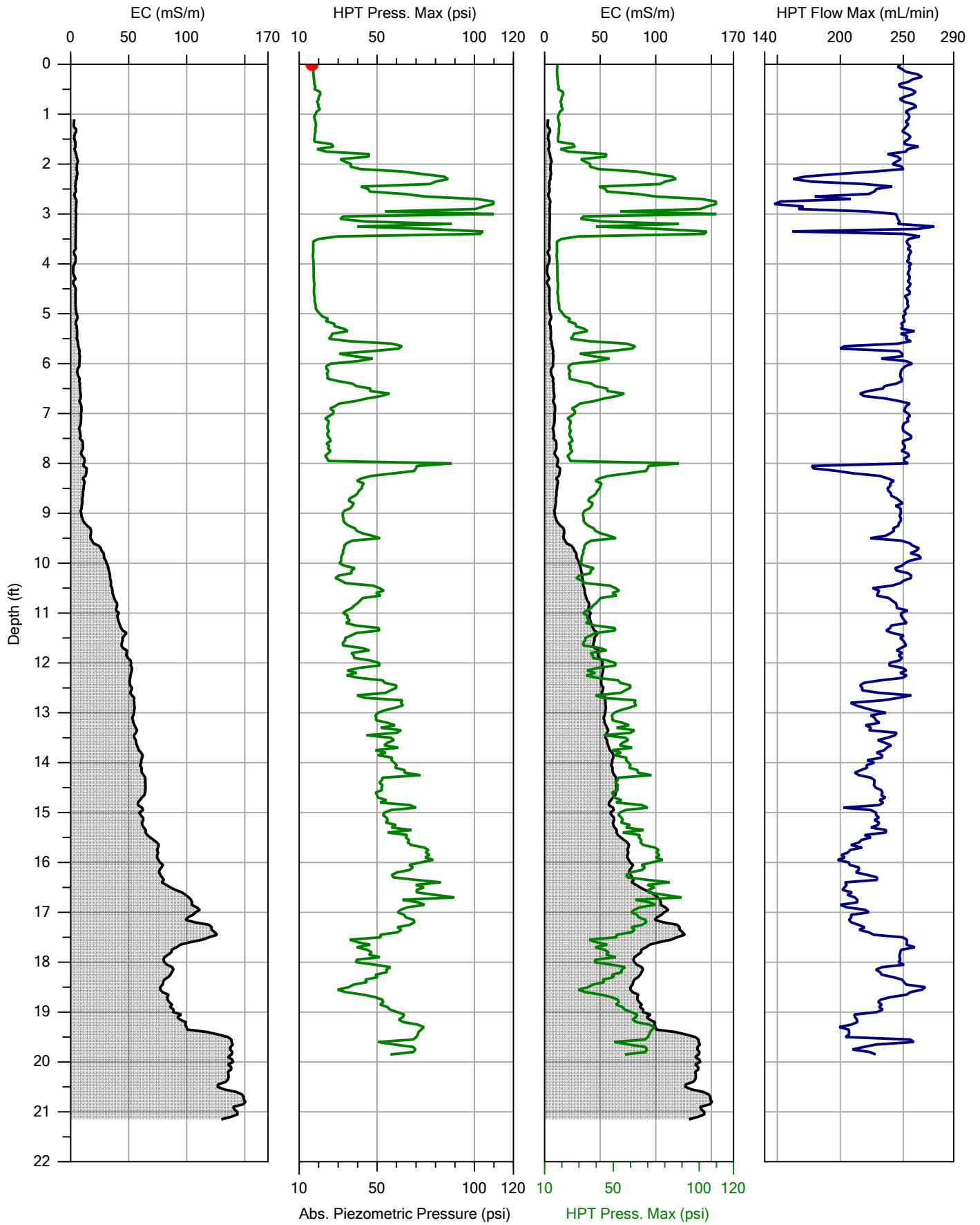


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-31.MHP
Date:	09/10/20
Location:	northeast

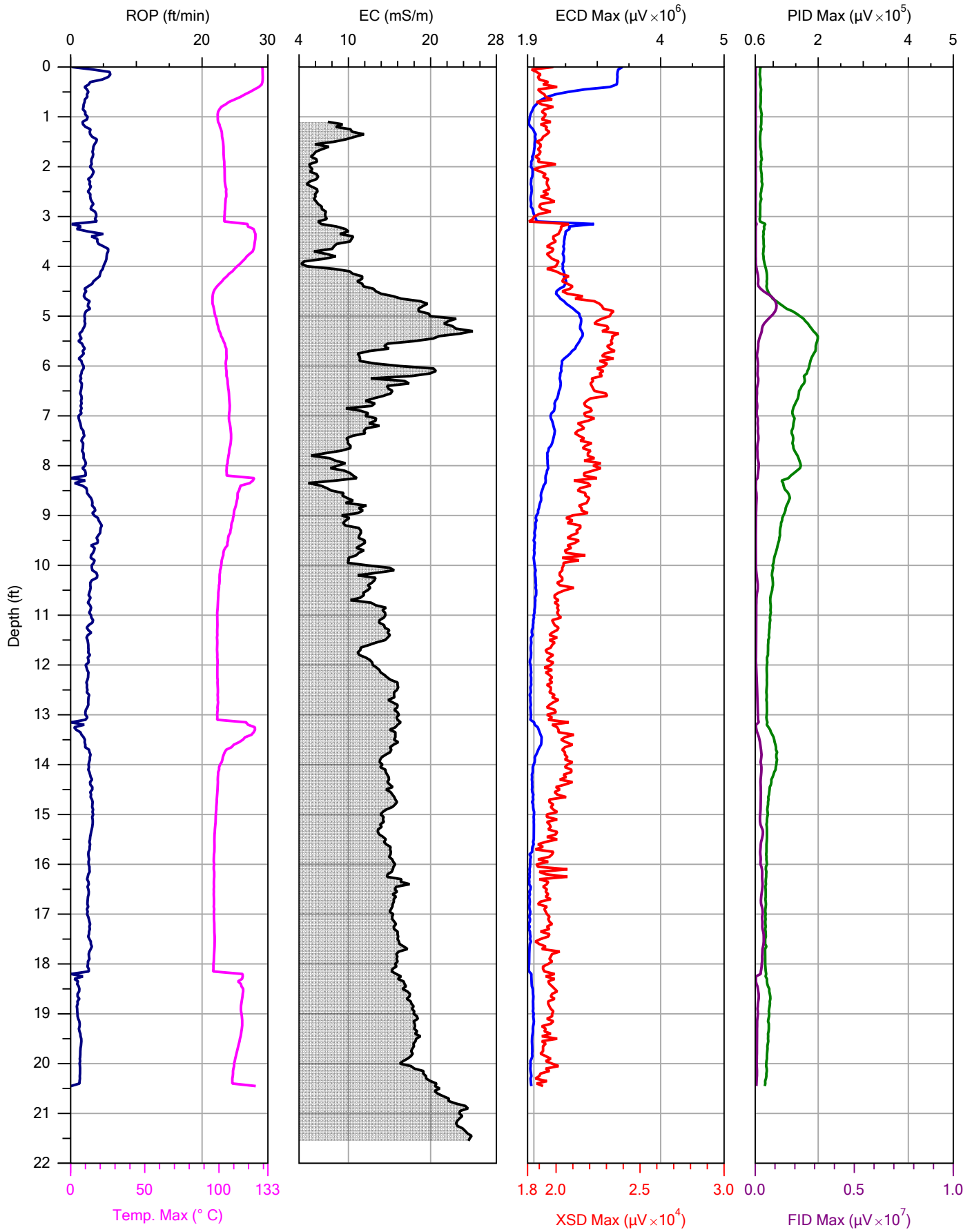




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

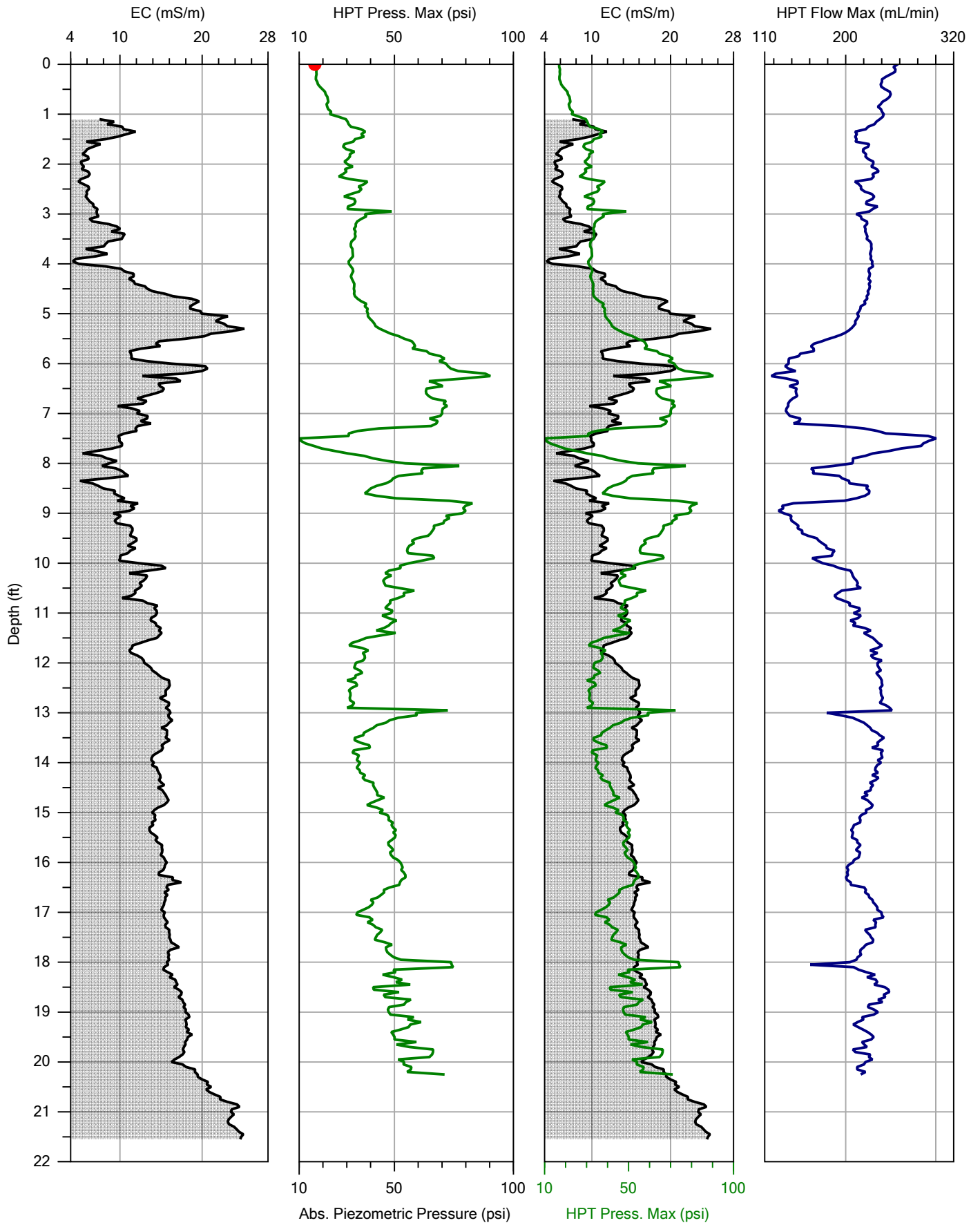
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

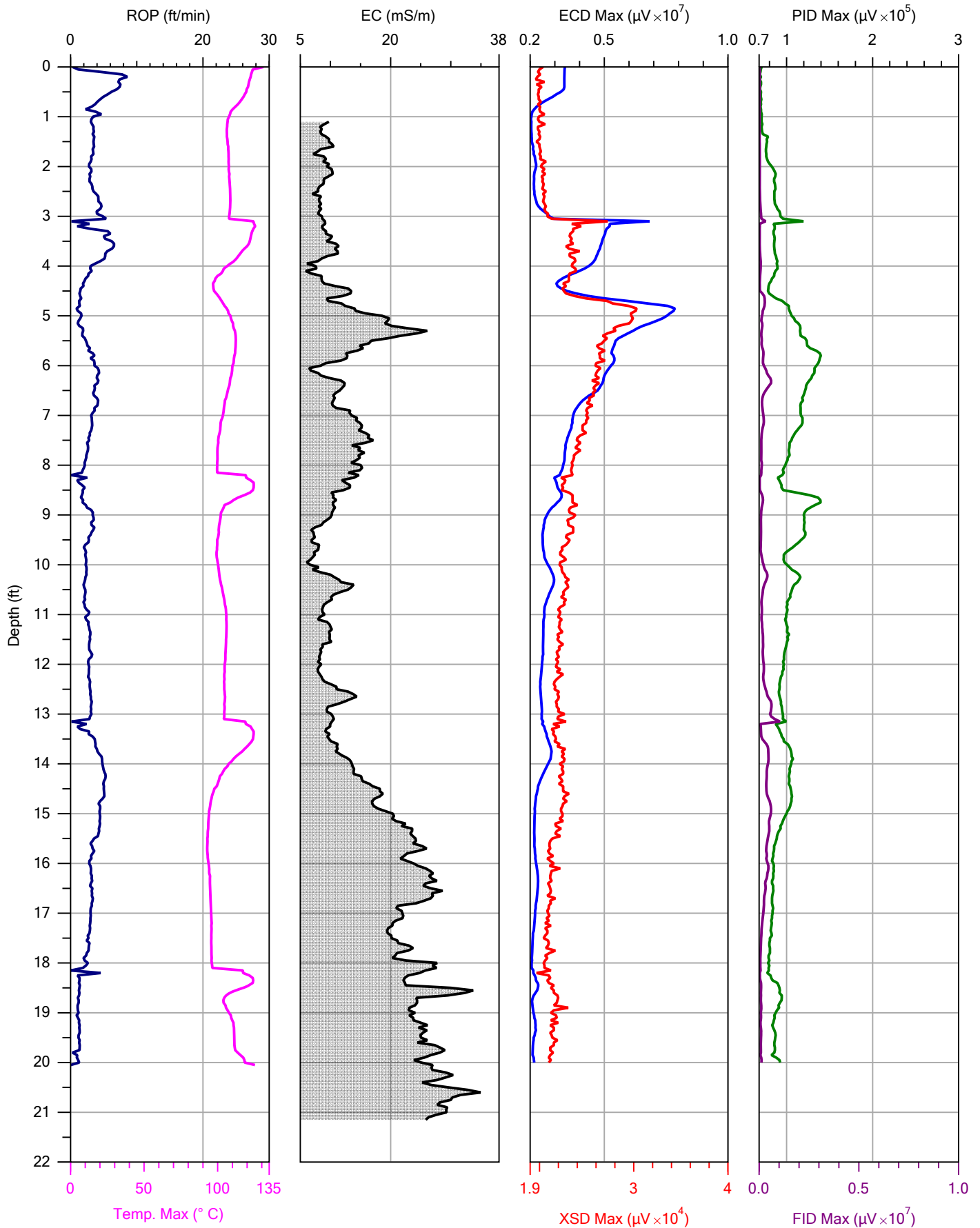
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Date:	09/10/20
Location:	northeast



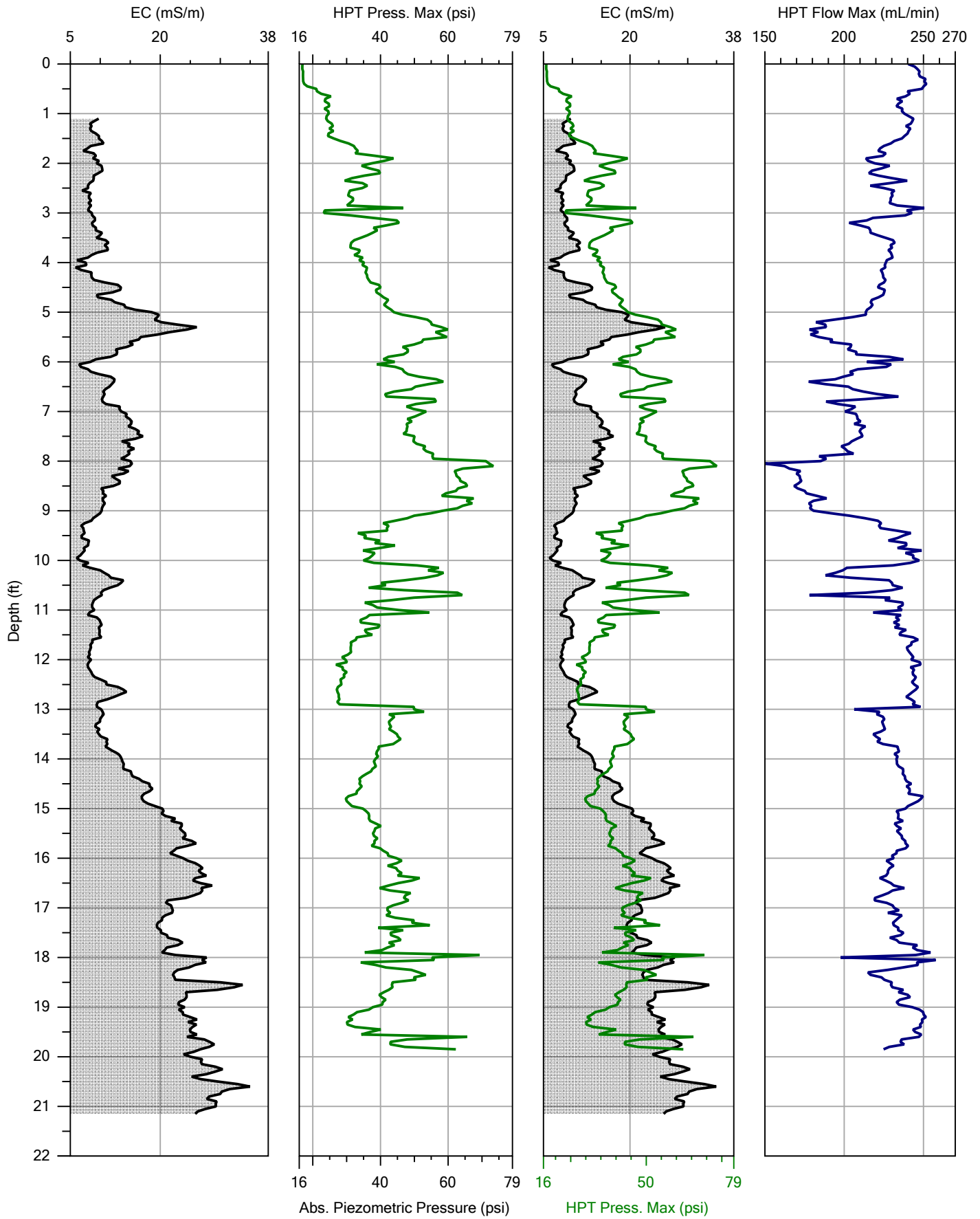
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-32.MHP
Date:	09/10/20
Location:	northeast



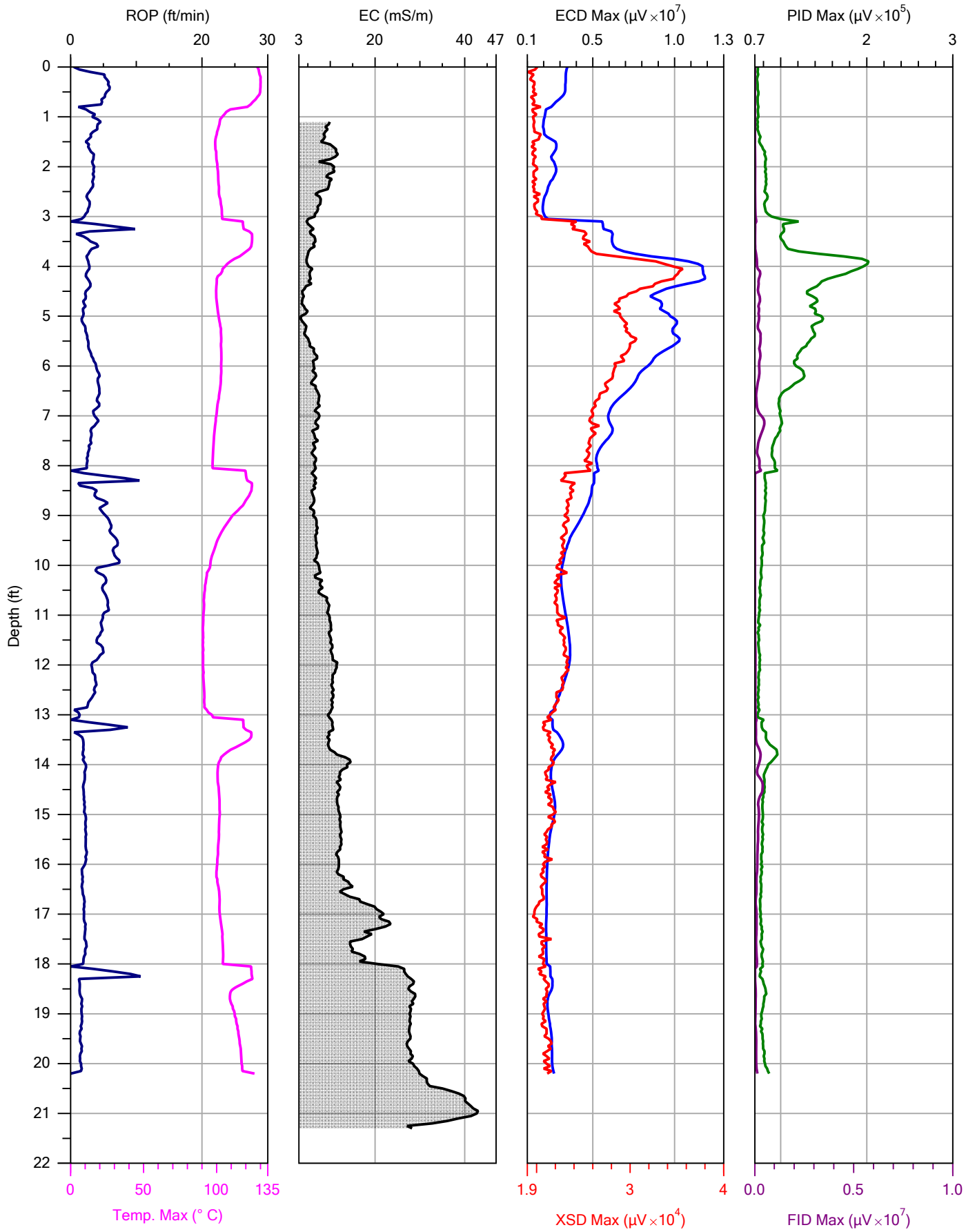
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-33.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-33.MHP
Date:	09/10/20
Location:	northeast

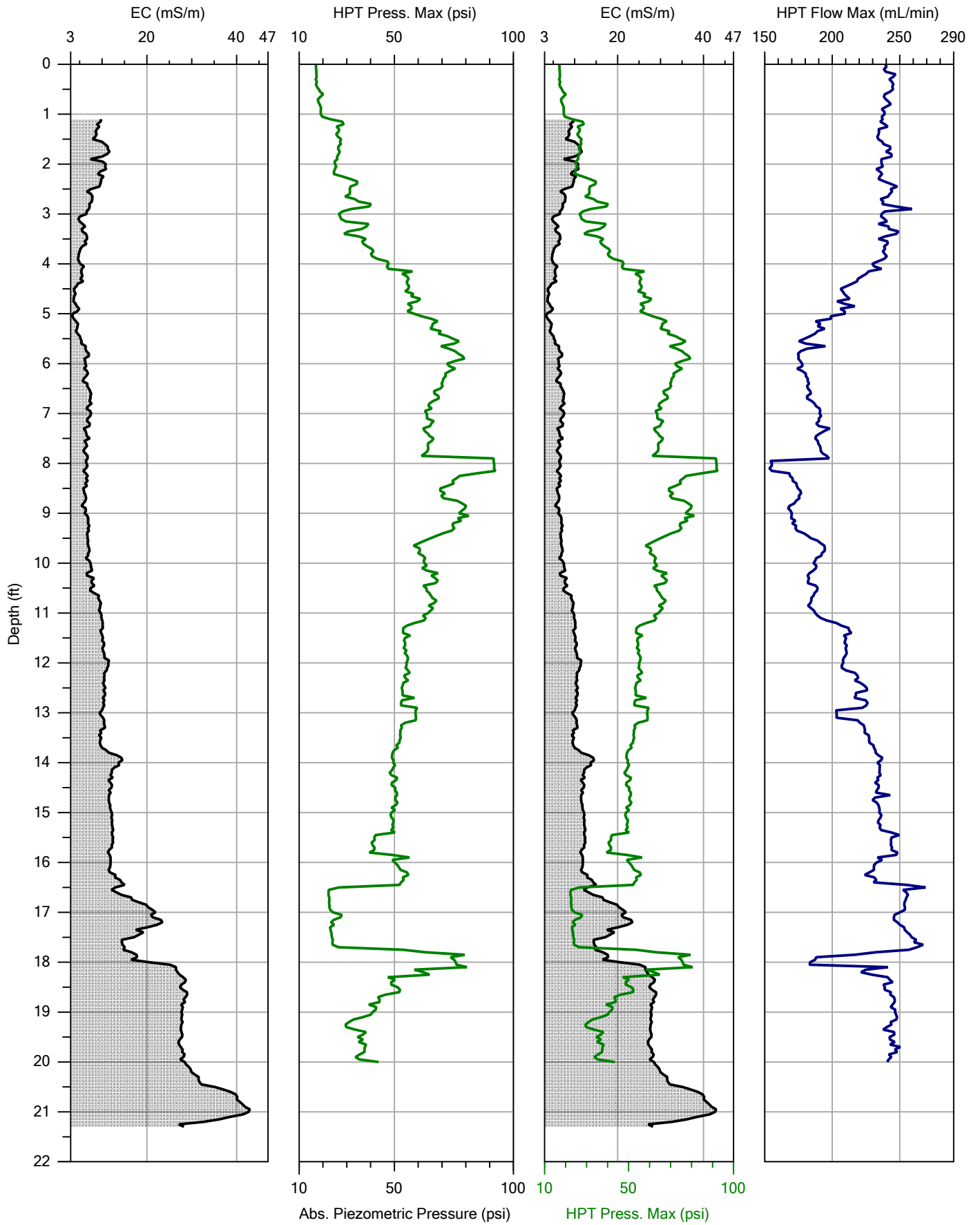


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-34.MHP
Date:	09/10/20
Location:	northeast

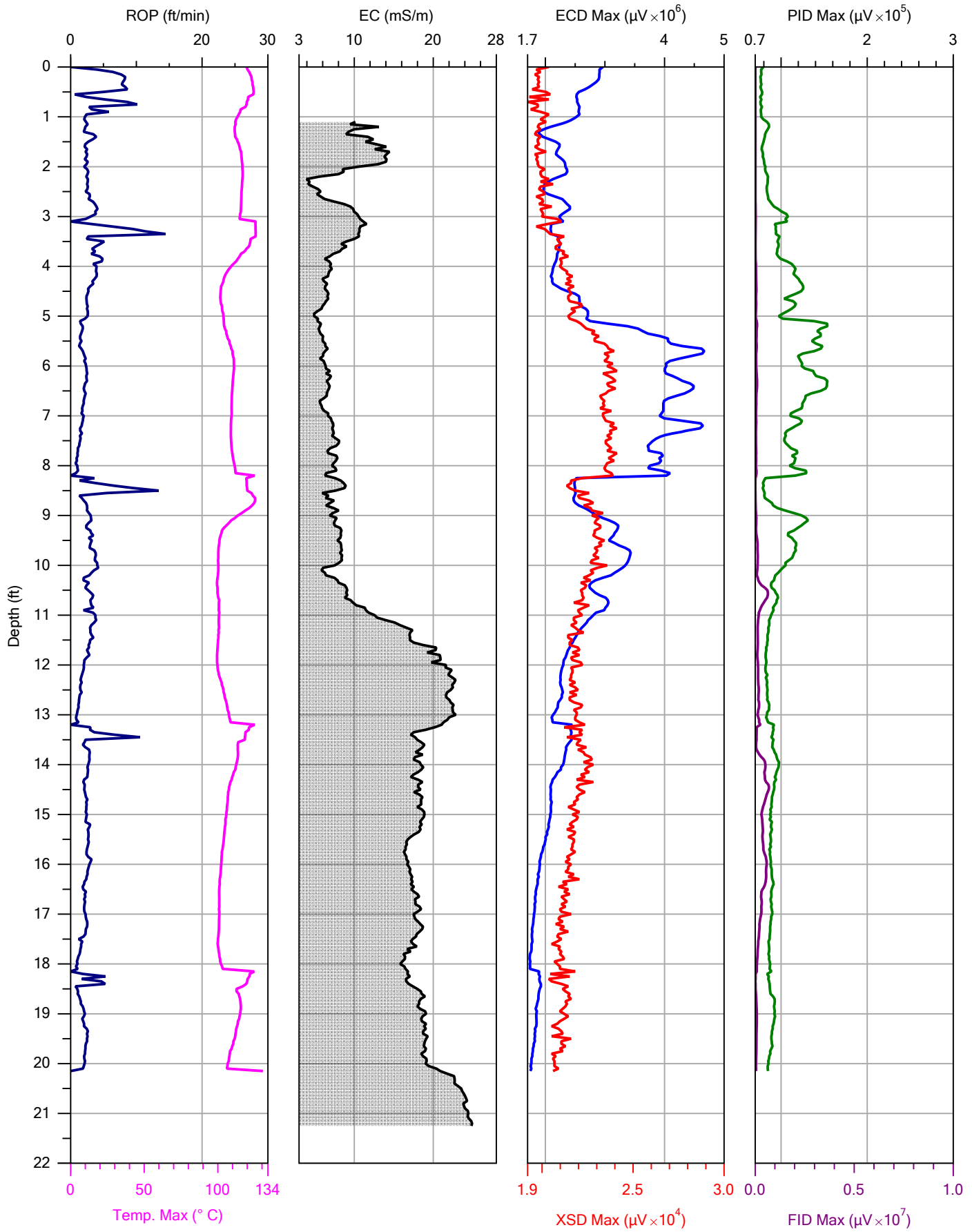




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

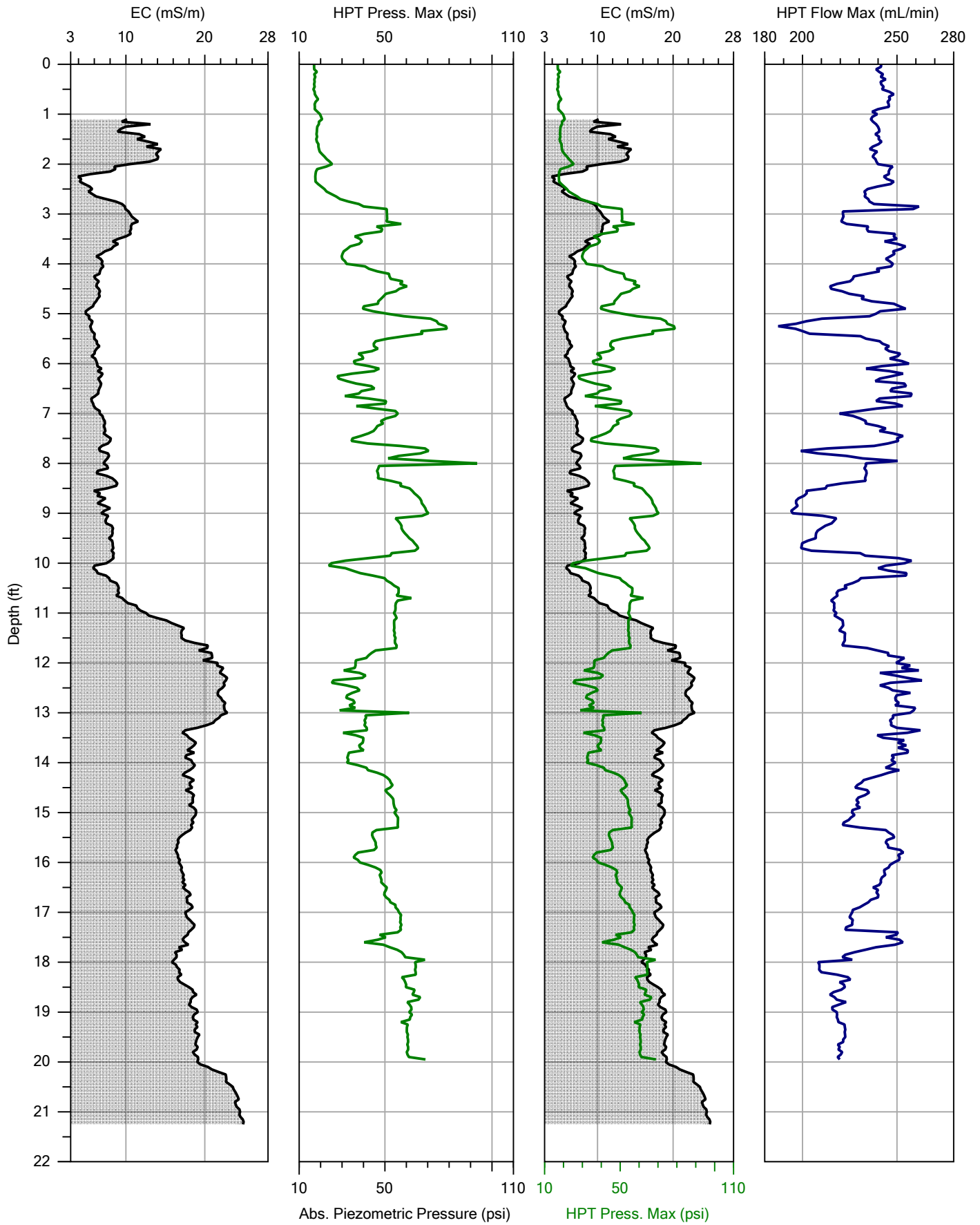
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Date:	09/10/20
Location:	northeast



Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

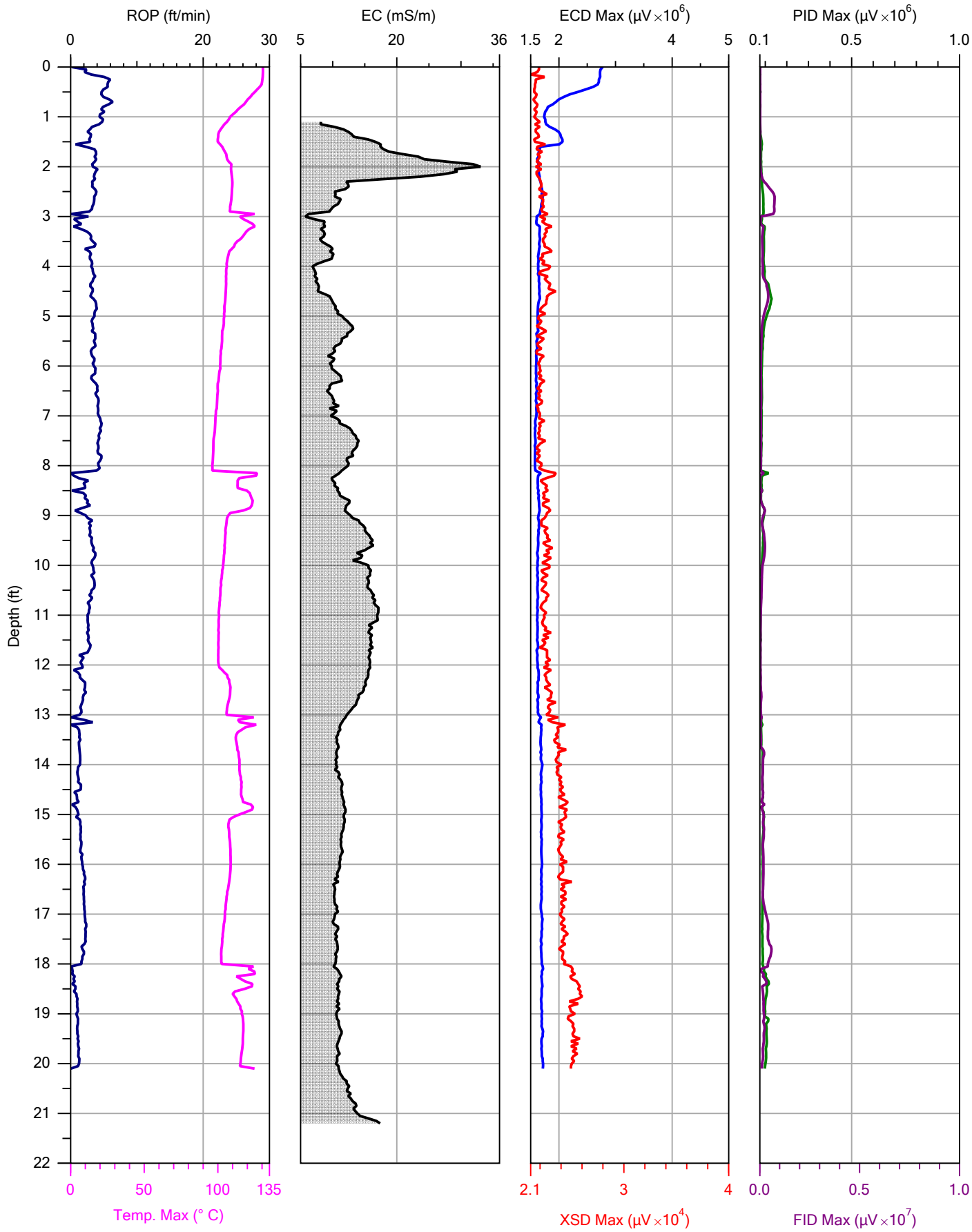
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Date:	09/10/20
Location:	northeast



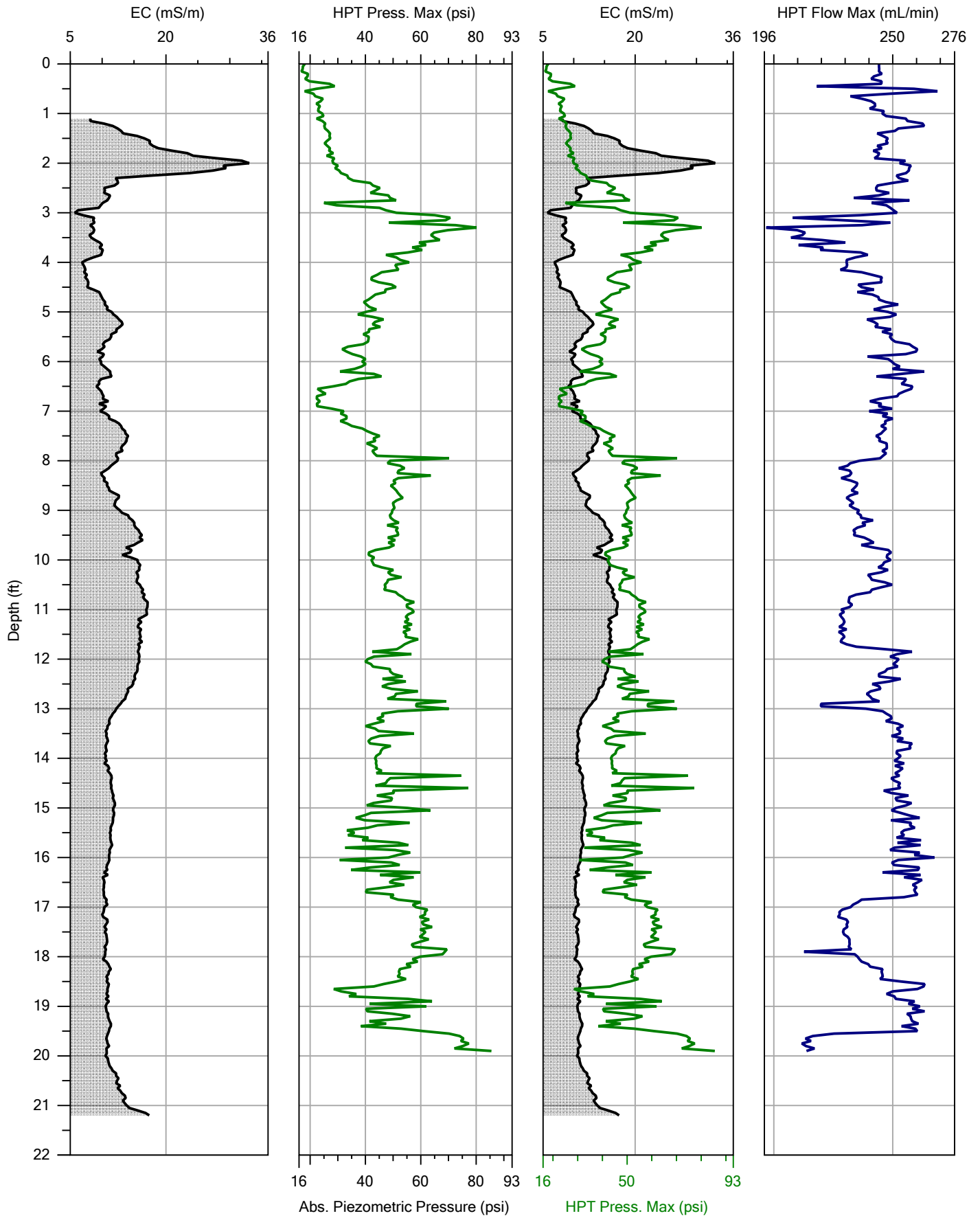
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-35.MHP
Date:	09/10/20
Location:	northeast



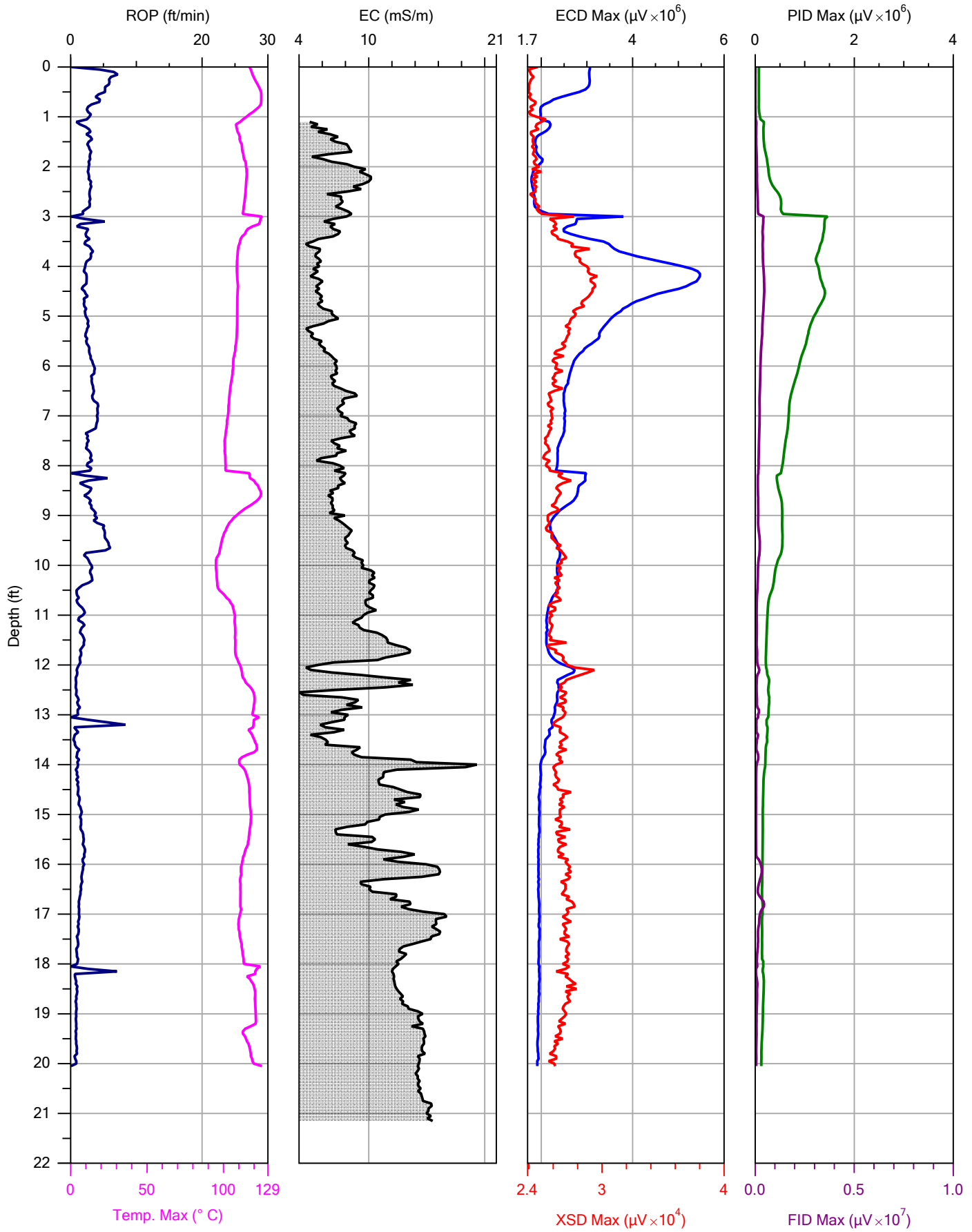
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-36.MHP
Date:	09/10/20
Location:	northeast

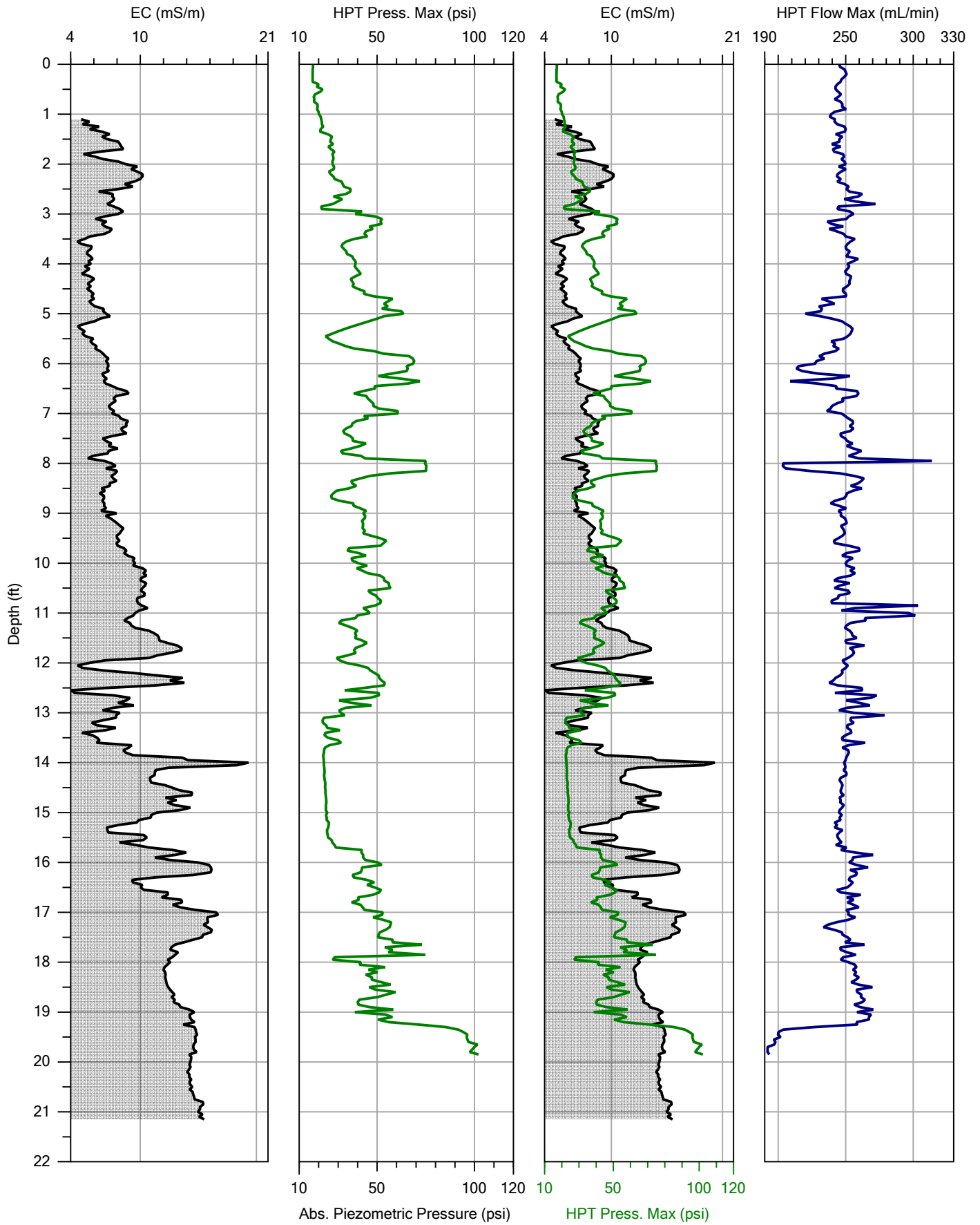


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-37.MHP
Date:	09/10/20
Location:	northeast

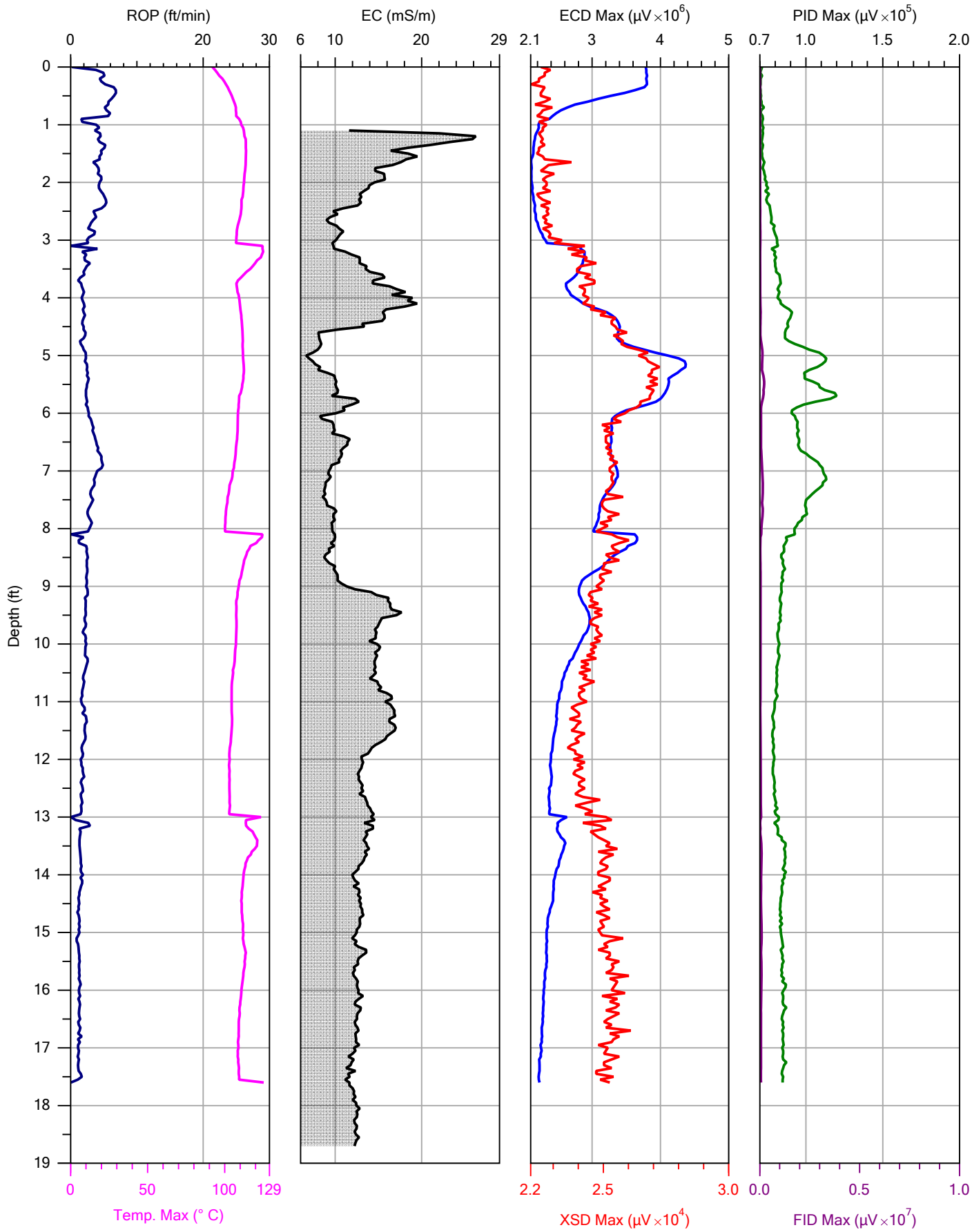




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

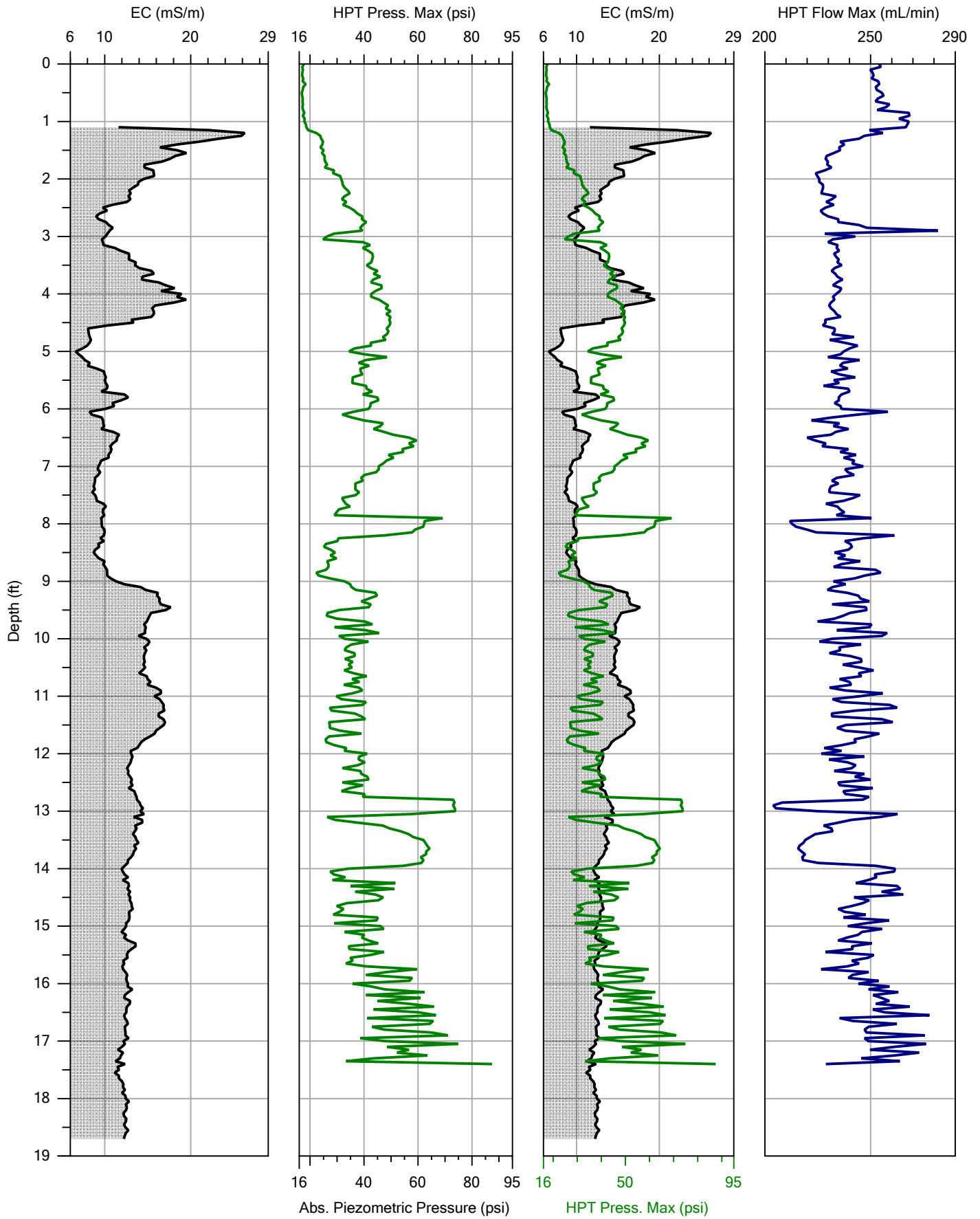
File:	HSI-HRSC-37.MHP
Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

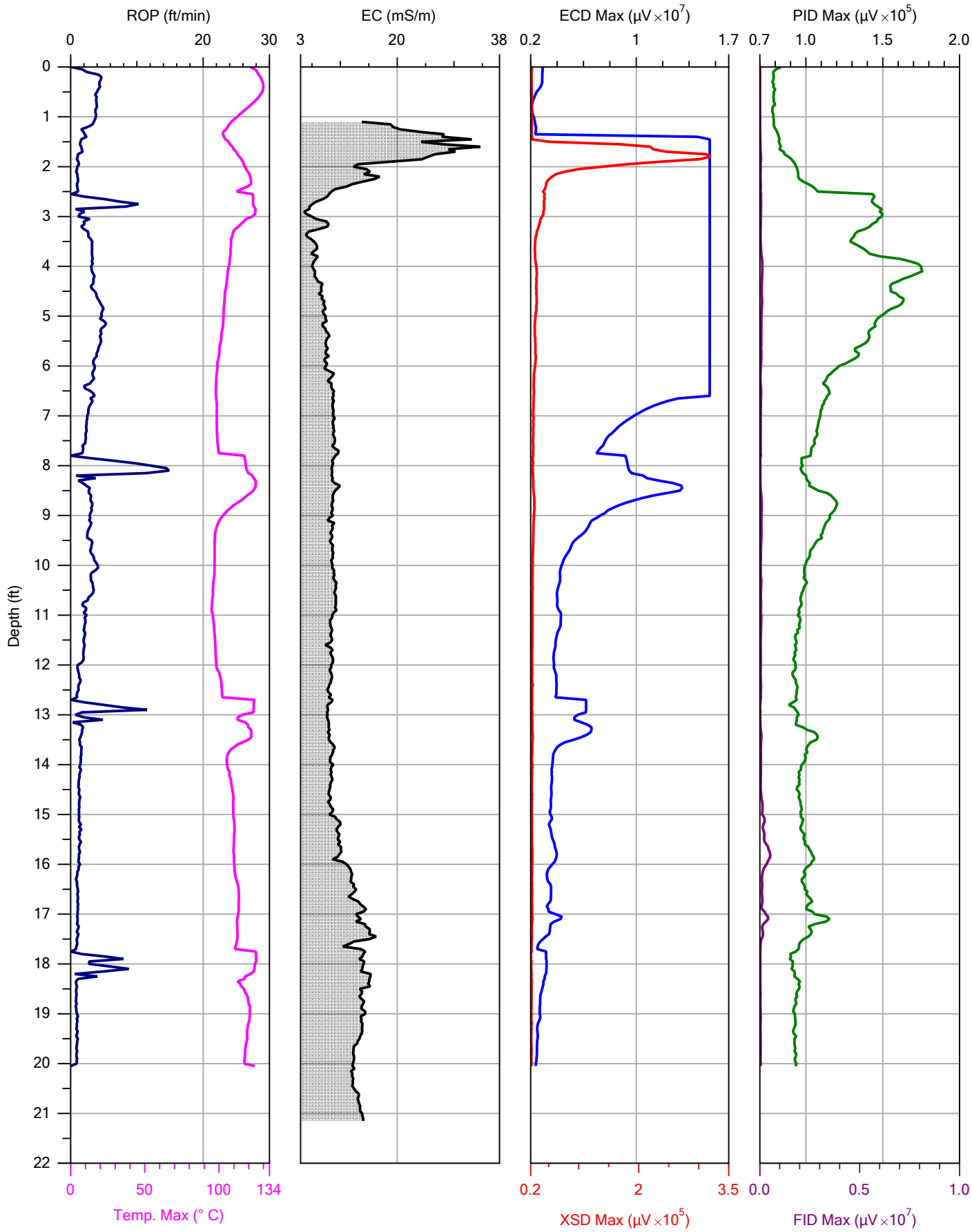
File:	HSI-HRSC-38.MHP
Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

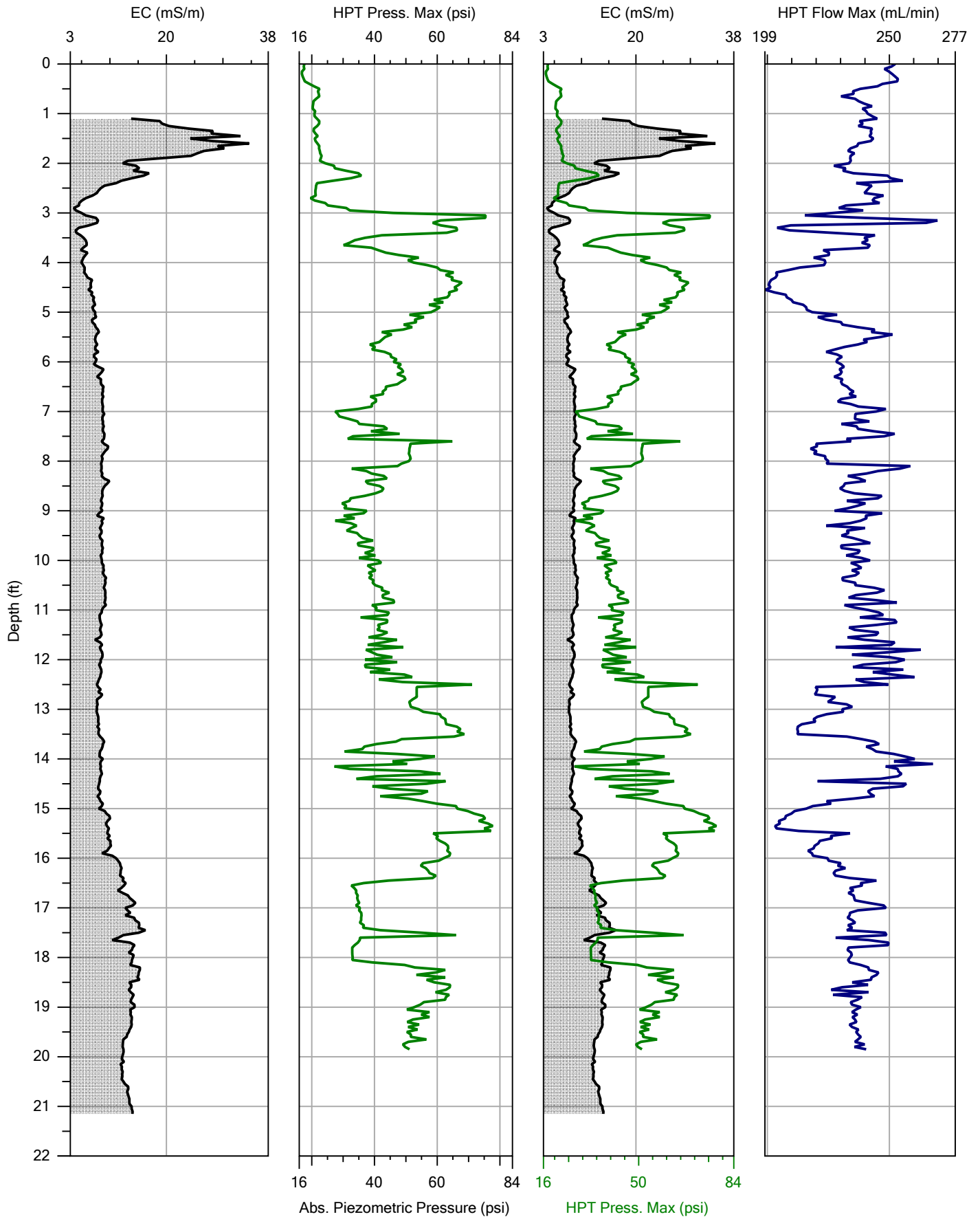
File:	HSI-HRSC-38.MHP
Date:	09/10/20
Location:	northeast



Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

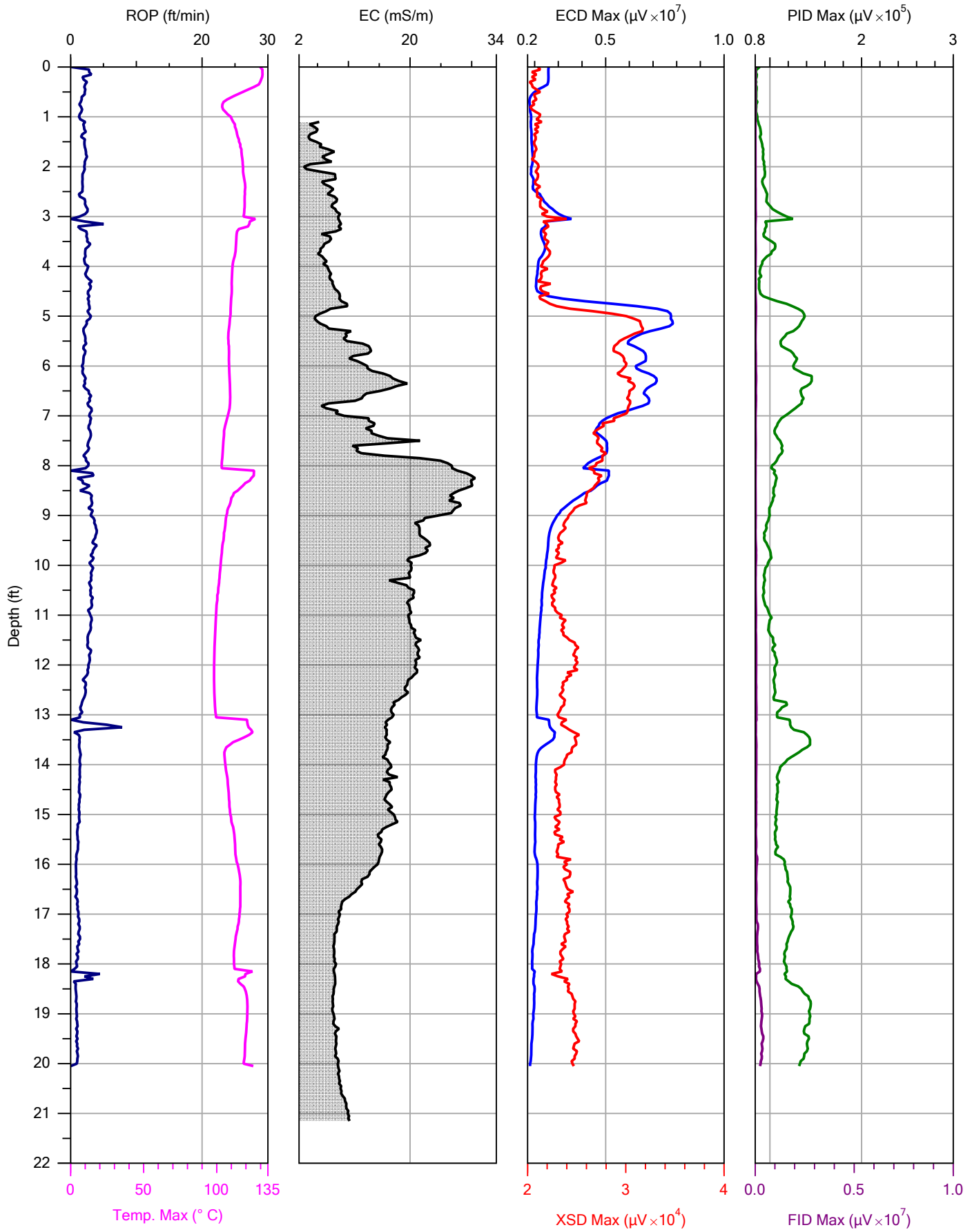
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-39.MHP
Date:	09/10/20
Location:	northeast

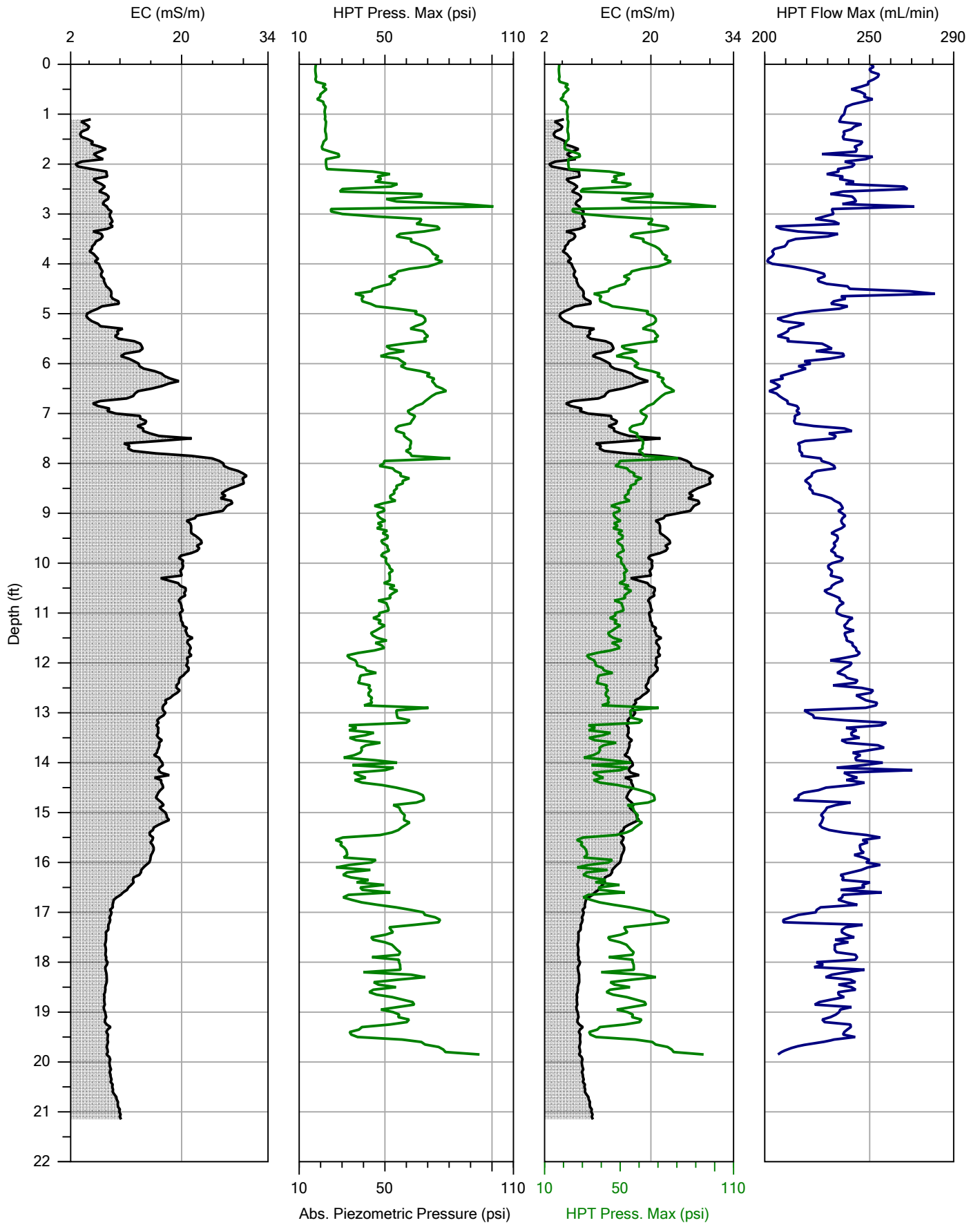


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-40.MHP
Date:	09/10/20
Location:	northeast

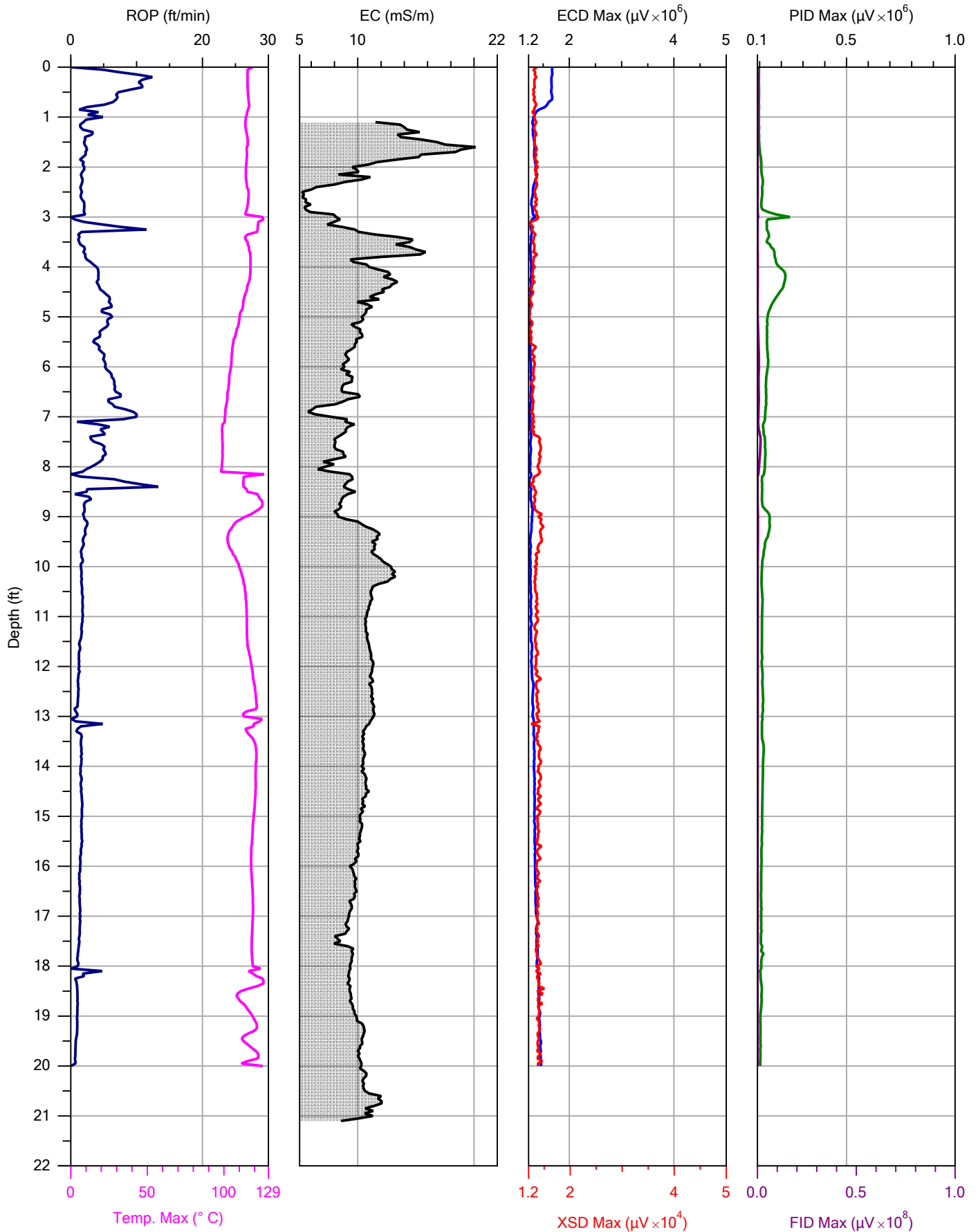




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

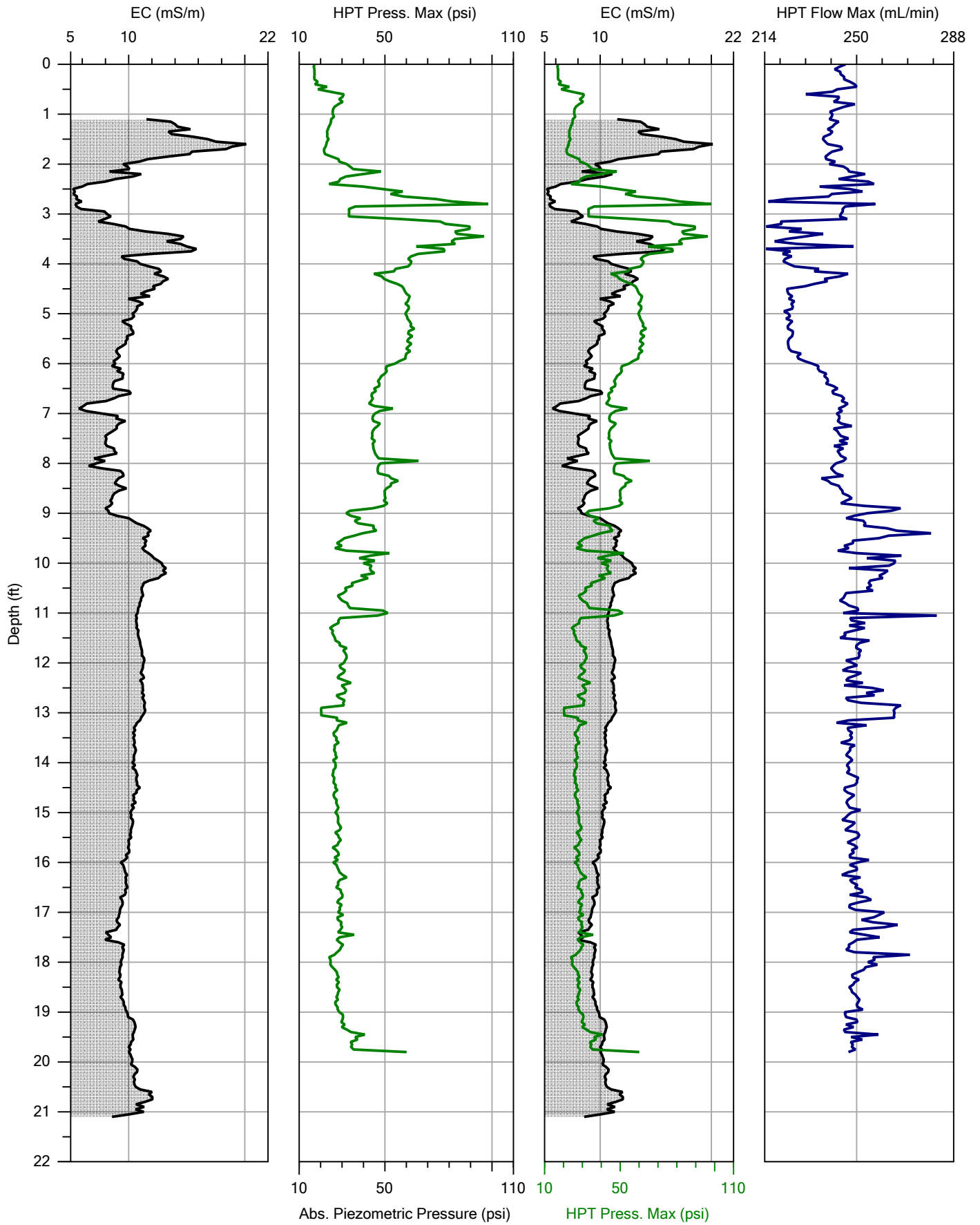
File:	HSI-HRSC-40.MHP
Date:	09/10/20
Location:	northeast



Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

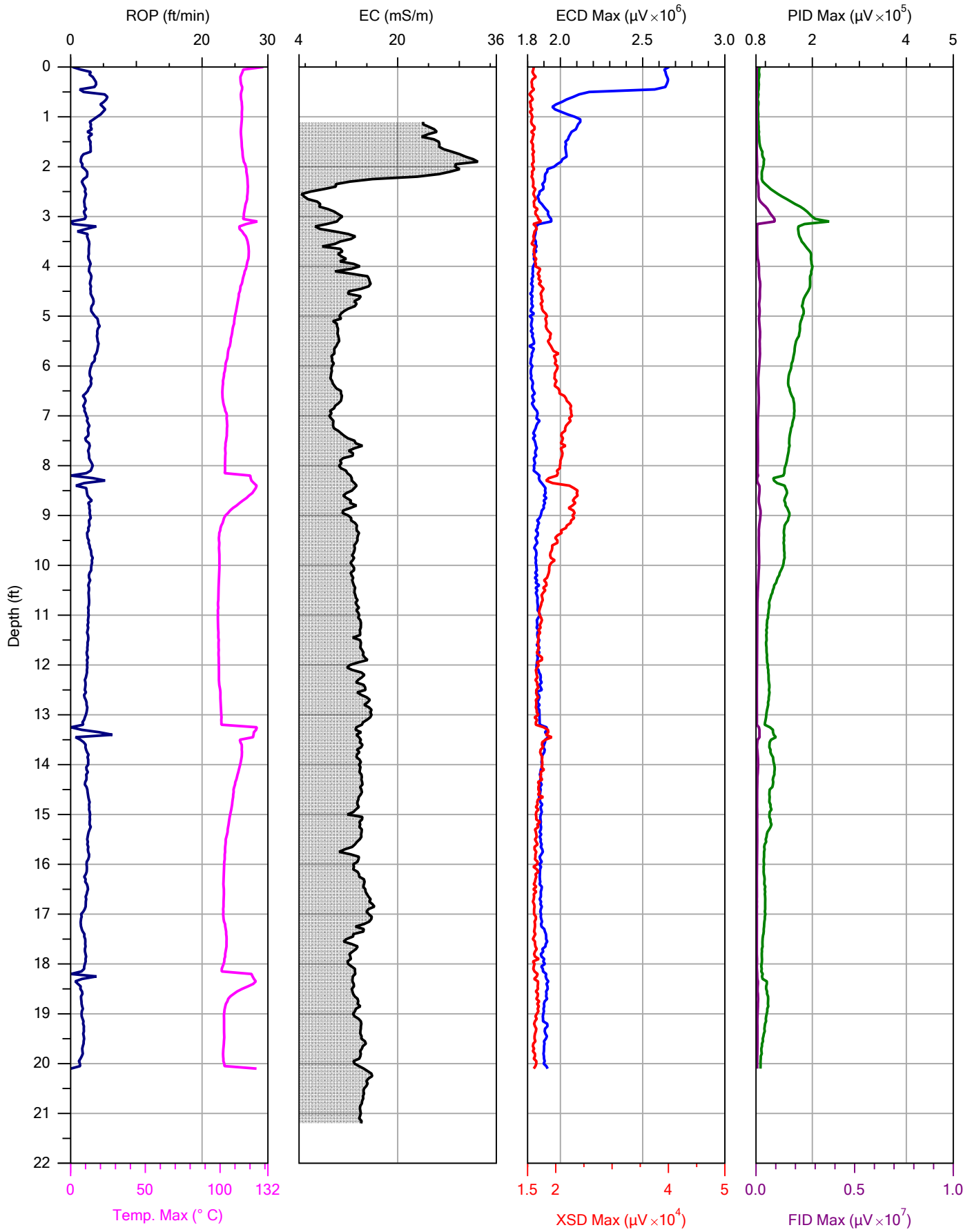
File:	HSI-HRSC-41.MHP
Date:	09/11/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

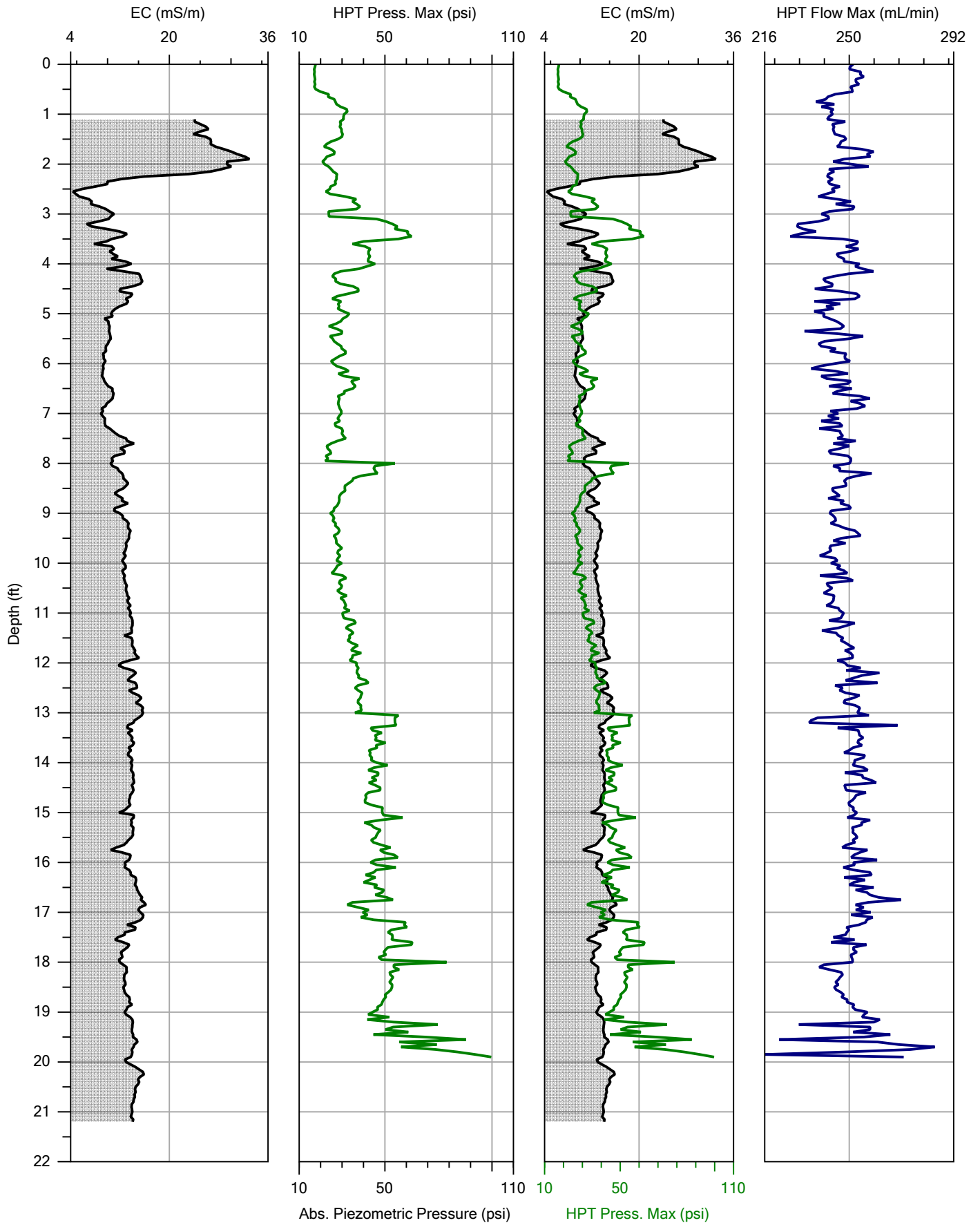
File:	HSI-HRSC-41.MHP
Date:	09/11/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

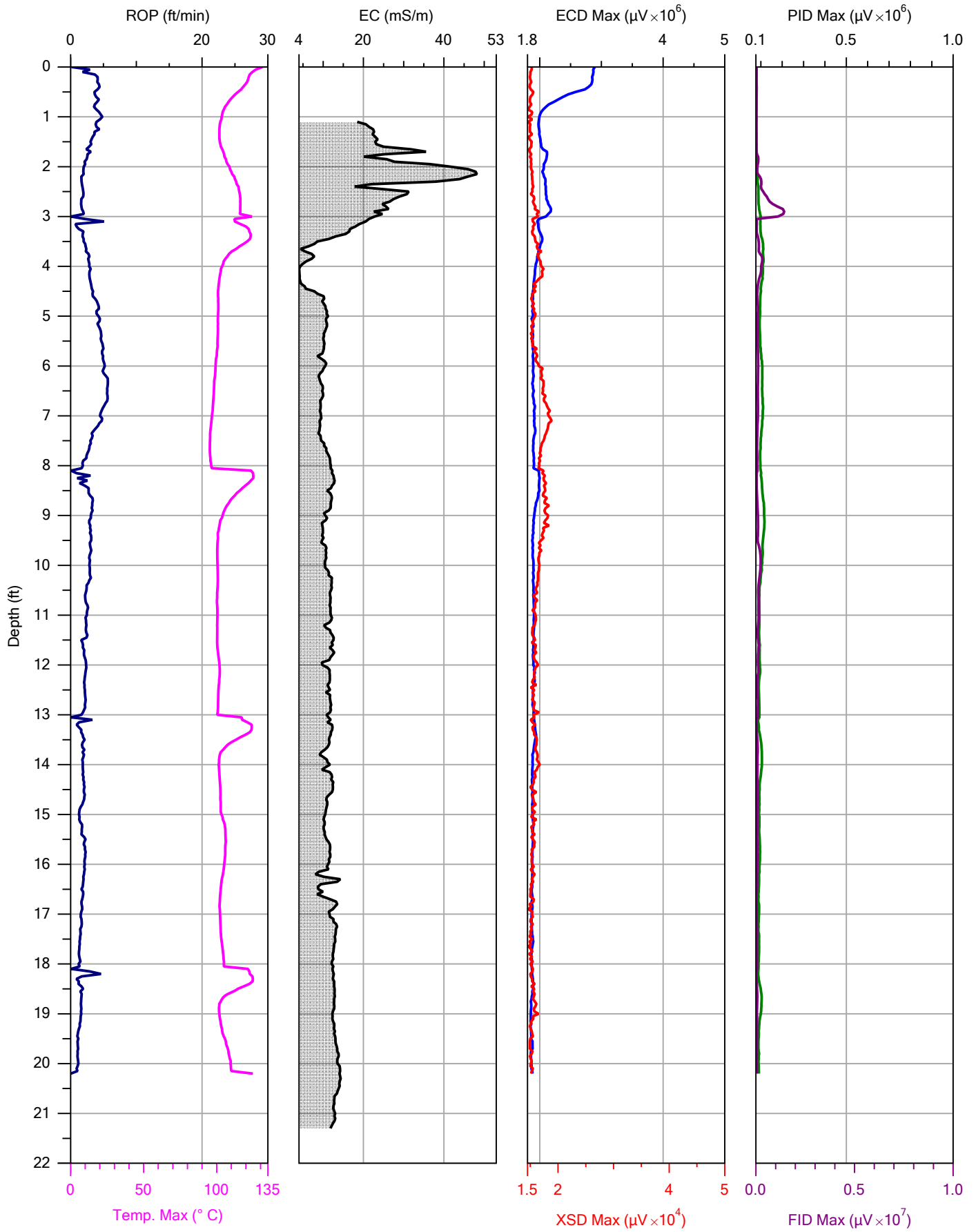
File:	HSI-HRSC-42.MHP
Date:	09/11/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-42.MHP
Date:	09/11/20
Location:	northeast

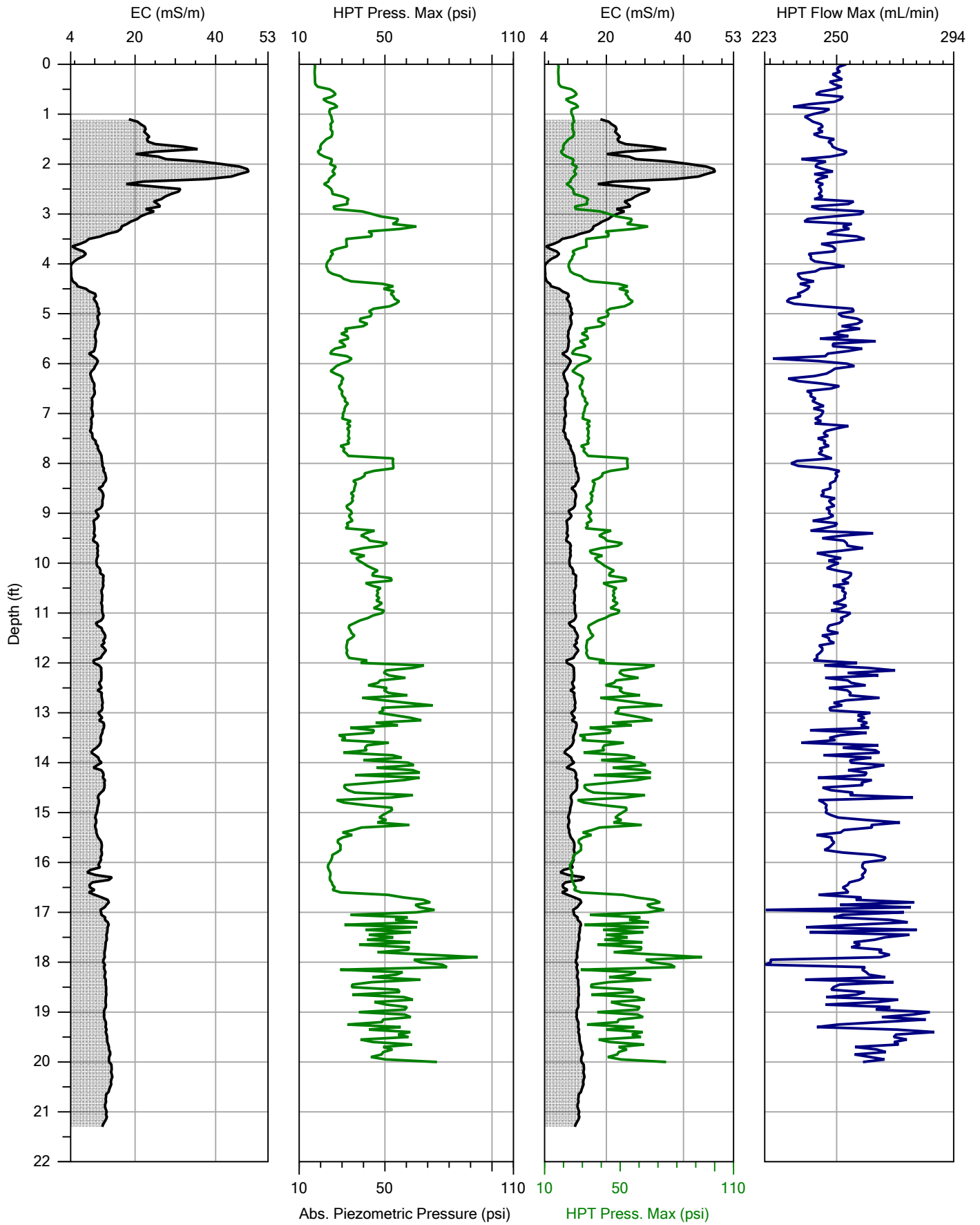


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-43.MHP
Date:	09/11/20
Location:	northeast

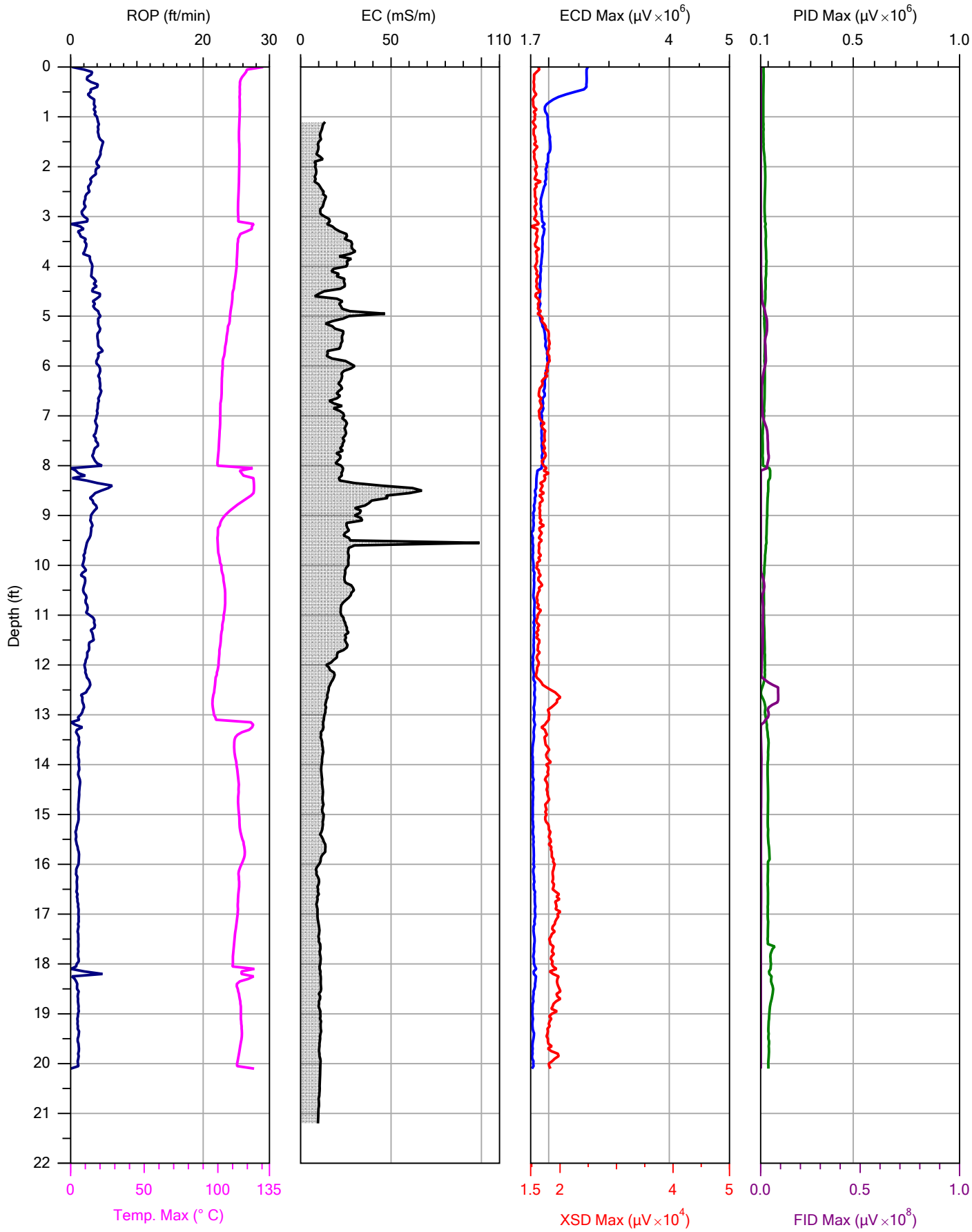




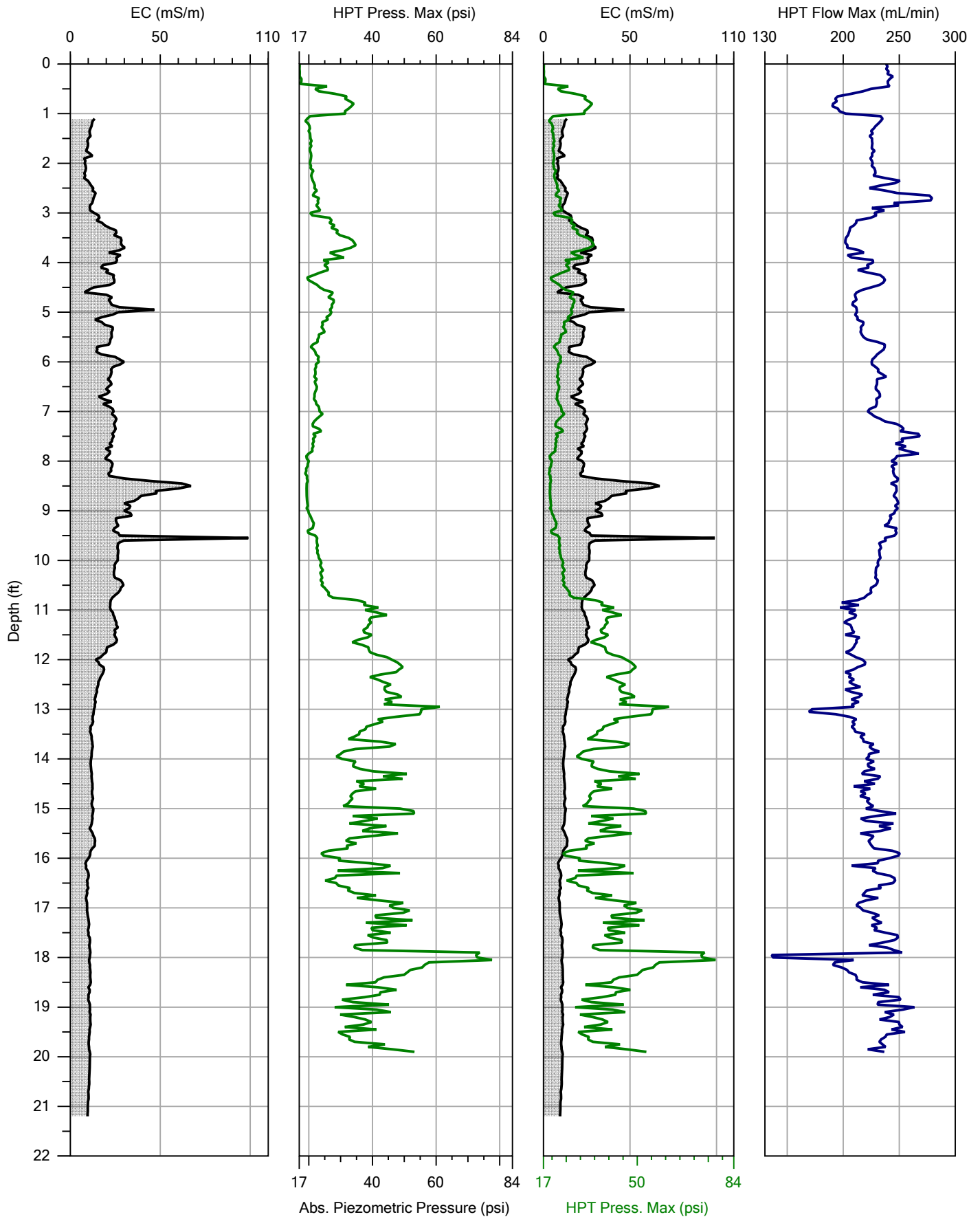
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-43.MHP
Date:	09/11/20
Location:	northeast



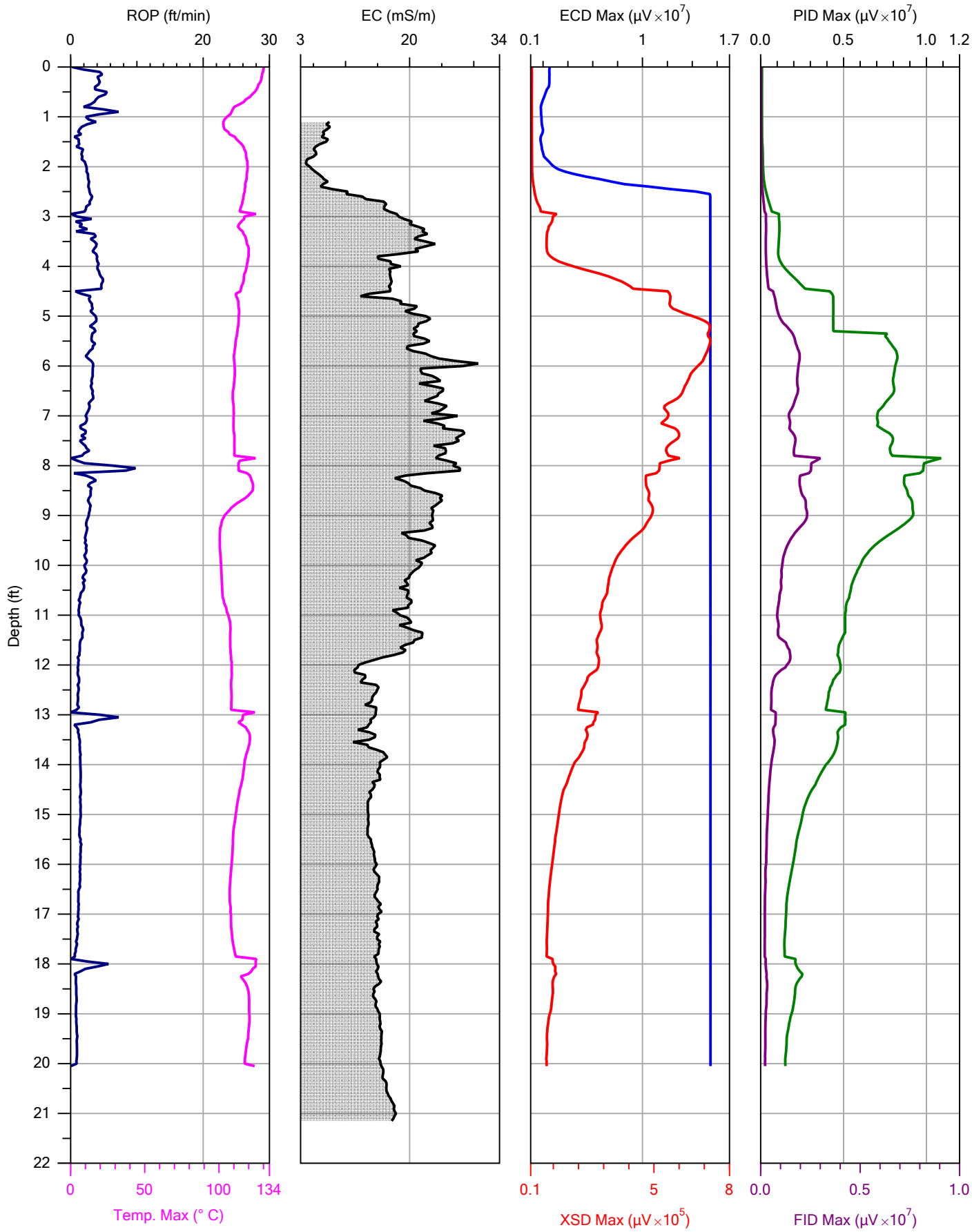
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-44.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



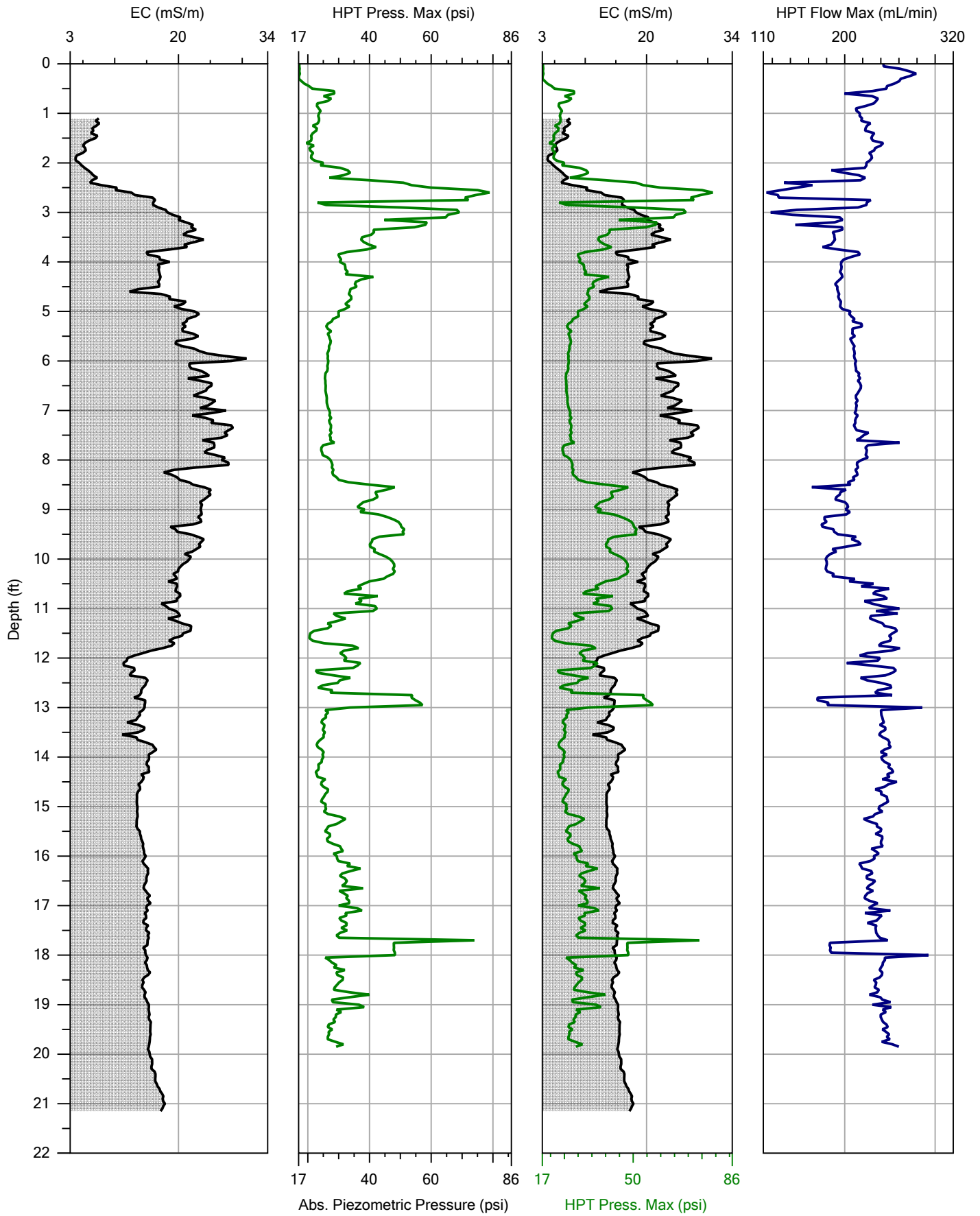
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-44.MHP
Date:	09/11/20
Location:	northeast



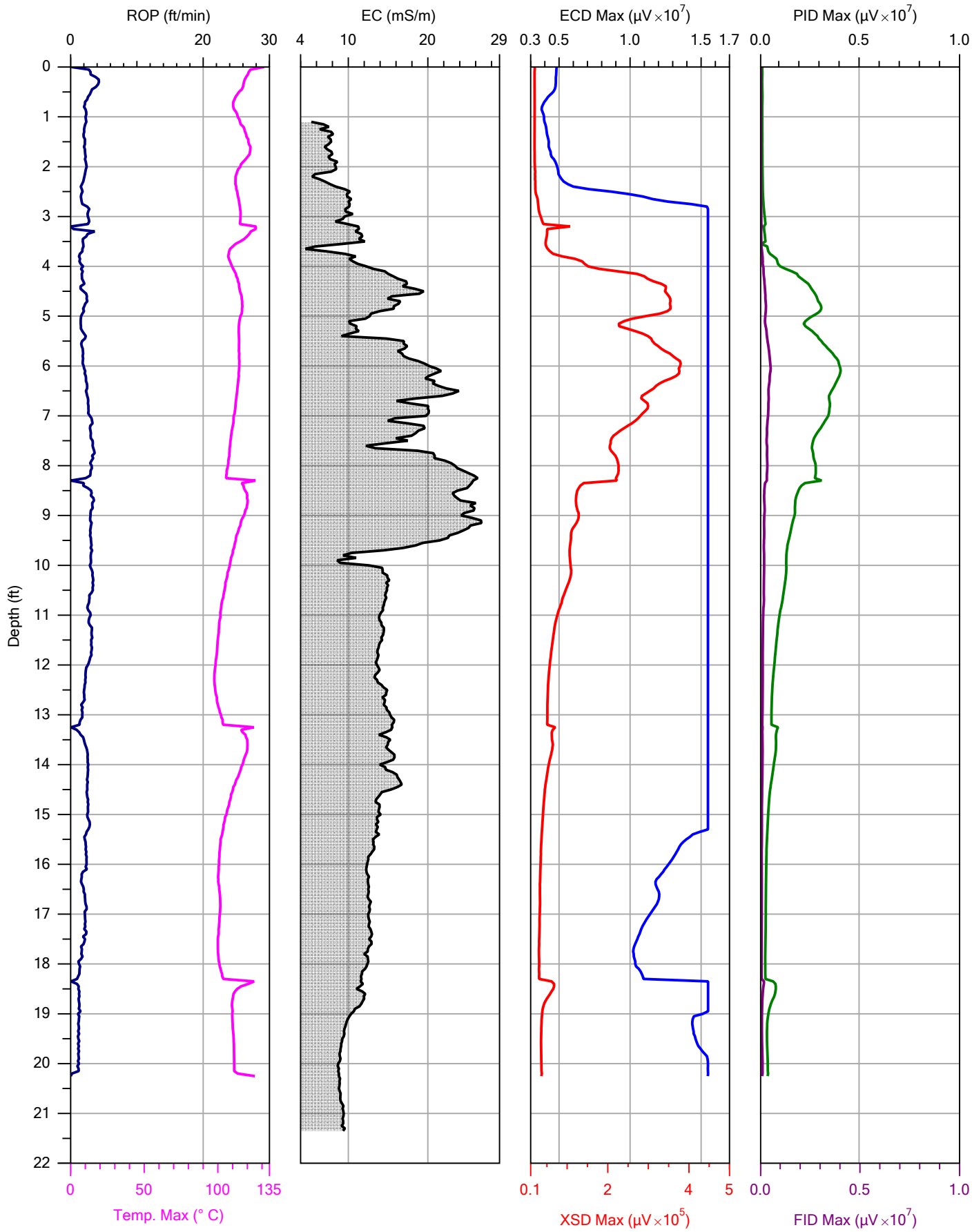
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-45.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

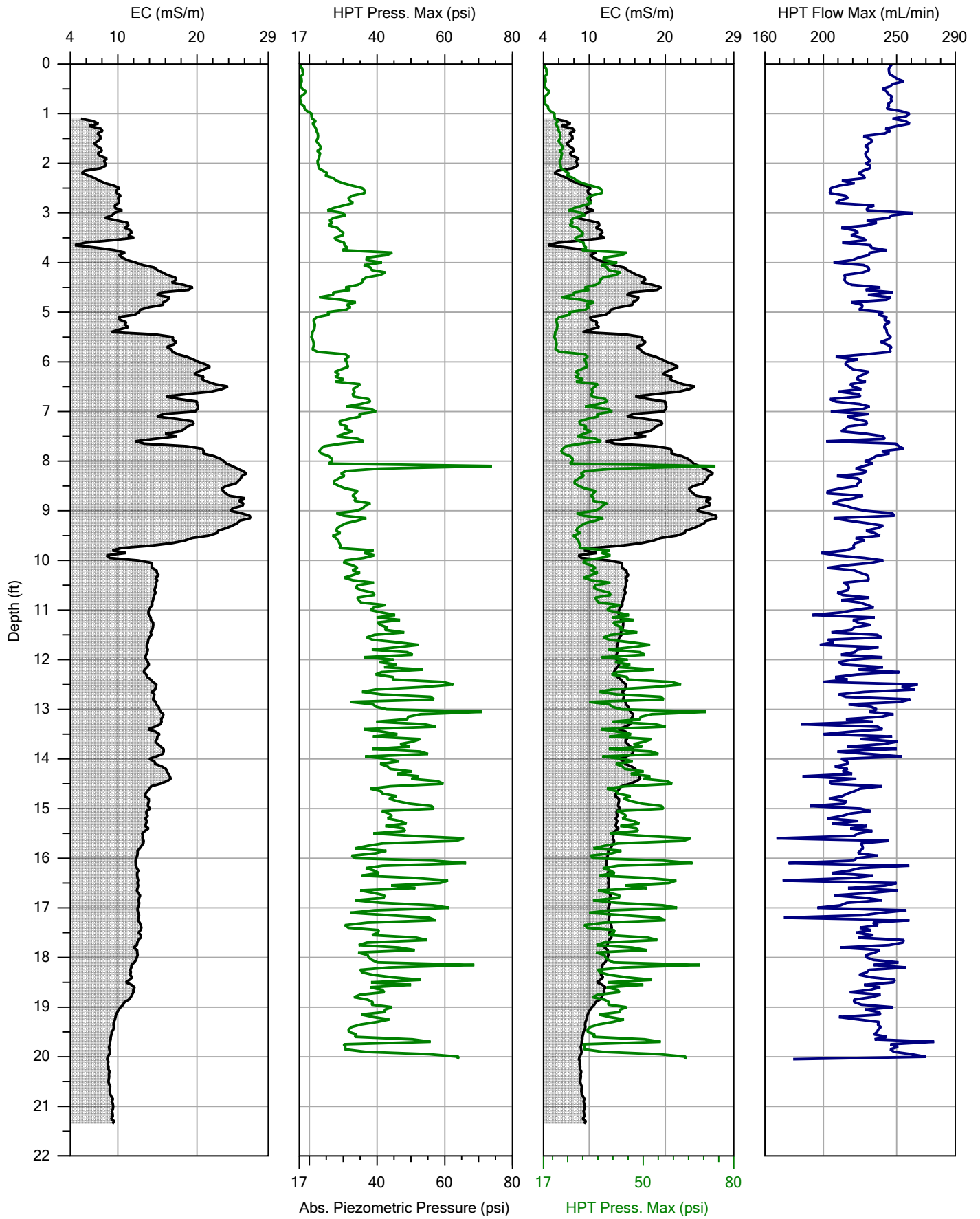
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-45.MHP
Date:	09/11/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-46.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast

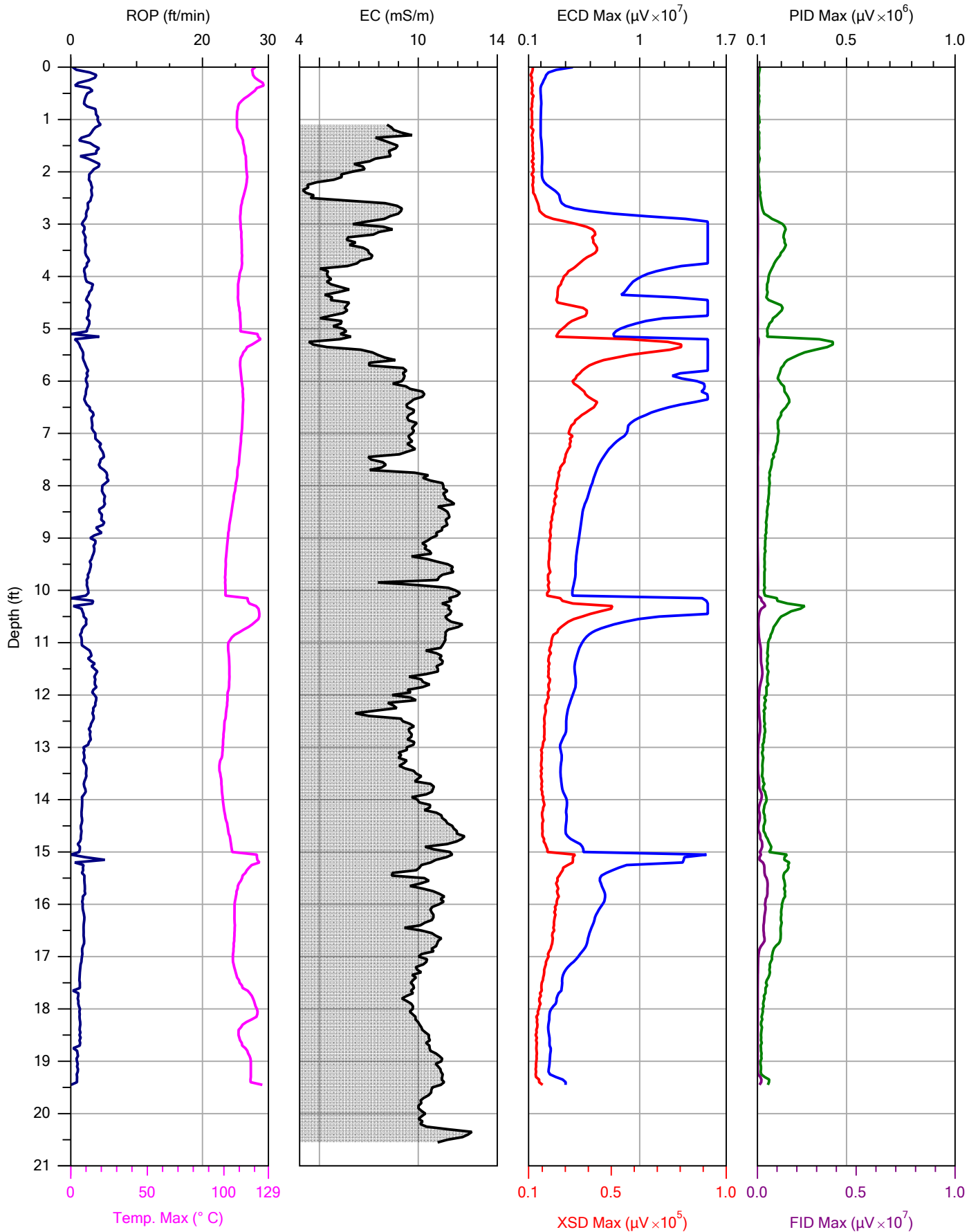




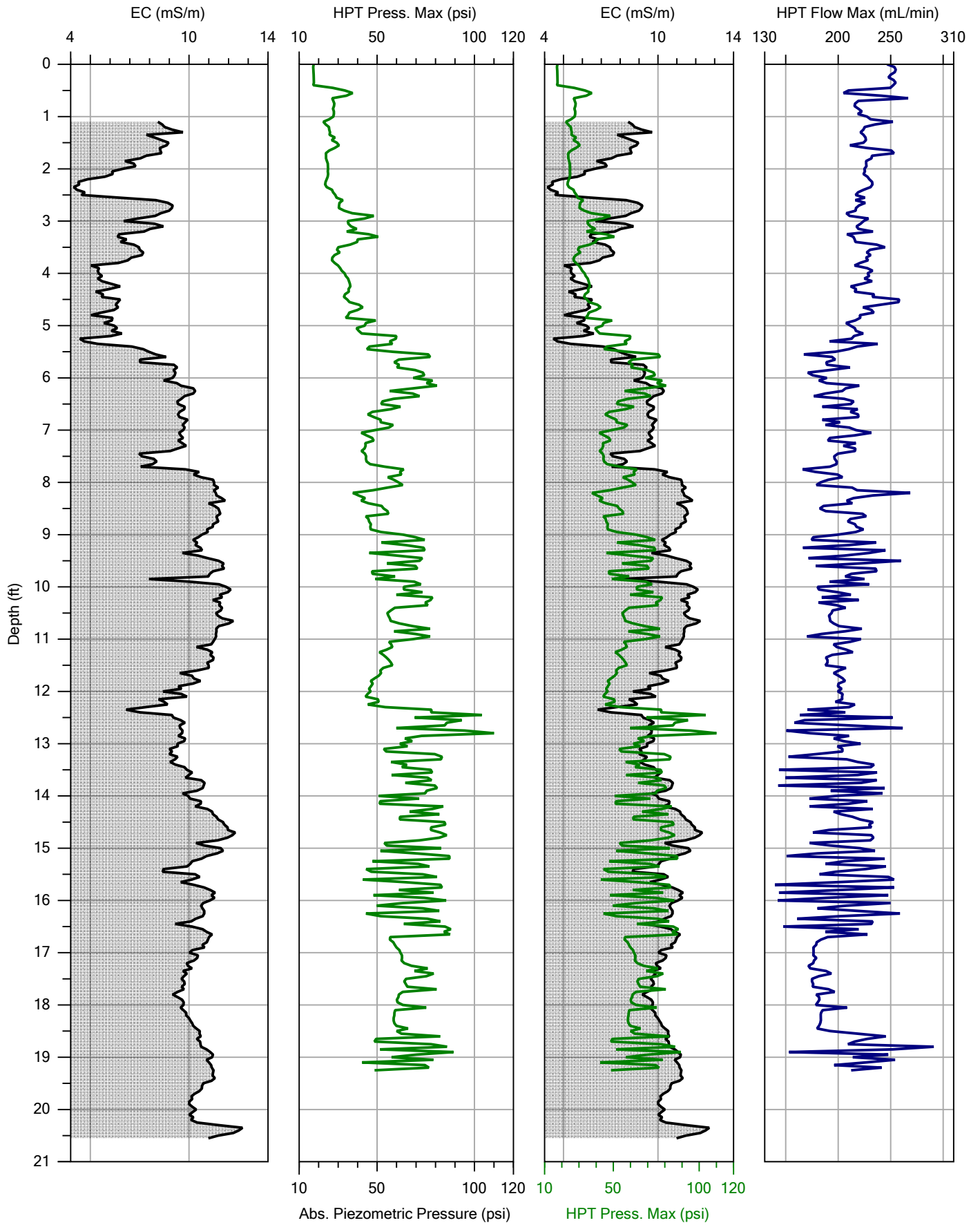
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-46.MHP
Date:	09/11/20
Location:	northeast



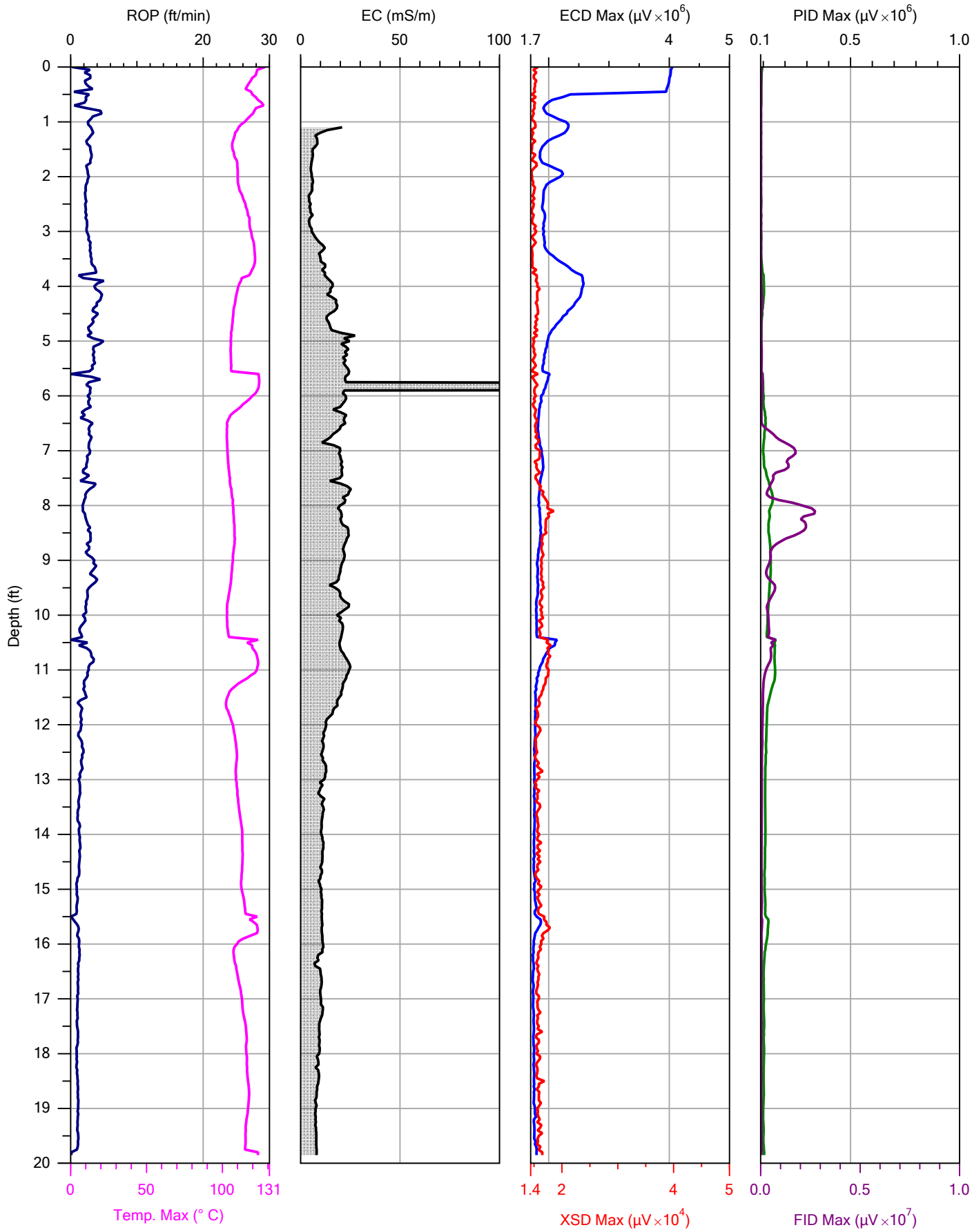
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-47.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



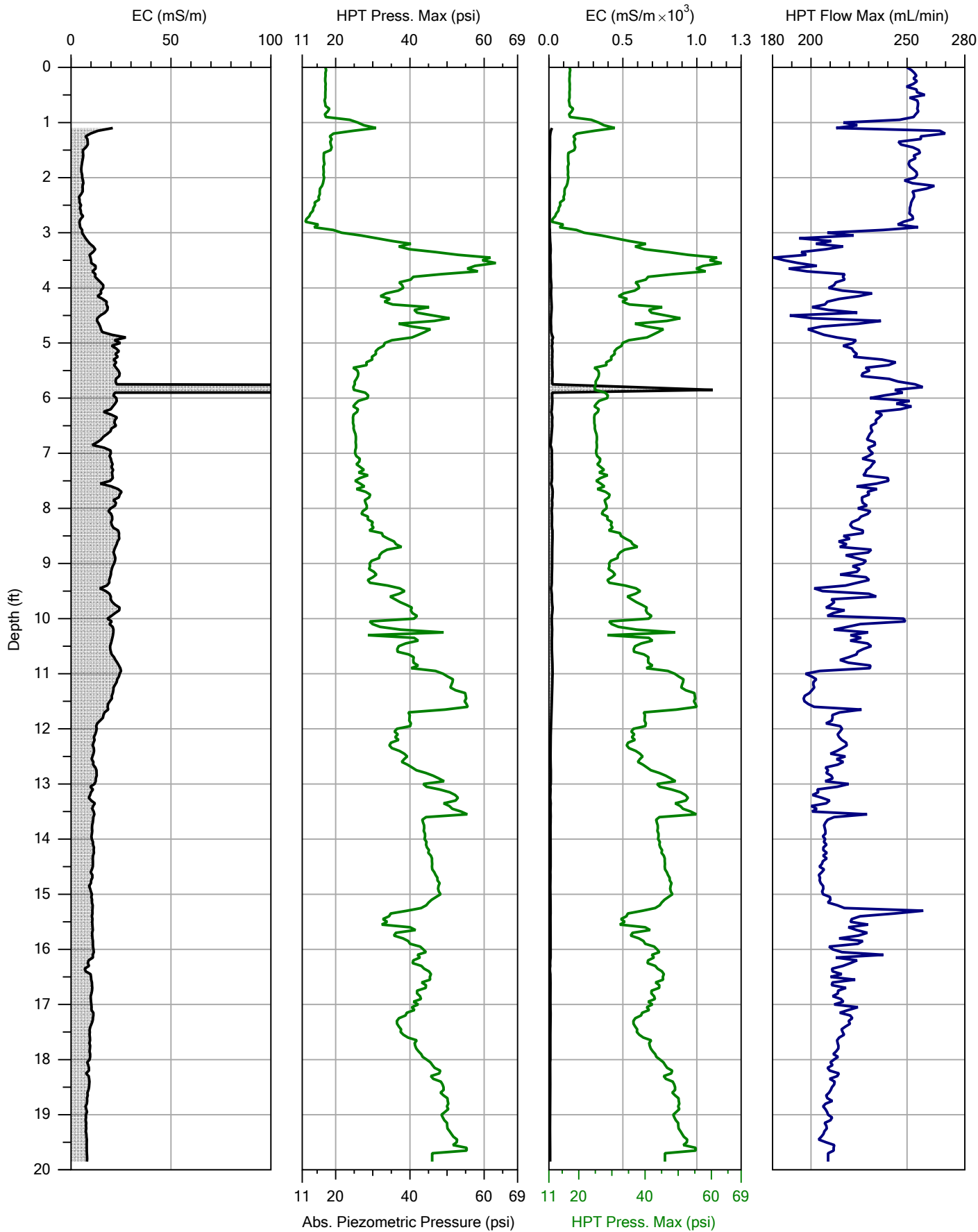
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-47.MHP
Date:	09/11/20
Location:	northeast



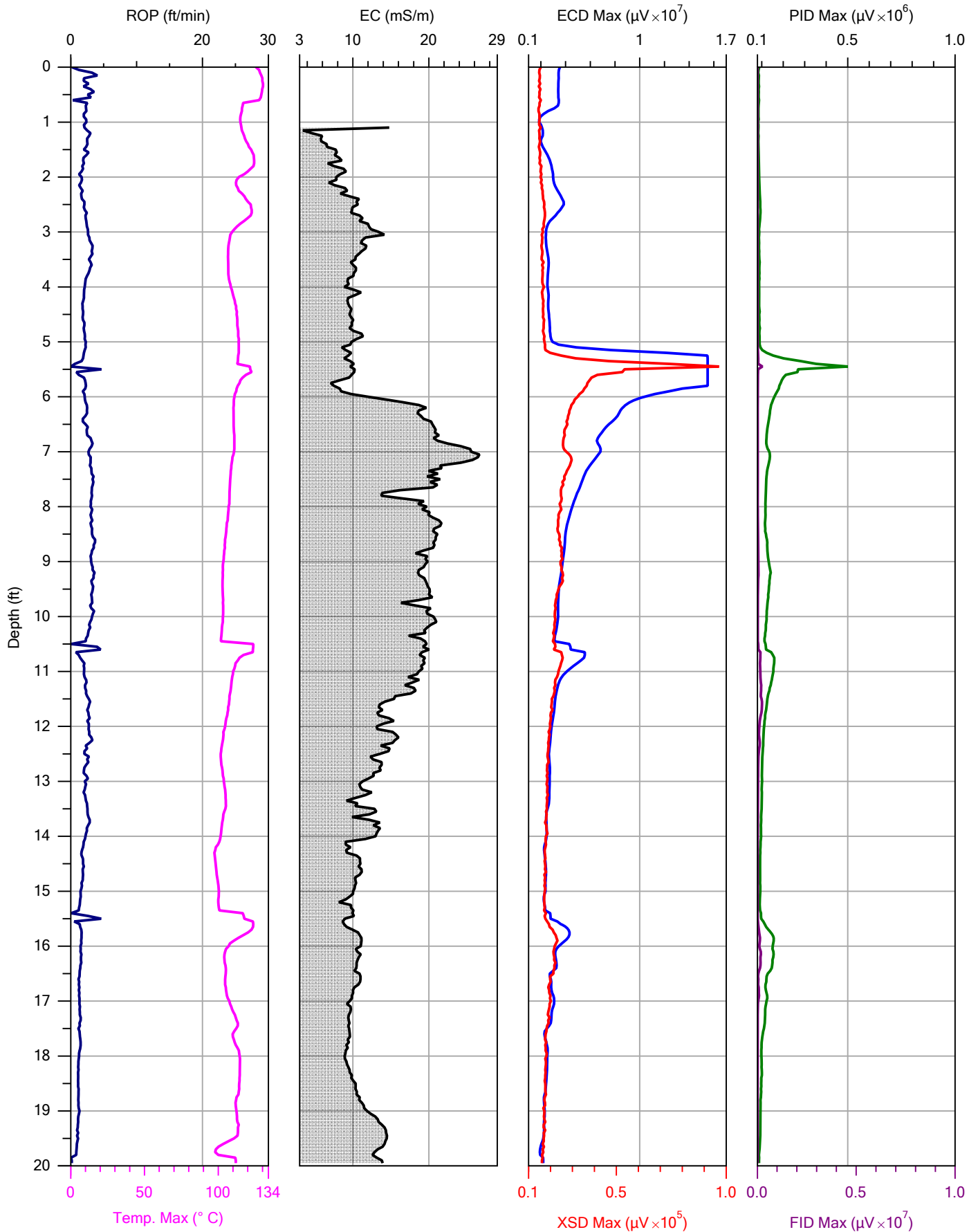
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-48.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-48.MHP
Date:	09/11/20
Location:	northeast

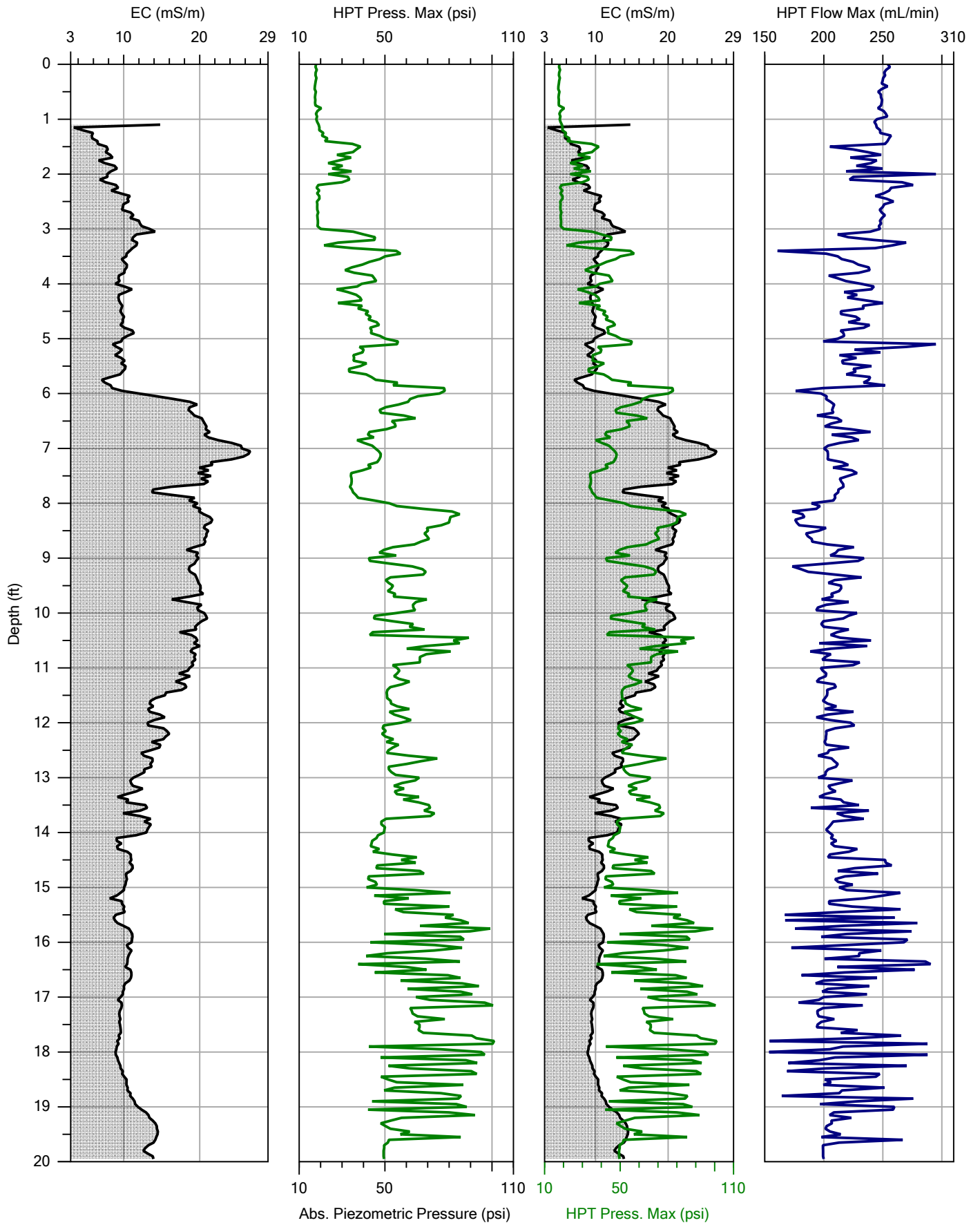


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-49.MHP
Date:	09/11/20
Location:	northeast

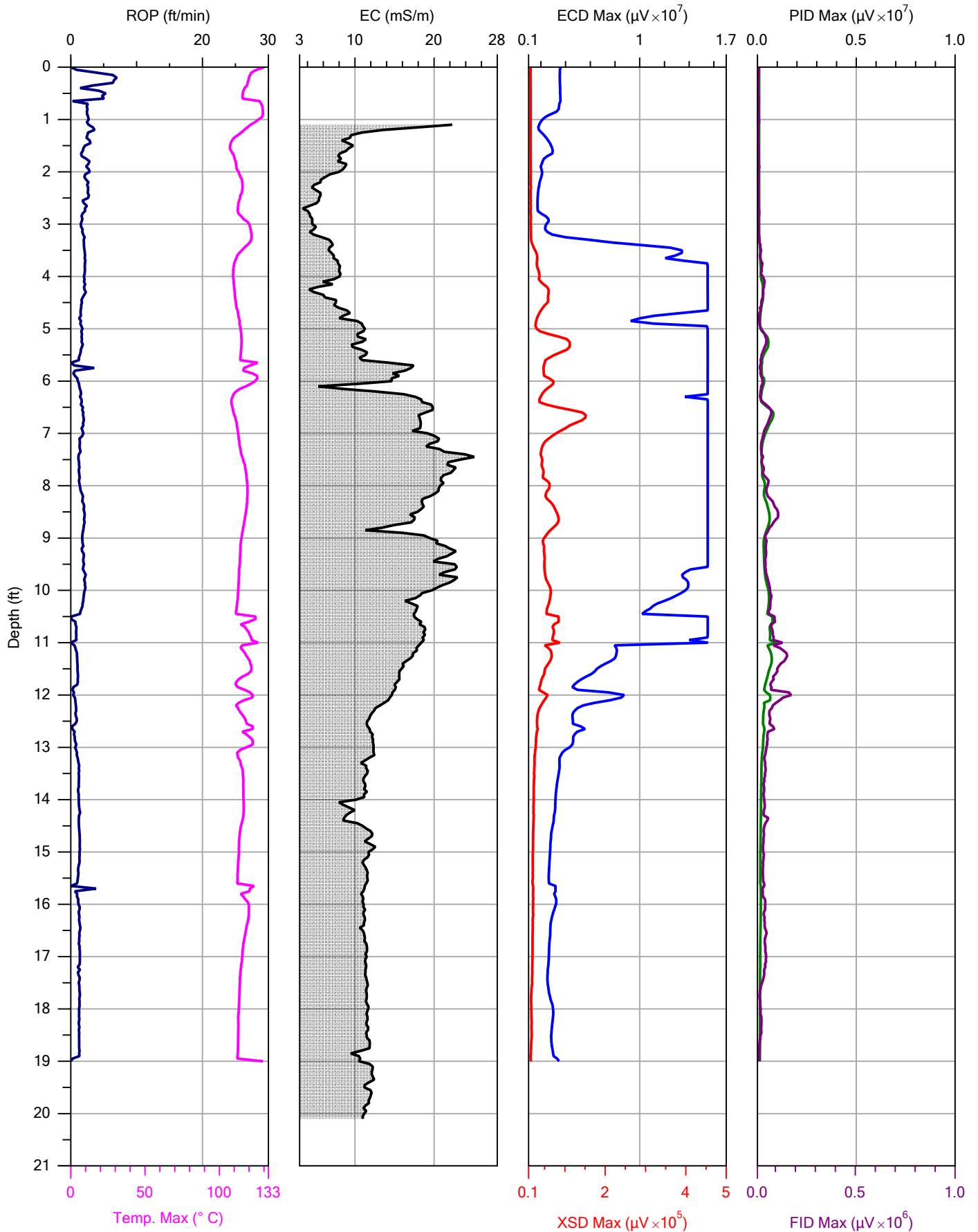




Company: Cascade  
 Project ID: 2022001119

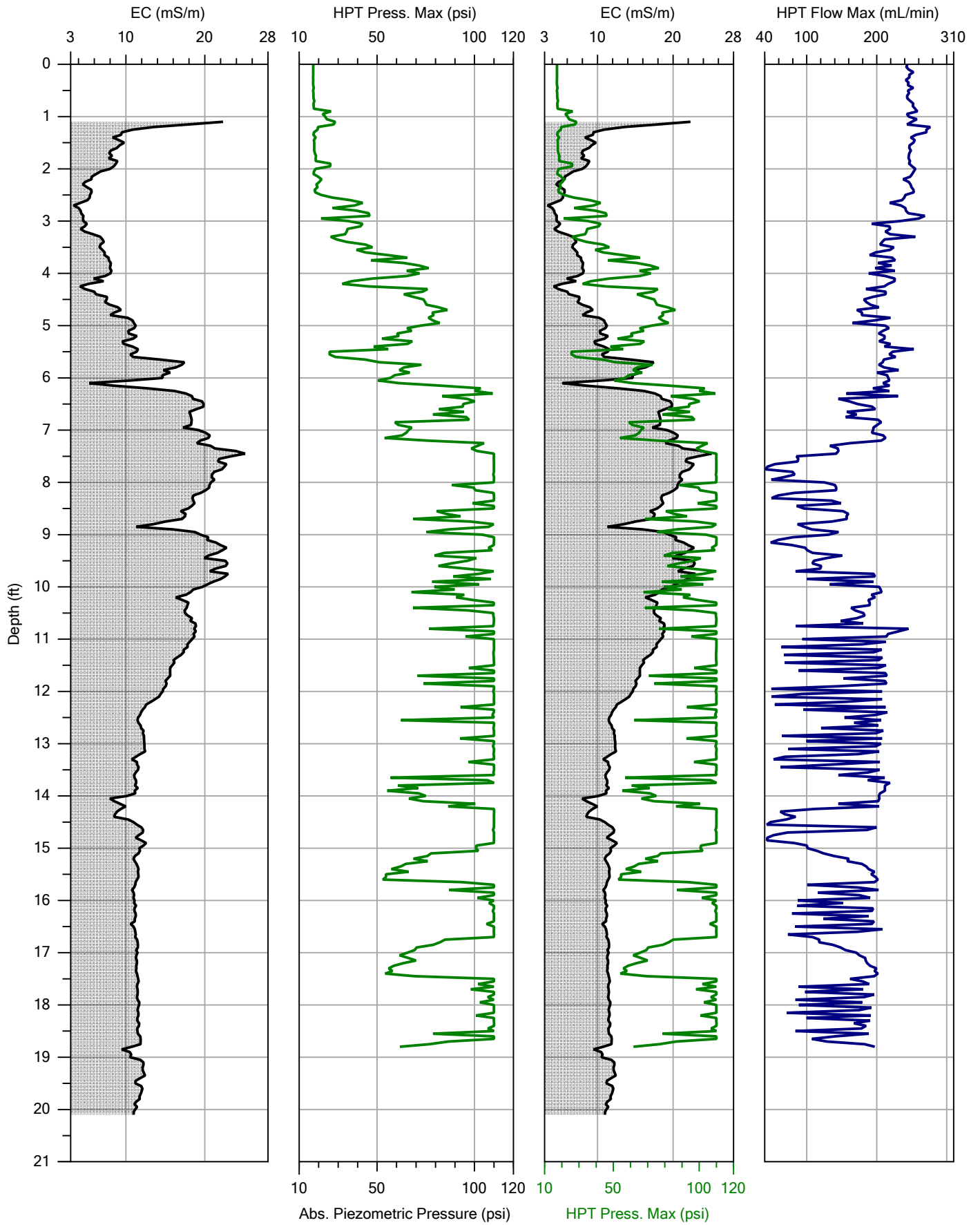
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-49.MHP
Date:	09/11/20
Location:	northeast



Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

File:	HSI-HRSC-50.MHP
Date:	09/11/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

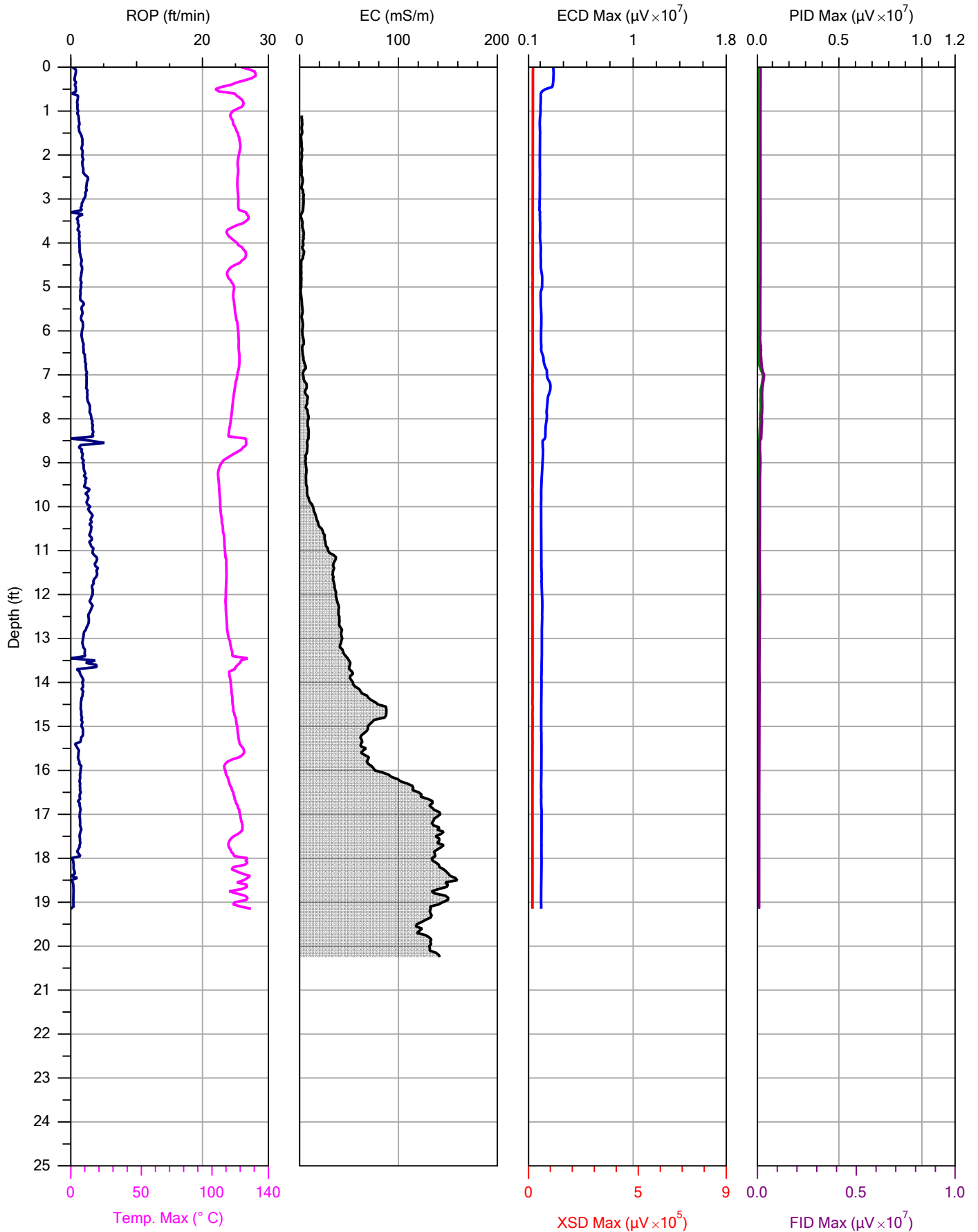
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-50.MHP
Date:	09/11/20
Location:	northeast

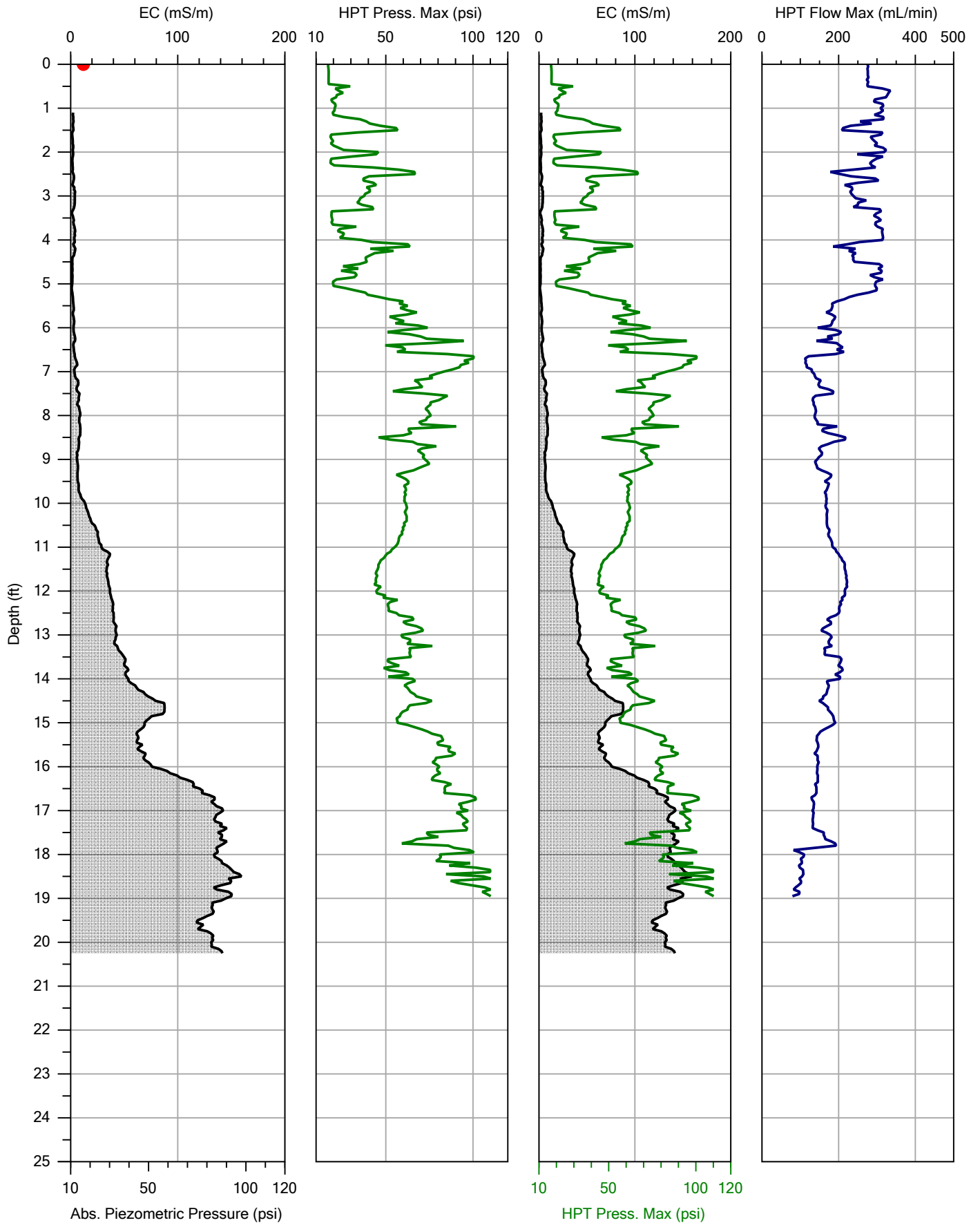


# **INVESTIGATION DATA PLOTS**

## **COMMON SCALE**



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-01.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast

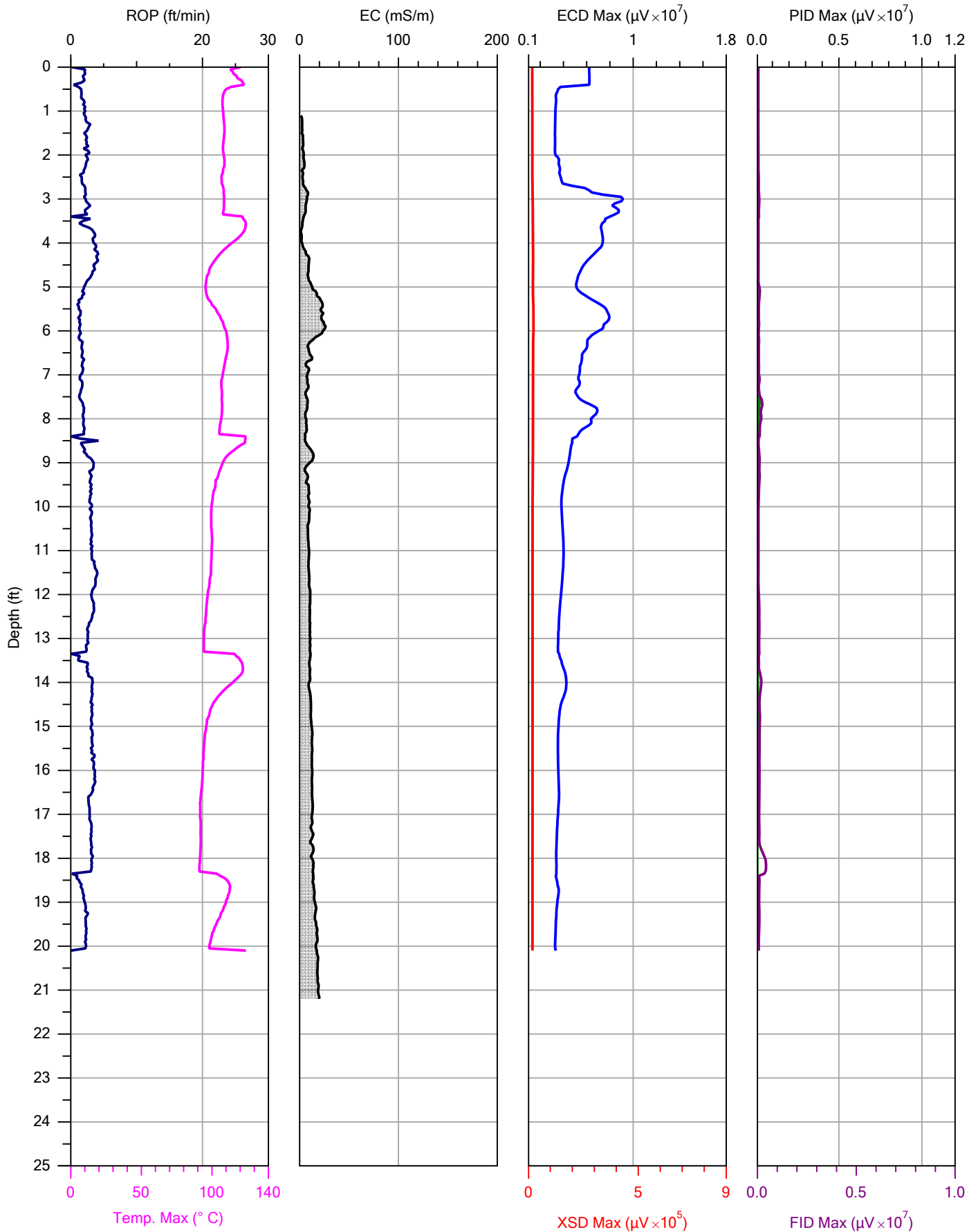


Company: Cascade  
 Project ID: 2022001119

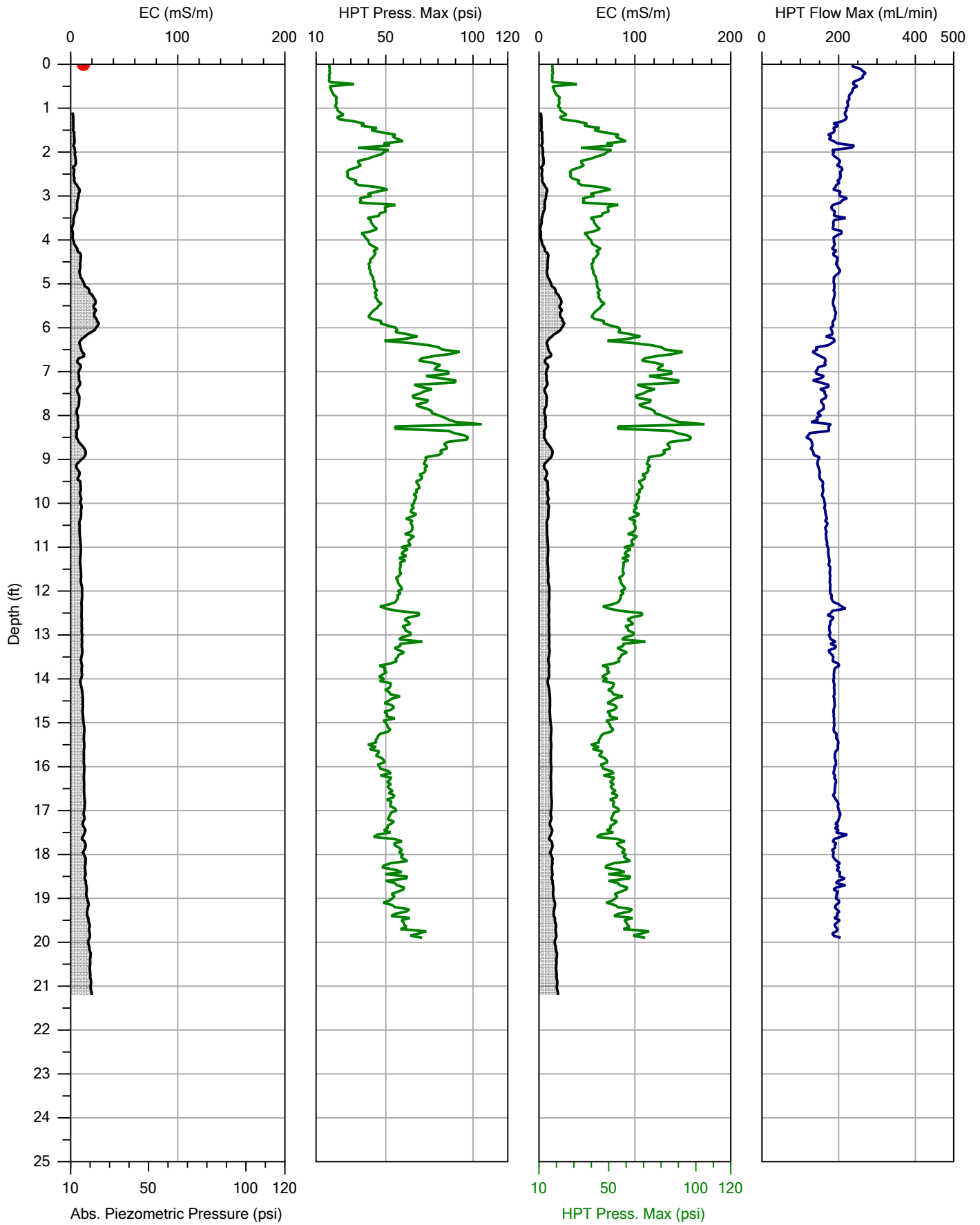
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-01.MHP
Date:	09/08/20
Location:	northeast





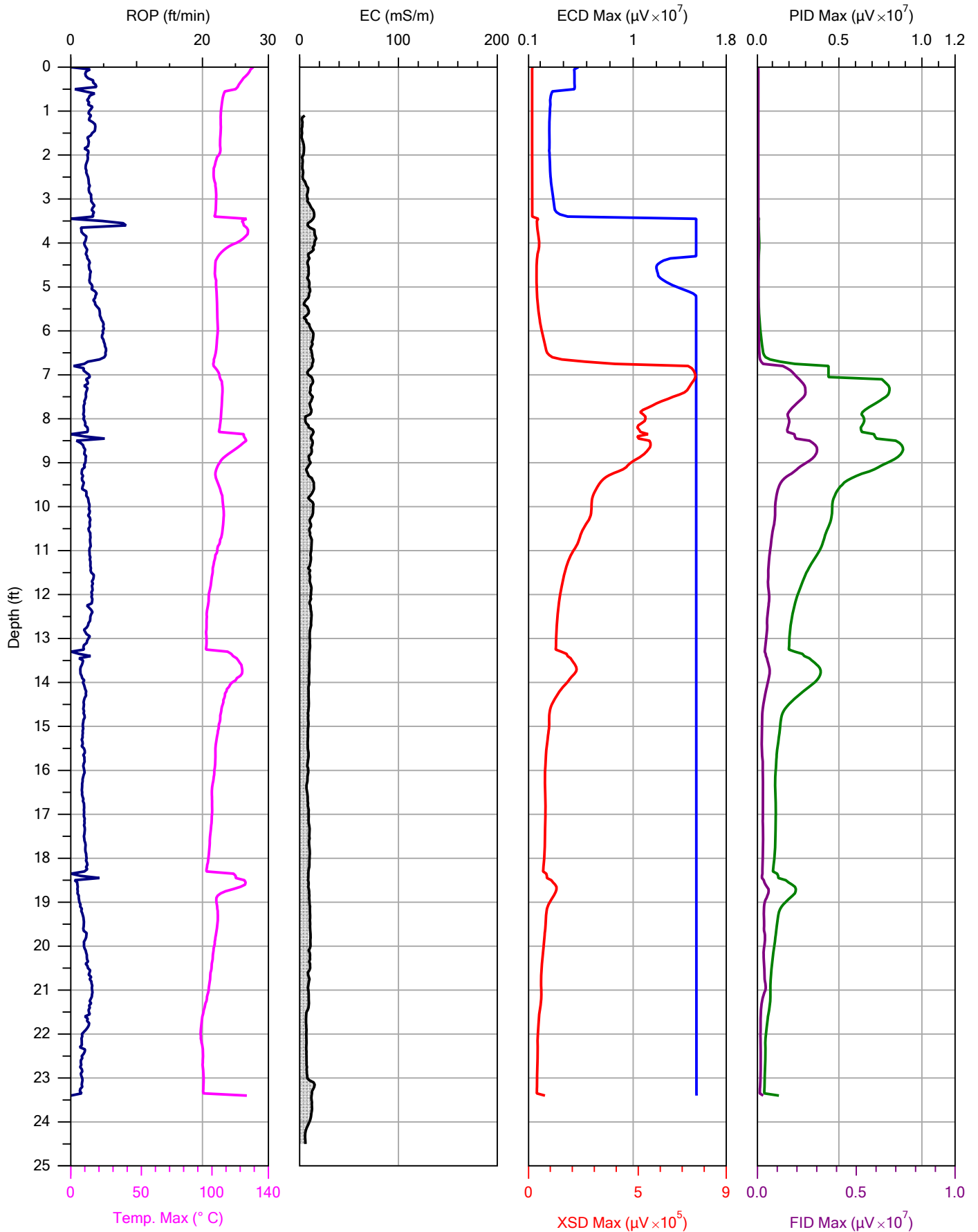
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-02.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



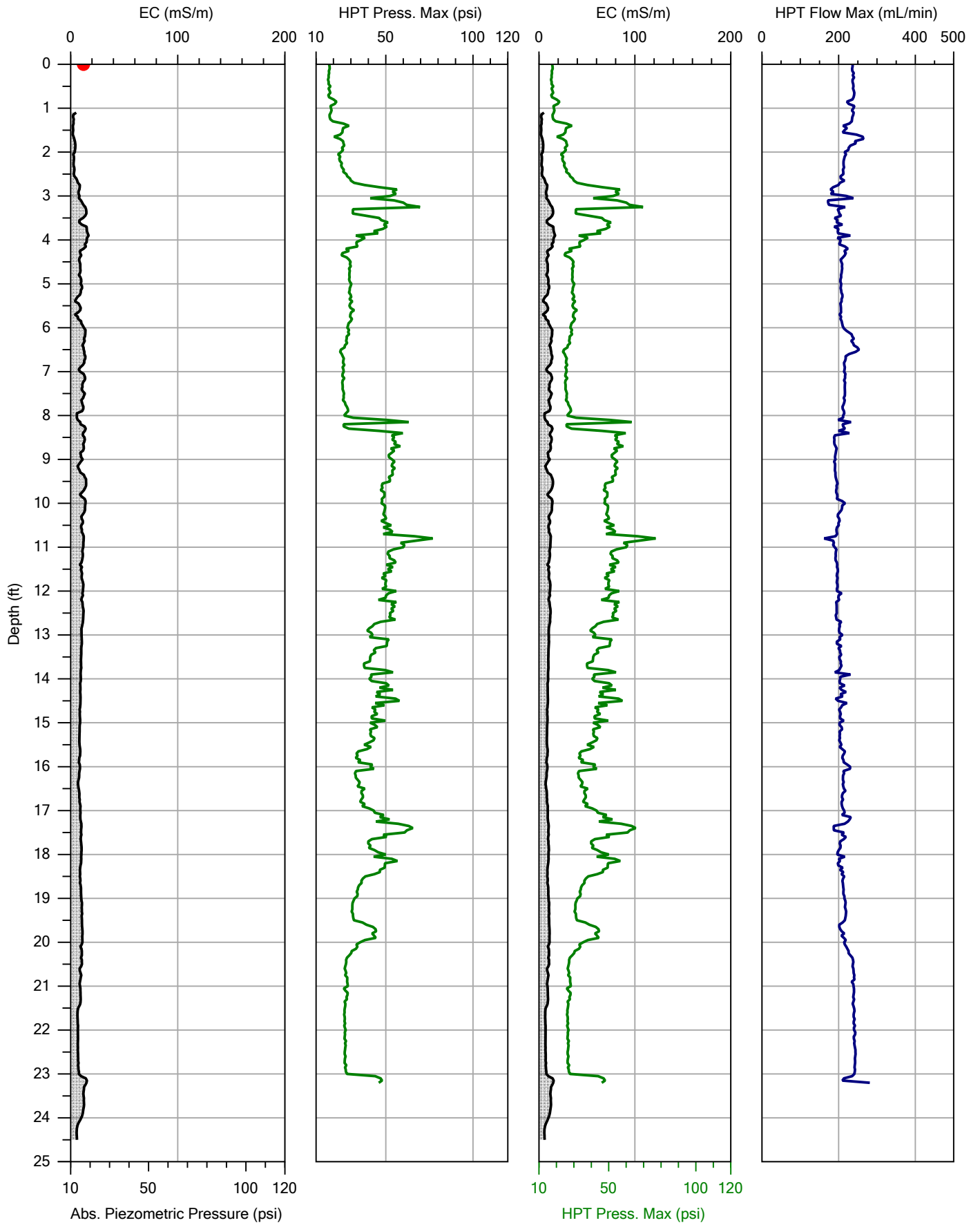
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-02.MHP
Date:	09/08/20
Location:	northeast



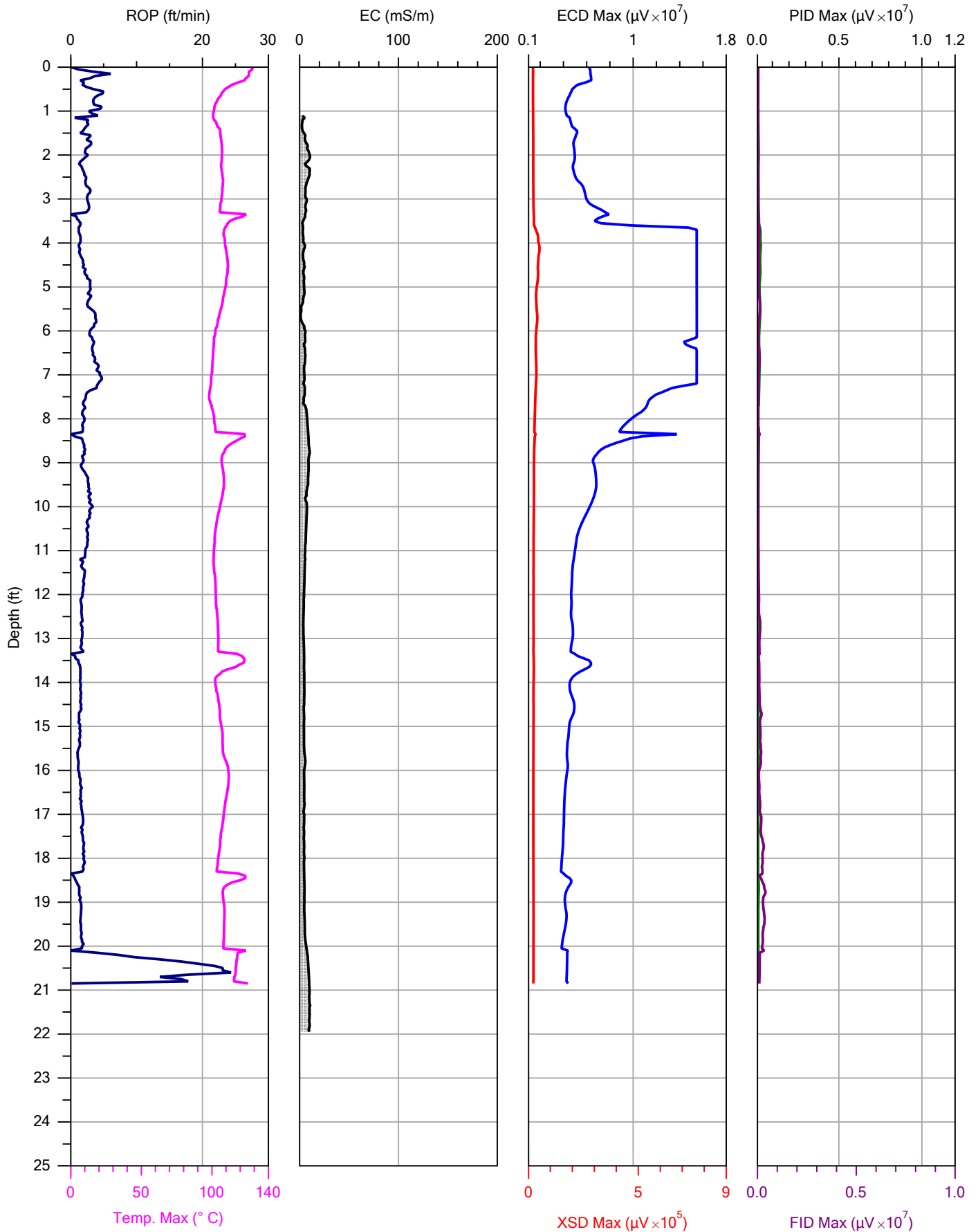
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-03.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



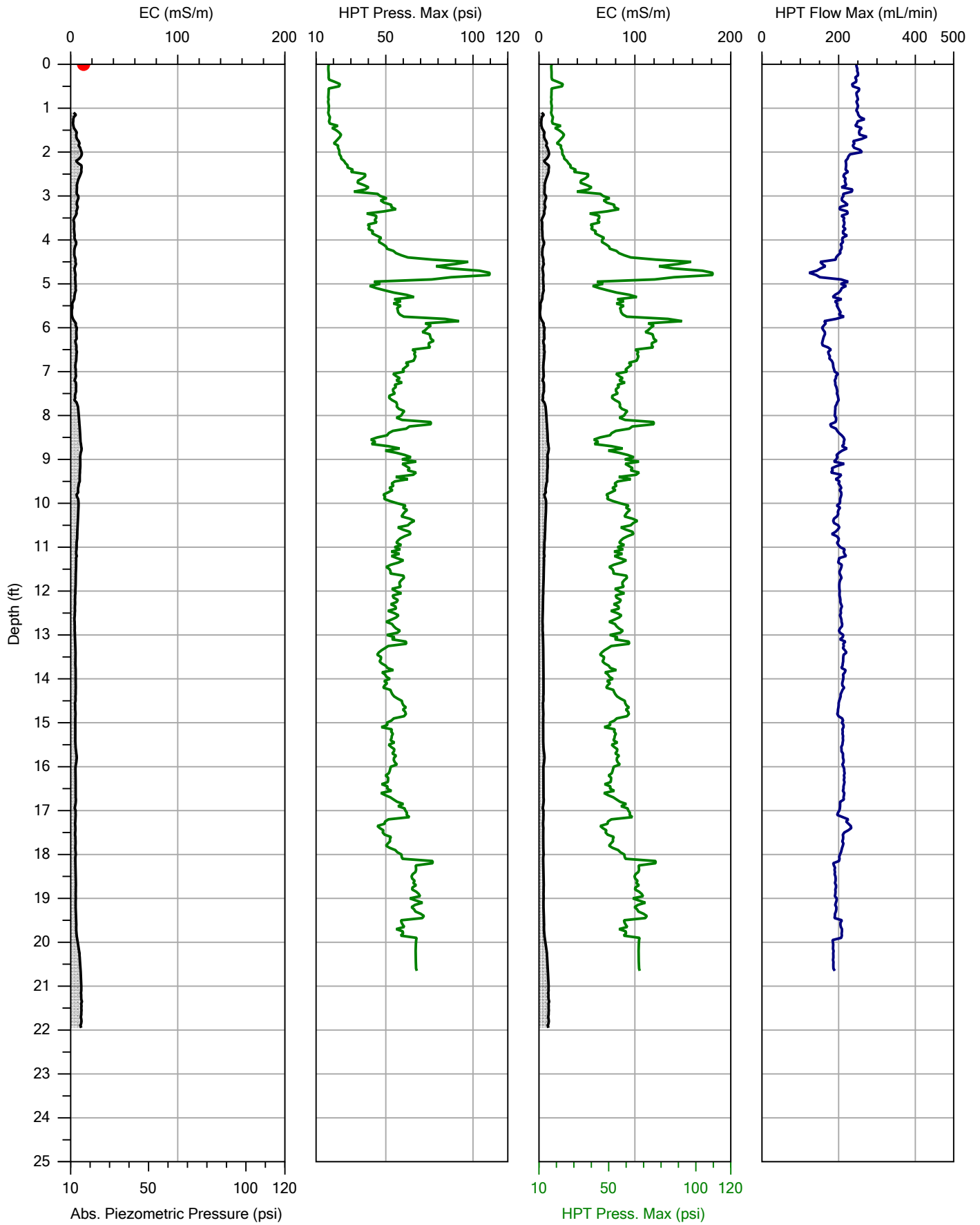
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-03.MHP
Date:	09/08/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-04.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast

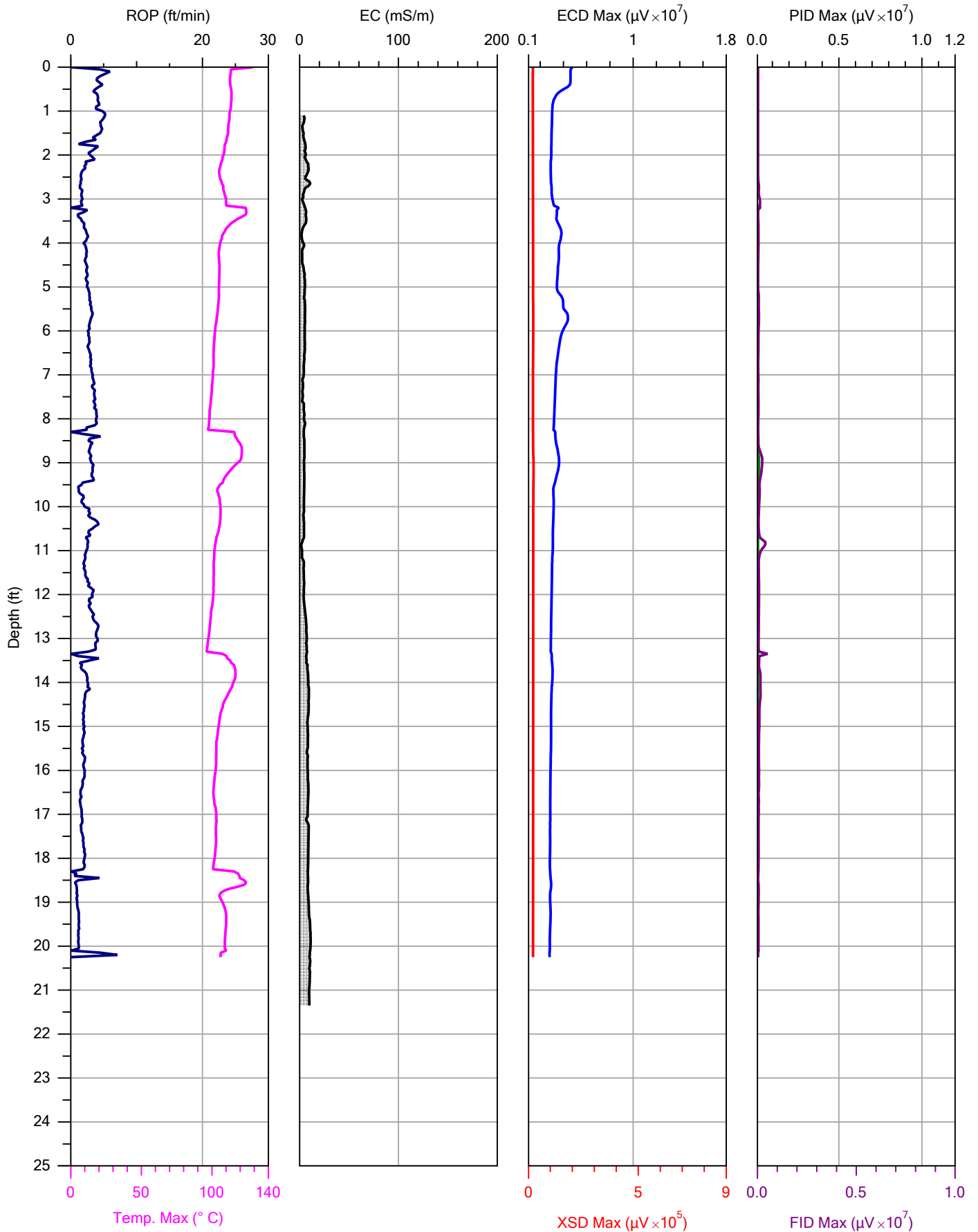


Company: Cascade  
 Project ID: 2022001119

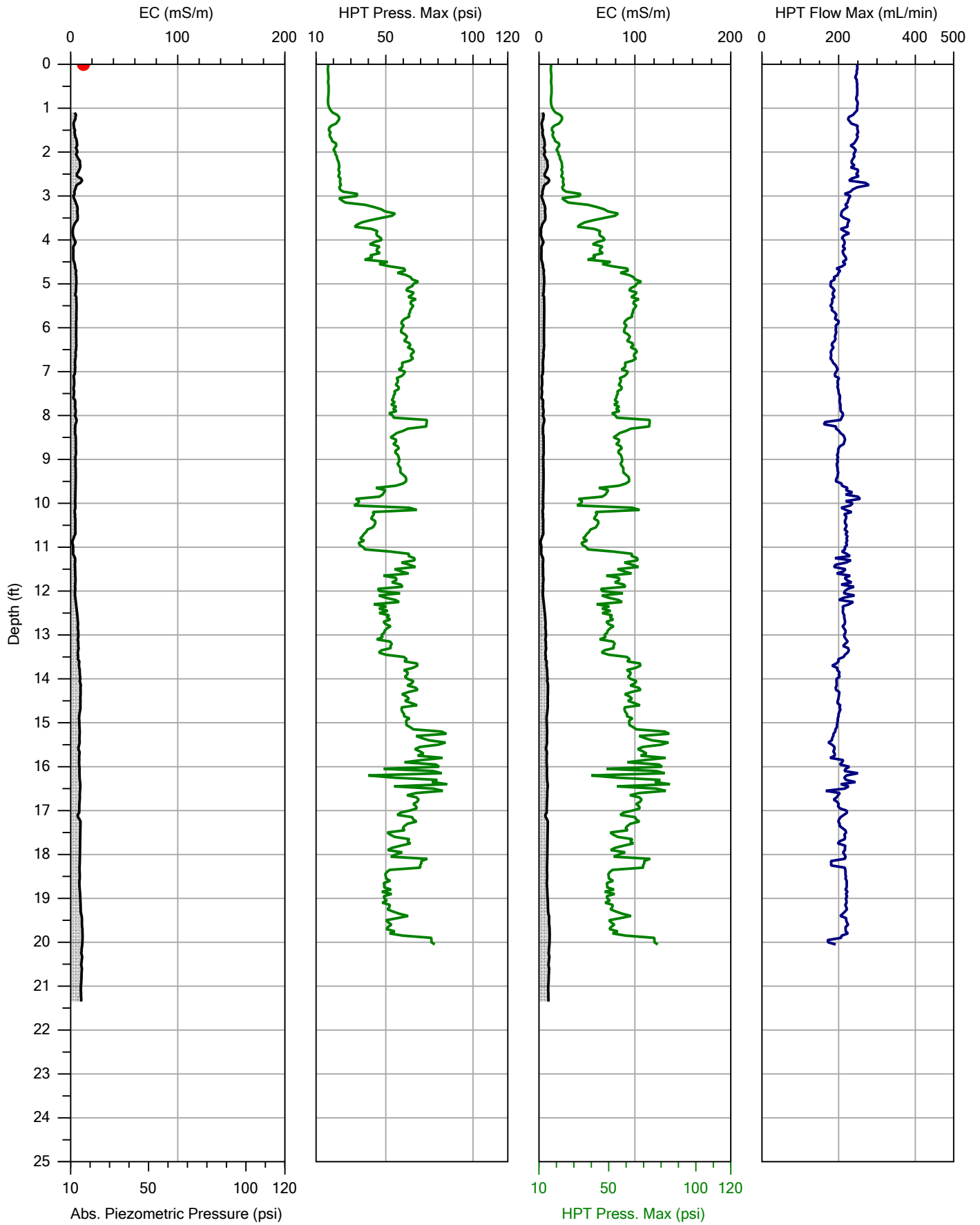
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-04.MHP
Date:	09/08/20
Location:	northeast

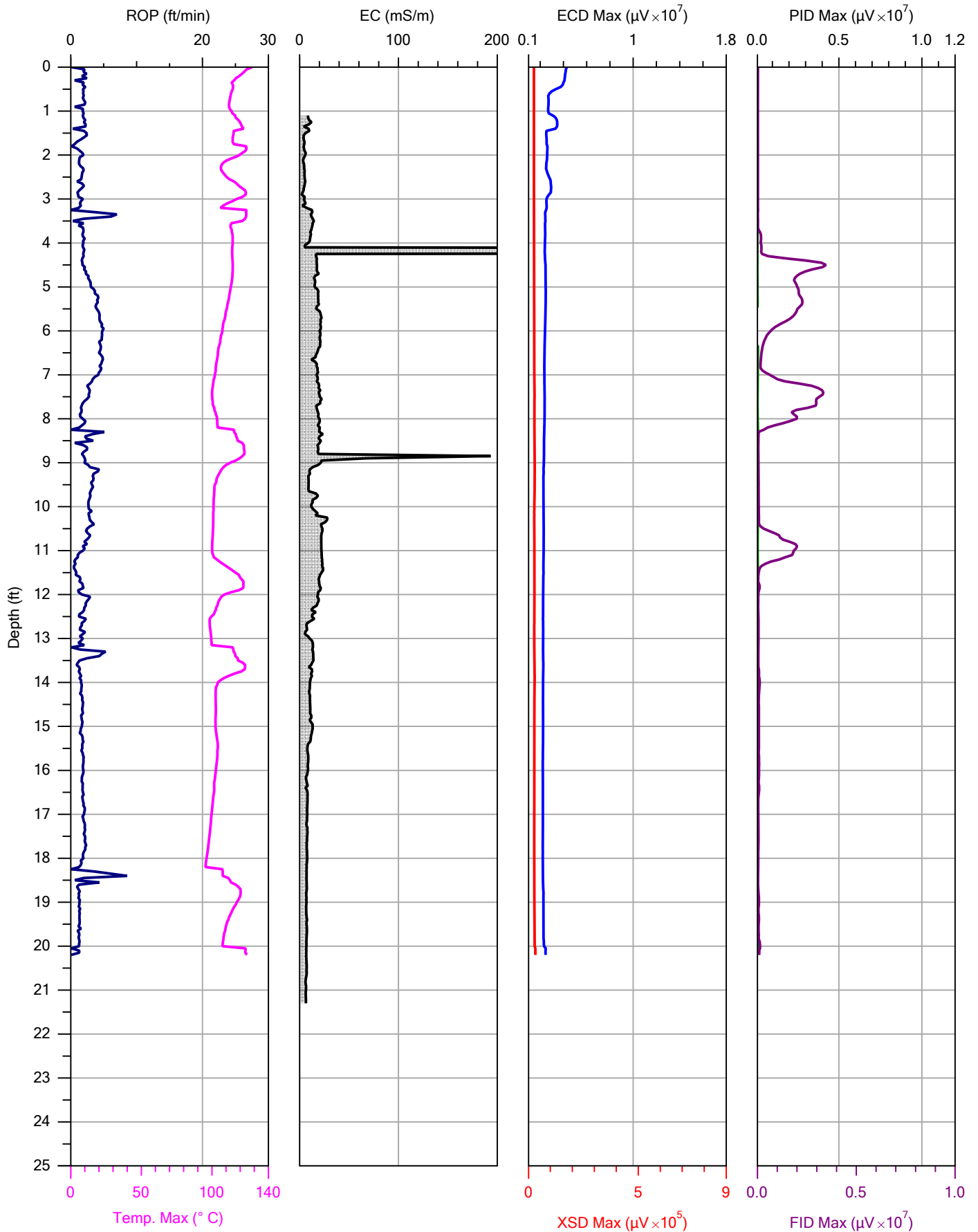




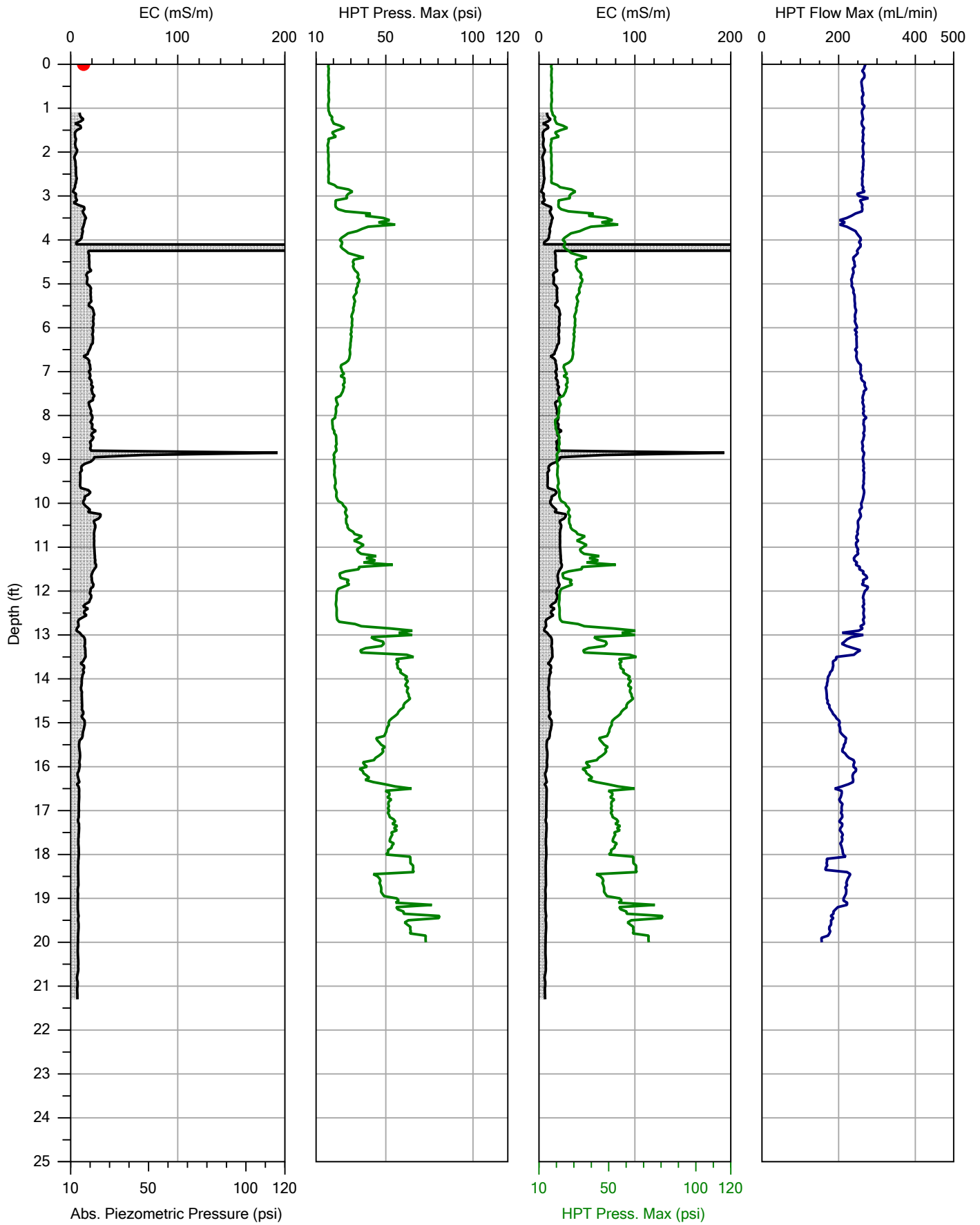
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-05.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-05.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



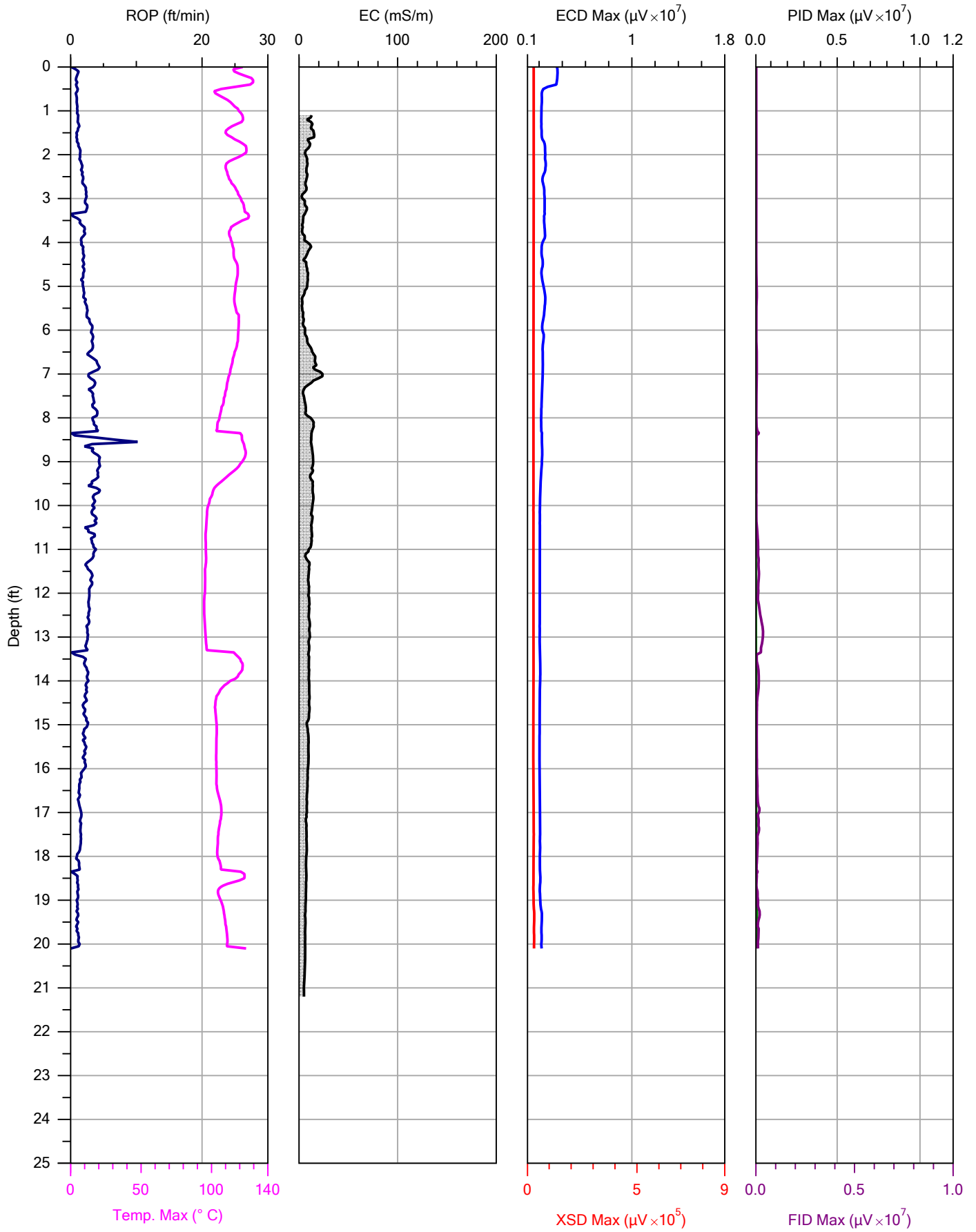
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-06.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

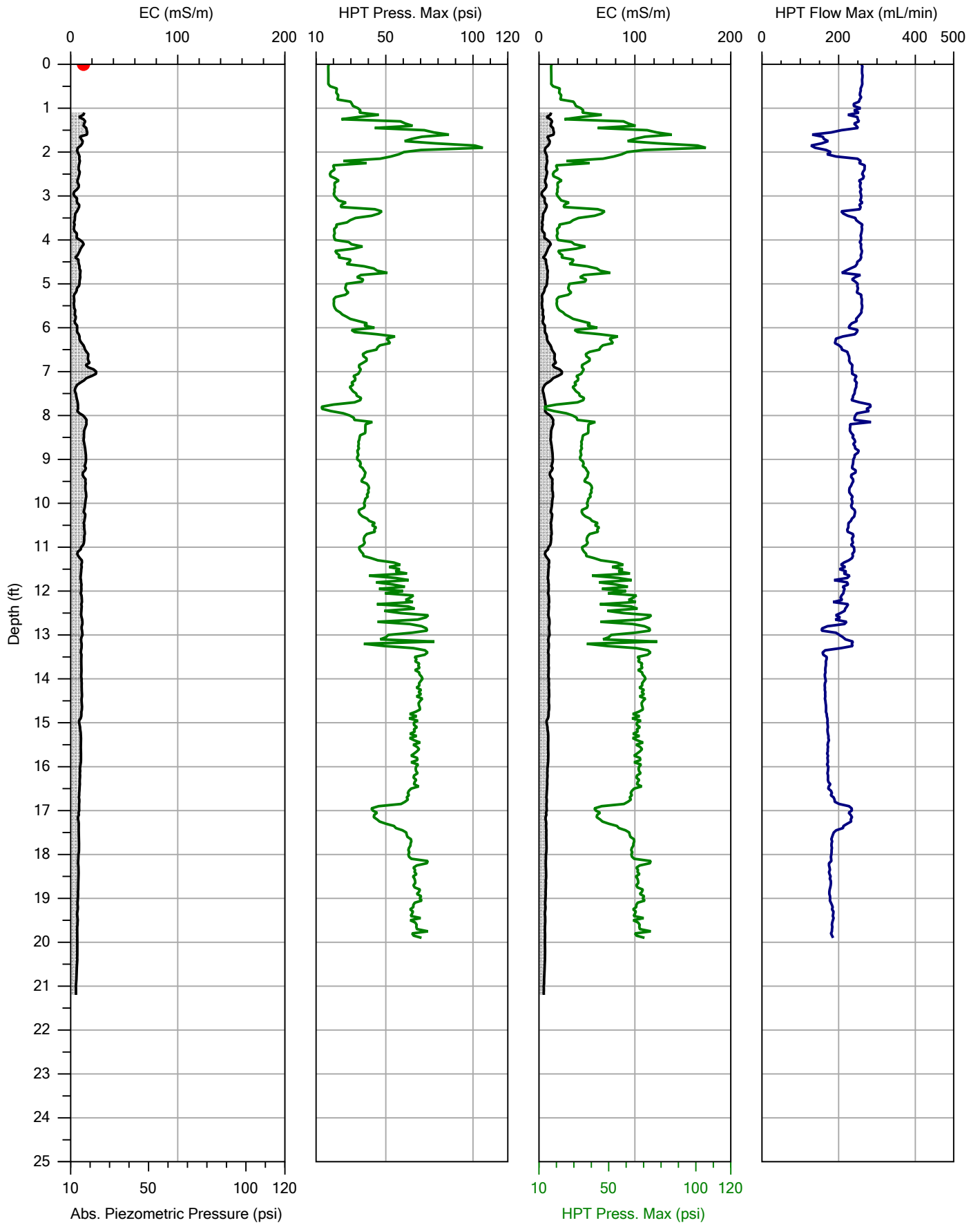
File:	HSI-HRSC-06.MHP
Date:	09/08/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-07.MHP
Date:	09/08/20
Location:	northeast

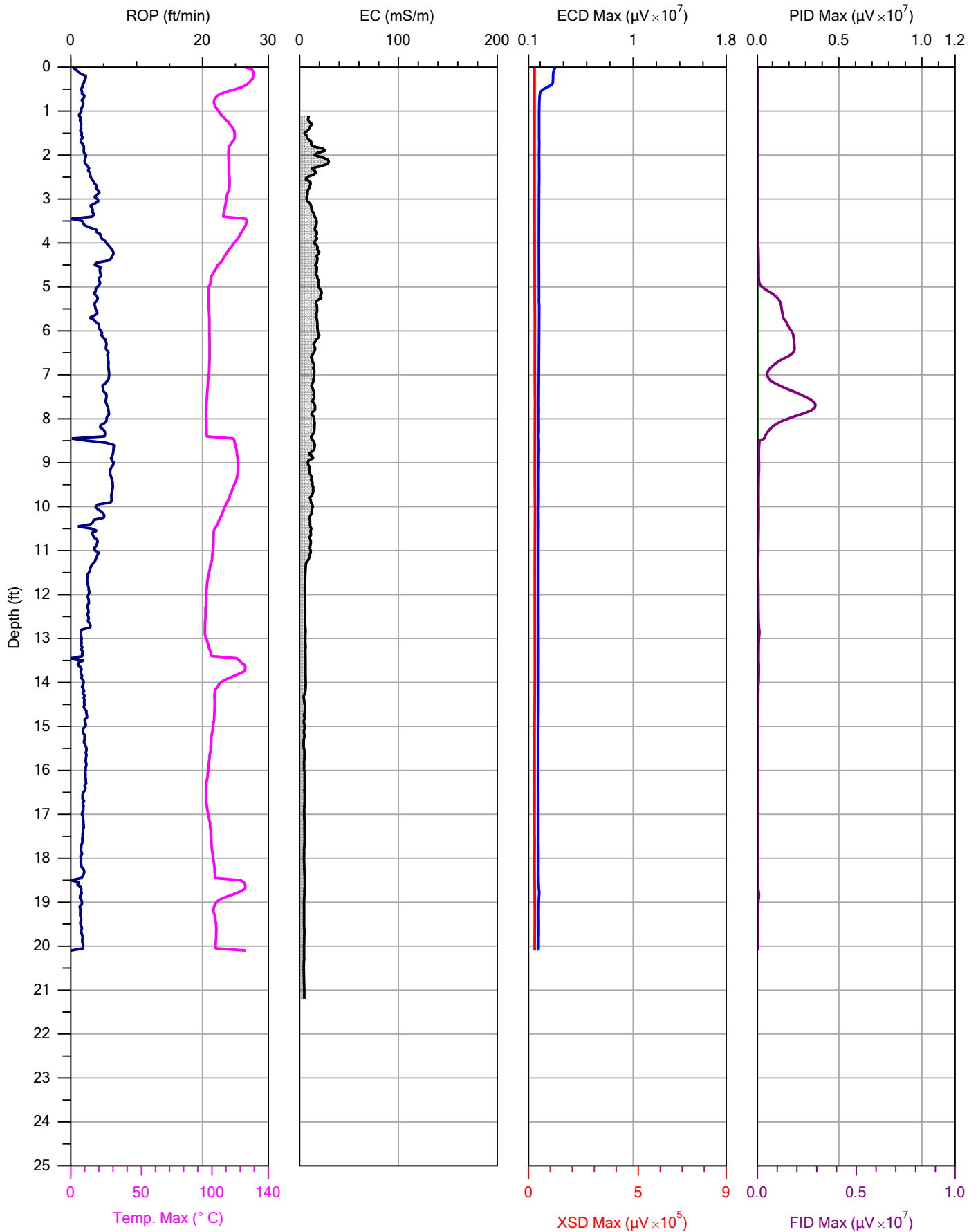


Company: Cascade  
 Project ID: 2022001119

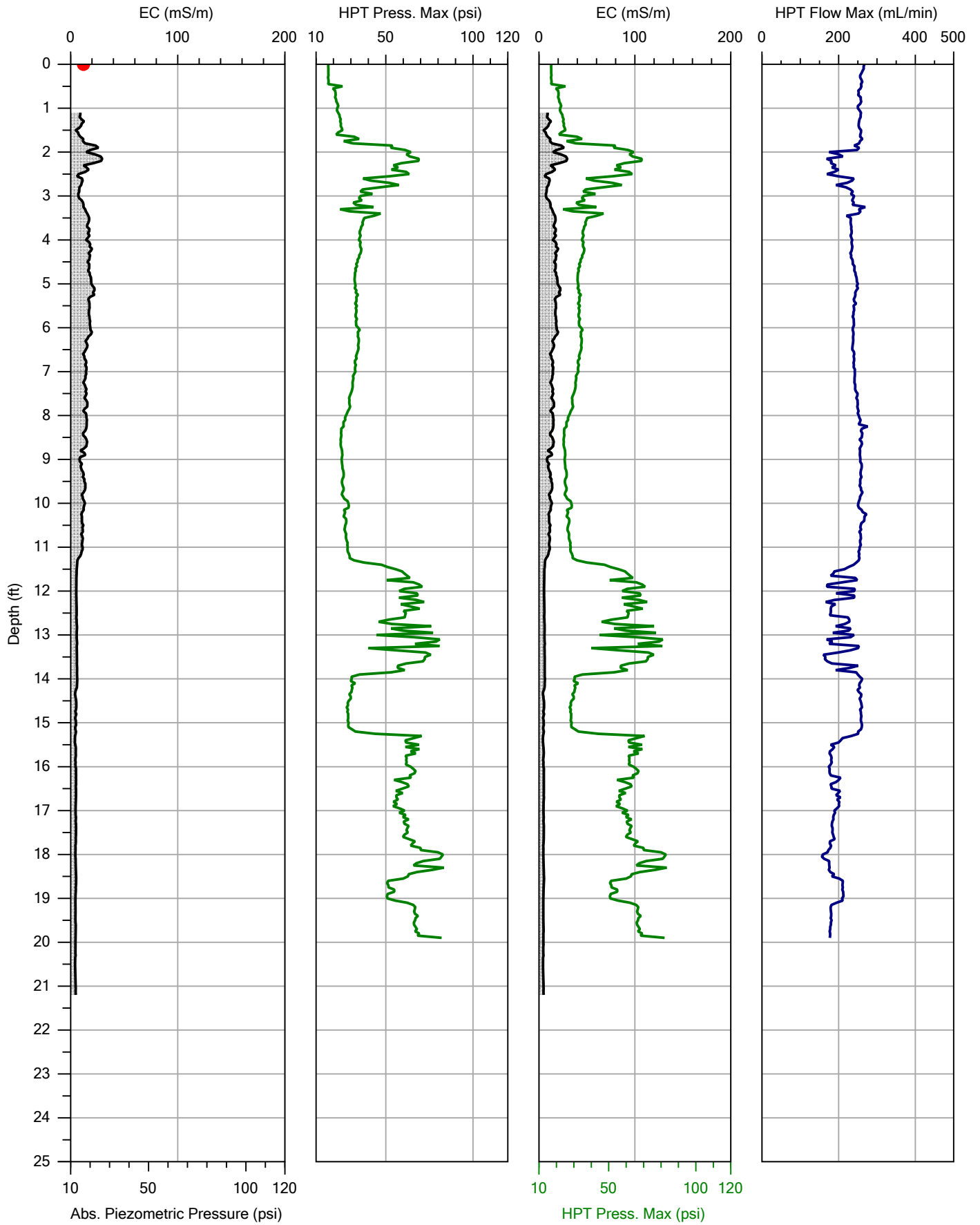
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-07.MHP
Date:	09/08/20
Location:	northeast





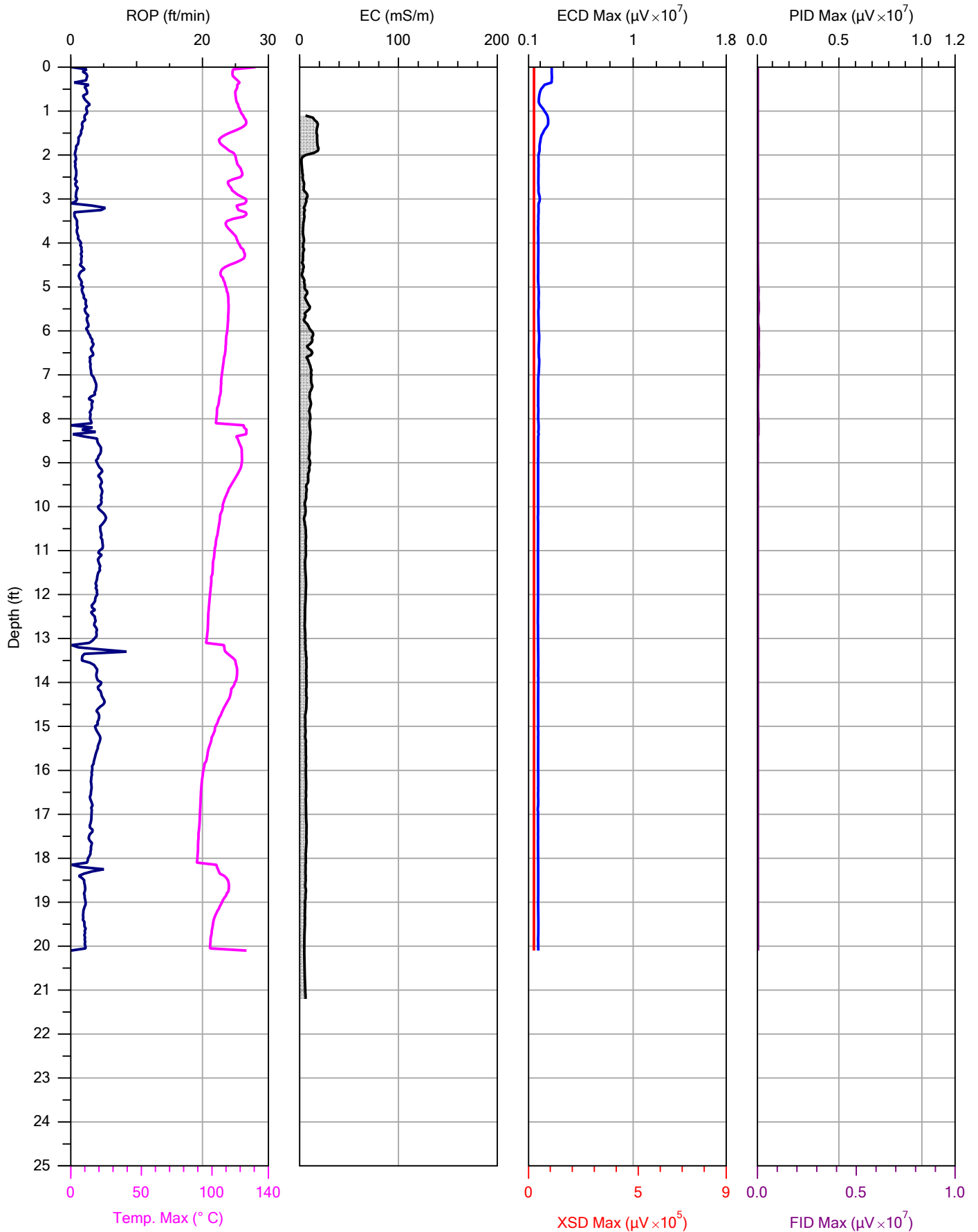
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-08.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



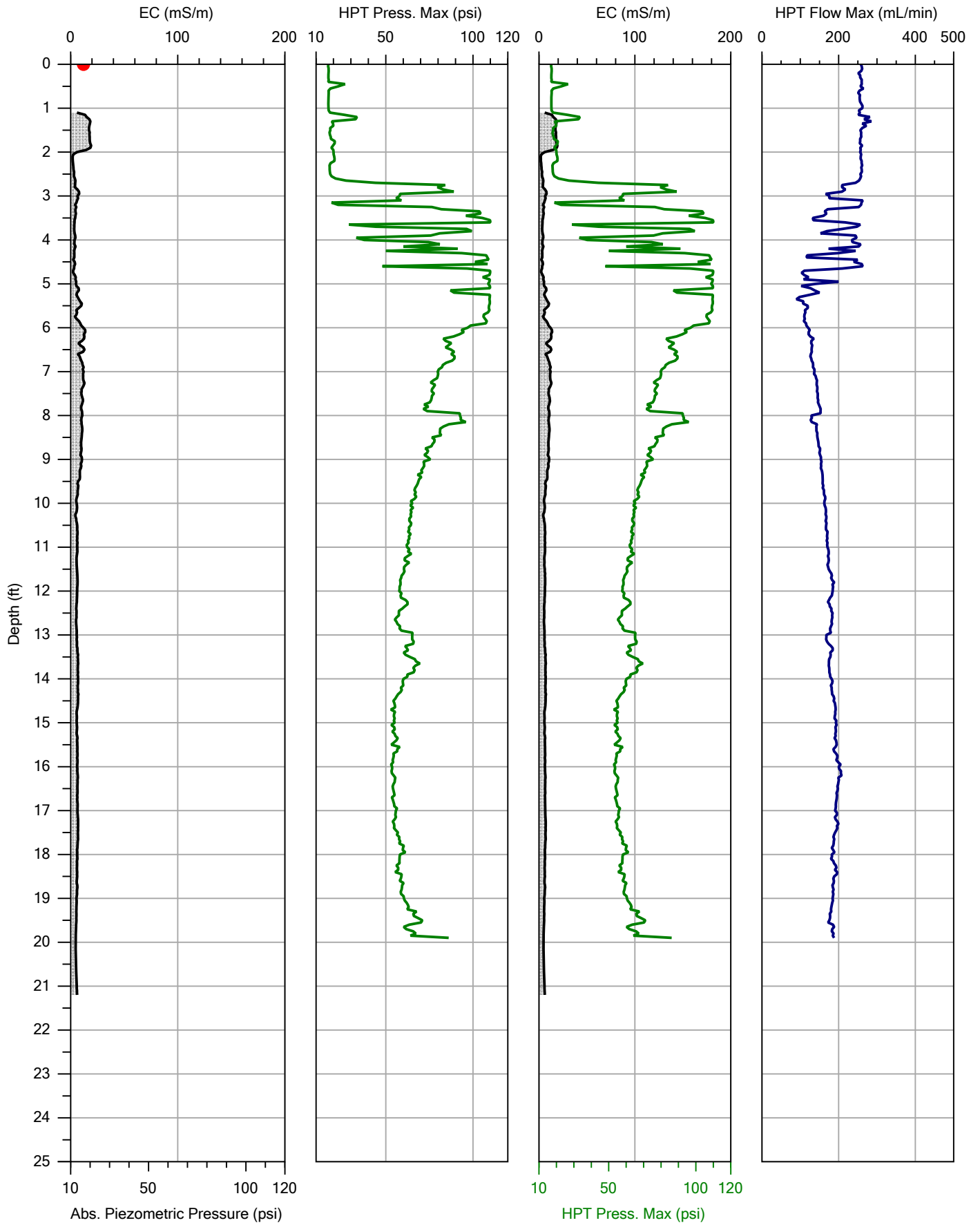
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-08.MHP
Date:	09/08/20
Location:	northeast



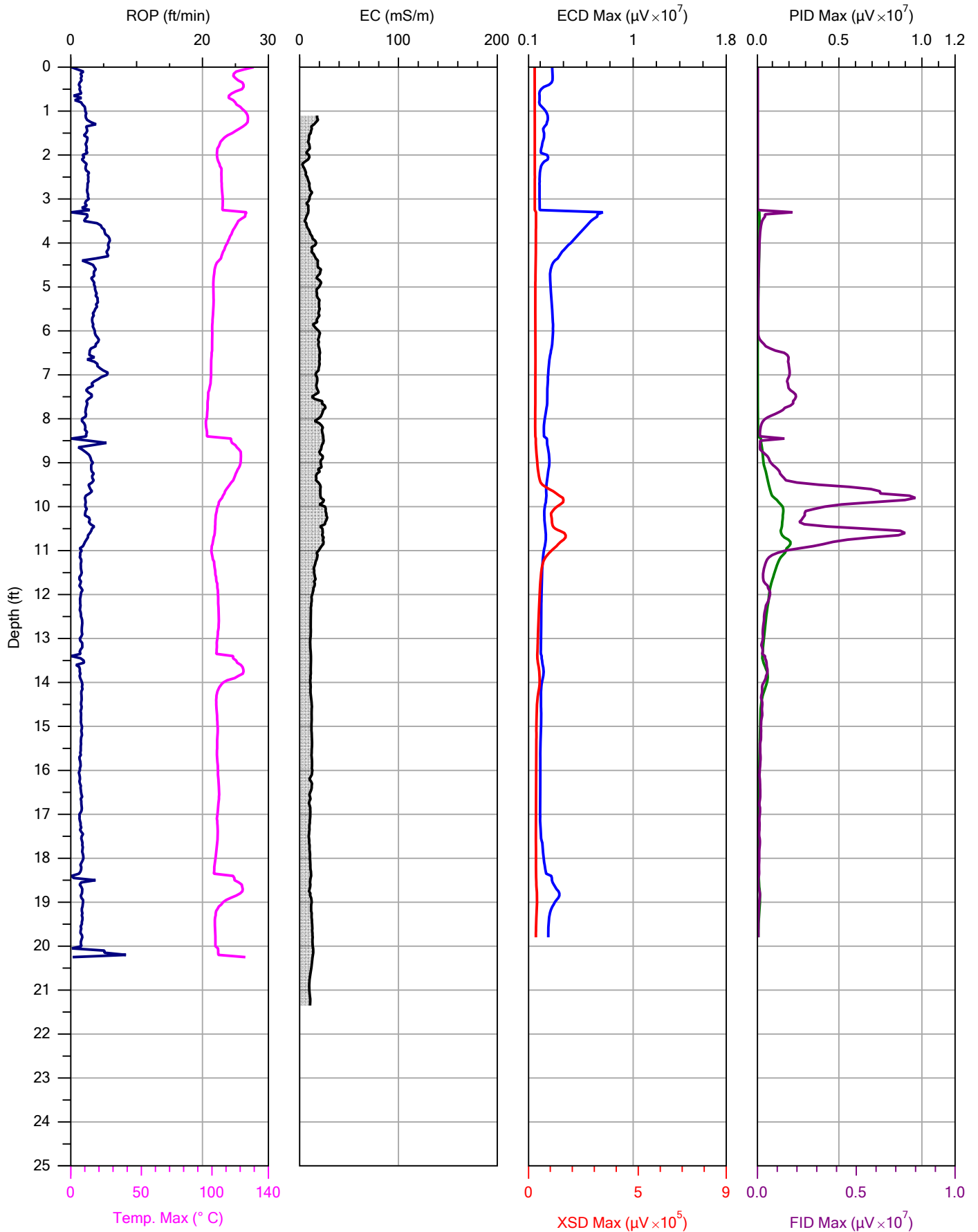
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-09.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



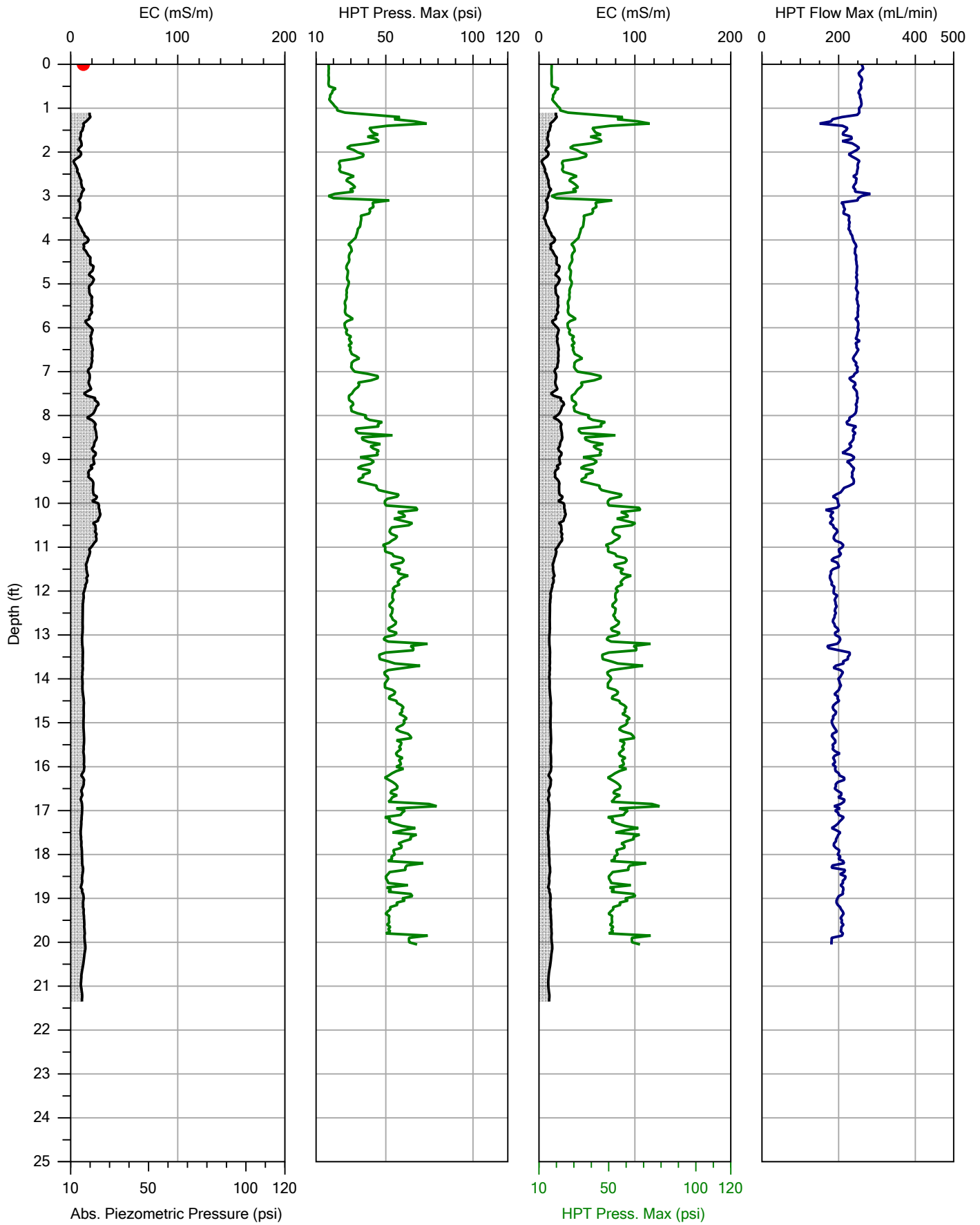
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-09.MHP
Date:	09/08/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-10.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast

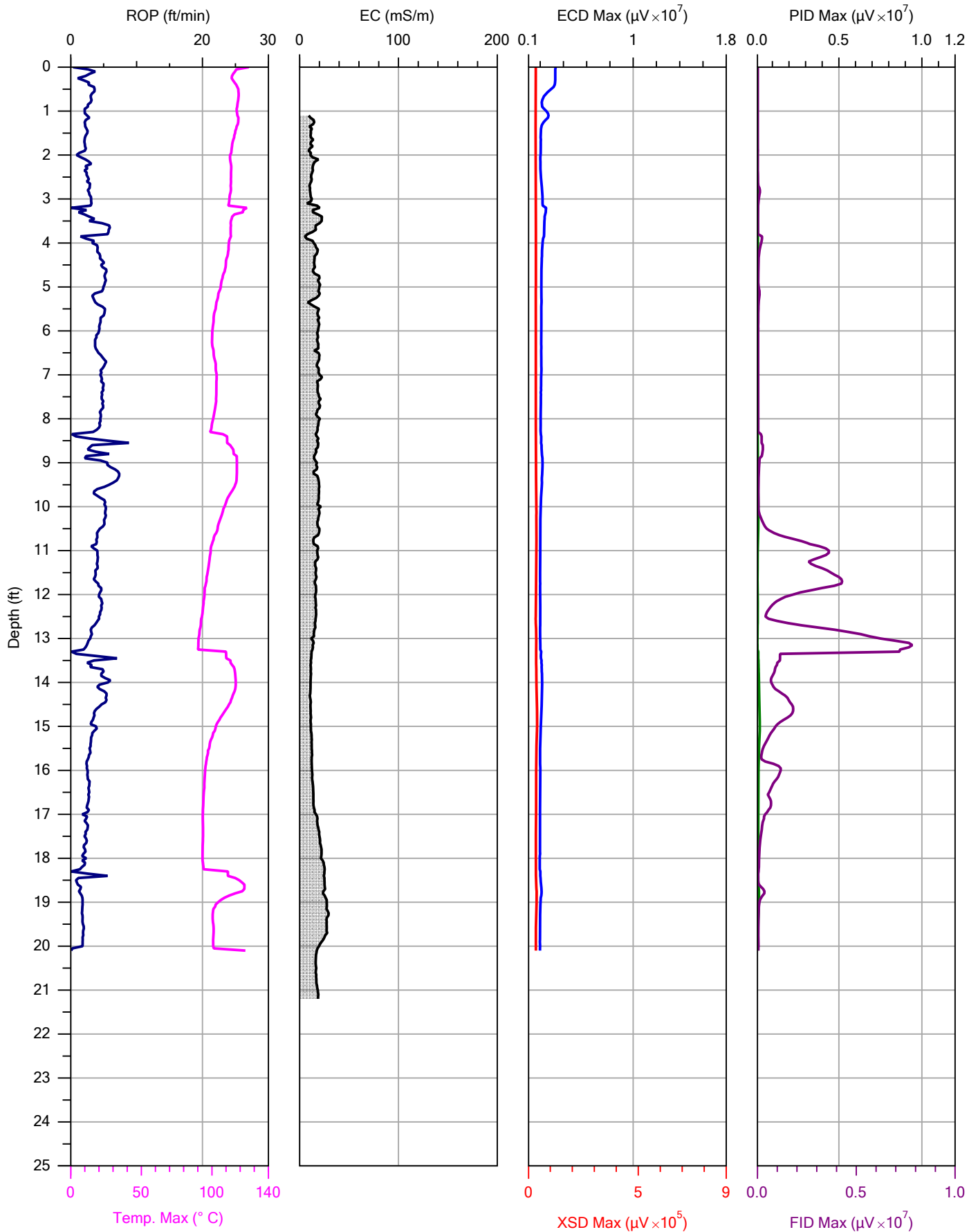


Company: Cascade  
 Project ID: 2022001119

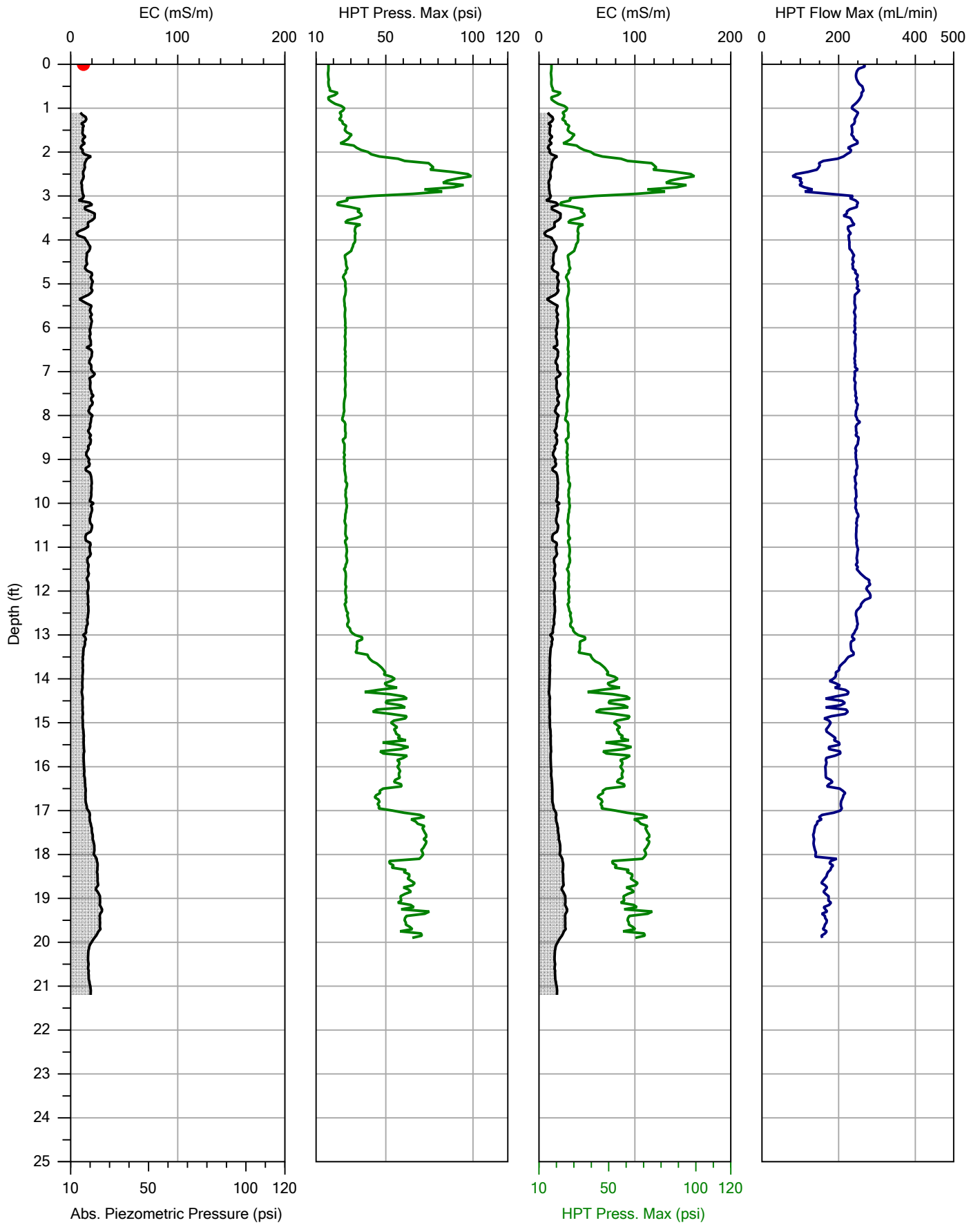
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-10.MHP
Date:	09/08/20
Location:	northeast





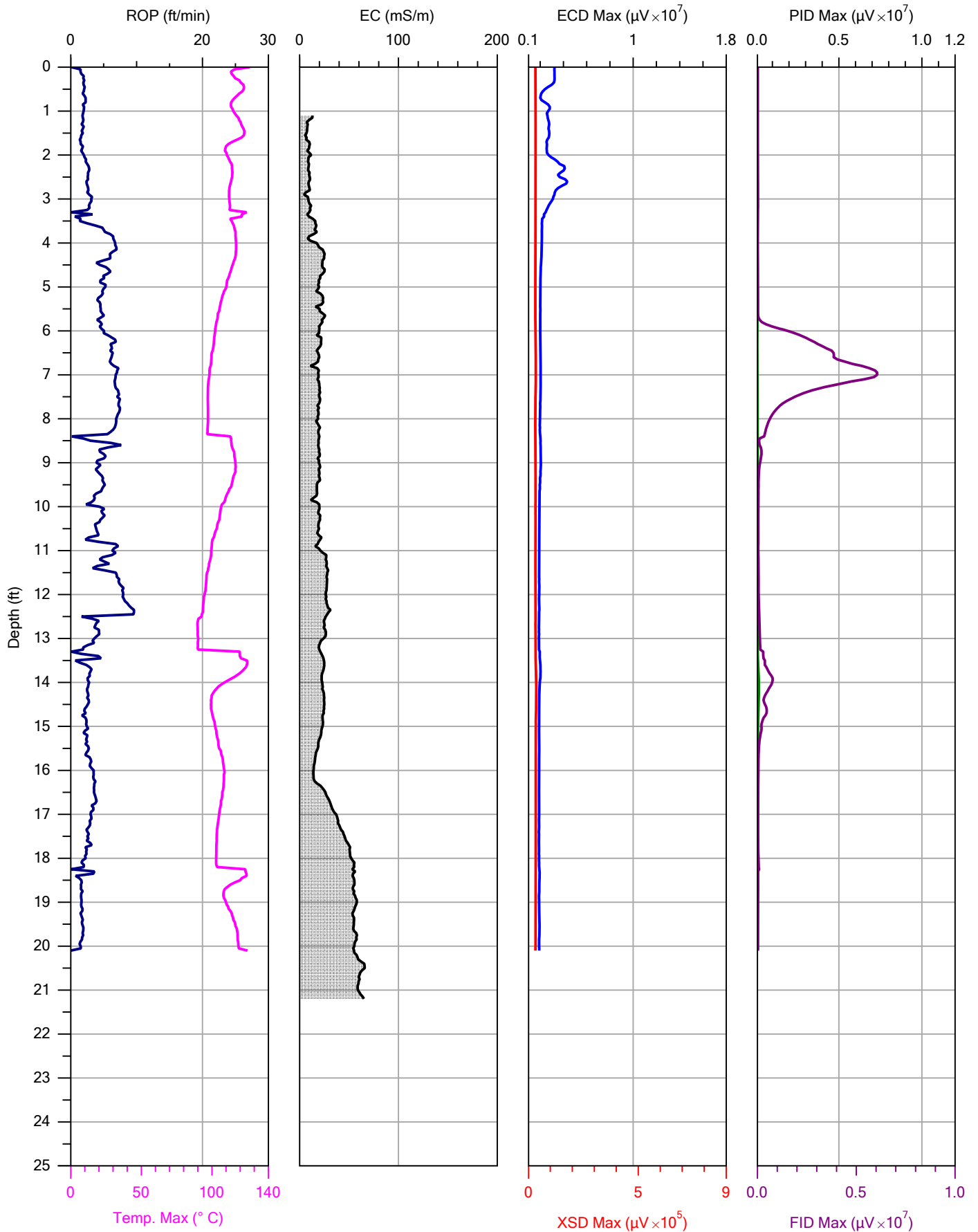
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-11.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



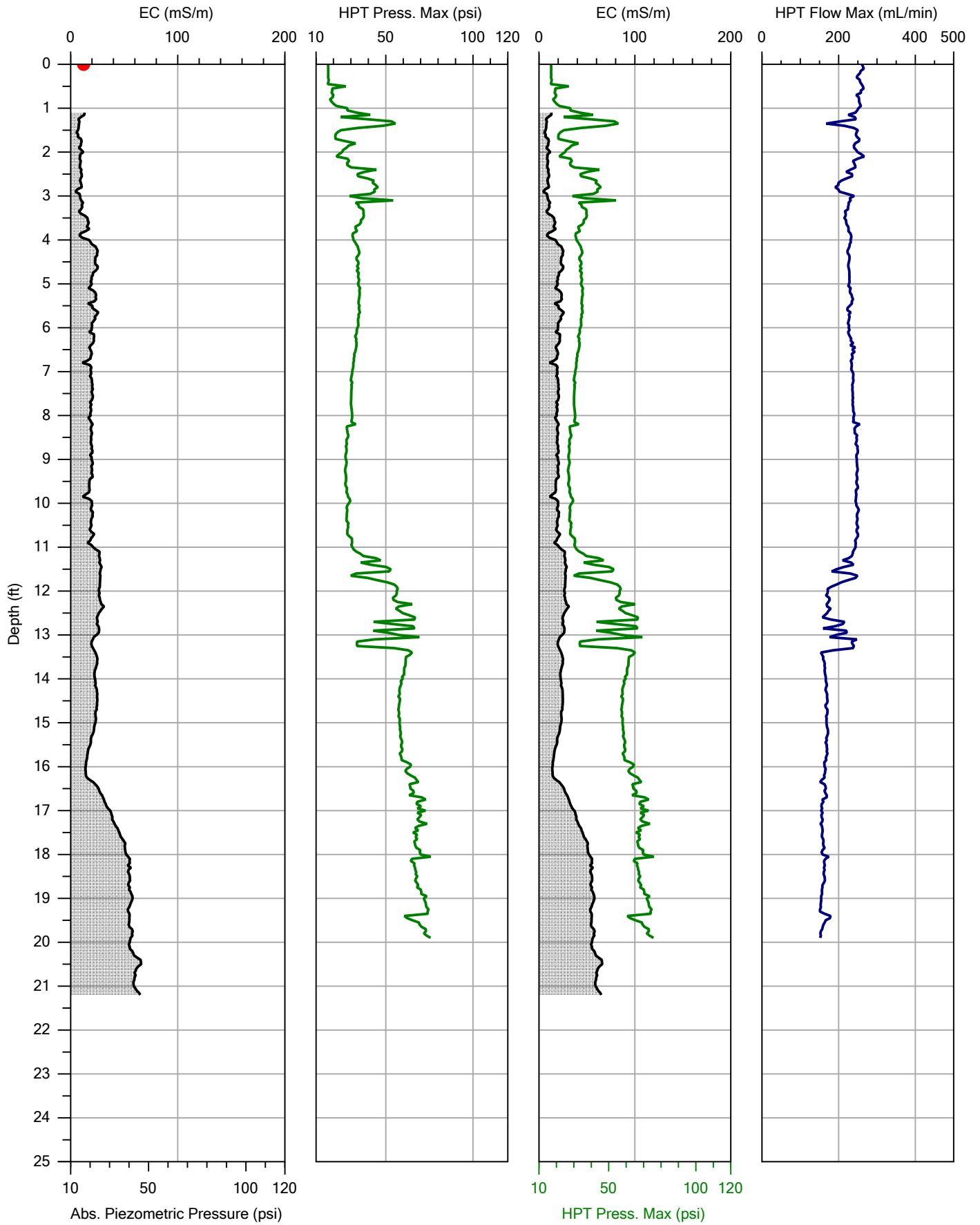
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-11.MHP
Date:	09/08/20
Location:	northeast



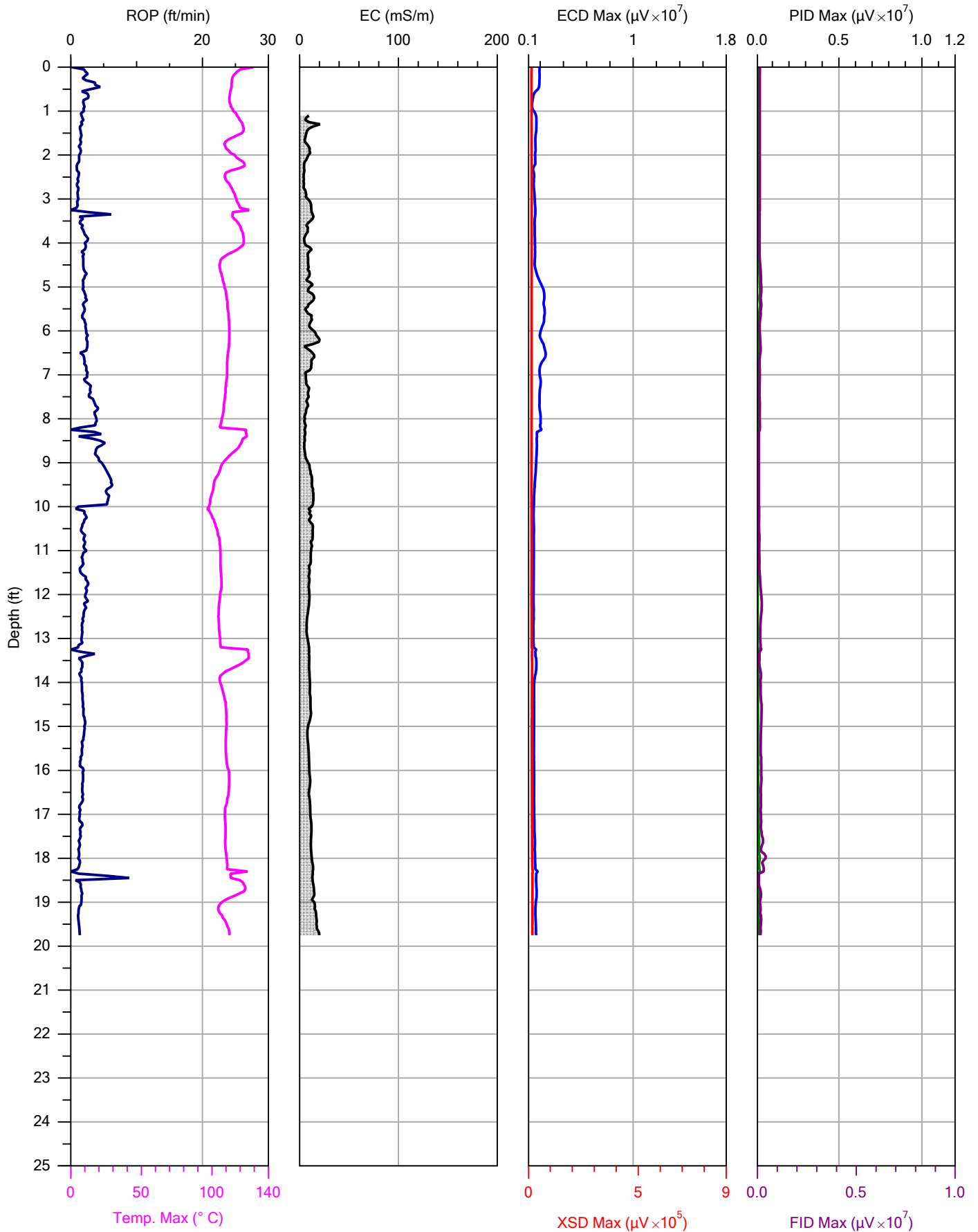
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-12.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/08/20
				Location:	northeast



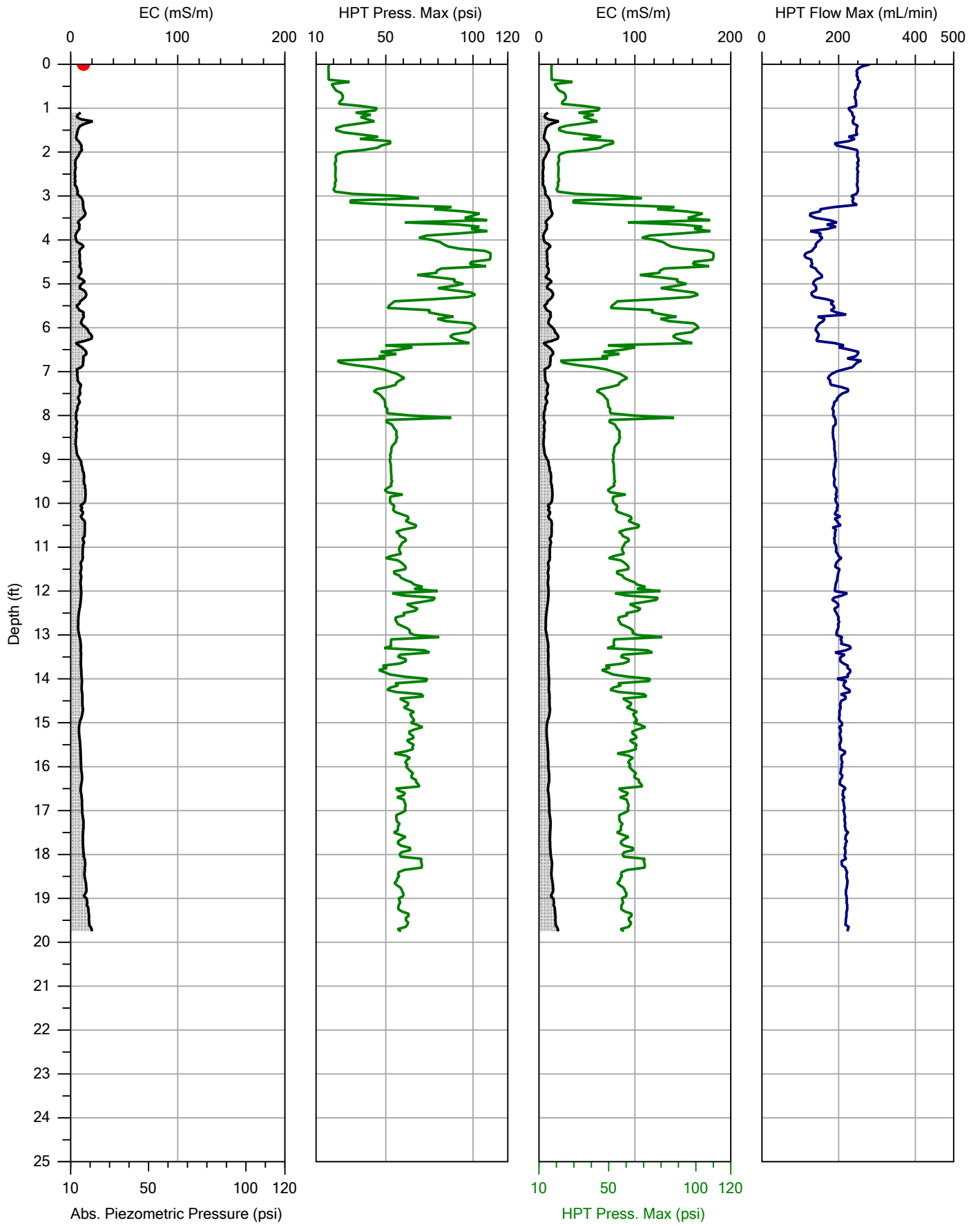
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-12.MHP
Date:	09/08/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-13.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast

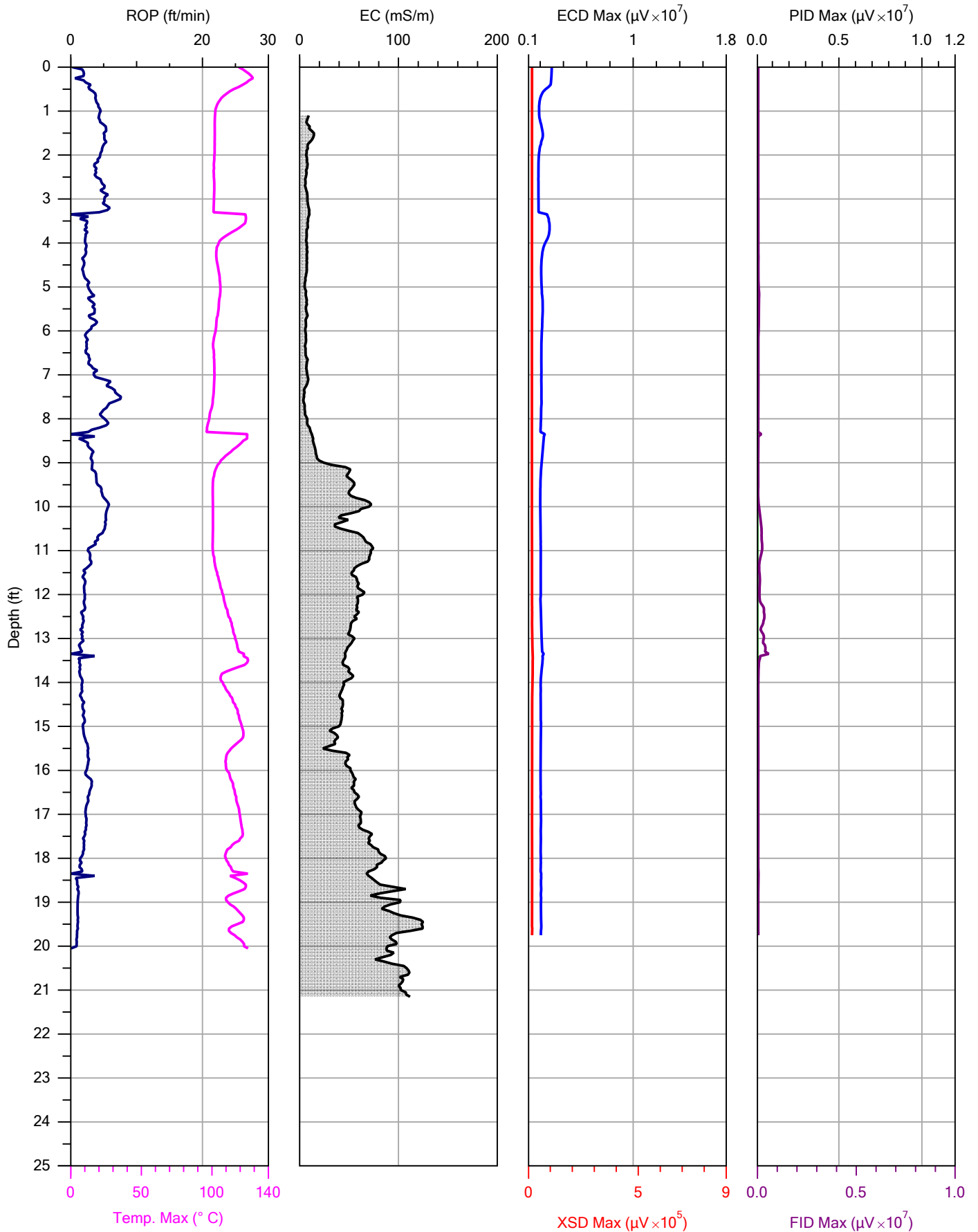


Company: Cascade  
 Project ID: 2022001119

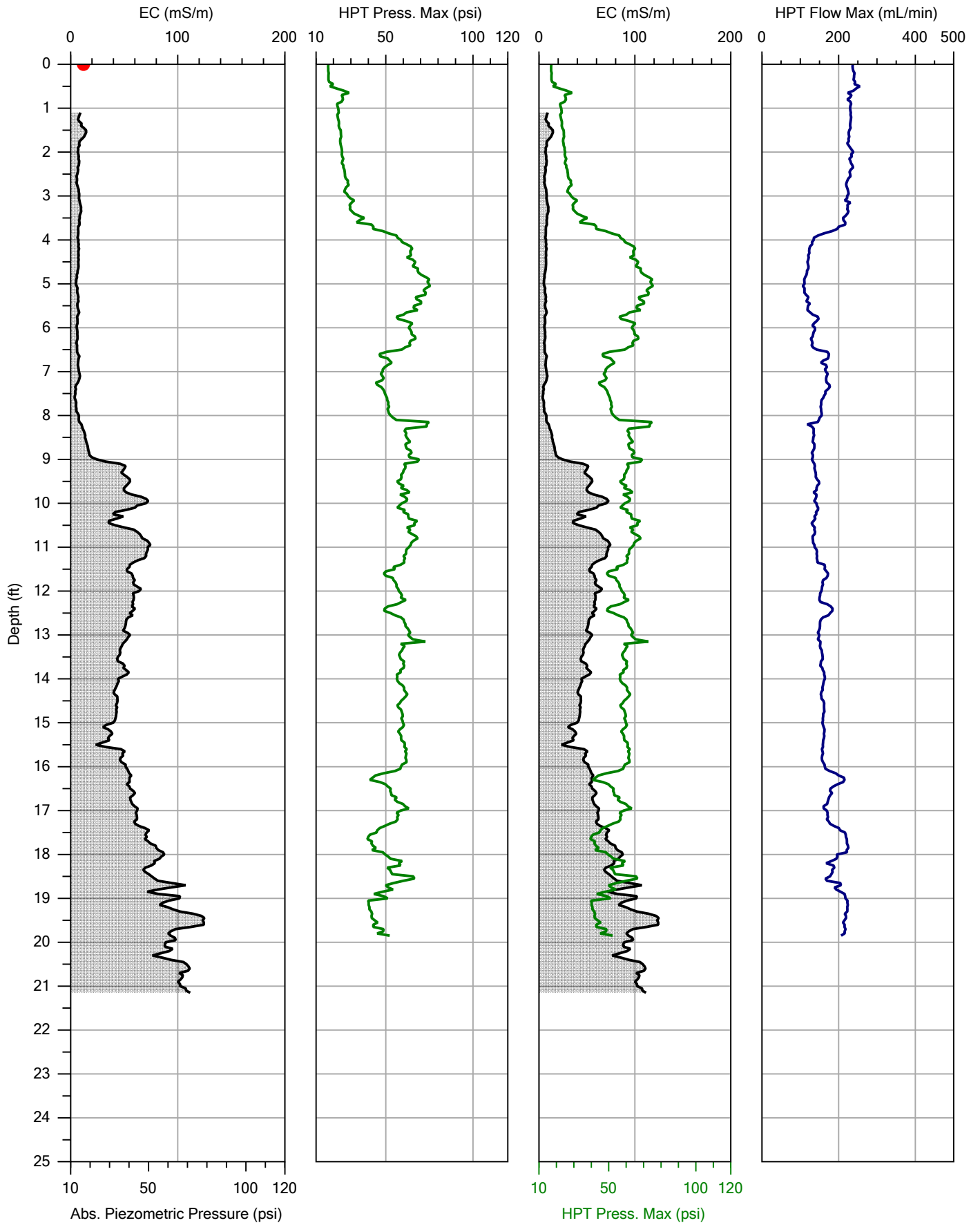
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-13.MHP
Date:	09/09/20
Location:	northeast





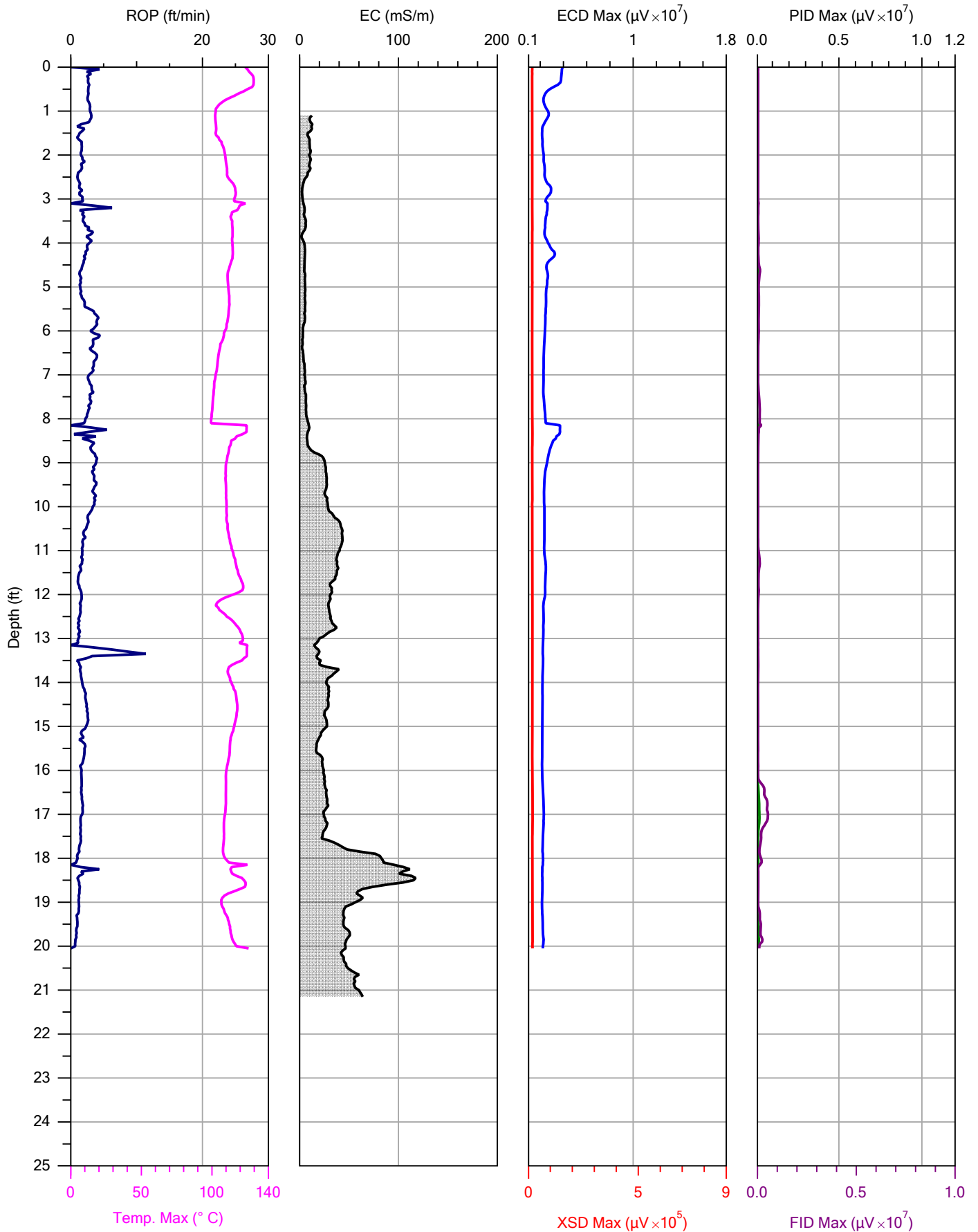
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-14.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

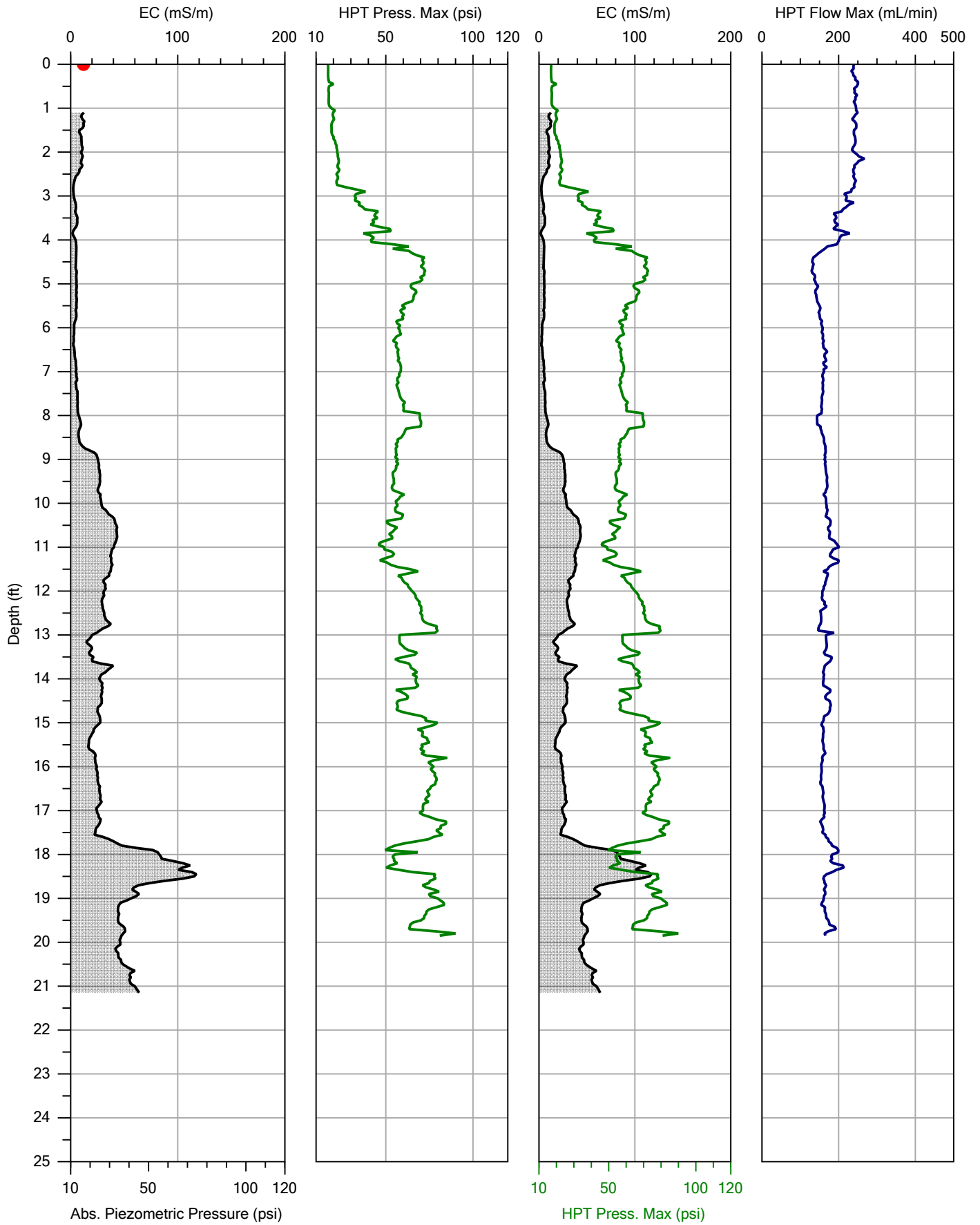
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Date:	09/09/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

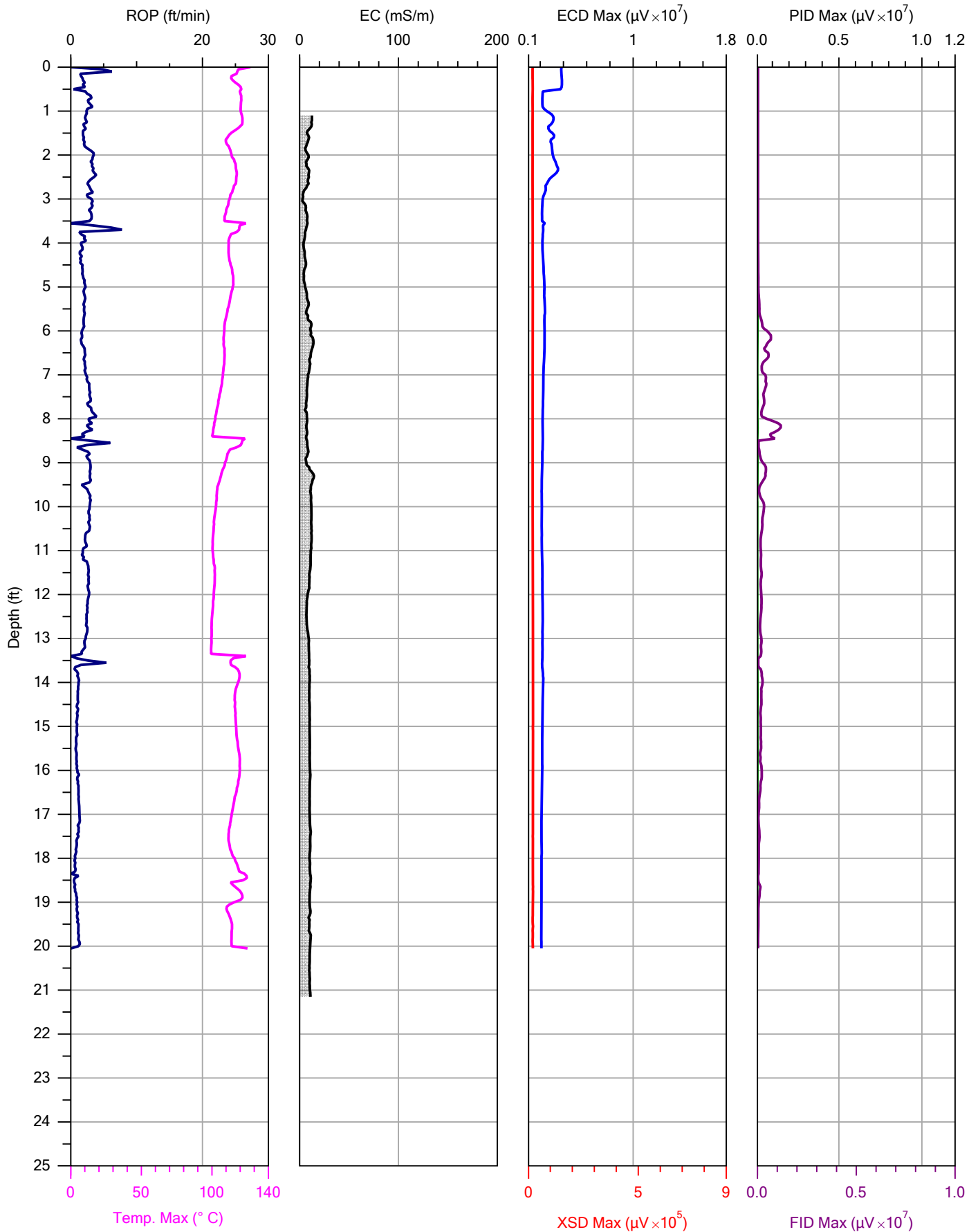
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Date:	09/09/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

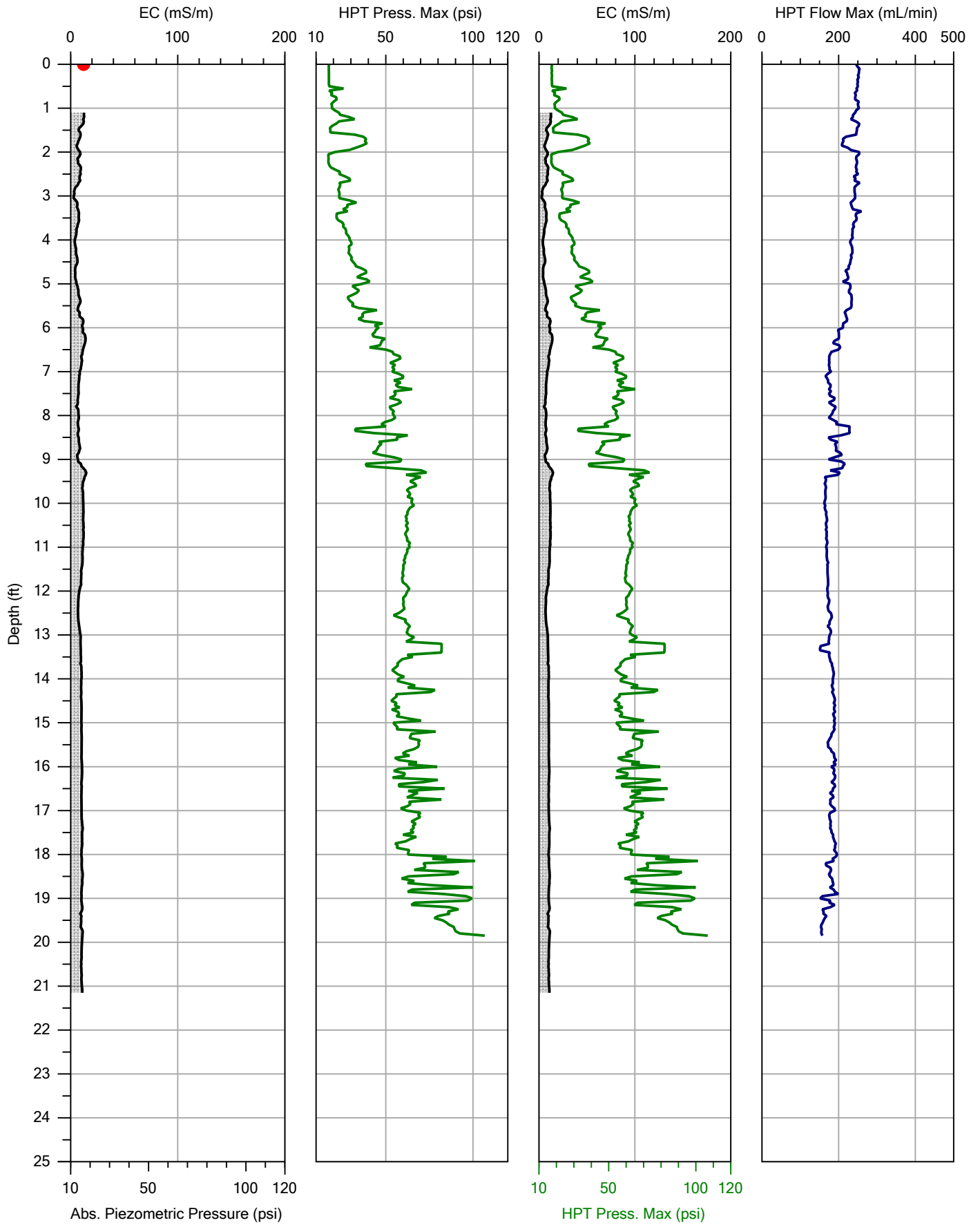
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Date:	09/09/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-16.MHP
Date:	09/09/20
Location:	northeast

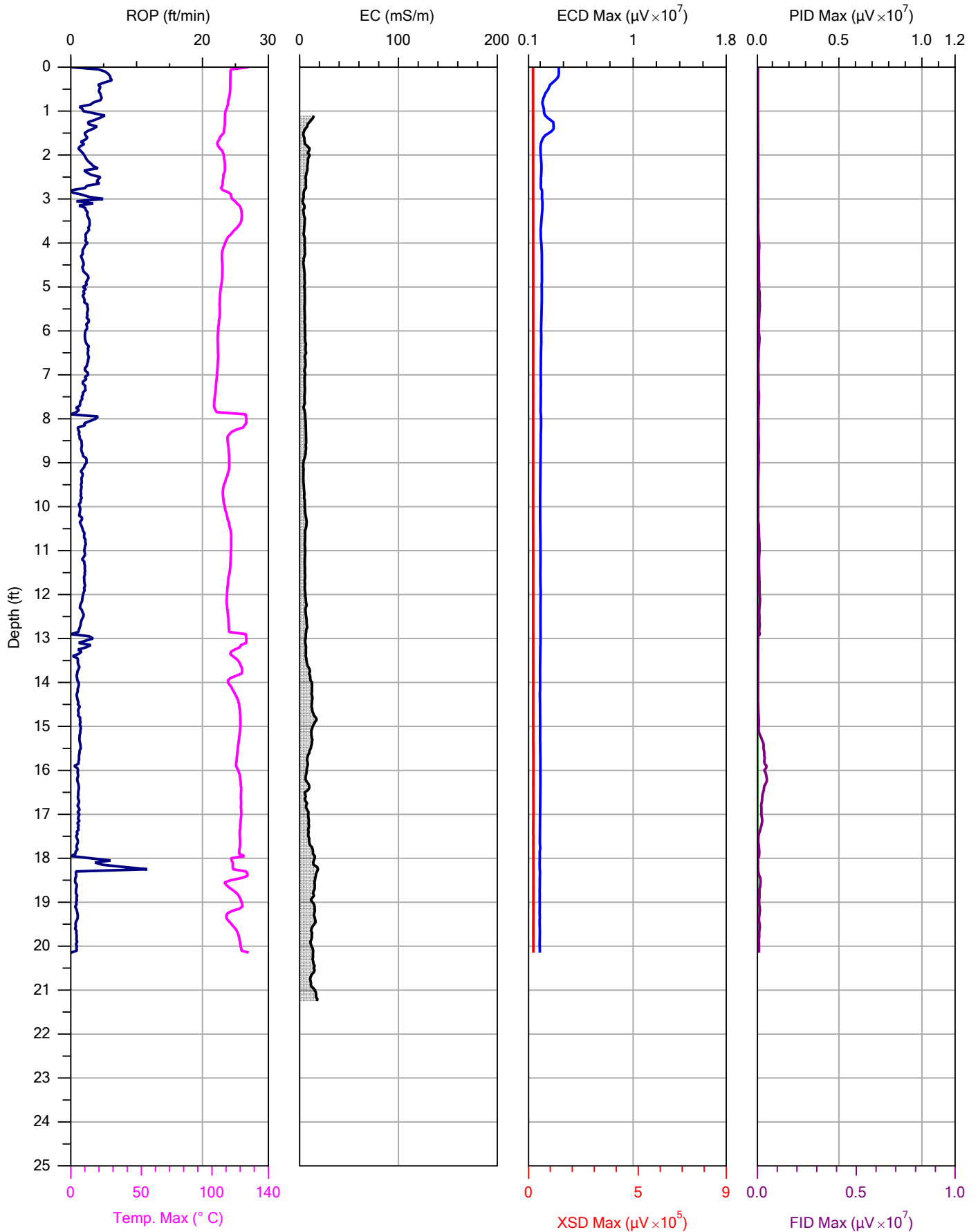


Company: Cascade  
 Project ID: 2022001119

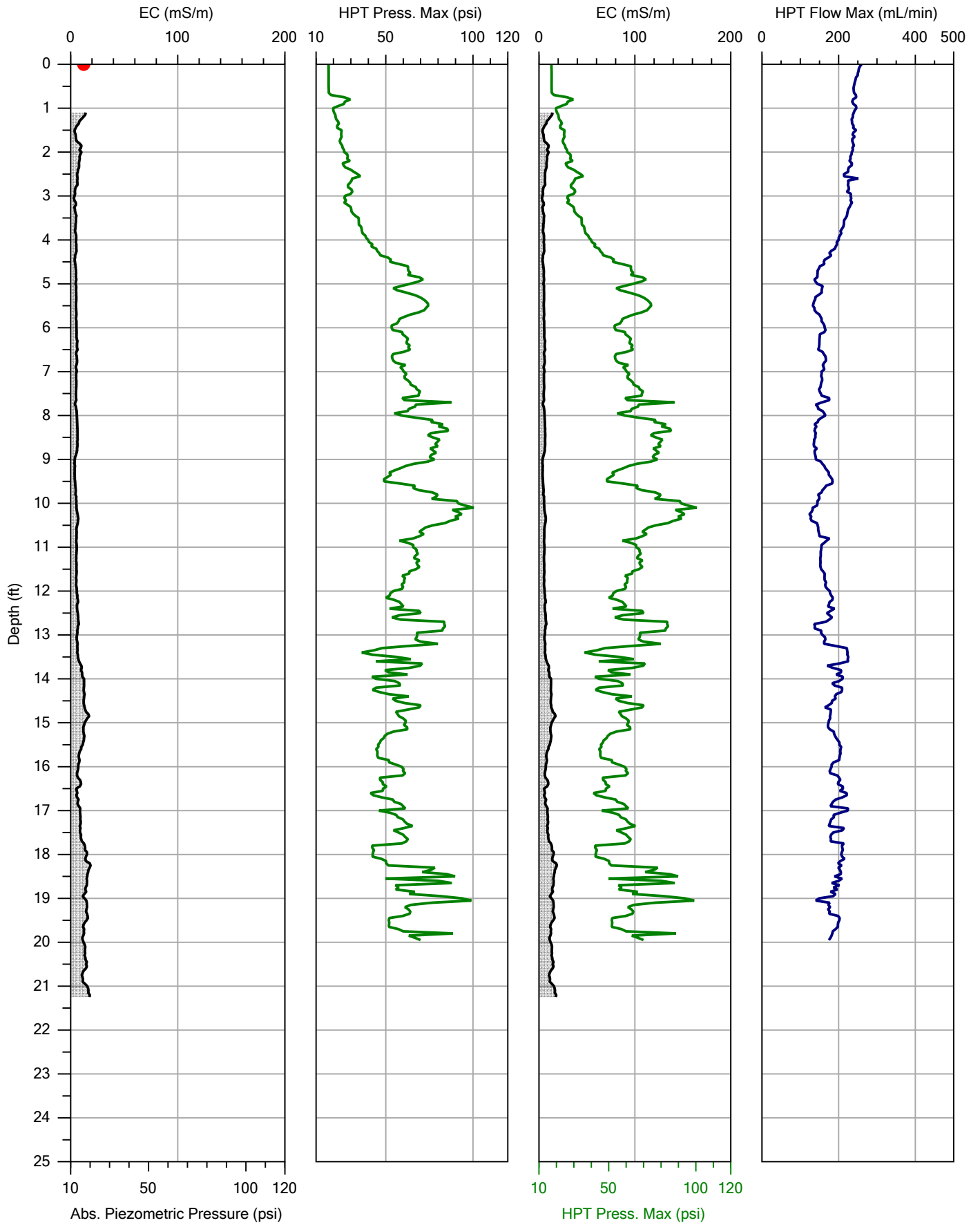
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-16.MHP
Date:	09/09/20
Location:	northeast





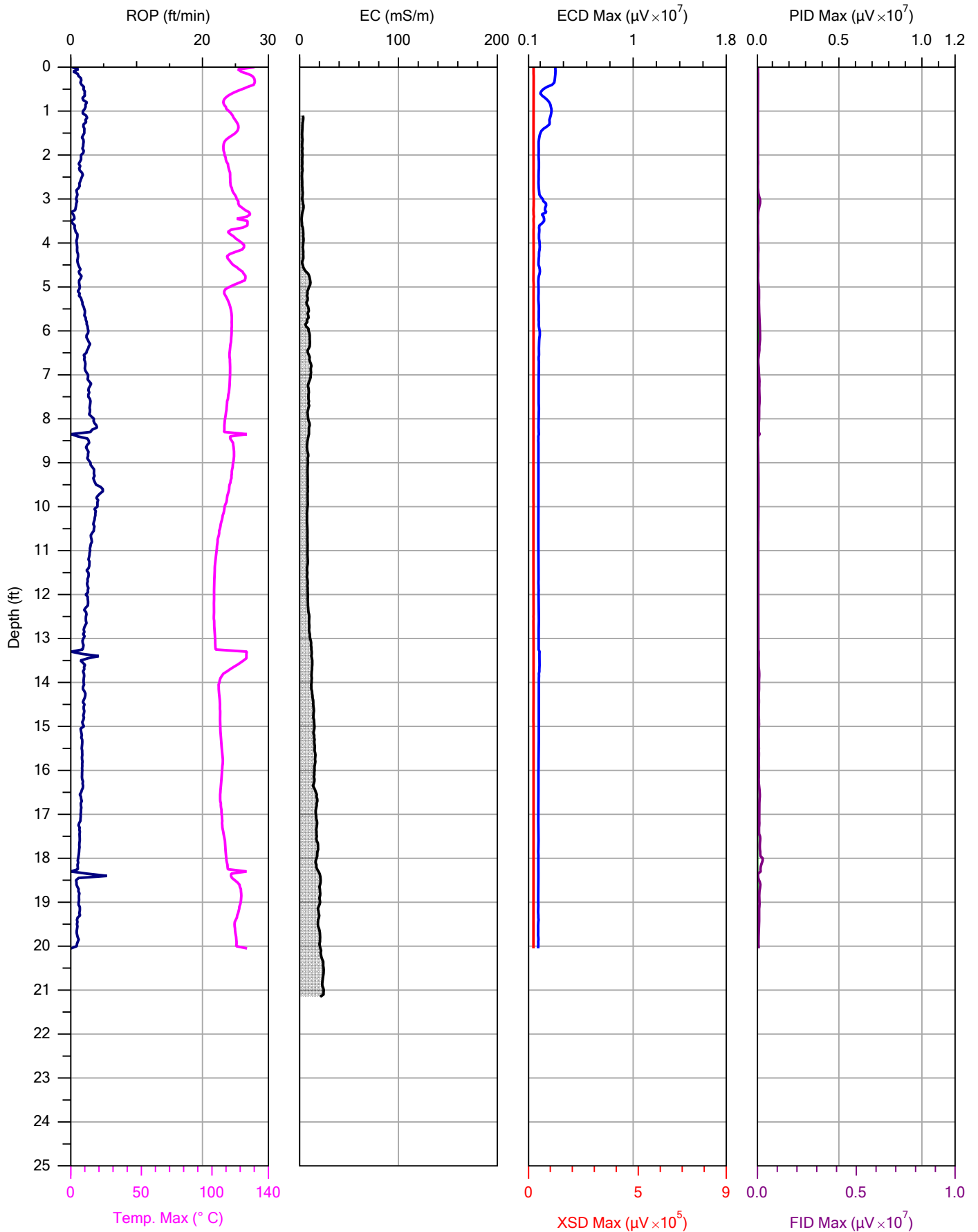
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



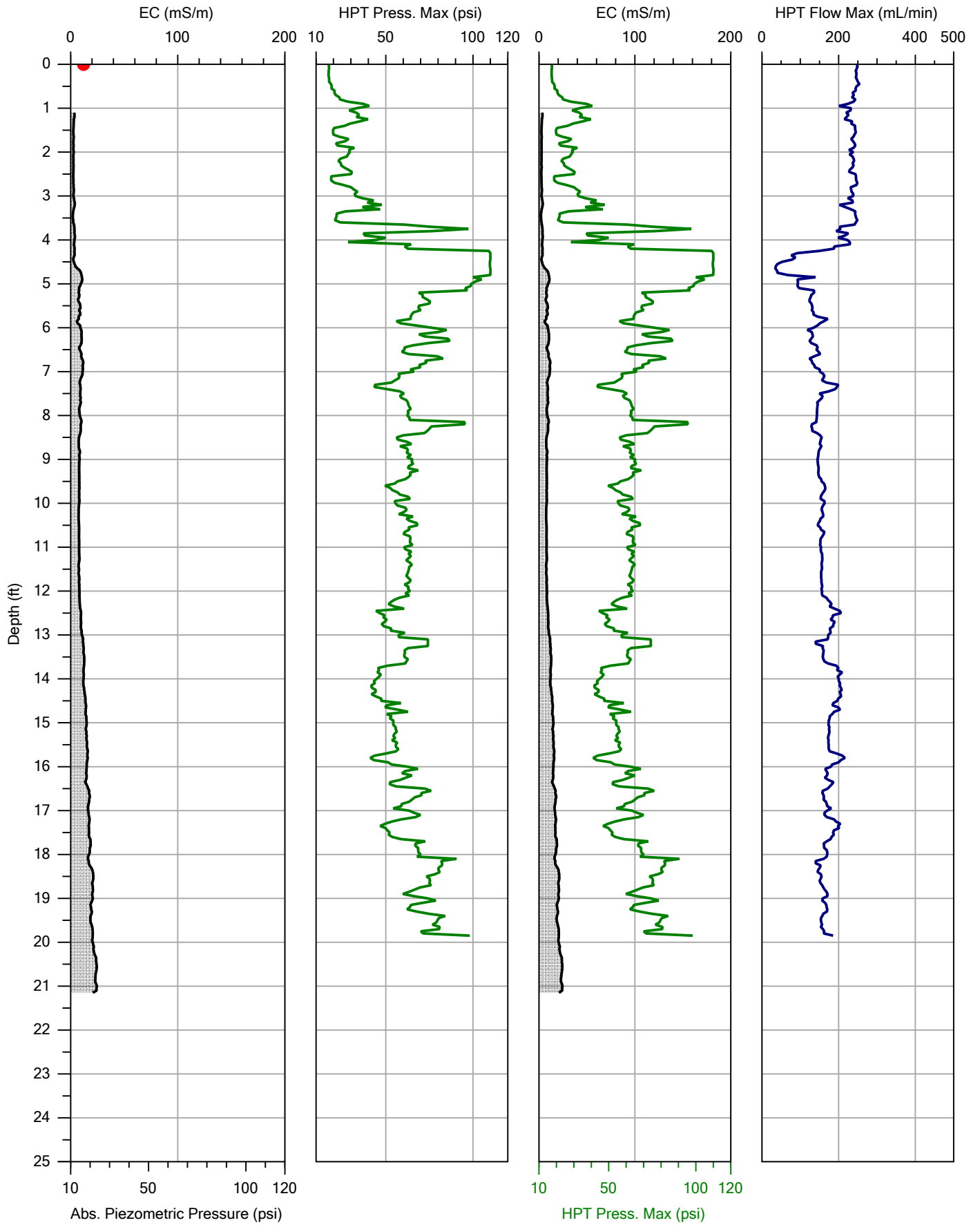
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-17.MHP
Date:	09/09/20
Location:	northeast



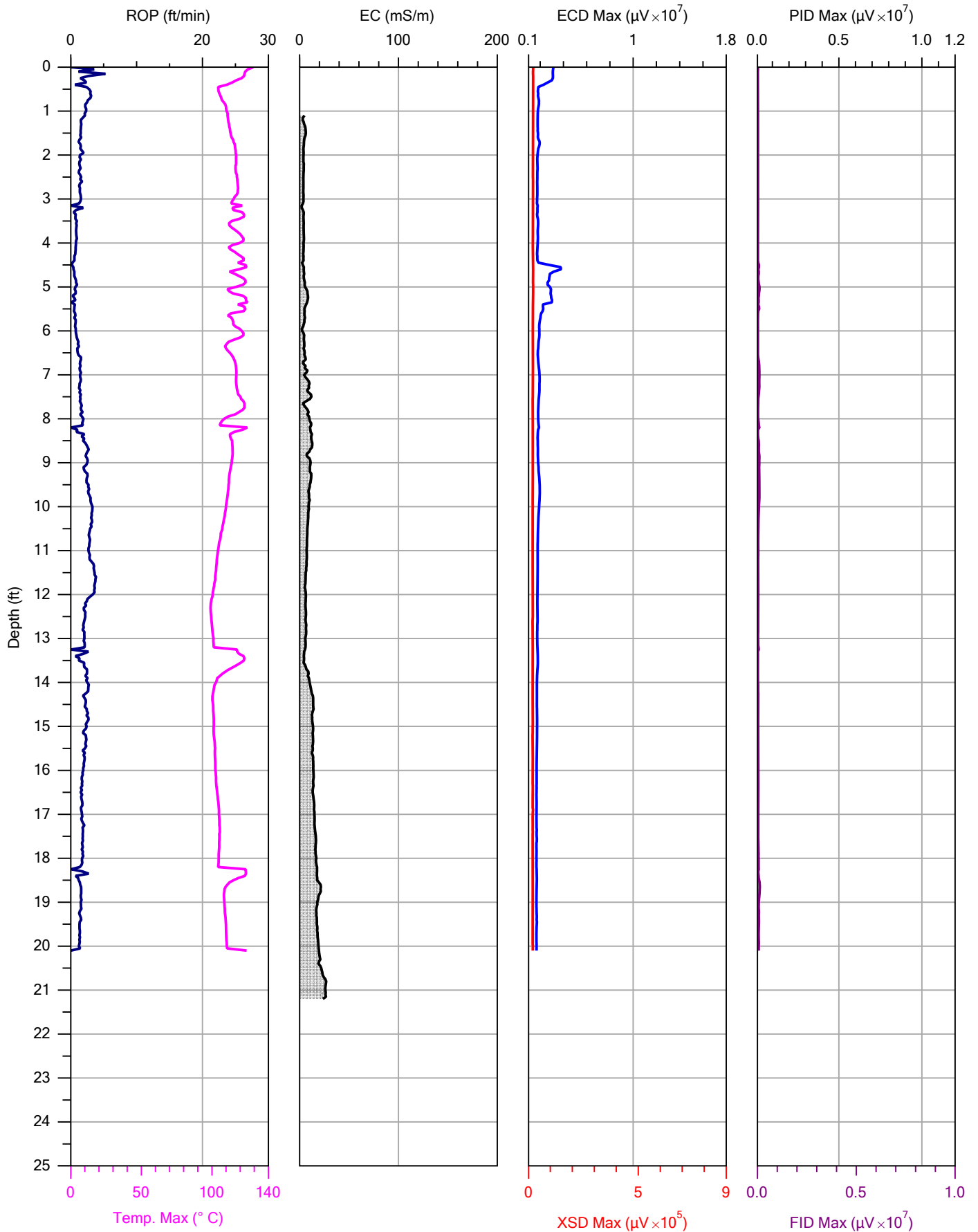
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



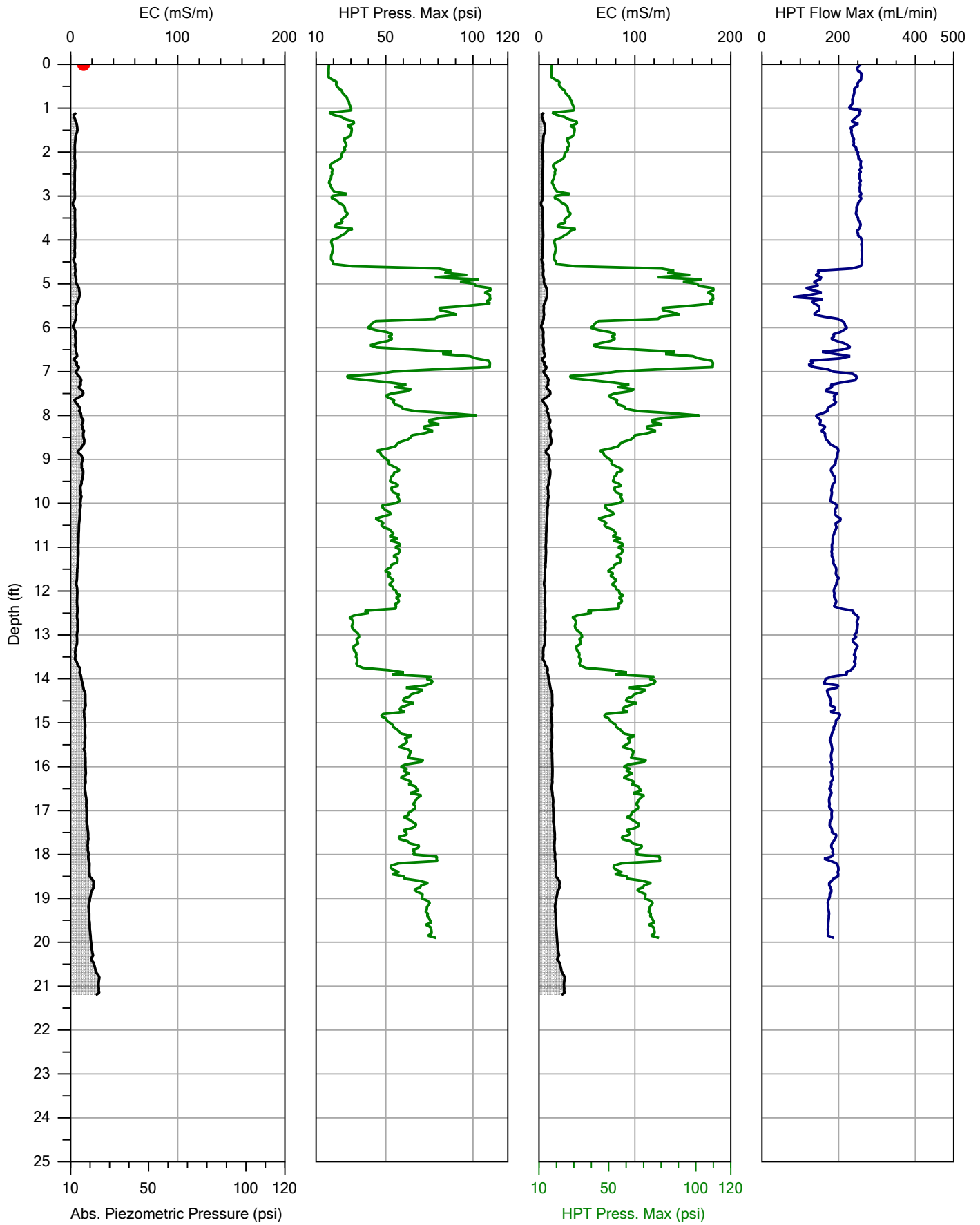
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-18.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-19.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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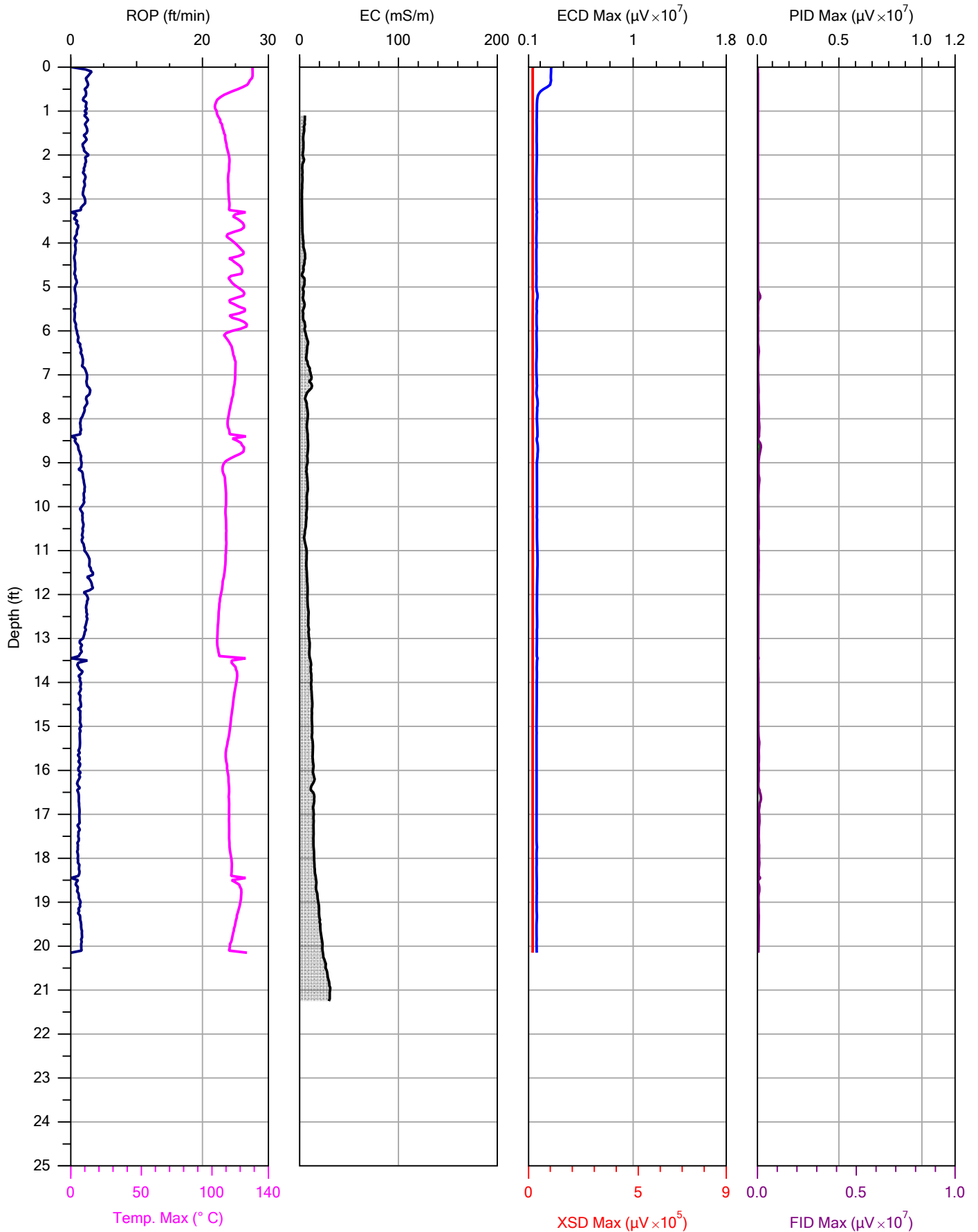


Company: Cascade  
 Project ID: 2022001119

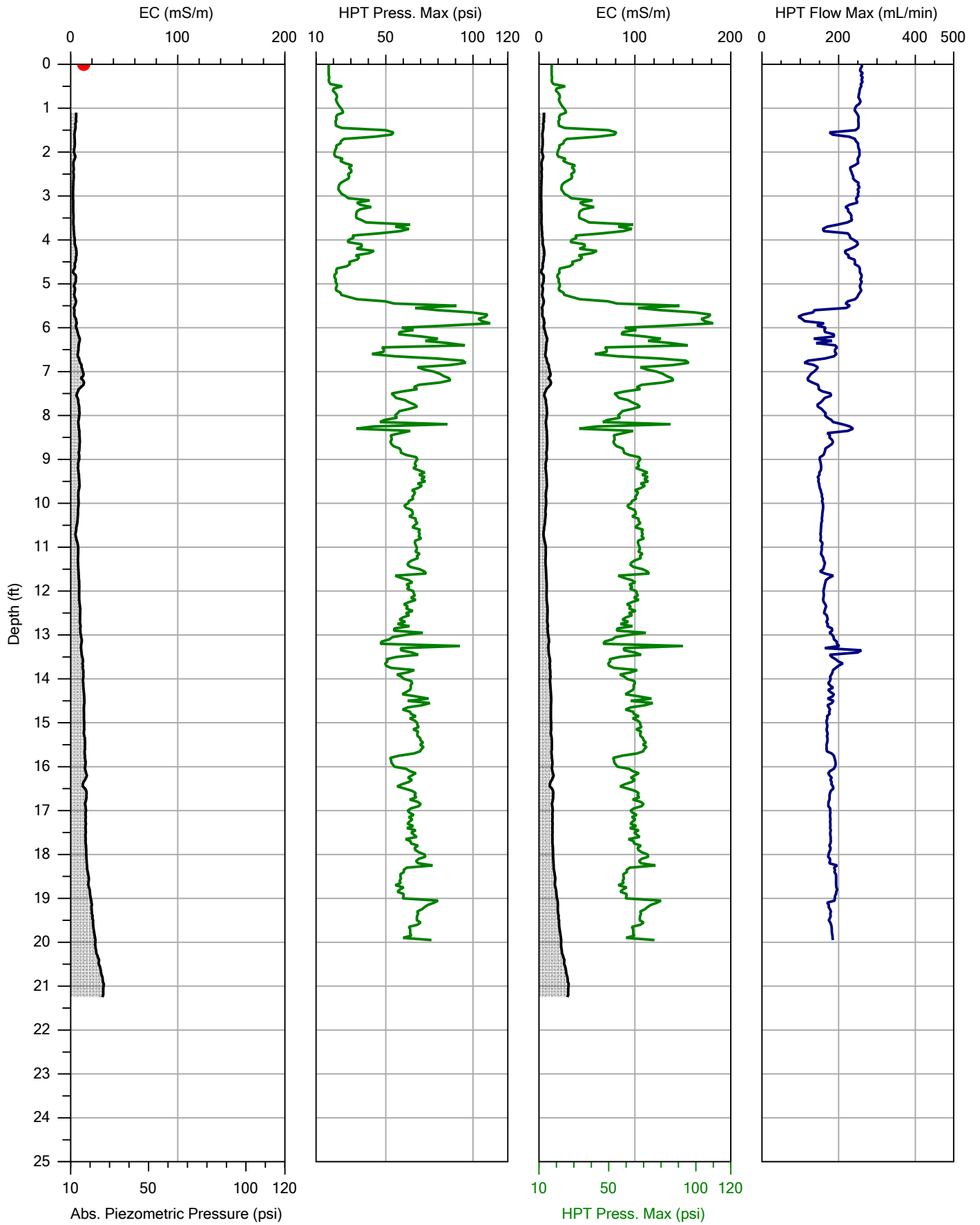
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-19.MHP
Date:	09/09/20
Location:	northeast





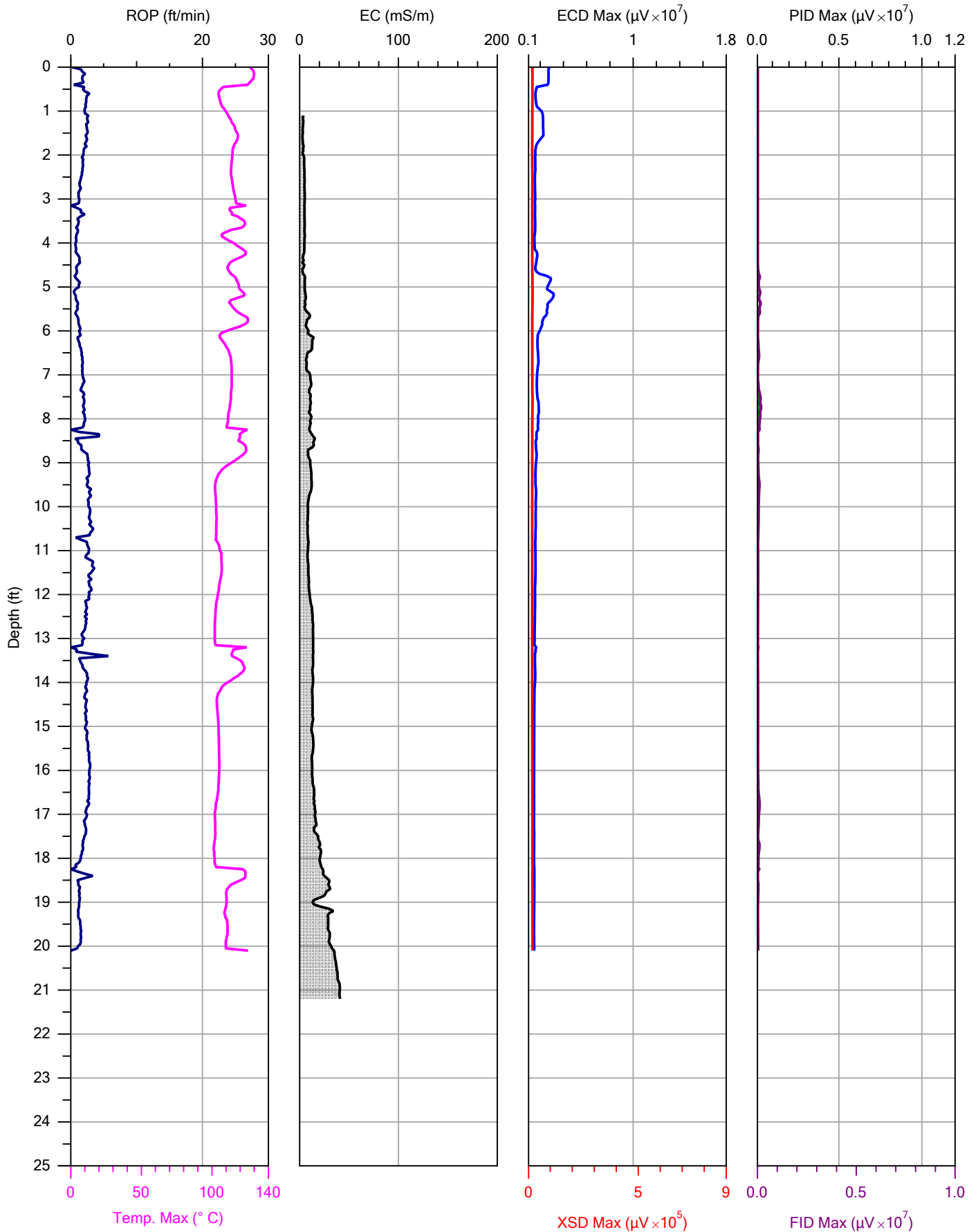
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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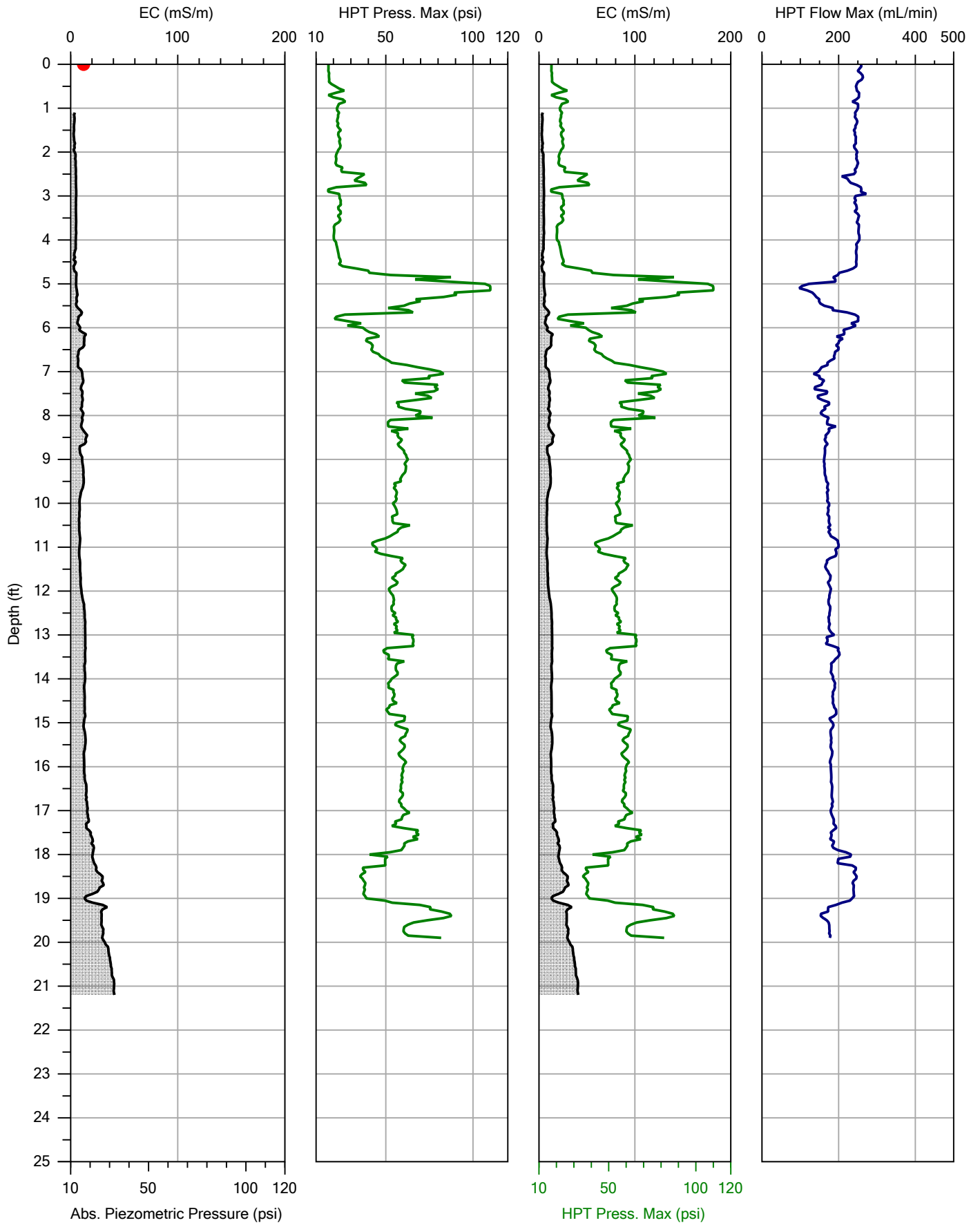
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

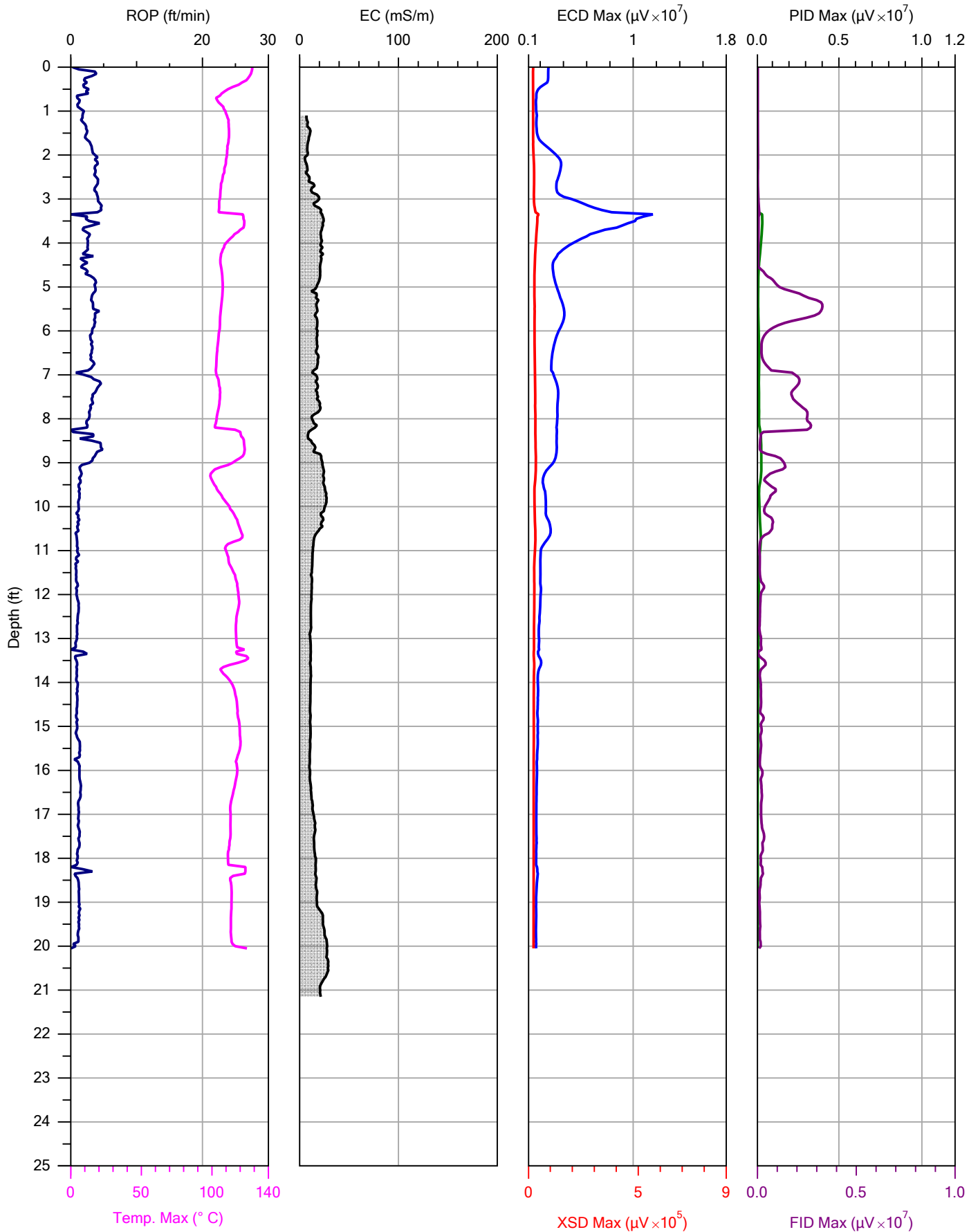
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Date:	09/09/20
Location:	northeast



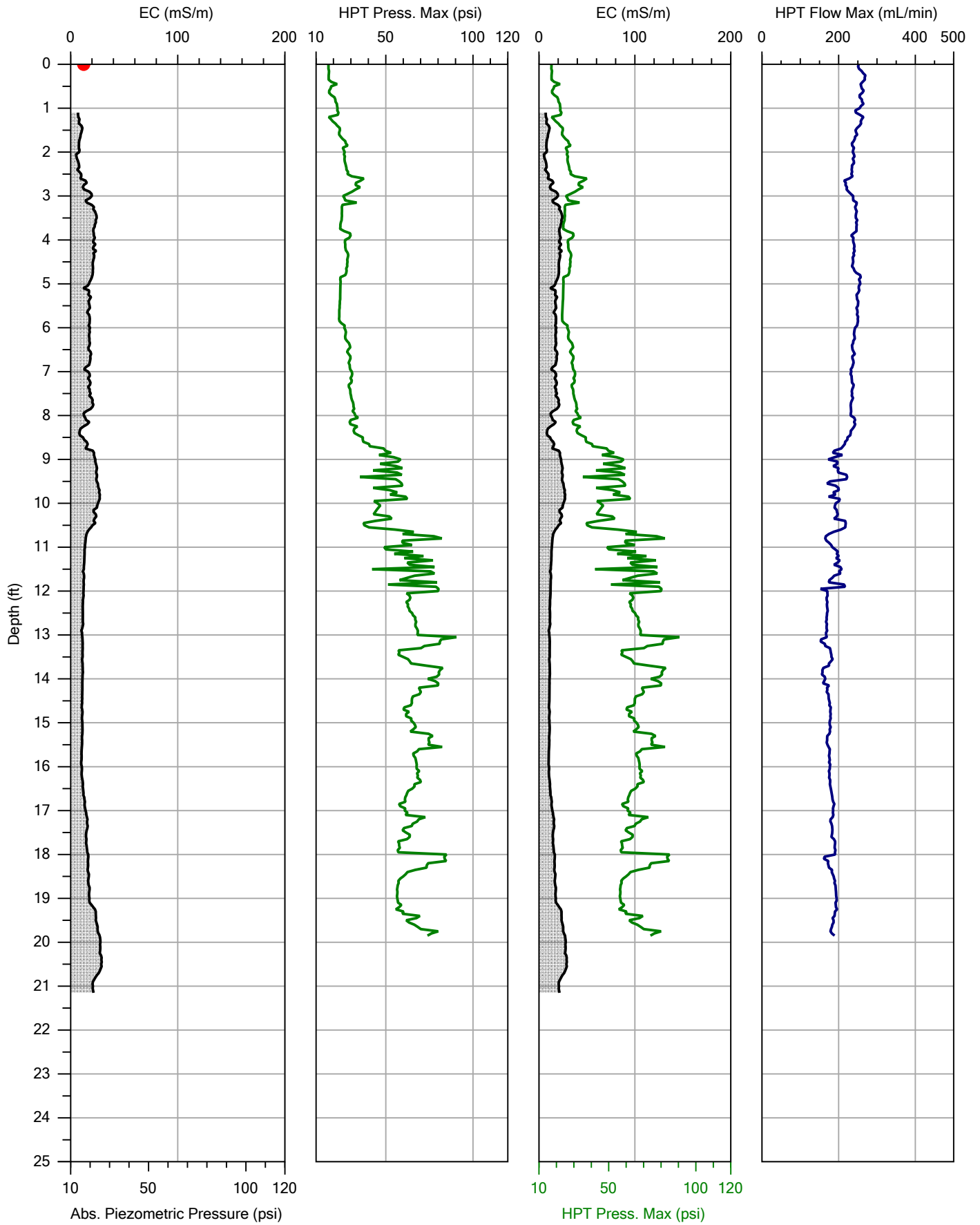
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-21.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-21.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-22.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast

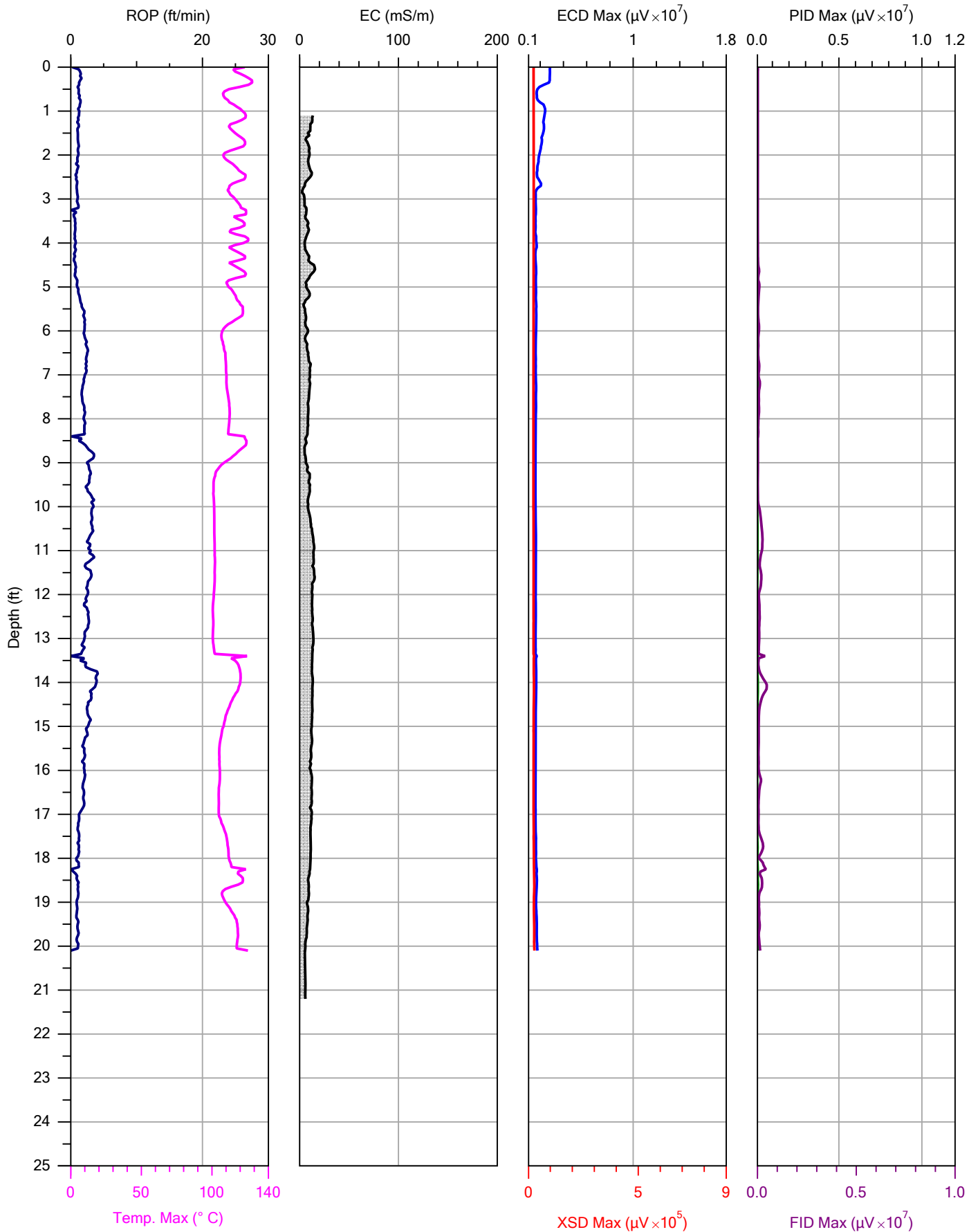


Company: Cascade  
 Project ID: 2022001119

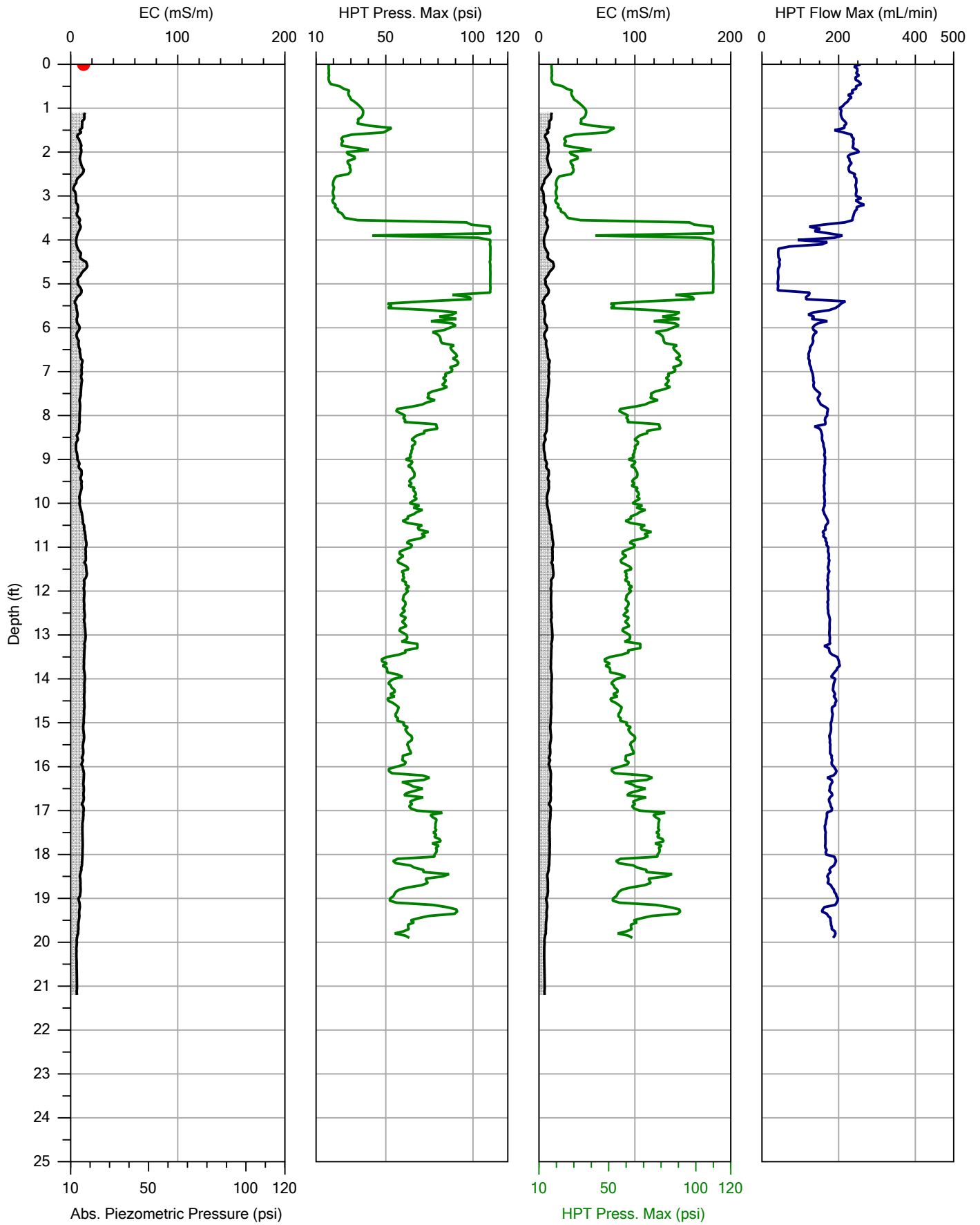
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-22.MHP
Date:	09/09/20
Location:	northeast





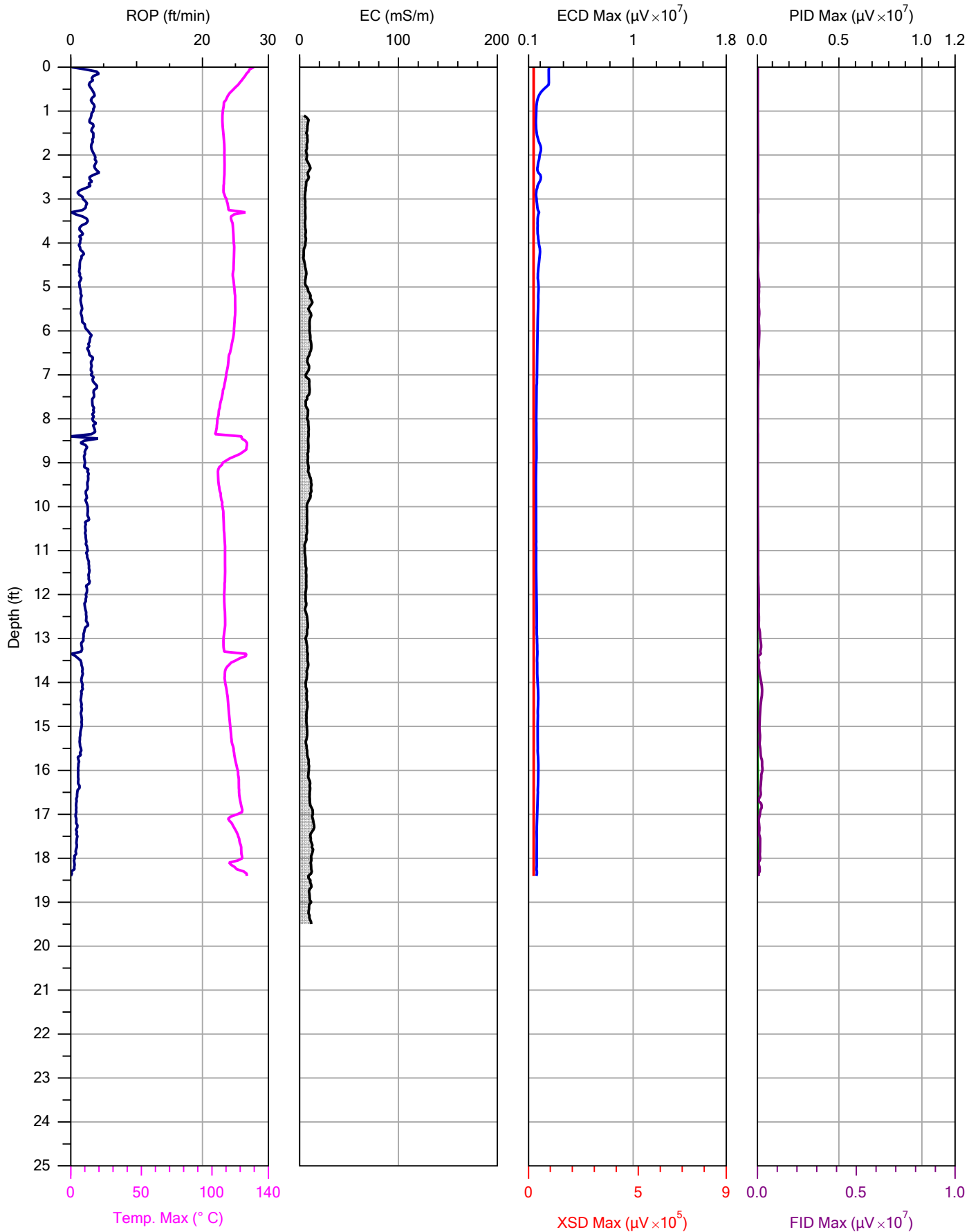
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-23.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



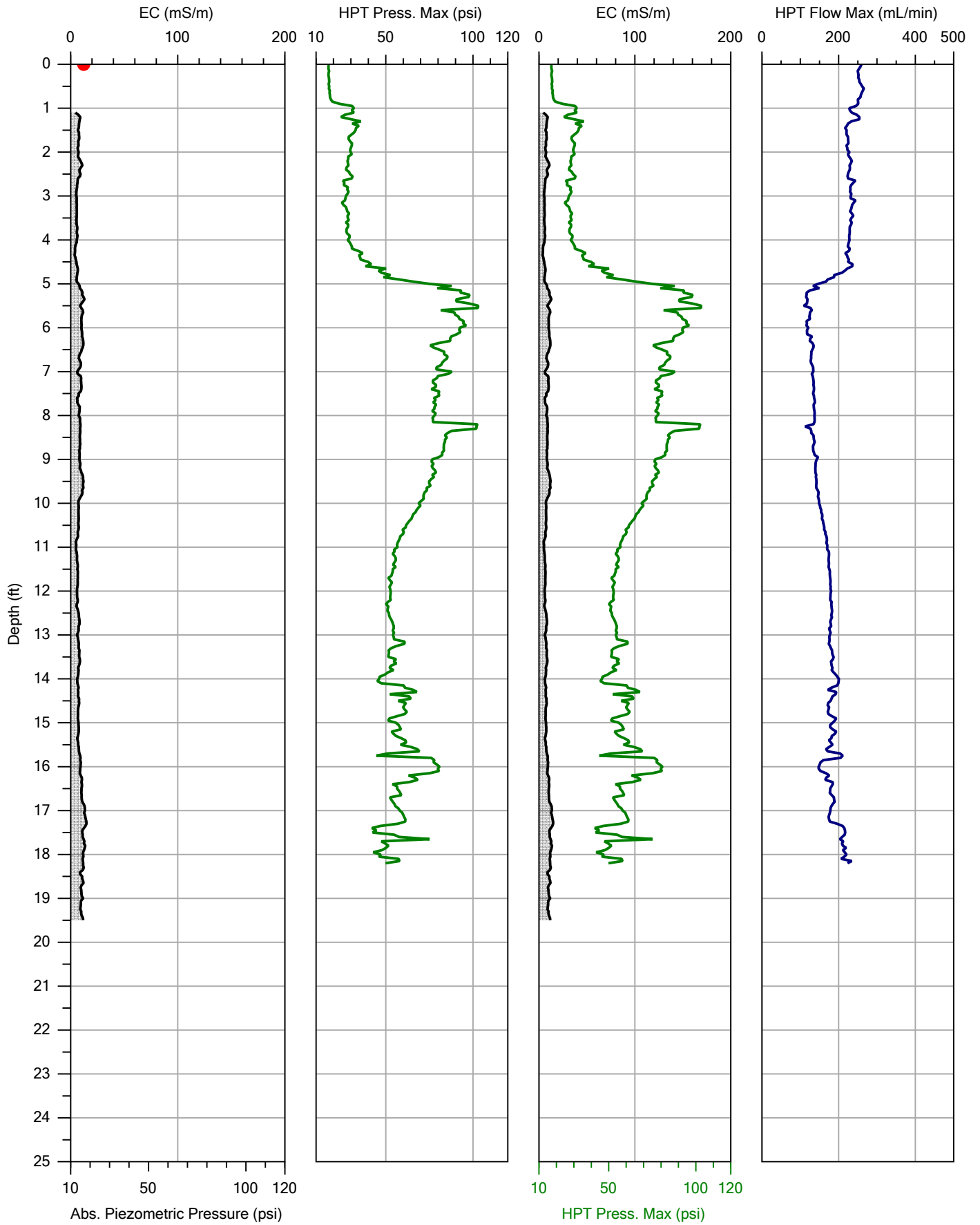
Company: Cascade  
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Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-23.MHP
Date:	09/09/20
Location:	northeast



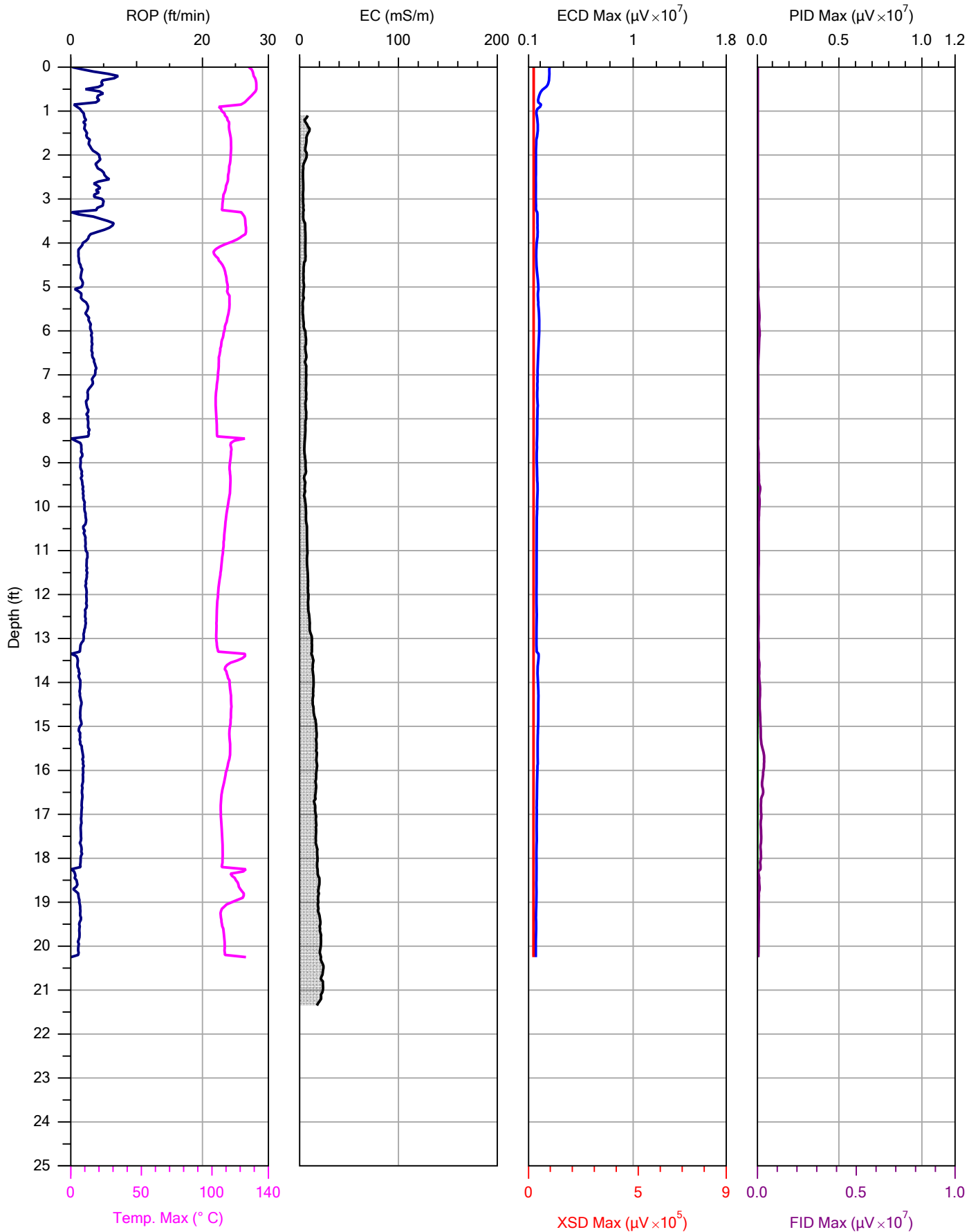
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-24.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
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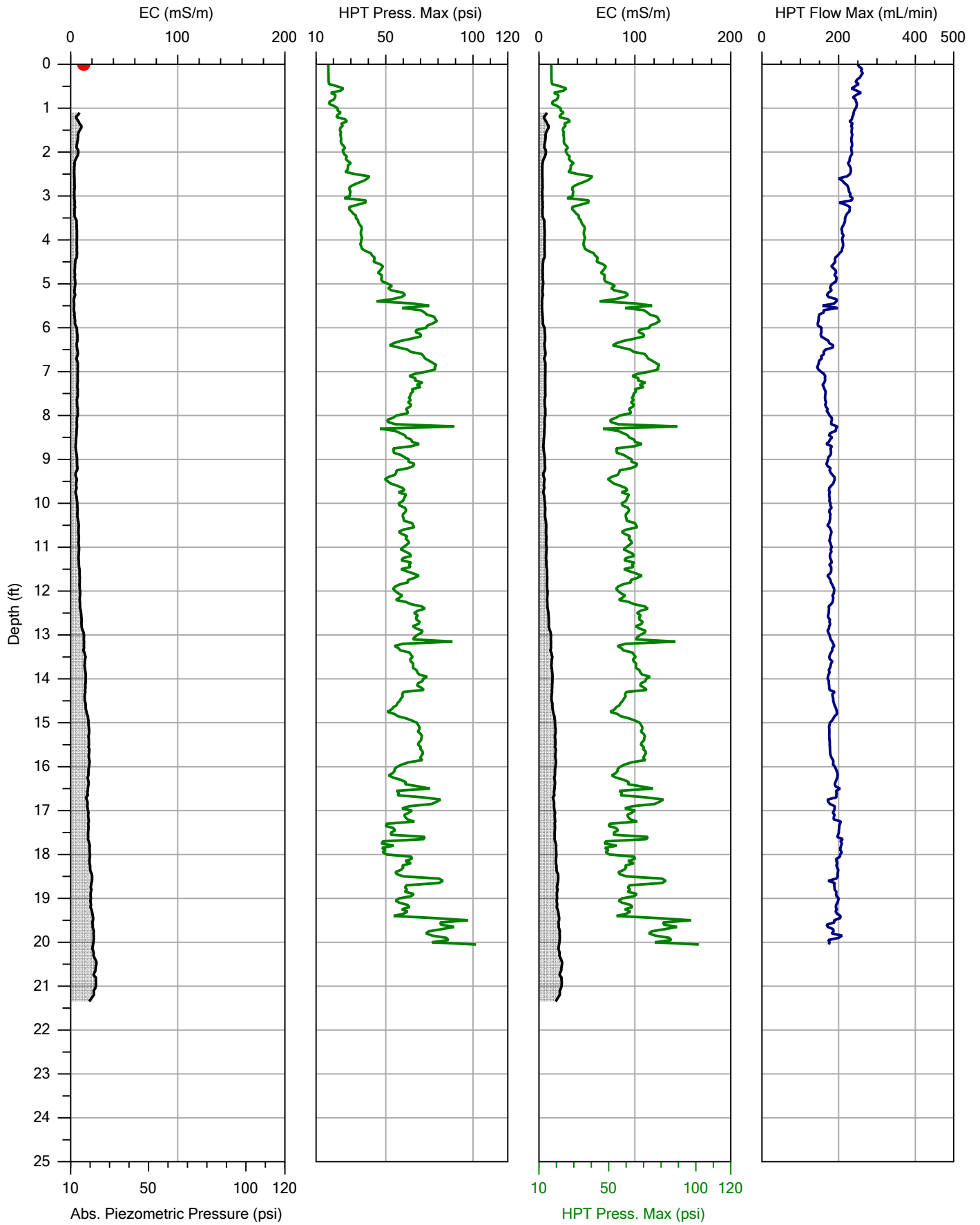
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-24.MHP
Date:	09/09/20
Location:	northeast



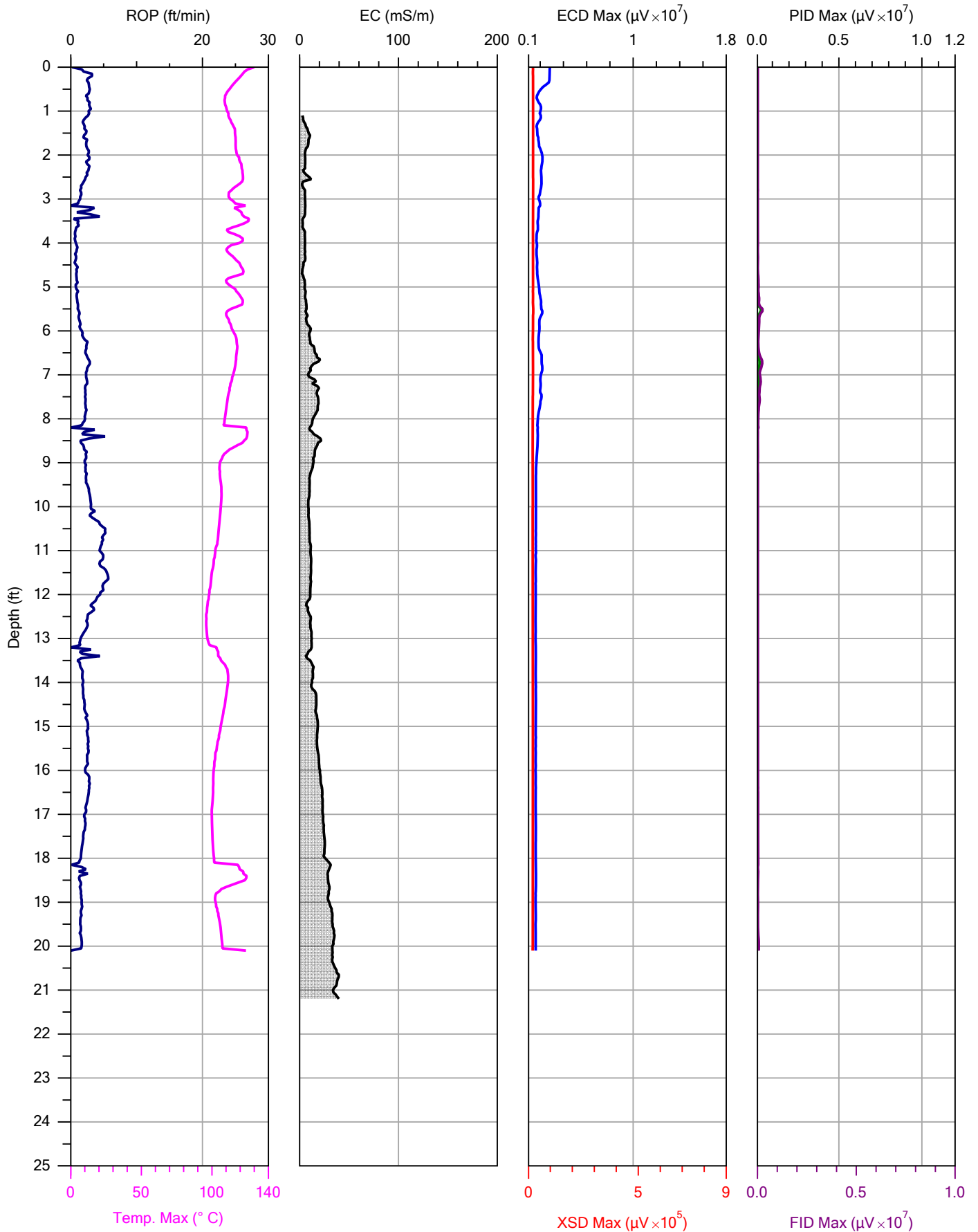
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-25.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

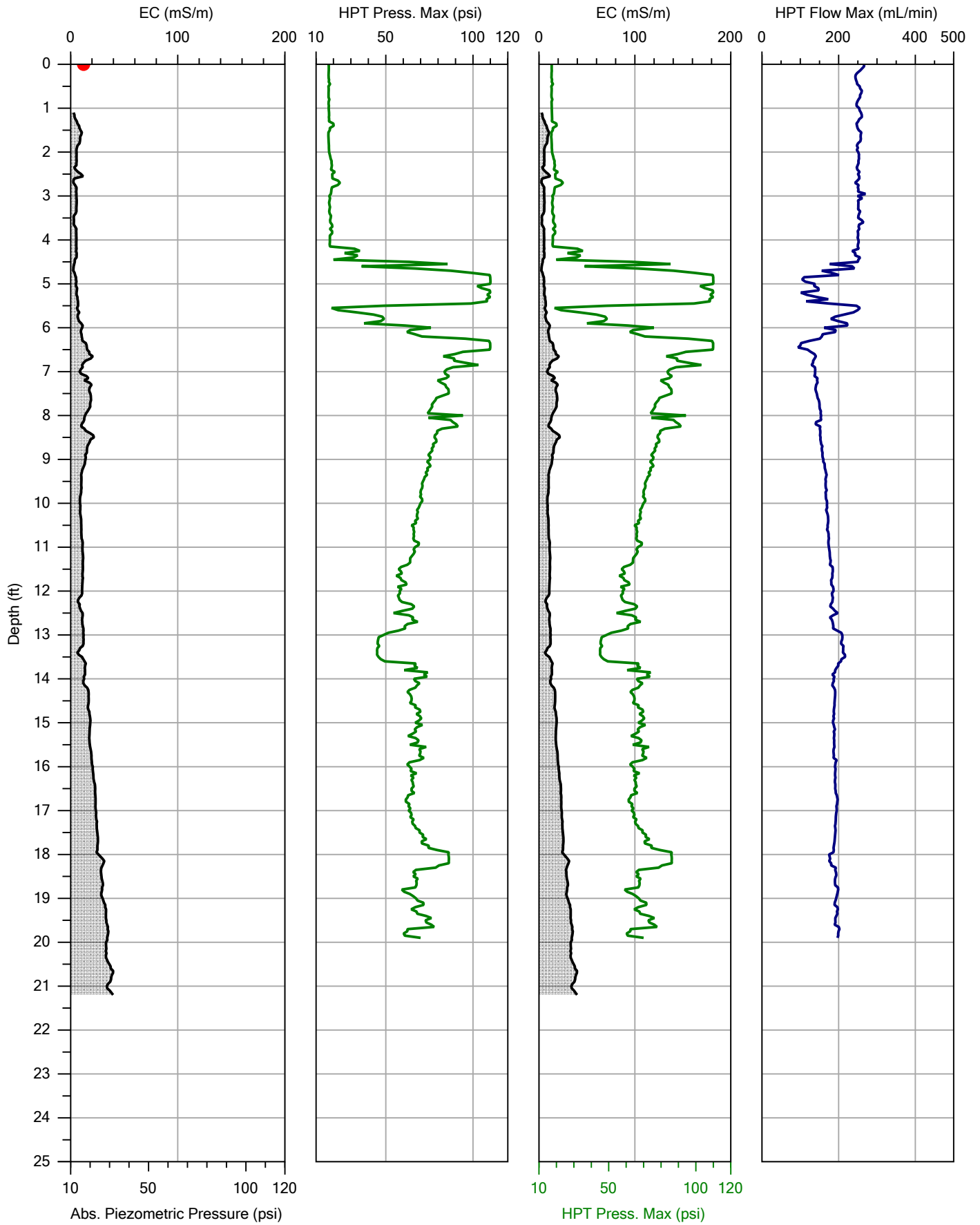
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-25.MHP
Date:	09/09/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-26.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast

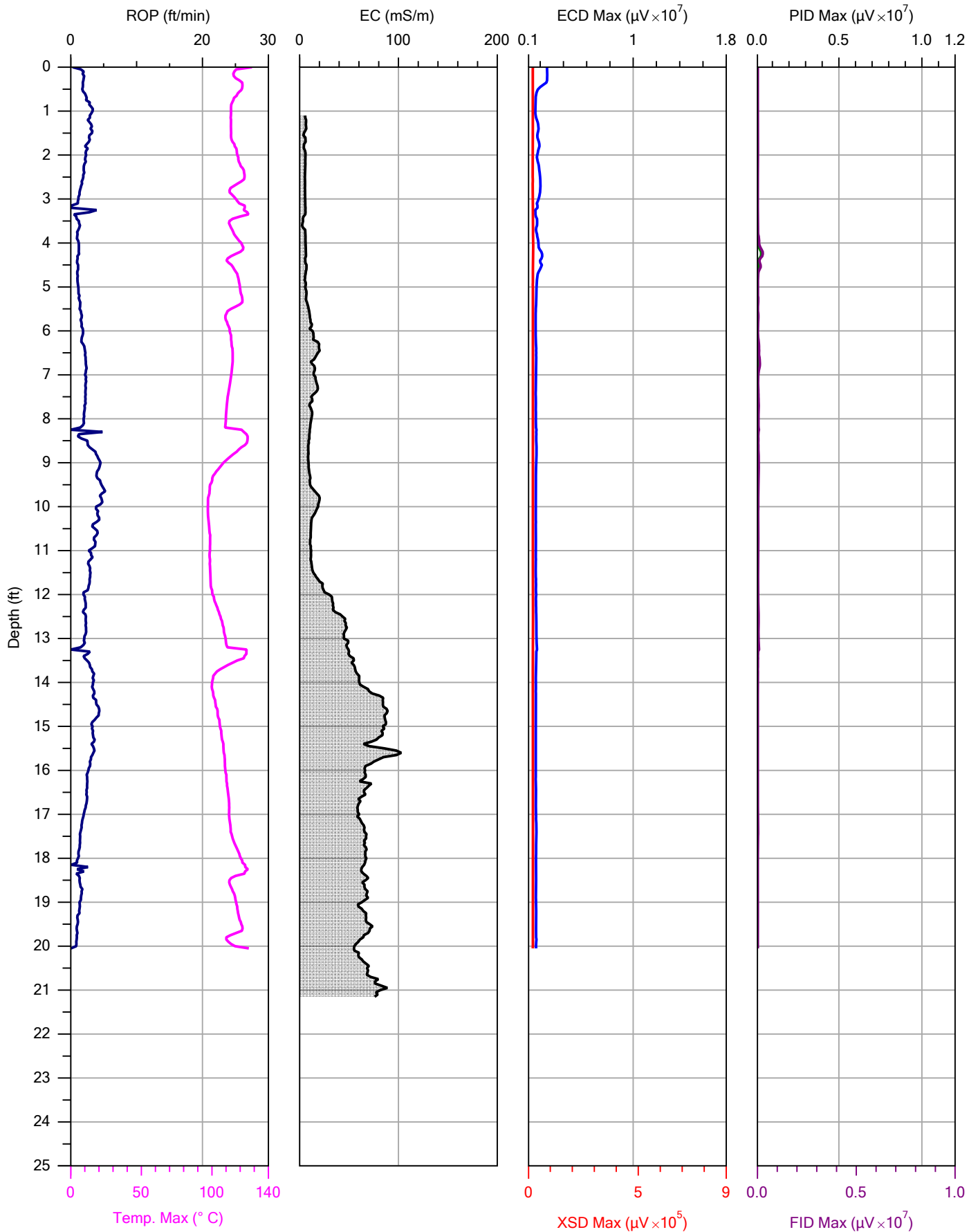




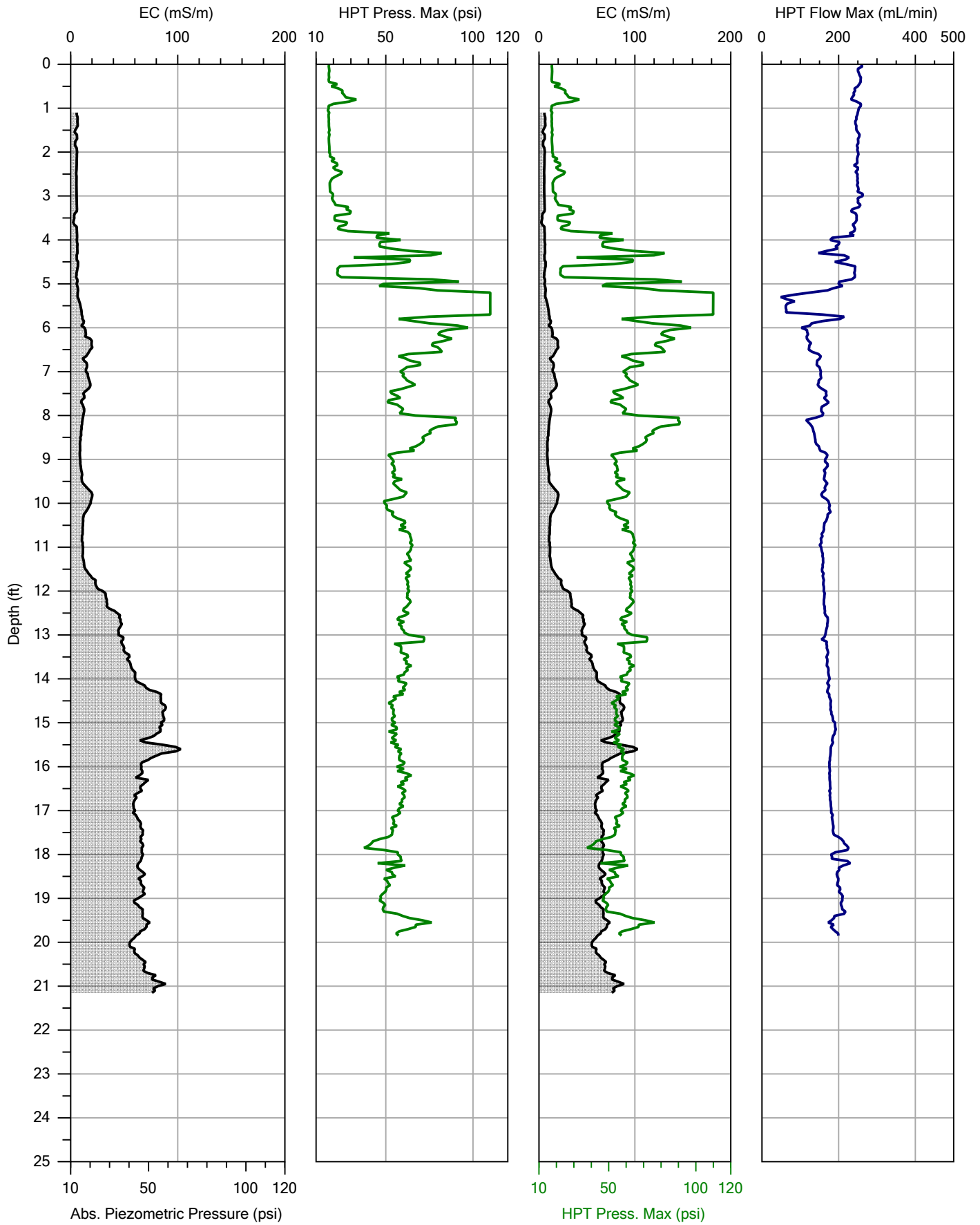
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-26.MHP
Date:	09/09/20
Location:	northeast



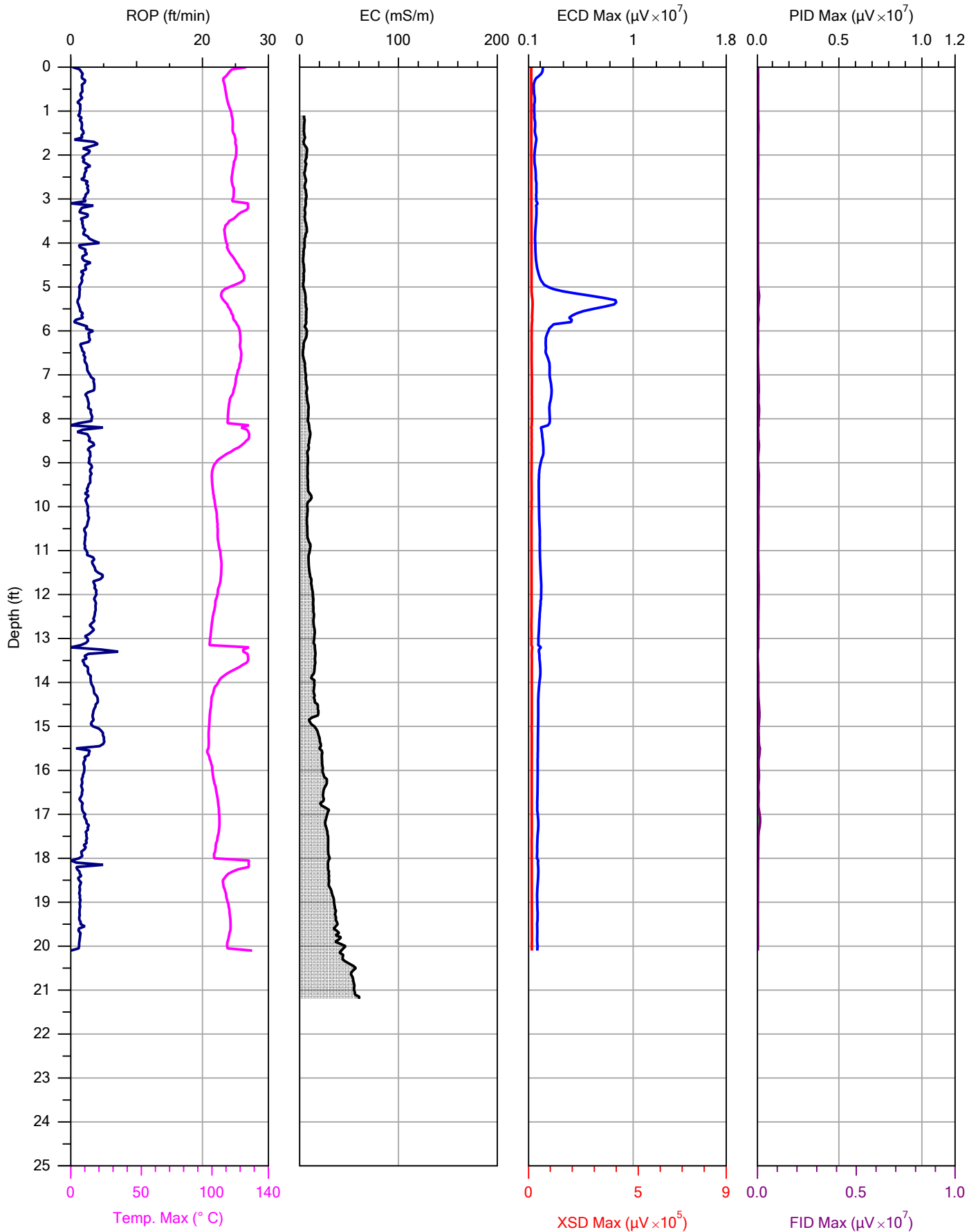
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Project ID:	2022001119	Client:	tidewater	Date:	09/09/20
				Location:	northeast



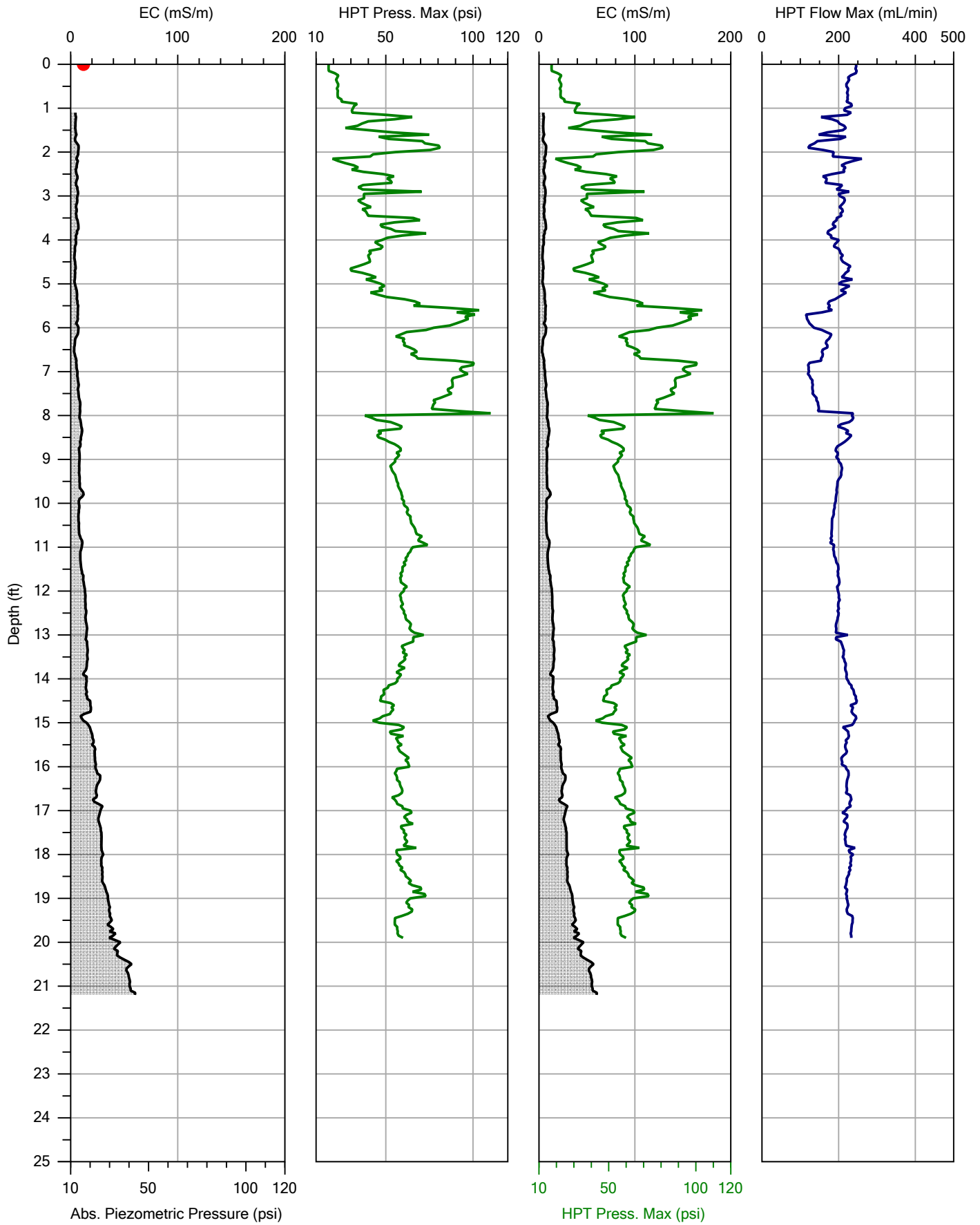
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-27.MHP
Date:	09/09/20
Location:	northeast



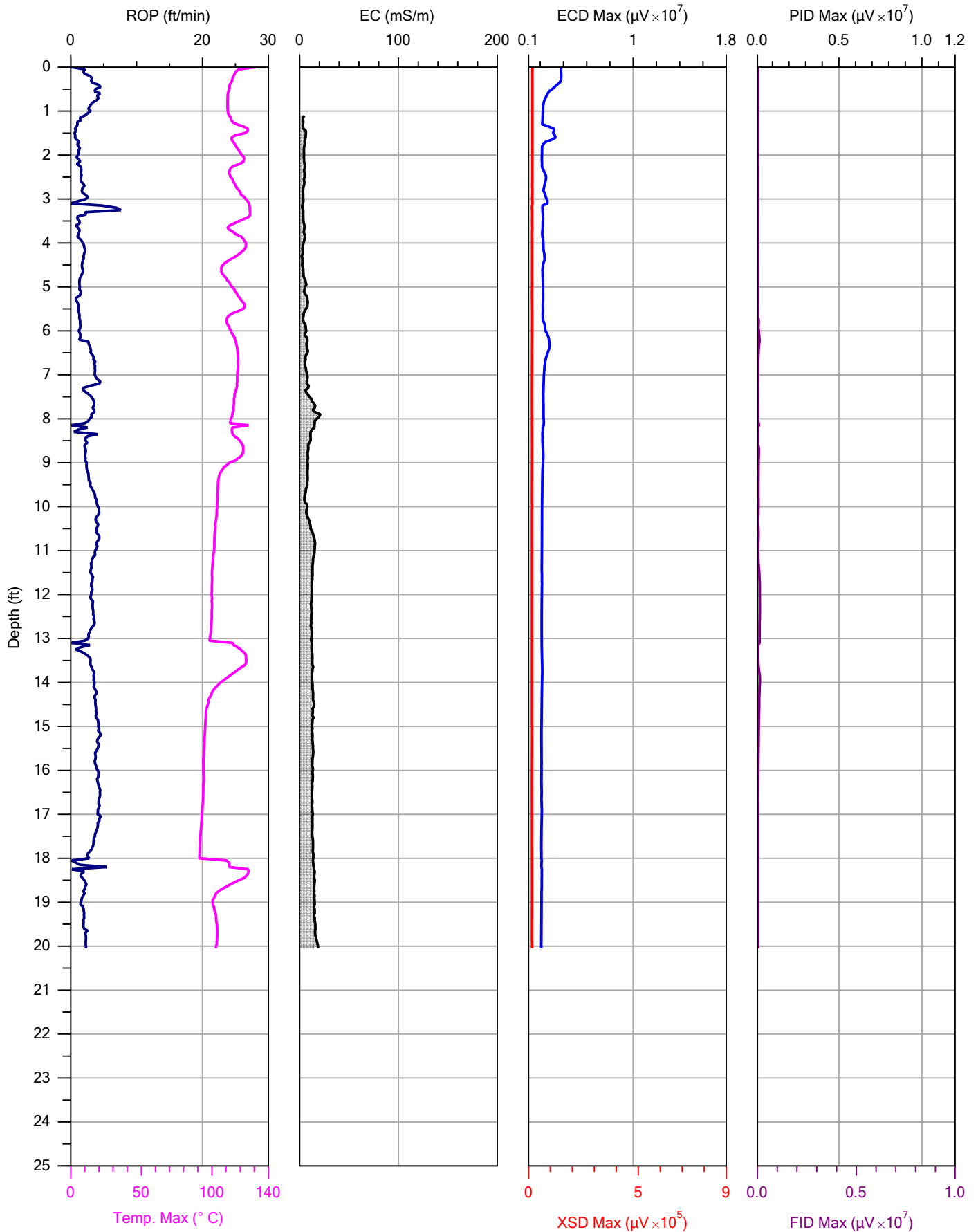
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

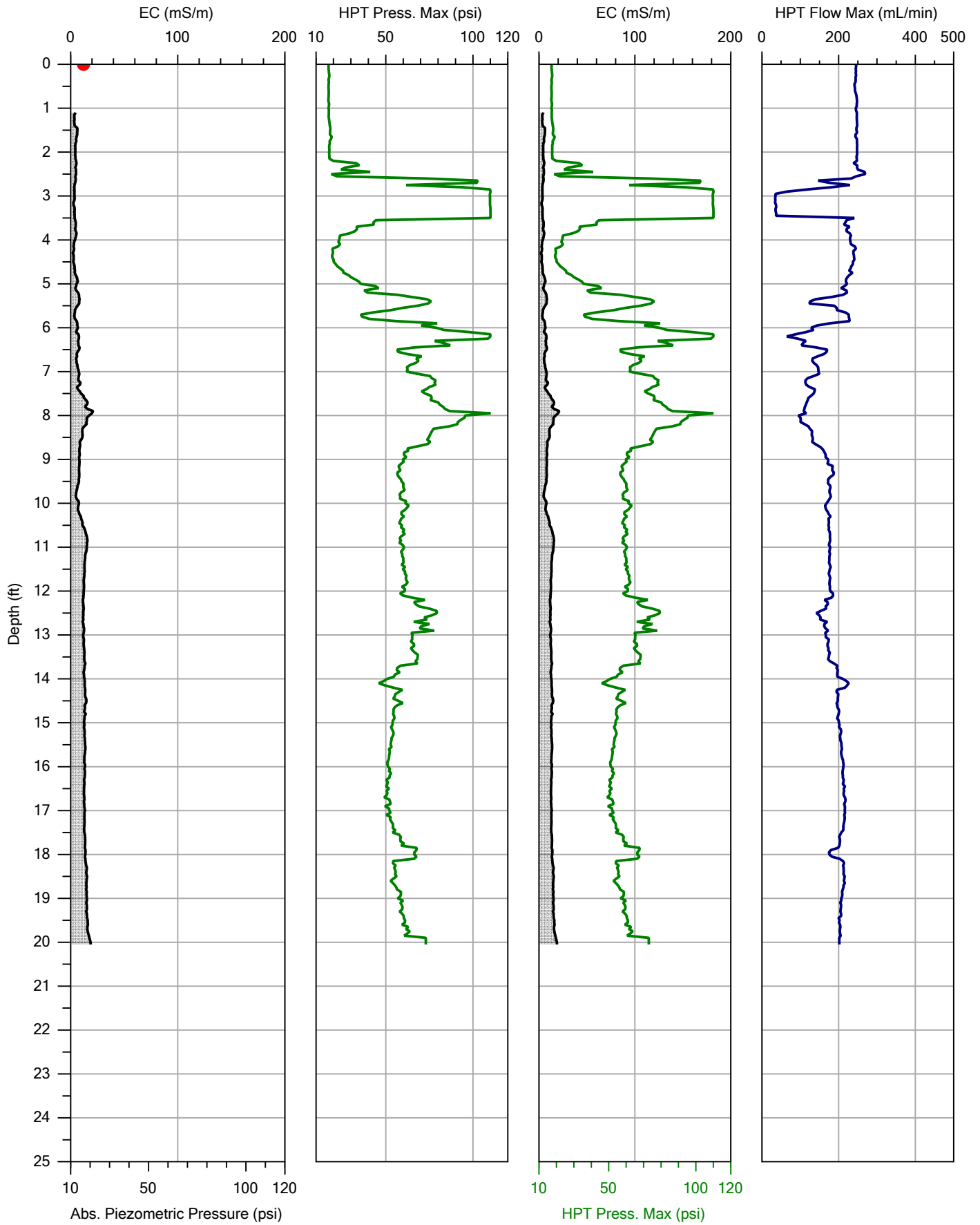
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-29.MHP
Date:	09/10/20
Location:	northeast

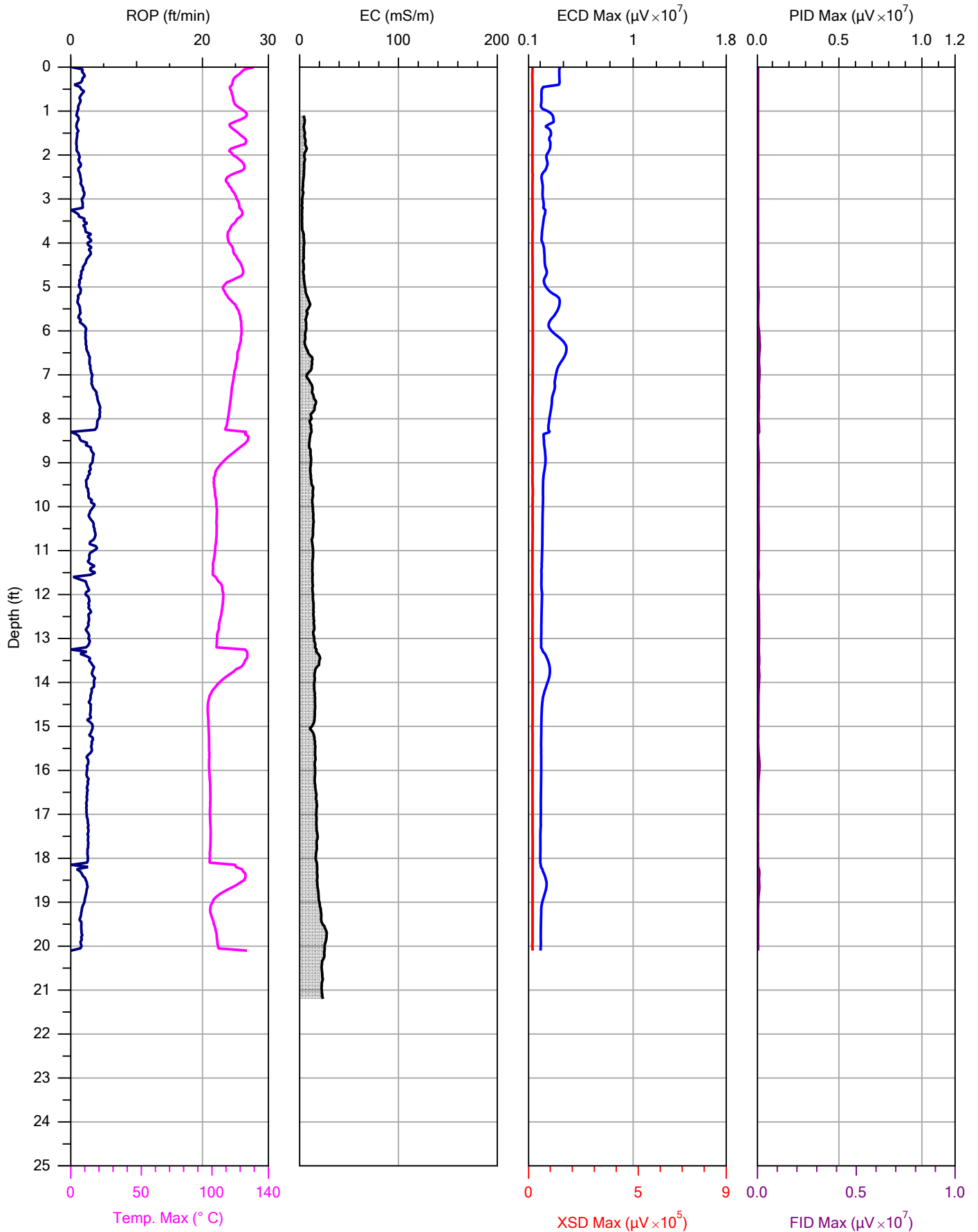


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-29.MHP
Date:	09/10/20
Location:	northeast

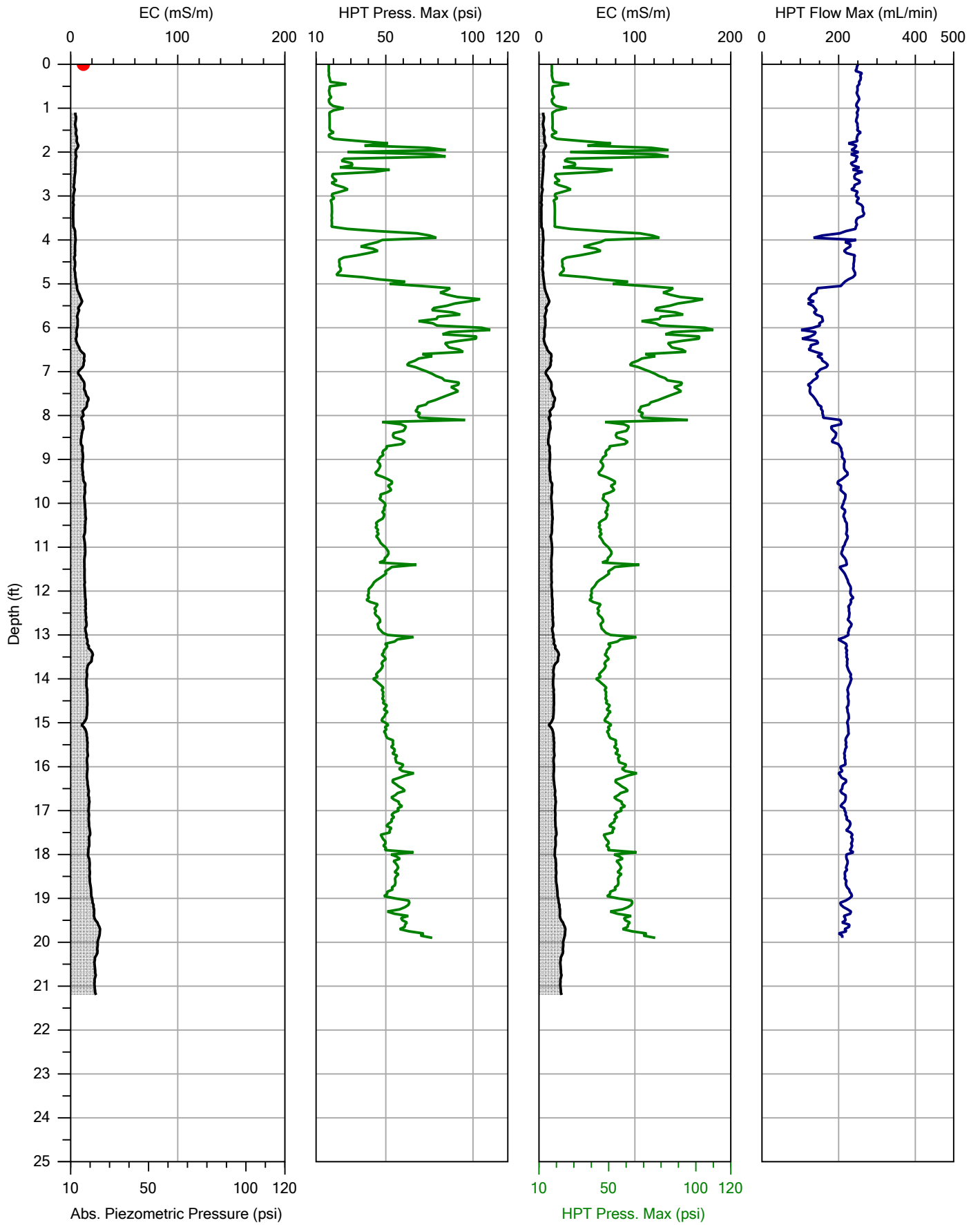




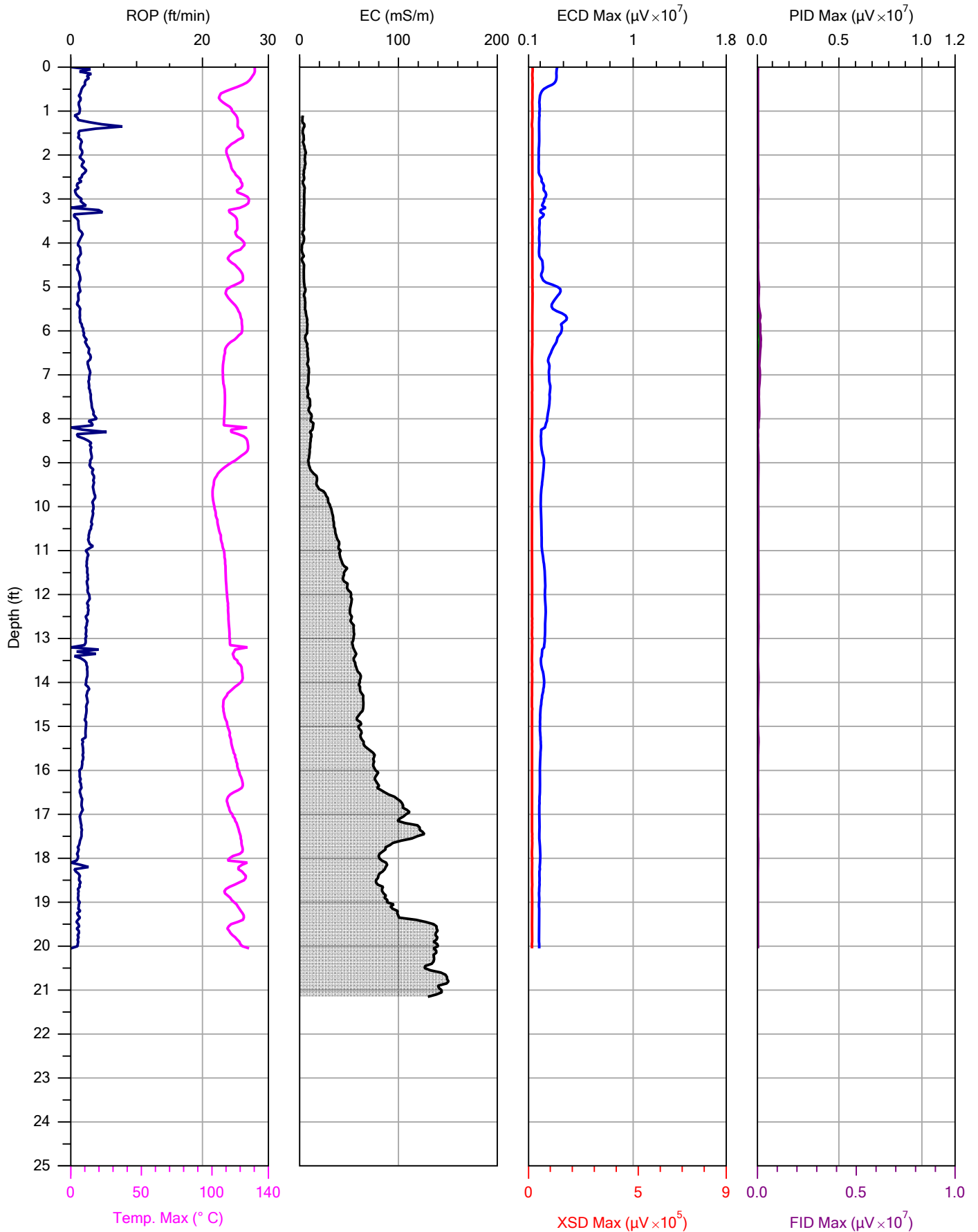
Company:	Cascade
Project ID:	2022001119

Operator:	Nick K
Client:	tidewater

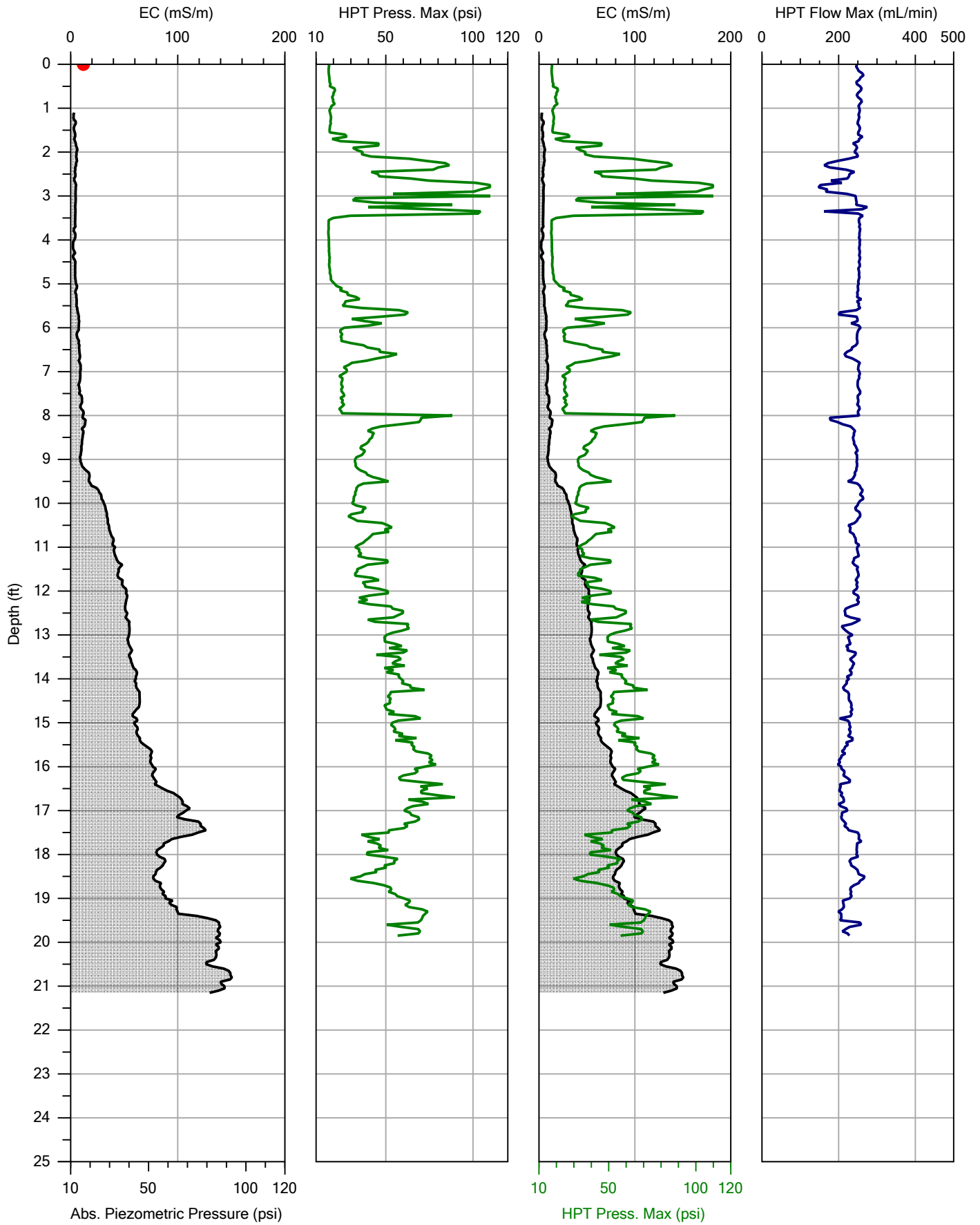
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Date:	09/10/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-30.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast



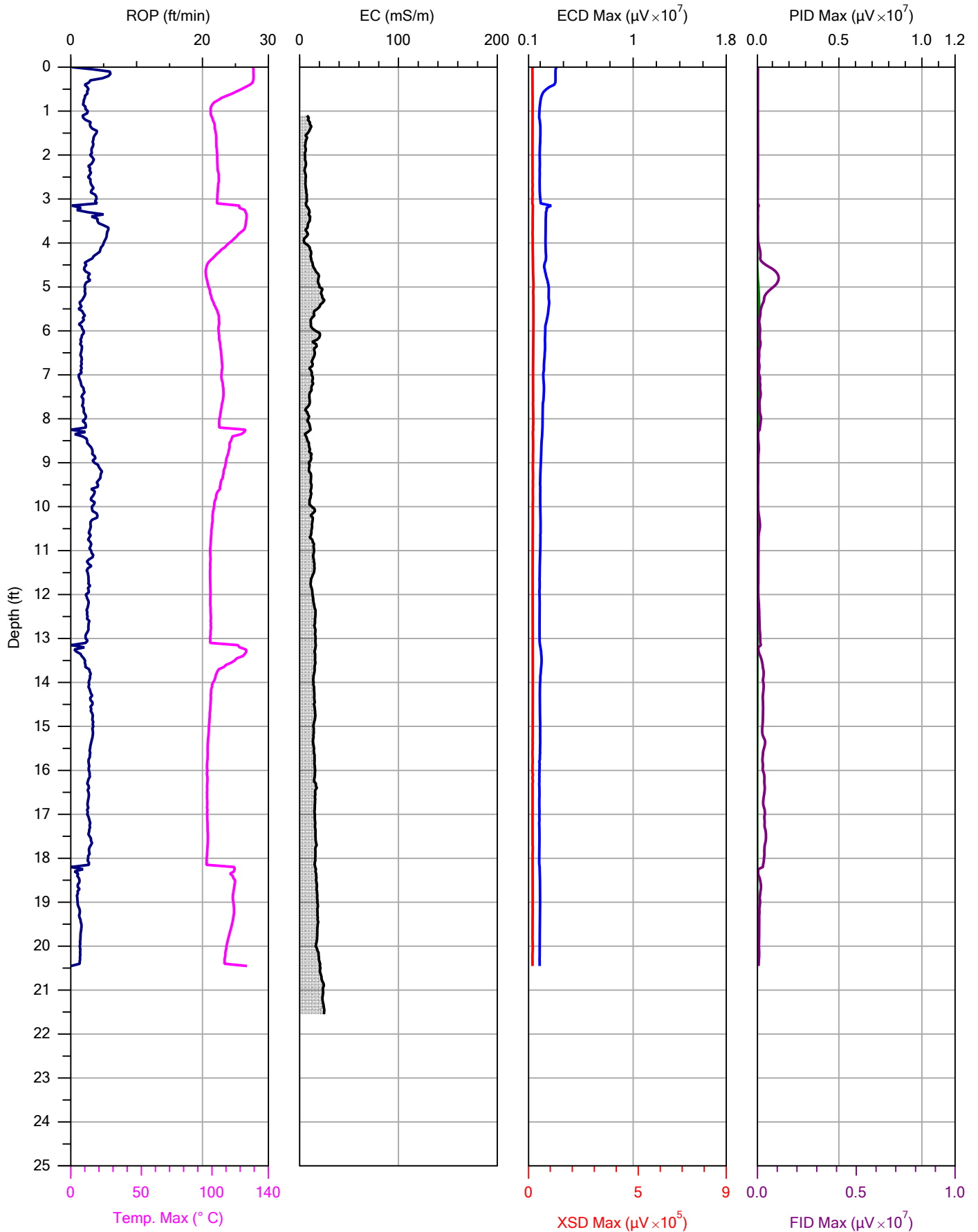
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast



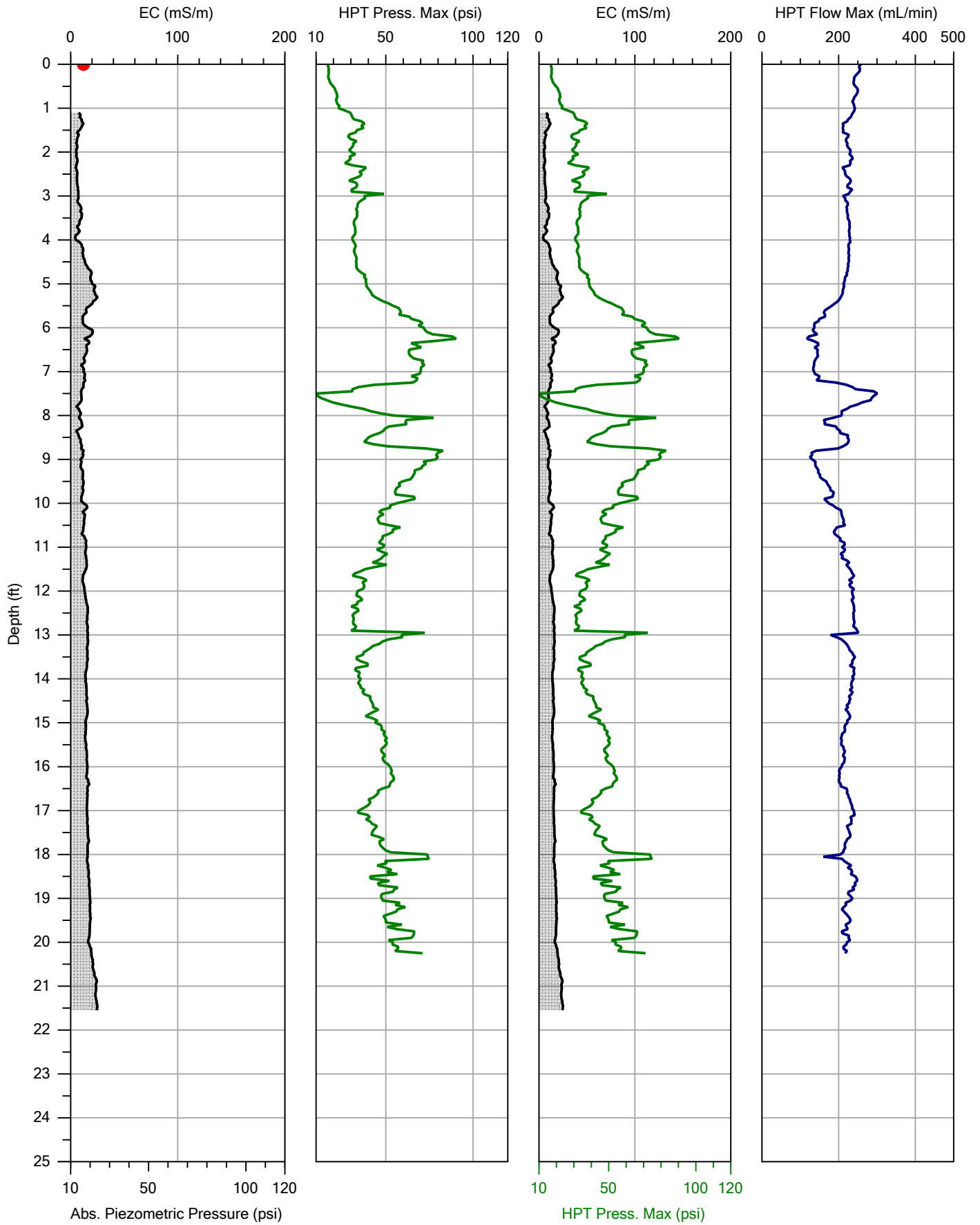
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-31.MHP
Date:	09/10/20
Location:	northeast



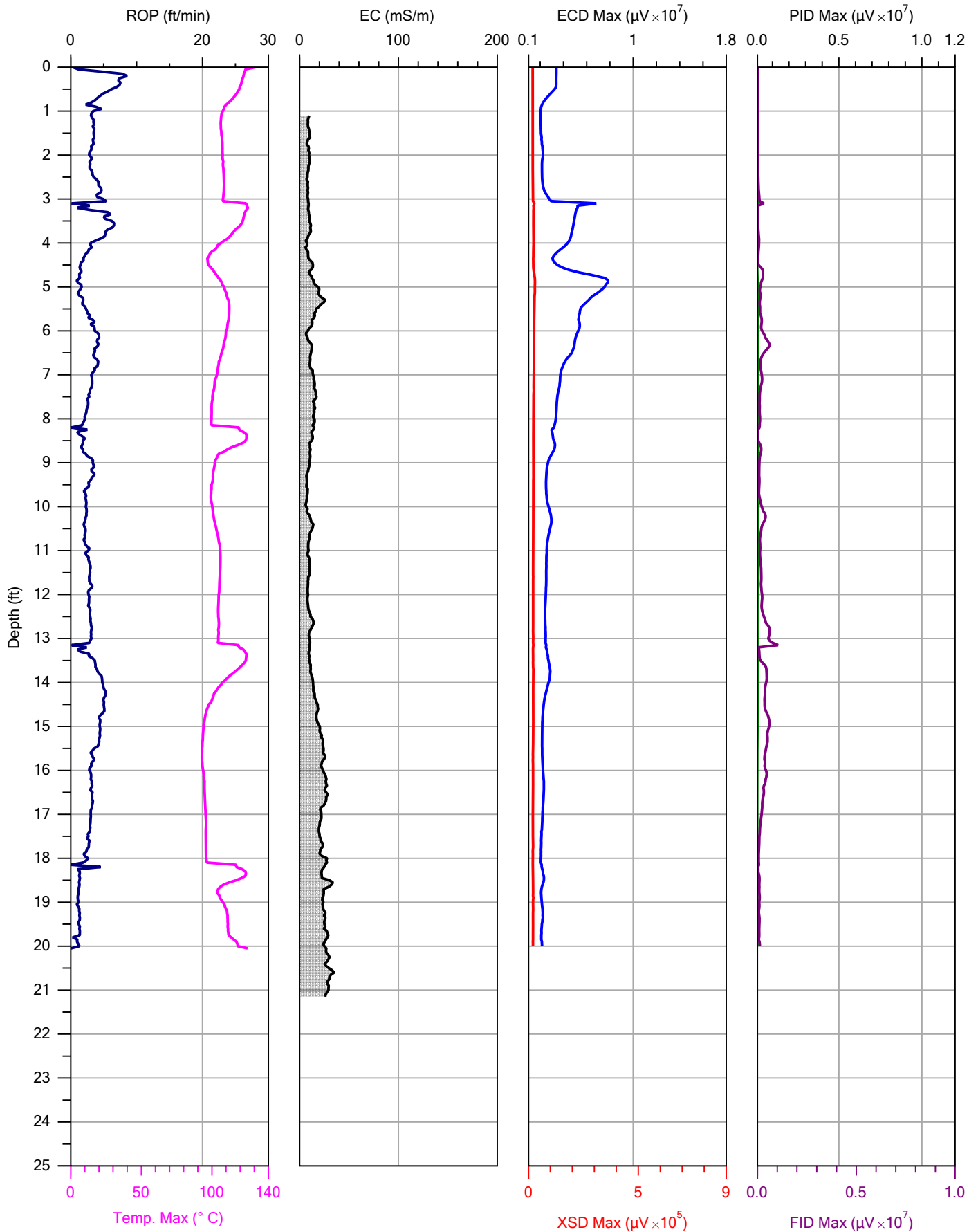
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
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Company: Cascade  
 Project ID: 2022001119

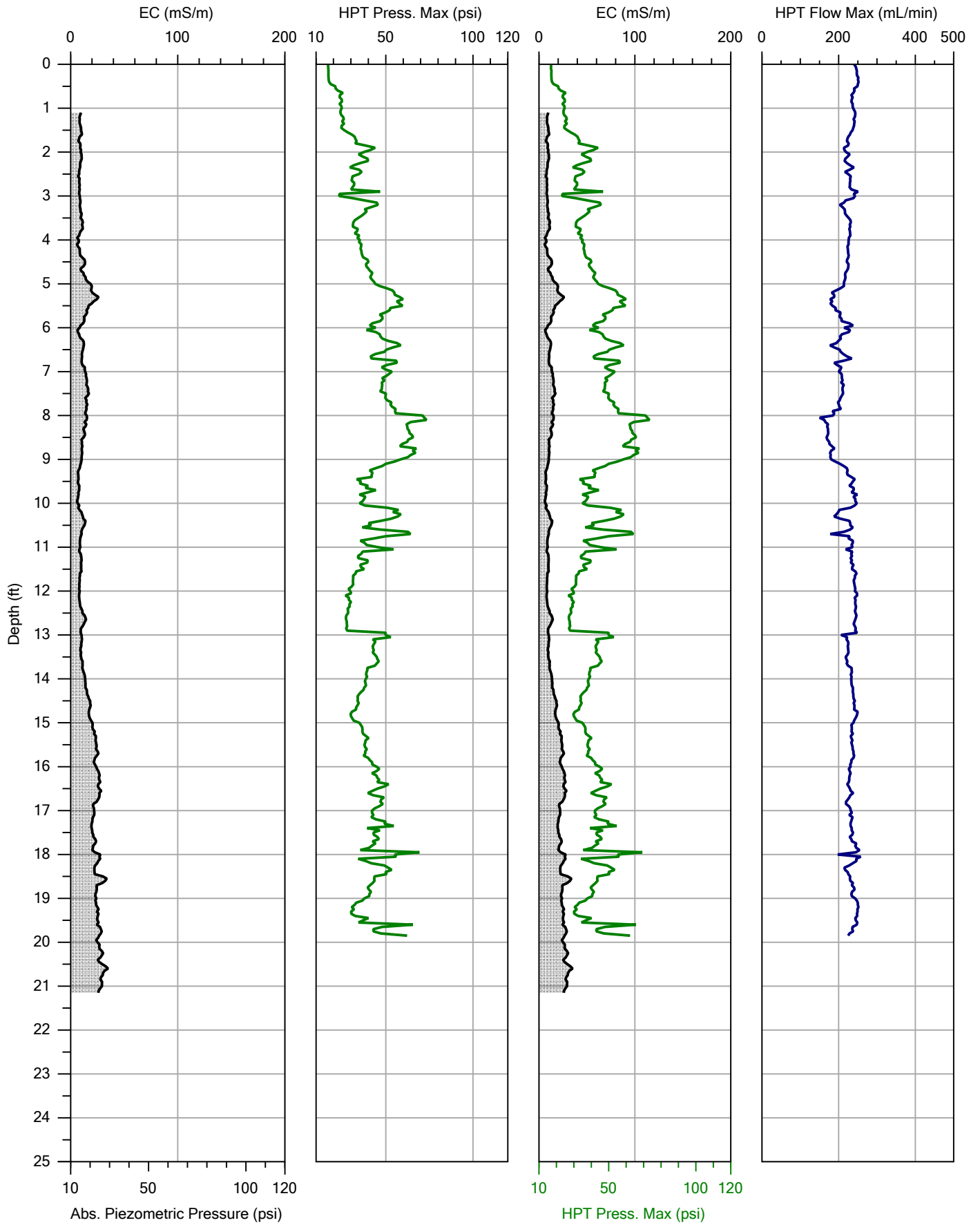
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-32.MHP
Date:	09/10/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-33.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast

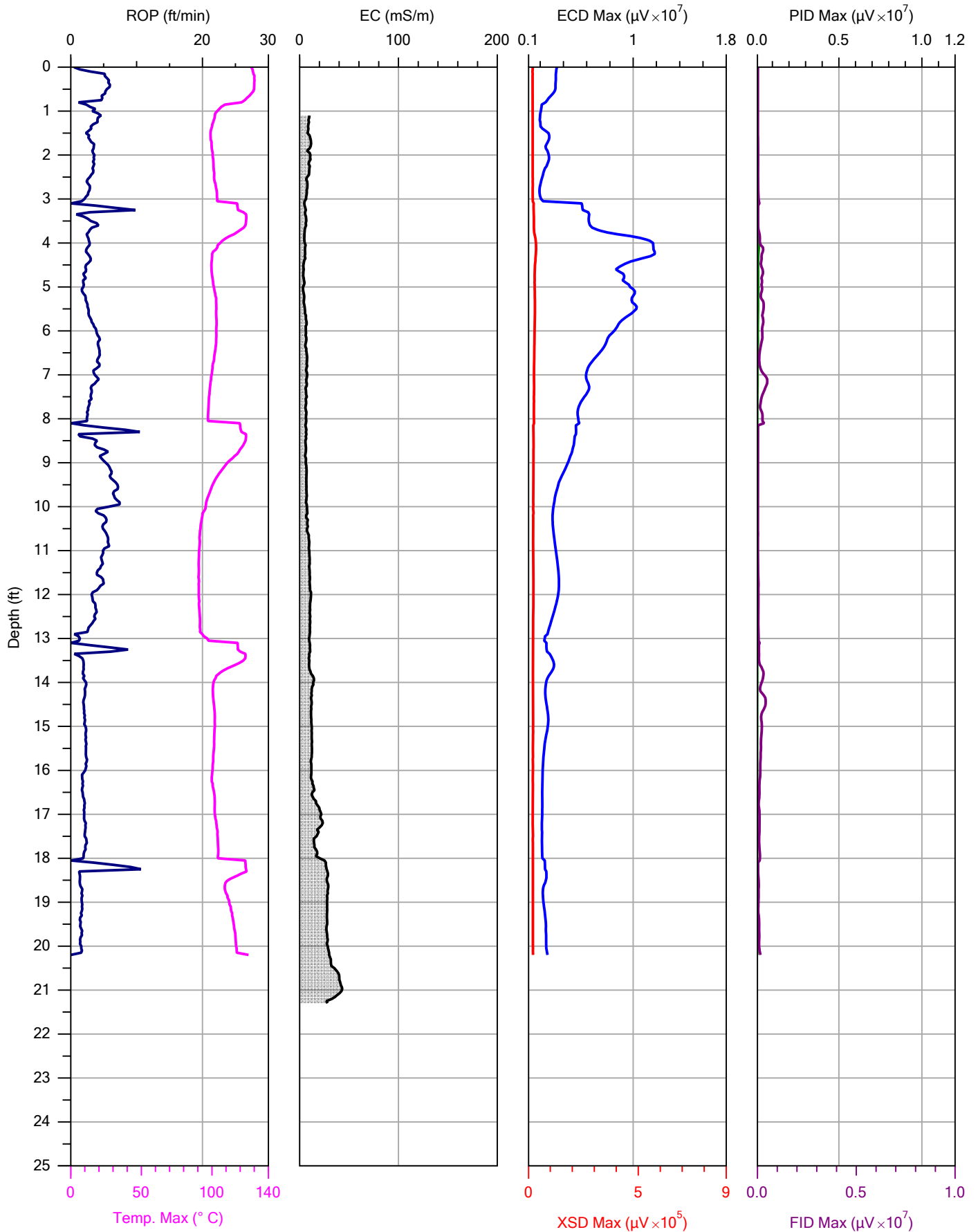




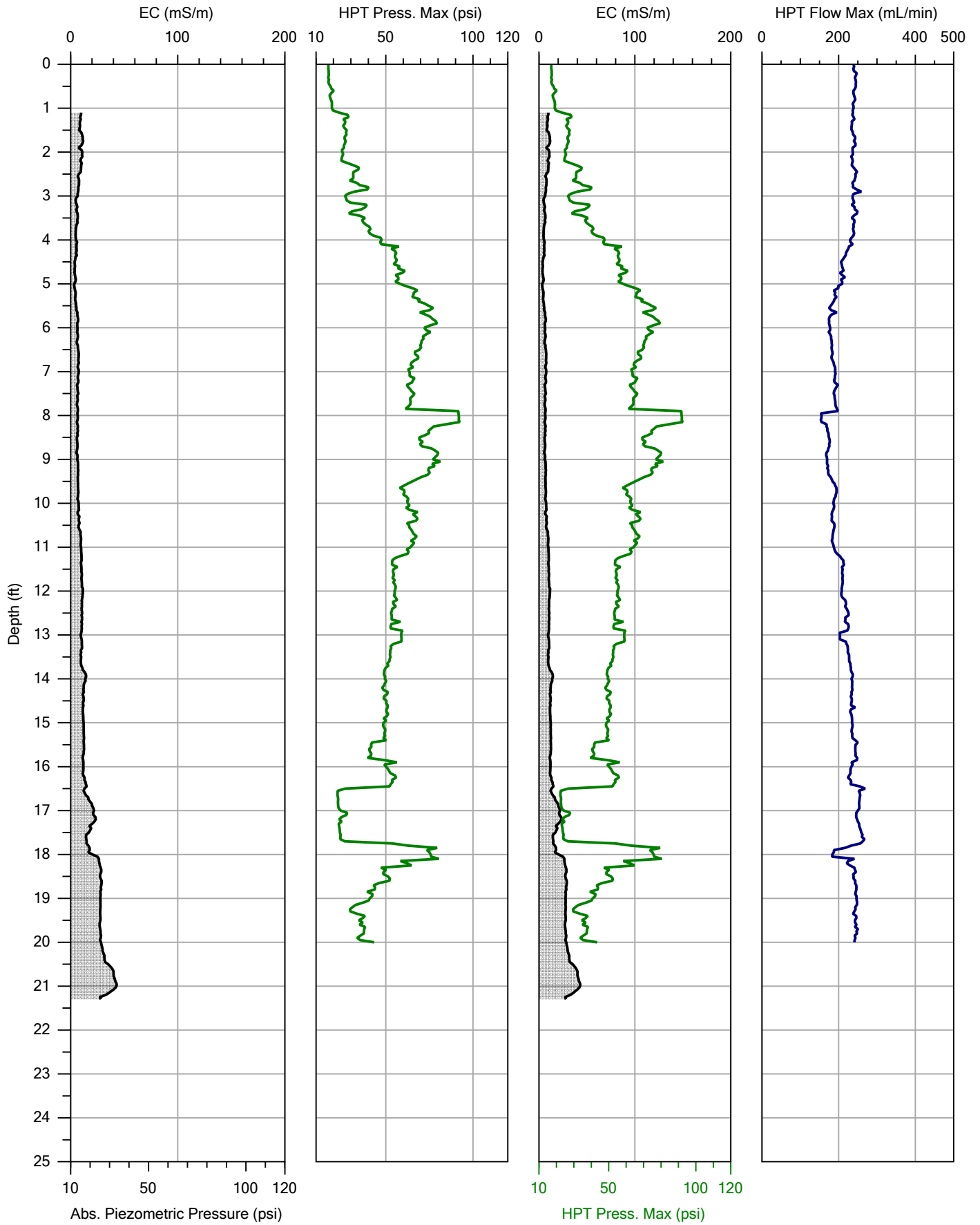
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-33.MHP
Date:	09/10/20
Location:	northeast



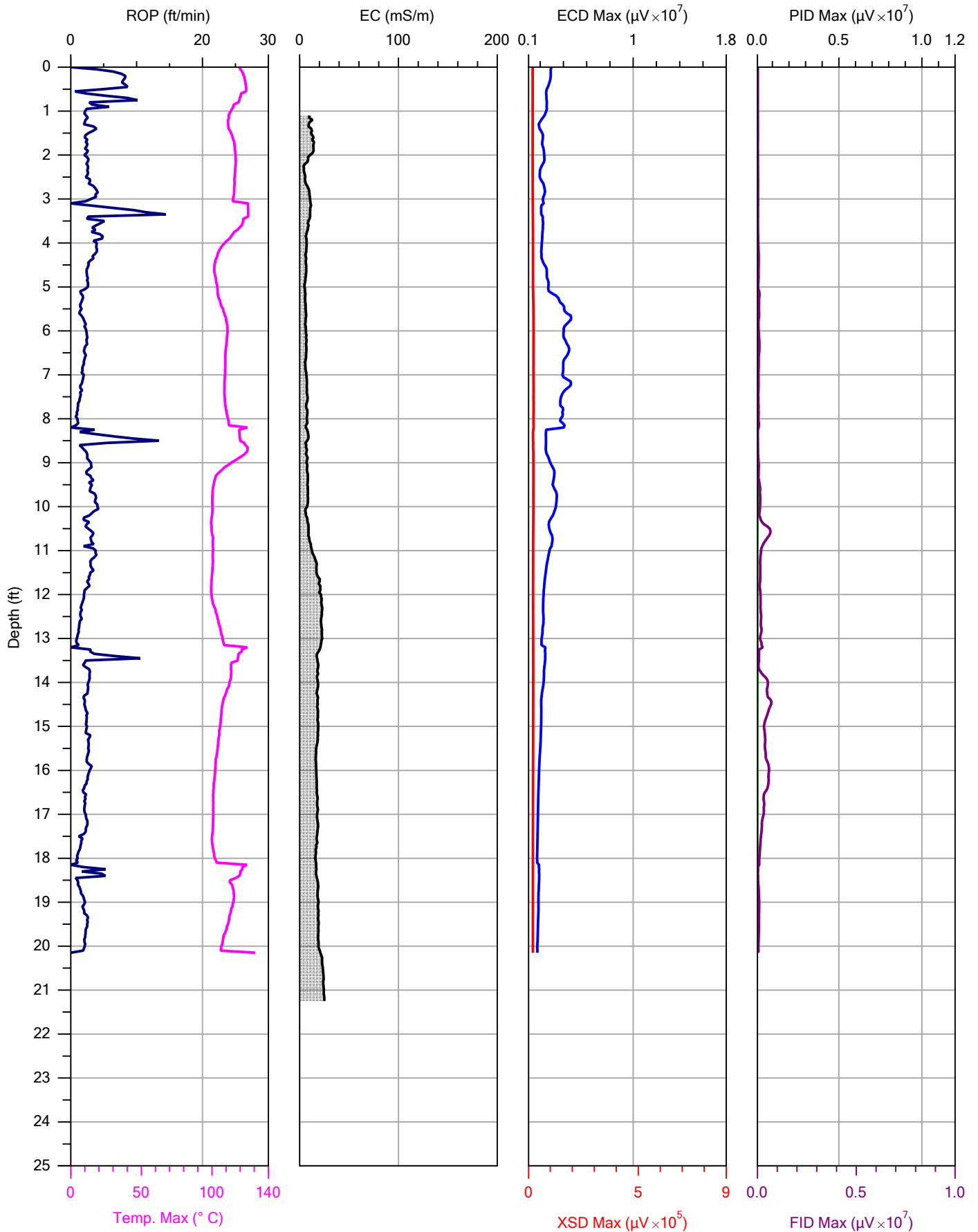
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
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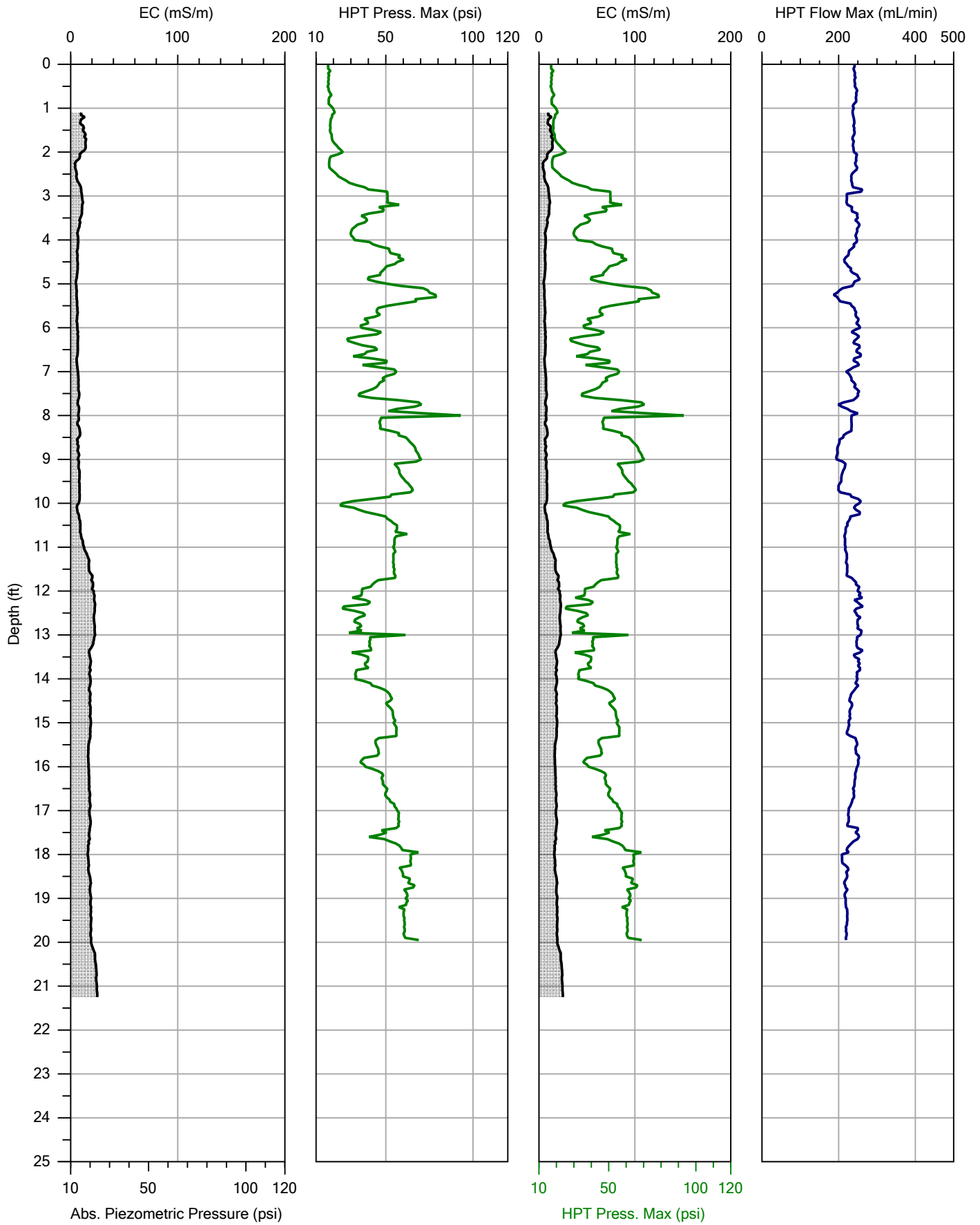
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-34.MHP
Date:	09/10/20
Location:	northeast



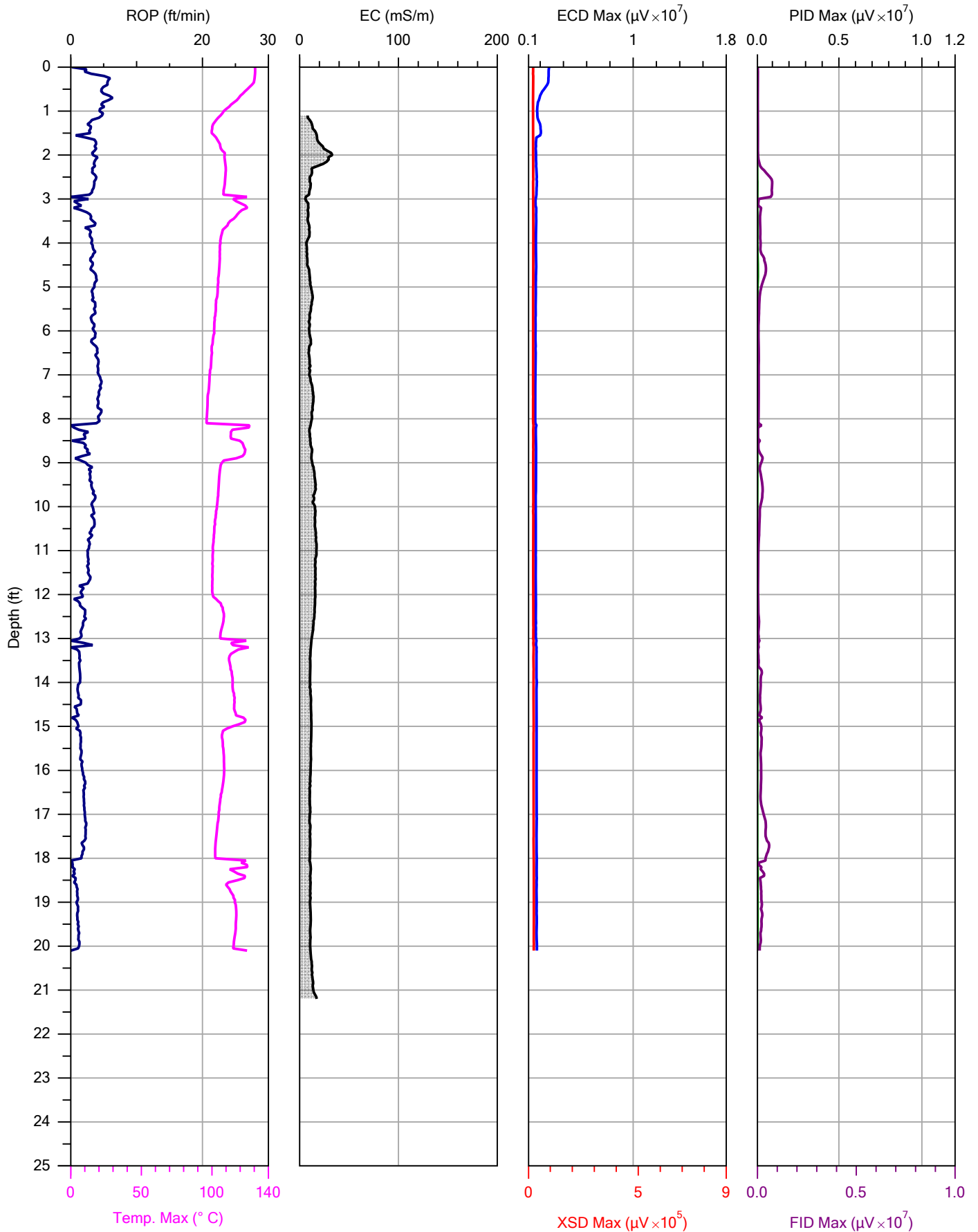
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
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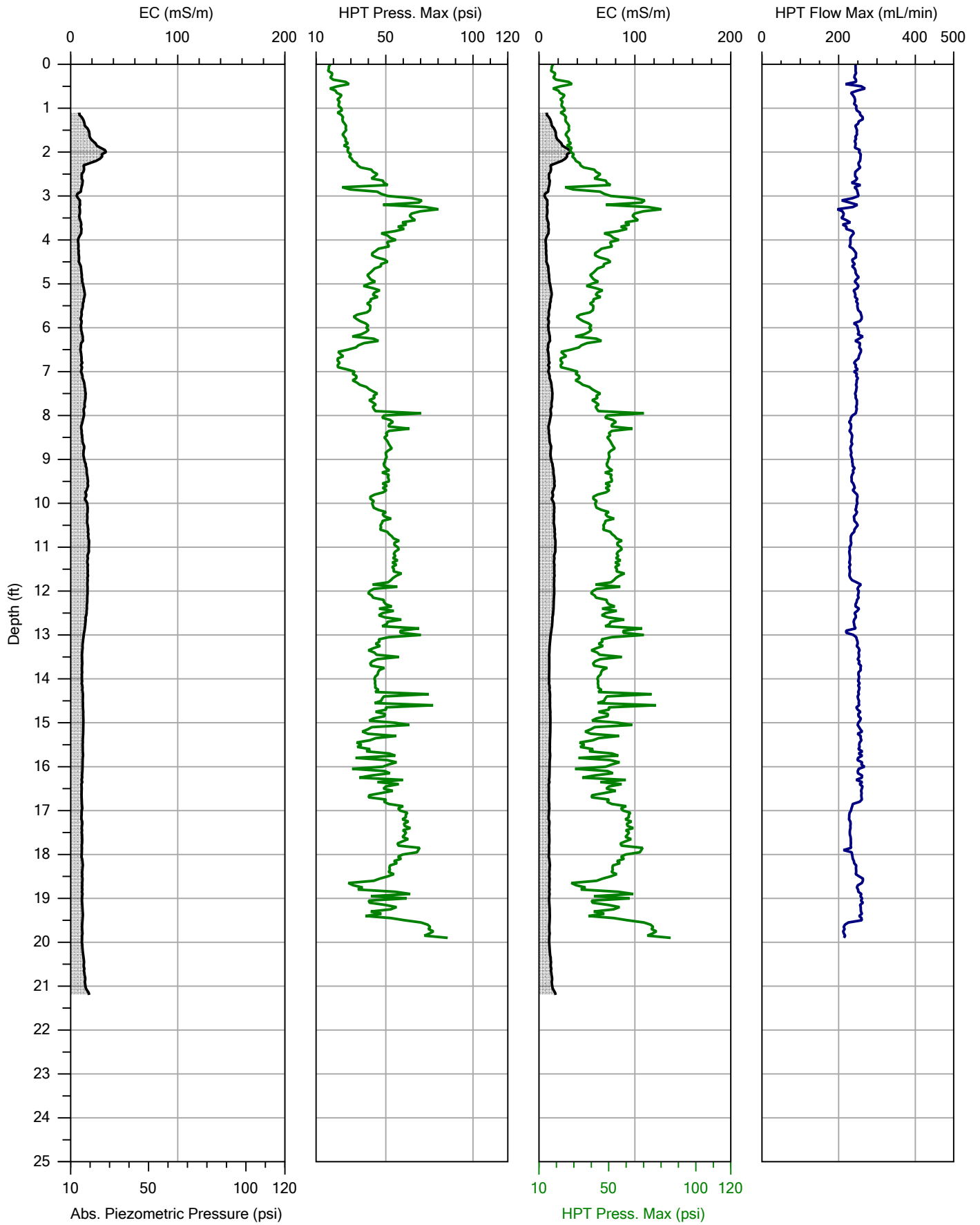
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-35.MHP
Date:	09/10/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-36.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast

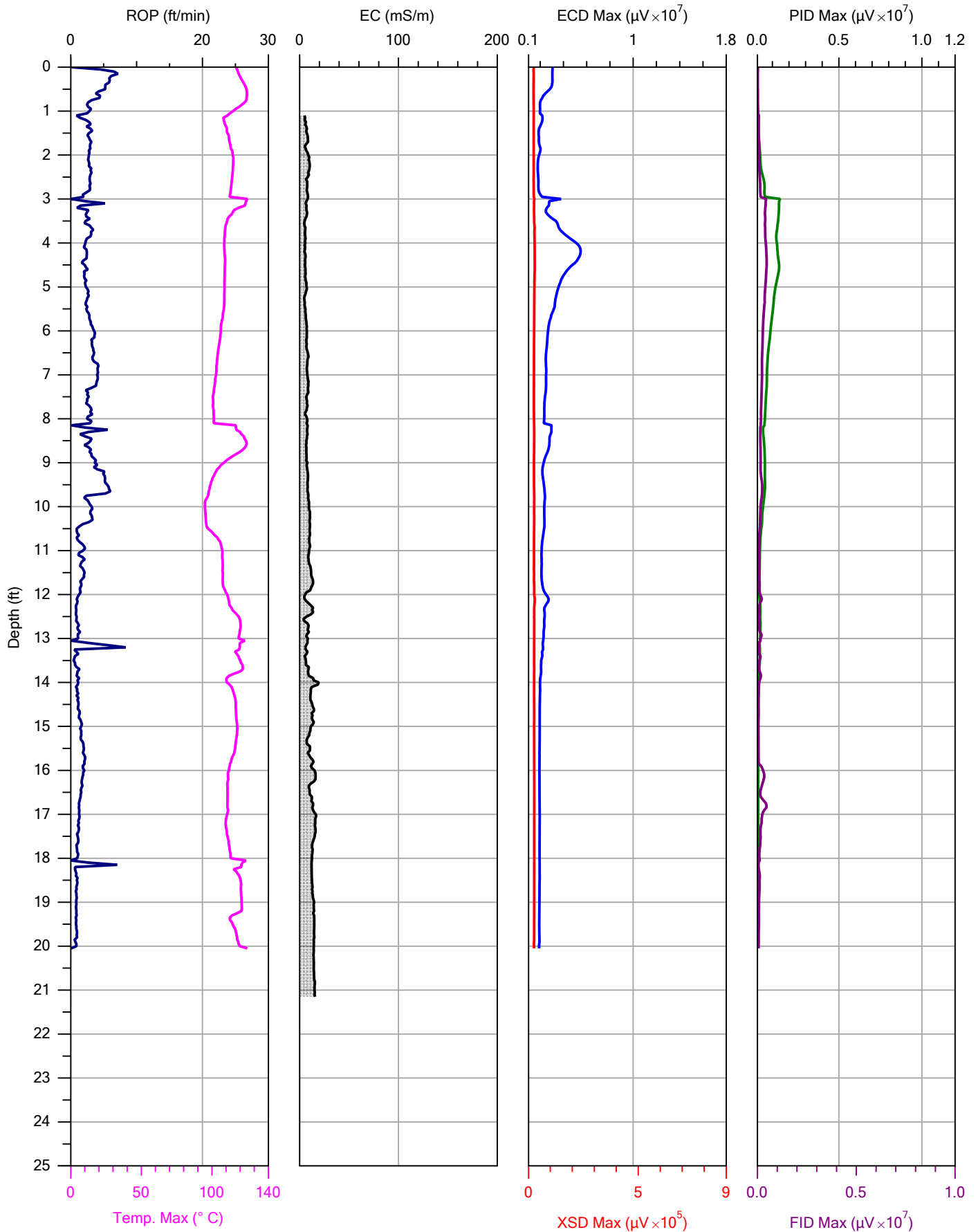


Company: Cascade  
 Project ID: 2022001119

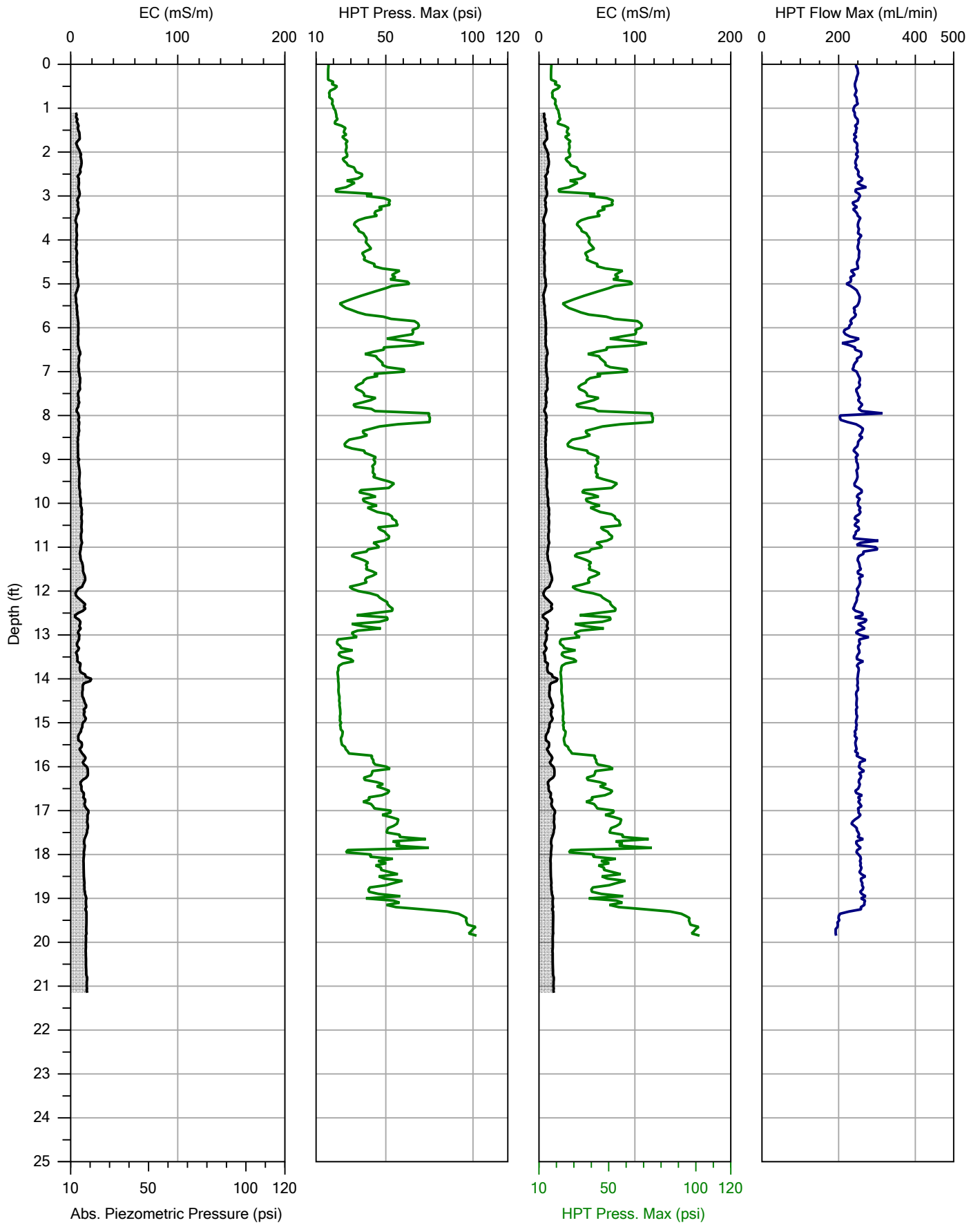
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-36.MHP
Date:	09/10/20
Location:	northeast





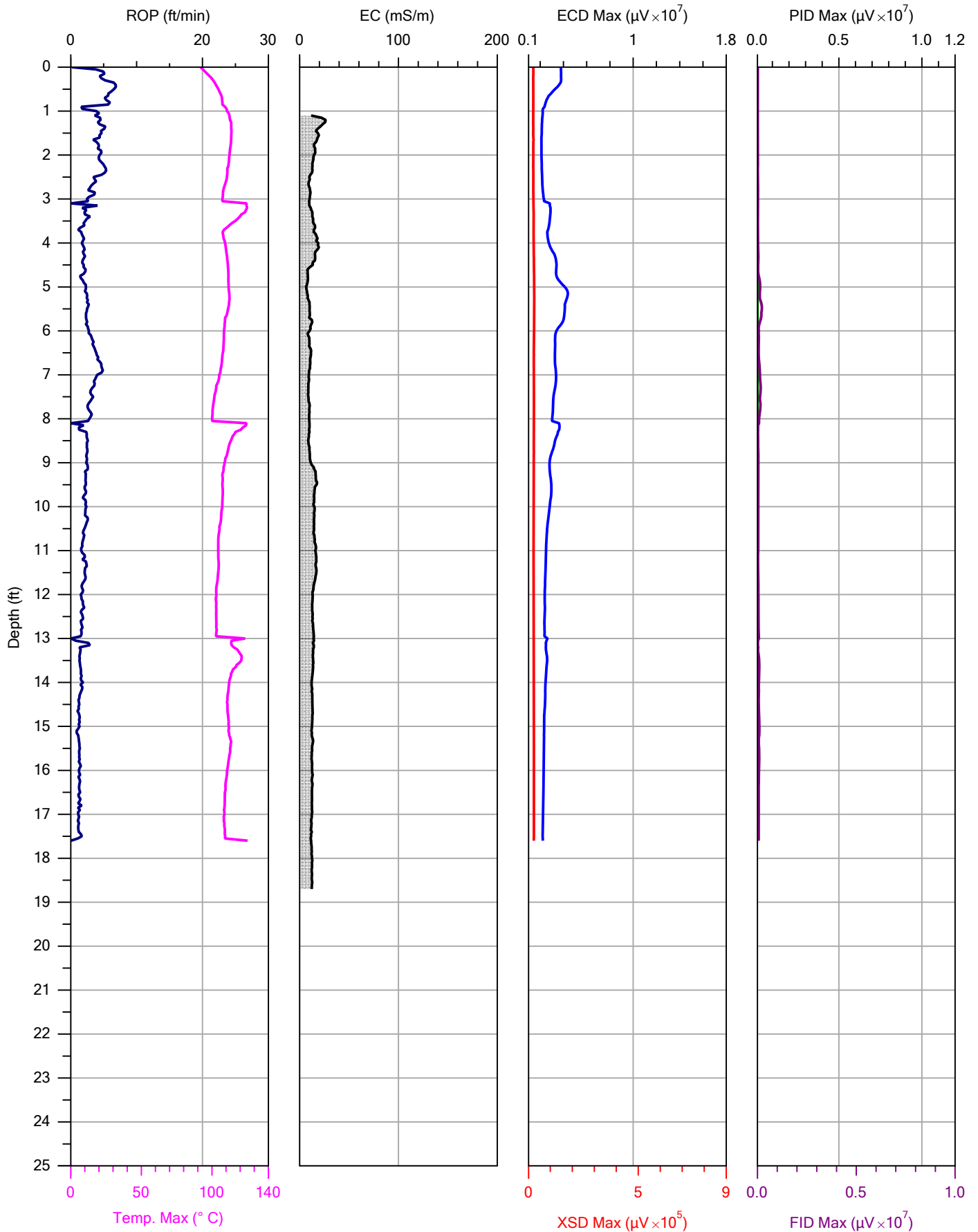
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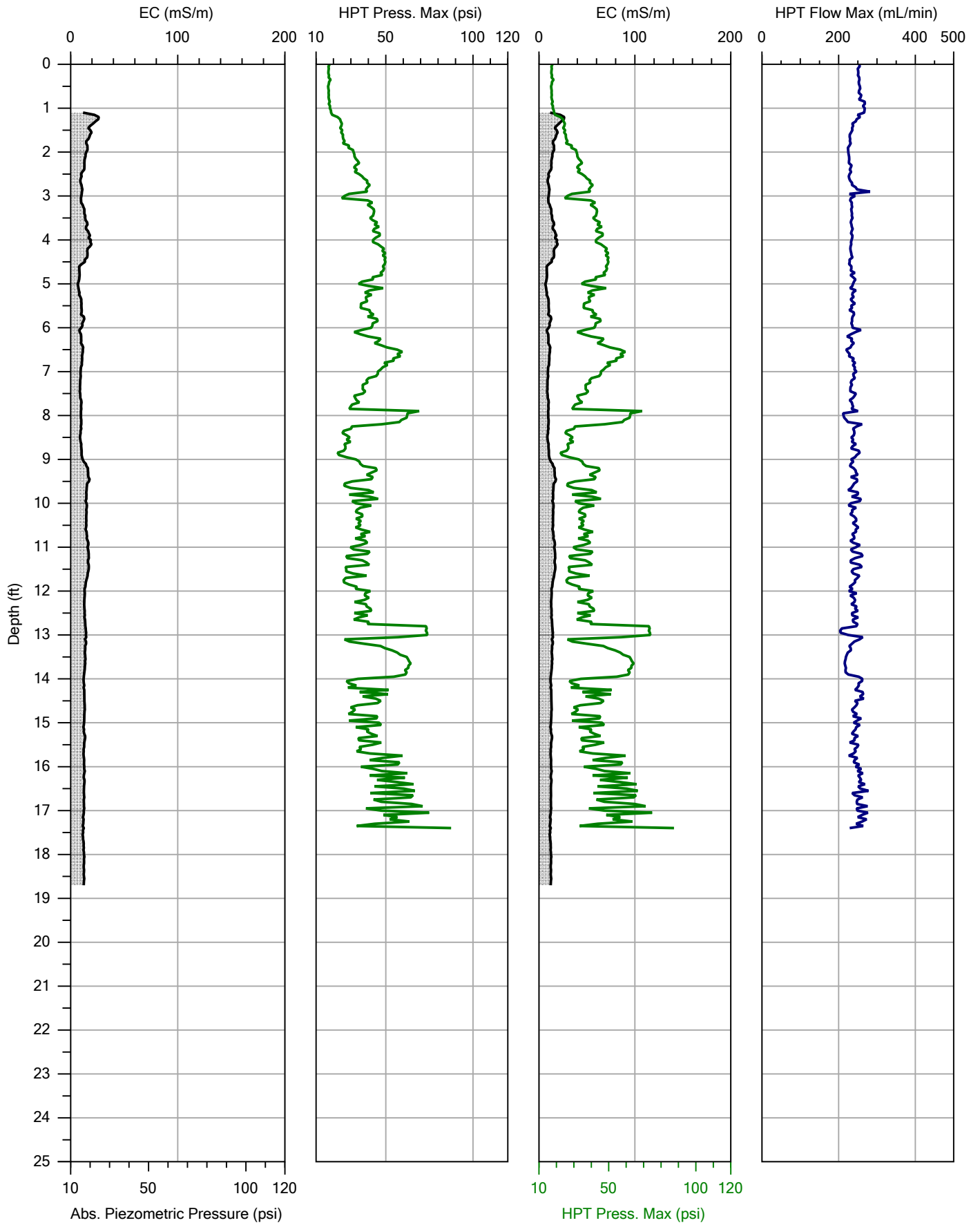
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-37.MHP
Date:	09/10/20
Location:	northeast



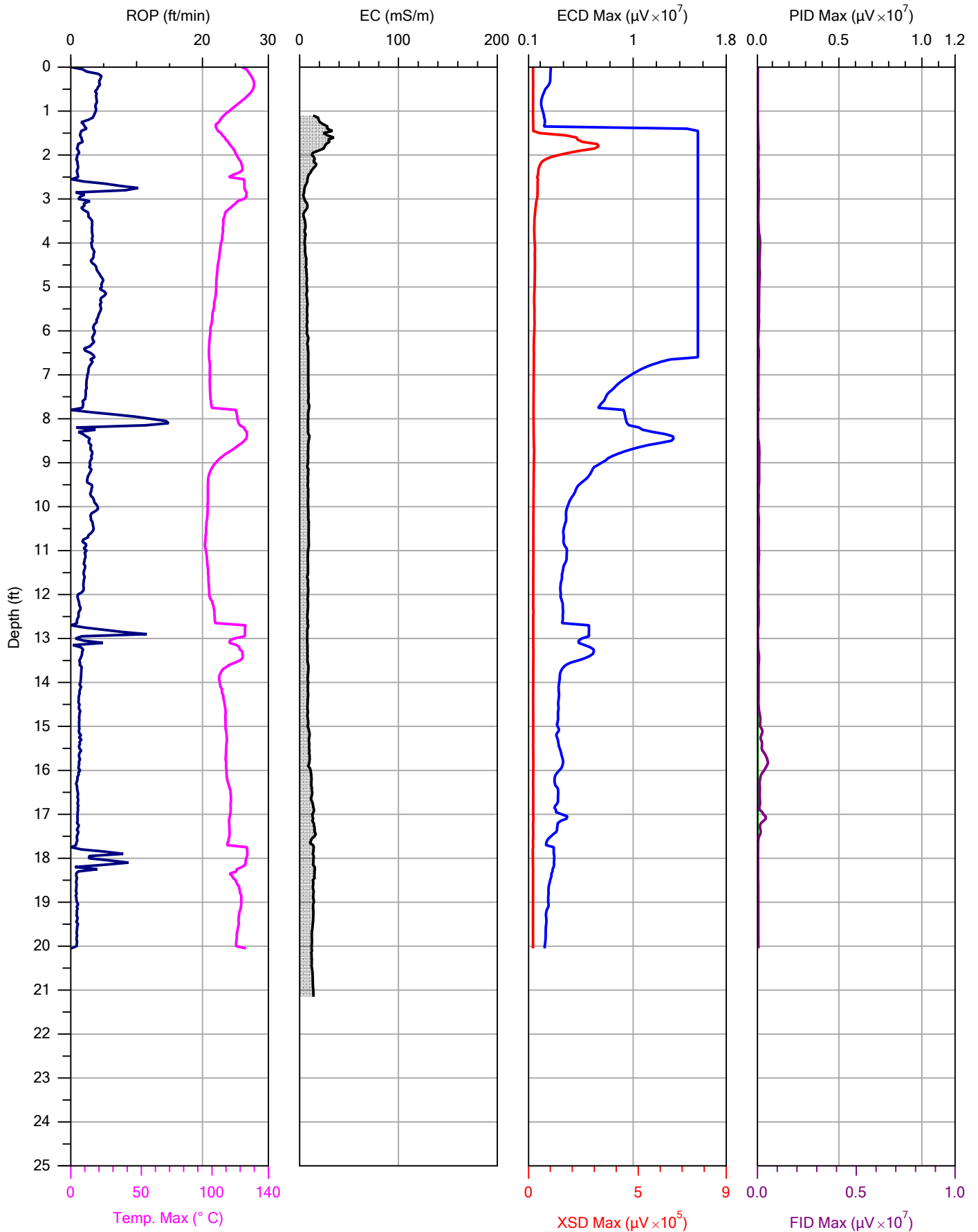
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Project ID:	2022001119	Client:	tidewater	Date:	09/10/20
				Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

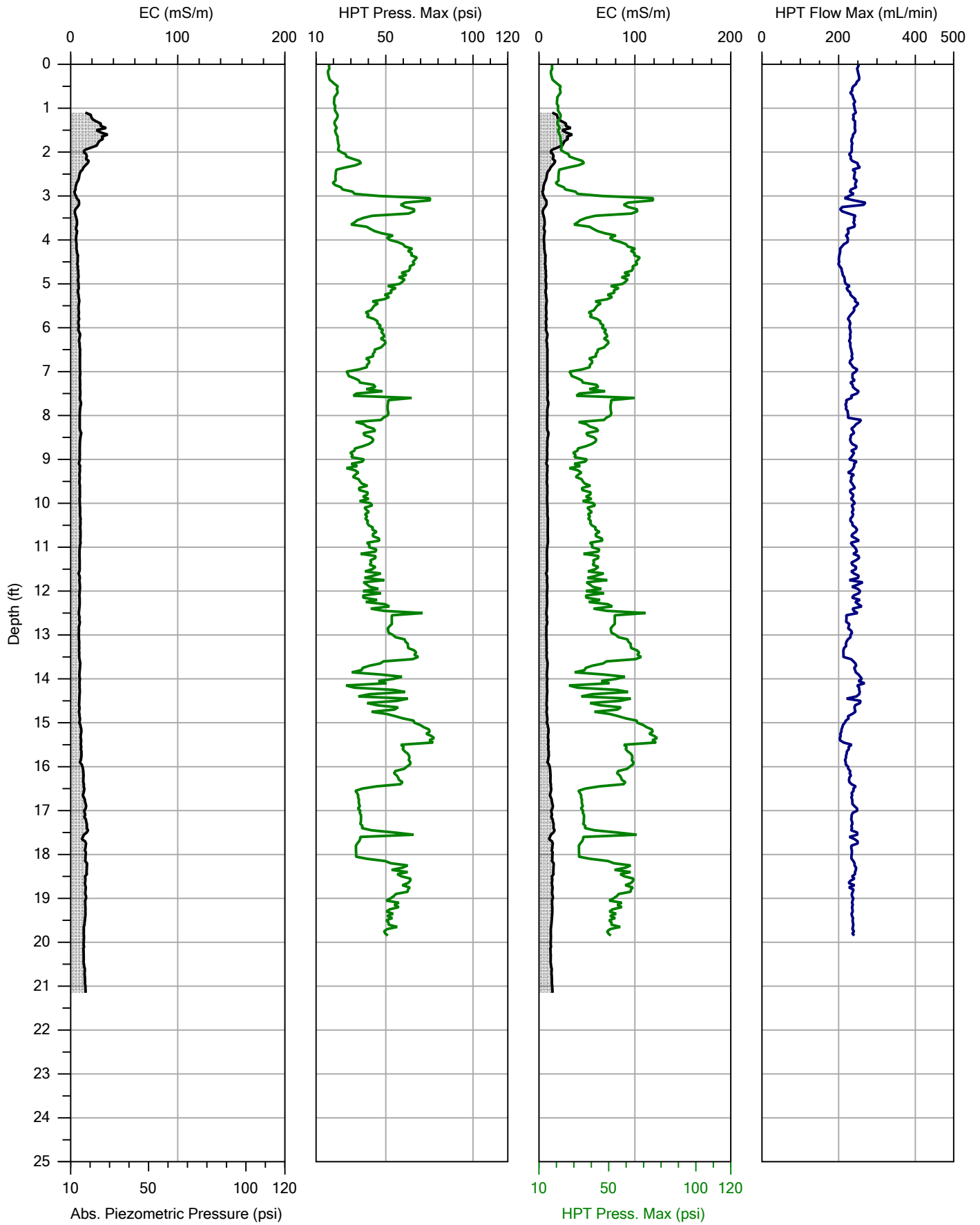
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

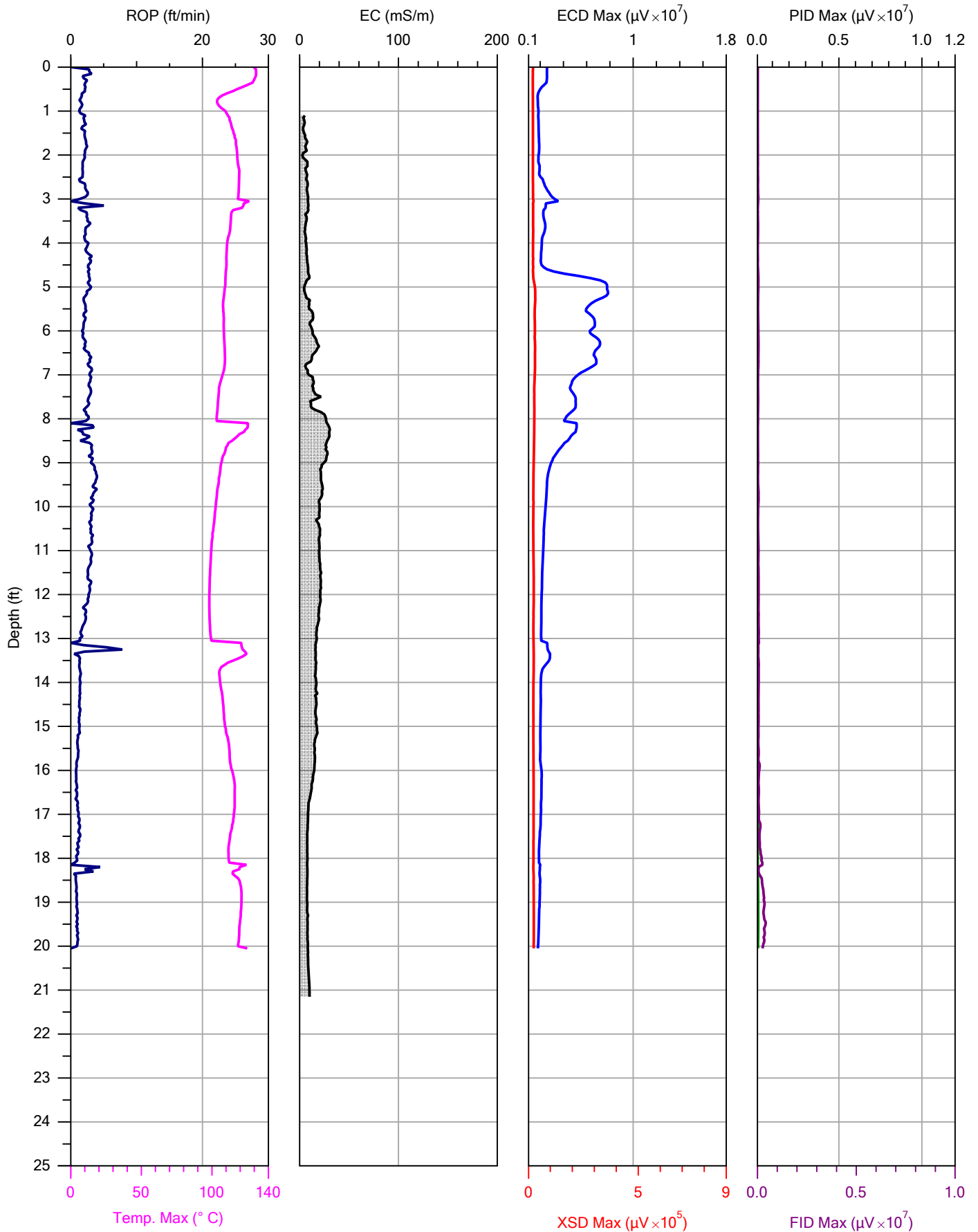
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Date:	09/10/20
Location:	northeast



Company: Cascade  
 Project ID: 2022001119

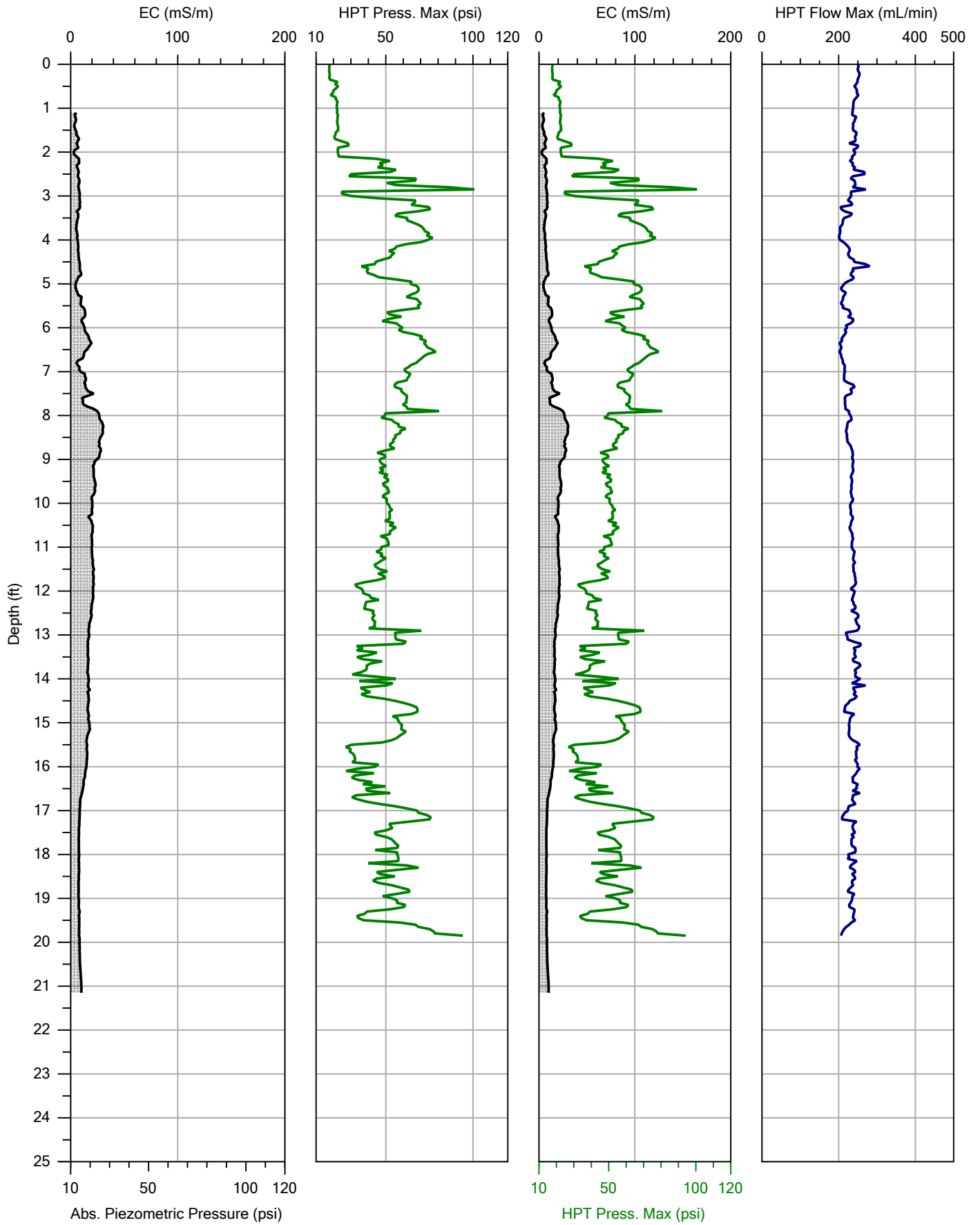
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-39.MHP
Date:	09/10/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-40.MHP
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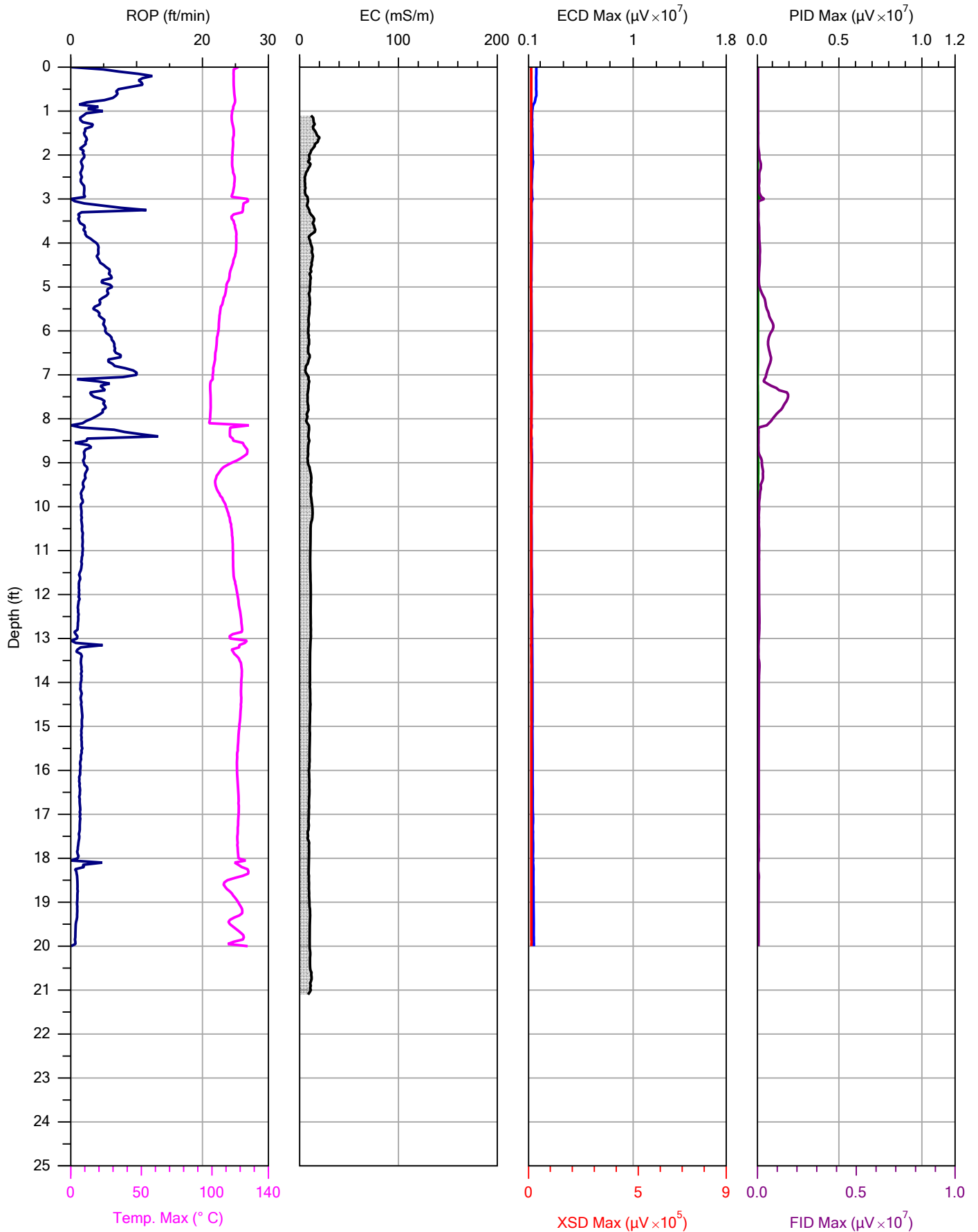




Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

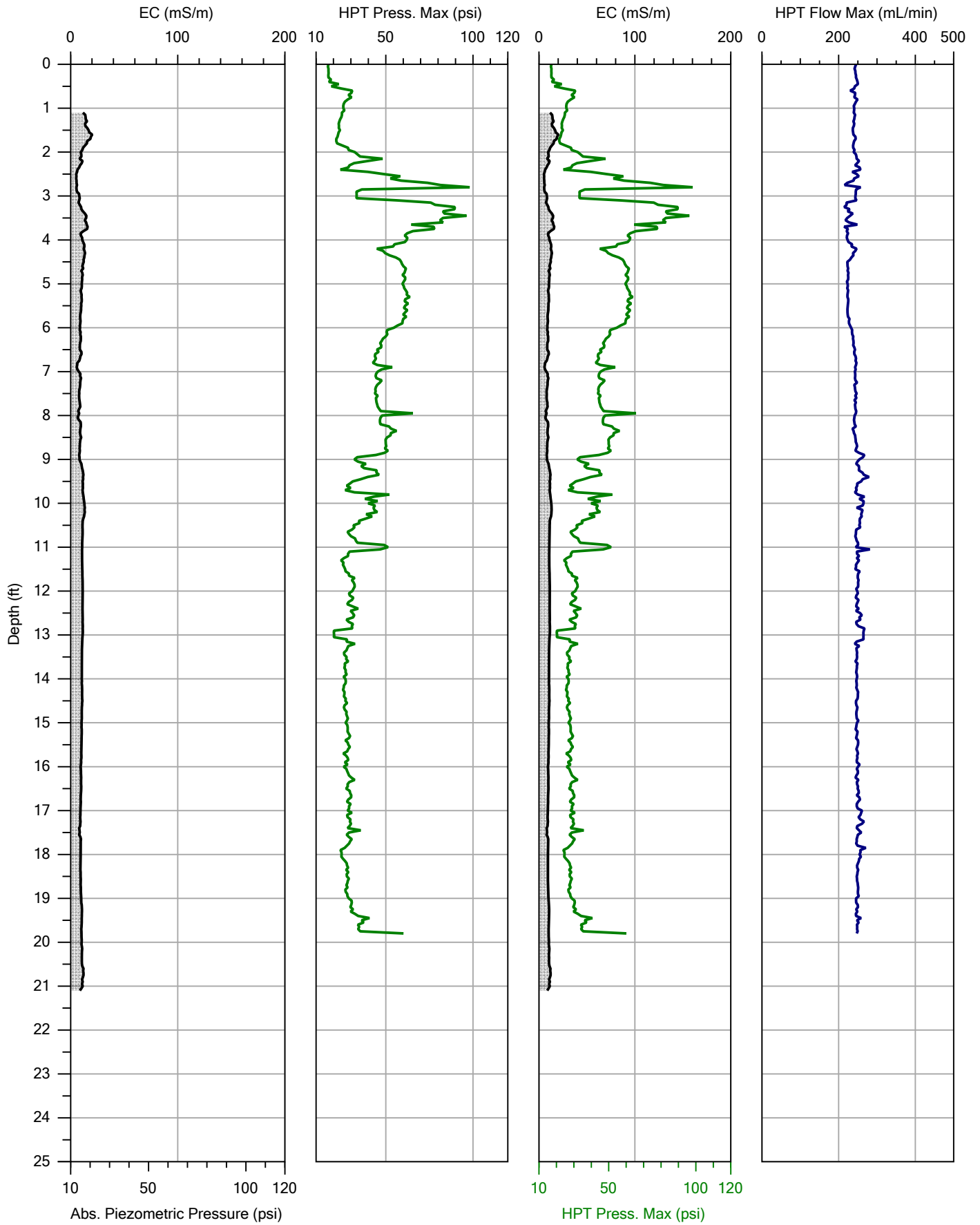
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Location:	northeast



Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

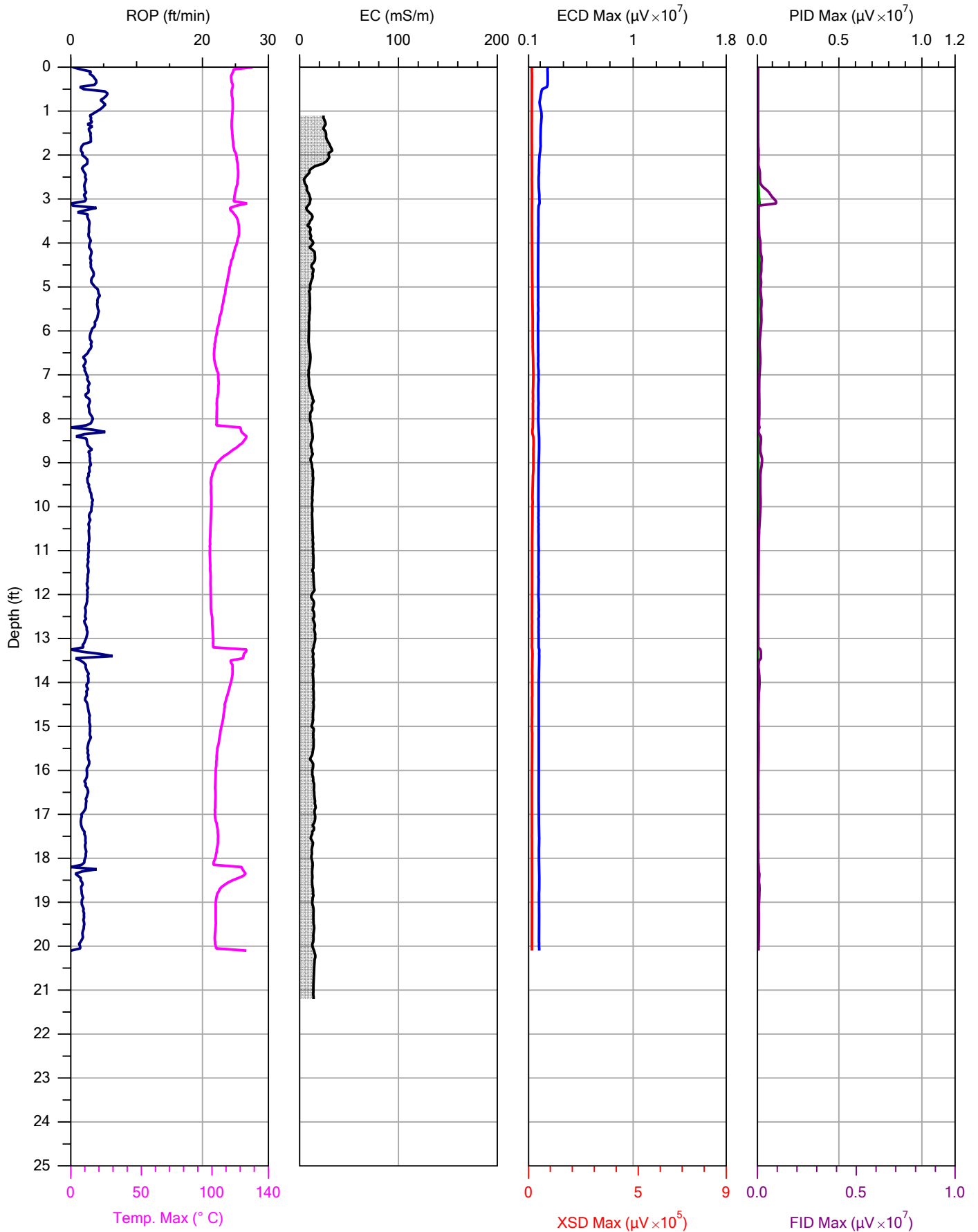
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Location:	northeast



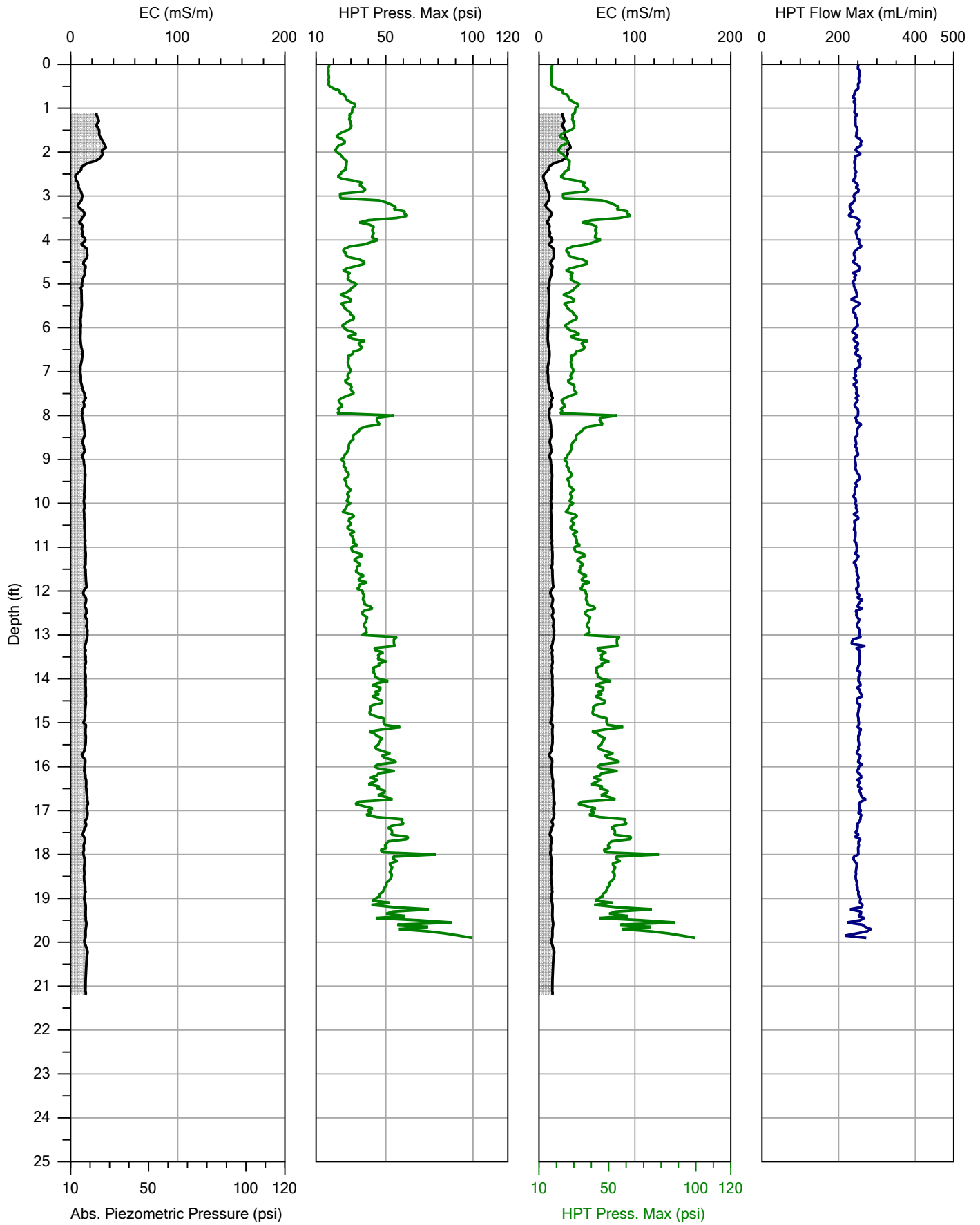
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-41.MHP
Date:	09/11/20
Location:	northeast



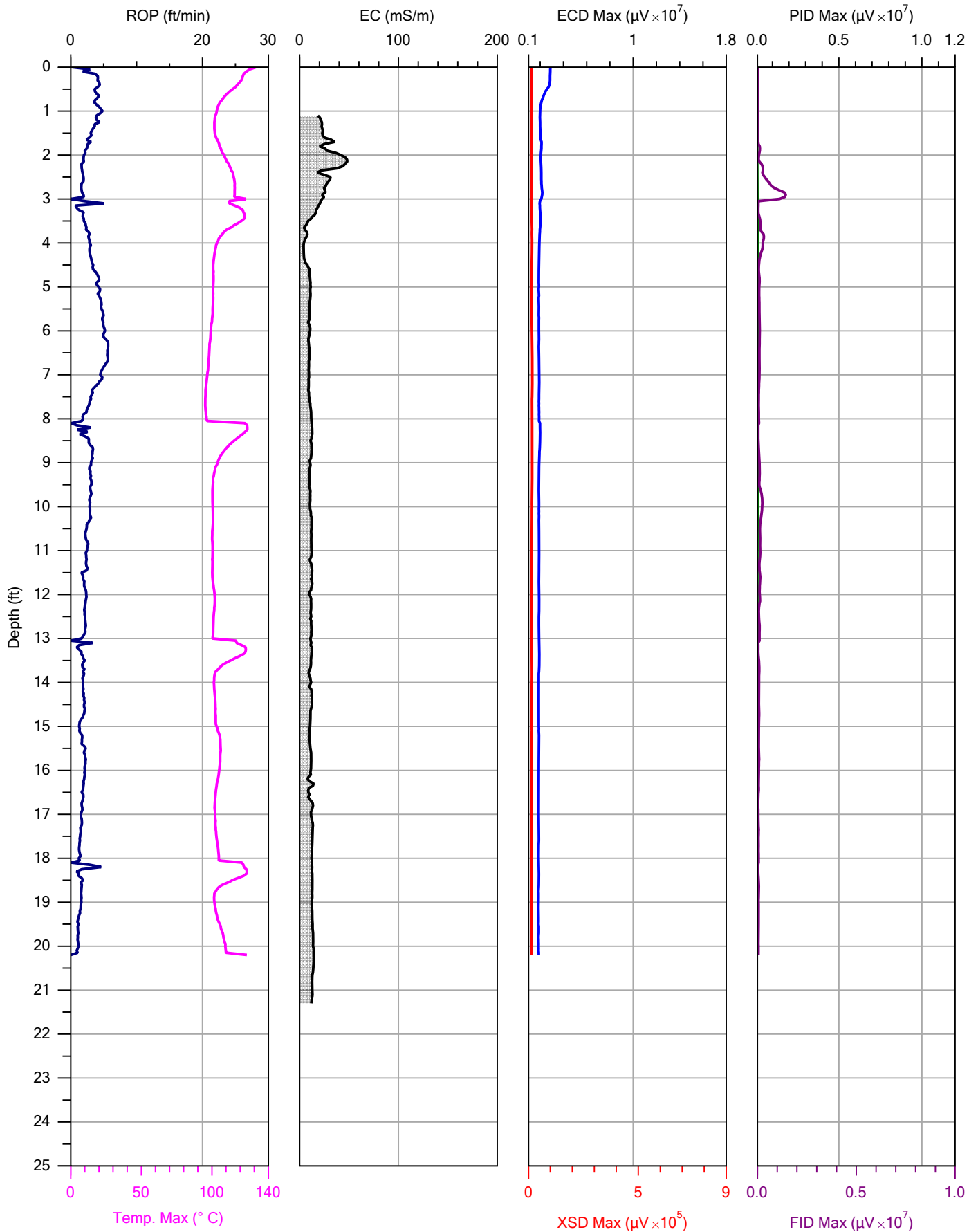
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-42.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



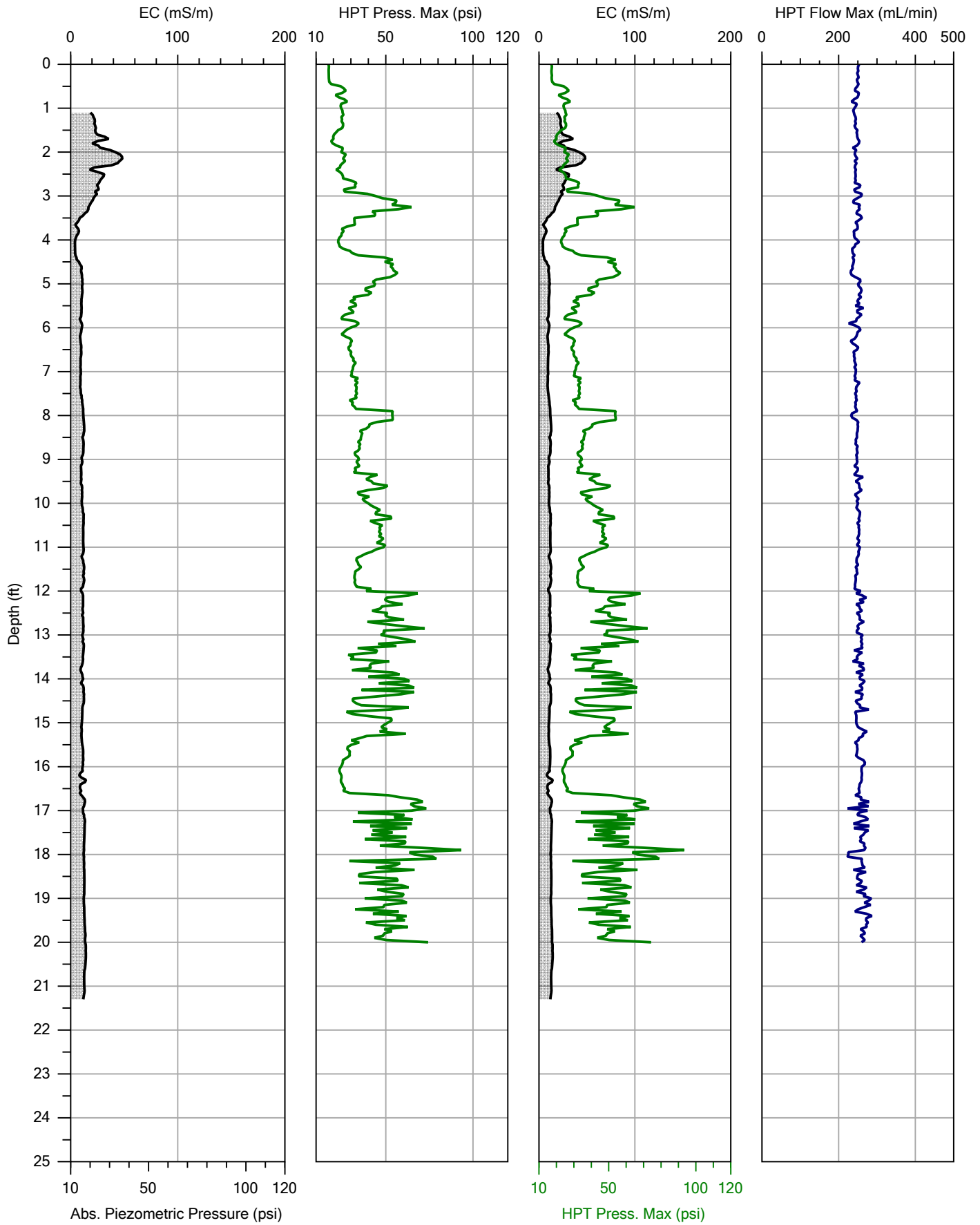
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-42.MHP
Date:	09/11/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-43.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast

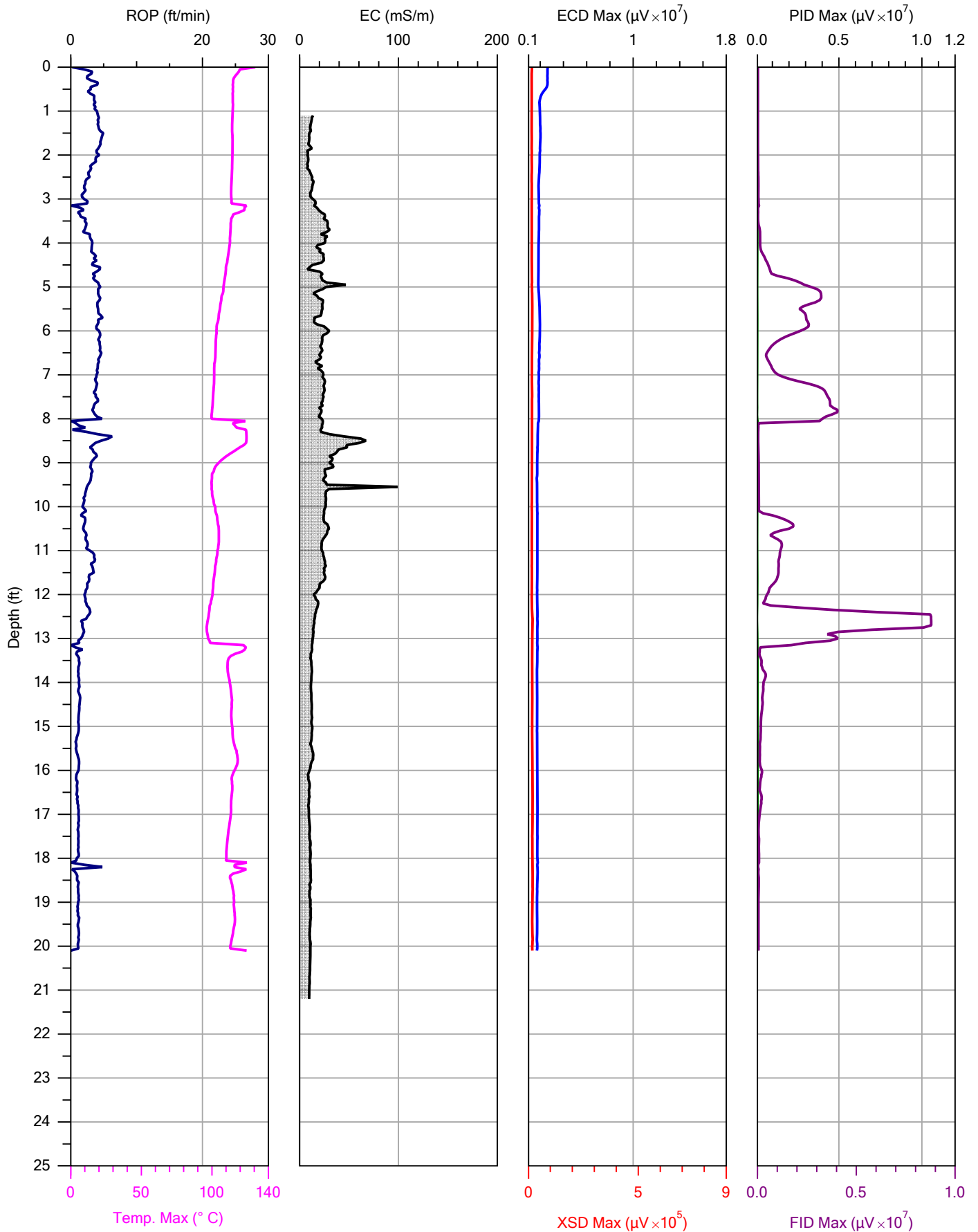


Company: Cascade  
 Project ID: 2022001119

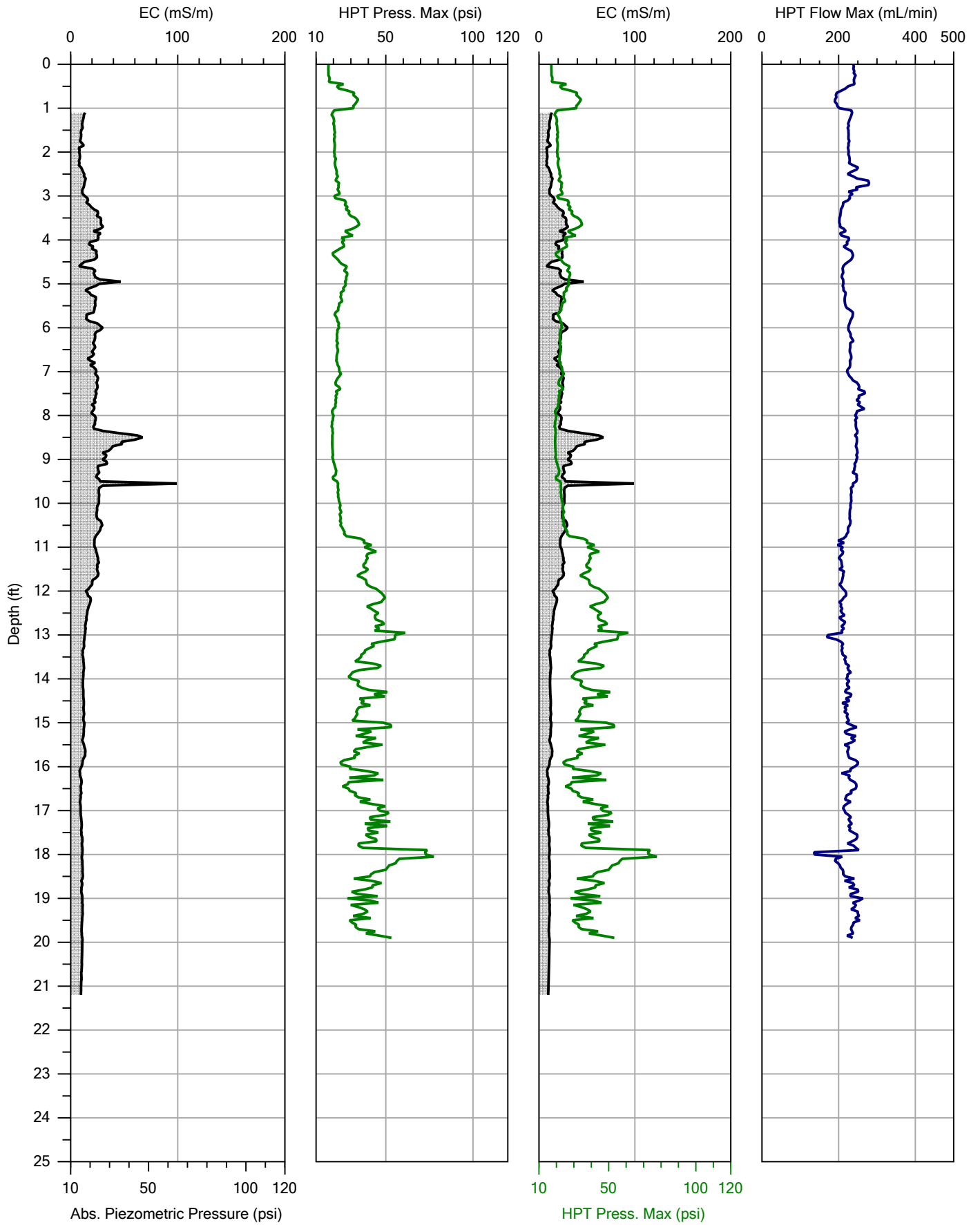
Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-43.MHP
Date:	09/11/20
Location:	northeast





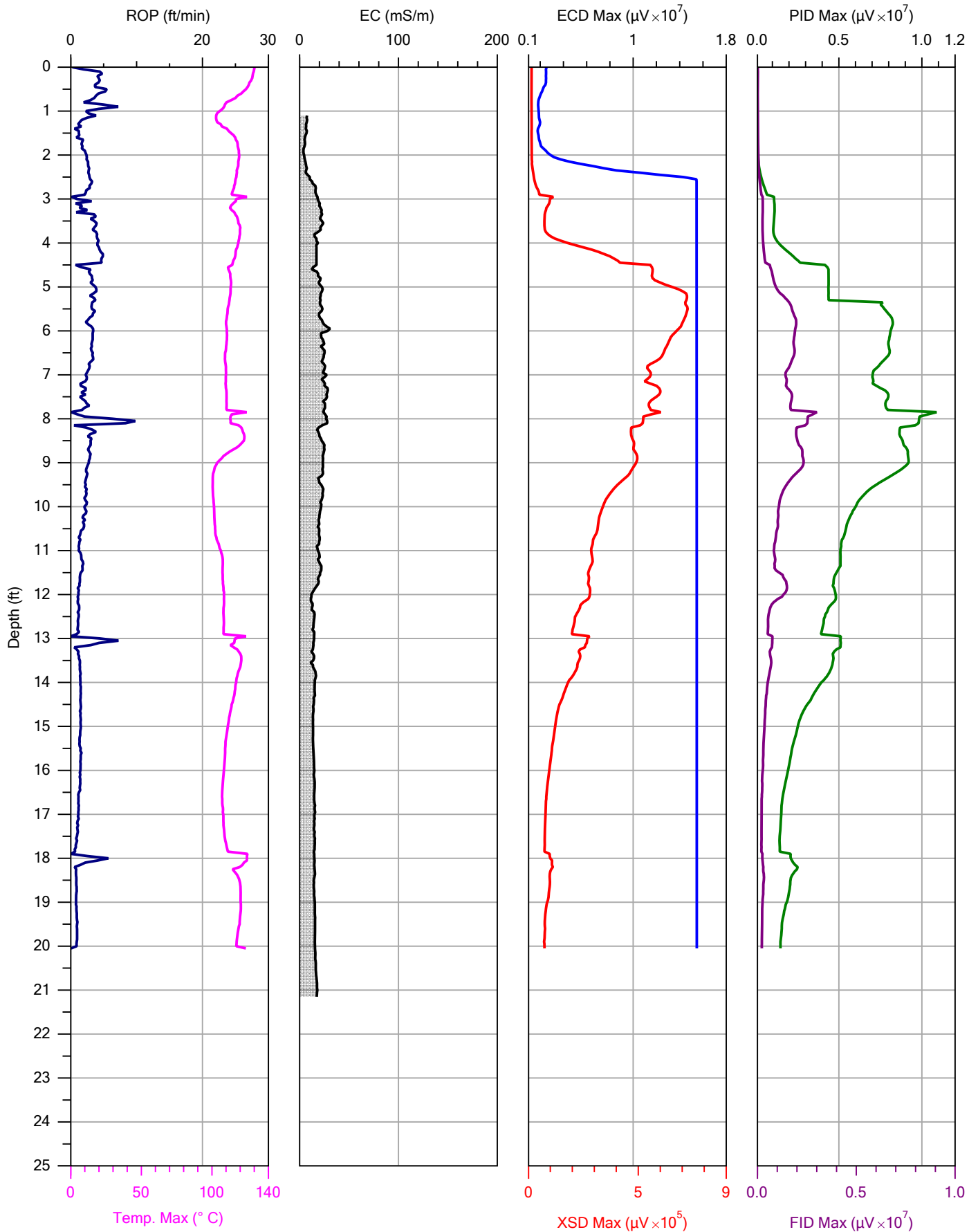
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-44.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



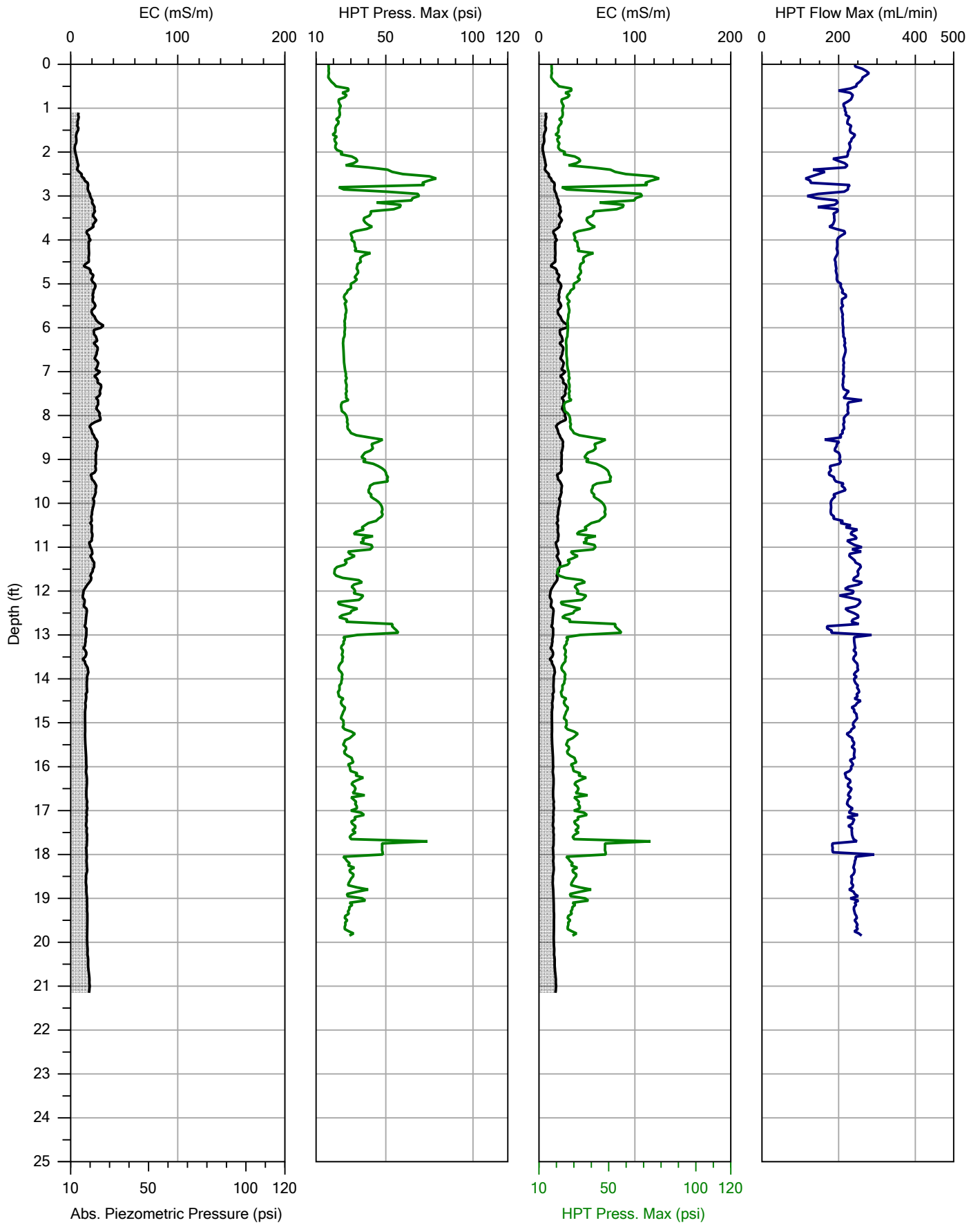
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-44.MHP
Date:	09/11/20
Location:	northeast



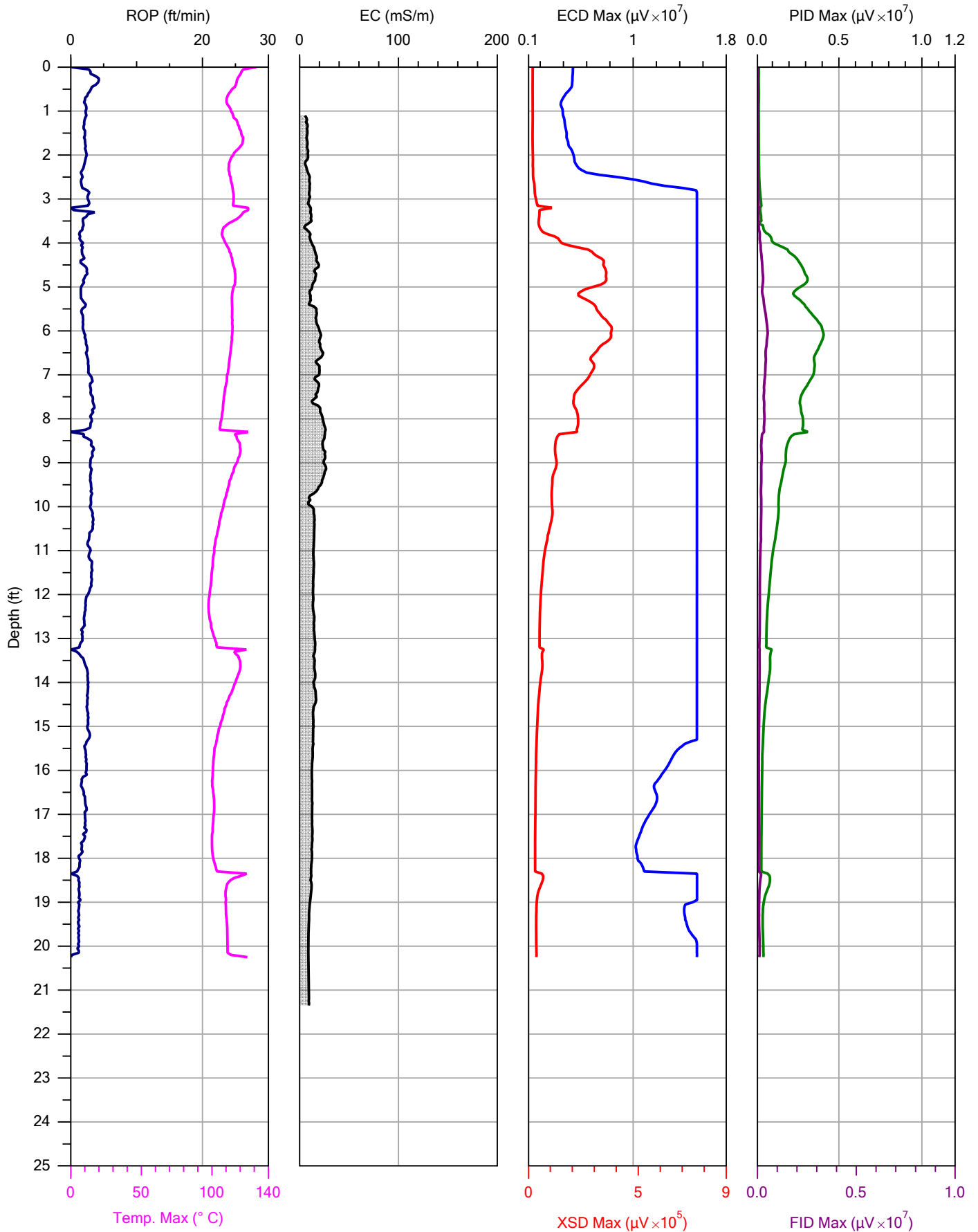
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-45.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



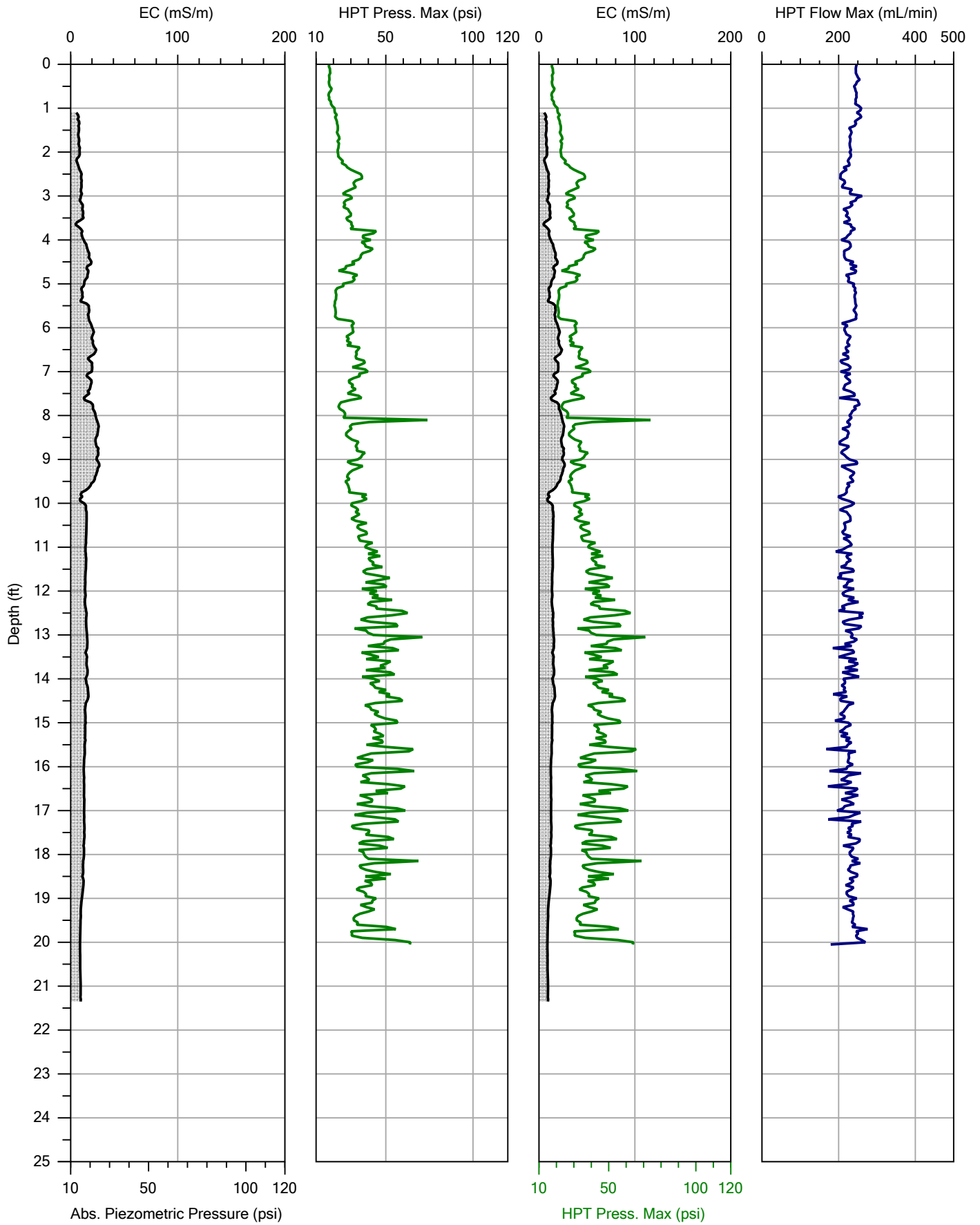
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

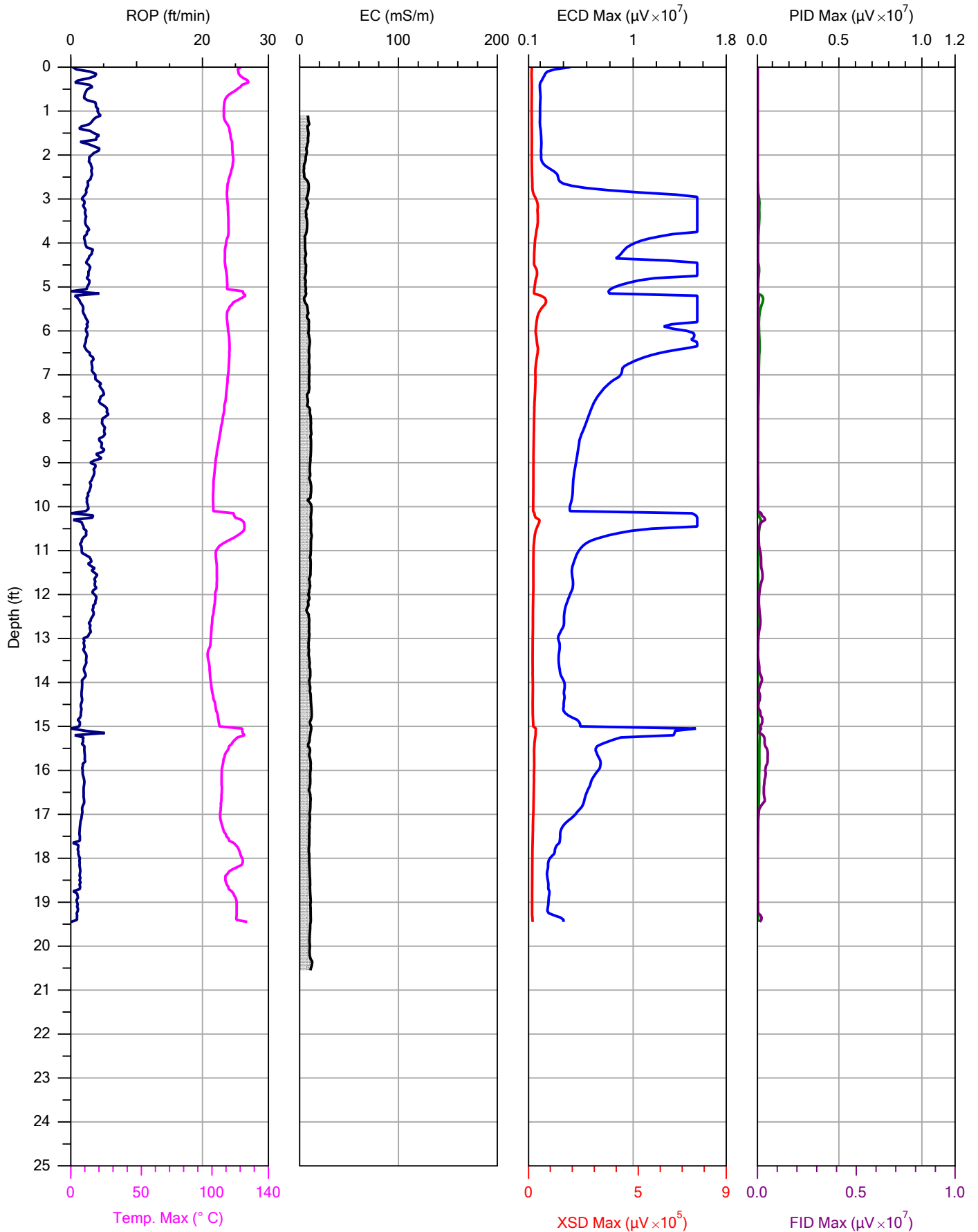
File:	HSI-HRSC-45.MHP
Date:	09/11/20
Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-46.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-46.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast

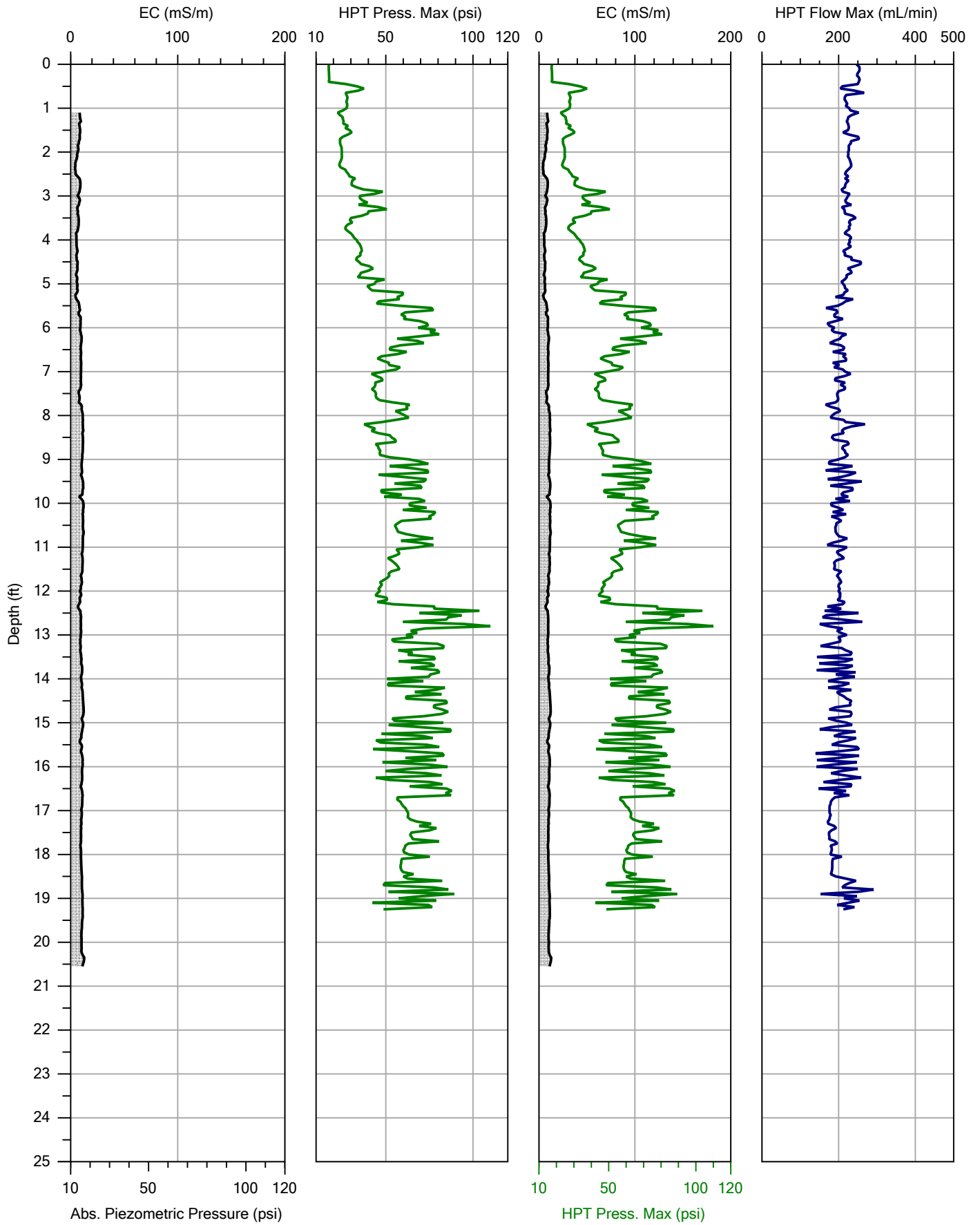


Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-47.MHP
Date:	09/11/20
Location:	northeast

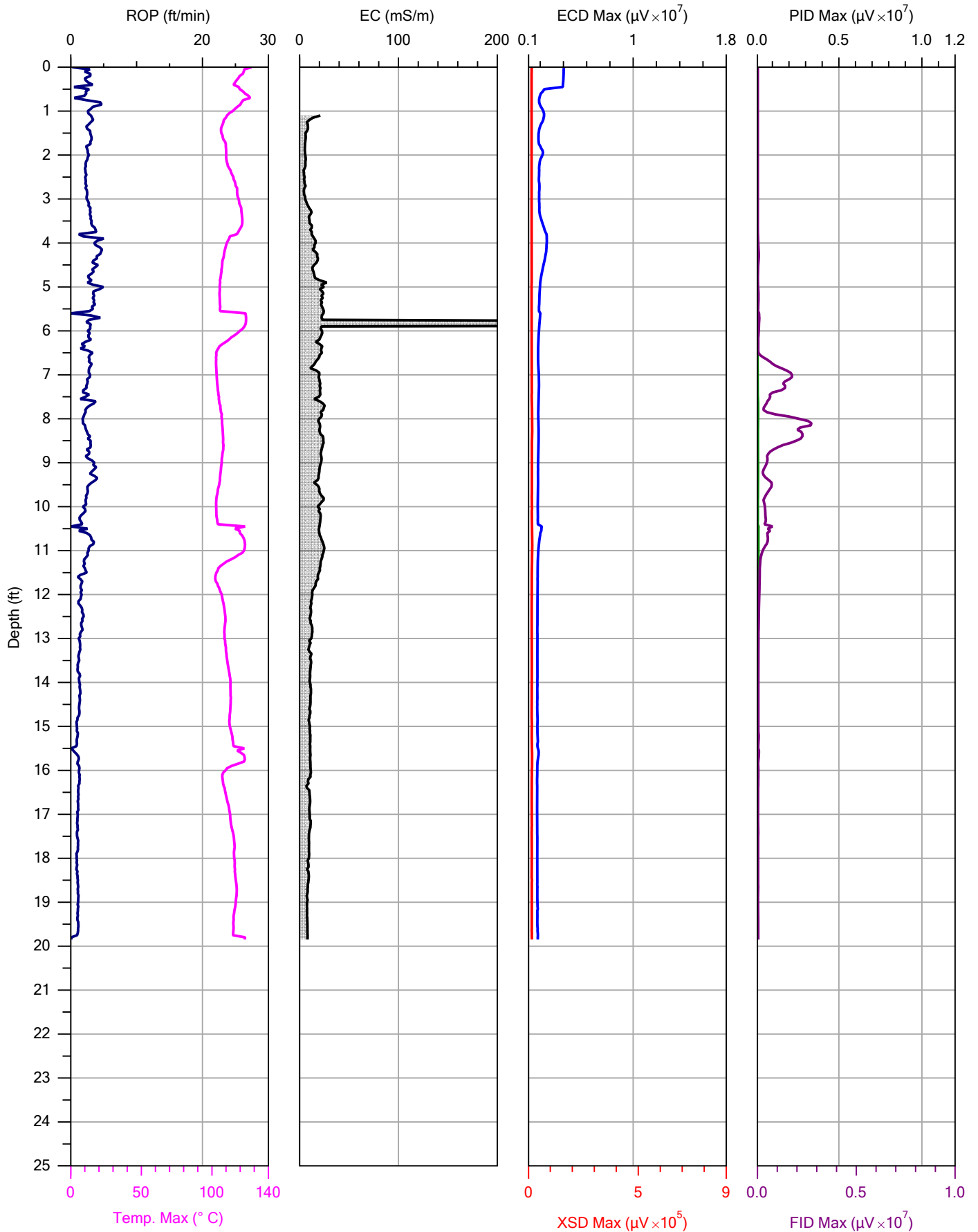




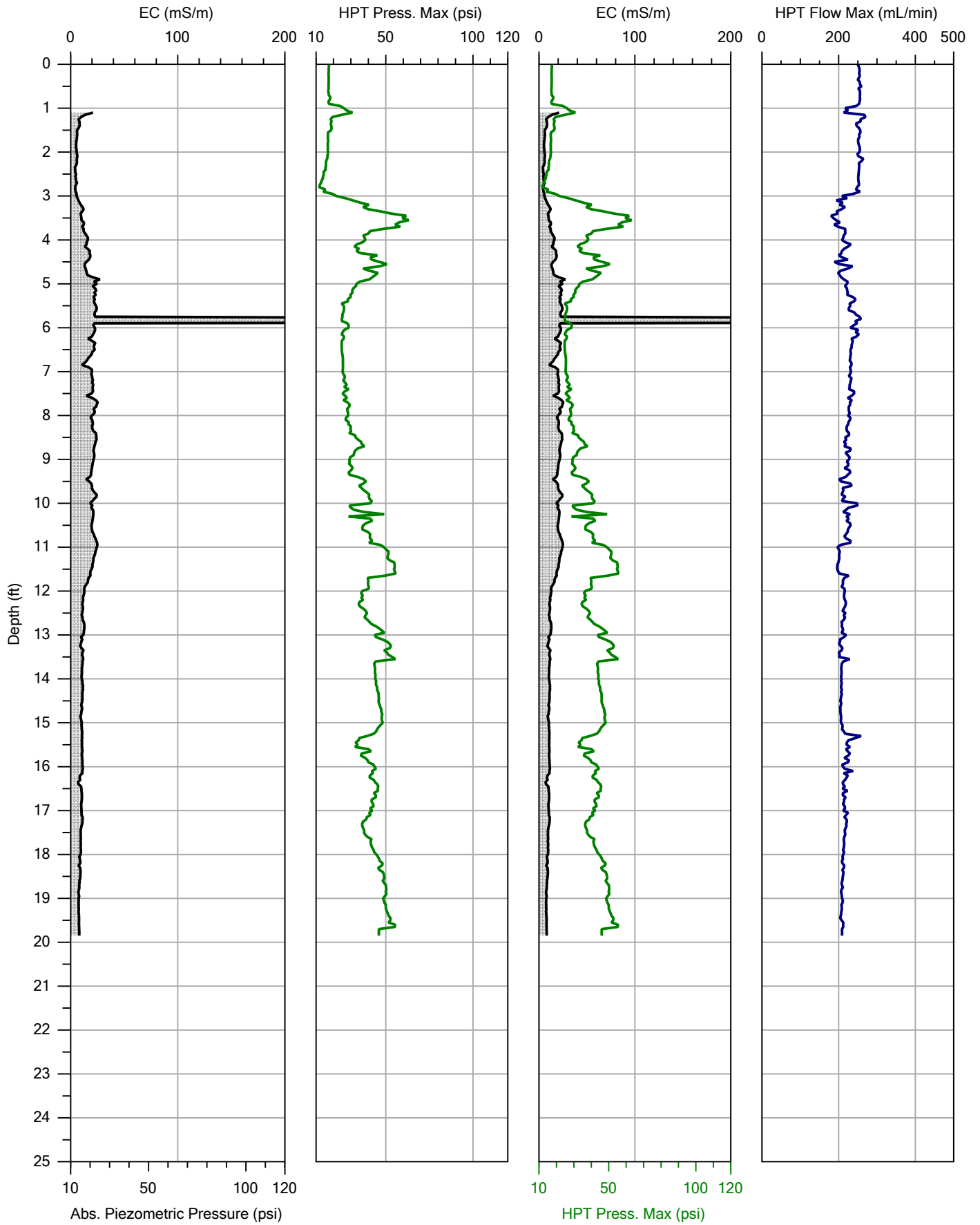
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

File:	HSI-HRSC-47.MHP
Date:	09/11/20
Location:	northeast



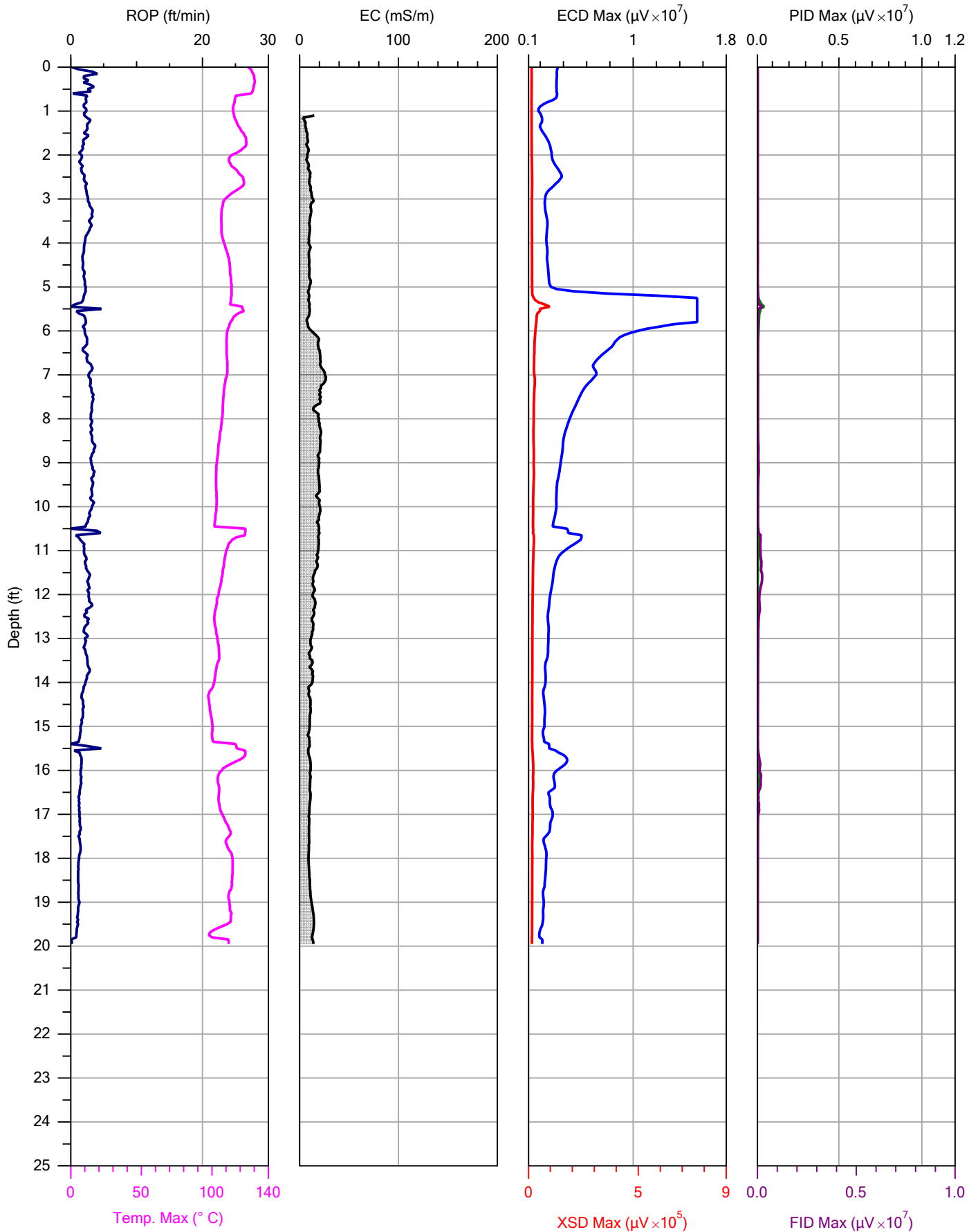
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-48.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



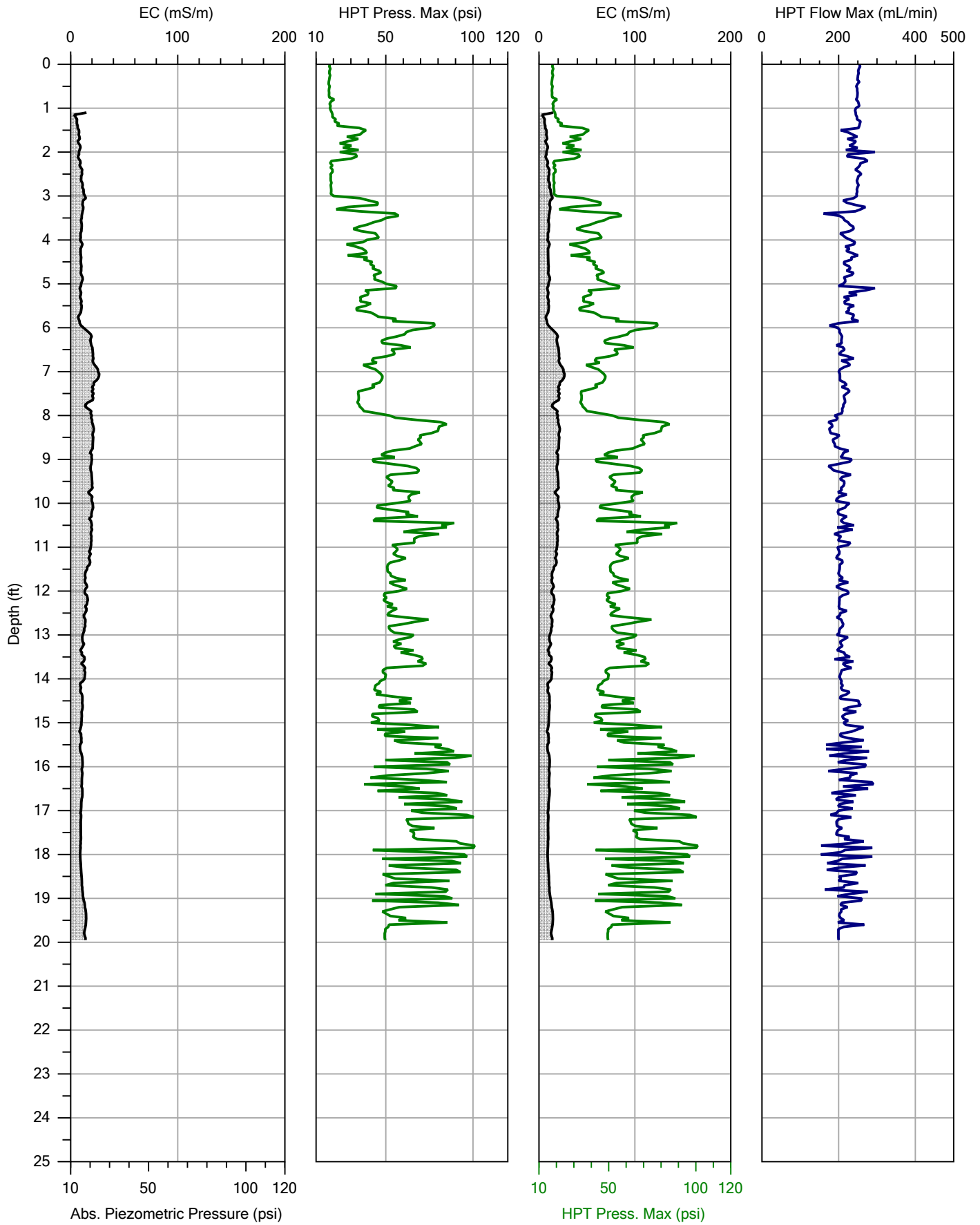
Company: Cascade  
 Project ID: 2022001119

Operator: Nick K  
 Client: tidewater

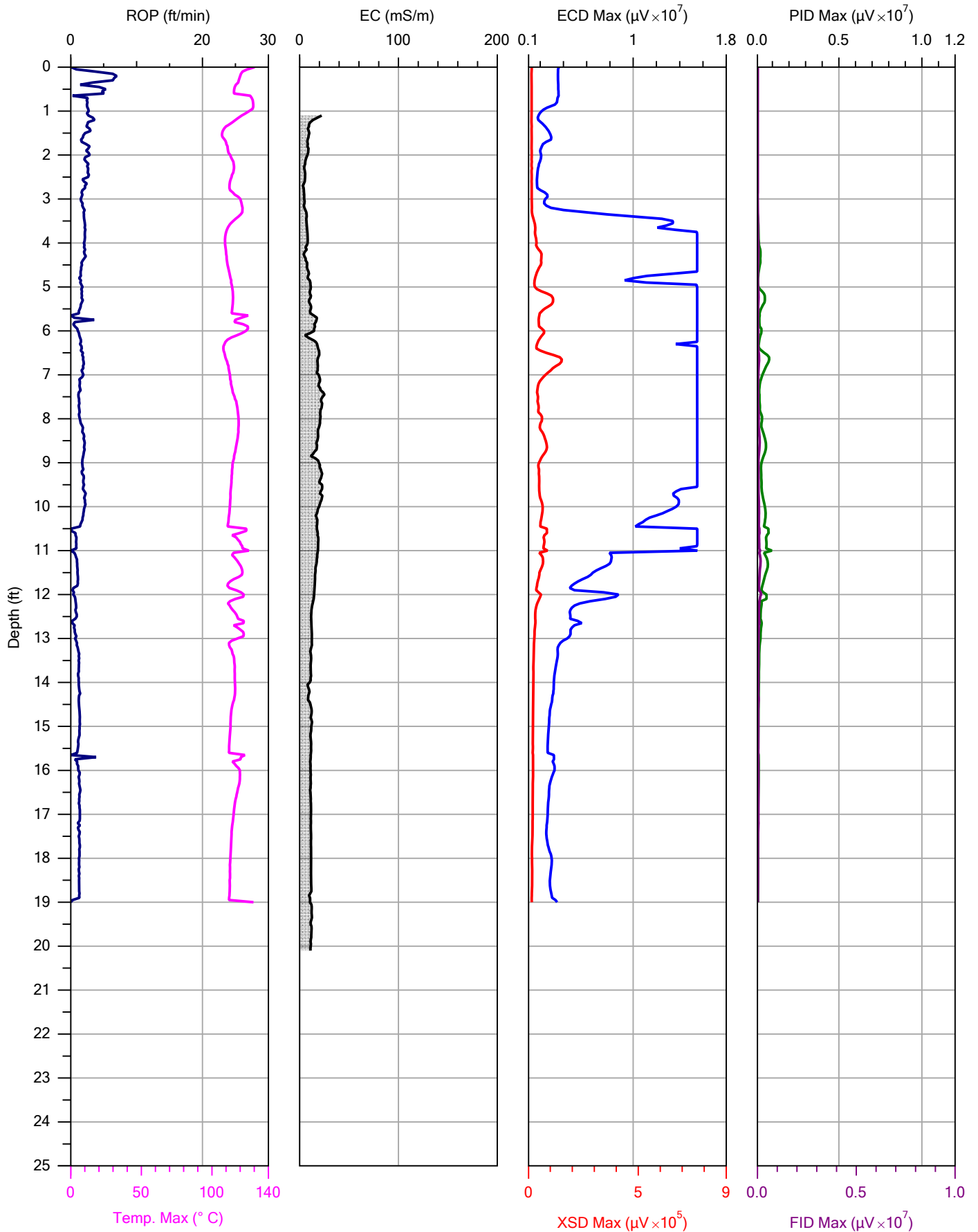
File:	HSI-HRSC-48.MHP
Date:	09/11/20
Location:	northeast



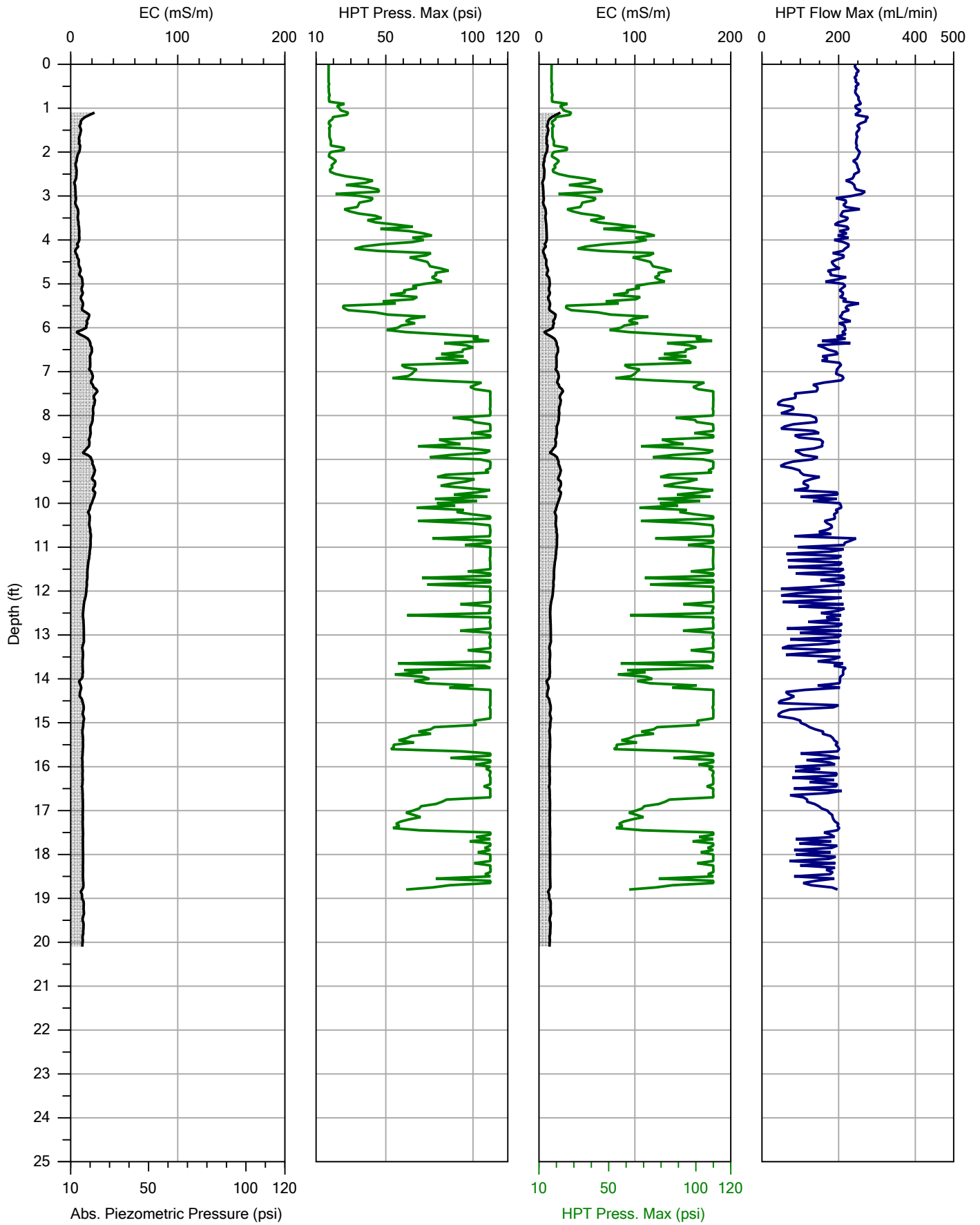
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-49.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-49.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



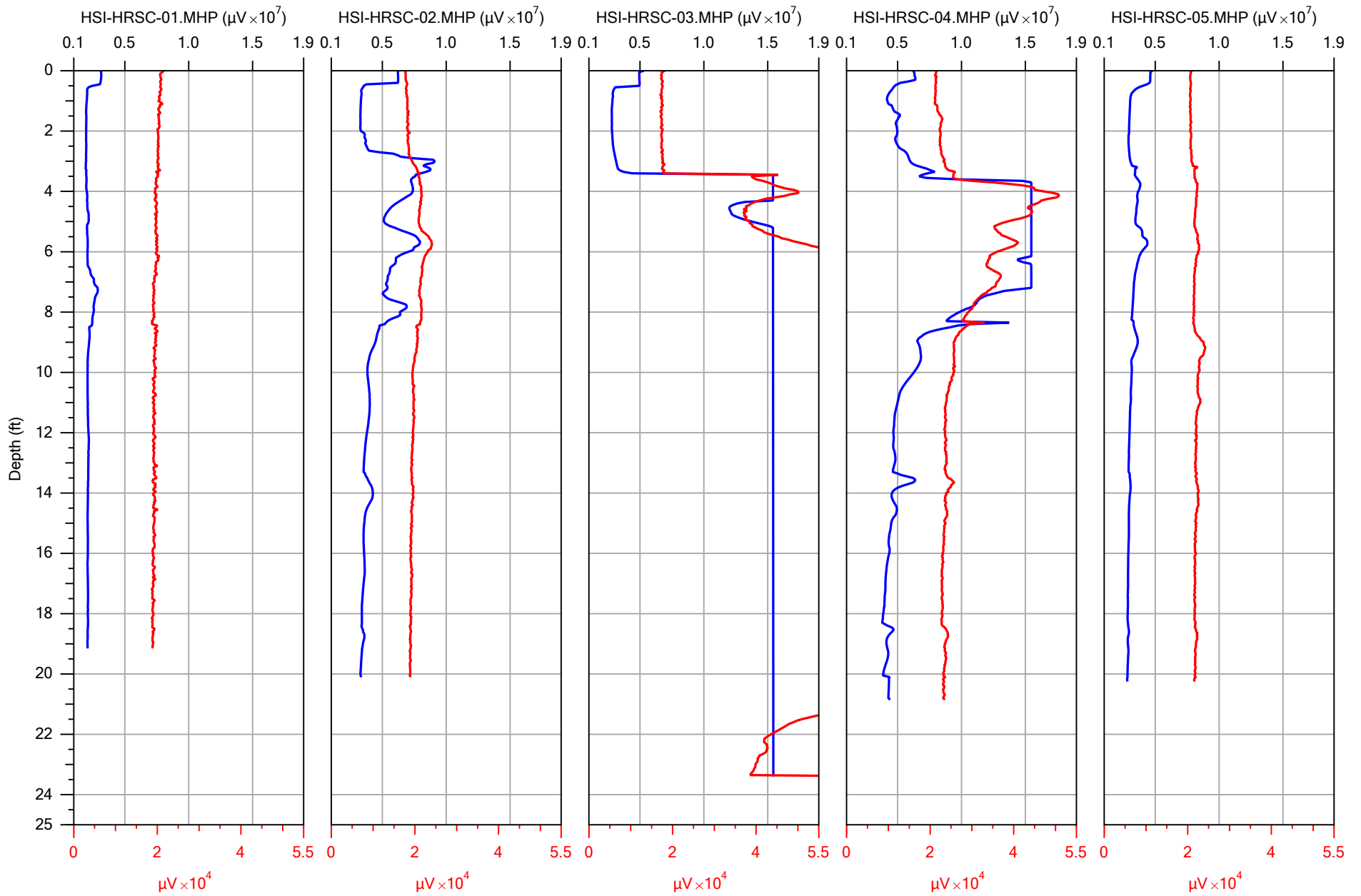
Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-50.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



Company:	Cascade	Operator:	Nick K	File:	HSI-HRSC-50.MHP
Project ID:	2022001119	Client:	tidewater	Date:	09/11/20
				Location:	northeast



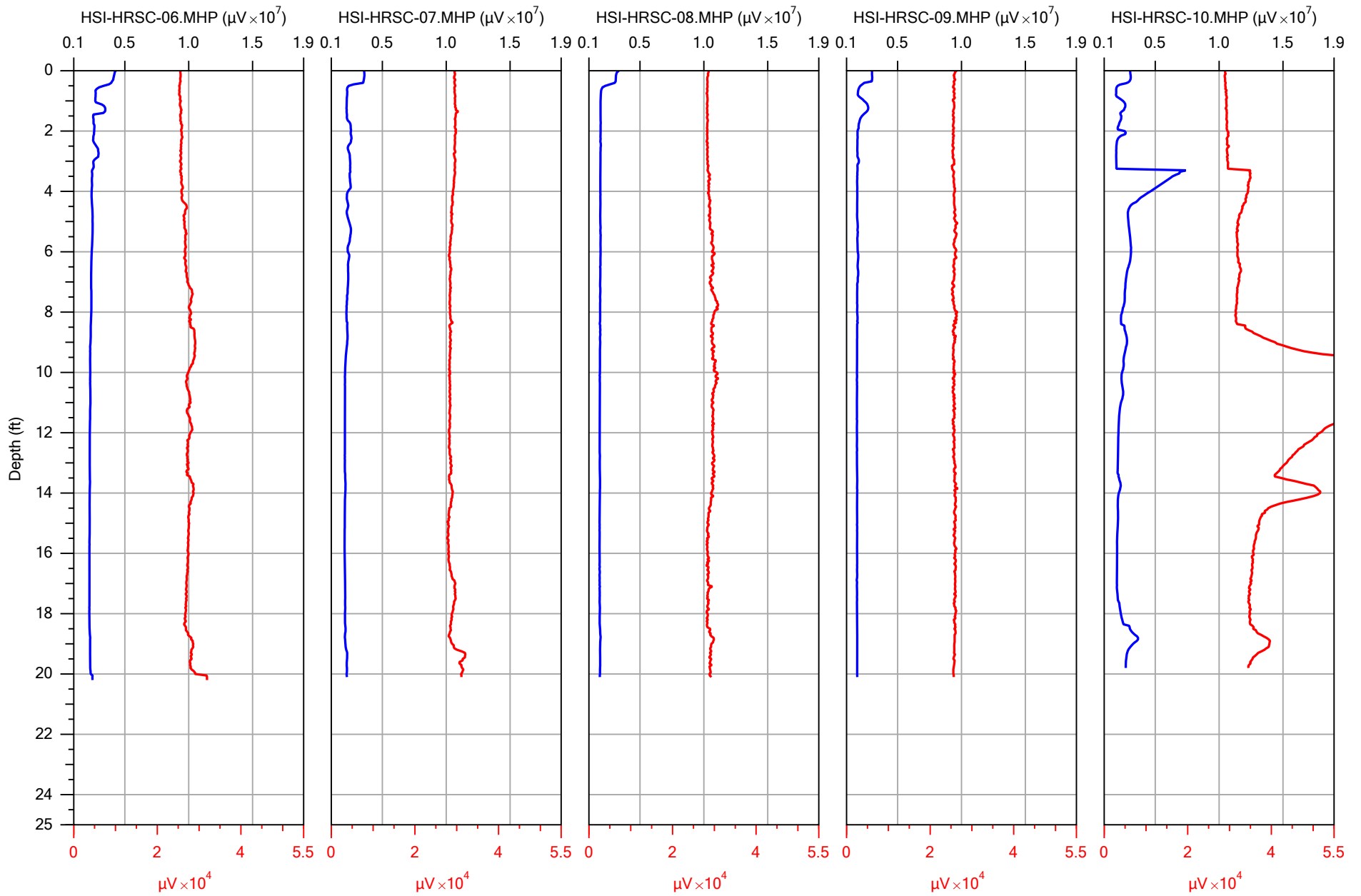
# Point To Point Comparison of ECD and XSD Low Scale



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

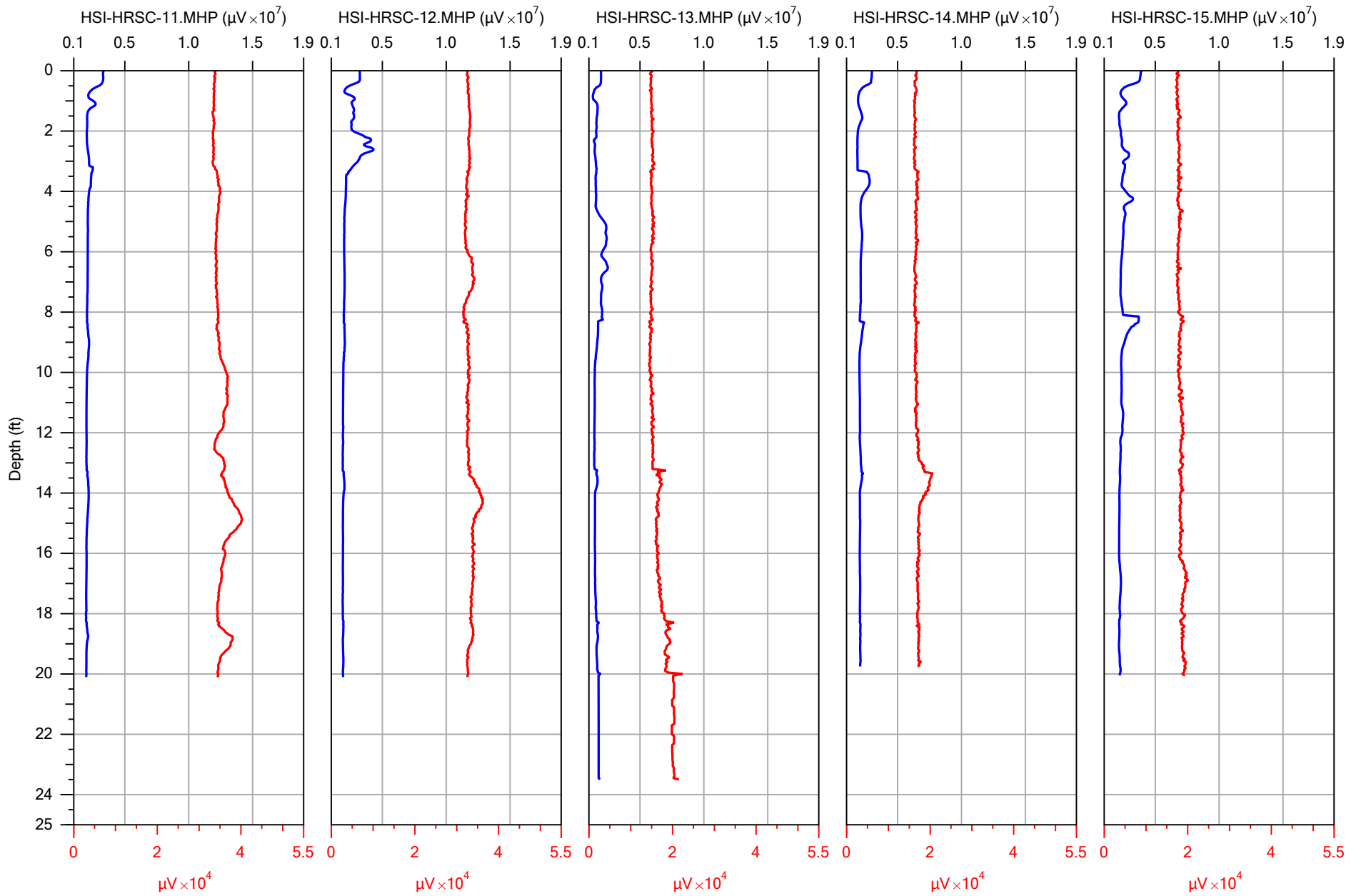
HSI-HRSC-01.MHP	09/08/20
HSI-HRSC-02.MHP	09/08/20
HSI-HRSC-03.MHP	09/08/20
HSI-HRSC-04.MHP	09/08/20
HSI-HRSC-05.MHP	09/08/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

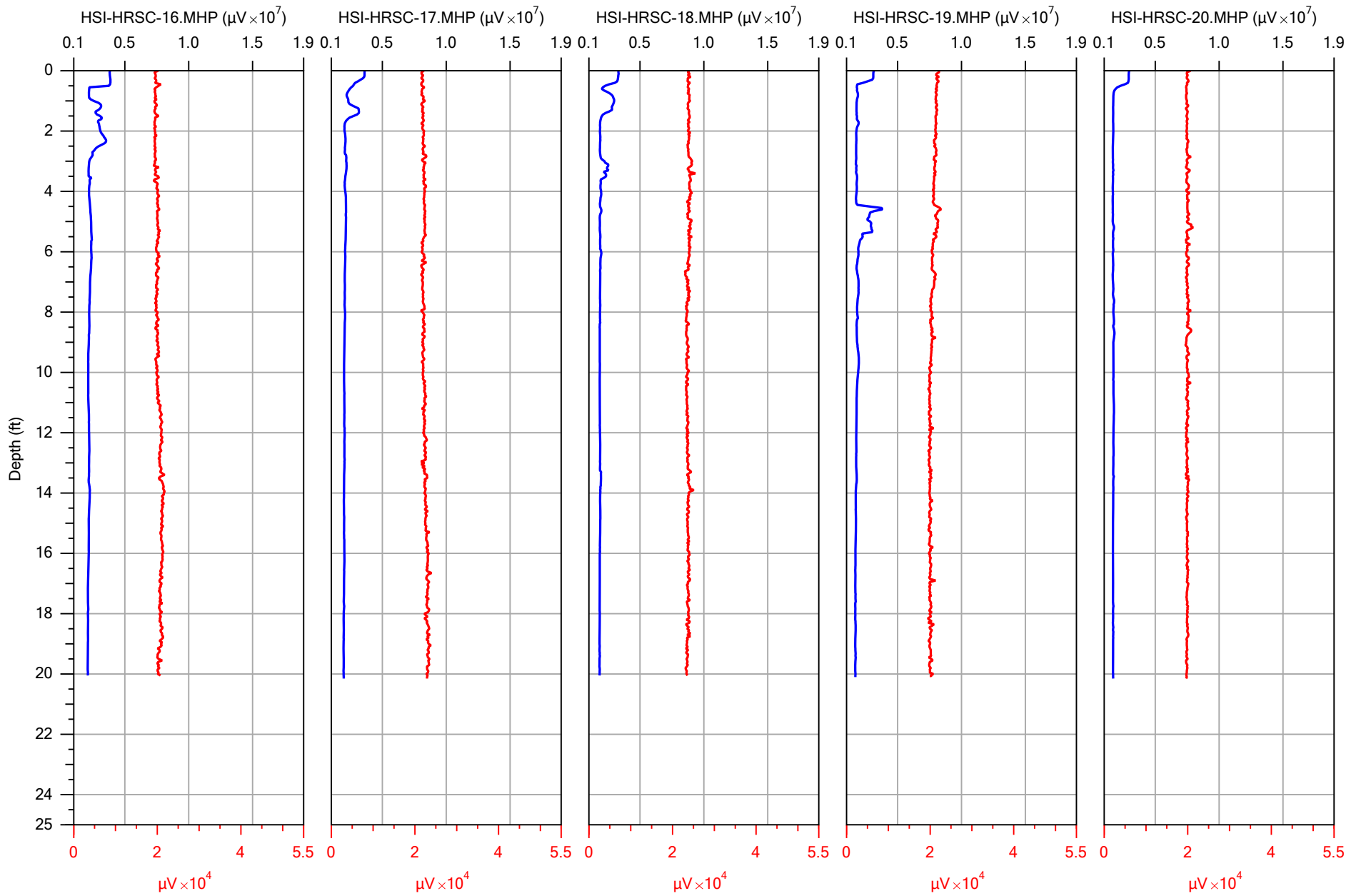
HSI-HRSC-06.MHP	09/08/20
HSI-HRSC-07.MHP	09/08/20
HSI-HRSC-08.MHP	09/08/20
HSI-HRSC-09.MHP	09/08/20
HSI-HRSC-10.MHP	09/08/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

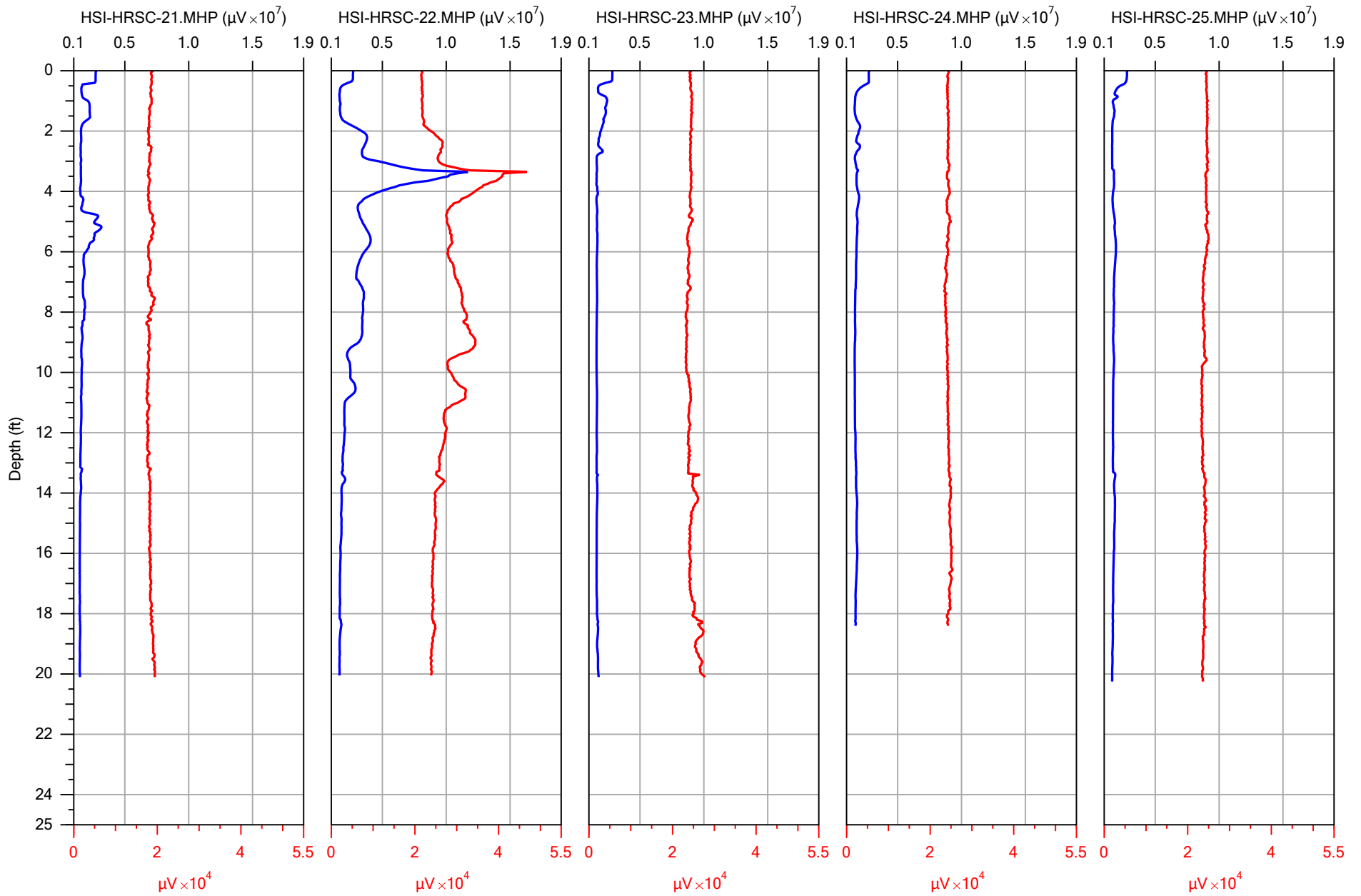
HSI-HRSC-11.MHP	09/08/20
HSI-HRSC-12.MHP	09/08/20
HSI-HRSC-13.MHP	09/09/20
HSI-HRSC-14.MHP	09/09/20
HSI-HRSC-15.MHP	09/09/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

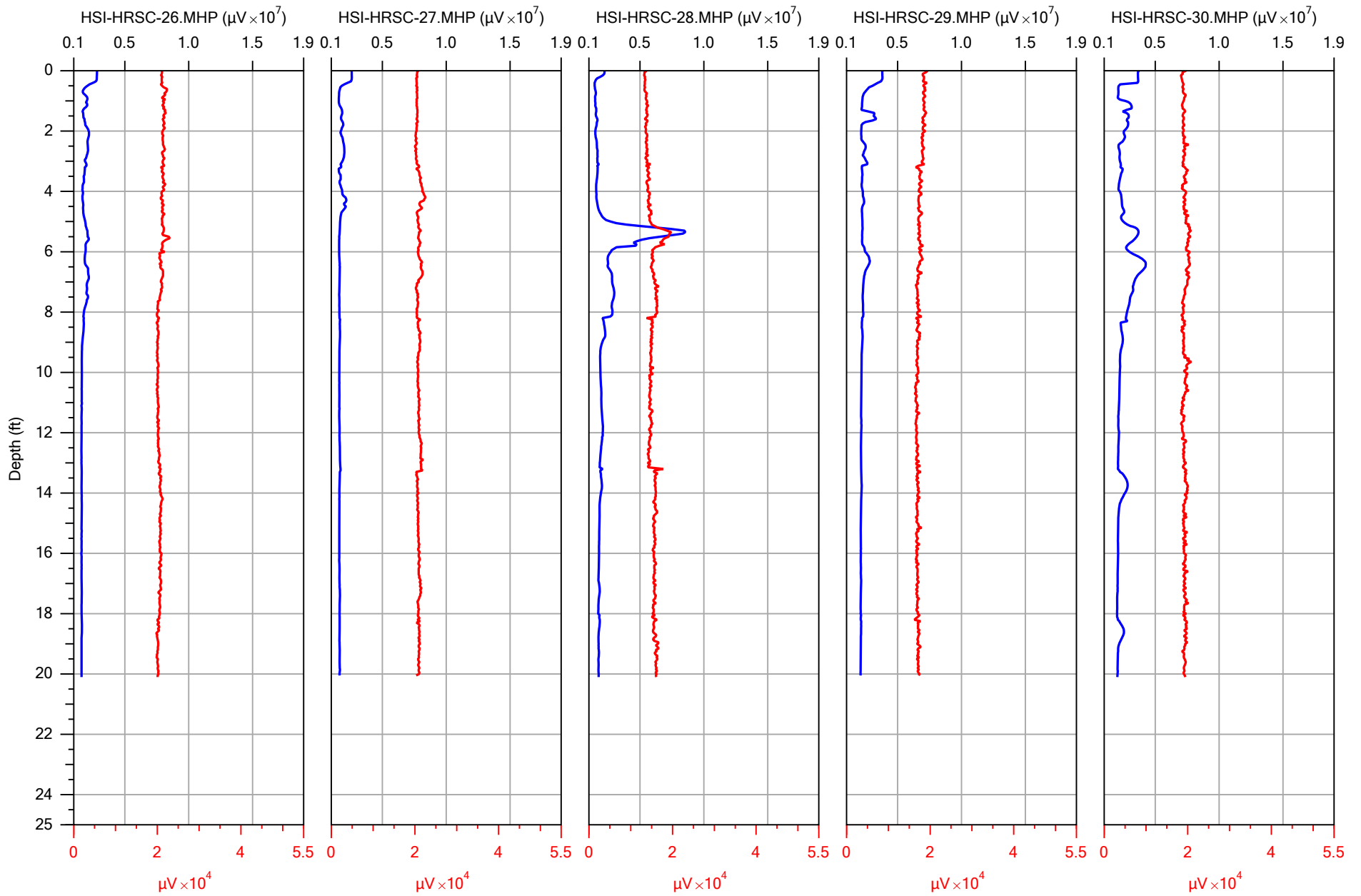
HSI-HRSC-16.MHP	09/09/20
HSI-HRSC-17.MHP	09/09/20
HSI-HRSC-18.MHP	09/09/20
HSI-HRSC-19.MHP	09/09/20
HSI-HRSC-20.MHP	09/09/20



**ECD Max / XSD Max**

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-21.MHP	09/09/20
HSI-HRSC-22.MHP	09/09/20
HSI-HRSC-23.MHP	09/09/20
HSI-HRSC-24.MHP	09/09/20
HSI-HRSC-25.MHP	09/09/20

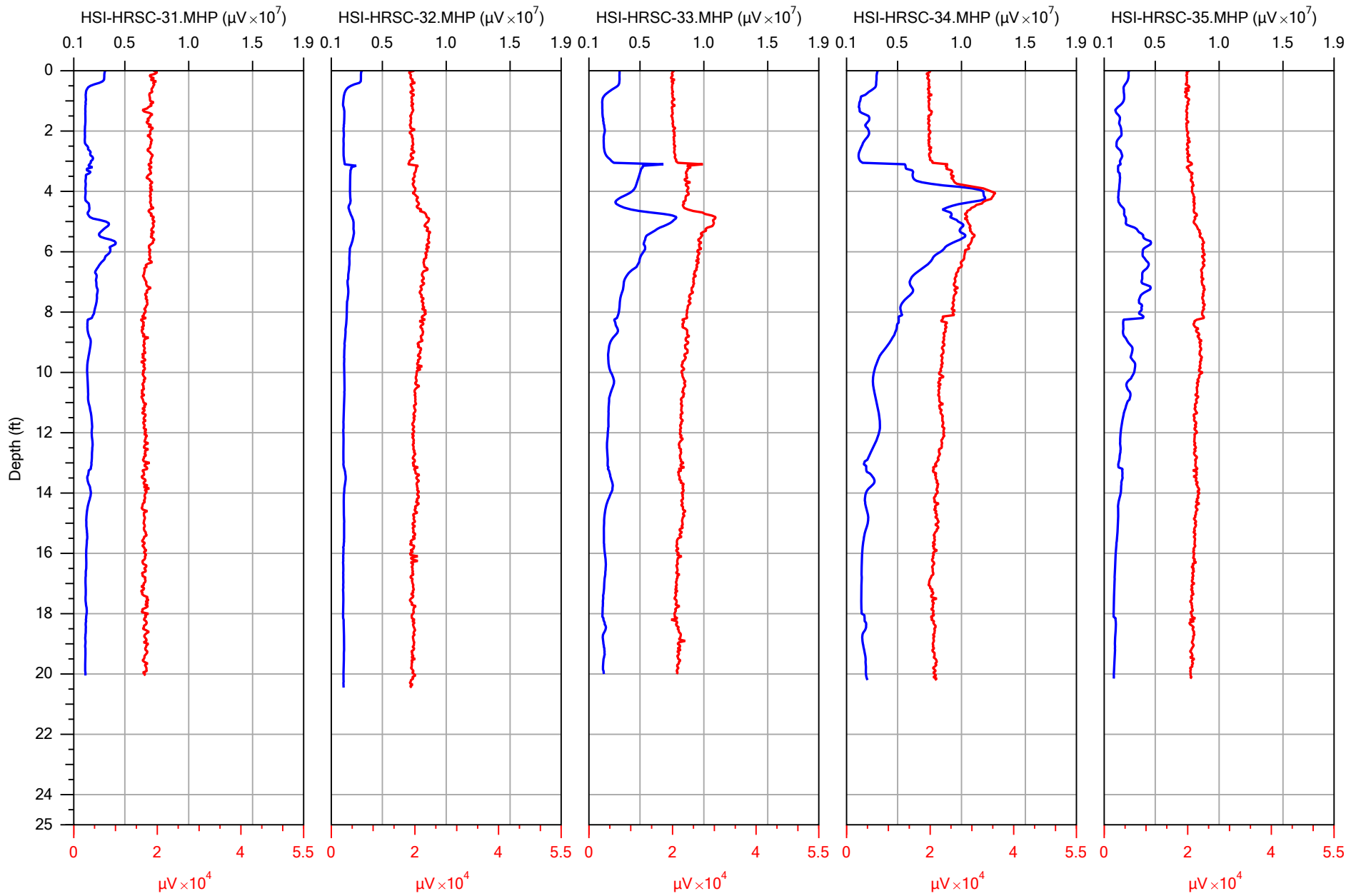


**ECD Max / XSD Max**

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-26.MHP	09/09/20
HSI-HRSC-27.MHP	09/09/20
HSI-HRSC-28.MHP	09/10/20
HSI-HRSC-29.MHP	09/10/20
HSI-HRSC-30.MHP	09/10/20

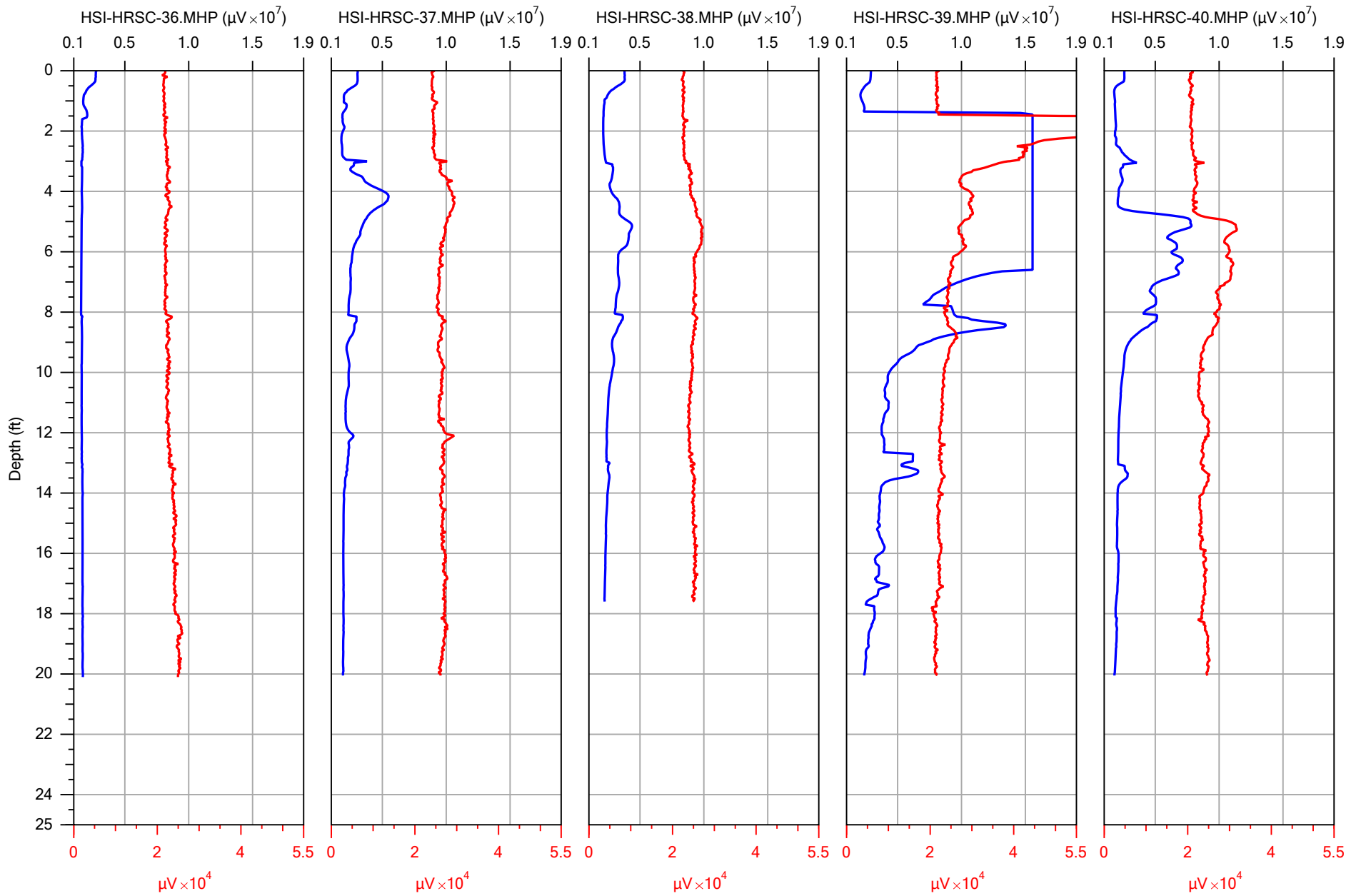




ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

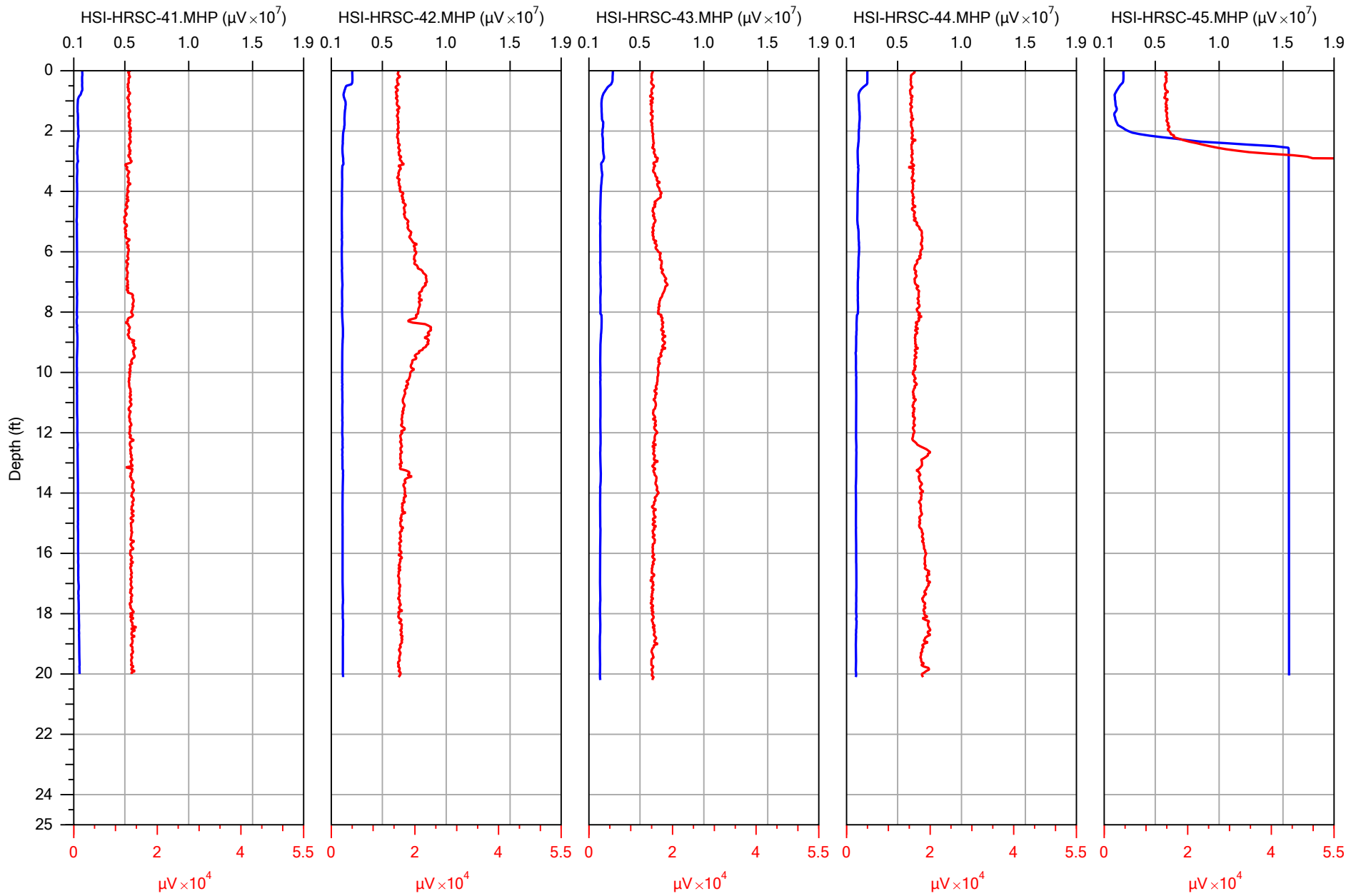
HSI-HRSC-31.MHP	09/10/20
HSI-HRSC-32.MHP	09/10/20
HSI-HRSC-33.MHP	09/10/20
HSI-HRSC-34.MHP	09/10/20
HSI-HRSC-35.MHP	09/10/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

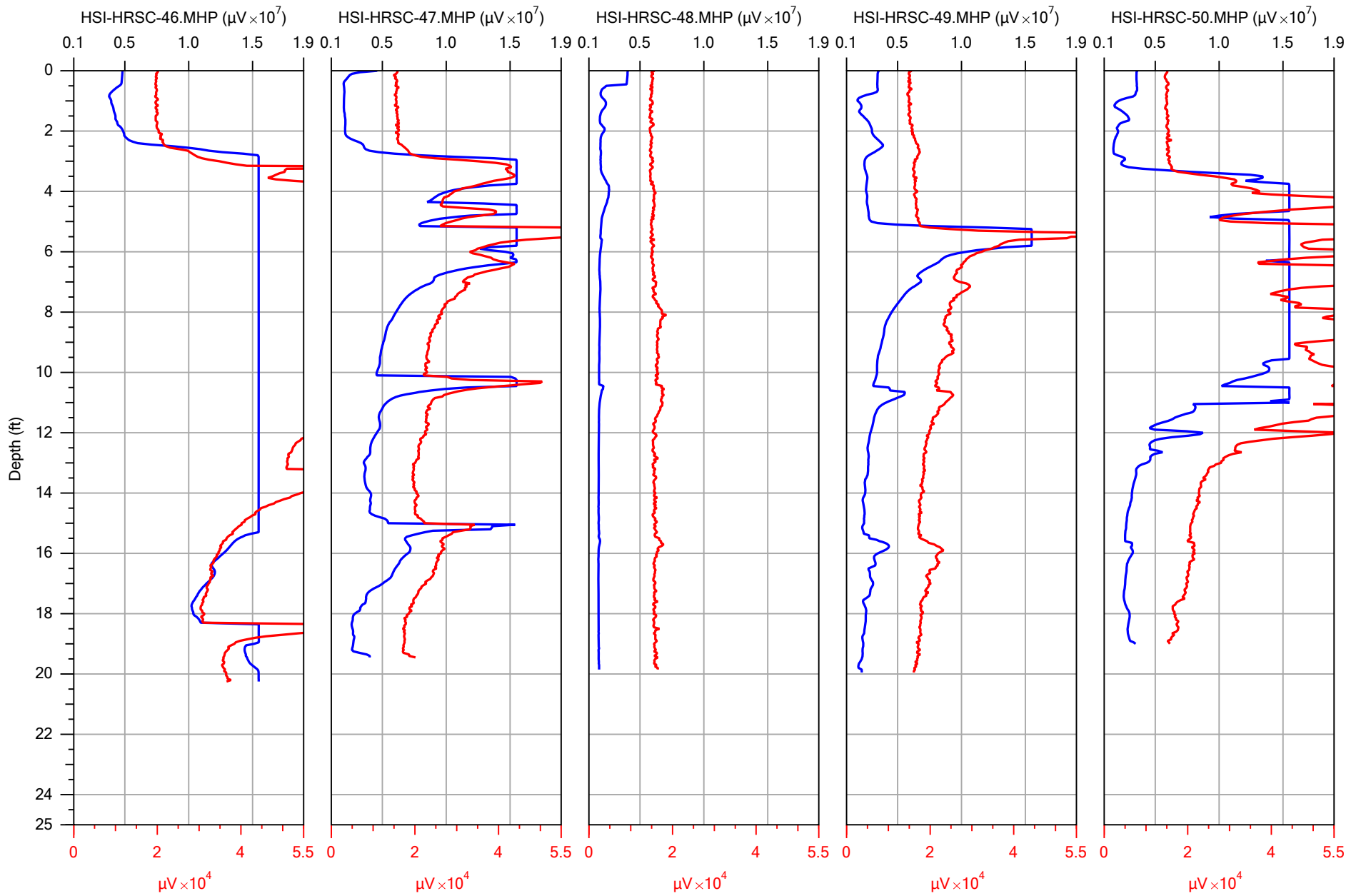
HSI-HRSC-36.MHP	09/10/20
HSI-HRSC-37.MHP	09/10/20
HSI-HRSC-38.MHP	09/10/20
HSI-HRSC-39.MHP	09/10/20
HSI-HRSC-40.MHP	09/10/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-41.MHP	09/11/20
HSI-HRSC-42.MHP	09/11/20
HSI-HRSC-43.MHP	09/11/20
HSI-HRSC-44.MHP	09/11/20
HSI-HRSC-45.MHP	09/11/20

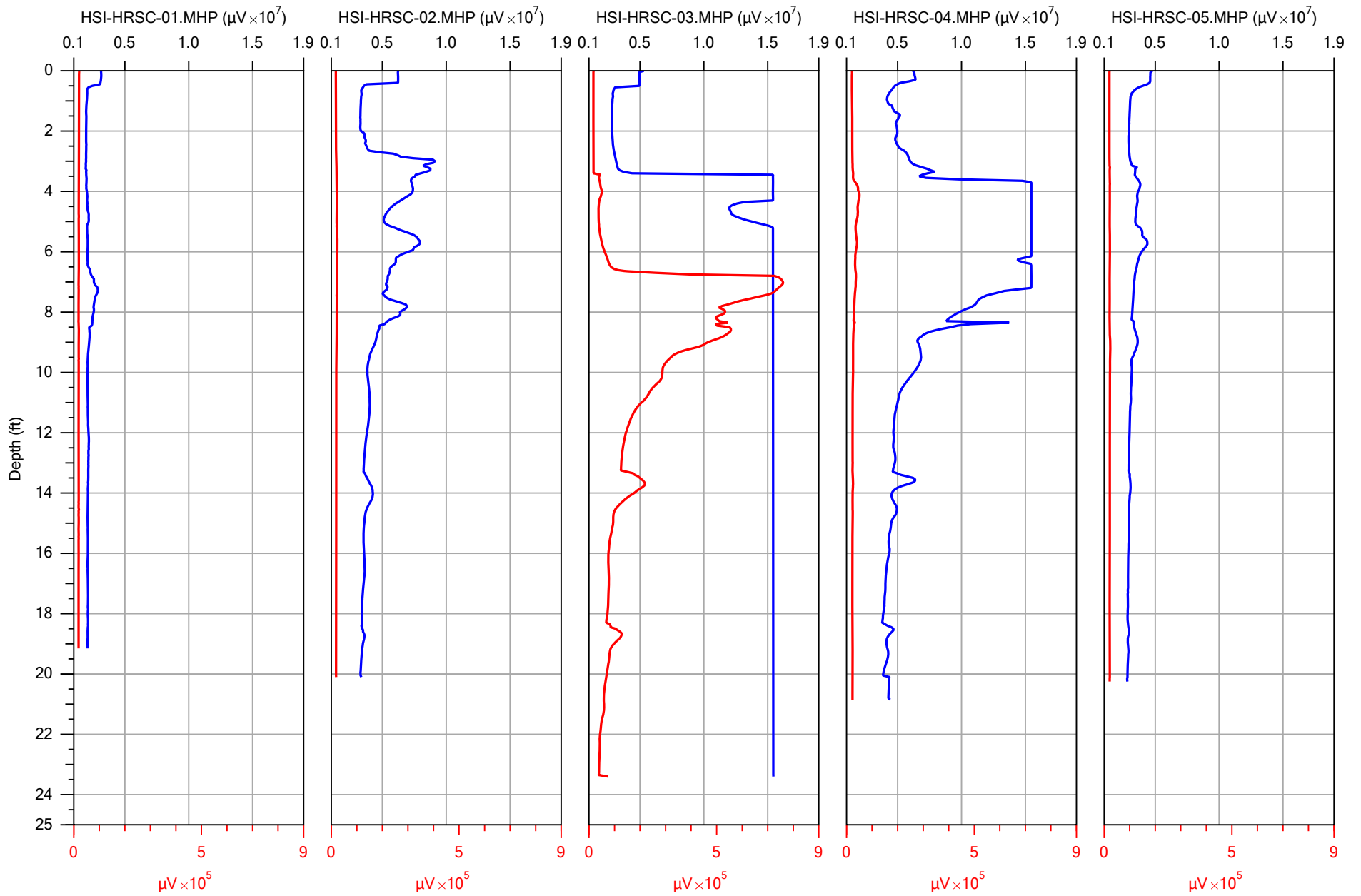


ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-46.MHP	09/11/20
HSI-HRSC-47.MHP	09/11/20
HSI-HRSC-48.MHP	09/11/20
HSI-HRSC-49.MHP	09/11/20
HSI-HRSC-50.MHP	09/11/20

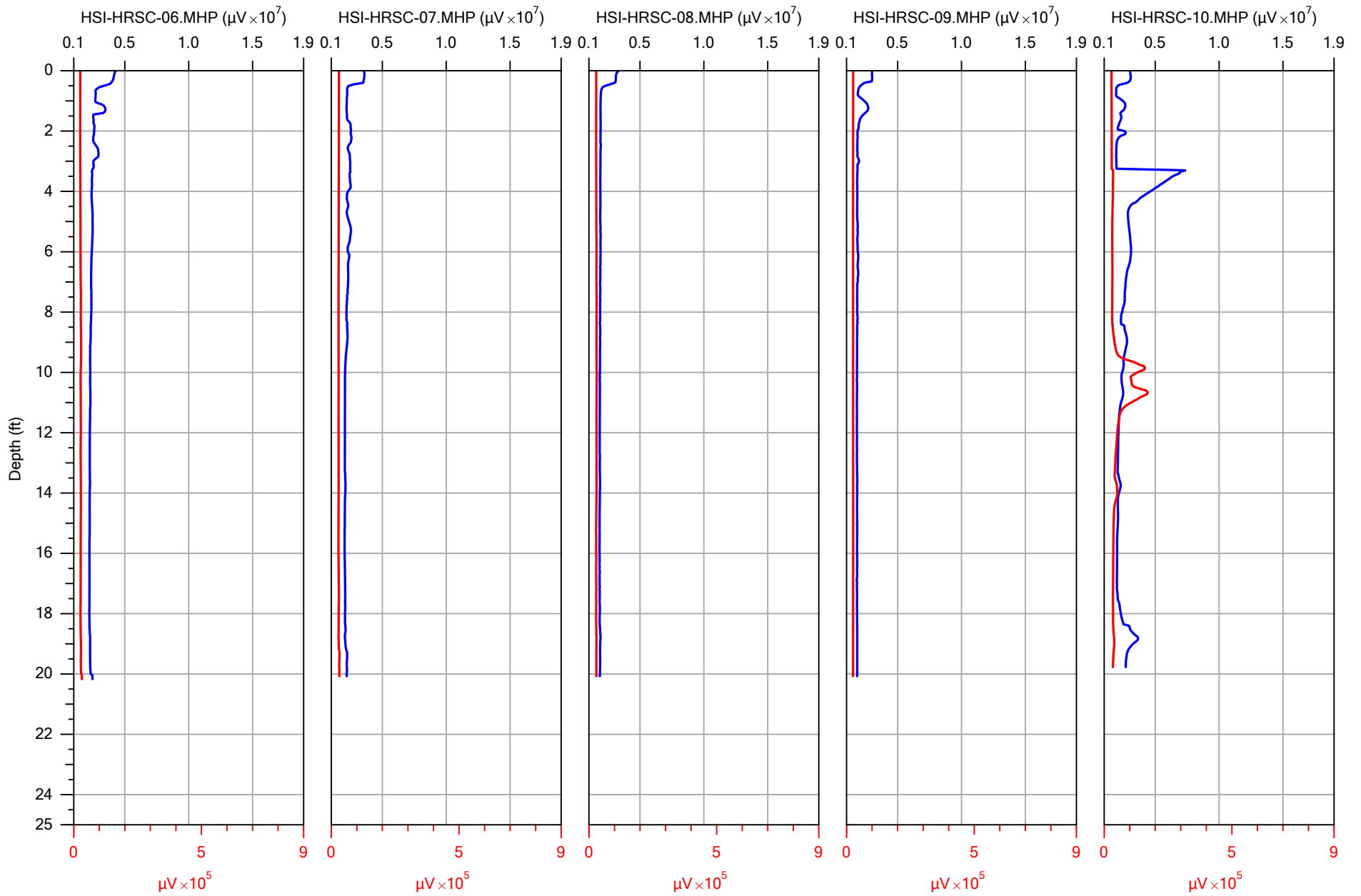
# Point To Point Comparison of ECD and XSD High Scale



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-01.MHP	09/08/20
HSI-HRSC-02.MHP	09/08/20
HSI-HRSC-03.MHP	09/08/20
HSI-HRSC-04.MHP	09/08/20
HSI-HRSC-05.MHP	09/08/20

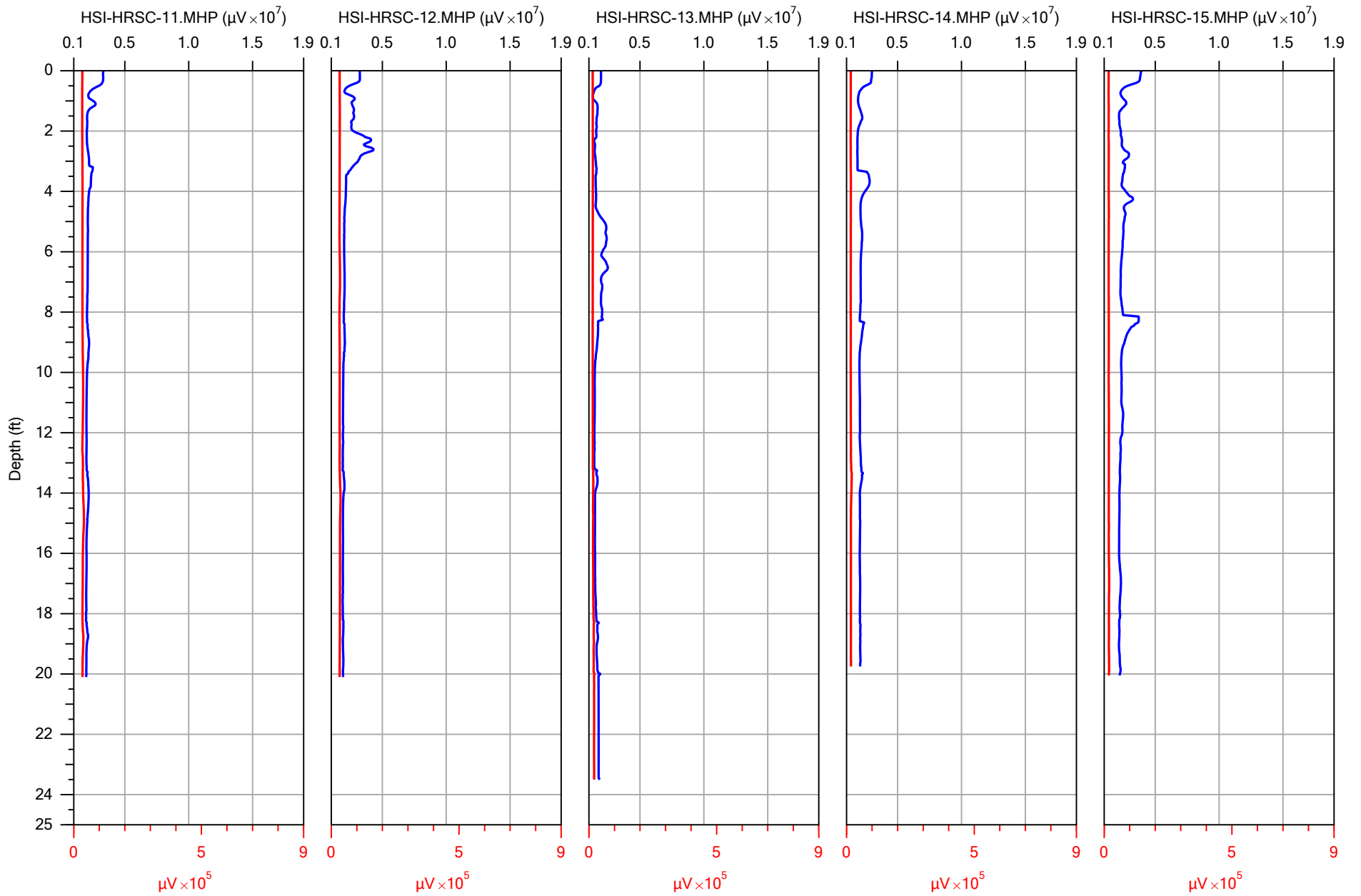


ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-06.MHP	09/08/20
HSI-HRSC-07.MHP	09/08/20
HSI-HRSC-08.MHP	09/08/20
HSI-HRSC-09.MHP	09/08/20
HSI-HRSC-10.MHP	09/08/20

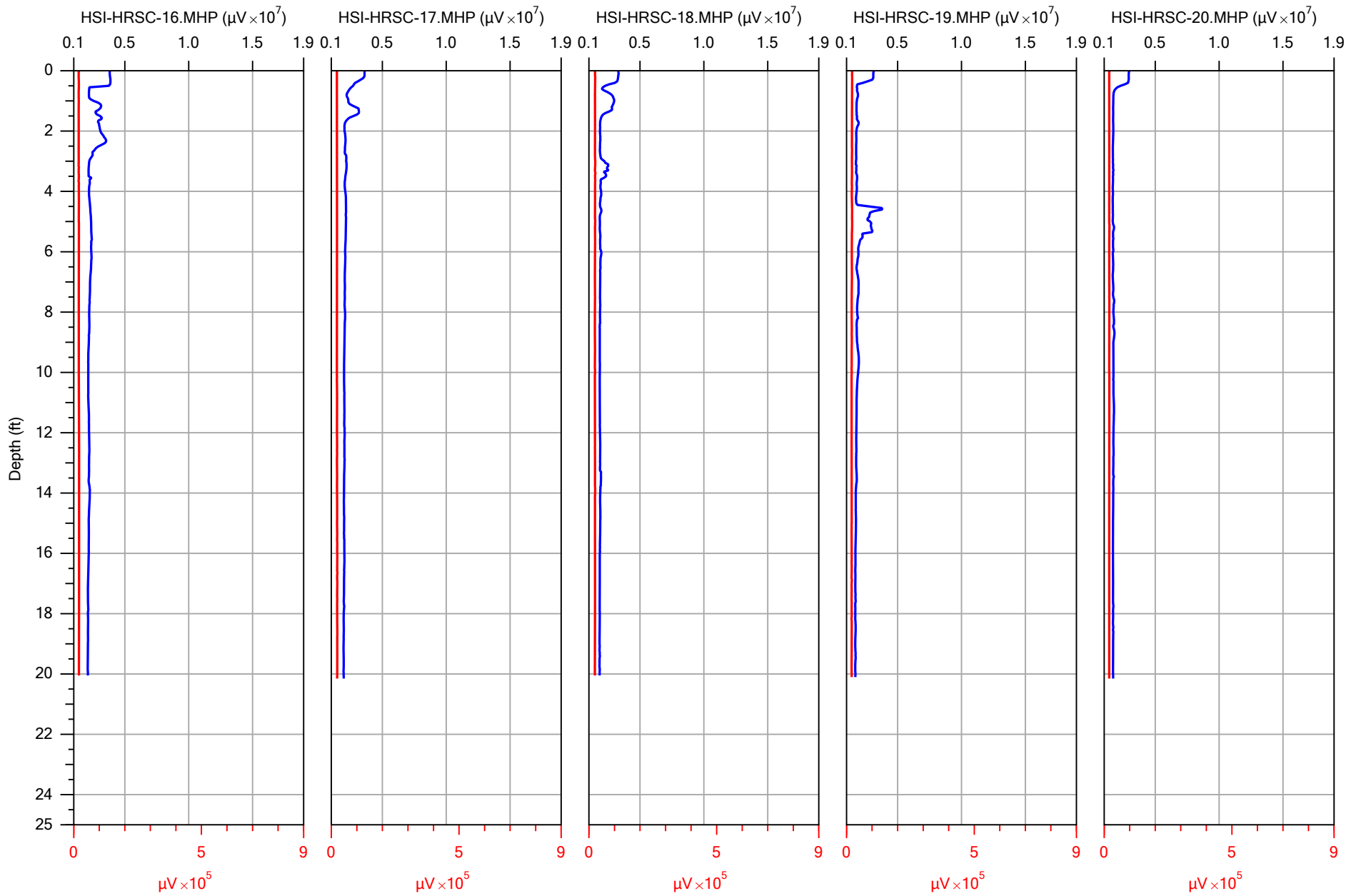




ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

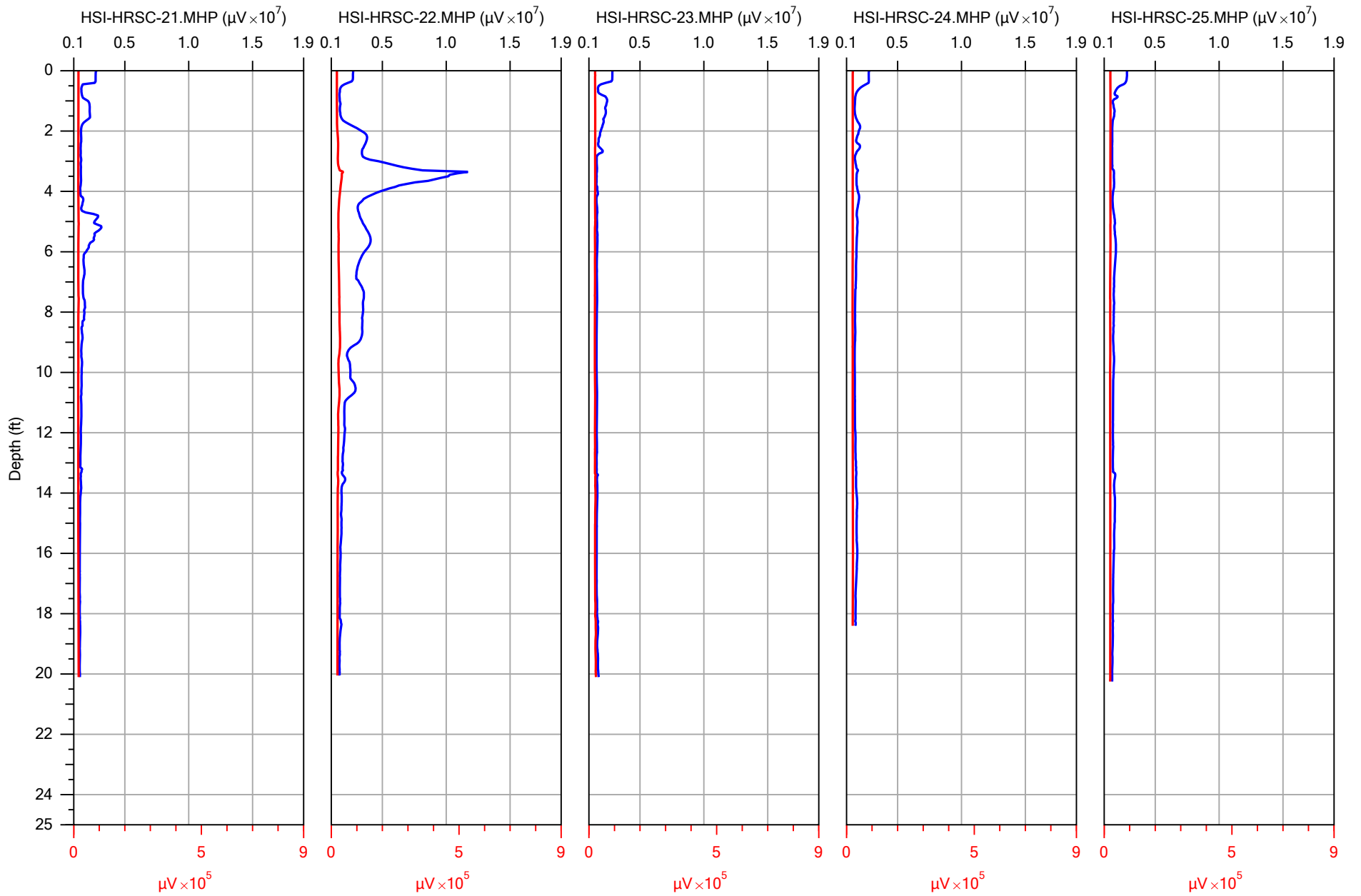
HSI-HRSC-11.MHP	09/08/20
HSI-HRSC-12.MHP	09/08/20
HSI-HRSC-13.MHP	09/09/20
HSI-HRSC-14.MHP	09/09/20
HSI-HRSC-15.MHP	09/09/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

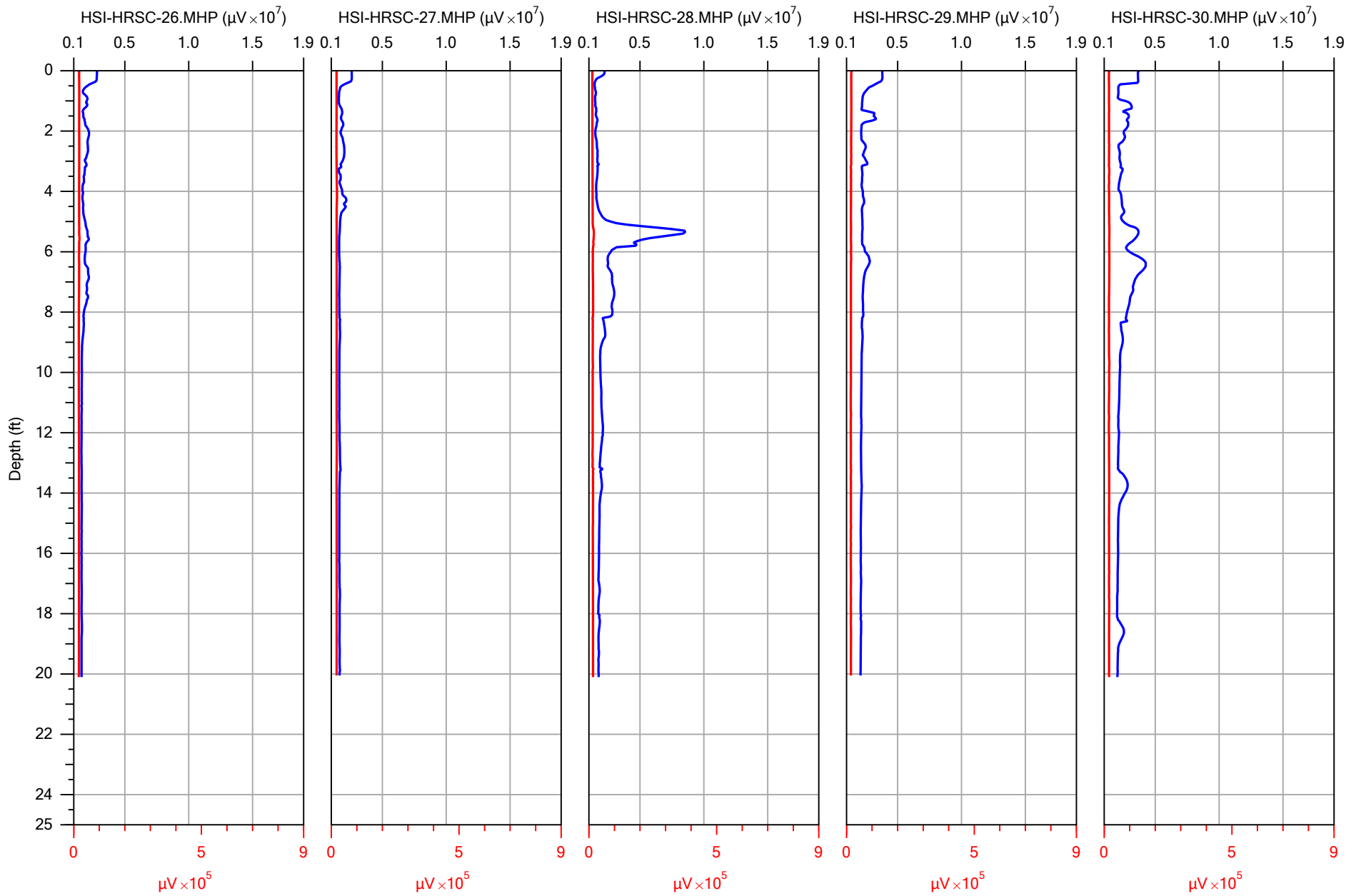
HSI-HRSC-16.MHP	09/09/20
HSI-HRSC-17.MHP	09/09/20
HSI-HRSC-18.MHP	09/09/20
HSI-HRSC-19.MHP	09/09/20
HSI-HRSC-20.MHP	09/09/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

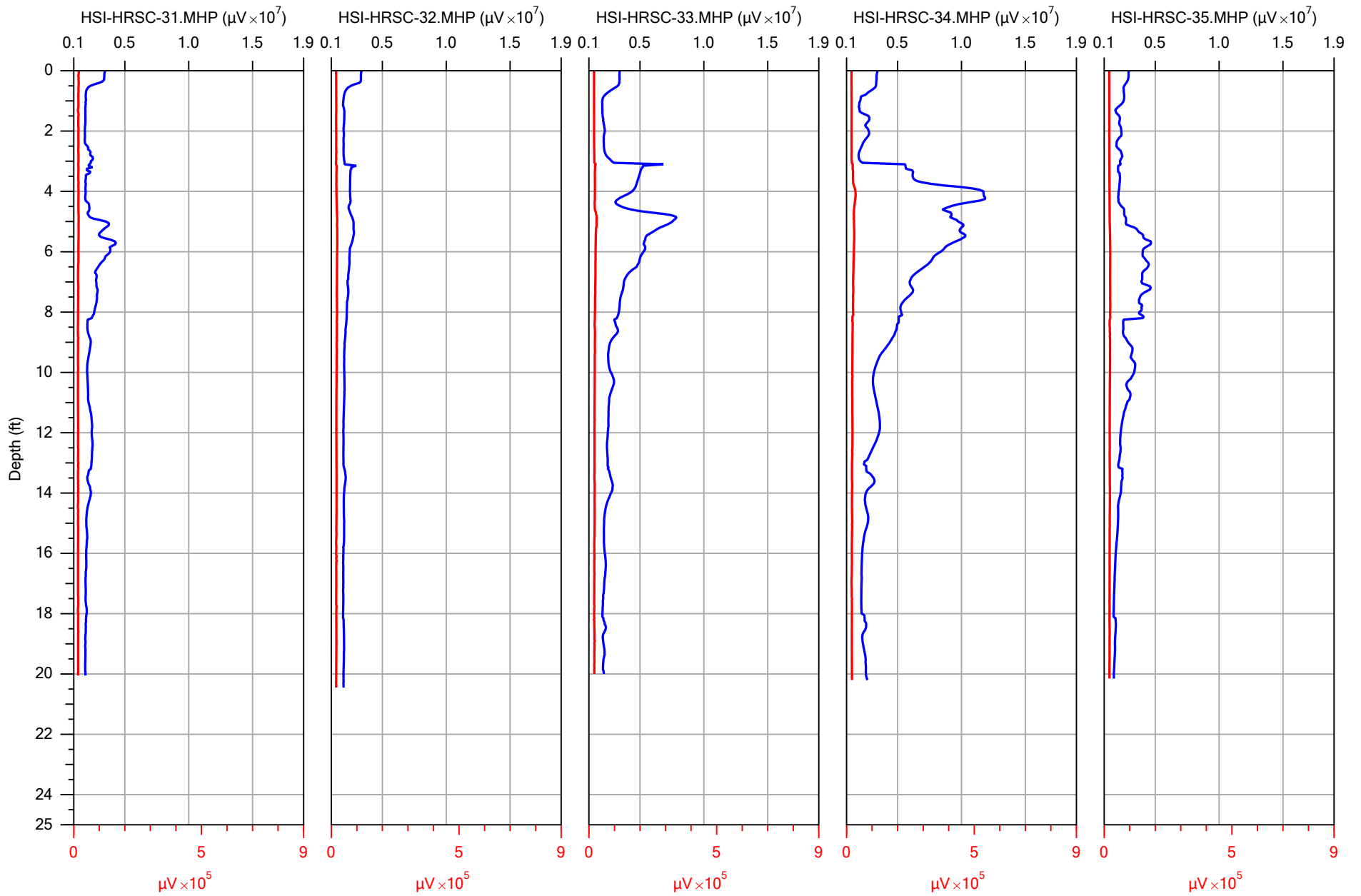
HSI-HRSC-21.MHP	09/09/20
HSI-HRSC-22.MHP	09/09/20
HSI-HRSC-23.MHP	09/09/20
HSI-HRSC-24.MHP	09/09/20
HSI-HRSC-25.MHP	09/09/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

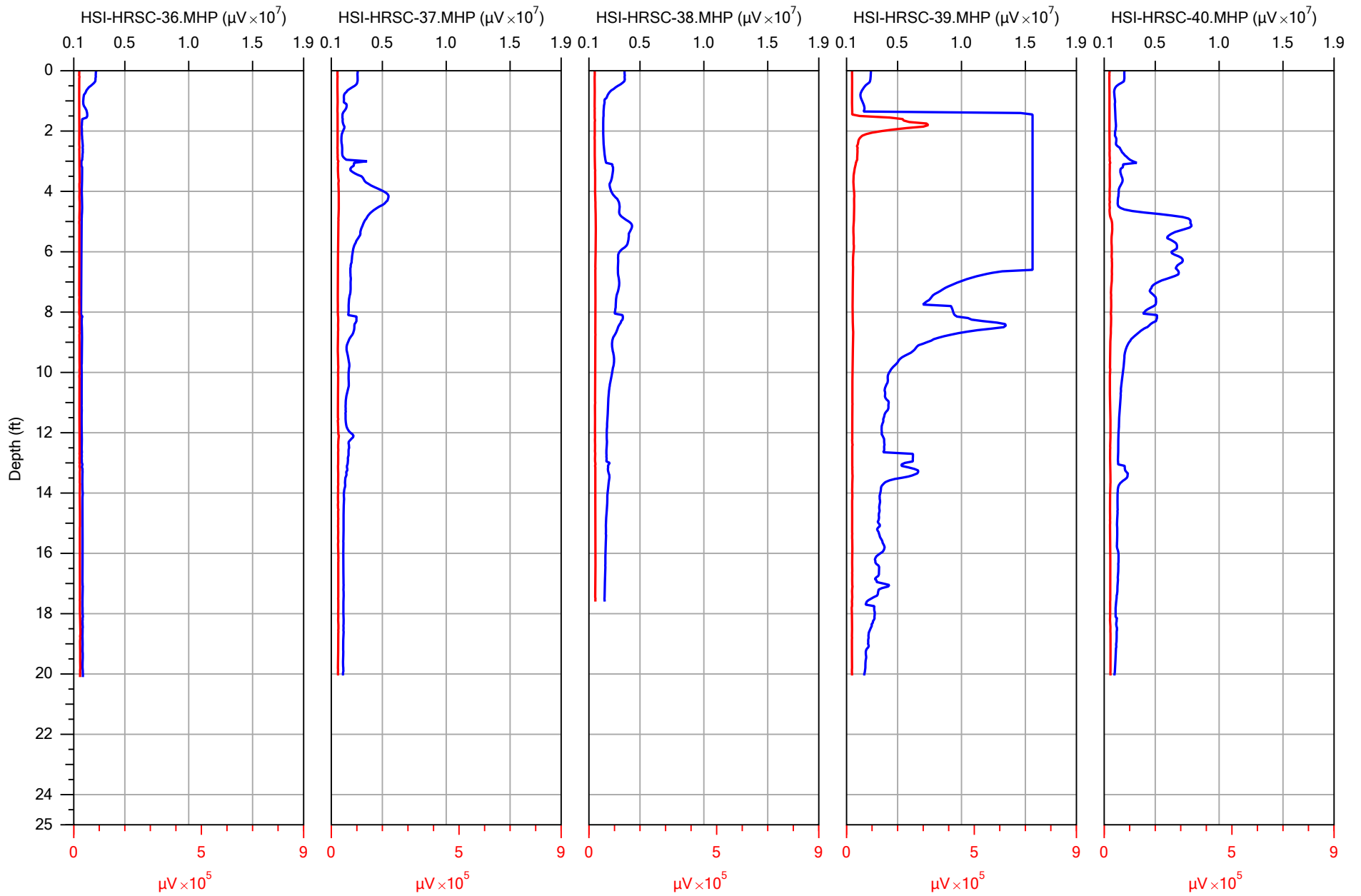
HSI-HRSC-26.MHP	09/09/20
HSI-HRSC-27.MHP	09/09/20
HSI-HRSC-28.MHP	09/10/20
HSI-HRSC-29.MHP	09/10/20
HSI-HRSC-30.MHP	09/10/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

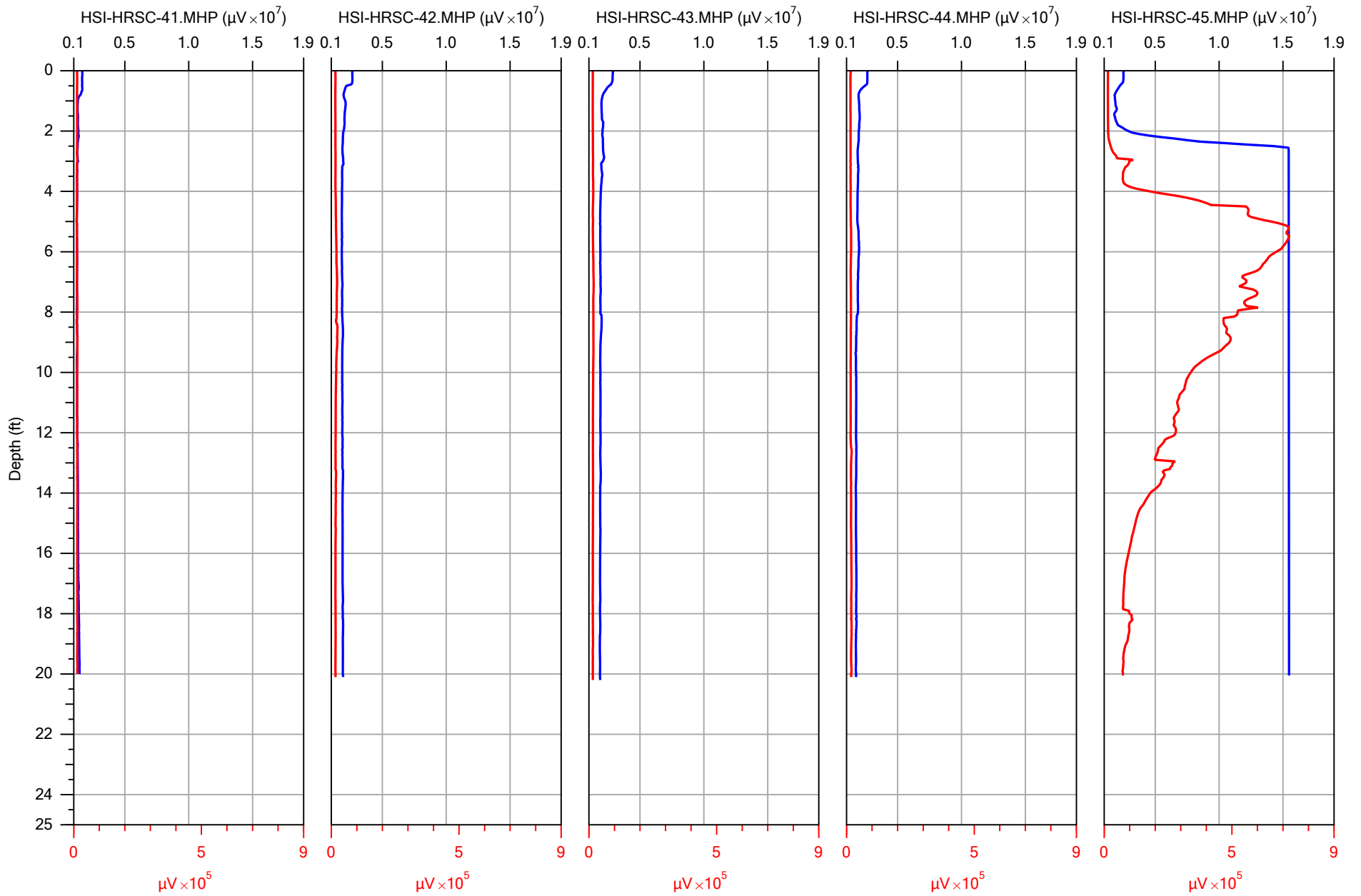
HSI-HRSC-31.MHP	09/10/20
HSI-HRSC-32.MHP	09/10/20
HSI-HRSC-33.MHP	09/10/20
HSI-HRSC-34.MHP	09/10/20
HSI-HRSC-35.MHP	09/10/20



ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-36.MHP	09/10/20
HSI-HRSC-37.MHP	09/10/20
HSI-HRSC-38.MHP	09/10/20
HSI-HRSC-39.MHP	09/10/20
HSI-HRSC-40.MHP	09/10/20

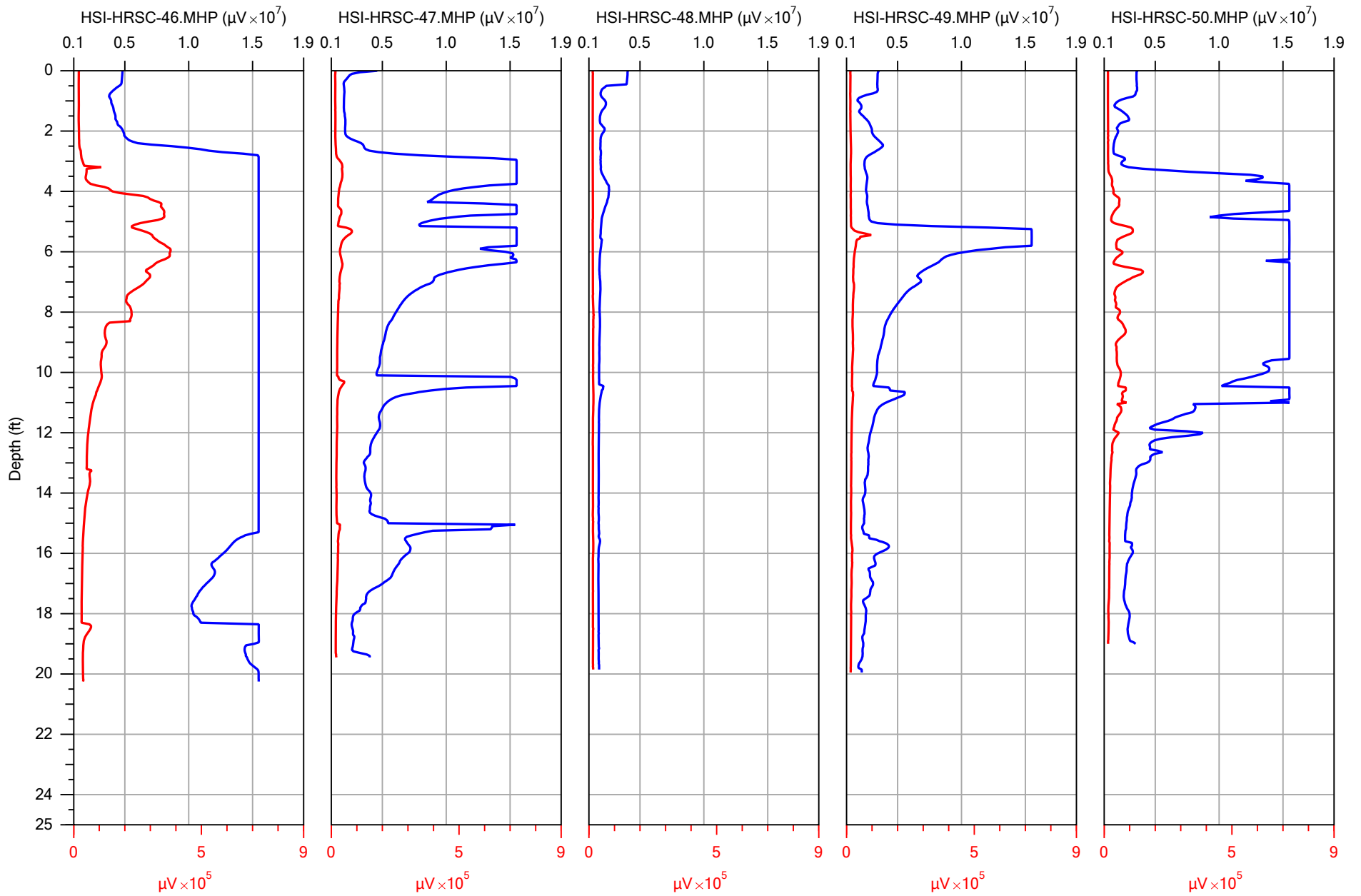


ECD Max / XSD Max

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-41.MHP	09/11/20
HSI-HRSC-42.MHP	09/11/20
HSI-HRSC-43.MHP	09/11/20
HSI-HRSC-44.MHP	09/11/20
HSI-HRSC-45.MHP	09/11/20





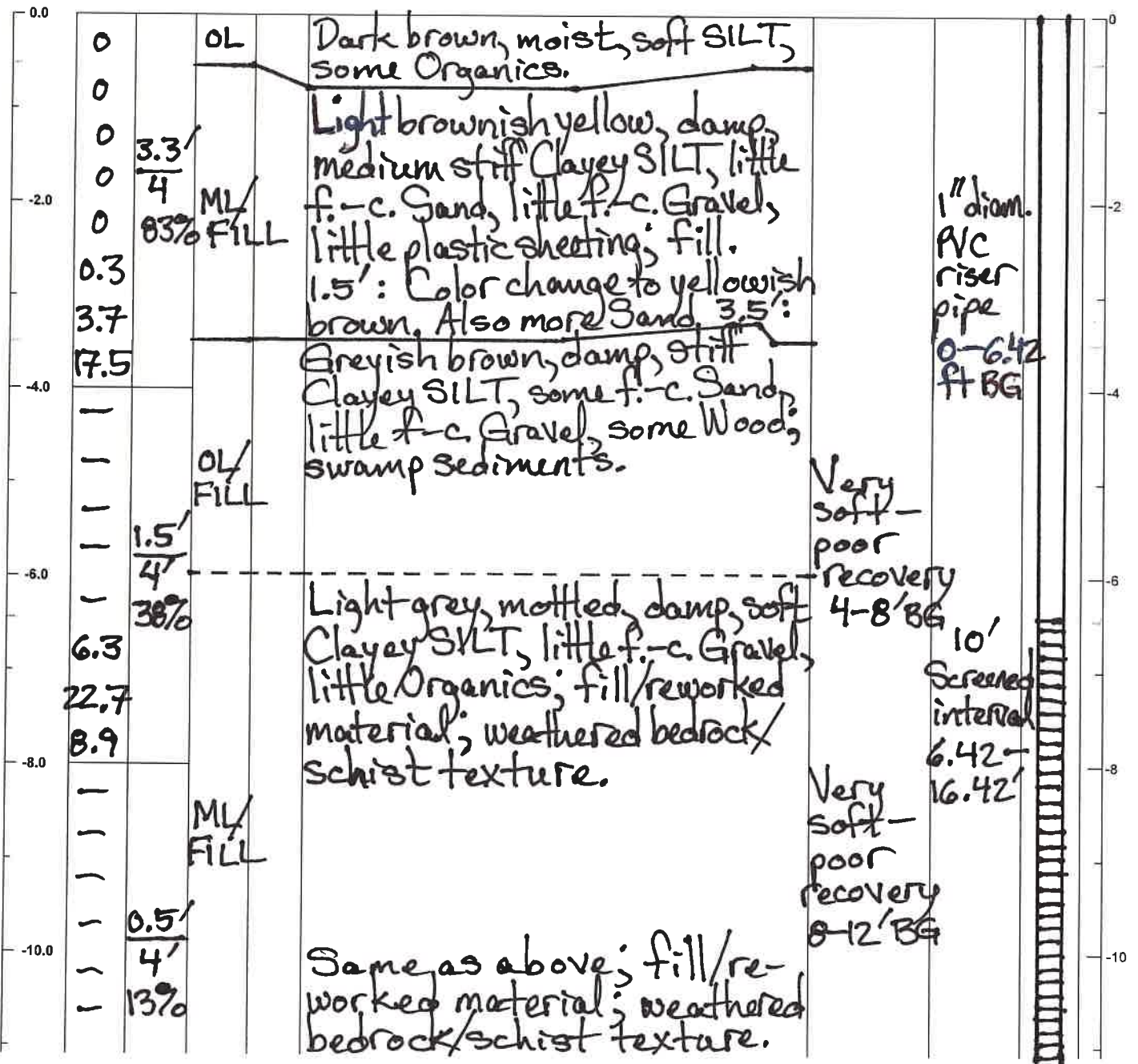
**ECD Max / XSD Max**

Company:	Cascade	Operator:	Nick K
Project ID:	2022001119	Client:	tidewater

HSI-HRSC-46.MHP	09/11/20
HSI-HRSC-47.MHP	09/11/20
HSI-HRSC-48.MHP	09/11/20
HSI-HRSC-49.MHP	09/11/20
HSI-HRSC-50.MHP	09/11/20

**ATTACHMENT B**  
**GROUNDWATER SAMPLE SOIL BORING LOGS**

<b>PROJECT</b> CG-09-0423.10		<b>TEMP. WELL CONSTR. LOG</b> HSI-GW-01		<b>PAGE 1 OF 2</b>			
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 9/28/20				
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 9/28/20 12:10				
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore			WELL DIAMETER: 2"		WELL DEPTH: 16.42'		
DEPTH TO GW (ft) FROM BG: 12.42		DATE: 9/28/20		BORING DIAMETER: 2"			
					BORING DEPTH: 20'		
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG




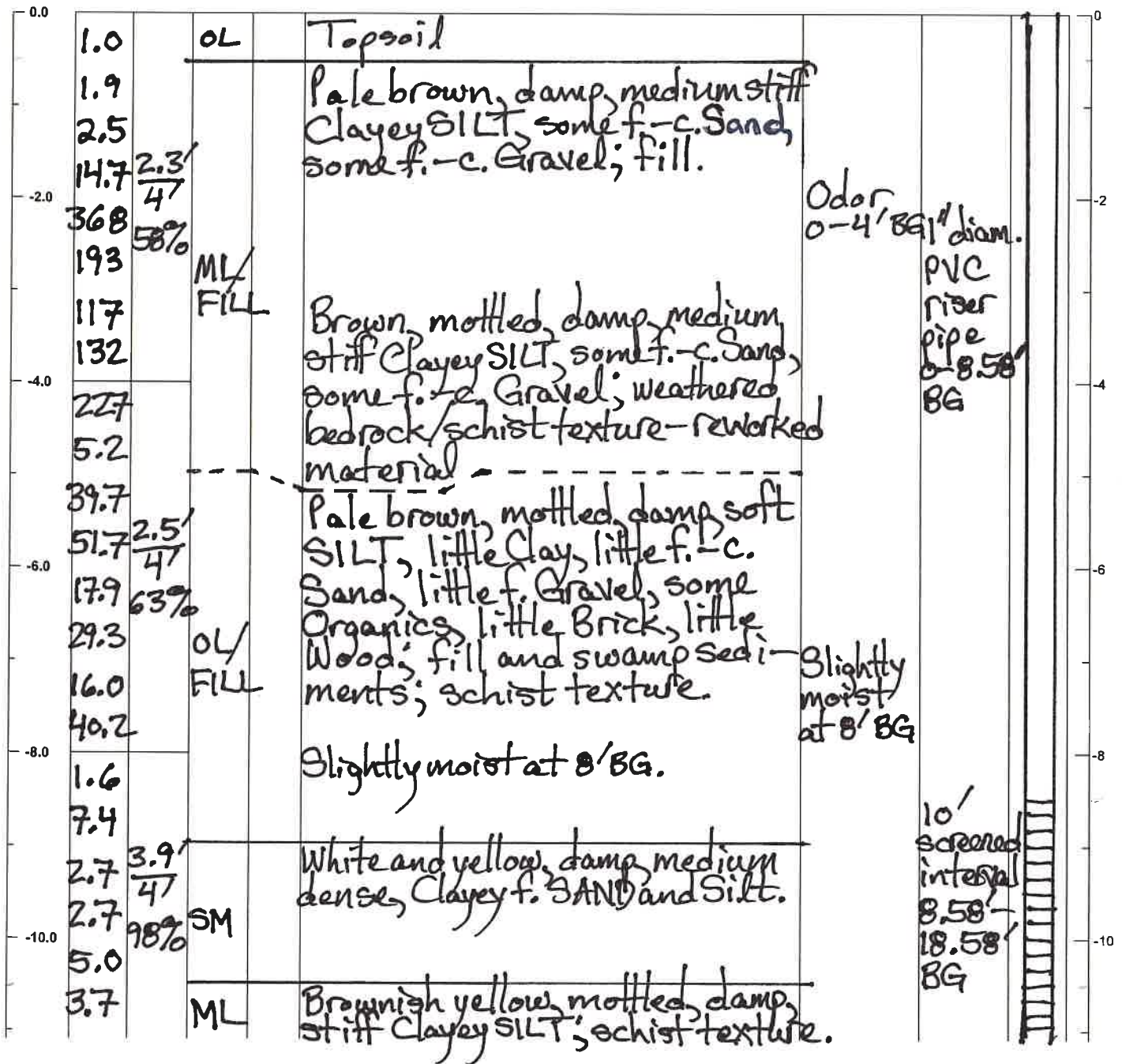
DEPTH (ft)	PID READING (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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-12.0	3.8 3.6		ML/ FILL		Light gray, mottled, damp soft clayey SILT, little f-c Gravel; fill/reworked material; weathered bedrock texture.	WL = 12.42' BG		
-14.0	0.6 10.9 2.7 16.3	4' 4' 100%			Yellow, mottled, wet, medium stiff clayey SILT, some f. Sand; weathered bedrock texture.	Wet 13-15' BG		
-16.0	9.7 8.8 1.9 3.6				Yellow, mottled, damp, medium stiff clayey SILT, little f. Sand; weathered bedrock/schist texture.			
-18.0	6.2 4.0 4.7 1.2 4.0	4' 4' 100%	ML		Yellow, mottled, damp stiff clayey SILT, little f. Sand; weathered bedrock/schist texture.			
-20.0	7.3 4.1 1.5							
-22.0								
-24.0								

11:55 Collected groundwater sample HSI-GW-01.

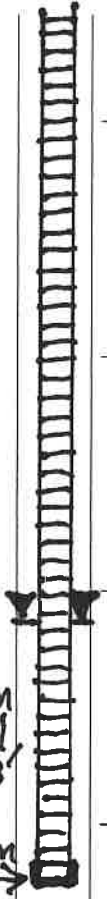
Bottom of well 16.42'  
Bottom cap.  
Bottom 3.58' of pore hole caved.


PROJECT CG-09-0423.10		TEMP. WELL CONSTR. LOG HSI-GW-02		PAGE 1 OF 2			
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation		DATE STARTED: 9/28/20					
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)		DATE/TIME COMPLETED: 9/28/20 13:15					
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines					
DRILLING METHOD: Geoprobe 6620DT - DPT		PROJECT MANAGER: Nancy Love					
SAMPLING METHOD: Macrocore		WELL DIAMETER: 2"					
DEPTH TO GW (ft) FROM BG: 16.28		DATE: 9/28/20		BORING DIAMETER: 2"			
				WELL DEPTH: 18.58'			
				BORING DEPTH: 20'			
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG

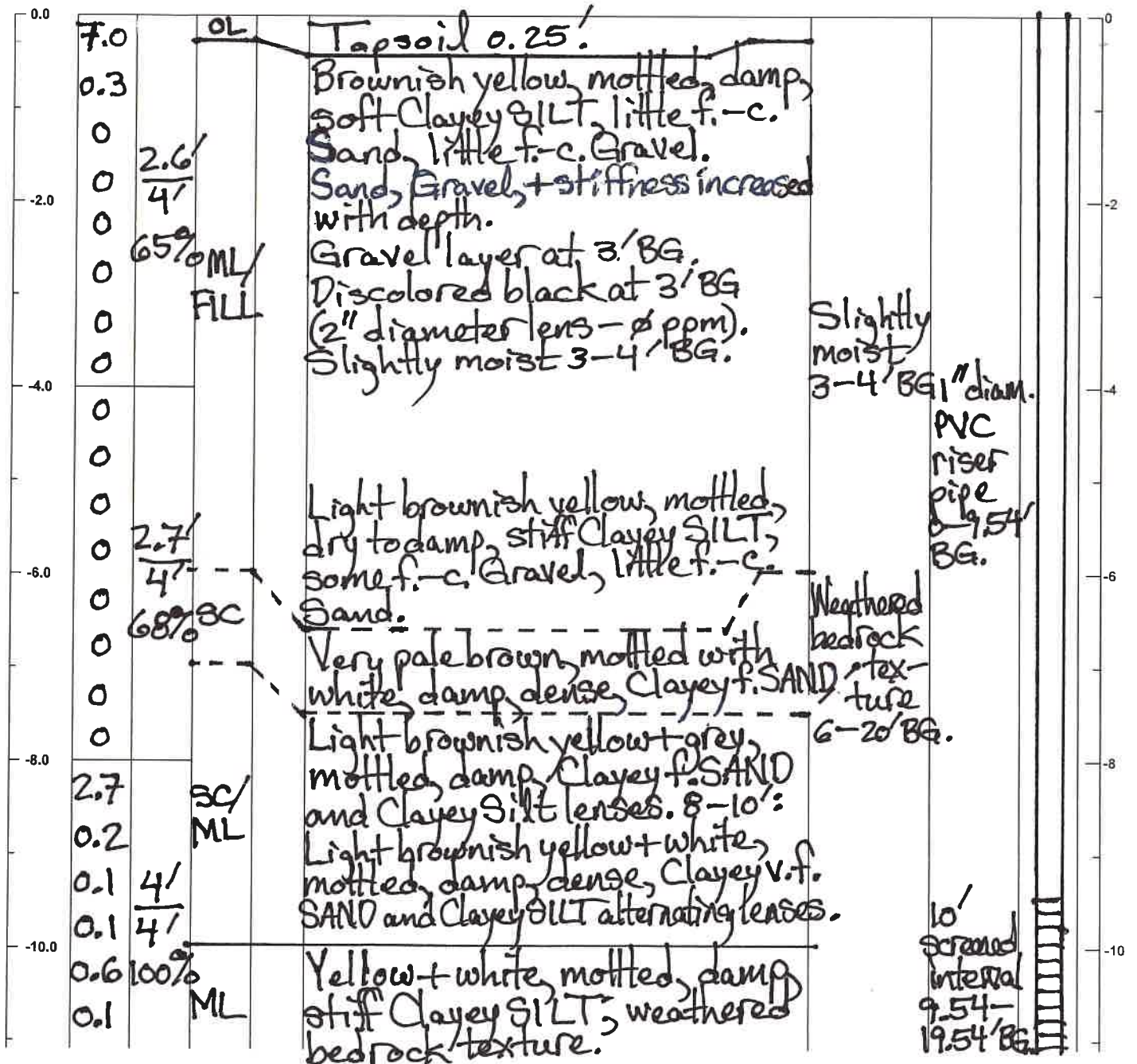




-12.0	6.3 5.8 1.7 13.0				Brownish yellow, mottled, damp, stiff Clayey SILT, some weathered bedrock seams.		
			ML				
-14.0	4.9 9.2 8.5 1.2	3.6' 4' 90%			Pale yellow, mottled, damp, stiff SILT, some f. Sand, weathered bedrock.		
	2.5 0.4		SM		White, damp, dense, f. SAND and Silt; weathered bedrock.		
-16.0	11.2 29.6 10.5 14.4				Pale yellow, white, and pale brown, mottled, moist, stiff SILT, little f. Sand; weathered bedrock. Damp 17-18'.	Moist, 16-17' WL = 16.28' BG	Bottom of well, 18.58' BG, Bottom cap →
-18.0	8.9 3.7 1.7 0.9	4' 4' 100%	ML		Damp 19-20' BG.	Moist, 18-19' BG	
-20.0					13:20 Collected groundwater sample HSI-GW-02	Bottom 1.42' of borehole caved in.	
-22.0							
-24.0							



<b>PROJECT</b> CG-09-0423.10		<b>TEMP. WELL CONSTR. LOG HSI-GW-03</b>		<b>PAGE 1 OF 2</b>			
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation		DATE STARTED: 9/28/20					
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)		DATE/TIME COMPLETED: 9/28/20 16:00					
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines					
DRILLING METHOD: Geoprobe 6620DT - DPT		PROJECT MANAGER: Nancy Love					
SAMPLING METHOD: Macrocore		WELL DIAMETER: 2"		WELL DEPTH: 19.54'			
DEPTH TO GW (ft) FROM BG: 14.54'		DATE: 9/28/20		BORING DIAMETER: 2"			
				BORING DEPTH: 20'			
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG

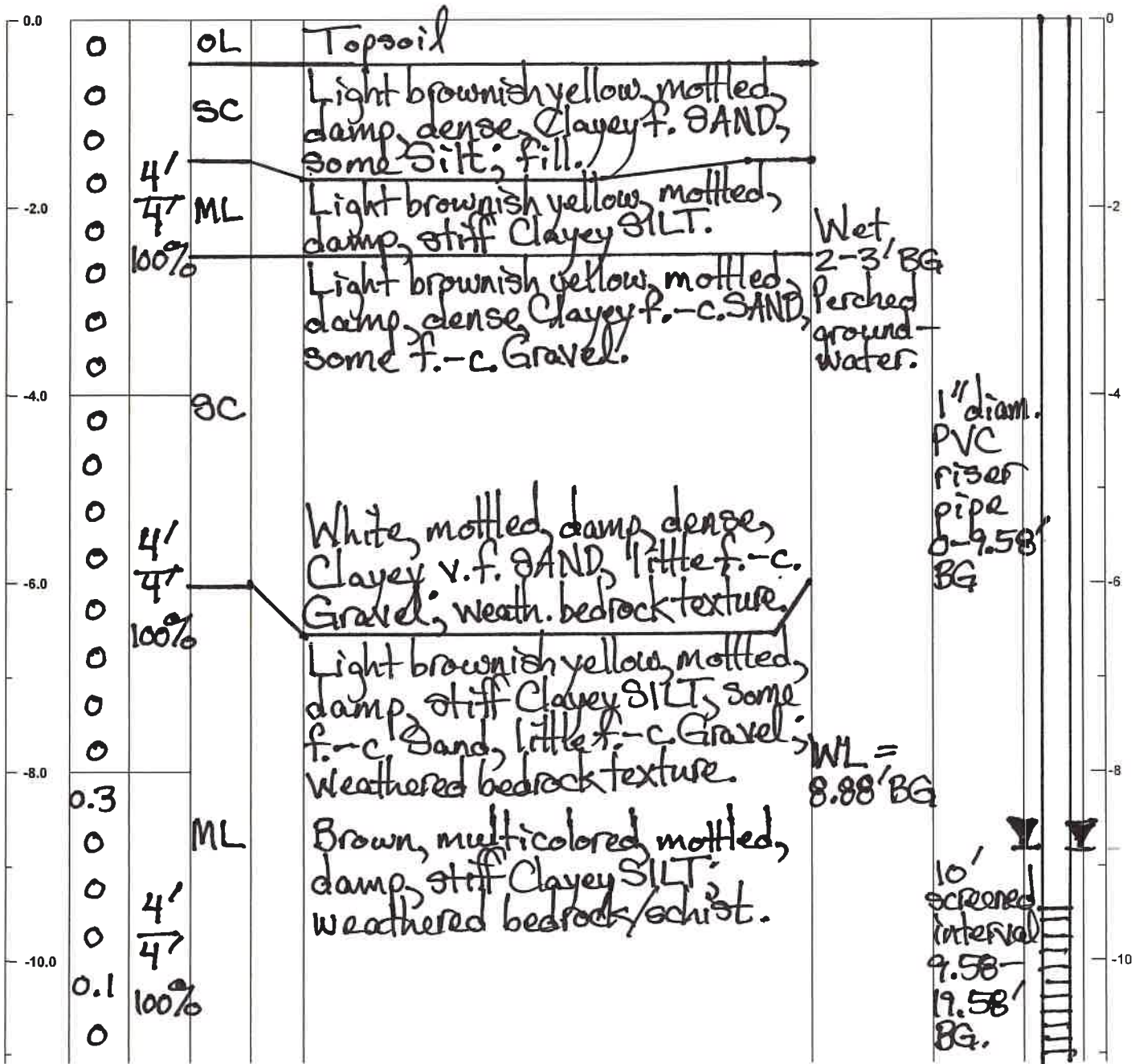




DEPTH (ft)	PID READING (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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0							
0			ML				
-12.0	0.5				Grey, mottled, damp, stiff Clayey SILT, little f.-c. Gravel; weathered bedrock texture.		
	2.0						
	0.1						
	0.1	4'			Yellow, damp, dense Clayey f. SAND, little f.-c. Rock Fragments, little Mica; weathered bedrock	WL = 14.54' BG	
-14.0	0.1	47'					
	0	100%					
	0.1						
	0.5						
	0.2						
-16.0	0		SC		Weak red + white, damp, dense Clayey SAND, little f.-c. Rock Fragments, little Mica; weathered bedrock.	Moist 16.75' - 17.25' BG.	
	1.6						
	0.9						
	0.1	4'					
-18.0	0	47'					
	0.6	100%					
	0.2						
	0						
					Color 19.5 - 20': deep red to burgundy.		Bottom of Well 19.54' Bottom cap
-20.0							
					15:50 Collected groundwater sample HSI-GW-03		
-22.0							
-24.0							

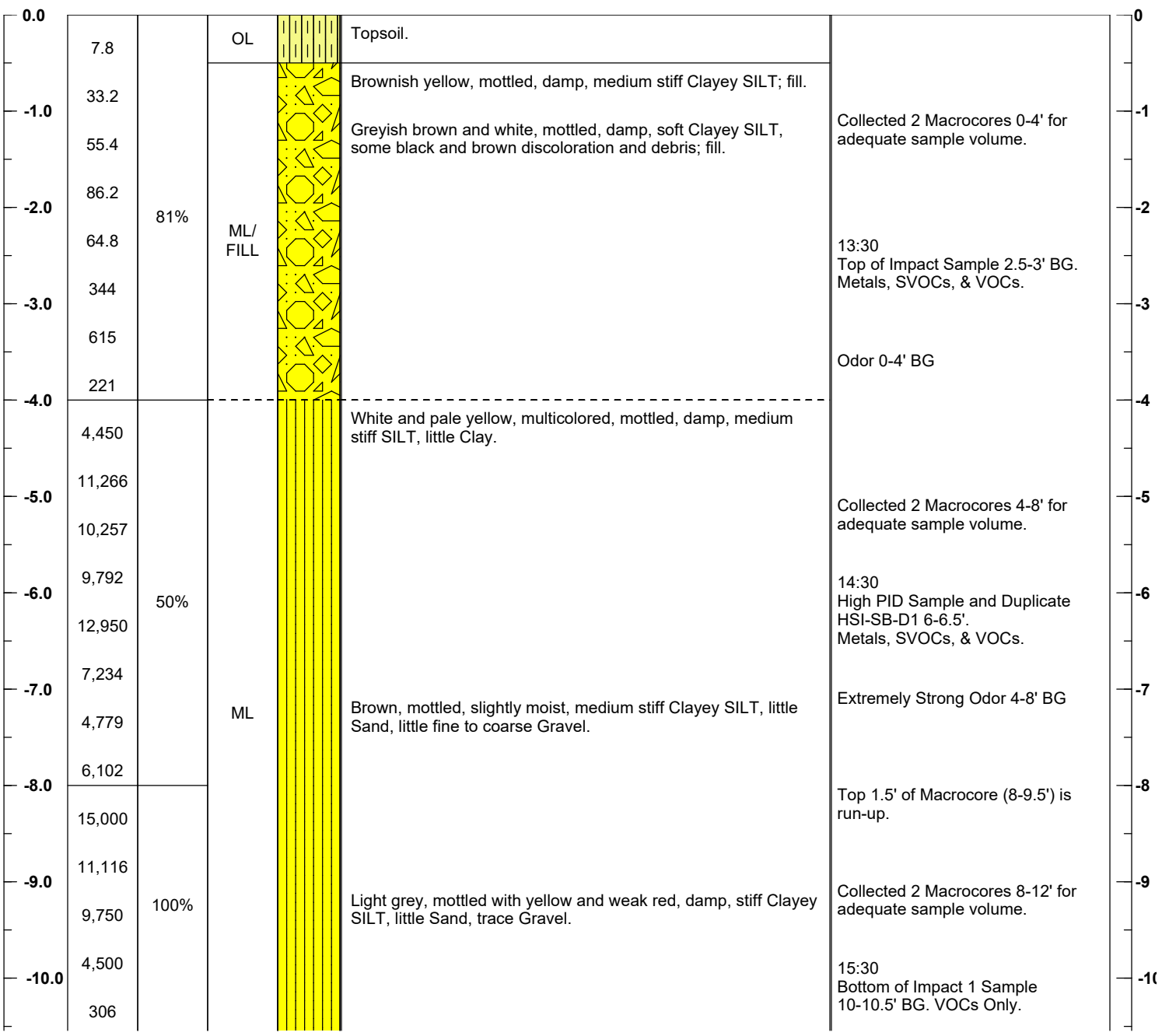
<b>PROJECT</b> CG-09-0423.10		<b>TEMP. WELL CONSTR. LOG</b> HSI-GW-04		<b>PAGE 1 OF 2</b>			
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 9/28/20				
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 9/28/20 15:00				
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore			WELL DIAMETER: 2"		WELL DEPTH: 19.58'		
DEPTH TO GW (ft) FROM BG: 8.88		DATE: 9/28/20	BORING DIAMETER: 2"		BORING DEPTH: 20'		
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG





**ATTACHMENT C**  
**SOIL SAMPLE SOIL BORING LOGS**

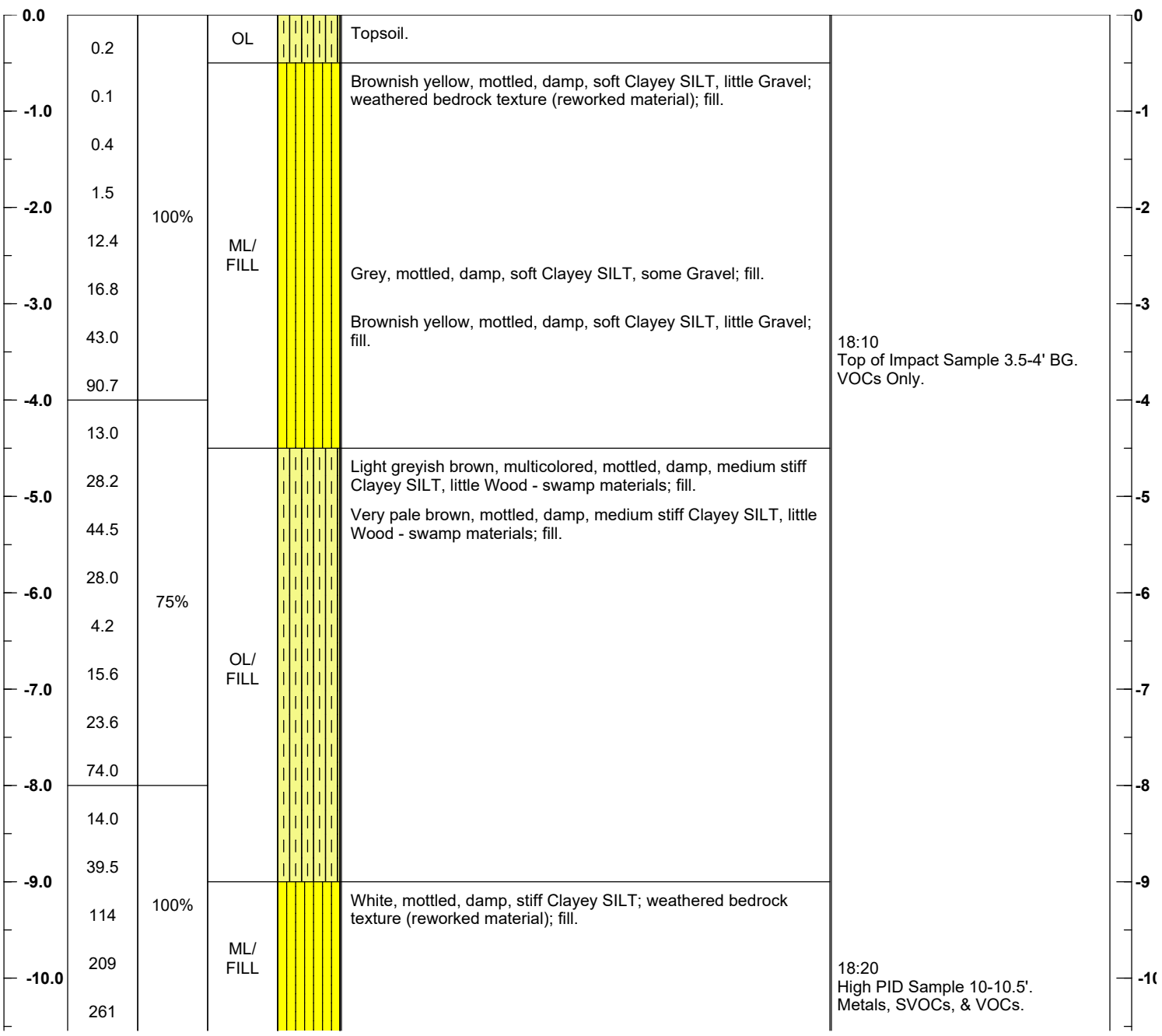
<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-01		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 09/29/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 09/29/2020 17:39			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 09/29/2020		NOTES: On the West side of HSI-HRSC-45, in AOC-3	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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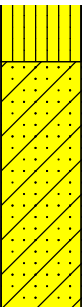
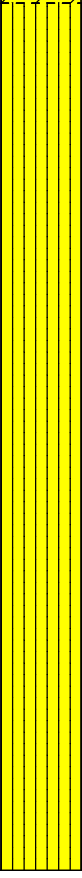


-11.0	116	100%	ML		Light grey, mottled with yellow and weak red, damp, stiff Clayey SILT, some Sand, some Gravel.	Extremely Strong Odor 8-12' BG	-11'
	62.3					Top 2.5' of Macrocore (12-14.5') is run-up.	-12'
-12.0	73.4				Light grey, mottled with dark grey, weak red, and yellow, damp, stiff Clayey SILT.	15:40 Bottom of Impact 2 Sample 14.5-15' BG. VOCs Only.	-13'
	12,260					Very Strong Odor 12-16' BG	-14'
-13.0	4,794				Light grey, brownish yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel. Weathered bedrock texture.	15:40 Bottom of Impact 2 Sample 14.5-15' BG. VOCs Only.	-15'
	1,397					Top 3' of Macrocore (16-19') is run-up.	-16'
-14.0	448	95%			Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-17'
	1,005					Strong Odor 16-20' BG	-18'
-15.0	132				Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-19'
	19.2					Strong Odor 16-20' BG	-20'
-16.0	43				Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-21'
	1,860					Strong Odor 16-20' BG	-22'
-17.0	996				Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-23'
	587					Strong Odor 16-20' BG	-24'
-18.0	254	100%			Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-25'
	761					Strong Odor 16-20' BG	-26'
-19.0	136				Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-27'
	42.7					Strong Odor 16-20' BG	-28'
-20.0	31.0				Light grey, very pale yellow, and weak red, mottled, damp, stiff Clayey SILT, little fine to coarse Sand. Weathered bedrock texture.	Strong Odor 16-20' BG	-29'

<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-02		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 09/28/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 09/28/2020 18:40			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 09/28/2020		NOTES: East-northeast of HSI-HRSC-10, in AOC-1	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES

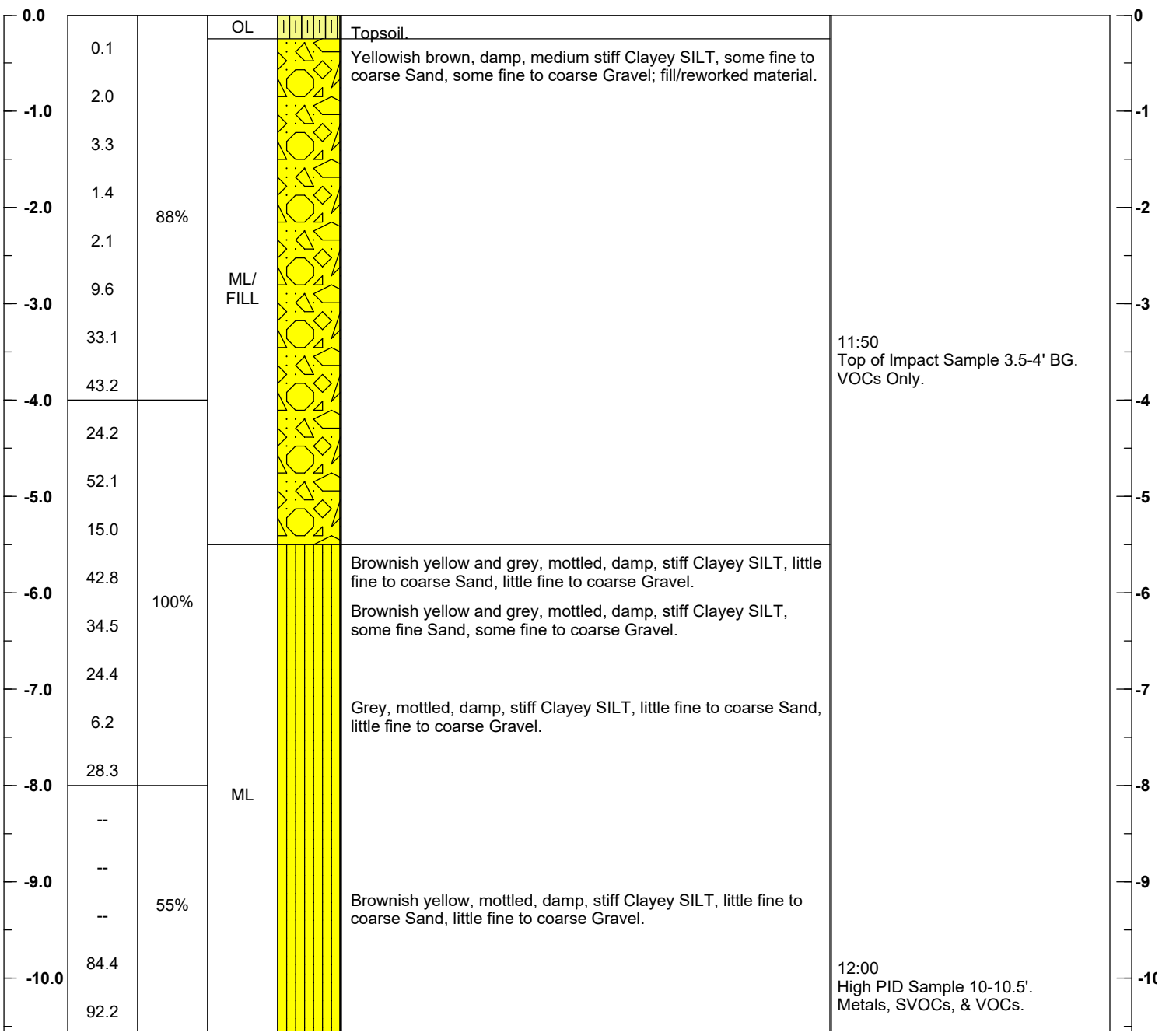




DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	124	100%	SC/ FILL		Pale yellow, mottled, damp, dense Clayey SAND, little plastic debris; weathered bedrock texture (reworked material); fill.	18:30 Bottom of Impact Sample 11-11.5' BG. VOCs Only. Odor 8-12' BG
-12.0	44.9					Top 1.5' of Macrocore (12-13.5') is run-up.
-13.0	11.0	100%	ML		Yellow, weak red, and white, damp, stiff Clayey SILT; weathered bedrock texture.	-13.0
-14.0	95.7					Odor 12-16' BG
-15.0	293					Top 2' of Macrocore (16-18') is run-up.
-16.0	141					
-17.0	17.9	100%	ML		Yellow, weak red, white, and grey, damp, stiff Clayey SILT, trace rock fragments; weathered bedrock texture.	-17.0
-18.0	15.4					
-19.0	10.0					
-20.0	6.5					
-18.0	10.6	100%	ML		Yellow, weak red, white, and grey, damp, stiff Clayey SILT, trace rock fragments; weathered bedrock texture.	-18.0
-19.0	55.0					
-20.0	85.8					
-21.0	199					
-18.0	186	100%	ML		Yellow, weak red, white, and grey, damp, stiff Clayey SILT, trace rock fragments; weathered bedrock texture.	-18.0
-19.0	43.7					
-20.0	22.3					
-21.0	13.0					
-20.0	14.7	100%	ML		Yellow, weak red, white, and grey, damp, stiff Clayey SILT, trace rock fragments; weathered bedrock texture.	-20.0
-21.0	14.7					

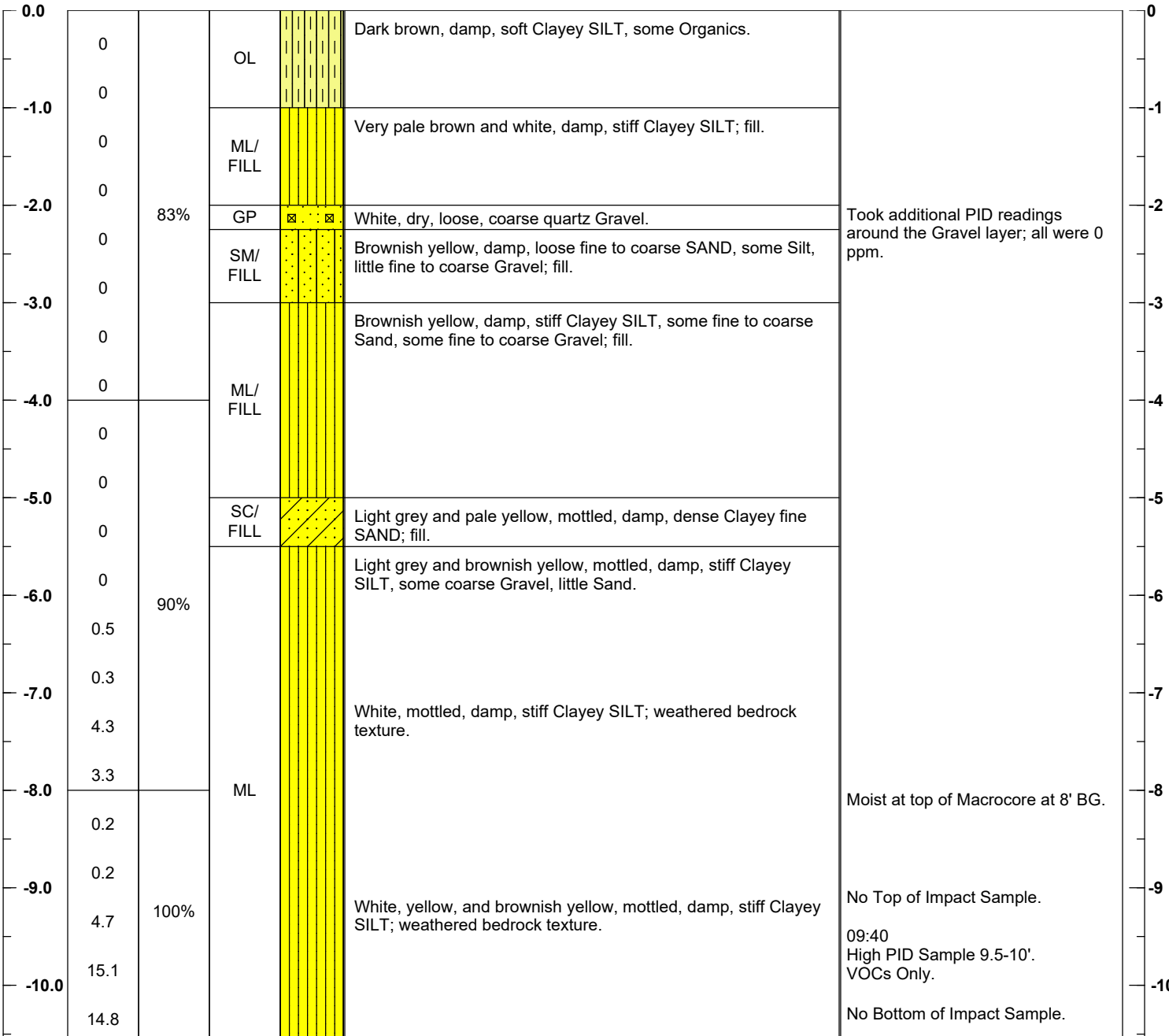
<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-03		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 09/29/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 09/29/2020 12:55			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 09/29/2020		NOTES: Southeast of HSI-HRSC-50, in AOC-3	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



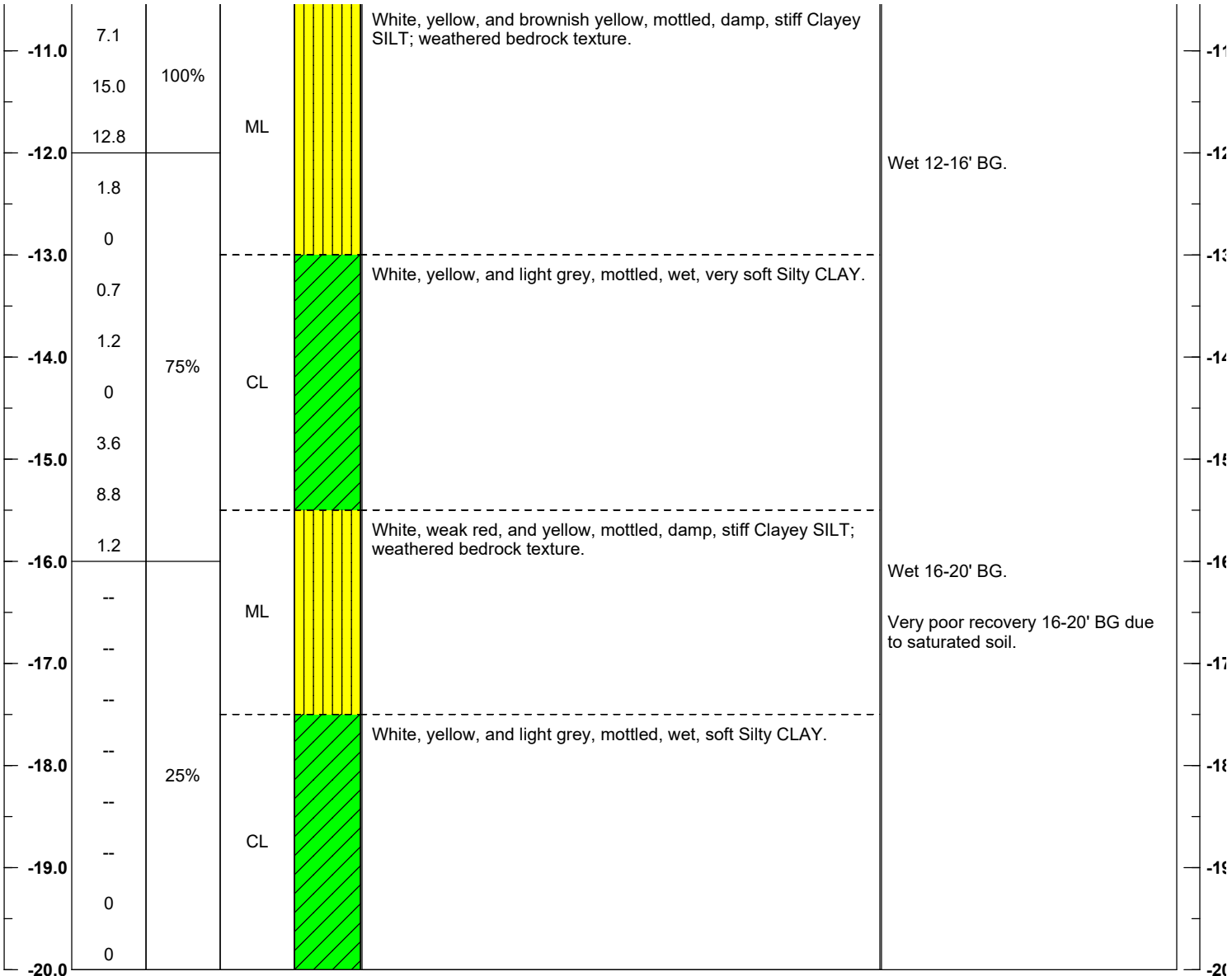
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	73.0 43.1 24.1	55%	ML		Light grey, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel.	12:10 Bottom of Impact Sample 11-11.5' BG. VOCs Only.	-11'
-12.0	15.8	100%			Pale yellow, white, and weak red, mottled, moist, stiff Clayey SILT, little Sand; weathered bedrock texture. Damp 12.25-16'.	Moist at 12' BG.	-12'
-13.0	19.3 22.0				-13'		
-14.0	10.7 13.3				-14'		
-15.0	17.3 8.7				-15'		
-16.0	2.4 102.5	100%			Yellow and white, mottled with weak red, damp, stiff Clayey SILT, little Sand, trace Gravel, trace weak red Silty Clay lenses; weathered bedrock texture.	Top 1' of Macrocore (16-17') is run-up. Moisture 16-17.5' - likely carried down from above.	-16'
-17.0	33.5 5.5				-17'		
-18.0	6.5 5.6				Slightly moist at 18' BG.	-18'	
-19.0	3.8 4.7				-19'		
-20.0	6.2						-20'




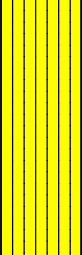
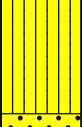
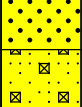

PROJECT		CG-09-0423.10		SOIL BORING LOG		HSI-SB-04		PAGE 1 OF 2	
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation				DATE STARTED: 09/29/2020					
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)				DATE/TIME COMPLETED: 09/29/2020 10:22					
DRILLING COMPANY: Tidewater, Inc.				LOGGED BY: Meg Staines					
DRILLING METHOD: Geoprobe 6620DT - DPT				PROJECT MANAGER: Nancy Love					
SAMPLING METHOD: Macrocore				BORING DIAMETER: 2"				BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA				DATE: 09/29/2020		NOTES: Northeast of HSI-HRSC-39, in AOC-3			
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION			NOTES	



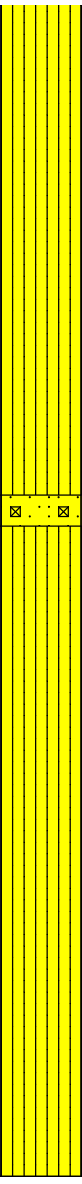
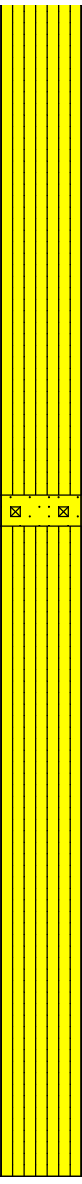
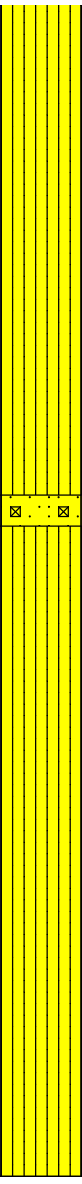
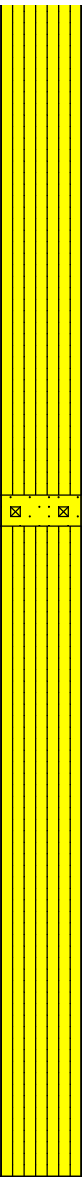
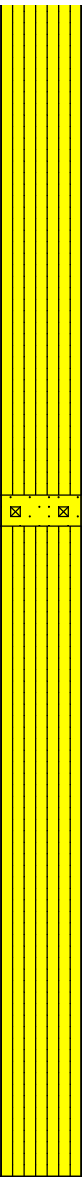
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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PROJECT		CG-09-0423.10		SOIL BORING LOG		HSI-SB-05		PAGE 1 OF 2	
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation				DATE STARTED: 09/30/2020					
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)				DATE/TIME COMPLETED: 09/30/2020 12:20					
DRILLING COMPANY: Tidewater, Inc.				LOGGED BY: Meg Staines					
DRILLING METHOD: Geoprobe 6620DT - DPT				PROJECT MANAGER: Nancy Love					
SAMPLING METHOD: Macrocore				BORING DIAMETER: 2"				BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA				DATE: 09/30/2020		NOTES: Southwest of HSI-HRSC-47, in AOC-3			
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION			NOTES	

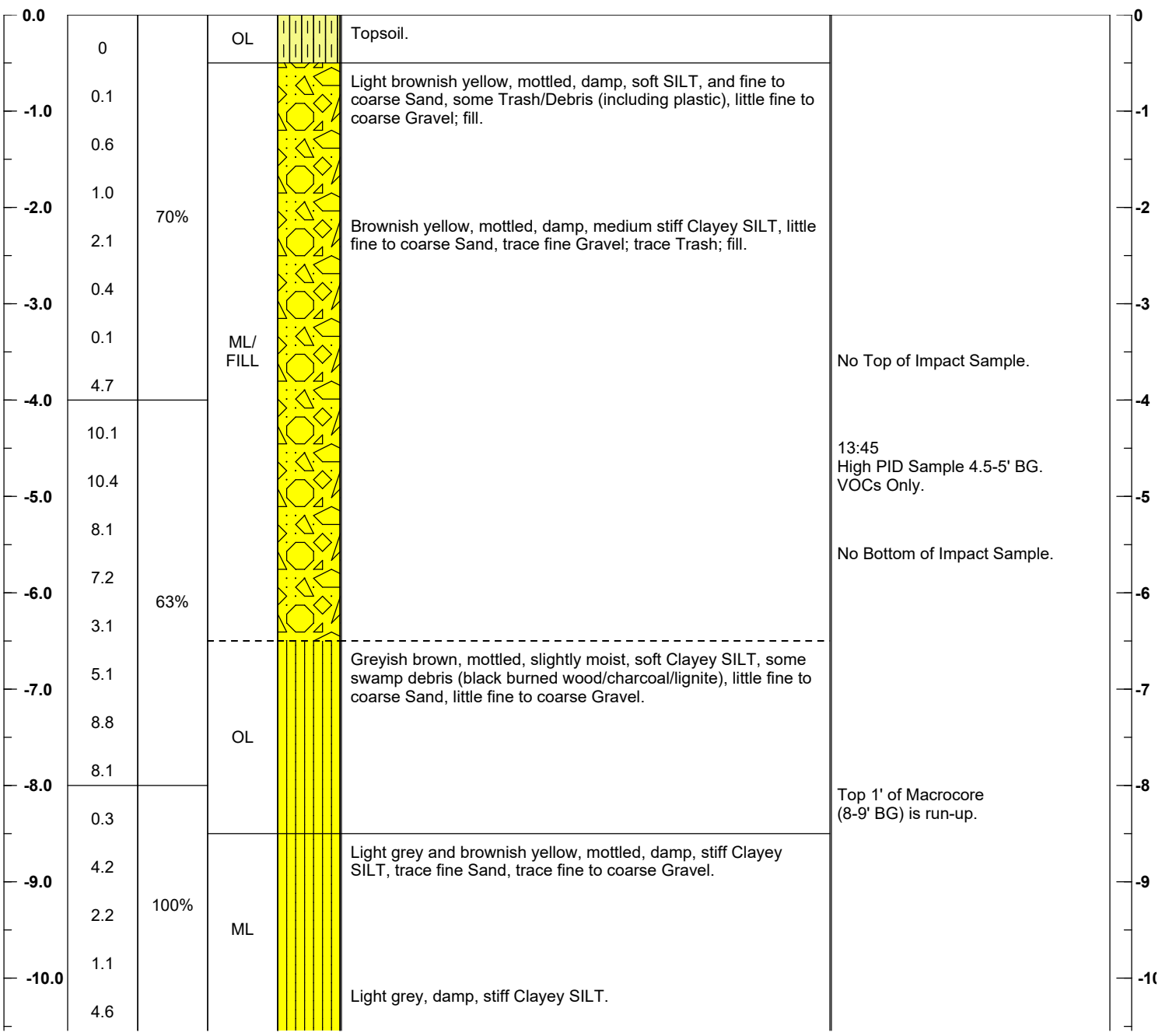
0.0			OL		Topsoil.				0
0.3			ML/ FILL		Greyish brown, mottled, moist, soft Clayey SILT, little fine to coarse Gravel, trace fine to coarse Sand; fill.			Collected 2 Macrocores 0-4' for adequate sample volume.	-1
-1.0					88%	Light grey, yellow, and white, mottled, damp, medium stiff Clayey SILT, little fine to coarse Gravel, little Trash, trace fine to coarse Sand; fill.			
-2.0			ML		Brownish yellow, mottled, damp, stiff Clayey SILT, some fine Sand, some fine to coarse Gravel; reworked material/fill.			No Top of Impact Sample.	-3
-3.0					100%	Brownish yellow and light grey, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little light grey fine Sand seams, little fine to coarse Gravel; fill/reworked material.			
-4.0			ML		GRAVEL layer (2" diameter).			No Bottom of Impact Sample.	-5
-5.0					100%	White, damp, stiff Clayey SILT, some very fine Sand, little fine to coarse Gravel. Native.			
-6.0			SP		White and light yellowish brown, damp to moist, stiff Clayey SILT.			Collected 2 Macrocores 4-8' for adequate sample volume.	-7
-7.0					100%	Light grey, wet, dense, fine to medium SAND.			
-8.0			GP		White and light yellowish brown, damp to moist, stiff Clayey SILT.			Wet 9-9.5' BG.	-9
-9.0					100%	Grey, damp, dense, coarse GRAVEL, some very fine to coarse Sand (mostly very fine to fine).			
-10.0			SC		Yellowish brown, damp, dense, Clayey fine SAND, little fine to coarse Gravel.			Collected 2 Macrocores 8-12' for adequate sample volume.	-11

DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	1.8	100%	ML		White, damp, stiff Clayey SILT, some very fine Sand, trace coarse Gravel; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 12-16' BG.	-11			
	6.1								-12	
-12.0	2.1									-13
	-	83%	ML		Very light brownish yellow and weak red, mottled, damp, stiff Clayey SILT, some very fine Sand, trace coarse Gravel; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-14			
-13.0	6.8								-15	
	1.9									-16
-14.0	3.2									-17
	4.0									-18
	5.2	83%	GP		GRAVEL layer.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-19			
-15.0	6.8								-20	
	1.1									-21
-16.0	0.2	100%	ML		Very light brownish yellow and weak red, mottled, damp, stiff Clayey SILT, some very fine Sand; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-22			
	0.8								-23	
-17.0	1.0									-24
	0.3									-25
-18.0	4.2									-26
	4.4	100%	ML		Weak red, mottled, damp, stiff Clayey SILT, some very fine Sand; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-27			
-19.0	1.1								-28	
	1.3									-29
-20.0							-30			



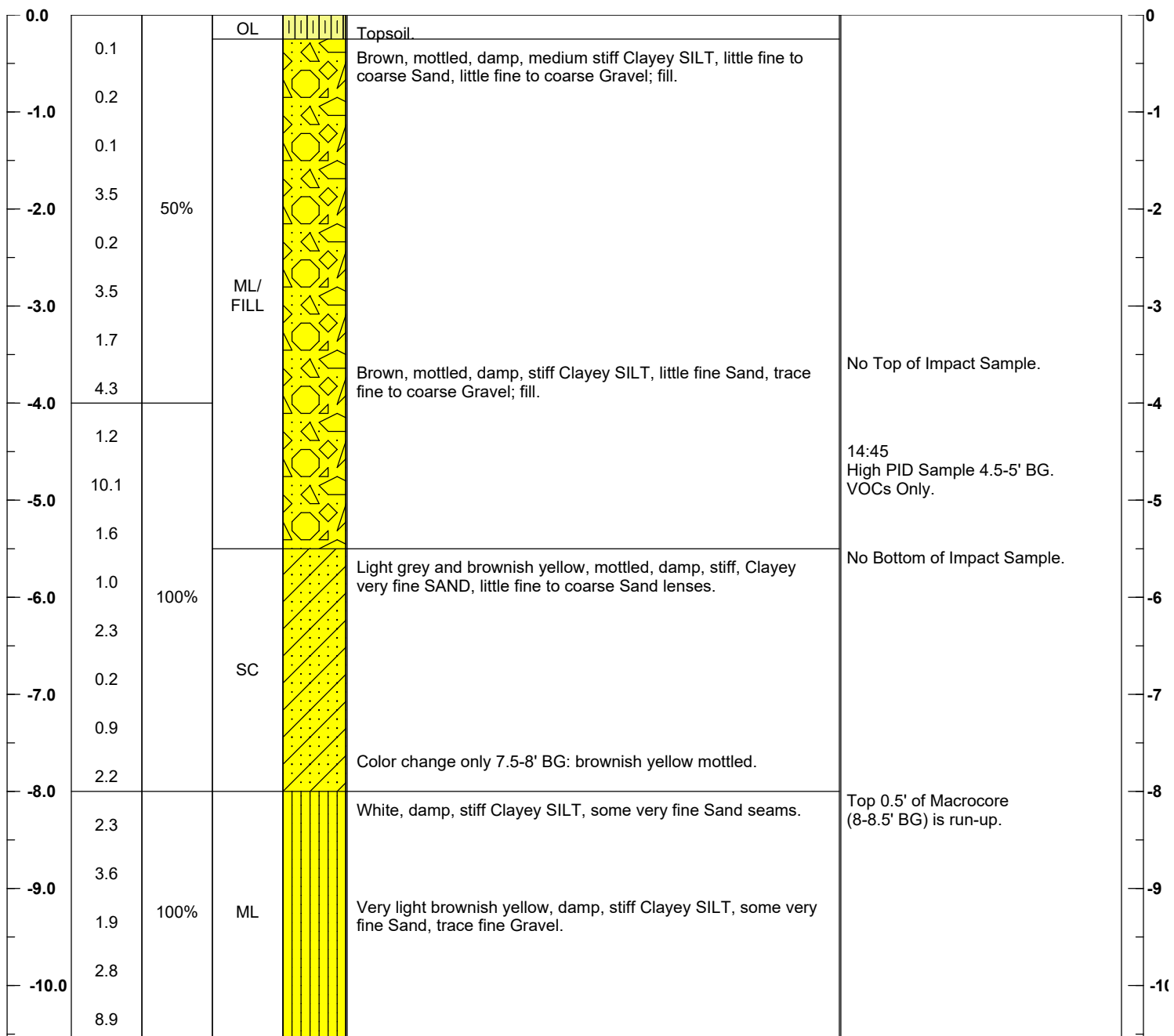
<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-06		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 09/30/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 09/30/2020 14:00			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 09/30/2020		NOTES: Southeast of HSI-HRSC-48, in AOC-3	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



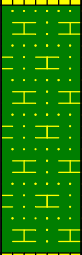
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	1.1	100%	ML		Light grey, mottled, damp, stiff Clayey SILT, some fine to coarse Sand, some fine to coarse Gravel; weathered bedrock texture.		
	0.6						
-12.0	3.3	98%			Grey, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine Gravel lenses; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 12-16' BG.	-11
	1.7						
-13.0	0.2				Wet at 13' BG.	Wet at 13'.	-13
	1.3						
-14.0	2.0	95%			Very pale yellow, mottled, damp, stiff Clayey SILT, little very fine SAND, little fine Gravel lenses; weathered bedrock texture.		-14
	4.0						
-15.0	3.3						
	2.1	95%			Very pale yellow, weak red, and yellow, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-15
-16.0	0.8						
	0.4						
-17.0	0.8	95%	Very pale yellow, weak red, and yellow, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel; weathered bedrock texture.		-17		
	0.2						
-18.0	1.1	95%	Very pale yellow, weak red, and yellow, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel; weathered bedrock texture.		-18		
	2.5						
-19.0	3.8						
	1.4	95%	Very pale yellow, weak red, and yellow, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel; weathered bedrock texture.		-19		
-20.0	0.3						

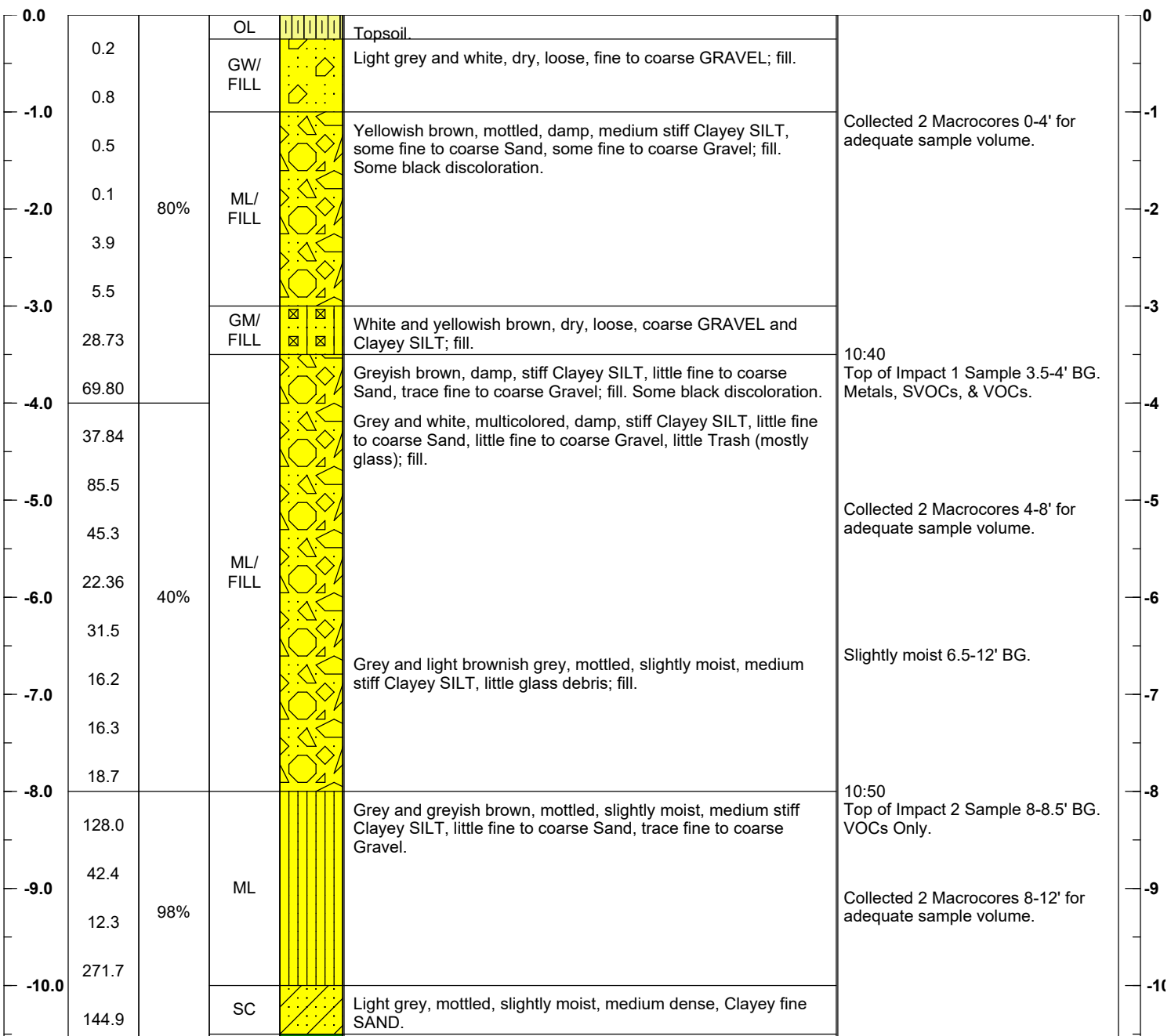
<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-07		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 09/30/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 09/30/2020 15:00			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 09/30/2020		NOTES: Northwest of HSI-HRSC-04, in AOC-3	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES




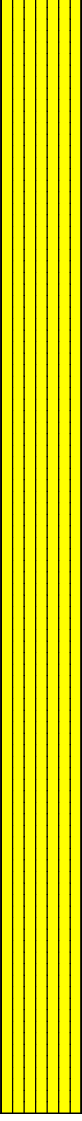
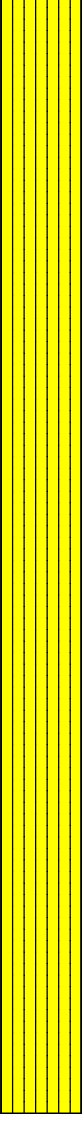
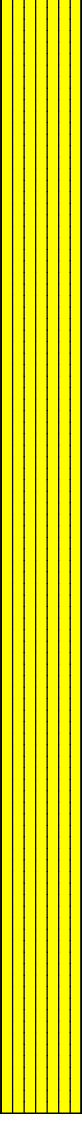
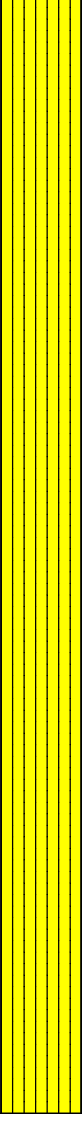
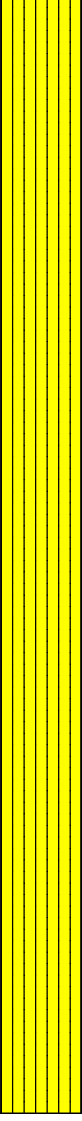
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	4.5	100%	ML		Very light brownish yellow, damp, stiff Clayey SILT, some very fine Sand, trace fine Gravel.	Used Discrete/ Closed-Piston Macrocore Sampler 12-16' BG.	-11
-12.0	2.8	1.6			0.7		Very pale yellow, damp, stiff Clayey SILT; weathered bedrock texture.
-13.0	2.7	83%	CL/ ML		Very pale yellow, light grey, yellow, and weak red, mottled, damp, stiff CLAY & SILT; weathered bedrock texture.	Top 0.5' of Macrocore (16-16.5' BG) is run-up.	-13
-14.0	1.9				6.9		0.3
-15.0	3.7	100%	ML		Yellow and light grey, mottled, damp, stiff Clayey SILT, little fine to coarse Sand; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-15
-16.0	0.8				0.7		-16
-17.0	1.4	100%	ML				-17
-18.0	2.5						1.5
-19.0	2.9	100%	ML				-19
-20.0	5.0						2.9
	3.2						-21

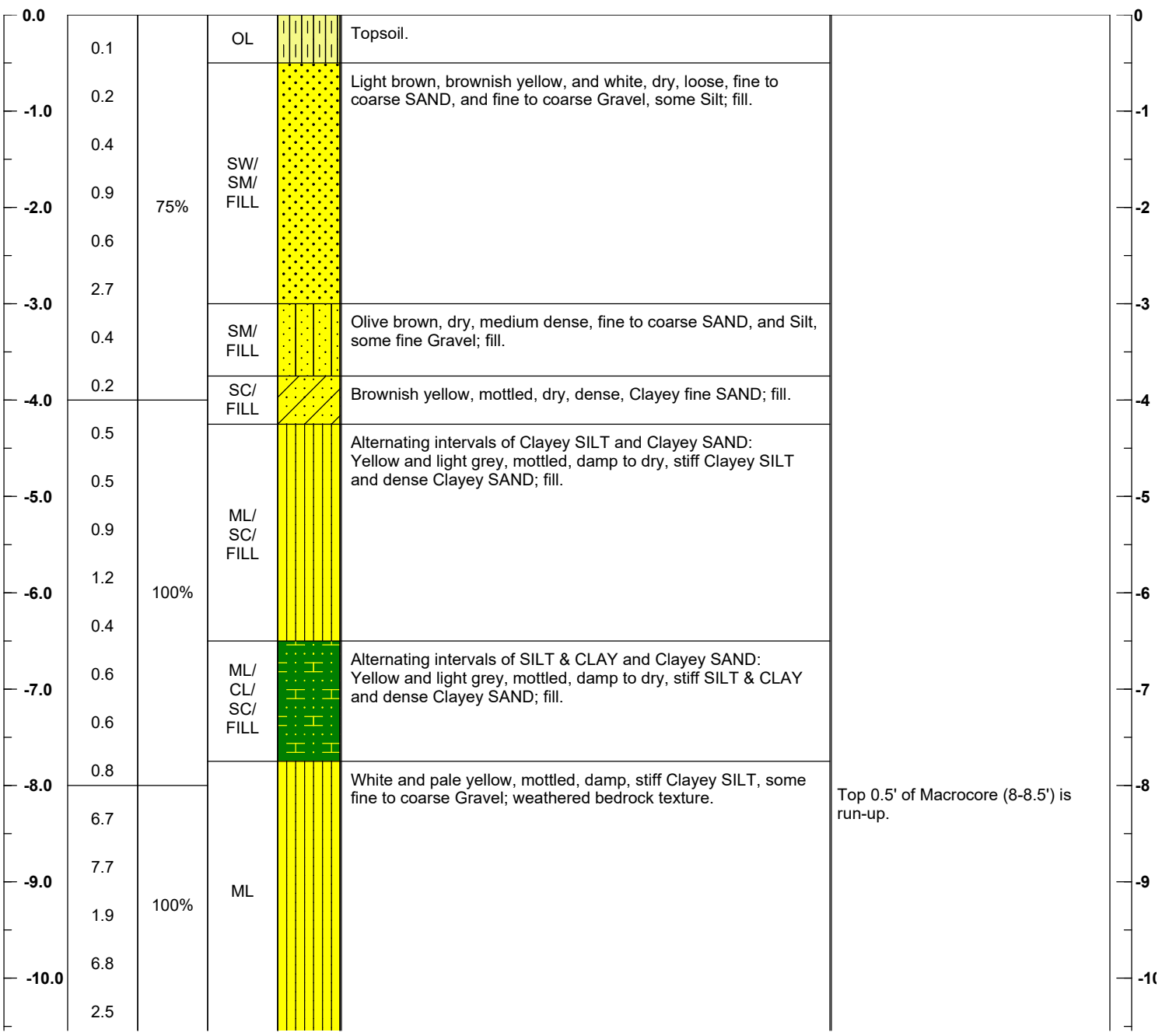
<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-08		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 10/01/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 10/01/2020 11:45			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 10/01/2020		NOTES: In between HSI-HRSC-10 and -12, in AOC-1	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	536	98%	CL/ML		White, slightly moist, medium stiff CLAY & SILT.	Slightly moist 6.5-12' BG.	-11		
	449				Grey, yellowish brown, and greyish brown, slightly moist, medium stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel; weathered bedrock texture.				
-12.0	434	83%	ML		Very pale brown and yellow, mottled, damp, stiff Clayey SILT, little fine to coarse Sand, little fine to coarse Gravel; weathered bedrock texture.	11:00 High PID Sample 12-13' BG and Duplicate HSI-SB-D2. VOCs Only.	-12		
	582								
-13.0	571								
	104								
-14.0	35.5	83%	ML		Yellow and light grey, mottled, damp, stiff Clayey SILT; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 12-16' BG.	-14		
	22.8								
-15.0	21.5								
	15.3	98%	ML				-15		
-16.0	5.2								
	1.0								
-17.0	10.2								
	15.0	98%	ML				-16		
-18.0	12.8								
	2.1						Yellow and light grey, mottled, damp, stiff Clayey SILT, trace fine Gravel lenses; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-18
-19.0	2.0	98%	ML				-19		
	5.6								
-20.0	8.9						-20		


<b>PROJECT</b> CG-09-0423.10		<b>SOIL BORING LOG</b> HSI-SB-09		<b>PAGE 1 OF 2</b>		
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation			DATE STARTED: 10/01/2020			
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)			DATE/TIME COMPLETED: 10/01/2020 13:50			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe 6620DT - DPT			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 10/01/2020		NOTES: In between HSI-HRSC-07 and -10, in AOC-1	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES

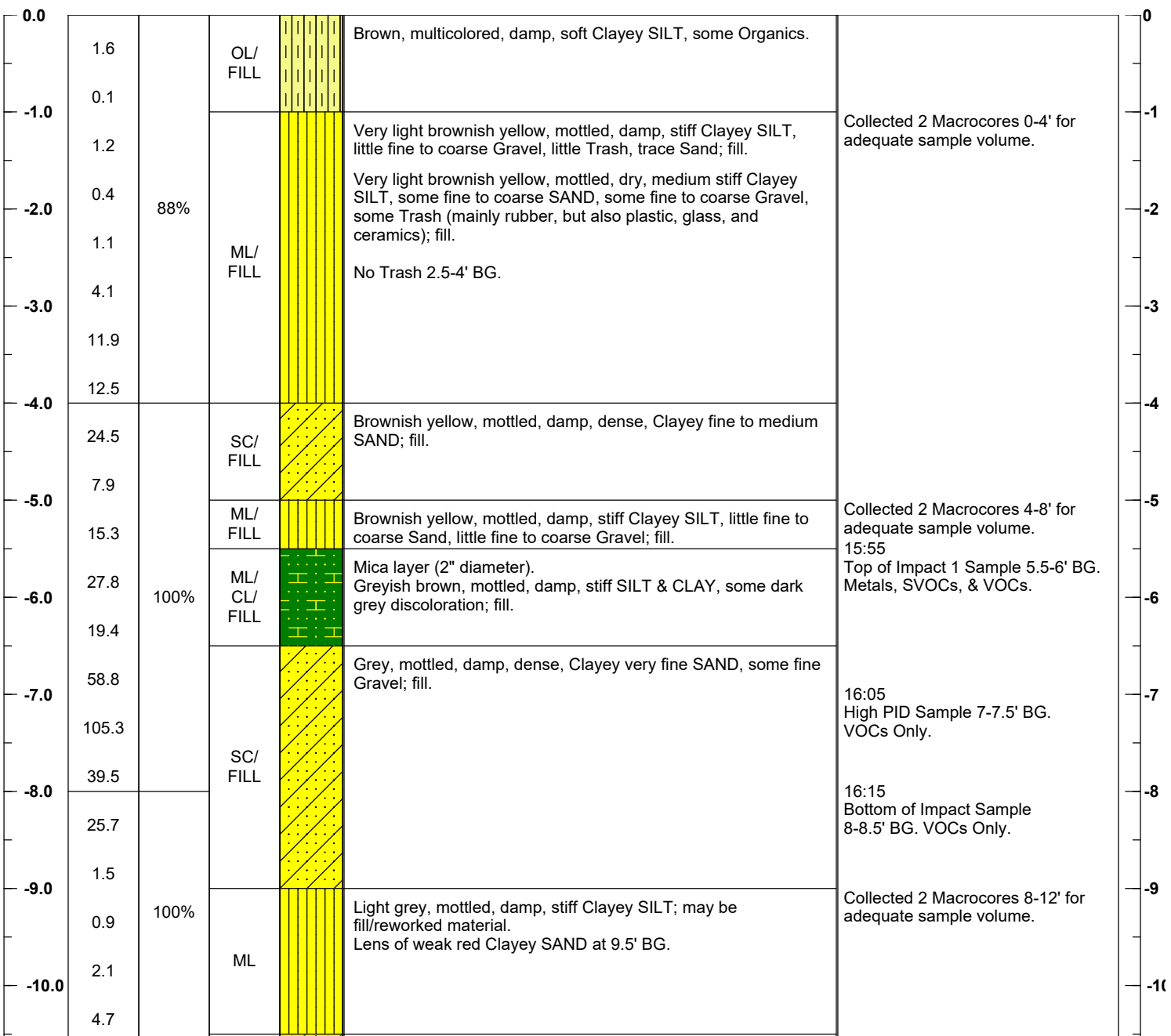





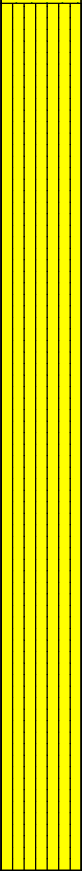


DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	8.6 4.4	100%	ML		White and pale yellow, mottled, damp, stiff Clayey SILT; weathered bedrock texture.		-11
-12.0	7.5 3.6	83%			White, yellow, and pale yellow, damp, stiff Clayey SILT, little fine Gravel seams; weathered bedrock texture.		Used Discrete/ Closed-Piston Macrocore Sampler 12-16' BG.
-13.0	3.6 9.3		No Top of Impact Sample.	-13			
-14.0	13.5 39.9		13:25 High PID Sample 14-14.5' BG. VOCs Only.	-14			
-15.0	7.9 29.2		No Bottom of Impact Sample.	-15			
-16.0	10.1 1.5	100%	ML/CL		Weak red, mottled, damp, stiff Clayey SILT; weathered bedrock texture.	Wet 16-17' BG.	-16
-17.0	0.9 21.1				Damp 17-18' BG.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-17
-18.0	4.2 21.5		Yellow, grey, and weak red, damp, stiff Clayey SILT, trace fine to coarse Sand, trace fine to coarse rock fragments; weathered bedrock texture.	-18			
-19.0	19.0 17.7	ML	ML				-19
-20.0	14.4					-20	

PROJECT		CG-09-0423.10		SOIL BORING LOG		HSI-SB-10		PAGE 1 OF 2	
PROJECT: Montgomery Brothers Dump - Hot Spot Investigation				DATE STARTED: 10/01/2020					
LOCATION: Lakeside Park, North East, MD 21901 (MD-137)				DATE/TIME COMPLETED: 10/01/2020 16:30					
DRILLING COMPANY: Tidewater, Inc.				LOGGED BY: Meg Staines					
DRILLING METHOD: Geoprobe 6620DT - DPT				PROJECT MANAGER: Nancy Love					
SAMPLING METHOD: Macrocore				BORING DIAMETER: 2"				BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: NA				DATE: 10/01/2020		NOTES: Southeast of HSI-HRSC-49, in AOC-3			
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES			



DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-11.0	16.3	100%	GC		Light grey, mottled, damp, dense, Clayey fine to coarse GRAVEL, and fine to coarse SAND, some Silt, some Clayey SILT lenses; may be fill/ reworked material.	Used Discrete/ Closed-Piston Macrocore Sampler 12-16' BG.	-11
	7.7			-12.0			-12
-12.0	13.5			-13.0			-13
	8.8	83%	ML		Light grey and very pale brown, damp, stiff Clayey SILT, little fine to coarse Sand, little fine Rock Fragment lenses; weathered bedrock texture.	Used Discrete/ Closed-Piston Macrocore Sampler 16-20' BG.	-14.0
	12.5			-14.0			-14
-13.0	9.3			-15.0			-15
	11.5			-16.0			-16
-14.0	7.2			-17.0			-17
	7.5	100%	ML		Very pale yellow, light grey, and weak red, damp, stiff Clayey SILT, trace fine to coarse Sand, trace fine to coarse Rock Fragments; weathered bedrock texture.		-18.0
	3.4			-18.0			-18
-15.0	1.5			-19.0			-19
	5.5			-19.0			-19
-16.0	1.0	100%	ML				-20.0
	1.5			-20.0			-20
-17.0	2.9			-20.0			-20
	4.1						
-18.0	9.0						
	10.5						
-19.0	6.9						
-20.0							

**ATTACHMENT D**  
**IDW DISPOSAL DOCUMENTS**

8

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>MDR000527800</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>1-866-932-6723</b>	4. Waste Tracking Number <b>214306</b>	
5. Generator's Name and Mailing Address <b>MARYLAND DEPARTMENT OF THE ENVIRONMENT 1800 WASHINGTON BLVD, SUITE 625 (AGENT OF AN LINK GENERATOR) BALTIMORE, MD 21230</b>			Generator's Site Address (if different than mailing address) <b>MONTGOMERY BROTHERS SITE INVERNESS DRIVE NORTH EAST, MD 21503</b>			
Generator's Phone: <b>410-537-3438 BRIAN DIETZ</b>			U.S. EPA ID Number <b>NCD980842132</b>			
6. Transporter 1 Company Name <b>ECOFLO, INC.</b>			U.S. EPA ID Number			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>ECOFLO, INC. 2750 PATTERSON STREET, GREENSBORO, NC 27407</b>			U.S. EPA ID Number <b>NCD980842132</b>			
Facility's Phone: <b>336-855-7925</b>						
GENERATOR	9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit V/L/Vol.
			No.	Type		
	1.	<b>NON REGULATED MATERIAL 292ABE-002</b>	X X2	DM	X 1,00	P
	2.	<b>NON REGULATED SOLID MATERIAL 292ABE-003</b>	X X1	DM	X X400	P
	3.					
4.						
13. Special Handling Instructions and Additional Information <b>1) 5572 2 DM SSGls</b> <b>2) 5572 1 DM SSGls</b> <b>WON 211683-B 214306</b>						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator's/Offoror's Printed/Typed Name <b>Brian Dietz</b>			Signature <i>Brian Dietz</i>		Month Day Year <b>1   8   21</b>	
INT'L	15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.    Port of entry/exit: _____					
	Transporter Signature (for exports only): _____ Date leaving U.S.: _____					
TRANSPORTER	16. Transporter Acknowledgment of Receipt of Materials					
	Transporter 1 Printed/Typed Name <b>Shanahan Padin</b>		Signature <i>Shanahan Padin</i>		Month Day Year <b>1   8   21</b>	
	Transporter 2 Printed/Typed Name		Signature		Month Day Year	
DESIGNATED FACILITY	17. Discrepancy					
	17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	Manifest Reference Number: _____					
	17b. Alternate Facility (or Generator)			U.S. EPA ID Number		
Facility's Phone: _____						
17c. Signature of Alternate Facility (or Generator)						
18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name <b>Benjamin White</b>			Signature <i>Benjamin White</i>		Month Day Year <b>11   18   21</b>	

ECOFLO LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM



Generator Name: MARYLAND DEPARTMENT OF THE ENVIRONMENT

Manifest Tracking No: 001108625WAS

Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or write NONE if the waste code has no subcategory. Spent solvent treatment standards are listed on the following page. If F039, multi-source applies, those constituents must be listed and attached by generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

To identify F039 or D001-D043, underlying hazardous constituent(s), use the "F039/Underlying Hazardous Constituent Form" provided. To list additional USEPA waste code(s) and subcategory(s), use the supplemental sheet provided. HOW MUST THE WASTE BE MANAGED? In column 5 enter the letter (A, B1, B3, B4, B5, B6, C, D or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7) Please understand that if you enter the letter B1, B3, B4, B5, B6, or D you are making the appropriate certification as provided below. States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

Line Item / Profile Number	USA EPA		Subcategory Description or None	Waste Management
	EPA Code(s)	WW or NWW		A, B1, B3, C, D, E, F
1 292ABE-001	D040	NWW	NONE	A

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature Brian Pate Title Division Chief Date 11/24/20

ECOFLO LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM

**A. RESTRICTED WASTE REQUIRES TREATMENT**

This waste must be treated to the applicable treatment standards set forth in 40 CFR 268.40. For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45.

**B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS**

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that treatment process has been operated and maintained properly so as to comply with standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS**

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS**

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**B.6 RESTRICTED DEBRIS TREATED TO ALTERNATED PERFORMANCE STANDARDS**

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.45 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**C. RESTRICTED WASTE SUBJECT TO A VARIANCE**

This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.

For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

**D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT**

"I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS**

This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

**F. THIS RESTRICTED WASTE HAS BEEN TREATED ON-SITE TO REMOVE THE HAZARDOUS CHARACTERISTIC AND TO TREAT UNDERLYING HAZARDOUS CONSTITUENTS TO LEVELS IN 40 CFR 268.48**

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic, and that the underlying hazardous constituents, as defined in 40 CFR 268.2, have been treated to meet the 40 CFR 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.



Inbound Manifest Containers by Line

January 18, 2021

Page 1

kshadrick

Manifest No.	Work Order No.	Generator No.	Generator Name	Transporter Code	Designated Facility Code	Received Date
214305	214306	292ABE	MARYLAND DEPARTMENT OF THEEN	ECOFLO	ECO	01/18/21

Profile	Description	Approval Code	Expected Containers	Actual Container	Doc Line No.
292ABE-002	NON REGULATED MATERIAL	5572	1	2	1
	Container No.				
	2572277				
	2572278				
	Container Type				
	55 DM				
	55 DM				
292ABE-003	NON REGULATED SOLID MATERIAL	5572	1	1	2
	Container No.				
	2572279				
	Container Type				
	55 DM				



Please print or type.

Form Approved, OMB No. 2050-0039

7

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>MDR000527800</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>1-866-932-6723</b>	4. Manifest Tracking Number <b>007 1018 205 WAS</b>			
5. Generator's Name and Mailing Address <b>MARYLAND DEPARTMENT OF THE ENVIRONMENT 1800 WASHINGTON BLVD, SUITE 625 (AGENT OF AN UNK GENERATOR) BALTIMORE, MD 21230</b>			Generator's Site Address (if different than mailing address) <b>MONTGOMERY BROTHERS SITE INVERNESS DRIVE NORTH EAST, MD 21901</b>					
Generator's Phone: <b>410-587-3455 BRIAN DIETZ</b>								
6. Transporter 1 Company Name <b>ECOFLO, INC.</b>			U.S. EPA ID Number <b>NCD980842132</b>					
7. Transporter 2 Company Name			U.S. EPA ID Number					
8. Designated Facility Name and Site Address <b>ECOFLO, INC. 2750 PATTERSON STREET, GREENSBORO, NC 27407</b>			U.S. EPA ID Number <b>NCD980842132</b>					
Facility's Phone: <b>336-855-7925</b>								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	<b>NA3082, HAZARDOUS WASTE LIQUID, N.O.S. (TRICHLOROETHYLENE), 9, III, ERG#171 292ABE-001</b>	X 1	DM	X 4 200	P	DD00		
14. Special Handling Instructions and Additional Information <b>114326-283 LD M 5.555</b>								
<b>WO#214306</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name <b>Brian Dietz</b>			Signature <i>Brian Dietz</i>		Month Day Year <b>11 18 21</b>			
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name <b>Shanahan Pack'g</b>			Signature <i>Shanahan Pack'g</i>		Month Day Year <b>11 18 21</b>			
Transporter 2 Printed/Typed Name			Signature		Month Day Year			
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number: _____								
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H411</b>	2.	3.	4.					
20. Designated Facility Owner/Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Brian Dietz</b>			Signature <i>Brian Dietz</i>		Month Day Year <b>11 18 21</b>			

**ATTACHMENT E**  
**FULL LABORATORY ANALYTICAL DATA TABLES**

**Table E-1**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Surface/Near Surface Soil Sample Analytical Results**  
**September 25, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	HSI-SS-01 (0.5-1')	HSI-SS-02 (0.5-1')	HSI-SS-03 (0.5-1')	HSI-SS-04 (0.5-1')	HSI-SS-05 (0.5-1')	HSI-SS-06 (0.5-1')	HSI-SS-07 (0.5-1')	HSI-SS-07 (0.5-1') [HSI-SS-D (0.5-1')]	HSI-SS-08 (0.5-1')	HSI-SS-09 (0.5-1')	MDE Residential Soil Standards
<b>Dilution Factor</b>	<b>0.752</b>	<b>0.74</b>	<b>0.883</b>	<b>0.824</b>	<b>0.723</b>	<b>0.919</b>	<b>0.816</b>	<b>0.74</b>	<b>0.766</b>	<b>1.03</b>	
<b>Analyte Name</b>	<b>Concentration (mg/kg)</b>										
1,1,1-Trichloroethane	0.00075 U	0.00075 U	0.0010 U	0.00083 U	0.00074 U	0.00093 U	0.0011 U	0.00086 U	0.00079 U	0.0010 U	8.1E+02
1,1,2,2-Tetrachloroethane	<b>0.0018</b>	<b>0.012</b>	<b>0.0065</b>	0.00041 U	<b>0.011</b>	<b>0.0039</b>	0.00052 U	0.00042 U	<b>0.0015 J</b>	0.00050 U	6.0E-01
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0011 U	0.0011 U	0.0015 U	0.0013 U	0.0011 U	0.0014 U	0.0016 U	0.0013 U	0.0012 U	0.0015 U	na
1,1,2-Trichloroethane	0.00038 U	<b>0.0014 J</b>	0.00050 U	0.00042 U	0.00037 U	0.00046 U	0.00053 U	0.00043 U	<b>0.00066 J</b>	0.00051 U	1.5E-01
1,1-Dichloroethane	0.00071 U	0.00071 U	0.00095 U	0.00079 U	0.00070 U	0.00088 U	0.0010 U	0.00081 U	0.00075 U	0.00096 U	3.6E+00
1,1-Dichloroethene	0.00094 U	0.00093 U	0.0013 U	0.0010 U	0.00092 U	0.0012 U	0.0013 U	0.0011 U	0.00099 U	0.0013 U	2.3E+01
1,2,3-Trichlorobenzene	0.00045 U	0.00045 U	0.00060 U	0.00050 U	0.00044 U	0.00056 U	0.00063 U	0.00051 U	0.00047 U	0.00061 U	na
1,2,4-Trichlorobenzene	0.00051 U	0.00051 U	0.00069 U	0.00057 U	0.00051 U	0.00064 U	0.00072 U	0.00059 U	0.00054 U	0.00070 U	5.8E+00
1,2-Dibromo-3-chloropropane	0.00045 U	0.00045 U	0.00060 U	0.00050 U	0.00044 U	0.00056 U	0.00063 U	0.00051 U	0.00047 U	0.00061 U	5.3E-03
1,2-Dibromoethane	0.00040 U	0.00040 U	0.00053 U	0.00044 U	0.00039 U	0.00049 U	0.00056 U	0.00046 U	0.00042 U	0.00054 U	3.6E-02
1,2-Dichlorobenzene	0.00042 U	0.00041 U	0.00056 U	0.00046 U	0.00041 U	0.00052 U	0.00059 U	0.00048 U	0.00044 U	0.00057 U	1.8E+02
1,2-Dichloroethane	0.00034 U	0.00033 U	0.00045 U	0.00037 U	0.00033 U	0.00041 U	0.00047 U	0.00038 U	0.00035 U	0.00045 U	4.6E-01
1,2-Dichloropropane	0.00067 U	0.00067 U	0.00089 U	0.00074 U	0.00066 U	0.00083 U	0.00094 U	0.00077 U	0.00071 U	0.00091 U	1.6E+00
1,3-Dichlorobenzene	0.00045 U	0.00045 U	0.00060 U	0.00050 U	0.00044 U	0.00056 U	0.00063 U	0.00051 U	0.00047 U	0.00061 U	na
1,4-Dichlorobenzene	0.00043 U	0.00043 U	0.00058 U	0.00048 U	0.00043 U	0.00054 U	0.00061 U	0.00050 U	0.00046 U	0.00059 U	2.6E+00
1,4-Dioxane	0.040 U	0.039 U	0.053 U	0.044 U	0.039 U	0.049 U	0.056 U	0.045 U	0.042 U	0.054 U	na
2-Butanone	0.00098 U	<b>0.0010 J</b>	0.0013 U	0.0011 U	0.00096 U	<b>0.0035</b>	<b>0.14</b>	0.0011 U	0.0010 U	0.0013 U	2.7E+03
2-Hexanone	0.00069 U	0.00069 U	0.00093 U	0.00077 U	0.00068 U	0.00086 U	0.00098 U	0.00080 U	0.00073 U	0.00094 U	na
4-Methyl-2-pentanone	0.00047 U	0.00047 U	0.00063 U	0.00053 U	0.00047 U	0.00059 U	0.00067 U	0.00054 U	0.00050 U	0.00064 U	3.3E+03
Acetone	0.0055 U	<b>0.044</b>	0.0074 U	<b>0.011</b>	<b>0.0069 J</b>	<b>0.064</b>	<b>0.74</b>	0.0063 U	<b>0.0074 J</b>	<b>0.020</b>	6.1E+03
Benzene	0.00060 U	0.00059 U	0.00080 U	0.00066 U	0.00059 U	0.00074 U	0.00084 U	0.00068 U	0.00063 U	0.00081 U	1.2E+00
Bromochloromethane	0.00057 U	0.00057 U	0.00076 U	0.00063 U	0.00056 U	0.00071 U	0.00080 U	0.00066 U	0.00060 U	0.00078 U	na
Bromodichloromethane	0.00038 U	0.00038 U	0.00051 U	0.00043 U	0.00038 U	0.00047 U	0.00054 U	0.00044 U	0.00040 U	0.00052 U	2.9E-01
Bromoform	0.00027 U	0.00027 U	0.00036 U	0.00030 U	0.00026 U	0.00033 U	0.00038 U	0.00031 U	0.00028 U	0.00037 U	1.9E+01
Bromomethane	0.0013 U	0.0013 U	0.0017 U	0.0014 U	0.0013 U	0.0016 U	0.0018 U	0.0015 U	0.0014 U	0.0017 U	6.8E-01
Carbon disulfide	0.0028 U	0.0028 U	0.0037 U	0.0031 U	0.0027 U	0.0034 U	0.0039 U	0.0032 U	0.0029 U	0.0038 U	7.7E+01
Carbon tetrachloride	0.00079 U	0.00079 U	0.0011 U	0.00088 U	0.00078 U	0.00098 U	0.0011 U	0.00091 U	0.00083 U	0.0011 U	6.5E-01
Chlorobenzene	0.00051 U	0.00050 U	0.00068 U	0.00056 U	<b>0.00050 J</b>	0.00063 U	0.00071 U	0.00058 U	0.00053 U	0.00069 U	2.8E+01
Chloroethane	0.0016 U	0.0016 U	0.0021 U	0.0018 U	0.0016 U	0.0020 U	0.0022 U	0.0018 U	0.0017 U	0.0022 U	1.4E+03
Chloroform	0.0011 U	0.0011 U	0.0015 U	0.0012 U	0.0011 U	0.0014 U	0.0016 U	0.0013 U	0.0012 U	0.0015 U	3.2E-01
Chloromethane	0.0010 U	0.0010 U	0.0013 U	0.0011 U	0.00099 U	0.0012 U	0.0014 U	0.0012 U	0.0011 U	0.0014 U	1.1E+01
cis-1,2-Dichloroethene	0.00066 U	0.00066 U	0.00088 U	0.00073 U	0.00065 U	0.00082 U	0.00093 U	0.00076 U	0.00070 U	0.00090 U	1.6E+01
cis-1,3-Dichloropropene	0.00043 U	0.00043 U	0.00058 U	0.00048 U	0.00043 U	0.00054 U	0.00061 U	0.00050 U	0.00046 U	0.00059 U	na
Cyclohexane	0.00098 U	0.00098 U	0.0013 U	0.0011 U	0.00096 U	0.0012 U	0.0014 U	0.0011 U	0.0010 U	0.0013 U	na
Dibromochloromethane	0.00035 U	0.00035 U	0.00047 U	0.00039 U	0.00035 U	0.00043 U	0.00049 U	0.00040 U	0.00037 U	0.00048 U	8.3E+00
Dichlorodifluoromethane	0.0012 U	0.0011 U	0.0015 U	0.0013 U	0.0011 U	0.0014 U	0.0016 U	0.0013 U	0.0012 U	0.0016 U	na
Ethylbenzene	0.00056 U	0.00056 U	0.00075 U	0.00062 U	0.00055 U	0.00070 U	0.00079 U	0.00065 U	0.00059 U	0.00076 U	5.8E+00
Isopropylbenzene	0.00068 U	0.00067 U	0.00091 U	0.00075 U	0.00067 U	0.00084 U	0.00095 U	0.00078 U	0.00071 U	0.00092 U	1.9E+02
m&p-Xylene	0.00098 U	0.00098 U	0.0013 U	0.0011 U	0.00096 U	0.0012 U	0.0014 U	0.0011 U	0.0010 U	<b>0.0014</b>	5.8E+01
Methyl Acetate	0.00078 U	0.00078 U	0.0010 U	0.00087 U	0.00077 U	0.00097 U	0.0011 U	0.00090 U	0.00083 U	0.0011 U	na
Methylcyclohexane	0.00074 U	0.00073 U	0.00098 U	0.00081 U	0.00072 U	<b>0.0024</b>	0.0010 U	0.00084 U	0.00077 U	0.0010 U	na
Methylene chloride	<b>0.0036</b>	<b>0.0024</b>	<b>0.0057</b>	<b>0.0049</b>	<b>0.0017</b>	<b>0.0035</b>	<b>0.0022 J</b>	0.00070 U	<b>0.0071</b>	<b>0.0046</b>	3.5E+01
Methyl-t-butyl ether	0.00044 U	0.00044 U	0.00059 U	0.00049 U	0.00043 U	0.00055 U	0.00062 U	0.00051 U	0.00046 U	0.00060 U	4.7E+01
o-Xylene	0.00058 U	0.00058 U	0.00077 U	0.00064 U	0.00057 U	0.00072 U	0.00082 U	0.00066 U	0.00061 U	0.00079 U	5.8E+01

**Table E-1**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Surface/Near Surface Soil Sample Analytical Results**  
**September 25, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	HSI-SS-01 (0.5-1')	HSI-SS-02 (0.5-1')	HSI-SS-03 (0.5-1')	HSI-SS-04 (0.5-1')	HSI-SS-05 (0.5-1')	HSI-SS-06 (0.5-1')	HSI-SS-07 (0.5-1')	HSI-SS-07 (0.5-1') [HSI-SS-D (0.5-1')]	HSI-SS-08 (0.5-1')	HSI-SS-09 (0.5-1')	MDE Residential Soil Standards
<b>Dilution Factor</b>	<b>0.752</b>	<b>0.74</b>	<b>0.883</b>	<b>0.824</b>	<b>0.723</b>	<b>0.919</b>	<b>0.816</b>	<b>0.74</b>	<b>0.766</b>	<b>1.03</b>	
<b>Analyte Name</b>	<b>Concentration (mg/kg)</b>										
Styrene	0.00045 U	0.00045 U	0.00060 U	0.00050 U	0.00044 U	<b>0.36</b>	0.00063 U	0.00051 U	0.00047 U	0.00061 U	6.0E+02
Tetrachloroethene	0.00080 U	<b>0.0045</b>	<b>0.024</b>	0.00089 U	0.00079 U	<b>0.0035</b>	0.0011 U	0.00092 U	<b>0.0011 J</b>	<b>0.0011 J</b>	8.1E+00
Toluene	0.00054 U	0.00054 U	0.00072 U	0.00060 U	<b>0.00073 J</b>	0.00067 U	<b>0.070</b>	0.00062 U	0.00057 U	0.00073 U	4.9E+02
trans-1,2-Dichloroethene	0.00098 U	0.00098 U	0.0013 U	0.0011 U	0.00096 U	0.0012 U	0.0014 U	0.0011 U	0.0010 U	0.0013 U	1.6E+02
trans-1,3-Dichloropropene	0.00038 U	0.00038 U	0.00051 U	0.00043 U	0.00038 U	0.00047 U	0.00054 U	0.00044 U	0.00040 U	0.00052 U	na
Trichloroethene	0.00067 U	<b>0.0021</b>	<b>0.0072</b>	0.00074 U	0.00066 U	0.00083 U	0.00094 U	0.00077 U	0.00071 U	0.00091 U	4.1E-01
Trichlorofluoromethane	0.00096 U	0.00096 U	0.0013 U	0.0011 U	0.00095 U	0.0012 U	<b>0.0092</b>	<b>0.0034</b>	0.0010 U	0.0013 U	na
Vinyl chloride	0.0010 U	0.00099 U	0.0013 U	0.0011 U	0.00098 U	0.0012 U	0.0014 U	0.0011 U	0.0010 U	0.0014 U	5.9E-02
Xylenes (Total)	0.00058 U	0.00058 U	0.00077 U	0.00064 U	0.00057 U	0.00072 U	0.00082 U	0.00066 U	0.00061 U	<b>0.0014</b>	5.8E+01

**Table Notes:**

VOCs Analytical Method: EPA Method 8260C

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

**Screening Evaluation Notes:**

No detected analyte concentrations exceed the respective SL.

No MDLs exceed the respective SLs

**Additional Screening Level Notes:**

<u>Analyte</u>	<u>MDE Residential Soil Standard</u>
m+p-Xylenes	Total Xylenes
o-Xylene	Total Xylenes

Table E-2  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Surface/Near Surface Soil Sample Analytical Results  
 September 25, 2020  
 Semi-Volatile Organic Compounds (SVOCs) and Metals

Analytical Suite	Sample ID	HSI-SS-01 (0-0.5')	HSI-SS-02 (0-0.5')	HSI-SS-02 (0-0.5') [HSI-SS-D (0-0.5')]	HSI-SS-03 (0-0.5')	HSI-SS-04 (0-0.5')	HSI-SS-05 (0-0.5')	HSI-SS-06 (0-0.5')	HSI-SS-07 (0-0.5')	HSI-SS-08 (0-0.5')	HSI-SS-09 (0-0.5')	MDE Residential Soil Standards	MDE ATC
	Dilution Factor (SVOCs)	1	1	1	1	1	1	1	1	3	1		
	Dilution Factor (Metals)	1	1	1	1	1	1	1	1	1	1		
Analyte Name	Concentration (mg/kg)												
1,1'-Biphenyl	0.011 U	0.011 U	0.010 U	0.012 U	0.011 U	0.010 U	0.012 U	0.010 U	0.012 U	0.031 U	0.010 U	na	na
1,2,4,5-Tetrachlorobenzene	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.013 U	0.012 U	0.014 U	0.014 U	0.036 U	0.012 U	na	na
1,4-Dioxane	0.019 U	0.018 U	0.018 U	0.020 U	0.019 U	0.019 U	0.018 U	0.020 U	0.054 U	0.018 U	na	na	na
2,3,4,6-Tetrachlorophenol	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.014 U	0.014 U	0.015 U	0.040 U	0.013 U	na	na	na
2,4,5-Trichlorophenol	0.011 U	0.010 U	0.010 U	0.012 U	0.011 U	0.011 U	0.010 U	0.012 U	0.030 U	0.010 U	6.3E+02	na	na
2,4,6-Trichlorophenol	0.029 U	0.028 U	0.028 U	0.032 U	0.029 U	0.030 U	0.028 U	0.032 U	0.083 U	0.028 U	6.3E+00	na	na
2,4-Dichlorophenol	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.014 U	0.014 U	0.015 U	0.040 U	0.013 U	1.9E+01	na	na
2,4-Dimethylphenol	0.018 U	0.018 U	0.018 U	0.020 U	0.018 U	0.019 U	0.018 U	0.020 U	0.052 U	0.017 U	1.3E+02	na	na
2,4-Dinitrophenol	0.16 U	0.16 U	0.16 U	0.18 U	0.16 U	0.17 U	0.16 U	0.18 U	0.46 U	0.16 U	1.3E+01	na	na
2,4-Dinitrotoluene	0.012 U	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	0.011 U	0.013 U	0.033 U	0.011 U	1.7E+00	na	na
2,6-Dinitrotoluene	0.019 U	0.019 U	0.018 U	0.021 U	0.019 U	0.020 U	0.018 U	0.021 U	0.054 U	0.018 U	3.6E-01	na	na
2-Chloronaphthalene	0.016 U	0.016 U	0.016 U	0.018 U	0.016 U	0.017 U	0.016 U	0.018 U	0.047 U	0.016 U	4.8E+02	na	na
2-Chlorophenol	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U	0.013 U	0.035 U	0.012 U	3.9E+01	na	na
2-Methylnaphthalene	0.011 U	0.011 U	0.011 U	0.013 U	0.011 U	0.012 U	0.011 U	0.013 U	0.033 U	0.011 U	2.4E+01	na	na
2-Methylphenol	0.011 U	0.011 U	0.010 U	0.012 U	0.011 U	0.011 U	0.010 U	0.012 U	0.031 U	0.010 U	3.2E+02	na	na
2-Nitroaniline	0.017 U	0.017 U	0.017 U	0.019 U	0.017 U	0.018 U	0.017 U	0.019 U	0.050 U	0.017 U	na	na	na
2-Nitrophenol	0.017 U	0.017 U	0.016 U	0.018 U	0.017 U	0.017 U	0.016 U	0.018 U	0.048 U	0.016 U	na	na	na
3&4-Methylphenol	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.031 U	0.010 U	6.3E+02	na	na
3,3'-Dichlorobenzidine	0.030 U	0.030 U	0.029 U	0.033 U	0.030 U	0.031 U	0.029 U	0.033 U	0.086 U	0.029 U	1.2E+00	na	na
3-Nitroaniline	0.014 U	0.014 U	0.014 U	0.016 U	0.014 U	0.015 U	0.014 U	0.016 U	0.041 U	0.014 U	na	na	na
4,6-Dinitro-2-methylphenol	0.13 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.13 U	0.14 U	0.37 U	0.12 U	na	na	na
4-Bromophenyl-phenylether	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U	0.011 U	0.010 U	0.011 U	0.030 U	0.010 U	na	na	na
4-Chloro-3-methylphenol	0.0089 U	0.0088 U	0.0087 U	0.0098 U	0.0089 U	0.0092 U	0.0087 U	0.0098 U	0.026 U	0.0086 U	na	na	na
4-Chloroaniline	0.016 U	0.016 U	0.016 U	0.018 U	0.016 U	0.017 U	0.016 U	0.018 U	0.047 U	0.016 U	2.7E+00	na	na
4-Chlorophenyl-phenylether	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.012 U	0.011 U	0.012 U	0.033 U	0.011 U	na	na	na
4-Nitroaniline	0.014 U	0.014 U	0.014 U	0.016 U	0.014 U	0.015 U	0.014 U	0.016 U	0.041 U	0.014 U	na	na	na
4-Nitrophenol	0.028 U	0.028 U	0.028 U	0.031 U	0.028 U	0.029 U	0.028 U	0.031 U	0.081 U	0.027 U	na	na	na
Acenaphthene	0.011 U	0.010 U	0.010 U	0.012 U	0.011 U	0.011 U	0.010 U	0.012 U	0.030 U	0.010 U	3.6E+02	na	na
Acenaphthylene	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.032 U	0.011 U	na	na	na
Acetophenone	0.019 J	0.023 J	0.013 U	0.015 U	0.013 U	0.014 U	0.013 U	0.015 U	0.038 U	0.013 U	na	na	na
Anthracene	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U	0.011 U	0.010 U	0.011 U	0.029 U	0.0099 U	1.8E+03	na	na
Atrazine	0.015 U	0.015 U	0.015 U	0.016 U	0.015 U	0.015 U	0.015 U	0.016 U	0.043 U	0.014 U	2.4E+00	na	na
Benzaldehyde	0.40 U	0.40 U	0.39 U	0.44 U	0.40 U	0.42 U	0.39 U	0.44 U	1.2 U	0.39 U	na	na	na
Benzo[a]anthracene	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.013 U	0.012 U	0.014 U	0.035 U	0.012 U	1.1E+00	na	na
Benzo[a]pyrene	0.014 J	0.012 U	0.012 U	0.014 U	0.013 U	0.013 U	0.012 U	0.014 U	0.036 U	0.012 U	1.1E-01	na	na
Benzo[b]fluoranthene	0.013 U	0.013 U	0.013 U	0.015 U	0.013 U	0.014 U	0.013 U	0.015 U	0.038 U	0.015 J	1.1E+00	na	na
Benzo[g,h,i]perylene	0.0092 J	0.00025 U	0.00025 U	0.00028 U	0.00026 U	0.00026 U	0.00025 U	0.00028 U	0.033 J	0.00025 U	na	na	na
Benzo[k]fluoranthene	0.014 U	0.013 U	0.013 U	0.015 U	0.014 U	0.014 U	0.013 U	0.015 U	0.039 U	0.013 U	1.1E+01	na	na
bis(2-Chloroethoxy)methane	0.010 U	0.010 U	0.010 U	0.012 U	0.010 U	0.011 U	0.010 U	0.012 U	0.030 U	0.010 U	na	na	na
bis(2-Chloroethyl)ether	0.0090 U	0.0089 U	0.0088 U	0.0099 U	0.0090 U	0.0093 U	0.0088 U	0.0099 U	0.026 U	0.0087 U	2.3E-01	na	na
bis(2-Chloroisopropyl)ether	0.015 U	0.015 U	0.014 U	0.016 U	0.015 U	0.015 U	0.014 U	0.016 U	0.043 U	0.014 U	na	na	na
bis(2-Ethylhexyl)phthalate	0.24	0.44	0.38	0.036 J	0.15	0.28	0.34	0.42	0.094 U	0.12	3.9E+01	na	na
Butylbenzylphthalate	0.028 U	0.028 U	0.028 U	0.031 U	0.028 U	0.033 J	0.028 U	0.031 U	0.082 U	0.027 U	na	na	na
Caprolactam	0.030 U	0.029 U	0.029 U	0.033 U	0.030 U	0.031 U	0.029 U	0.033 U	0.085 U	0.029 U	na	na	na
Carbazole	0.012 U	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	0.011 U	0.013 U	0.033 U	0.011 U	na	na	na
Chrysene	0.016 J	0.012 U	0.012 U	0.014 U	0.013 U	0.013 U	0.012 U	0.014 U	0.036 U	0.012 U	1.1E+02	na	na
Dibenzo[a,h]anthracene	0.014 U	0.013 U	0.013 U	0.015 U	0.014 U	0.014 U	0.013 U	0.015 U	0.039 U	0.013 U	1.1E-01	na	na
Dibenzofuran	0.0094 U	0.0093 U	0.0092 U	0.010 U	0.0094 U	0.0097 U	0.0092 U	0.010 U	0.027 U	0.0091 U	7.3E+00	na	na
Diethylphthalate	0.024 U	0.024 U	0.023 U	0.026 U	0.024 U	0.025 U	0.023 U	0.026 U	0.069 U	0.023 U	5.1E+03	na	na
Dimethylphthalate	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U	0.011 U	0.010 U	0.011 U	0.030 U	0.0066	na	na	na
Di-n-butylphthalate	0.12	0.16	0.17	0.047 U	0.042 U	0.067	0.077	0.061	0.12 U	0.058	na	na	na
Di-n-octylphthalate	0.025 U	0.024 U	0.024 J	0.027 U	0.025 U	0.025 U	0.024 U	0.027 U	0.070 U	0.024 U	na	na	na
Fluoranthene	0.014 U	0.014 U	0.014 U	0.016 U	0.014 U	0.015 U	0.014 U	0.016 U	0.041 U	0.014 U	2.4E+02	na	na
Fluorene	0.010 U	0.010 U	0.0099 U	0.012 J	0.010 U	0.010 U	0.0099 U	0.011 U	0.029 U	0.0098 U	2.4E+02	na	na

Table E-2  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Surface/Near Surface Soil Sample Analytical Results  
 September 25, 2020  
 Semi-Volatile Organic Compounds (SVOCs) and Metals

Analytical Suite	Sample ID	HSI-SS-01 (0-0.5')	HSI-SS-02 (0-0.5')	HSI-SS-02 (0-0.5') [HSI-SS-D (0-0.5')]	HSI-SS-03 (0-0.5')	HSI-SS-04 (0-0.5')	HSI-SS-05 (0-0.5')	HSI-SS-06 (0-0.5')	HSI-SS-07 (0-0.5')	HSI-SS-08 (0-0.5')	HSI-SS-09 (0-0.5')	MDE Residential Soil Standards	MDE ATC
	Dilution Factor (SVOCs)	1	1	1	1	1	1	1	1	3	1		
	Dilution Factor (Metals)	1	1	1	1	1	1	1	1	1	1		
Analyte Name	Concentration (mg/kg)												
Hexachlorobenzene	0.015 U	0.015 U	0.015 U	0.017 U	0.015 U	0.015 U	0.016 U	0.017 U	0.044 U	0.015 U	2.1E-01	na	
Hexachlorobutadiene	0.017 U	0.016 U	0.016 U	0.018 U	0.017 U	0.017 U	0.016 U	0.018 U	0.047 U	0.016 U	1.2E+00	na	
Hexachlorocyclopentadiene	0.12 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.13 U	0.35 U	0.12 U	1.8E-01	na	
Hexachloroethane	0.016 U	0.016 U	0.016 U	0.018 U	0.016 U	0.017 U	0.016 U	0.018 U	0.047 U	0.016 U	1.8E+00	na	
Indeno[1,2,3-cd]pyrene	0.017 U	0.017 U	0.016 U	0.018 U	0.017 U	0.017 U	0.016 U	0.018 U	0.048 U	0.016 U	1.1E+00	na	
Isophorone	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.012 U	0.012 U	0.013 U	0.034 U	0.012 U	5.7E+02	na	
Naphthalene	0.011 U	0.011 U	0.010 U	0.012 U	0.011 U	0.011 U	0.010 U	0.012 U	0.031 U	0.010 U	3.8E+00	na	
Nitrobenzene	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0015 U	0.0016 U	0.0015 U	0.0016 U	0.0043 U	0.0015 U	5.1E+00	na	
N-Nitroso-di-n-propylamine	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.014 U	0.014 U	0.015 U	0.040 U	0.013 U	7.8E-02	na	
N-Nitrosodiphenylamine	0.13 U	0.12 U	0.12 U	0.14 U	0.13 U	0.13 U	0.12 U	0.14 U	0.36 U	0.12 U	1.1E+02	na	
Pentachlorophenol	0.18 U	0.18 U	0.17 U	0.20 U	0.18 U	0.18 U	0.17 U	0.20 U	0.51 U	0.17 U	1.0E+00	na	
Phenanthrene	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.012 U	0.012 U	0.013 U	0.034 U	0.011 U	1.8E+02	na	
Phenol	0.010 U	0.010 U	0.010 U	0.011 U	0.010 U	0.011 U	0.010 U	0.011 U	0.029 U	0.0099 U	1.9E+03	na	
Pyrene	0.013 U	0.012 U	0.012 U	0.014 U	0.013 U	0.013 U	0.012 U	0.014 U	0.036 U	0.015 J	1.8E+02	na	
Aluminum	3,200	3,800	3,700	4,000	6,700	3,300	5,000	3,200	3,900	5,000	7.7E+03	1.9E+04	
Antimony	0.13 J	0.11 J	0.063 J	0.027 U	0.031 J	0.058 J	0.053 J	0.084 J	0.024 U	0.031 J	3.1E+00	6.8E+00	
Arsenic	3.9 B	3.2 B	3.0 B	3.6 B	7.1 B	3.0 B	3.2 B	2.2 B	2.2 B	3.5 B	6.8E-01	4.9E+00	
Barium	21	20	20	22	22	15	24	21	29	37	1.5E+03	9.9E+01	
Beryllium	0.18 J	0.18 J	0.17 J	0.19 J	0.20 J	0.20 J	0.18 J	0.14 J	0.14 J	0.19 J	1.6E+01	1.6E+00	
Cadmium	0.38 J	0.49	0.39 J	0.17 J	0.15 J	0.50	0.18 J	0.48 J	0.15 J	0.26 J	7.1E+00	1.1E+00	
Calcium	1,700	1,600	1,400	1,700	210 J	190 J	290 J	410 J	19,000	1,400	na	1.2E+04	
Chromium	19 B	20 B	17 B	23 B	24 B	20 B	21 B	18 B	15 B	17 B	na	3.0E+01	
Cobalt	0.95 J	1.4 J	1.5 J	1.2 J	1.5 J	0.94 J	1.5 J	1.6 J	3.1	4.0	na	3.3E+01	
Copper	14 B	18 B	16 B	9.2 B	7.3 B	13 B	8.9 B	12 B	11 B	27 B	3.1E+02	4.2E+01	
Iron	6,500 B	6,700 B	6,500 B	7,100 B	11,000 B	7,000 B	9,900 B	14,000 B	8,100 B	11,000 B	5.5E+03	2.6E+04	
Lead	17	23	140	3.9 J	7.1	22	15	22	6.6	9.8	2.0E+02	6.1E+01	
Magnesium	450 J	540 J	550	560 J	680	340 J	510 J	300 J	7,900	2,200	na	3.7E+03	
Manganese	50	61	56	54	31	28	37	68	150	210	1.8E+02	1.4E+03	
Mercury	0.014 U	0.020 J	0.014 J	0.015 U	0.014 U	0.015 U	0.014 U	0.038 J	0.013 U	0.014 U	1.1E+00	1.4E-01	
Nickel	3.5 J	4.5 J	3.8 J	3.0 J	4.2 J	4.7 J	3.8 J	4.6 J	9.1	9.8	1.5E+02	2.2E+01	
Potassium	150 J	160 J	160 J	180 J	220 J	140 J	150 J	150 J	540	550	na	2.6E+03	
Selenium	1.2 JB	1.4 JB	1.3 JB	1.2 JB	0.88 JB	4.0 B	1.1 JB	1.4 JB	0.87 JB	0.99 JB	3.9E+01	1.0E+00	
Silver	0.067 JB	0.048 JB	0.041 JB	0.050 JB	0.037 JB	0.061 JB	0.047 JB	0.084 JB	0.049 JB	0.050 JB	3.9E+01	1.0E+00	
Sodium	140 U	140 U	140 U	150 U	140 U	140 U	140 U	150 U	130 U	140 U	na	2.3E+02	
Thallium	0.10 J	0.020 J	0.019 U	0.026 J	0.039 J	0.061 U	0.035 J	0.022 J	0.028 J	0.037 J	7.8E-02	1.5E+00	
Vanadium	47 B	18 B	18 B	19 B	22 B	21 B	17 B	16 B	15 B	20 B	3.9E+01	3.5E+01	
Zinc	43 B	29 B	26 B	22 B	18 B	24 B	25 B	42 B	22 B	38 B	2.3E+03	7.3E+01	

**Table Notes:**

SVOCs Analytical Method: EPA Method 8270D  
 Target Analyte List (TAL) Metals Analytical Methods: EPA Method 6010D, 6020B, and 7471B  
 [Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.  
 mg/kg - milligrams per kilogram or parts per million (ppm)  
 U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
 J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.  
 B - Indicates analyte was present in the Method Blank and sample.  
 na - not applicable  
**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)  
 MDE Anticipated Typical Concentration (ATC) for Central Maryland (October 2018)

**Screening Evaluation Notes:**

SVOCs: No detected analyte concentrations exceed the respective MDE Residential Soil Clean-up Standard.  
Underline - MDL exceeds the respective MDE Residential Soil Clean-up Standard.  
 Metals: **Bold and underline** - Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.  
**Red, bold, and underline** - Detected analyte concentration exceeds the MDE Residential Soil Clean-up Standard and the ATC for Central Maryland.  
 No MDLs exceed the respective MDE Residential Soil Clean-up Standard.

**Additional Screening Level Notes:**

**Analvte** **MDE Residential Soil Standard**  
 Total Mercury Mercury (elemental)

**Table E-3**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Grab Groundwater Sample Analytical Results**  
**September 28, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	HSI-GW-01	HSI-GW-02	HSI-GW-03	HSI-GW-04	HSI-TB-01	EPA Residential Groundwater VISLs
Dilution Factor	5	5	5	5	1	
Sample Type	Groundwater				Blank	
Analyte Name	Concentration (ug/L)					
1,1,1-Trichloroethane	1.8 U	1.8 U	1.8 U	1.8 U	0.36 U	7.4E+03
1,1,2,2-Tetrachloroethane	2.2 U	<b>7.5</b>	<b>2.4 J</b>	<b>12</b>	0.45 U	3.2E+01
1,1,2-Trichloro-1,2,2-trifluoroethane	3.6 U	3.6 U	3.6 U	3.6 U	0.73 U	2.4E+02
1,1,2-Trichloroethane	1.6 U	1.6 U	1.6 U	1.6 U	0.32 U	6.2E+00
1,1-Dichloroethane	<b>6.9</b>	<b>3.6 J</b>	<b>2.7 J</b>	<b>4.5 J</b>	0.43 U	7.6E+01
1,1-Dichloroethene	2.7 U	2.7 U	2.7 U	2.7 U	0.53 U	2.0E+02
1,2,3-Trichlorobenzene	3.9 U	3.9 U	3.9 U	3.9 U	0.79 U	na
1,2,4-Trichlorobenzene	3.6 U	3.6 U	3.6 U	3.6 U	0.73 U	3.6E+01
1,2-Dibromo-3-chloropropane	4.2 U	4.2 U	4.2 U	4.2 U	0.83 U	2.8E-01
1,2-Dibromoethane	1.7 U	1.7 U	1.7 U	1.7 U	0.34 U	1.8E+00
1,2-Dichlorobenzene	1.6 U	1.6 U	1.6 U	1.6 U	0.32 U	2.7E+03
1,2-Dichloroethane	<b>35</b>	<b>24</b>	3.2 U	<b>20</b>	0.64 U	2.2E+01
1,2-Dichloropropane	1.5 U	1.5 U	1.5 U	1.5 U	0.30 U	3.6E+01
1,3-Dichlorobenzene	1.9 U	1.9 U	1.9 U	1.9 U	0.38 U	na
1,4-Dichlorobenzene	1.8 U	1.8 U	1.8 U	1.8 U	0.37 U	2.6E+01
1,4-Dioxane	200 U	200 U	200 U	200 U	39 U	2.9E+04
2-Butanone	3.7 U	3.7 U	3.7 U	3.7 U	0.75 U	2.2E+06
2-Hexanone	3.0 U	3.0 U	3.0 U	3.0 U	0.60 U	8.2E+03
4-Methyl-2-pentanone	2.4 U	2.4 U	2.4 U	2.4 U	0.49 U	5.6E+05
Acetone	23 U	23 U	23 U	23 U	4.6 U	2.3E+07
Benzene	<b>40</b>	<b>36</b>	<b>13</b>	<b>28</b>	0.30 U	1.6E+01
Bromochloromethane	3.9 U	3.9 U	3.9 U	3.9 U	0.79 U	7.0E+02
Bromodichloromethane	1.7 U	1.7 U	1.7 U	1.7 U	0.35 U	8.8E+00
Bromoform	2.7 U	2.7 U	2.7 U	2.7 U	0.54 U	1.2E+03
Bromomethane	2.5 U	2.5 U	2.5 U	2.5 U	0.50 U	1.7E+01
Carbon disulfide	2.1 U	2.1 U	2.1 U	2.1 U	0.42 U	1.2E+03
Carbon tetrachloride	1.6 U	1.6 U	1.6 U	1.6 U	0.32 U	4.2E+00
Chlorobenzene	<b>510</b>	<b>550</b>	<b>320</b>	<b>460</b>	0.33 U	4.1E+02
Chloroethane	2.9 U	2.9 U	<b>4.5 J</b>	<b>3.6 J</b>	0.58 U	na
Chloroform	9.8 U	9.8 U	9.8 U	9.8 U	2.0 U	8.1E+00
Chloromethane	2.6 U	2.6 U	2.6 U	2.6 U	0.52 U	2.6E+02
cis-1,2-Dichloroethene	<b>360</b>	<b>97</b>	<b>4.7 J</b>	<b>120</b>	0.64 U	na
cis-1,3-Dichloropropene	1.6 U	1.6 U	1.6 U	1.6 U	0.32 U	na
Cyclohexane	2.4 U	2.4 U	2.4 U	2.4 U	0.49 U	1.0E+03
Dibromochloromethane	1.2 U	1.2 U	1.2 U	1.2 U	0.24 U	na
Dichlorodifluoromethane	3.1 U	3.1 U	3.1 U	3.1 U	0.62 U	7.4E+00
Ethylbenzene	<b>3.6 J</b>	<b>17</b>	2.3 U	2.3 U	0.47 U	3.5E+01
Isopropylbenzene	2.5 U	<b>2.9 J</b>	2.5 U	2.5 U	0.49 U	8.9E+02
m&p-Xylene	<b>6.6</b>	<b>39</b>	4.2 U	4.2 U	0.85 U	3.9E+02
Methyl Acetate	<b>11 B</b>	<b>13 B</b>	<b>15 B</b>	<b>14 B</b>	0.70 U	na
Methylcyclohexane	3.1 U	3.1 U	3.1 U	3.1 U	0.61 U	na
Methylene chloride	1.5 U	1.5 U	1.5 U	<b>1.9 J</b>	0.29 U	4.7E+03
Methyl-t-butyl ether	<b>18</b>	<b>4.1</b>	<b>1.9 J</b>	<b>9.6</b>	0.31 U	4.5E+03
o-Xylene	<b>3.6 J</b>	<b>13</b>	3.4 U	3.4 U	0.68 U	4.9E+02
Styrene	2.7 U	2.7 U	2.7 U	2.7 U	0.54 U	9.3E+03
Tetrachloroethene	1.8 U	1.8 U	1.8 U	1.8 U	0.36 U	5.8E+01
Toluene	<b>2.1 J</b>	<b>120</b>	1.6 U	<b>4.3 J</b>	0.33 U	1.9E+04
trans-1,2-Dichloroethene	<b>91</b>	<b>15</b>	<b>1.9 J</b>	<b>32</b>	0.31 U	na
trans-1,3-Dichloropropene	1.5 U	1.5 U	1.5 U	1.5 U	0.31 U	na
Trichloroethene	<b>10</b>	<b>16</b>	1.7 U	<b>26</b>	0.35 U	5.2E+00
Trichlorofluoromethane	1.5 U	1.5 U	1.5 U	1.5 U	0.31 U	na
Vinyl chloride	<b>65</b>	<b>45</b>	<b>9.0</b>	<b>48</b>	0.71 U	1.5E+00
Xylenes (Total)	<b>10</b>	<b>52</b>	3.4 U	3.4 U	0.68 U	3.9E+02

**Table Notes:**

VOCs Analytical Method: EPA Method 8260D

ug/L - micrograms per liter or parts per billion (ppb)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

B - Indicates analyte was present in the Method Blank and sample.

na - not applicable

**Bold** - Detected analyte concentration

**Residential Screening Levels (SLs):**

EPA Residential Groundwater Vapor Intrusion Screening Levels (VISLs) (May 2020) (at CR = 1x10<sup>-5</sup> or HI = 1)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.

Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes**

**Analyte**

m+p-Xylenes

o-Xylene

**EPA VISLs**

Total Xylenes

o-Xylene



Table E-4  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Subsurface Soil Sample Analytical Results  
 September 28 - October 1, 2020  
 Volatile Organic Compounds (VOCs)

Sample ID	HSI-SB-01 (2.5-3)	HSI-SB-01 (6-6.5)	HSI-SB-01 (6-6.5) [HSI-SB-D1]	HSI-SB-01 (10-10.5)	HSI-SB-01 (14.5-15)	HSI-SB-02 (3.5-4)	HSI-SB-02 (10-10.5)	HSI-SB-02 (11-11.5)	HSI-SB-03 (3.5-4)	HSI-SB-03 (10-10.5)	HSI-SB-03 (11-11.5)	HSI-SB-04 (9.5-10)	HSI-SB-05 (4.5-5)
Dilution Factor	63.5	1220	6590	0.616	0.71	74.5	0.687	56.9	65.2	65.2	69.1	0.665	68.8
Sample Collection Date	09/29/20	09/29/20	09/29/20	09/29/20	09/29/20	09/28/20	09/28/20	09/28/20	09/29/20	09/29/20	09/29/20	09/29/20	09/30/20
Analyte Name	Concentration (mg/kg)												
1,1,1-Trichloroethane	0.026 U	0.53 U	2.8 U	0.00069 U	0.00082 U	0.032 U	0.00079 U	0.026 U	0.027 U	0.028 U	0.031 U	0.00076 U	0.029 U
1,1,2,2-Tetrachloroethane	<b>2.7</b>	<b>58</b>	<b>200</b>	<b>0.0011 J</b>	<b>0.0024</b>	0.040 U	<b>0.0063</b>	0.032 U	<b>0.43</b>	0.035 U	0.039 U	0.00037 U	0.036 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.053 U	1.1 U	5.7 U	0.0010 U	0.0012 U	0.065 U	0.0012 U	0.052 U	0.055 U	0.056 U	0.063 U	0.0011 U	0.058 U
1,1,2-Trichloroethane	<b>0.031 J</b>	0.47 U	2.5 U	0.00035 U	0.00041 U	0.029 U	0.00039 U	0.023 U	<b>0.025 J</b>	0.025 U	0.028 U	0.00038 U	0.026 U
1,1-Dichloroethane	0.031 U	0.63 U	3.4 U	<b>0.00097 J</b>	0.00077 U	0.038 U	<b>0.0011 J</b>	0.031 U	0.032 U	0.033 U	0.037 U	<b>0.0014 J</b>	0.034 U
1,1-Dichloroethene	0.039 U	0.78 U	4.2 U	<b>0.0016</b>	0.0010 U	0.048 U	0.00099 U	0.038 U	0.040 U	0.041 U	0.046 U	0.00094 U	0.043 U
1,2,3-Trichlorobenzene	0.057 U	1.2 U	6.2 U	0.00041 U	0.00049 U	0.071 U	0.00047 U	0.057 U	0.060 U	0.061 U	0.068 U	0.00045 U	0.063 U
1,2,4-Trichlorobenzene	0.053 U	1.1 U	5.7 U	0.00047 U	0.00056 U	0.065 U	0.00054 U	0.052 U	0.055 U	0.056 U	0.063 U	0.00052 U	0.058 U
1,2-Dibromo-3-chloropropane	0.061 U	1.2 U	6.5 U	0.00041 U	0.00049 U	0.075 U	0.00047 U	0.060 U	0.063 U	0.065 U	0.072 U	0.00045 U	0.067 U
1,2-Dibromoethane	0.025 U	0.50 U	2.7 U	0.00037 U	0.00044 U	0.031 U	0.00042 U	0.025 U	0.026 U	0.027 U	0.030 U	0.00040 U	0.027 U
1,2-Dichlorobenzene	0.024 U	0.48 U	2.5 U	0.00038 U	0.00045 U	0.029 U	<b>0.0016 J</b>	0.023 U	0.025 U	0.025 U	0.028 U	0.00042 U	0.026 U
1,2-Dichloroethane	<b>1.8</b>	<b>19</b>	<b>74</b>	<b>0.0073</b>	<b>0.010</b>	0.057 U	0.00035 U	0.046 U	<b>0.39</b>	0.050 U	0.055 U	<b>0.0028</b>	<b>0.10</b>
1,2-Dichloropropane	0.022 U	0.44 U	2.3 U	0.00062 U	0.00073 U	0.027 U	0.00070 U	0.022 U	0.023 U	0.023 U	0.026 U	0.00067 U	0.024 U
1,3-Dichlorobenzene	0.028 U	0.55 U	3.0 U	0.00041 U	0.00049 U	0.034 U	0.00047 U	0.027 U	0.029 U	0.029 U	0.033 U	0.00045 U	0.030 U
1,4-Dichlorobenzene	0.027 U	0.54 U	2.9 U	0.00040 U	0.00047 U	0.033 U	<b>0.00075 J</b>	0.026 U	0.028 U	0.028 U	0.032 U	0.00044 U	0.029 U
1,4-Dioxane	2.9 U	58 U	310 U	0.036 U	0.043 U	3.5 U	0.042 U	2.8 U	3.0 U	3.1 U	3.4 U	0.040 U	3.1 U
2-Butanone	0.055 U	1.1 U	5.9 U	0.00090 U	0.0011 U	0.067 U	<b>0.0093</b>	0.054 U	0.057 U	0.058 U	0.065 U	0.00099 U	0.060 U
2-Hexanone	0.044 U	0.88 U	4.7 U	0.00064 U	0.00075 U	0.054 U	0.00073 U	0.043 U	0.046 U	0.047 U	0.052 U	0.00070 U	0.048 U
4-Methyl-2-pentanone	<b>0.59</b>	<b>14</b>	<b>76</b>	<b>0.0040</b>	<b>0.00081 J</b>	0.044 U	<b>0.0042</b>	0.035 U	0.037 U	0.038 U	0.042 U	0.00048 U	0.039 U
Acetone	0.33 U	6.7 U	36 U	<b>0.0080</b>	<b>0.012</b>	0.41 U	<b>0.034</b>	0.33 U	0.35 U	0.36 U	0.40 U	0.0056 U	0.37 U
Benzene	<b>0.034 J</b>	<b>2.4</b>	<b>9.7</b>	<b>0.0086</b>	<b>0.0030</b>	0.027 U	<b>0.083</b>	<b>0.098</b>	0.022 U	0.023 U	0.026 U	<b>0.0072</b>	0.024 U
Bromochloromethane	0.057 U	1.2 U	6.2 U	0.00053 U	0.00062 U	0.071 U	0.00060 U	0.057 U	0.060 U	0.061 U	0.068 U	0.00057 U	0.063 U
Bromodichloromethane	0.025 U	0.51 U	2.7 U	0.00035 U	0.00042 U	0.031 U	0.00040 U	0.025 U	0.026 U	0.027 U	0.030 U	0.00039 U	0.028 U
Bromoform	0.039 U	0.80 U	4.2 U	0.00025 U	0.00029 U	0.049 U	0.00028 U	0.039 U	0.041 U	0.042 U	0.047 U	0.00027 U	0.043 U
Bromomethane	0.037 U	0.74 U	3.9 U	0.0012 U	0.0014 U	0.045 U	0.0013 U	0.036 U	0.038 U	0.039 U	0.043 U	0.0013 U	0.040 U
Carbon disulfide	0.031 U	0.62 U	3.3 U	0.0026 U	0.0030 U	0.038 U	0.0029 U	0.031 U	0.032 U	0.033 U	0.037 U	0.0028 U	0.034 U
Carbon tetrachloride	0.024 U	0.48 U	2.5 U	0.00073 U	0.00086 U	0.029 U	0.00083 U	0.023 U	0.024 U	0.025 U	0.028 U	0.00080 U	0.026 U
Chlorobenzene	<b>1.5</b>	<b>320</b>	<b>1,200</b>	<b>0.18</b>	<b>0.065</b>	<b>9.1</b>	0.00053 U	<b>2.7</b>	<b>0.057 J</b>	<b>0.33</b>	<b>0.19</b>	<b>0.097</b>	<b>0.050 J</b>
Chloroethane	0.042 U	0.85 U	4.5 U	0.0015 U	0.0017 U	0.052 U	0.0017 U	0.042 U	0.044 U	0.045 U	0.050 U	0.0016 U	0.046 U
Chloroform	0.14 U	2.9 U	15 U	0.0010 U	0.0012 U	0.18 U	0.0012 U	0.14 U	0.15 U	0.15 U	0.17 U	0.0011 U	0.16 U
Chloromethane	0.038 U	0.76 U	4.0 U	0.00092 U	0.0011 U	0.046 U	0.0011 U	0.037 U	0.039 U	0.040 U	0.045 U	0.0010 U	0.041 U
cis-1,2-Dichloroethene	<b>0.35</b>	<b>9.9</b>	<b>33</b>	<b>0.052</b>	<b>0.014</b>	0.057 U	0.00070 U	0.046 U	<b>0.18</b>	0.049 U	<b>0.079 J</b>	<b>0.030</b>	<b>0.34</b>
cis-1,3-Dichloropropene	0.023 U	0.47 U	2.5 U	0.00040 U	0.00047 U	0.029 U	0.00046 U	0.023 U	0.024 U	0.025 U	0.028 U	0.00044 U	0.026 U
Cyclohexane	0.036 U	0.72 U	3.8 U	0.00090 U	0.0011 U	0.044 U	0.0010 U	0.035 U	0.037 U	0.038 U	0.042 U	0.00099 U	0.039 U
Dibromochloromethane	0.017 U	0.35 U	1.9 U	0.00032 U	0.00038 U	0.021 U	0.00037 U	0.017 U	0.018 U	0.019 U	0.021 U	0.00035 U	0.019 U
Dichlorodifluoromethane	0.045 U	0.91 U	4.9 U	0.0011 U	0.0013 U	0.056 U	0.0012 U	0.045 U	0.047 U	0.048 U	0.053 U	0.0012 U	0.050 U
Ethylbenzene	0.034 U	<b>12</b>	<b>44</b>	<b>0.0028</b>	<b>0.00070 J</b>	<b>0.78</b>	<b>0.074</b>	<b>0.046 J</b>	0.035 U	0.036 U	0.040 U	0.00057 U	0.037 U
Isopropylbenzene	0.036 U	<b>1.2 J</b>	<b>5.0 J</b>	0.00062 U	0.00074 U	0.044 U	<b>0.035</b>	0.035 U	0.037 U	0.038 U	0.042 U	0.00068 U	0.039 U
m&p-Xylene	<b>0.11</b>	<b>57</b>	<b>200</b>	<b>0.0024</b>	<b>0.0013</b>	<b>4.1</b>	<b>0.29</b>	<b>0.14</b>	0.064 U	0.066 U	0.073 U	<b>0.0010</b>	0.068 U
Methyl Acetate	0.051 U	1.0 U	5.5 U	0.00072 U	0.00085 U	0.063 U	0.00082 U	0.051 U	0.053 U	0.055 U	0.061 U	0.00079 U	0.056 U
Methylcyclohexane	0.045 U	<b>1.8</b>	4.8 U	<b>0.00093 J</b>	0.00080 U	0.055 U	<b>0.0025</b>	0.044 U	0.047 U	0.048 U	0.053 U	0.00074 U	0.049 U
Methylene chloride	<b>2.3</b>	<b>49</b>	<b>160</b>	<b>0.0031</b>	<b>0.022</b>	0.026 U	<b>0.0024</b>	0.021 U	0.022 U	0.023 U	0.025 U	<b>0.0022</b>	0.024 U
Methyl-t-butyl ether	0.023 U	0.46 U	2.4 U	0.00041 U	<b>0.0012</b>	0.028 U	0.00046 U	0.022 U	0.024 U	0.024 U	0.027 U	<b>0.00070 J</b>	0.025 U
o-Xylene	0.050 U	<b>13</b>	<b>46</b>	<b>0.0019</b>	0.00063 U	<b>1.3</b>	<b>0.12</b>	0.049 U	0.052 U	0.053 U	0.059 U	<b>0.0014</b>	0.055 U



Table E-4  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Subsurface Soil Sample Analytical Results  
 September 28 - October 1, 2020  
 Volatile Organic Compounds (VOCs)

Sample ID	HSI-SB-01 (2.5-3)	HSI-SB-01 (6-6.5)	HSI-SB-01 (6-6.5) [HSI-SB-D1]	HSI-SB-01 (10-10.5)	HSI-SB-01 (14.5-15)	HSI-SB-02 (3.5-4)	HSI-SB-02 (10-10.5)	HSI-SB-02 (11-11.5)	HSI-SB-03 (3.5-4)	HSI-SB-03 (10-10.5)	HSI-SB-03 (11-11.5)	HSI-SB-04 (9.5-10)	HSI-SB-05 (4.5-5)
Dilution Factor	63.5	1220	6590	0.616	0.71	74.5	0.687	56.9	65.2	65.2	69.1	0.665	68.8
Sample Collection Date	09/29/20	09/29/20	09/29/20	09/29/20	09/29/20	09/28/20	09/28/20	09/28/20	09/29/20	09/29/20	09/29/20	09/29/20	09/30/20
Analyte Name	Concentration (mg/kg)												
Styrene	0.040 U	0.80 U	4.3 U	0.00041 U	0.00049 U	0.049 U	0.00047 U	0.039 U	0.041 U	0.042 U	0.047 U	0.00045 U	0.043 U
Tetrachloroethene	<b>0.21</b>	<u>29</u>	<u>95</u>	0.00074 U	0.00087 U	0.032 U	0.00084 U	0.026 U	<b>0.17</b>	0.028 U	0.031 U	0.00080 U	<b>0.059 J</b>
Toluene	<b>0.75</b>	<u>570</u>	<u>2,200</u>	<b>0.0094</b>	<b>0.035</b>	<b>0.31</b>	<b>0.17</b>	<b>1.2</b>	<b>0.042 J</b>	<b>0.37</b>	<b>0.082 J</b>	<b>0.0049</b>	0.026 U
trans-1,2-Dichloroethene	<b>0.088</b>	<b>3.4</b>	<b>12</b>	<b>0.0027</b>	<b>0.0027</b>	0.028 U	0.0010 U	0.022 U	0.023 U	0.024 U	0.027 U	<b>0.0033</b>	<b>0.076 J</b>
trans-1,3-Dichloropropene	0.022 U	0.45 U	2.4 U	0.00035 U	0.00042 U	0.028 U	0.00040 U	0.022 U	0.023 U	0.024 U	0.026 U	0.00039 U	0.025 U
Trichloroethene	<b>4.4</b>	<u>460</u>	<u>1,700</u>	<b>0.030</b>	<b>0.040</b>	0.031 U	0.00070 U	0.025 U	<u>2.3</u>	0.027 U	<b>0.032 J</b>	<b>0.0012 J</b>	<u>0.85</u>
Trichlorofluoromethane	0.022 U	0.45 U	2.4 U	0.00089 U	0.0010 U	0.028 U	0.0010 U	0.022 U	0.023 U	0.024 U	0.027 U	0.00097 U	0.025 U
Vinyl chloride	0.052 U	<u>1.0 U</u>	<u>5.5 U</u>	<b>0.084</b>	<b>0.0075</b>	<u>0.063 U</u>	0.0010 U	0.051 U	0.054 U	0.055 U	<u>0.061 U</u>	<u>0.14</u>	0.056 U
Xylenes (Total)	<b>0.11</b>	<u>70</u>	<u>250</u>	<b>0.0043</b>	<b>0.0013</b>	<b>5.4</b>	<b>0.41</b>	<b>0.14</b>	0.052 U	0.053 U	0.059 U	<b>0.0024</b>	0.055 U

**Table Notes:**

VOCs Analytical Method: EPA Method 8260D

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.

Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes:**

<b>Analyte</b>	<b>MDE Residential Soil Standard</b>
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m+p-Xylenes	Total Xylenes
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o-Xylene	Total Xylenes
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Table E-4  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Subsurface Soil Sample Analytical Results  
 September 28 - October 1, 2020  
 Volatile Organic Compounds (VOCs)

Sample ID	HSI-SB-06 (4.5-5)	HSI-SB-07 (4.5-5)	HSI-SB-08 (3.5-4)	HSI-SB-08 (8-8.5)	HSI-SB-08 (12-13)	HSI-SB-08 (12-13) [HSI-SB-D2]	HSI-SB-08 (13-13.5)	HSI-SB-09 (14-14.5)	HSI-SB-10 (5.5-6)	HSI-SB-10 (7-7.5)	HSI-SB-10 (8-8.5)	MDE Residential Soil Standards
Dilution Factor	67.5	70.8	64.7	66.2	69.4	70.7	0.681	0.697	63.2	61.7	0.679	
Sample Collection Date	09/30/20	09/30/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	
Analyte Name	Concentration (mg/kg)											
1,1,1-Trichloroethane	0.028 U	0.029 U	0.027 U	0.029 U	0.033 U	0.033 U	0.00081 U	0.00080 U	0.025 U	0.027 U	0.00076 U	8.1E+02
1,1,2,2-Tetrachloroethane	0.036 U	<b>0.17</b>	0.033 U	0.036 U	0.041 U	0.042 U	0.00040 U	0.00039 U	<b>0.052 J</b>	0.033 U	<b>0.028</b>	6.0E-01
1,1,2-Trichloro-1,2,2-trifluoroethane	0.058 U	0.060 U	0.054 U	0.059 U	0.066 U	0.068 U	0.0012 U	0.0012 U	0.052 U	0.054 U	0.0012 U	na
1,1,2-Trichloroethane	0.025 U	0.026 U	0.024 U	0.026 U	0.029 U	0.030 U	0.00041 U	0.00040 U	0.023 U	0.024 U	<b>0.0043</b>	1.5E-01
1,1-Dichloroethane	0.034 U	0.035 U	0.032 U	0.035 U	0.039 U	0.040 U	0.00077 U	0.00076 U	0.030 U	0.032 U	0.00072 U	3.6E+00
1,1-Dichloroethene	0.042 U	0.044 U	0.040 U	0.043 U	0.049 U	0.050 U	0.0010 U	0.0010 U	0.038 U	0.040 U	0.00095 U	2.3E+01
1,2,3-Trichlorobenzene	0.062 U	0.065 U	0.058 U	0.064 U	0.072 U	0.073 U	0.00049 U	0.00048 U	0.056 U	0.059 U	0.00046 U	na
1,2,4-Trichlorobenzene	0.058 U	0.060 U	0.054 U	0.059 U	0.067 U	0.068 U	0.00056 U	0.00055 U	0.052 U	0.054 U	0.00052 U	5.8E+00
1,2-Dibromo-3-chloropropane	0.066 U	0.069 U	0.062 U	0.067 U	0.076 U	0.078 U	0.00049 U	0.00048 U	0.059 U	0.062 U	0.00046 U	5.3E-03
1,2-Dibromoethane	0.027 U	0.028 U	0.025 U	0.028 U	0.031 U	0.032 U	0.00043 U	0.00043 U	0.024 U	0.025 U	0.00041 U	3.6E-02
1,2-Dichlorobenzene	0.026 U	0.027 U	<b>0.029 J</b>	0.026 U	0.030 U	0.030 U	0.00045 U	0.00044 U	0.023 U	0.024 U	0.00042 U	1.8E+02
1,2-Dichloroethane	0.051 U	<b>0.087</b>	0.047 U	0.052 U	0.058 U	0.059 U	0.00036 U	<b>0.0047</b>	<b>0.070</b>	0.047 U	<b>0.018</b>	4.6E-01
1,2-Dichloropropane	0.024 U	0.025 U	0.022 U	0.024 U	0.027 U	0.028 U	0.00073 U	0.00071 U	0.021 U	0.022 U	0.00068 U	1.6E+00
1,3-Dichlorobenzene	0.030 U	0.031 U	0.028 U	0.030 U	0.034 U	0.035 U	0.00049 U	0.00048 U	0.027 U	0.028 U	0.00046 U	na
1,4-Dichlorobenzene	0.029 U	0.030 U	0.027 U	0.030 U	0.033 U	0.034 U	0.00047 U	0.00046 U	0.026 U	0.027 U	0.00044 U	2.6E+00
1,4-Dioxane	3.1 U	3.2 U	2.9 U	3.2 U	3.6 U	3.7 U	0.043 U	0.042 U	2.8 U	2.9 U	0.040 U	na
2-Butanone	0.059 U	0.062 U	0.056 U	0.060 U	0.068 U	0.070 U	0.0011 U	0.0010 U	0.053 U	0.056 U	0.00099 U	2.7E+03
2-Hexanone	0.048 U	0.049 U	0.045 U	0.048 U	0.055 U	0.056 U	0.00075 U	0.00074 U	0.043 U	0.045 U	0.00070 U	na
4-Methyl-2-pentanone	0.039 U	0.040 U	0.036 U	0.039 U	0.044 U	<b>4.1</b>	0.00051 U	0.00051 U	0.035 U	0.036 U	0.00048 U	3.3E+03
Acetone	0.36 U	0.38 U	0.34 U	0.37 U	0.42 U	0.43 U	0.0060 U	0.0059 U	0.33 U	0.34 U	<b>0.019</b>	6.1E+03
Benzene	0.023 U	0.024 U	0.022 U	<b>0.040 J</b>	<b>0.13</b>	<b>0.12</b>	<b>0.0086</b>	<b>0.0039</b>	0.021 U	<b>0.031 J</b>	<b>0.0018</b>	1.2E+00
Bromochloromethane	0.062 U	0.065 U	0.058 U	0.063 U	0.072 U	0.073 U	0.00062 U	0.00061 U	0.056 U	0.058 U	0.00058 U	na
Bromodichloromethane	0.027 U	0.028 U	0.026 U	0.028 U	0.032 U	0.032 U	0.00042 U	0.00041 U	0.025 U	0.026 U	0.00039 U	2.9E-01
Bromoform	0.043 U	0.045 U	0.040 U	0.044 U	0.049 U	0.050 U	0.00029 U	0.00029 U	0.038 U	0.040 U	0.00027 U	1.9E+01
Bromomethane	0.040 U	0.041 U	0.037 U	0.041 U	0.046 U	0.047 U	0.0014 U	0.0014 U	0.036 U	0.037 U	0.0013 U	6.8E-01
Carbon disulfide	0.034 U	0.035 U	0.031 U	0.034 U	0.039 U	0.039 U	0.0030 U	0.0030 U	0.030 U	0.031 U	0.0028 U	7.7E+01
Carbon tetrachloride	0.026 U	0.027 U	0.024 U	0.026 U	0.029 U	0.030 U	0.00086 U	0.00085 U	0.023 U	0.024 U	0.00080 U	6.5E-01
Chlorobenzene	<b>1.4</b>	0.027 U	<b>1.3</b>	<b>1.0</b>	<b>3.7</b>	<b>3.7</b>	<b>0.20</b>	<b>0.064</b>	<b>0.17</b>	<b>0.81</b>	<b>0.052</b>	2.8E+01
Chloroethane	0.046 U	0.048 U	0.043 U	0.047 U	0.053 U	0.054 U	0.0017 U	0.0017 U	0.041 U	0.043 U	0.0016 U	1.4E+03
Chloroform	0.16 U	0.16 U	0.15 U	0.16 U	0.18 U	0.18 U	0.0012 U	0.0012 U	0.14 U	0.15 U	0.0011 U	3.2E-01
Chloromethane	0.041 U	0.042 U	0.038 U	0.042 U	0.047 U	0.048 U	0.0011 U	0.0011 U	0.037 U	0.038 U	0.0010 U	1.1E+01
cis-1,2-Dichloroethene	<b>0.17</b>	0.052 U	0.047 U	0.051 U	0.058 U	<b>0.40</b>	0.00072 U	<b>0.040</b>	<b>0.40</b>	<b>0.81</b>	<b>0.059</b>	1.6E+01
cis-1,3-Dichloropropene	0.025 U	0.026 U	0.024 U	0.026 U	0.029 U	0.030 U	0.00047 U	0.00046 U	0.023 U	0.024 U	0.00044 U	na
Cyclohexane	0.039 U	0.040 U	0.036 U	0.039 U	0.044 U	0.045 U	0.0011 U	0.0010 U	0.035 U	0.036 U	0.00099 U	na
Dibromochloromethane	0.019 U	0.020 U	0.018 U	0.019 U	0.022 U	0.022 U	0.00038 U	0.00037 U	0.017 U	0.018 U	0.00036 U	8.3E+00
Dichlorodifluoromethane	0.049 U	0.051 U	0.046 U	0.050 U	0.057 U	0.058 U	0.0012 U	0.0012 U	0.044 U	0.046 U	0.0012 U	na
Ethylbenzene	<b>0.044 J</b>	0.038 U	<b>0.11</b>	<b>0.15</b>	<b>0.065 J</b>	<b>0.069 J</b>	<b>0.0019</b>	0.00060 U	<b>0.053 J</b>	<b>0.045 J</b>	0.00057 U	5.8E+00
Isopropylbenzene	0.039 U	0.041 U	0.037 U	0.040 U	0.045 U	0.046 U	0.00073 U	0.00072 U	0.035 U	0.037 U	0.00069 U	1.9E+02
m&p-Xylene	<b>0.16</b>	0.070 U	<b>0.47</b>	<b>0.56</b>	<b>0.27</b>	<b>0.25</b>	<b>0.0071</b>	0.0010 U	<b>0.099</b>	0.063 U	0.00099 U	5.8E+01
Methyl Acetate	0.056 U	0.058 U	0.052 U	0.057 U	0.064 U	0.065 U	0.00085 U	0.00084 U	0.050 U	0.052 U	0.00080 U	na
Methylcyclohexane	0.049 U	0.051 U	0.046 U	0.050 U	0.056 U	0.057 U	0.00080 U	0.00078 U	0.044 U	0.046 U	0.00075 U	na
Methylene chloride	0.023 U	0.024 U	0.022 U	0.024 U	0.027 U	0.027 U	0.00066 U	0.00065 U	0.021 U	0.022 U	0.00062 U	3.5E+01
Methyl-t-butyl ether	0.025 U	0.026 U	0.023 U	0.025 U	0.029 U	0.029 U	<b>0.0016</b>	<b>0.0022</b>	0.022 U	0.023 U	0.00045 U	4.7E+01
o-Xylene	<b>0.067 J</b>	0.056 U	<b>0.14</b>	<b>0.18</b>	<b>0.068 J</b>	<b>0.076 J</b>	<b>0.0019</b>	0.00062 U	<b>0.054 J</b>	0.051 U	0.00059 U	5.8E+01

Table E-4  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Subsurface Soil Sample Analytical Results  
 September 28 - October 1, 2020  
 Volatile Organic Compounds (VOCs)

Sample ID	HSI-SB-06 (4.5-5)	HSI-SB-07 (4.5-5)	HSI-SB-08 (3.5-4)	HSI-SB-08 (8-8.5)	HSI-SB-08 (12-13)	HSI-SB-08 (12-13) [HSI-SB-D2]	HSI-SB-08 (13-13.5)	HSI-SB-09 (14-14.5)	HSI-SB-10 (5.5-6)	HSI-SB-10 (7-7.5)	HSI-SB-10 (8-8.5)	MDE Residential Soil Standards
Dilution Factor	67.5	70.8	64.7	66.2	69.4	70.7	0.681	0.697	63.2	61.7	0.679	
Sample Collection Date	09/30/20	09/30/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	10/01/20	
Analyte Name	Concentration (mg/kg)											
Styrene	0.043 U	0.045 U	0.040 U	0.044 U	0.050 U	0.051 U	0.00049 U	0.00048 U	0.039 U	0.040 U	0.00046 U	6.0E+02
Tetrachloroethene	<b>0.028 J</b>	0.029 U	0.027 U	0.029 U	0.033 U	0.033 U	0.00087 U	0.00085 U	<b>0.028 J</b>	0.027 U	<b>0.0035</b>	8.1E+00
Toluene	<b>0.39</b>	0.027 U	<b>0.49</b>	<b>0.053 J</b>	<b>1.1</b>	<b>5.4</b>	<b>0.0035</b>	<b>0.0038</b>	<b>0.040 J</b>	<b>0.063 J</b>	<b>0.0030</b>	4.9E+02
trans-1,2-Dichloroethene	0.025 U	0.025 U	0.023 U	0.025 U	0.028 U	<b>0.068 J</b>	0.0011 U	<b>0.010</b>	0.022 U	0.023 U	<b>0.0019</b>	1.6E+02
trans-1,3-Dichloropropene	0.024 U	0.025 U	0.023 U	0.025 U	0.028 U	0.029 U	0.00042 U	0.00041 U	0.022 U	0.023 U	0.00039 U	na
Trichloroethene	<b>0.54</b>	<b>0.11</b>	<b>0.030 J</b>	0.028 U	0.032 U	0.032 U	<b>0.0033</b>	<b>0.0062</b>	<b>0.24</b>	0.026 U	<b>0.061</b>	4.1E-01
Trichlorofluoromethane	0.024 U	0.025 U	0.023 U	0.025 U	0.028 U	0.029 U	0.0010 U	0.0010 U	0.022 U	0.023 U	0.00098 U	na
Vinyl chloride	0.056 U	0.058 U	0.053 U	0.057 U	<u>0.065 U</u>	<b>1.1</b>	0.0011 U	<b>0.0057</b>	0.050 U	<b>0.75</b>	<b>0.010</b>	5.9E-02
Xylenes (Total)	<b>0.23</b>	0.056 U	<b>0.61</b>	<b>0.74</b>	<b>0.34</b>	<b>0.33</b>	<b>0.0090</b>	0.00062 U	<b>0.15</b>	0.051 U	0.00059 U	5.8E+01

**Table Notes:**

VOCs Analytical Method: EPA Method 8260D

[Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.

mg/kg - milligrams per kilogram or parts per million (ppm)

U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).

J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.

na - not applicable

**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.

Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes:**

**Analyte**                      **MDE Residential Soil Standard**

m+p-Xylenes              Total Xylenes

o-Xylene                      Total Xylenes

Table E-5  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Subsurface Soil Sample Analytical Results  
 September 28 - October 1, 2020  
 Semi-Volatile Organic Compounds (SVOCs) and Metals

Analytical Suite	Sample ID	HSI-SB-01 (2.5-3)	HSI-SB-01 (6-6.5)	HSI-SB-01 (6-6.5) [HSI-SB-D1]	HSI-SB-02 (10-10.5)	HSI-SB-03 (10-10.5)	HSI-SB-08 (3.5-4)	HSI-SB-10 (5.5-6)	MDE Residential Soil Standards	MDE ATC
	Dilution Factor (SVOCs)	1	200	400	1	1	1	1		
	Dilution Factor (Metals)	1	1	1	1/3	1	1	1		
	Sample Collection Date	09/29/20	09/29/20	09/29/20	09/28/20	09/29/20	10/01/20	10/01/20		
Analyte Name	Concentration (mg/kg)									
1,1'-Biphenyl	0.011 U	2.3 U	4.6 U	0.012 U	0.011 U	0.10	0.011 U	na	na	
1,2,4,5-Tetrachlorobenzene	0.013 U	2.7 U	5.3 U	0.014 U	0.013 U	0.013 U	0.013 U	na	na	
1,4-Dioxane	0.019 U	4.0 U	8.0 U	0.021 U	0.020 U	0.019 U	0.019 U	na	na	
2,3,4,6-Tetrachlorophenol	0.014 U	3.0 U	6.0 U	0.016 U	0.015 U	0.014 U	0.014 U	na	na	
2,4,5-Trichlorophenol	0.011 U	2.3 U	4.5 U	0.012 U	0.011 U	0.011 U	0.011 U	6.3E+02	na	
2,4,6-Trichlorophenol	0.030 U	6.2 U	12 U	0.032 U	0.031 U	0.030 U	0.029 U	6.3E+00	na	
2,4-Dichlorophenol	0.014 U	3.0 U	6.0 U	0.016 U	0.015 U	0.014 U	0.014 U	1.9E+01	na	
2,4-Dimethylphenol	0.019 U	3.9 U	7.7 U	0.020 U	0.019 U	0.019 U	0.018 U	1.3E+02	na	
2,4-Dinitrophenol	0.17 U	35 U	69 U	0.18 U	0.17 U	0.17 U	0.16 U	1.3E+01	na	
2,4-Dinitrotoluene	0.012 U	2.5 U	4.9 U	0.013 U	0.012 U	0.012 U	0.012 U	1.7E+00	na	
2,6-Dinitrotoluene	0.020 U	4.1 U	8.1 U	0.021 U	0.020 U	0.020 U	0.019 U	3.6E-01	na	
2-Chloronaphthalene	0.017 U	3.6 U	7.1 U	0.019 U	0.018 U	0.017 U	0.017 U	4.8E+02	na	
2-Chlorophenol	0.35	13	24	0.014 U	0.013 U	0.013 U	0.012 U	3.9E+01	na	
2-Methylnaphthalene	0.012 U	2.5 U	4.9 U	0.013 U	0.012 U	0.12	0.012 U	2.4E+01	na	
2-Methylphenol	0.013	2.3 U	4.6 U	0.012 U	0.011 U	0.011 U	0.011 U	3.2E+02	na	
2-Nitroaniline	0.018 U	3.8 U	7.5 U	0.020 U	0.019 U	0.018 U	0.018 U	na	na	
2-Nitrophenol	0.017 U	3.6 U	7.2 U	0.019 U	0.018 U	0.017 U	0.017 U	na	na	
3&4-Methylphenol	0.011 U	2.3 U	4.6 U	0.012 U	0.012 U	0.021	0.011 U	6.3E+02	na	
3,3'-Dichlorobenzidine	0.031 U	6.5 U	13 U	0.034 U	0.032 U	0.031 U	0.030 U	1.2E+00	na	
3-Nitroaniline	0.015 U	3.1 U	6.2 U	0.016 U	0.015 U	0.015 U	0.015 U	na	na	
4,6-Dinitro-2-methylphenol	0.13 U	28 U	55 U	0.15 U	0.14 U	0.13 U	0.13 U	na	na	
4-Bromophenyl-phenylether	0.011 U	2.2 U	4.4 U	0.012 U	0.011 U	0.011 U	0.010 U	na	na	
4-Chloro-3-methylphenol	0.0092 U	1.9 U	3.8 U	0.010 U	0.0096 U	0.0092 U	0.0090 U	na	na	
4-Chloroaniline	0.017 U	3.5 U	7.0 U	0.018 U	0.017 U	0.017 U	0.016 U	2.7E+00	na	
4-Chlorophenyl-phenylether	0.012 U	2.5 U	4.9 U	0.013 U	0.012 U	0.012 U	0.011 U	na	na	
4-Nitroaniline	0.015 U	3.1 U	6.1 U	0.016 U	0.015 U	0.015 U	0.014 U	na	na	
4-Nitrophenol	0.029 U	6.1 U	12 U	0.032 U	0.030 U	0.029 U	0.028 U	na	na	
Acenaphthene	0.011 U	2.3 U	4.5 U	0.012 U	0.011 U	0.011 U	0.011 U	3.6E+02	na	
Acenaphthylene	0.011 U	2.4 U	4.7 U	0.012 U	0.012 U	0.011 U	0.011 U	na	na	
Acetophenone	0.014 U	2.9 U	5.7 U	0.015 U	0.014 U	0.014 U	0.013 U	na	na	
Anthracene	0.011 U	2.2 U	4.4 U	0.011 U	0.011 U	0.011 U	0.010 U	1.8E+03	na	
Atrazine	0.015 U	3.2 U	6.4 U	0.017 U	0.016 U	0.015 U	0.015 U	2.4E+00	na	
Benzaldehyde	0.42 U	87 U	170 U	0.45 U	0.43 U	0.42 U	0.41 U	na	na	
Benzo[a]anthracene	0.013 U	2.7 U	5.3 U	0.014 U	0.013 U	0.013 U	0.012 U	1.1E+00	na	
Benzo[a]pyrene	0.013 U	2.7 U	5.4 U	0.014 U	0.014 U	0.013 U	0.013 U	1.1E-01	na	
Benzo[b]fluoranthene	0.014 U	2.9 U	5.7 U	0.015 U	0.014 U	0.014 U	0.013 U	1.1E+00	na	
Benzo[g,h,i]perylene	0.00026 U	0.055 U	0.11 U	0.00029 U	0.00027 U	0.00026 U	0.00026 U	na	na	
Benzo[k]fluoranthene	0.014 U	3.0 U	5.8 U	0.015 U	0.015 U	0.014 U	0.014 U	1.1E+01	na	
bis(2-Chloroethoxy)methane	0.011 U	2.3 U	4.5 U	0.012 U	0.011 U	0.011 U	0.011 U	na	na	
bis(2-Chloroethyl)ether	0.0093 U	1.9 U	3.9 U	0.010 U	0.0096 U	0.0093 U	0.0091 U	2.3E-01	na	
bis(2-Chloroisopropyl)ether	0.015 U	3.2 U	6.3 U	0.017 U	0.016 U	0.015 U	0.015 U	na	na	
bis(2-Ethylhexyl)phthalate	0.25	50	58	0.34	0.035 U	0.38	0.033 U	3.9E+01	na	
Butylbenzylphthalate	0.029 U	6.2 U	12 U	0.032 U	0.030 U	0.029 U	0.029 U	na	na	
Caprolactam	0.031 U	6.4 U	13 U	0.033 U	0.032 U	0.031 U	0.030 U	na	na	
Carbazole	0.012 U	2.5 U	4.9 U	0.013 U	0.012 U	0.012 U	0.012 U	na	na	
Chrysene	0.013 U	2.7 U	5.4 U	0.014 U	0.013 U	0.013 U	0.013 U	1.1E+02	na	
Dibenzo[a,h]anthracene	0.014 U	2.9 U	5.8 U	0.015 U	0.015 U	0.014 U	0.014 U	1.1E-01	na	
Dibenzofuran	0.0097 U	2.0 U	4.0 U	0.011 U	0.010 U	0.0097 U	0.0095 U	7.3E+00	na	
Diethylphthalate	0.025 U	5.2 U	10 U	0.027 U	0.026 U	0.025 U	0.024 U	5.1E+03	na	
Dimethylphthalate	0.011 U	2.3 U	4.5 U	0.012 U	0.011 U	0.011 U	0.011 U	na	na	
Di-n-butylphthalate	0.25	720	1,200	1.6	0.046 U	0.064	0.043 U	na	na	
Di-n-octylphthalate	0.025 U	5.3 U	11 U	0.028 U	0.026 U	0.025 U	0.025 U	na	na	
Fluoranthene	0.015 U	3.1 U	6.1 U	0.016 U	0.015 U	0.015 U	0.014 U	2.4E+02	na	
Fluorene	0.010 U	2.2 U	4.3 U	0.011 U	0.011 U	0.010 U	0.010 U	2.4E+02	na	
Hexachlorobenzene	0.016 U	3.4 U	6.6 U	0.017 U	0.017 U	0.016 U	0.016 U	2.1E-01	na	

**Table E-5**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Subsurface Soil Sample Analytical Results**  
**September 28 - October 1, 2020**  
**Semi-Volatile Organic Compounds (SVOCs) and Metals**

Analytical Suite	Sample ID	HSI-SB-01 (2.5-3)	HSI-SB-01 (6-6.5)	HSI-SB-01 (6-6.5) [HSI-SB-D1]	HSI-SB-02 (10-10.5)	HSI-SB-03 (10-10.5)	HSI-SB-08 (3.5-4)	HSI-SB-10 (5.5-6)	MDE Residential Soil Standards	MDE ATC
	Dilution Factor (SVOCs)	1	200	400	1	1	1	1		
	Dilution Factor (Metals)	1	1	1	1/3	1	1	1		
	Sample Collection Date	09/29/20	09/29/20	09/29/20	09/28/20	09/29/20	10/01/20	10/01/20		
Analyte Name	Concentration (mg/kg)									
SVOCs (cont'd)	Hexachlorobutadiene	0.017 U	3.6 U	7.1 U	0.019 U	0.018 U	0.017 U	0.017 U	1.2E+00	na
	Hexachlorocyclopentadiene	0.12 U	26 U	52 U	0.14 U	0.13 U	0.12 U	0.12 U	1.8E-01	na
	Hexachloroethane	0.017 U	3.5 U	7.0 U	0.018 U	0.018 U	0.017 U	0.017 U	1.8E+00	na
	Indeno[1,2,3-cd]pyrene	0.017 U	3.6 U	7.2 U	0.019 U	0.018 U	0.017 U	0.017 U	1.1E+00	na
	Isophorone	0.012 U	2.6 U	5.1 U	0.013 U	0.013 U	0.012 U	0.012 U	5.7E+02	na
	Naphthalene	<b>0.063</b>	<b>16</b>	<b>26</b>	<b>0.058</b>	0.011 U	<b>0.10</b>	0.011 U	3.8E+00	na
	Nitrobenzene	0.0016 U	0.33 U	0.64 U	0.0017 U	0.0016 U	0.0016 U	0.0015 U	5.1E+00	na
	N-Nitroso-di-n-propylamine	0.014 U	3.0 U	6.0 U	0.016 U	0.015 U	0.014 U	0.014 U	7.8E-02	na
	N-Nitrosodiphenylamine	0.13 U	27 U	54 U	0.14 U	0.13 U	0.13 U	0.13 U	1.1E+02	na
	Pentachlorophenol	0.18 U	39 U	76 U	0.20 U	0.19 U	0.18 U	0.18 U	1.0E+00	na
	Phenanthrene	0.012 U	2.6 U	5.1 U	0.013 U	0.013 U	<b>0.019 J</b>	0.012 U	1.8E+02	na
	Phenol	0.011 U	2.2 U	4.4 U	0.012 U	0.011 U	0.011 U	0.010 U	1.9E+03	na
	Pyrene	0.013 U	2.7 U	5.4 U	0.014 U	0.014 U	0.013 U	0.013 U	1.8E+02	na
Metals	Aluminum	<b>4,200</b>	<b>4,200</b>	<b>5,000</b>	<b>2,200</b>	<b>570</b>	<b>4,000</b>	<b>5,900</b>	7.7E+03	1.9E+04
	Antimony	<b>0.045 J</b>	<b>0.84 J</b>	<b>1.3</b>	<b>0.053 J</b>	0.027 U	0.026 U	0.025 U	3.1E+00	6.8E+00
	Arsenic	<b>1.8</b>	<b>2.3</b>	<b>2.3</b>	<b>1.9</b>	<b>0.30</b>	<b>3.7</b>	<b>1.5</b>	6.8E-01	4.9E+00
	Barium	<b>9.1 J</b>	<b>75</b>	<b>37</b>	<b>15</b>	0.80 U	<b>20</b>	<b>28</b>	1.5E+03	9.9E+01
	Beryllium	<b>0.059 J</b>	<b>0.20 J</b>	<b>0.17 J</b>	<b>0.12 JD</b>	<b>0.040 J</b>	<b>0.18 J</b>	<b>0.22 J</b>	1.6E+01	1.6E+00
	Cadmium	<b>0.40 J</b>	<b>11</b>	<b>6.2</b>	<b>0.24 J</b>	0.017 U	<b>0.21 J</b>	<b>0.020 J</b>	7.1E+00	1.1E+00
	Calcium	120 U	<b>290 J</b>	<b>1,300</b>	<b>200 J</b>	120 U	120 U	<b>120 J</b>	na	1.2E+04
	Chromium	<b>20</b>	<b>60</b>	<b>49</b>	<b>21</b>	<b>1.0 J</b>	<b>19</b>	<b>21</b>	na	3.0E+01
	Cobalt	0.82 U	<b>1.3 J</b>	<b>1.4 J</b>	0.89 U	0.85 U	0.82 U	<b>2.1 J</b>	na	3.3E+01
	Copper	<b>7.0</b>	<b>12</b>	<b>12</b>	<b>8.0</b>	<b>1.0 J</b>	<b>10</b>	<b>8.1</b>	3.1E+02	4.2E+01
	Iron	<b>7,600</b>	<b>8,200</b>	<b>9,700</b>	<b>5,300</b>	<b>1,400</b>	<b>8,200</b>	<b>6,900</b>	5.5E+03	2.6E+04
	Lead	<b>9.8</b>	<b>160</b>	<b>140</b>	<b>13</b>	<b>1.2 J</b>	<b>7.1</b>	<b>4.4 J</b>	2.0E+02	6.1E+01
	Magnesium	<b>350 J</b>	<b>420 J</b>	<b>440 J</b>	<b>160 J</b>	23 U	<b>390 JB</b>	<b>940 B</b>	na	3.7E+03
	Manganese	<b>13</b>	<b>27</b>	<b>27</b>	<b>12 J</b>	<b>1.4 J</b>	<b>16</b>	<b>36</b>	1.8E+02	1.4E+03
	Mercury	0.015 U	<b>0.063 J</b>	<b>0.14</b>	0.016 U	0.015 U	0.015 U	0.014 U	1.1E+00	1.4E-01
	Nickel	<b>3.5 J</b>	<b>8.1</b>	<b>9.0</b>	<b>2.5 J</b>	1.3 U	<b>3.3 J</b>	<b>7.6</b>	1.5E+02	2.2E+01
	Potassium	<b>160 J</b>	<b>160 J</b>	<b>190 J</b>	120 U	120 U	<b>150 J</b>	<b>280 J</b>	na	2.6E+03
	Selenium	<b>0.80 J</b>	<b>3.3</b>	<b>2.8</b>	<b>3.1</b>	<b>1.1 J</b>	<b>2.6</b>	<b>1.3 J</b>	3.9E+01	1.0E+00
	Silver	<b>0.054 J</b>	<b>0.062 J</b>	<b>0.064 J</b>	<b>0.12 J</b>	<b>0.077 J</b>	<b>0.045 JB</b>	<b>0.042 JB</b>	3.9E+01	1.0E+00
	Sodium	140 U	150 U	150 U	160 U	150 U	140 U	140 U	na	2.3E+02
Thallium	0.020 U	0.021 U	0.021 U	0.066 UD	0.021 U	<b>0.021 J</b>	<b>0.021 J</b>	7.8E-02	1.5E+00	
Vanadium	<b>14</b>	<b>18</b>	<b>19</b>	<b>32</b>	<b>7.5</b>	<b>20 B</b>	<b>20 B</b>	3.9E+01	3.5E+01	
Zinc	<b>9.0 J</b>	<b>33</b>	<b>31</b>	<b>23</b>	1.8 U	<b>7.7 J</b>	<b>12</b>	2.3E+03	7.3E+01	

**Table Notes:**

SVOCs Analytical Method: EPA Method 8270E  
 Target Analyte List (TAL) Metals Analytical Methods: EPA Method 6010D, 6020B, and 7471B  
 [Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.  
 mg/kg - milligrams per kilogram or parts per million (ppm)  
 U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
 J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.  
 B - Indicates analyte was present in the Method Blank and sample.  
 D - Sample analyzed at a higher dilution factor to allow calibration of this analyte.  
 na - not applicable  
**Bold** - Detected analyte concentration

**Screening Levels (SLs):**

MDE Residential Soil Clean-up Standards (October 2018)  
 MDE Anticipated Typical Concentration (ATC) for Central Maryland (October 2018)

**Screening Evaluation Notes:**

SVOCs: **Red, bold, and underline** - Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.  
**Underline** - MDL exceeds the respective MDE Residential Soil Clean-up Standard.  
 Metals: **Bold and underline** - Detected analyte concentration exceeds the respective MDE Residential Soil Clean-up Standard.  
**Red, bold, and underline** - Detected analyte concentration exceeds the MDE Residential Soil Clean-up Standard and the ATC for Central Maryland.  
 No MDLs exceed the respective MDE Residential Soil Clean-up Standard.

**Additional Screening Level Notes:**

<b>Analyte</b>	<b>MDE Residential Soil Standard</b>
Total Mercury	Mercury (elemental)

**Table E-6**  
**Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD**  
**Hot Spot Investigation**

**Soil Vapor Sample Analytical Results**  
**October 7, 2020**  
**Volatile Organic Compounds (VOCs)**

Sample ID	SMP-VMP-10	SMP-VMP-11	SMP-VMP-11 [SMP-VMP-D]	SMP-VMP-12	SMP-VMP-13	MDE Residential Soil Gas Tier 1 RGs	MDE Residential Soil Gas Tier 2 RGs
Dilution Factor	2/20	2/20	2/20	6.67	2/20		
Analyte Name	Concentration (ug/m <sup>3</sup> )						
1,1,1,2-Tetrachloroethane	1.4 U	1.4 U	1.4 U	4.6 U	1.4 U	6.6E+01	3.3E+02
1,1,1-Trichloroethane	1.1 U	1.1 U	1.1 U	3.6 U	1.1 U	1.1E+05	5.3E+05
1,1,2,2-Tetrachloroethane	<b>120</b> *	<b>28</b>	<b>31</b>	4.6 U	<b>400</b> D *	8.4E+00	4.2E+01
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1.5 U	5.1 U	1.5 U	1.1E+05	5.2E+05
1,1,2-Trichloroethane	<b>3.2</b>	<b>1.5</b> J	<b>1.4</b> J	3.6 U	<b>17</b>	4.2E+00	2.1E+01
1,1-Dichloroethane	0.81 U	0.81 U	0.81 U	2.7 U	0.81 U	3.1E+02	1.5E+03
1,1-Dichloroethylene	0.79 U	0.79 U	0.79 U	2.6 U	0.79 U	4.2E+03	2.1E+04
1,2,4-Trichlorobenzene	1.5 U	1.5 U	<b>1.9</b> J	4.9 U	1.5 U	4.2E+01	2.1E+02
1,2,4-Trimethylbenzene	<b>4.0</b>	<b>7.8</b>	<b>7.9</b>	<b>6.3</b> J	<b>1.7</b> J	1.3E+03	6.3E+03
1,2-Dibromoethane (EDB)	1.5 U	1.5 U	1.5 U	5.1 U	1.5 U	8.2E-01	4.1E+00
1,2-Dichlorobenzene	1.2 U	1.2 U	1.2 U	4.0 U	1.2 U	4.2E+03	2.1E+04
1,2-Dichloroethane	0.81 U	0.81 U	0.81 U	<b>4.6</b> J	<b>1.3</b> J	1.9E+01	9.4E+01
1,2-Dichloropropane	0.92 U	0.92 U	0.92 U	3.1 U	0.92 U	8.4E+01	4.2E+02
1,2-Dichlorotetrafluoroethane	<b>2.4</b> J	<b>2.2</b> J	<b>2.3</b> J	4.7 U	1.4 U	na	na
1,3,5-Trimethylbenzene	0.98 U	<b>3.5</b>	<b>3.3</b>	3.3 U	0.98 U	1.3E+03	6.3E+03
1,3-Butadiene	0.44 U	0.44 U	0.44 U	1.5 U	0.44 U	1.6E+01	8.2E+01
1,3-Dichlorobenzene	1.2 U	1.2 U	1.2 U	4.0 U	1.2 U	na	na
1,4-Dichlorobenzene	1.2 U	<b>1.2</b> J	<b>2.9</b>	4.0 U	<b>1.7</b> J	4.6E+01	2.3E+02
1,4-Dioxane	0.72 U	0.72 U	0.72 U	2.4 U	0.72 U	9.8E+01	4.9E+02
1-Ethyl-4-methyl benzene	0.98 U	0.98 U	0.98 U	<b>12</b>	0.98 U	na	na
2-Butanone (MEK)	<b>1.5</b>	<b>1.1</b> J	<b>2.3</b>	<b>2.8</b> J	<b>2.2</b>	1.1E+05	5.3E+05
2-Chlorotoluene	1.0 U	1.0 U	1.0 U	3.5 U	1.0 U	na	na
2-Hexanone (MBK)	0.82 U	0.82 U	0.82 U	2.7 U	0.82 U	6.4E+02	3.2E+03
4-Methyl-2-pentanone (MIBK)	2.3 U	2.3 U	<b>4.1</b> J	<b>17</b>	<b>3.1</b> J	6.4E+04	3.2E+05
Acetone	<b>6.9</b>	<b>7.3</b>	<b>12</b>	1.6 U	<b>44</b>	6.6E+05	3.3E+06
Acrolein	0.46 U	0.46 U	<b>0.58</b> J	1.5 U	<b>0.87</b> J	4.2E-01	2.1E+00
Allyl chloride	0.63 U	0.63 U	0.63 U	2.1 U	0.63 U	2.1E+01	1.1E+02
Benzene	0.64 U	0.64 U	0.64 U	<b>7.6</b>	<b>3.1</b>	6.4E+01	3.2E+02
Benzyl Chloride	1.0 U	1.0 U	1.0 U	3.5 U	1.0 U	1.0E+01	5.0E+01
Bromodichloromethane	<b>5.8</b>	<b>21</b>	<b>21</b>	<b>4.5</b> J	<b>17</b>	1.3E+01	6.6E+01
Bromoform	2.1 U	2.1 U	2.1 U	6.9 U	2.1 U	4.6E+02	2.3E+03
Bromomethane	0.78 U	0.78 U	0.78 U	2.6 U	0.78 U	1.1E+02	5.3E+02
Carbon Disulfide	<b>4.7</b>	<b>6.4</b>	<b>6.2</b>	<b>5.3</b> J	<b>6.2</b>	1.5E+04	7.3E+04
Carbon Tetrachloride	1.3 U	1.3 U	1.3 U	4.2 U	1.3 U	8.2E+01	4.1E+02
Chlorobenzene	0.92 U	<b>2.3</b>	<b>2.3</b>	<b>3.9</b> J	0.92 U	1.1E+03	5.3E+03
Chloroethane	0.53 U	0.53 U	0.53 U	1.8 U	0.53 U	2.1E+05	1.1E+06
Chloroform	<b>31</b>	<b>140</b> *	<b>140</b> *	<b>120</b> *	<b>120</b> *	2.2E+01	1.1E+02
Chloromethane	0.41 U	0.41 U	0.41 U	1.4 U	0.41 U	1.9E+03	9.4E+03
cis-1,2-Dichloroethylene	0.79 U	0.79 U	0.79 U	<b>35</b>	<b>24</b>	7.4E+02	3.7E+03
cis-1,3-Dichloropropene	0.91 U	0.91 U	0.91 U	3.0 U	0.91 U	na	na
Cyclohexane	0.69 U	0.69 U	0.69 U	2.3 U	0.69 U	1.3E+05	6.3E+05
Dibromochloromethane	1.7 U	<b>1.9</b> J	<b>2.0</b> J	5.7 U	1.7 U	1.8E+01	9.1E+01
Dichlorodifluoromethane	<b>1.5</b> J	<b>1.5</b> J	<b>1.7</b> J	3.3 U	<b>1.9</b> J	2.1E+03	1.1E+04
Ethanol	<b>2.5</b>	<b>1.4</b> J	<b>2.4</b>	<b>2.1</b> J	<b>2.6</b>	na	na
Ethyl acetate	0.72 U	0.72 U	0.72 U	2.4 U	0.72 U	1.5E+03	7.4E+03
Ethylbenzene	<b>1.2</b> J	<b>4.7</b>	<b>6.0</b>	<b>18</b>	<b>2.5</b>	2.0E+02	1.0E+03
Heptane	0.82 U	0.82 U	0.82 U	<b>3.9</b> J	0.82 U	8.4E+03	4.2E+04
Hexachlorobutadiene	2.1 U	2.1 U	2.1 U	7.1 U	2.1 U	2.3E+01	1.1E+02
Hexane	0.70 U	0.70 U	0.70 U	<b>17</b>	0.70 U	1.5E+04	7.3E+04
Isooctane	0.93 U	0.93 U	0.93 U	<b>3.6</b> J	0.93 U	na	na
Isopropyl alcohol	0.49 U	<b>0.80</b> J	<b>2.1</b> J	1.6 U	<b>1.6</b> J	4.2E+03	2.1E+04
Isopropylbenzene	0.98 U	<b>1.6</b> J	<b>1.9</b> J	3.3 U	0.98 U	8.4E+03	4.2E+04
m+p-Xylenes	<b>4.0</b>	<b>22</b>	<b>25</b>	<b>42</b>	<b>6.9</b>	2.1E+03	1.1E+04
Methyl methacrylate	0.82 U	0.82 U	0.82 U	2.7 U	0.82 U	1.5E+04	7.3E+04
Methylene chloride	0.69 U	<b>1.1</b> J	<b>1.1</b> J	<b>12</b> J	<b>1.4</b> J	1.3E+04	6.3E+04
Methyl-t-butyl ether (MTBE)	0.72 U	0.72 U	0.72 U	<b>12</b>	0.72 U	1.9E+03	9.4E+03
Naphthalene	<b>2.3</b>	<b>3.9</b>	<b>5.2</b>	<b>8.3</b>	<b>2.9</b>	1.4E+01	7.2E+01
n-Nonane (C9)	1.0 U	1.0 U	1.0 U	3.5 U	1.0 U	4.2E+02	2.1E+03
n-Pentane (C5)	<b>0.89</b> J	<b>1.7</b>	<b>1.8</b>	<b>44</b>	<b>3.2</b>	2.1E+04	1.1E+05
n-Propylbenzene	0.98 U	<b>1.1</b> J	<b>1.5</b> J	3.3 U	0.98 U	2.1E+04	1.1E+05
o-Xylene	<b>3.7</b>	<b>9.1</b>	<b>10</b>	<b>11</b>	<b>2.6</b>	2.1E+03	1.1E+04
Propylene	0.34 U	<b>0.90</b>	<b>1.0</b>	<b>71</b>	<b>3.5</b>	6.4E+04	3.2E+05
Styrene	0.85 U	0.85 U	0.85 U	2.8 U	0.85 U	2.1E+04	1.1E+05
tert-Butyl alcohol (TBA)	<b>1.9</b> J	<b>0.67</b> J	<b>0.73</b> J	2.0 U	<b>16</b>	na	na
Tetrachloroethylene (PCE)	<b>590</b> D	<b>500</b> D	<b>530</b> D	<b>6.2</b> J	<b>120</b>	8.4E+02	4.2E+03
Tetrahydrofuran	<b>2.4</b>	<b>9.8</b>	<b>8.5</b>	<b>3.1</b> J	<b>12</b>	4.2E+04	2.1E+05
Toluene	<b>2.0</b>	<b>5.1</b>	<b>6.8</b>	<b>25</b>	<b>8.6</b>	1.1E+05	5.3E+05
trans-1,2-Dichloroethylene	0.79 U	0.79 U	0.79 U	<b>3.0</b> J	<b>27</b>	1.5E+03	7.4E+03
trans-1,3-Dichloropropene	0.91 U	0.91 U	0.91 U	3.0 U	0.91 U	na	na
Trichloroethylene	<b>19</b>	<b>12</b>	<b>15</b>	<b>7.0</b> J	<b>250</b> D *	4.2E+01	2.1E+02
Trichlorofluoromethane	<b>1.2</b> J	<b>1.8</b> J	<b>1.8</b> J	3.7 U	<b>1.2</b> J	1.5E+04	7.3E+04
Vinyl acetate	0.70 U	0.70 U	0.70 U	2.3 U	0.70 U	4.2E+03	2.1E+04
Vinyl bromide	0.87 U	0.87 U	0.87 U	2.9 U	0.87 U	1.5E+01	7.7E+01
Vinyl chloride	0.51 U	0.51 U	0.51 U	<b>2.9</b> J	0.51 U	3.4E+01	1.7E+02
Xylenes, Total	<b>7.7</b>	<b>31</b>	<b>35</b>	<b>53</b>	<b>9.5</b>	2.1E+03	1.1E+04

**Table Notes:**

VOC Analytical Method: EPA TO-15 Low Level  
 [Sample ID] - Sample Identification as shown on the COC and in the Lab Report for the duplicate sample.  
 ug/m<sup>3</sup> - micrograms per cubic meter  
 RG - Remediation Goal  
 CR - Cancer Risk  
 HI - Hazard Index  
 AF - Attenuation Factor  
 U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
 J - Detected above the MDL but below the Limit of Quantitation (LOQ); therefore, result is an estimated concentration.  
 D - Sample analyzed at a higher dilution factor to allow calibration of this analyte.  
 na - not applicable  
**Bold** - Detected analyte concentration

**Residential Screening Levels (SLs):**

Primary SL: MDE Residential Soil Gas Tier 1 RGs (Sept 2019) (at CR = 1x10<sup>-5</sup> or HI = 1 and AF of 20)  
 Secondary SL: MDE Residential Soil Gas Tier 2 RGs (Sept 2019) (at CR = 1x10<sup>-5</sup> or HI = 1 and AF of 100)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective Primary SL.  
 \* - Detected analyte concentration exceeds the respective Secondary SL.  
 Underline - MDL exceeds the respective Primary SL.

**Additional Screening Level Notes**

<b>Analyte</b>	<b>MDE RGs</b>
m+p-Xylenes	Total Xylenes
o-Xylene	o-Xylene



Table E-7  
 Montgomery Brothers Dump (MD-137), Inverness Drive, North East, MD  
 Hot Spot Investigation

Crawl Space Air and Outdoor Air Sample Analytical Results  
 October 6 - 7, 2020  
 Volatile Organic Compounds (VOCs)

Sample ID	HSI-105M-CSA	HSI-105R-CSA	HSI-107M-CSA	HSI-107R-CSA [HSI-107R-CSA]	HSI-OAA	EPA Residential Indoor Air RSLs
Dilution Factor	1.25	1.25	1.25	1.25	1.25/5	
Sample Type	Crawl Space Air				Outdoor Air	
Analyte Name	Concentration (ug/m <sup>3</sup> )					
1,1,1,2-Tetrachloroethane	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	3.8E+00
1,1,1-Trichloroethane	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	5.2E+03
1,1,2,2-Tetrachloroethane	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U	4.8E-01
1,1,2-Trichloro-1,2,2-trifluoroethane	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	5.2E+03
1,1,2-Trichloroethane	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	2.1E-01
1,1-Dichloroethane	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	1.8E+01
1,1-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.1E+02
1,2,4-Trichlorobenzene	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	2.1E+00
1,2,4-Trimethylbenzene	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	6.3E+01
1,2-Dibromoethane (EDB)	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.7E-02
1,2-Dichlorobenzene	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	2.1E+02
1,2-Dichloroethane	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	1.1E+00
1,2-Dichloropropane	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	4.2E+00
1,2-Dichlorotetrafluoroethane	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	na
1,3,5-Trimethylbenzene	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	6.3E+01
1,3-Butadiene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	9.4E-01
1,3-Dichlorobenzene	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	na
1,4-Dichlorobenzene	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	2.6E+00
1,4-Dioxane	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	5.6E+00
1-Ethyl-4-methyl benzene	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	na
2-Butanone (MEK)	0.68 J	0.72 J	0.81	1.2	0.95	5.2E+03
2-Chlorotoluene	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	na
2-Hexanone (MBK)	0.51 U	0.51 U	0.51 U	0.51 U	0.72 J	3.1E+01
4-Methyl-2-pentanone (MIBK)	1.4 U	1.4 U	1.6 J	3.3	2.0 J	3.1E+03
Acetone	8.2	11	21	33	21	3.2E+04
Acrolein	0.29 U	0.40 J	0.46 J	0.46 J	0.37 J	2.1E-02
Allyl chloride	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	1.0E+00
Benzene	0.40 U	0.40 U	0.40 U	0.50 J	0.45 J	3.6E+00
Benzyl Chloride	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	5.7E-01
Bromodichloromethane	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	7.6E-01
Bromoform	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6E+01
Bromomethane	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	5.2E+00
Carbon Disulfide	0.44 J	2.3	0.39 U	0.39 U	0.39 U	7.3E+02
Carbon Tetrachloride	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	4.7E+00
Chlorobenzene	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	5.2E+01
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.0E+04
Chloroform	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	1.2E+00
Chloromethane	0.99	0.99	1.1	1.0	1.1	9.4E+01
cis-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	na
cis-1,3-Dichloropropene	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	na
Cyclohexane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	6.3E+03
Dibromochloromethane	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	na
Dichlorodifluoromethane	2.3 J	2.2 J	2.2 J	2.2 J	2.1 J	1.0E+02
Ethanol	3.2	1.6	5.6	7.6	5.1	na
Ethyl acetate	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	7.3E+01
Ethylbenzene	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	1.1E+01
Heptane	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	4.2E+02
Hexachlorobutadiene	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3E+00
Hexane	0.49 J	0.59 J	0.58 J	0.74 J	0.72 J	1.4E+02
Isooctane	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	na
Isopropyl alcohol	0.55 J	1.0 J	3.2	5.0	1.1 J	2.1E+02
Isopropylbenzene	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	4.2E+02
m+p-Xylenes	0.54 U	0.54 U	0.54 U	0.69 J	0.84 J	1.0E+02
Methyl methacrylate	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	7.3E+02
Methylene chloride	1.2 J	1.4 J	1.3 J	2.0 J	1.5 J	6.3E+02
Methyl-t-butyl ether (MTBE)	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	1.1E+02
Naphthalene	1.1 J	1.2 J	1.2 J	1.9	1.2 J	8.3E-01
n-Nonane (C9)	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	2.1E+01
n-Pentane (C5)	1.1	1.3	1.4	1.4	1.5	1.0E+03
n-Propylbenzene	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	1.0E+03
o-Xylene	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	1.0E+02
Propylene	0.22 U	1.1	0.34 J	0.60	0.54	3.1E+03
Styrene	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.0E+03
tert-Butyl alcohol (TBA)	0.38 U	0.38 U	14	41	100 D	na
Tetrachloroethylene (PCE)	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	4.2E+01
Tetrahydrofuran	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	2.1E+03
Toluene	0.88 J	0.83 J	0.86 J	1.2	1.2	5.2E+03
trans-1,2-Dichloroethylene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	na
trans-1,3-Dichloropropene	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	na
Trichloroethylene	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	2.1E+00
Trichlorofluoromethane	1.2 J	1.2 J	1.2 J	1.2 J	1.1 J	na
Vinyl acetate	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	2.1E+02
Vinyl bromide	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	8.8E-01
Vinyl chloride	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.7E+00
Xylenes, Total	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	1.0E+02

**Table Notes:**

VOC Analytical Method: EPA TO-15 Low Level  
 [Sample ID] - Incorrect Sample Identification as shown on the COC and in the Lab Report.  
 ug/m<sup>3</sup> - micrograms per cubic meter  
 U - Analyte not detected above specified Method Detection Limit (MDL) (shown as a gray tone).  
 J - Detected above the MDL but below the Limit of Quantitation (LOQ); therefore, result is an estimated concentration.  
 D - Sample analyzed at a higher dilution factor to allow calibration of this analyte.  
 na - not applicable  
**Bold** - Detected analyte concentration

**Residential Screening Levels (SLs):**

EPA Residential Indoor Air Regional Screening Levels (RSLs) (May 2020) (at CR = 1x10<sup>-5</sup> or HI = 1)

**Screening Evaluation Notes:**

**Red, bold, and underline** - Detected analyte concentration exceeds the respective SL.  
Underline - MDL exceeds the respective SL.

**Additional Screening Level Notes**

<b>Analyte</b>	<b>EPA RSLs</b>
m+p-Xylenes	Total Xylenes
o-Xylene	o-Xylene



**ATTACHMENT F**

**SURFACE/NEAR SURFACE SOIL SAMPLE LABORATORY ANALYTICAL REPORT**

## Project: Hot Spot Investigation

**Client PO:** CG09042310MS

**Report To:** Chesapeake Geosciences Inc  
5405 Twin Knolls Rd.  
Suite 1  
Columbia, MD 21045  
Attn: Nancy Love

**Received Date:** 9/28/2020

**Report Date:** 10/19/2020

**Deliverables:** MDE-R

**Lab ID:** AD19479


**Lab Project No:** 0092806

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This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

---

  
Sean Berls - Quality Assurance Officer

OR

Jean Revolus - Laboratory Director

NJ (07071)  
PA (68-00463)

NY (ELAP11408)  
KY (90124)

CT (PH-0671)





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Form 1 Sample Results

Inorganic Spreadsheet / QC Summary

# Sample Summary

**Client:** Chesapeake Geosciences Inc

**HC Project #:** 0092806

**Project:** Hot Spot Investigation

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AD19479-001	HSI-SS-01 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-002	HSI-SS-01 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-003	HSI-SS-02 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-004	HSI-SS-02 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-005	HSI-SS-03 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-006	HSI-SS-03 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-007	HSI-SS-04 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-008	HSI-SS-04 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-009	HSI-SS-05 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-010	HSI-SS-05 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-011	HSI-SS-06 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-012	HSI-SS-06 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-013	HSI-SS-07 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-014	HSI-SS-07 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-015	HSI-SS-08 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-016	HSI-SS-08 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-017	HSI-SS-09 (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-018	HSI-SS-09 (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020
AD19479-019	HSI-SS-D (0-0.5')	Soil	9/25/2020	9/28/2020
AD19479-020	HSI-SS-D (0.5-1')	Soil/Terracore	9/25/2020	9/28/2020

# HC Case Narrative

**Client:** Chesapeake Geosciences Inc.  
**Project:** Hot Spot Investigation

**HC Project:** 0092806

*This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.*

## **Volatile Organic Analysis:**

Methylene chloride was recovered in samples AD19479-002, -004, -006, -008, -010, -012, -016 and -018 due to possible laboratory contamination.

Acetone was recovered in sample AD19479-018 due to possible laboratory contamination.

The Method Blank Spike for batch 89405 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The Matrix Spike and/or Matrix Spike Duplicate for batches 89405 and 89411 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

## **Base Neutral/Acid Extractable Analysis:**

Sample AD19479-015 was analyzed at a dilution due to the nature of the sample.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 88130 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

## **Metals Analysis:**

Sample AD19479-009 was reported at a dilution for Be, TI due to internal standard interference.

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batch 85347 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

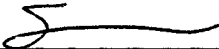
The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batches 85347, 85348. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 85348 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Reported to MDL per client request. When reporting to the MDL, detections are typically found in the blanks. Acceptance criteria for blanks are based on the RL.

## **Wet Chemistry Analysis:**

Data conforms to method requirements.

  
\_\_\_\_\_  
Sean Berls  
Quality Assurance Officer

Or

\_\_\_\_\_  
Jean Revolus  
Laboratory Director

10/19/20  
\_\_\_\_\_  
Date

# HC Executive Summary

0092806 0003

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-001

Sample ID: HSI-SS-01 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	19	3200	EPA 6010D
Barium	mg/kg	0.75	21	EPA 6010D
Calcium	mg/kg	110	1700	EPA 6010D
Chromium	mg/kg	0.74	19B	EPA 6010D
Cobalt	mg/kg	0.79	0.95J	EPA 6010D
Copper	mg/kg	0.68	14B	EPA 6010D
Iron	mg/kg	15	6500B	EPA 6010D
Lead	mg/kg	0.68	17	EPA 6010D
Magnesium	mg/kg	22	450J	EPA 6010D
Manganese	mg/kg	0.71	50	EPA 6010D
Nickel	mg/kg	1.2	3.5J	EPA 6010D
Potassium	mg/kg	110	150J	EPA 6010D
Zinc	mg/kg	1.7	43B	EPA 6010D
Antimony	mg/kg	0.025	0.13J	EPA 6020B
Arsenic	mg/kg	0.019	3.9B	EPA 6020B
Beryllium	mg/kg	0.017	0.18J	EPA 6020B
Cadmium	mg/kg	0.016	0.38J	EPA 6020B
Selenium	mg/kg	0.071	1.2JB	EPA 6020B
Silver	mg/kg	0.029	0.067JB	EPA 6020B
Thallium	mg/kg	0.020	0.10J	EPA 6020B
Vanadium	mg/kg	0.012	47B	EPA 6020B
Acetophenone	mg/kg	0.013	0.019J	EPA 8270D
Benzo[a]pyrene	mg/kg	0.013	0.014J	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.00026	0.0092J	EPA 8270D
bis(2-Ethylhexyl)phthalate	mg/kg	0.033	0.24	EPA 8270D
Chrysene	mg/kg	0.013	0.016J	EPA 8270D
Di-n-butylphthalate	mg/kg	0.042	0.12	EPA 8270D

Lab#: AD19479-002

Sample ID: HSI-SS-01 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00037	0.0018	EPA 8260C
Methylene chloride	mg/kg	0.00061	0.0036	EPA 8260C



# HC Executive Summary

0092806 0004

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-003

Sample ID: HSI-SS-02 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	18	3800	EPA 6010D
Barium	mg/kg	0.74	20	EPA 6010D
Calcium	mg/kg	110	1600	EPA 6010D
Chromium	mg/kg	0.74	20B	EPA 6010D
Cobalt	mg/kg	0.78	1.4J	EPA 6010D
Copper	mg/kg	0.68	18B	EPA 6010D
Iron	mg/kg	15	6700B	EPA 6010D
Lead	mg/kg	0.68	23	EPA 6010D
Magnesium	mg/kg	21	540J	EPA 6010D
Manganese	mg/kg	0.71	61	EPA 6010D
Nickel	mg/kg	1.2	4.5J	EPA 6010D
Potassium	mg/kg	110	160J	EPA 6010D
Zinc	mg/kg	1.7	29B	EPA 6010D
Antimony	mg/kg	0.025	0.11J	EPA 6020B
Arsenic	mg/kg	0.019	3.2B	EPA 6020B
Beryllium	mg/kg	0.017	0.18J	EPA 6020B
Cadmium	mg/kg	0.016	0.49	EPA 6020B
Selenium	mg/kg	0.070	1.4JB	EPA 6020B
Silver	mg/kg	0.029	0.048JB	EPA 6020B
Thallium	mg/kg	0.019	0.020J	EPA 6020B
Vanadium	mg/kg	0.012	18B	EPA 6020B
Mercury	mg/kg	0.014	0.020J	EPA 7471B
Acetophenone	mg/kg	0.013	0.023J	EPA 8270D
bis(2-Ethylhexyl)phthalate	mg/kg	0.032	0.44	EPA 8270D
Di-n-butylphthalate	mg/kg	0.042	0.16	EPA 8270D

Lab#: AD19479-004

Sample ID: HSI-SS-02 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00037	0.012	EPA 8260C
1,1,2-Trichloroethane	mg/kg	0.00037	0.0014J	EPA 8260C
2-Butanone	mg/kg	0.00098	0.0010J	EPA 8260C
Acetone	mg/kg	0.0055	0.044	EPA 8260C
Methylene chloride	mg/kg	0.00061	0.0024	EPA 8260C
Tetrachloroethene	mg/kg	0.00080	0.0045	EPA 8260C
Trichloroethene	mg/kg	0.00067	0.0021	EPA 8260C

# HC Executive Summary

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-005

Sample ID: HSI-SS-03 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	20	4000	EPA 6010D
Barium	mg/kg	0.82	22	EPA 6010D
Calcium	mg/kg	120	1700	EPA 6010D
Chromium	mg/kg	0.82	23B	EPA 6010D
Cobalt	mg/kg	0.87	1.2J	EPA 6010D
Copper	mg/kg	0.75	9.2B	EPA 6010D
Iron	mg/kg	16	7100B	EPA 6010D
Lead	mg/kg	0.75	3.9J	EPA 6010D
Magnesium	mg/kg	24	560J	EPA 6010D
Manganese	mg/kg	0.78	54	EPA 6010D
Nickel	mg/kg	1.3	3.0J	EPA 6010D
Potassium	mg/kg	120	180J	EPA 6010D
Zinc	mg/kg	1.8	22B	EPA 6010D
Arsenic	mg/kg	0.021	3.6B	EPA 6020B
Beryllium	mg/kg	0.019	0.19J	EPA 6020B
Cadmium	mg/kg	0.017	0.17J	EPA 6020B
Selenium	mg/kg	0.077	1.2JB	EPA 6020B
Silver	mg/kg	0.032	0.050JB	EPA 6020B
Thallium	mg/kg	0.022	0.026J	EPA 6020B
Vanadium	mg/kg	0.013	19B	EPA 6020B
bis(2-Ethylhexyl)phthalate	mg/kg	0.036	0.036J	EPA 8270D
Fluorene	mg/kg	0.011	0.012J	EPA 8270D

Lab#: AD19479-006

Sample ID: HSI-SS-03 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00049	0.0065	EPA 8260C
Methylene chloride	mg/kg	0.00082	0.0057	EPA 8260C
Tetrachloroethene	mg/kg	0.0011	0.024	EPA 8260C
Trichloroethene	mg/kg	0.00089	0.0072	EPA 8260C

# HC Executive Summary

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-007

Sample ID: HSI-SS-04 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	19	6700	EPA 6010D
Barium	mg/kg	0.75	22	EPA 6010D
Calcium	mg/kg	110	210J	EPA 6010D
Chromium	mg/kg	0.74	24B	EPA 6010D
Cobalt	mg/kg	0.79	1.5J	EPA 6010D
Copper	mg/kg	0.68	7.3B	EPA 6010D
Iron	mg/kg	15	11000B	EPA 6010D
Lead	mg/kg	0.68	7.1	EPA 6010D
Magnesium	mg/kg	22	680	EPA 6010D
Manganese	mg/kg	0.71	31	EPA 6010D
Nickel	mg/kg	1.2	4.2J	EPA 6010D
Potassium	mg/kg	110	220J	EPA 6010D
Zinc	mg/kg	1.7	18B	EPA 6010D
Antimony	mg/kg	0.025	0.031J	EPA 6020B
Arsenic	mg/kg	0.019	7.1B	EPA 6020B
Beryllium	mg/kg	0.017	0.20J	EPA 6020B
Cadmium	mg/kg	0.016	0.15J	EPA 6020B
Selenium	mg/kg	0.071	0.88JB	EPA 6020B
Silver	mg/kg	0.029	0.037JB	EPA 6020B
Thallium	mg/kg	0.020	0.039J	EPA 6020B
Vanadium	mg/kg	0.012	22B	EPA 6020B
Benzo[b]fluoranthene	mg/kg	0.013	0.018J	EPA 8270D
bis(2-Ethylhexyl)phthalate	mg/kg	0.033	0.15	EPA 8270D

Lab#: AD19479-008

Sample ID: HSI-SS-04 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
Acetone	mg/kg	0.0061	0.011	EPA 8260C
Methylene chloride	mg/kg	0.00068	0.0049	EPA 8260C

# HC Executive Summary

0092806 0007

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-009

Sample ID: HSI-SS-05 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	19	3300	EPA 6010D
Barium	mg/kg	0.78	15	EPA 6010D
Calcium	mg/kg	120	190J	EPA 6010D
Chromium	mg/kg	0.77	20B	EPA 6010D
Cobalt	mg/kg	0.82	0.94J	EPA 6010D
Copper	mg/kg	0.71	13B	EPA 6010D
Iron	mg/kg	15	7000B	EPA 6010D
Lead	mg/kg	0.71	22	EPA 6010D
Magnesium	mg/kg	22	340J	EPA 6010D
Manganese	mg/kg	0.74	28	EPA 6010D
Nickel	mg/kg	1.3	4.7J	EPA 6010D
Potassium	mg/kg	110	140J	EPA 6010D
Zinc	mg/kg	1.7	24B	EPA 6010D
Antimony	mg/kg	0.026	0.058J	EPA 6020B
Arsenic	mg/kg	0.020	3.0B	EPA 6020B
Beryllium	mg/kg	0.054	0.20J	EPA 6020B
Cadmium	mg/kg	0.016	0.50	EPA 6020B
Selenium	mg/kg	0.073	4.0B	EPA 6020B
Silver	mg/kg	0.030	0.061JB	EPA 6020B
Vanadium	mg/kg	0.012	21B	EPA 6020B
bis(2-Ethylhexyl)phthalate	mg/kg	0.034	0.28	EPA 8270D
Butylbenzylphthalate	mg/kg	0.029	0.033J	EPA 8270D
Di-n-butylphthalate	mg/kg	0.044	0.067	EPA 8270D

Lab#: AD19479-010

Sample ID: HSI-SS-05 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00036	0.011	EPA 8260C
Acetone	mg/kg	0.0054	0.0069J	EPA 8260C
Chlorobenzene	mg/kg	0.00050	0.00050J	EPA 8260C
Methylene chloride	mg/kg	0.00060	0.0017	EPA 8260C
Toluene	mg/kg	0.00053	0.00073J	EPA 8260C

# HC Executive Summary

0092806 0008

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-011

Sample ID: HSI-SS-06 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	18	5000	EPA 6010D
Barium	mg/kg	0.73	24	EPA 6010D
Calcium	mg/kg	110	290J	EPA 6010D
Chromium	mg/kg	0.73	21B	EPA 6010D
Cobalt	mg/kg	0.77	1.5J	EPA 6010D
Copper	mg/kg	0.67	8.9B	EPA 6010D
Iron	mg/kg	14	9900B	EPA 6010D
Lead	mg/kg	0.67	15	EPA 6010D
Magnesium	mg/kg	21	510J	EPA 6010D
Manganese	mg/kg	0.70	37	EPA 6010D
Nickel	mg/kg	1.2	3.8J	EPA 6010D
Potassium	mg/kg	110	150J	EPA 6010D
Zinc	mg/kg	1.6	25B	EPA 6010D
Antimony	mg/kg	0.024	0.053J	EPA 6020B
Arsenic	mg/kg	0.019	3.2B	EPA 6020B
Beryllium	mg/kg	0.017	0.18J	EPA 6020B
Cadmium	mg/kg	0.015	0.18J	EPA 6020B
Selenium	mg/kg	0.069	1.1JB	EPA 6020B
Silver	mg/kg	0.028	0.047JB	EPA 6020B
Thallium	mg/kg	0.019	0.035J	EPA 6020B
Vanadium	mg/kg	0.012	17B	EPA 6020B
bis(2-Ethylhexyl)phthalate	mg/kg	0.032	0.34	EPA 8270D
Di-n-butylphthalate	mg/kg	0.042	0.077	EPA 8270D

Lab#: AD19479-012

Sample ID: HSI-SS-06 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00045	0.0039	EPA 8260C
2-Butanone	mg/kg	0.0012	0.0035	EPA 8260C
Acetone	mg/kg	0.0068	0.064	EPA 8260C
Methylcyclohexane	mg/kg	0.00091	0.0024	EPA 8260C
Methylene chloride	mg/kg	0.00076	0.0035	EPA 8260C
Styrene	mg/kg	0.00056	0.36	EPA 8260C
Tetrachloroethene	mg/kg	0.00099	0.0035	EPA 8260C

# HC Executive Summary

0092806 0009

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-013

Sample ID: HSI-SS-07 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	20	3200	EPA 6010D
Barium	mg/kg	0.82	21	EPA 6010D
Calcium	mg/kg	120	410J	EPA 6010D
Chromium	mg/kg	0.82	18B	EPA 6010D
Cobalt	mg/kg	0.87	1.6J	EPA 6010D
Copper	mg/kg	0.75	12B	EPA 6010D
Iron	mg/kg	16	14000B	EPA 6010D
Lead	mg/kg	0.75	22	EPA 6010D
Magnesium	mg/kg	24	300J	EPA 6010D
Manganese	mg/kg	0.78	68	EPA 6010D
Nickel	mg/kg	1.3	4.6J	EPA 6010D
Potassium	mg/kg	120	150J	EPA 6010D
Zinc	mg/kg	1.8	42B	EPA 6010D
Antimony	mg/kg	0.027	0.084J	EPA 6020B
Arsenic	mg/kg	0.021	2.2B	EPA 6020B
Beryllium	mg/kg	0.019	0.14J	EPA 6020B
Cadmium	mg/kg	0.017	0.48J	EPA 6020B
Selenium	mg/kg	0.077	1.4JB	EPA 6020B
Silver	mg/kg	0.032	0.084JB	EPA 6020B
Thallium	mg/kg	0.022	0.022J	EPA 6020B
Vanadium	mg/kg	0.013	16B	EPA 6020B
Mercury	mg/kg	0.015	0.038J	EPA 7471B
bis(2-Ethylhexyl)phthalate	mg/kg	0.036	0.42	EPA 8270D
Di-n-butylphthalate	mg/kg	0.047	0.061	EPA 8270D

Lab#: AD19479-014

Sample ID: HSI-SS-07 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
2-Butanone	mg/kg	0.0014	0.14	EPA 8260C
Acetone	mg/kg	0.0078	0.74	EPA 8260C
Methylene chloride	mg/kg	0.00086	0.0022J	EPA 8260C
Toluene	mg/kg	0.00076	0.070	EPA 8260C
Trichlorofluoromethane	mg/kg	0.0014	0.0092	EPA 8260C

# HC Executive Summary

0092806 0010

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-015

Sample ID: HSI-SS-08 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	18	3900	EPA 6010D
Barium	mg/kg	0.72	29	EPA 6010D
Calcium	mg/kg	110	19000	EPA 6010D
Chromium	mg/kg	0.71	15B	EPA 6010D
Cobalt	mg/kg	0.76	3.1	EPA 6010D
Copper	mg/kg	0.66	11B	EPA 6010D
Iron	mg/kg	14	8100B	EPA 6010D
Lead	mg/kg	0.66	6.6	EPA 6010D
Magnesium	mg/kg	21	7900	EPA 6010D
Manganese	mg/kg	0.68	150	EPA 6010D
Nickel	mg/kg	1.2	9.1	EPA 6010D
Potassium	mg/kg	100	540	EPA 6010D
Zinc	mg/kg	1.6	22B	EPA 6010D
Arsenic	mg/kg	0.019	2.2B	EPA 6020B
Beryllium	mg/kg	0.017	0.14J	EPA 6020B
Cadmium	mg/kg	0.015	0.15J	EPA 6020B
Selenium	mg/kg	0.068	0.87JB	EPA 6020B
Silver	mg/kg	0.028	0.049JB	EPA 6020B
Thallium	mg/kg	0.019	0.028J	EPA 6020B
Vanadium	mg/kg	0.012	15B	EPA 6020B
Benzo[g,h,i]perylene	mg/kg	0.00073	0.033J	EPA 8270D

Lab#: AD19479-016

Sample ID: HSI-SS-08 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00039	0.0015J	EPA 8260C
1,1,2-Trichloroethane	mg/kg	0.00040	0.00066J	EPA 8260C
Acetone	mg/kg	0.0058	0.0074J	EPA 8260C
Methylene chloride	mg/kg	0.00065	0.0071	EPA 8260C
Tetrachloroethene	mg/kg	0.00084	0.0011J	EPA 8260C



# HC Executive Summary

0092806 0011

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-017

Sample ID: HSI-SS-09 (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	18	5000	EPA 6010D
Barium	mg/kg	0.73	37	EPA 6010D
Calcium	mg/kg	110	1400	EPA 6010D
Chromium	mg/kg	0.72	17B	EPA 6010D
Cobalt	mg/kg	0.77	4.0	EPA 6010D
Copper	mg/kg	0.66	27B	EPA 6010D
Iron	mg/kg	14	11000B	EPA 6010D
Lead	mg/kg	0.66	9.8	EPA 6010D
Magnesium	mg/kg	21	2200	EPA 6010D
Manganese	mg/kg	0.69	210	EPA 6010D
Nickel	mg/kg	1.2	9.8	EPA 6010D
Potassium	mg/kg	110	550	EPA 6010D
Zinc	mg/kg	1.6	38B	EPA 6010D
Antimony	mg/kg	0.024	0.031J	EPA 6020B
Arsenic	mg/kg	0.019	3.5B	EPA 6020B
Beryllium	mg/kg	0.017	0.19J	EPA 6020B
Cadmium	mg/kg	0.015	0.26J	EPA 6020B
Selenium	mg/kg	0.068	0.99JB	EPA 6020B
Silver	mg/kg	0.028	0.050JB	EPA 6020B
Thallium	mg/kg	0.019	0.037J	EPA 6020B
Vanadium	mg/kg	0.012	20B	EPA 6020B
Benzo[b]fluoranthene	mg/kg	0.013	0.015J	EPA 8270D
bis(2-Ethylhexyl)phthalate	mg/kg	0.032	0.12	EPA 8270D
Dimethylphthalate	mg/kg	0.010	0.066	EPA 8270D
Di-n-butylphthalate	mg/kg	0.041	0.058	EPA 8270D
Pyrene	mg/kg	0.012	0.015J	EPA 8270D

Lab#: AD19479-018

Sample ID: HSI-SS-09 (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
Acetone	mg/kg	0.0075	0.020	EPA 8260C
m&p-Xylenes	mg/kg	0.0013	0.0014	EPA 8260C
Methylene chloride	mg/kg	0.00083	0.0046	EPA 8260C
Tetrachloroethene	mg/kg	0.0011	0.0011J	EPA 8260C
Xylenes (Total)	mg/kg	0.00079	0.0014	EPA 8260C

# HC Executive Summary

0092806 0012

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-019

Sample ID: HSI-SS-D (0-0.5')

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	18	3700	EPA 6010D
Barium	mg/kg	0.73	20	EPA 6010D
Calcium	mg/kg	110	1400	EPA 6010D
Chromium	mg/kg	0.73	17B	EPA 6010D
Cobalt	mg/kg	0.77	1.5J	EPA 6010D
Copper	mg/kg	0.67	16B	EPA 6010D
Iron	mg/kg	14	6500B	EPA 6010D
Lead	mg/kg	0.67	140	EPA 6010D
Magnesium	mg/kg	21	550	EPA 6010D
Manganese	mg/kg	0.70	56	EPA 6010D
Nickel	mg/kg	1.2	3.8J	EPA 6010D
Potassium	mg/kg	110	160J	EPA 6010D
Zinc	mg/kg	1.6	26B	EPA 6010D
Antimony	mg/kg	0.024	0.063J	EPA 6020B
Arsenic	mg/kg	0.019	3.0B	EPA 6020B
Beryllium	mg/kg	0.017	0.17J	EPA 6020B
Cadmium	mg/kg	0.015	0.39J	EPA 6020B
Selenium	mg/kg	0.069	1.3JB	EPA 6020B
Silver	mg/kg	0.028	0.041JB	EPA 6020B
Vanadium	mg/kg	0.012	18B	EPA 6020B
Mercury	mg/kg	0.014	0.014J	EPA 7471B
bis(2-Ethylhexyl)phthalate	mg/kg	0.032	0.38	EPA 8270D
Di-n-butylphthalate	mg/kg	0.042	0.17	EPA 8270D
Di-n-octylphthalate	mg/kg	0.024	0.024J	EPA 8270D

Lab#: AD19479-020

Sample ID: HSI-SS-D (0.5-1')

Analyte	Units	RL/MDL	Result	Analytical Method
Trichlorofluoromethane	mg/kg	0.0011	0.0034	EPA 8260C

# HC Report of Analysis

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Sample ID: HSI-SS-01 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-001

Receipt Date: 9/28/2020

Matrix: Soil

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

## Mercury (Soil/Waste) 7471B

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.093	ND

## Semivolatile Organics (no search) 8270

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.012	0.037	ND
1,4-Dioxane	1	mg/kg	0.019	0.0093	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.029	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0093	ND
2,4-Dimethylphenol	1	mg/kg	0.018	0.0093	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.019	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.016	0.037	ND
2-Chlorophenol	1	mg/kg	0.012	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.011	0.037	ND
2-Methylphenol	1	mg/kg	0.011	0.0093	ND
2-Nitroaniline	1	mg/kg	0.017	0.037	ND
2-Nitrophenol	1	mg/kg	0.017	0.037	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0093	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.030	0.037	ND
3-Nitroaniline	1	mg/kg	0.014	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0089	0.037	ND
4-Chloroaniline	1	mg/kg	0.016	0.0093	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.037	ND
4-Nitroaniline	1	mg/kg	0.014	0.037	ND
4-Nitrophenol	1	mg/kg	0.028	0.037	ND
Acenaphthene	1	mg/kg	0.011	0.037	ND
Acenaphthylene	1	mg/kg	0.011	0.037	ND
Acetophenone	1	mg/kg	0.013	0.037	0.019J
Anthracene	1	mg/kg	0.010	0.037	ND
Atrazine	1	mg/kg	0.015	0.037	ND
Benzaldehyde	1	mg/kg	0.40	0.037	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.037	ND
Benzo[a]pyrene	1	mg/kg	0.013	0.037	0.014J
Benzo[b]fluoranthene	1	mg/kg	0.013	0.037	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00026	0.037	0.0092J
Benzo[k]fluoranthene	1	mg/kg	0.014	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.010	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0090	0.0093	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.033	0.037	0.24
Butylbenzylphthalate	1	mg/kg	0.028	0.037	ND
Caprolactam	1	mg/kg	0.030	0.037	ND
Carbazole	1	mg/kg	0.012	0.037	ND
Chrysene	1	mg/kg	0.013	0.037	0.016J
Dibenzo[a,h]anthracene	1	mg/kg	0.014	0.037	ND
Dibenzofuran	1	mg/kg	0.0094	0.0093	ND
Diethylphthalate	1	mg/kg	0.024	0.037	ND
Dimethylphthalate	1	mg/kg	0.010	0.037	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-01 (0-0.5')

Lab#: AD19479-001

Matrix: Soil

Collection Date: 9/25/2020

Receipt Date: 9/28/2020

Di-n-butylphthalate	1	mg/kg	0.042	0.0093	0.12
Di-n-octylphthalate	1	mg/kg	0.025	0.037	ND
Fluoranthene	1	mg/kg	0.014	0.037	ND
Fluorene	1	mg/kg	0.010	0.037	ND
Hexachlorobenzene	1	mg/kg	0.015	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.017	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.037	ND
Hexachloroethane	1	mg/kg	0.016	0.037	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.037	ND
Isophorone	1	mg/kg	0.012	0.037	ND
Naphthalene	1	mg/kg	0.011	0.0093	ND
Nitrobenzene	1	mg/kg	0.0015	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0093	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.037	ND
Pentachlorophenol	1	mg/kg	0.18	0.19	ND
Phenanthrene	1	mg/kg	0.012	0.037	ND
Phenol	1	mg/kg	0.010	0.037	ND
Pyrene	1	mg/kg	0.013	0.037	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	19	220	3200
Barium	1	mg/kg	0.75	11	21
Calcium	1	mg/kg	110	1100	1700
Chromium	1	mg/kg	0.74	5.6	19B
Cobalt	1	mg/kg	0.79	2.8	0.95J
Copper	1	mg/kg	0.68	5.6	14B
Iron	1	mg/kg	15	220	6500B
Lead	1	mg/kg	0.68	5.6	17
Magnesium	1	mg/kg	22	560	450J
Manganese	1	mg/kg	0.71	11	50
Nickel	1	mg/kg	1.2	5.6	3.5J
Potassium	1	mg/kg	110	560	150J
Sodium	1	mg/kg	140	280	ND
Zinc	1	mg/kg	1.7	11	43B

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.025	0.89	0.13J
Arsenic	1	mg/kg	0.019	0.22	3.9B
Beryllium	1	mg/kg	0.017	0.22	0.18J
Cadmium	1	mg/kg	0.016	0.44	0.38J
Selenium	1	mg/kg	0.071	2.2	1.2JB
Silver	1	mg/kg	0.029	0.22	0.067JB
Thallium	1	mg/kg	0.020	0.44	0.10J
Vanadium	1	mg/kg	0.012	0.22	47B

Sample ID: HSI-SS-01 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-002

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		92

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.752	mg/kg	0.00075	0.0016	ND
1,1,2,2-Tetrachloroethane	0.752	mg/kg	0.00037	0.0016	0.0018
1,1,2-Trichloro-1,2,2-trifluoroethane	0.752	mg/kg	0.0011	0.0016	ND
1,1,2-Trichloroethane	0.752	mg/kg	0.00038	0.0016	ND
1,1-Dichloroethane	0.752	mg/kg	0.00071	0.0016	ND
1,1-Dichloroethene	0.752	mg/kg	0.00094	0.0016	ND
1,2,3-Trichlorobenzene	0.752	mg/kg	0.00045	0.0016	ND
1,2,4-Trichlorobenzene	0.752	mg/kg	0.00051	0.0016	ND
1,2-Dibromo-3-chloropropane	0.752	mg/kg	0.00045	0.0016	ND
1,2-Dibromoethane	0.752	mg/kg	0.00040	0.00082	ND
1,2-Dichlorobenzene	0.752	mg/kg	0.00042	0.0016	ND
1,2-Dichloroethane	0.752	mg/kg	0.00034	0.0016	ND
1,2-Dichloropropane	0.752	mg/kg	0.00067	0.0016	ND
1,3-Dichlorobenzene	0.752	mg/kg	0.00045	0.0016	ND
1,4-Dichlorobenzene	0.752	mg/kg	0.00043	0.0016	ND
1,4-Dioxane	0.752	mg/kg	0.040	0.082	ND
2-Butanone	0.752	mg/kg	0.00098	0.0016	ND
2-Hexanone	0.752	mg/kg	0.00069	0.0016	ND
4-Methyl-2-pentanone	0.752	mg/kg	0.00047	0.0016	ND
Acetone	0.752	mg/kg	0.0055	0.0082	ND
Benzene	0.752	mg/kg	0.00060	0.00082	ND
Bromochloromethane	0.752	mg/kg	0.00057	0.0016	ND
Bromodichloromethane	0.752	mg/kg	0.00038	0.0016	ND
Bromoform	0.752	mg/kg	0.00027	0.0016	ND
Bromomethane	0.752	mg/kg	0.0013	0.0016	ND
Carbon disulfide	0.752	mg/kg	0.0028	0.0028	ND
Carbon tetrachloride	0.752	mg/kg	0.00079	0.0016	ND
Chlorobenzene	0.752	mg/kg	0.00051	0.0016	ND
Chloroethane	0.752	mg/kg	0.0016	0.0016	ND
Chloroform	0.752	mg/kg	0.0011	0.0016	ND
Chloromethane	0.752	mg/kg	0.0010	0.0016	ND
cis-1,2-Dichloroethene	0.752	mg/kg	0.00066	0.0016	ND
cis-1,3-Dichloropropene	0.752	mg/kg	0.00043	0.0016	ND
Cyclohexane	0.752	mg/kg	0.00098	0.0016	ND
Dibromochloromethane	0.752	mg/kg	0.00035	0.0016	ND
Dichlorodifluoromethane	0.752	mg/kg	0.0012	0.0016	ND
Ethylbenzene	0.752	mg/kg	0.00056	0.00082	ND
Isopropylbenzene	0.752	mg/kg	0.00068	0.00082	ND
m&p-Xylenes	0.752	mg/kg	0.00098	0.00098	ND
Methyl Acetate	0.752	mg/kg	0.00078	0.0016	ND
Methylcyclohexane	0.752	mg/kg	0.00074	0.0016	ND
Methylene chloride	0.752	mg/kg	0.00061	0.0016	0.0036
Methyl-t-butyl ether	0.752	mg/kg	0.00044	0.00082	ND
o-Xylene	0.752	mg/kg	0.00058	0.00082	ND
Styrene	0.752	mg/kg	0.00045	0.0016	ND
Tetrachloroethene	0.752	mg/kg	0.00080	0.0016	ND
Toluene	0.752	mg/kg	0.00054	0.00082	ND
trans-1,2-Dichloroethene	0.752	mg/kg	0.00098	0.0016	ND
trans-1,3-Dichloropropene	0.752	mg/kg	0.00038	0.0016	ND
Trichloroethene	0.752	mg/kg	0.00067	0.0016	ND
Trichlorofluoromethane	0.752	mg/kg	0.00096	0.0016	ND
Vinyl chloride	0.752	mg/kg	0.0010	0.0016	ND
Xylenes (Total)	0.752	mg/kg	0.00058	0.00082	ND

Sample ID: HSI-SS-02 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-003

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.092	0.020J

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.012	0.037	ND
1,4-Dioxane	1	mg/kg	0.018	0.0092	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.010	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.028	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0092	ND
2,4-Dimethylphenol	1	mg/kg	0.018	0.0092	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.011	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.019	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.016	0.037	ND
2-Chlorophenol	1	mg/kg	0.012	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.011	0.037	ND
2-Methylphenol	1	mg/kg	0.011	0.0092	ND
2-Nitroaniline	1	mg/kg	0.017	0.037	ND
2-Nitrophenol	1	mg/kg	0.017	0.037	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0092	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.030	0.037	ND
3-Nitroaniline	1	mg/kg	0.014	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0088	0.037	ND
4-Chloroaniline	1	mg/kg	0.016	0.0092	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.037	ND
4-Nitroaniline	1	mg/kg	0.014	0.037	ND
4-Nitrophenol	1	mg/kg	0.028	0.037	ND
Acenaphthene	1	mg/kg	0.010	0.037	ND
Acenaphthylene	1	mg/kg	0.011	0.037	ND
Acetophenone	1	mg/kg	0.013	0.037	0.023J
Anthracene	1	mg/kg	0.010	0.037	ND
Atrazine	1	mg/kg	0.015	0.037	ND
Benzaldehyde	1	mg/kg	0.40	0.037	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.037	ND
Benzo[a]pyrene	1	mg/kg	0.012	0.037	ND
Benzo[b]fluoranthene	1	mg/kg	0.013	0.037	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00025	0.037	ND
Benzo[k]fluoranthene	1	mg/kg	0.013	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.010	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0089	0.0092	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.032	0.037	0.44
Butylbenzylphthalate	1	mg/kg	0.028	0.037	ND
Caprolactam	1	mg/kg	0.029	0.037	ND
Carbazole	1	mg/kg	0.011	0.037	ND
Chrysene	1	mg/kg	0.012	0.037	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.013	0.037	ND
Dibenzofuran	1	mg/kg	0.0093	0.0092	ND
Diethylphthalate	1	mg/kg	0.024	0.037	ND
Dimethylphthalate	1	mg/kg	0.010	0.037	ND
Di-n-butylphthalate	1	mg/kg	0.042	0.0092	0.16
Di-n-octylphthalate	1	mg/kg	0.024	0.037	ND
Fluoranthene	1	mg/kg	0.014	0.037	ND
Fluorene	1	mg/kg	0.010	0.037	ND
Hexachlorobenzene	1	mg/kg	0.015	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.016	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.037	ND
Hexachloroethane	1	mg/kg	0.016	0.037	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-02 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-003

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.037	ND
Isophorone	1	mg/kg	0.012	0.037	ND
Naphthalene	1	mg/kg	0.011	0.0092	ND
Nitrobenzene	1	mg/kg	0.0015	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0092	ND
N-Nitrosodiphenylamine	1	mg/kg	0.12	0.037	ND
Pentachlorophenol	1	mg/kg	0.18	0.18	ND
Phenanthrene	1	mg/kg	0.012	0.037	ND
Phenol	1	mg/kg	0.010	0.037	ND
Pyrene	1	mg/kg	0.012	0.037	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	18	220	3800
Barium	1	mg/kg	0.74	11	20
Calcium	1	mg/kg	110	1100	1600
Chromium	1	mg/kg	0.74	5.5	20B
Cobalt	1	mg/kg	0.78	2.7	1.4J
Copper	1	mg/kg	0.68	5.5	18B
Iron	1	mg/kg	15	220	6700B
Lead	1	mg/kg	0.68	5.5	23
Magnesium	1	mg/kg	21	550	540J
Manganese	1	mg/kg	0.71	11	61
Nickel	1	mg/kg	1.2	5.5	4.5J
Potassium	1	mg/kg	110	550	160J
Sodium	1	mg/kg	140	270	ND
Zinc	1	mg/kg	1.7	11	29B

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.025	0.88	0.11J
Arsenic	1	mg/kg	0.019	0.22	3.2B
Beryllium	1	mg/kg	0.017	0.22	0.18J
Cadmium	1	mg/kg	0.016	0.44	0.49
Selenium	1	mg/kg	0.070	2.2	1.4JB
Silver	1	mg/kg	0.029	0.22	0.048JB
Thallium	1	mg/kg	0.019	0.44	0.020J
Vanadium	1	mg/kg	0.012	0.22	18B

Sample ID: HSI-SS-02 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-004

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.74	mg/kg	0.00075	0.0016	ND
1,1,2,2-Tetrachloroethane	0.74	mg/kg	0.00037	0.0016	0.012
1,1,2-Trichloro-1,2,2-trifluoroethane	0.74	mg/kg	0.0011	0.0016	ND
1,1,2-Trichloroethane	0.74	mg/kg	0.00037	0.0016	0.0014J
1,1-Dichloroethane	0.74	mg/kg	0.00071	0.0016	ND
1,1-Dichloroethene	0.74	mg/kg	0.00093	0.0016	ND
1,2,3-Trichlorobenzene	0.74	mg/kg	0.00045	0.0016	ND
1,2,4-Trichlorobenzene	0.74	mg/kg	0.00051	0.0016	ND
1,2-Dibromo-3-chloropropane	0.74	mg/kg	0.00045	0.0016	ND
1,2-Dibromoethane	0.74	mg/kg	0.00040	0.00081	ND
1,2-Dichlorobenzene	0.74	mg/kg	0.00041	0.0016	ND
1,2-Dichloroethane	0.74	mg/kg	0.00033	0.0016	ND
1,2-Dichloropropane	0.74	mg/kg	0.00067	0.0016	ND
1,3-Dichlorobenzene	0.74	mg/kg	0.00045	0.0016	ND
1,4-Dichlorobenzene	0.74	mg/kg	0.00043	0.0016	ND
1,4-Dioxane	0.74	mg/kg	0.039	0.081	ND
2-Butanone	0.74	mg/kg	0.00098	0.0016	0.0010J
2-Hexanone	0.74	mg/kg	0.00069	0.0016	ND
4-Methyl-2-pentanone	0.74	mg/kg	0.00047	0.0016	ND
Acetone	0.74	mg/kg	0.0055	0.0081	0.044
Benzene	0.74	mg/kg	0.00059	0.00081	ND
Bromochloromethane	0.74	mg/kg	0.00057	0.0016	ND
Bromodichloromethane	0.74	mg/kg	0.00038	0.0016	ND
Bromoform	0.74	mg/kg	0.00027	0.0016	ND
Bromomethane	0.74	mg/kg	0.0013	0.0016	ND
Carbon disulfide	0.74	mg/kg	0.0028	0.0028	ND
Carbon tetrachloride	0.74	mg/kg	0.00079	0.0016	ND
Chlorobenzene	0.74	mg/kg	0.00050	0.0016	ND
Chloroethane	0.74	mg/kg	0.0016	0.0016	ND
Chloroform	0.74	mg/kg	0.0011	0.0016	ND
Chloromethane	0.74	mg/kg	0.0010	0.0016	ND
cis-1,2-Dichloroethene	0.74	mg/kg	0.00066	0.0016	ND
cis-1,3-Dichloropropene	0.74	mg/kg	0.00043	0.0016	ND
Cyclohexane	0.74	mg/kg	0.00098	0.0016	ND
Dibromochloromethane	0.74	mg/kg	0.00035	0.0016	ND
Dichlorodifluoromethane	0.74	mg/kg	0.0011	0.0016	ND
Ethylbenzene	0.74	mg/kg	0.00056	0.00081	ND
Isopropylbenzene	0.74	mg/kg	0.00067	0.00081	ND
m&p-Xylenes	0.74	mg/kg	0.00098	0.00098	ND
Methyl Acetate	0.74	mg/kg	0.00078	0.0016	ND
Methylcyclohexane	0.74	mg/kg	0.00073	0.0016	ND
Methylene chloride	0.74	mg/kg	0.00061	0.0016	0.0024
Methyl-t-butyl ether	0.74	mg/kg	0.00044	0.00081	ND
o-Xylene	0.74	mg/kg	0.00058	0.00081	ND
Styrene	0.74	mg/kg	0.00045	0.0016	ND
Tetrachloroethene	0.74	mg/kg	0.00080	0.0016	0.0045
Toluene	0.74	mg/kg	0.00054	0.00081	ND
trans-1,2-Dichloroethene	0.74	mg/kg	0.00098	0.0016	ND
trans-1,3-Dichloropropene	0.74	mg/kg	0.00038	0.0016	ND
Trichloroethene	0.74	mg/kg	0.00067	0.0016	0.0021
Trichlorofluoromethane	0.74	mg/kg	0.00096	0.0016	ND
Vinyl chloride	0.74	mg/kg	0.00099	0.0016	ND
Xylenes (Total)	0.74	mg/kg	0.00058	0.00081	ND



Sample ID: HSI-SS-03 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-005

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.10	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.012	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.014	0.041	ND
1,4-Dioxane	1	mg/kg	0.020	0.010	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.015	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.012	0.041	ND
2,4,6-Trichlorophenol	1	mg/kg	0.032	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.015	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.020	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.18	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.013	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.021	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.018	0.041	ND
2-Chlorophenol	1	mg/kg	0.013	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.013	0.041	ND
2-Methylphenol	1	mg/kg	0.012	0.010	ND
2-Nitroaniline	1	mg/kg	0.019	0.041	ND
2-Nitrophenol	1	mg/kg	0.018	0.041	ND
3&4-Methylphenol	1	mg/kg	0.012	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.033	0.041	ND
3-Nitroaniline	1	mg/kg	0.016	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.14	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.011	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0098	0.041	ND
4-Chloroaniline	1	mg/kg	0.018	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.012	0.041	ND
4-Nitroaniline	1	mg/kg	0.016	0.041	ND
4-Nitrophenol	1	mg/kg	0.031	0.041	ND
Acenaphthene	1	mg/kg	0.012	0.041	ND
Acenaphthylene	1	mg/kg	0.012	0.041	ND
Acetophenone	1	mg/kg	0.015	0.041	ND
Anthracene	1	mg/kg	0.011	0.041	ND
Atrazine	1	mg/kg	0.016	0.041	ND
Benzaldehyde	1	mg/kg	0.44	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.014	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.014	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.015	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00028	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.015	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.012	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0099	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.016	0.041	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.036</b>	0.041	<b>0.036J</b>
Butylbenzylphthalate	1	mg/kg	0.031	0.041	ND
Caprolactam	1	mg/kg	0.033	0.041	ND
Carbazole	1	mg/kg	0.013	0.041	ND
Chrysene	1	mg/kg	0.014	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.015	0.041	ND
Dibenzofuran	1	mg/kg	0.010	0.010	ND
Diethylphthalate	1	mg/kg	0.026	0.041	ND
Dimethylphthalate	1	mg/kg	0.011	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.047	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.027	0.041	ND
Fluoranthene	1	mg/kg	0.016	0.041	ND
<b>Fluorene</b>	<b>1</b>	<b>mg/kg</b>	<b>0.011</b>	0.041	<b>0.012J</b>
Hexachlorobenzene	1	mg/kg	0.017	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.018	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.13	0.041	ND
Hexachloroethane	1	mg/kg	0.018	0.041	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-03 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-005

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.018	0.041	ND
Isophorone	1	mg/kg	0.013	0.041	ND
Naphthalene	1	mg/kg	0.012	0.010	ND
Nitrobenzene	1	mg/kg	0.0016	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.015	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.14	0.041	ND
Pentachlorophenol	1	mg/kg	0.20	0.20	ND
Phenanthrene	1	mg/kg	0.013	0.041	ND
Phenol	1	mg/kg	0.011	0.041	ND
Pyrene	1	mg/kg	0.014	0.041	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	20	240	4000
Barium	1	mg/kg	0.82	12	22
Calcium	1	mg/kg	120	1200	1700
Chromium	1	mg/kg	0.82	6.1	23B
Cobalt	1	mg/kg	0.87	3.0	1.2J
Copper	1	mg/kg	0.75	6.1	9.2B
Iron	1	mg/kg	16	240	7100B
Lead	1	mg/kg	0.75	6.1	3.9J
Magnesium	1	mg/kg	24	610	560J
Manganese	1	mg/kg	0.78	12	54
Nickel	1	mg/kg	1.3	6.1	3.0J
Potassium	1	mg/kg	120	610	180J
Sodium	1	mg/kg	150	300	ND
Zinc	1	mg/kg	1.8	12	22B

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.027	0.98	ND
Arsenic	1	mg/kg	0.021	0.24	3.6B
Beryllium	1	mg/kg	0.019	0.24	0.19J
Cadmium	1	mg/kg	0.017	0.49	0.17J
Selenium	1	mg/kg	0.077	2.4	1.2JB
Silver	1	mg/kg	0.032	0.24	0.050JB
Thallium	1	mg/kg	0.022	0.49	0.026J
Vanadium	1	mg/kg	0.013	0.24	19B

Sample ID: HSI-SS-03 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-006

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.883	mg/kg	0.0010	0.0022	ND
1,1,2,2-Tetrachloroethane	0.883	mg/kg	0.00049	0.0022	0.0065
1,1,2-Trichloro-1,2,2-trifluoroethane	0.883	mg/kg	0.0015	0.0022	ND
1,1,2-Trichloroethane	0.883	mg/kg	0.00050	0.0022	ND
1,1-Dichloroethane	0.883	mg/kg	0.00095	0.0022	ND
1,1-Dichloroethene	0.883	mg/kg	0.0013	0.0022	ND
1,2,3-Trichlorobenzene	0.883	mg/kg	0.00060	0.0022	ND
1,2,4-Trichlorobenzene	0.883	mg/kg	0.00069	0.0022	ND
1,2-Dibromo-3-chloropropane	0.883	mg/kg	0.00060	0.0022	ND
1,2-Dibromoethane	0.883	mg/kg	0.00053	0.0011	ND
1,2-Dichlorobenzene	0.883	mg/kg	0.00056	0.0022	ND
1,2-Dichloroethane	0.883	mg/kg	0.00045	0.0022	ND
1,2-Dichloropropane	0.883	mg/kg	0.00089	0.0022	ND
1,3-Dichlorobenzene	0.883	mg/kg	0.00060	0.0022	ND
1,4-Dichlorobenzene	0.883	mg/kg	0.00058	0.0022	ND
1,4-Dioxane	0.883	mg/kg	0.053	0.11	ND
2-Butanone	0.883	mg/kg	0.0013	0.0022	ND
2-Hexanone	0.883	mg/kg	0.00093	0.0022	ND
4-Methyl-2-pentanone	0.883	mg/kg	0.00063	0.0022	ND
Acetone	0.883	mg/kg	0.0074	0.011	ND
Benzene	0.883	mg/kg	0.00080	0.0011	ND
Bromochloromethane	0.883	mg/kg	0.00076	0.0022	ND
Bromodichloromethane	0.883	mg/kg	0.00051	0.0022	ND
Bromoform	0.883	mg/kg	0.00036	0.0022	ND
Bromomethane	0.883	mg/kg	0.0017	0.0022	ND
Carbon disulfide	0.883	mg/kg	0.0037	0.0037	ND
Carbon tetrachloride	0.883	mg/kg	0.0011	0.0022	ND
Chlorobenzene	0.883	mg/kg	0.00068	0.0022	ND
Chloroethane	0.883	mg/kg	0.0021	0.0022	ND
Chloroform	0.883	mg/kg	0.0015	0.0022	ND
Chloromethane	0.883	mg/kg	0.0013	0.0022	ND
cis-1,2-Dichloroethene	0.883	mg/kg	0.00088	0.0022	ND
cis-1,3-Dichloropropene	0.883	mg/kg	0.00058	0.0022	ND
Cyclohexane	0.883	mg/kg	0.0013	0.0022	ND
Dibromochloromethane	0.883	mg/kg	0.00047	0.0022	ND
Dichlorodifluoromethane	0.883	mg/kg	0.0015	0.0022	ND
Ethylbenzene	0.883	mg/kg	0.00075	0.0011	ND
Isopropylbenzene	0.883	mg/kg	0.00091	0.0011	ND
m&p-Xylenes	0.883	mg/kg	0.0013	0.0013	ND
Methyl Acetate	0.883	mg/kg	0.0010	0.0022	ND
Methylcyclohexane	0.883	mg/kg	0.00098	0.0022	ND
Methylene chloride	0.883	mg/kg	0.00082	0.0022	0.0057
Methyl-t-butyl ether	0.883	mg/kg	0.00059	0.0011	ND
o-Xylene	0.883	mg/kg	0.00077	0.0011	ND
Styrene	0.883	mg/kg	0.00060	0.0022	ND
Tetrachloroethene	0.883	mg/kg	0.0011	0.0022	0.024
Toluene	0.883	mg/kg	0.00072	0.0011	ND
trans-1,2-Dichloroethene	0.883	mg/kg	0.0013	0.0022	ND
trans-1,3-Dichloropropene	0.883	mg/kg	0.00051	0.0022	ND
Trichloroethene	0.883	mg/kg	0.00089	0.0022	0.0072
Trichlorofluoromethane	0.883	mg/kg	0.0013	0.0022	ND
Vinyl chloride	0.883	mg/kg	0.0013	0.0022	ND
Xylenes (Total)	0.883	mg/kg	0.00077	0.0011	ND

Sample ID: HSI-SS-04 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-007

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.093	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.012	0.037	ND
1,4-Dioxane	1	mg/kg	0.019	0.0093	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.029	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0093	ND
2,4-Dimethylphenol	1	mg/kg	0.018	0.0093	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.019	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.016	0.037	ND
2-Chlorophenol	1	mg/kg	0.012	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.011	0.037	ND
2-Methylphenol	1	mg/kg	0.011	0.0093	ND
2-Nitroaniline	1	mg/kg	0.017	0.037	ND
2-Nitrophenol	1	mg/kg	0.017	0.037	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0093	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.030	0.037	ND
3-Nitroaniline	1	mg/kg	0.014	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0089	0.037	ND
4-Chloroaniline	1	mg/kg	0.016	0.0093	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.037	ND
4-Nitroaniline	1	mg/kg	0.014	0.037	ND
4-Nitrophenol	1	mg/kg	0.028	0.037	ND
Acenaphthene	1	mg/kg	0.011	0.037	ND
Acenaphthylene	1	mg/kg	0.011	0.037	ND
Acetophenone	1	mg/kg	0.013	0.037	ND
Anthracene	1	mg/kg	0.010	0.037	ND
Atrazine	1	mg/kg	0.015	0.037	ND
Benzaldehyde	1	mg/kg	0.40	0.037	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.037	ND
Benzo[a]pyrene	1	mg/kg	0.013	0.037	ND
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b>mg/kg</b>	<b>0.013</b>	<b>0.037</b>	<b>0.018J</b>
Benzo[g,h,i]perylene	1	mg/kg	0.00026	0.037	ND
Benzo[k]fluoranthene	1	mg/kg	0.014	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.010	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0090	0.0093	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.037	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.033</b>	<b>0.037</b>	<b>0.15</b>
Butylbenzylphthalate	1	mg/kg	0.028	0.037	ND
Caprolactam	1	mg/kg	0.030	0.037	ND
Carbazole	1	mg/kg	0.012	0.037	ND
Chrysene	1	mg/kg	0.013	0.037	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.014	0.037	ND
Dibenzofuran	1	mg/kg	0.0094	0.0093	ND
Diethylphthalate	1	mg/kg	0.024	0.037	ND
Dimethylphthalate	1	mg/kg	0.010	0.037	ND
Di-n-butylphthalate	1	mg/kg	0.042	0.0093	ND
Di-n-octylphthalate	1	mg/kg	0.025	0.037	ND
Fluoranthene	1	mg/kg	0.014	0.037	ND
Fluorene	1	mg/kg	0.010	0.037	ND
Hexachlorobenzene	1	mg/kg	0.015	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.017	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.037	ND
Hexachloroethane	1	mg/kg	0.016	0.037	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-04 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-007

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.037	ND
Isophorone	1	mg/kg	0.012	0.037	ND
Naphthalene	1	mg/kg	0.011	0.0093	ND
Nitrobenzene	1	mg/kg	0.0015	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0093	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.037	ND
Pentachlorophenol	1	mg/kg	0.18	0.19	ND
Phenanthrene	1	mg/kg	0.012	0.037	ND
Phenol	1	mg/kg	0.010	0.037	ND
Pyrene	1	mg/kg	0.013	0.037	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	19	220	6700
Barium	1	mg/kg	0.75	11	22
Calcium	1	mg/kg	110	1100	210J
Chromium	1	mg/kg	0.74	5.6	24B
Cobalt	1	mg/kg	0.79	2.8	1.5J
Copper	1	mg/kg	0.68	5.6	7.3B
Iron	1	mg/kg	15	220	11000B
Lead	1	mg/kg	0.68	5.6	7.1
Magnesium	1	mg/kg	22	560	680
Manganese	1	mg/kg	0.71	11	31
Nickel	1	mg/kg	1.2	5.6	4.2J
Potassium	1	mg/kg	110	560	220J
Sodium	1	mg/kg	140	280	ND
Zinc	1	mg/kg	1.7	11	18B

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.025	0.89	0.031J
Arsenic	1	mg/kg	0.019	0.22	7.1B
Beryllium	1	mg/kg	0.017	0.22	0.20J
Cadmium	1	mg/kg	0.016	0.44	0.15J
Selenium	1	mg/kg	0.071	2.2	0.88JB
Silver	1	mg/kg	0.029	0.22	0.037JB
Thallium	1	mg/kg	0.020	0.44	0.039J
Vanadium	1	mg/kg	0.012	0.22	22B

Sample ID: HSI-SS-04 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-008

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.824	mg/kg	0.00083	0.0018	ND
1,1,1,2-Tetrachloroethane	0.824	mg/kg	0.00041	0.0018	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.824	mg/kg	0.0013	0.0018	ND
1,1,2-Trichloroethane	0.824	mg/kg	0.00042	0.0018	ND
1,1-Dichloroethane	0.824	mg/kg	0.00079	0.0018	ND
1,1-Dichloroethene	0.824	mg/kg	0.0010	0.0018	ND
1,2,3-Trichlorobenzene	0.824	mg/kg	0.00050	0.0018	ND
1,2,4-Trichlorobenzene	0.824	mg/kg	0.00057	0.0018	ND
1,2-Dibromo-3-chloropropane	0.824	mg/kg	0.00050	0.0018	ND
1,2-Dibromoethane	0.824	mg/kg	0.00044	0.00091	ND
1,2-Dichlorobenzene	0.824	mg/kg	0.00046	0.0018	ND
1,2-Dichloroethane	0.824	mg/kg	0.00037	0.0018	ND
1,2-Dichloropropane	0.824	mg/kg	0.00074	0.0018	ND
1,3-Dichlorobenzene	0.824	mg/kg	0.00050	0.0018	ND
1,4-Dichlorobenzene	0.824	mg/kg	0.00048	0.0018	ND
1,4-Dioxane	0.824	mg/kg	0.044	0.091	ND
2-Butanone	0.824	mg/kg	0.0011	0.0018	ND
2-Hexanone	0.824	mg/kg	0.00077	0.0018	ND
4-Methyl-2-pentanone	0.824	mg/kg	0.00053	0.0018	ND
Acetone	0.824	mg/kg	0.0061	0.0091	0.011
Benzene	0.824	mg/kg	0.00066	0.00091	ND
Bromochloromethane	0.824	mg/kg	0.00063	0.0018	ND
Bromodichloromethane	0.824	mg/kg	0.00043	0.0018	ND
Bromoform	0.824	mg/kg	0.00030	0.0018	ND
Bromomethane	0.824	mg/kg	0.0014	0.0018	ND
Carbon disulfide	0.824	mg/kg	0.0031	0.0031	ND
Carbon tetrachloride	0.824	mg/kg	0.00088	0.0018	ND
Chlorobenzene	0.824	mg/kg	0.00056	0.0018	ND
Chloroethane	0.824	mg/kg	0.0018	0.0018	ND
Chloroform	0.824	mg/kg	0.0012	0.0018	ND
Chloromethane	0.824	mg/kg	0.0011	0.0018	ND
cis-1,2-Dichloroethene	0.824	mg/kg	0.00073	0.0018	ND
cis-1,3-Dichloropropene	0.824	mg/kg	0.00048	0.0018	ND
Cyclohexane	0.824	mg/kg	0.0011	0.0018	ND
Dibromochloromethane	0.824	mg/kg	0.00039	0.0018	ND
Dichlorodifluoromethane	0.824	mg/kg	0.0013	0.0018	ND
Ethylbenzene	0.824	mg/kg	0.00062	0.00091	ND
Isopropylbenzene	0.824	mg/kg	0.00075	0.00091	ND
m&p-Xylenes	0.824	mg/kg	0.0011	0.0011	ND
Methyl Acetate	0.824	mg/kg	0.00087	0.0018	ND
Methylcyclohexane	0.824	mg/kg	0.00081	0.0018	ND
Methylene chloride	0.824	mg/kg	0.00068	0.0018	0.0049
Methyl-t-butyl ether	0.824	mg/kg	0.00049	0.00091	ND
o-Xylene	0.824	mg/kg	0.00064	0.00091	ND
Styrene	0.824	mg/kg	0.00050	0.0018	ND
Tetrachloroethene	0.824	mg/kg	0.00089	0.0018	ND
Toluene	0.824	mg/kg	0.00060	0.00091	ND
trans-1,2-Dichloroethene	0.824	mg/kg	0.0011	0.0018	ND
trans-1,3-Dichloropropene	0.824	mg/kg	0.00043	0.0018	ND
Trichloroethene	0.824	mg/kg	0.00074	0.0018	ND
Trichlorofluoromethane	0.824	mg/kg	0.0011	0.0018	ND
Vinyl chloride	0.824	mg/kg	0.0011	0.0018	ND
Xylenes (Total)	0.824	mg/kg	0.00064	0.00091	ND

Sample ID: HSI-SS-05 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-009

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		87

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.096	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.038	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.013	0.038	ND
1,4-Dioxane	1	mg/kg	0.019	0.0096	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.038	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.038	ND
2,4,6-Trichlorophenol	1	mg/kg	0.030	0.038	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0096	ND
2,4-Dimethylphenol	1	mg/kg	0.019	0.0096	ND
2,4-Dinitrophenol	1	mg/kg	0.17	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.038	ND
2,6-Dinitrotoluene	1	mg/kg	0.020	0.038	ND
2-Chloronaphthalene	1	mg/kg	0.017	0.038	ND
2-Chlorophenol	1	mg/kg	0.013	0.038	ND
2-Methylnaphthalene	1	mg/kg	0.012	0.038	ND
2-Methylphenol	1	mg/kg	0.011	0.0096	ND
2-Nitroaniline	1	mg/kg	0.018	0.038	ND
2-Nitrophenol	1	mg/kg	0.017	0.038	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0096	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.031	0.038	ND
3-Nitroaniline	1	mg/kg	0.015	0.038	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.011	0.038	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0092	0.038	ND
4-Chloroaniline	1	mg/kg	0.017	0.0096	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.012	0.038	ND
4-Nitroaniline	1	mg/kg	0.015	0.038	ND
4-Nitrophenol	1	mg/kg	0.029	0.038	ND
Acenaphthene	1	mg/kg	0.011	0.038	ND
Acenaphthylene	1	mg/kg	0.011	0.038	ND
Acetophenone	1	mg/kg	0.014	0.038	ND
Anthracene	1	mg/kg	0.011	0.038	ND
Atrazine	1	mg/kg	0.015	0.038	ND
Benzaldehyde	1	mg/kg	0.42	0.038	ND
Benzo[a]anthracene	1	mg/kg	0.013	0.038	ND
Benzo[a]pyrene	1	mg/kg	0.013	0.038	ND
Benzo[b]fluoranthene	1	mg/kg	0.014	0.038	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00026	0.038	ND
Benzo[k]fluoranthene	1	mg/kg	0.014	0.038	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.011	0.038	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0093	0.0096	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.038	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.034	0.038	0.28
Butylbenzylphthalate	1	mg/kg	0.029	0.038	0.033J
Caprolactam	1	mg/kg	0.031	0.038	ND
Carbazole	1	mg/kg	0.012	0.038	ND
Chrysene	1	mg/kg	0.013	0.038	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.014	0.038	ND
Dibenzofuran	1	mg/kg	0.0097	0.0096	ND
Diethylphthalate	1	mg/kg	0.025	0.038	ND
Dimethylphthalate	1	mg/kg	0.011	0.038	ND
Di-n-butylphthalate	1	mg/kg	0.044	0.0096	0.067
Di-n-octylphthalate	1	mg/kg	0.025	0.038	ND
Fluoranthene	1	mg/kg	0.015	0.038	ND
Fluorene	1	mg/kg	0.010	0.038	ND
Hexachlorobenzene	1	mg/kg	0.016	0.038	ND
Hexachlorobutadiene	1	mg/kg	0.017	0.038	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.038	ND
Hexachloroethane	1	mg/kg	0.017	0.038	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-05 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-009

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.038	ND
Isophorone	1	mg/kg	0.012	0.038	ND
Naphthalene	1	mg/kg	0.011	0.0096	ND
Nitrobenzene	1	mg/kg	0.0016	0.038	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0096	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.038	ND
Pentachlorophenol	1	mg/kg	0.18	0.19	ND
Phenanthrene	1	mg/kg	0.012	0.038	ND
Phenol	1	mg/kg	0.011	0.038	ND
Pyrene	1	mg/kg	0.013	0.038	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	19	230	3300
Barium	1	mg/kg	0.78	11	15
Calcium	1	mg/kg	120	1100	190J
Chromium	1	mg/kg	0.77	5.7	20B
Cobalt	1	mg/kg	0.82	2.9	0.94J
Copper	1	mg/kg	0.71	5.7	13B
Iron	1	mg/kg	15	230	7000B
Lead	1	mg/kg	0.71	5.7	22
Magnesium	1	mg/kg	22	570	340J
Manganese	1	mg/kg	0.74	11	28
Nickel	1	mg/kg	1.3	5.7	4.7J
Potassium	1	mg/kg	110	570	140J
Sodium	1	mg/kg	140	290	ND
Zinc	1	mg/kg	1.7	11	24B

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.026	0.92	0.058J
Arsenic	1	mg/kg	0.020	0.23	3.0B
Beryllium	3	mg/kg	0.054	0.69	0.20J
Cadmium	1	mg/kg	0.016	0.46	0.50
Selenium	1	mg/kg	0.073	2.3	4.0B
Silver	1	mg/kg	0.030	0.23	0.061JB
Thallium	3	mg/kg	0.061	1.4	ND
Vanadium	1	mg/kg	0.012	0.23	21B



Sample ID: HSI-SS-05 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-010

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.723	mg/kg	0.00074	0.0016	ND
1,1,2,2-Tetrachloroethane	0.723	mg/kg	0.00036	0.0016	0.011
1,1,2-Trichloro-1,2,2-trifluoroethane	0.723	mg/kg	0.0011	0.0016	ND
1,1,2-Trichloroethane	0.723	mg/kg	0.00037	0.0016	ND
1,1-Dichloroethane	0.723	mg/kg	0.00070	0.0016	ND
1,1-Dichloroethene	0.723	mg/kg	0.00092	0.0016	ND
1,2,3-Trichlorobenzene	0.723	mg/kg	0.00044	0.0016	ND
1,2,4-Trichlorobenzene	0.723	mg/kg	0.00051	0.0016	ND
1,2-Dibromo-3-chloropropane	0.723	mg/kg	0.00044	0.0016	ND
1,2-Dibromoethane	0.723	mg/kg	0.00039	0.00080	ND
1,2-Dichlorobenzene	0.723	mg/kg	0.00041	0.0016	ND
1,2-Dichloroethane	0.723	mg/kg	0.00033	0.0016	ND
1,2-Dichloropropane	0.723	mg/kg	0.00066	0.0016	ND
1,3-Dichlorobenzene	0.723	mg/kg	0.00044	0.0016	ND
1,4-Dichlorobenzene	0.723	mg/kg	0.00043	0.0016	ND
1,4-Dioxane	0.723	mg/kg	0.039	0.080	ND
2-Butanone	0.723	mg/kg	0.00096	0.0016	ND
2-Hexanone	0.723	mg/kg	0.00068	0.0016	ND
4-Methyl-2-pentanone	0.723	mg/kg	0.00047	0.0016	ND
Acetone	0.723	mg/kg	0.0054	0.0080	0.0069J
Benzene	0.723	mg/kg	0.00059	0.00080	ND
Bromochloromethane	0.723	mg/kg	0.00056	0.0016	ND
Bromodichloromethane	0.723	mg/kg	0.00038	0.0016	ND
Bromoform	0.723	mg/kg	0.00026	0.0016	ND
Bromomethane	0.723	mg/kg	0.0013	0.0016	ND
Carbon disulfide	0.723	mg/kg	0.0027	0.0027	ND
Carbon tetrachloride	0.723	mg/kg	0.00078	0.0016	ND
Chlorobenzene	0.723	mg/kg	0.00050	0.0016	0.00050J
Chloroethane	0.723	mg/kg	0.0016	0.0016	ND
Chloroform	0.723	mg/kg	0.0011	0.0016	ND
Chloromethane	0.723	mg/kg	0.00099	0.0016	ND
cis-1,2-Dichloroethene	0.723	mg/kg	0.00065	0.0016	ND
cis-1,3-Dichloropropene	0.723	mg/kg	0.00043	0.0016	ND
Cyclohexane	0.723	mg/kg	0.00096	0.0016	ND
Dibromochloromethane	0.723	mg/kg	0.00035	0.0016	ND
Dichlorodifluoromethane	0.723	mg/kg	0.0011	0.0016	ND
Ethylbenzene	0.723	mg/kg	0.00055	0.00080	ND
Isopropylbenzene	0.723	mg/kg	0.00067	0.00080	ND
m&p-Xylenes	0.723	mg/kg	0.00096	0.00096	ND
Methyl Acetate	0.723	mg/kg	0.00077	0.0016	ND
Methylcyclohexane	0.723	mg/kg	0.00072	0.0016	ND
Methylene chloride	0.723	mg/kg	0.00060	0.0016	0.0017
Methyl-t-butyl ether	0.723	mg/kg	0.00043	0.00080	ND
o-Xylene	0.723	mg/kg	0.00057	0.00080	ND
Styrene	0.723	mg/kg	0.00044	0.0016	ND
Tetrachloroethene	0.723	mg/kg	0.00079	0.0016	ND
Toluene	0.723	mg/kg	0.00053	0.00080	0.00073J
trans-1,2-Dichloroethene	0.723	mg/kg	0.00096	0.0016	ND
trans-1,3-Dichloropropene	0.723	mg/kg	0.00038	0.0016	ND
Trichloroethene	0.723	mg/kg	0.00066	0.0016	ND
Trichlorofluoromethane	0.723	mg/kg	0.00095	0.0016	ND
Vinyl chloride	0.723	mg/kg	0.00098	0.0016	ND
Xylenes (Total)	0.723	mg/kg	0.00057	0.00080	ND

Sample ID: HSI-SS-06 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-011

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		92

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.091	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.010	0.036	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.012	0.036	ND
1,4-Dioxane	1	mg/kg	0.018	0.0091	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.036	ND
2,4,5-Trichlorophenol	1	mg/kg	0.010	0.036	ND
2,4,6-Trichlorophenol	1	mg/kg	0.028	0.036	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0091	ND
2,4-Dimethylphenol	1	mg/kg	0.018	0.0091	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.011	0.036	ND
2,6-Dinitrotoluene	1	mg/kg	0.018	0.036	ND
2-Chloronaphthalene	1	mg/kg	0.016	0.036	ND
2-Chlorophenol	1	mg/kg	0.012	0.036	ND
2-Methylnaphthalene	1	mg/kg	0.011	0.036	ND
2-Methylphenol	1	mg/kg	0.010	0.0091	ND
2-Nitroaniline	1	mg/kg	0.017	0.036	ND
2-Nitrophenol	1	mg/kg	0.016	0.036	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0091	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.029	0.036	ND
3-Nitroaniline	1	mg/kg	0.014	0.036	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.036	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0087	0.036	ND
4-Chloroaniline	1	mg/kg	0.016	0.0091	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.036	ND
4-Nitroaniline	1	mg/kg	0.014	0.036	ND
4-Nitrophenol	1	mg/kg	0.028	0.036	ND
Acenaphthene	1	mg/kg	0.010	0.036	ND
Acenaphthylene	1	mg/kg	0.011	0.036	ND
Acetophenone	1	mg/kg	0.013	0.036	ND
Anthracene	1	mg/kg	0.010	0.036	ND
Alrazine	1	mg/kg	0.015	0.036	ND
Benzaldehyde	1	mg/kg	0.39	0.036	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.036	ND
Benzo[a]pyrene	1	mg/kg	0.012	0.036	ND
Benzo[b]fluoranthene	1	mg/kg	0.013	0.036	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00025	0.036	ND
Benzo[k]fluoranthene	1	mg/kg	0.013	0.036	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.010	0.036	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0088	0.0091	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.014	0.036	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.032</b>	0.036	<b>0.34</b>
Butylbenzylphthalate	1	mg/kg	0.028	0.036	ND
Caprolactam	1	mg/kg	0.029	0.036	ND
Carbazole	1	mg/kg	0.011	0.036	ND
Chrysene	1	mg/kg	0.012	0.036	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.013	0.036	ND
Dibenzofuran	1	mg/kg	0.0092	0.0091	ND
Diethylphthalate	1	mg/kg	0.023	0.036	ND
Dimethylphthalate	1	mg/kg	0.010	0.036	ND
<b>Di-n-butylphthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.042</b>	0.0091	<b>0.077</b>
Di-n-octylphthalate	1	mg/kg	0.024	0.036	ND
Fluoranthene	1	mg/kg	0.014	0.036	ND
Fluorene	1	mg/kg	0.0099	0.036	ND
Hexachlorobenzene	1	mg/kg	0.015	0.036	ND
Hexachlorobutadiene	1	mg/kg	0.016	0.036	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.036	ND
Hexachloroethane	1	mg/kg	0.016	0.036	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-06 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-011

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.016	0.036	ND
Isophorone	1	mg/kg	0.012	0.036	ND
Naphthalene	1	mg/kg	0.010	0.0091	ND
Nitrobenzene	1	mg/kg	0.0015	0.036	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0091	ND
N-Nitrosodiphenylamine	1	mg/kg	0.12	0.036	ND
Pentachlorophenol	1	mg/kg	0.17	0.18	ND
Phenanthrene	1	mg/kg	0.012	0.036	ND
Phenol	1	mg/kg	0.010	0.036	ND
Pyrene	1	mg/kg	0.012	0.036	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	18	220	5000
Barium	1	mg/kg	0.73	11	24
Calcium	1	mg/kg	110	1100	290J
Chromium	1	mg/kg	0.73	5.4	21B
Cobalt	1	mg/kg	0.77	2.7	1.5J
Copper	1	mg/kg	0.67	5.4	8.9B
Iron	1	mg/kg	14	220	9900B
Lead	1	mg/kg	0.67	5.4	15
Magnesium	1	mg/kg	21	540	510J
Manganese	1	mg/kg	0.70	11	37
Nickel	1	mg/kg	1.2	5.4	3.8J
Potassium	1	mg/kg	110	540	150J
Sodium	1	mg/kg	140	270	ND
Zinc	1	mg/kg	1.6	11	25B

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.024	0.87	0.053J
Arsenic	1	mg/kg	0.019	0.22	3.2B
Beryllium	1	mg/kg	0.017	0.22	0.18J
Cadmium	1	mg/kg	0.015	0.43	0.18J
Selenium	1	mg/kg	0.069	2.2	1.1JB
Silver	1	mg/kg	0.028	0.22	0.047JB
Thallium	1	mg/kg	0.019	0.43	0.035J
Vanadium	1	mg/kg	0.012	0.22	17B

Sample ID: HSI-SS-06 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-012

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.919	mg/kg	0.00093	0.0020	ND
1,1,2,2-Tetrachloroethane	0.919	mg/kg	0.00045	0.0020	0.0039
1,1,2-Trichloro-1,2,2-trifluoroethane	0.919	mg/kg	0.0014	0.0020	ND
1,1,2-Trichloroethane	0.919	mg/kg	0.00046	0.0020	ND
1,1-Dichloroethane	0.919	mg/kg	0.00088	0.0020	ND
1,1-Dichloroethene	0.919	mg/kg	0.0012	0.0020	ND
1,2,3-Trichlorobenzene	0.919	mg/kg	0.00056	0.0020	ND
1,2,4-Trichlorobenzene	0.919	mg/kg	0.00064	0.0020	ND
1,2-Dibromo-3-chloropropane	0.919	mg/kg	0.00056	0.0020	ND
1,2-Dibromoethane	0.919	mg/kg	0.00049	0.0010	ND
1,2-Dichlorobenzene	0.919	mg/kg	0.00052	0.0020	ND
1,2-Dichloroethane	0.919	mg/kg	0.00041	0.0020	ND
1,2-Dichloropropane	0.919	mg/kg	0.00083	0.0020	ND
1,3-Dichlorobenzene	0.919	mg/kg	0.00056	0.0020	ND
1,4-Dichlorobenzene	0.919	mg/kg	0.00054	0.0020	ND
1,4-Dioxane	0.919	mg/kg	0.049	0.10	ND
2-Butanone	0.919	mg/kg	0.0012	0.0020	0.0035
2-Hexanone	0.919	mg/kg	0.00086	0.0020	ND
4-Methyl-2-pentanone	0.919	mg/kg	0.00059	0.0020	ND
Acetone	0.919	mg/kg	0.0068	0.010	0.064
Benzene	0.919	mg/kg	0.00074	0.0010	ND
Bromochloromethane	0.919	mg/kg	0.00071	0.0020	ND
Bromodichloromethane	0.919	mg/kg	0.00047	0.0020	ND
Bromoform	0.919	mg/kg	0.00033	0.0020	ND
Bromomethane	0.919	mg/kg	0.0016	0.0020	ND
Carbon disulfide	0.919	mg/kg	0.0034	0.0034	ND
Carbon tetrachloride	0.919	mg/kg	0.00098	0.0020	ND
Chlorobenzene	0.919	mg/kg	0.00063	0.0020	ND
Chloroethane	0.919	mg/kg	0.0020	0.0020	ND
Chloroform	0.919	mg/kg	0.0014	0.0020	ND
Chloromethane	0.919	mg/kg	0.0012	0.0020	ND
cis-1,2-Dichloroethene	0.919	mg/kg	0.00082	0.0020	ND
cis-1,3-Dichloropropene	0.919	mg/kg	0.00054	0.0020	ND
Cyclohexane	0.919	mg/kg	0.0012	0.0020	ND
Dibromochloromethane	0.919	mg/kg	0.00043	0.0020	ND
Dichlorodifluoromethane	0.919	mg/kg	0.0014	0.0020	ND
Ethylbenzene	0.919	mg/kg	0.00070	0.0010	ND
Isopropylbenzene	0.919	mg/kg	0.00084	0.0010	ND
m&p-Xylenes	0.919	mg/kg	0.0012	0.0012	ND
Methyl Acetate	0.919	mg/kg	0.00097	0.0020	ND
Methylcyclohexane	0.919	mg/kg	0.00091	0.0020	0.0024
Methylene chloride	0.919	mg/kg	0.00076	0.0020	0.0035
Methyl-t-butyl ether	0.919	mg/kg	0.00055	0.0010	ND
o-Xylene	0.919	mg/kg	0.00072	0.0010	ND
Styrene	0.919	mg/kg	0.00056	0.0020	0.36
Tetrachloroethene	0.919	mg/kg	0.00099	0.0020	0.0035
Toluene	0.919	mg/kg	0.00067	0.0010	ND
trans-1,2-Dichloroethene	0.919	mg/kg	0.0012	0.0020	ND
trans-1,3-Dichloropropene	0.919	mg/kg	0.00047	0.0020	ND
Trichloroethene	0.919	mg/kg	0.00083	0.0020	ND
Trichlorofluoromethane	0.919	mg/kg	0.0012	0.0020	ND
Vinyl chloride	0.919	mg/kg	0.0012	0.0020	ND
Xylenes (Total)	0.919	mg/kg	0.00072	0.0010	ND

Sample ID: HSI-SS-07 (0-0.5')

Lab#: AD19479-013

Matrix: Soil

Collection Date: 9/25/2020

Receipt Date: 9/28/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.10	0.038J

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.012	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.014	0.041	ND
1,4-Dioxane	1	mg/kg	0.020	0.010	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.015	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.012	0.041	ND
2,4,6-Trichlorophenol	1	mg/kg	0.032	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.015	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.020	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.18	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.013	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.021	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.018	0.041	ND
2-Chlorophenol	1	mg/kg	0.013	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.013	0.041	ND
2-Methylphenol	1	mg/kg	0.012	0.010	ND
2-Nitroaniline	1	mg/kg	0.019	0.041	ND
2-Nitrophenol	1	mg/kg	0.018	0.041	ND
3,4-Methylphenol	1	mg/kg	0.012	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.033	0.041	ND
3-Nitroaniline	1	mg/kg	0.016	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.14	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.011	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0098	0.041	ND
4-Chloroaniline	1	mg/kg	0.018	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.012	0.041	ND
4-Nitroaniline	1	mg/kg	0.016	0.041	ND
4-Nitrophenol	1	mg/kg	0.031	0.041	ND
Acenaphthene	1	mg/kg	0.012	0.041	ND
Acenaphthylene	1	mg/kg	0.012	0.041	ND
Acetophenone	1	mg/kg	0.015	0.041	ND
Anthracene	1	mg/kg	0.011	0.041	ND
Atrazine	1	mg/kg	0.016	0.041	ND
Benzaldehyde	1	mg/kg	0.44	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.014	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.014	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.015	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00028	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.015	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.012	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0099	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.016	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.036	0.041	0.42
Butylbenzylphthalate	1	mg/kg	0.031	0.041	ND
Caprolactam	1	mg/kg	0.033	0.041	ND
Carbazole	1	mg/kg	0.013	0.041	ND
Chrysene	1	mg/kg	0.014	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.015	0.041	ND
Dibenzofuran	1	mg/kg	0.010	0.010	ND
Diethylphthalate	1	mg/kg	0.026	0.041	ND
Dimethylphthalate	1	mg/kg	0.011	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.047	0.010	0.061
Di-n-octylphthalate	1	mg/kg	0.027	0.041	ND
Fluoranthene	1	mg/kg	0.016	0.041	ND
Fluorene	1	mg/kg	0.011	0.041	ND
Hexachlorobenzene	1	mg/kg	0.017	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.018	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.13	0.041	ND
Hexachloroethane	1	mg/kg	0.018	0.041	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-07 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-013

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.018	0.041	ND
Isophorone	1	mg/kg	0.013	0.041	ND
Naphthalene	1	mg/kg	0.012	0.010	ND
Nitrobenzene	1	mg/kg	0.0016	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.015	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.14	0.041	ND
Pentachlorophenol	1	mg/kg	0.20	0.20	ND
Phenanthrene	1	mg/kg	0.013	0.041	ND
Phenol	1	mg/kg	0.011	0.041	ND
Pyrene	1	mg/kg	0.014	0.041	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	20	240	3200
Barium	1	mg/kg	0.82	12	21
Calcium	1	mg/kg	120	1200	410J
Chromium	1	mg/kg	0.82	6.1	18B
Cobalt	1	mg/kg	0.87	3.0	1.6J
Copper	1	mg/kg	0.75	6.1	12B
Iron	1	mg/kg	16	240	14000B
Lead	1	mg/kg	0.75	6.1	22
Magnesium	1	mg/kg	24	610	300J
Manganese	1	mg/kg	0.78	12	68
Nickel	1	mg/kg	1.3	6.1	4.6J
Potassium	1	mg/kg	120	610	150J
Sodium	1	mg/kg	150	300	ND
Zinc	1	mg/kg	1.8	12	42B

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.027	0.98	0.084J
Arsenic	1	mg/kg	0.021	0.24	2.2B
Beryllium	1	mg/kg	0.019	0.24	0.14J
Cadmium	1	mg/kg	0.017	0.49	0.48J
Selenium	1	mg/kg	0.077	2.4	1.4JB
Silver	1	mg/kg	0.032	0.24	0.084JB
Thallium	1	mg/kg	0.022	0.49	0.022J
Vanadium	1	mg/kg	0.013	0.24	16B

Sample ID: HSI-SS-07 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-014

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		71

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.816	mg/kg	0.0011	0.0023	ND
1,1,2,2-Tetrachloroethane	0.816	mg/kg	0.00052	0.0023	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.816	mg/kg	0.0016	0.0023	ND
1,1,2-Trichloroethane	0.816	mg/kg	0.00053	0.0023	ND
1,1-Dichloroethane	0.816	mg/kg	0.0010	0.0023	ND
1,1-Dichloroethene	0.816	mg/kg	0.0013	0.0023	ND
1,2,3-Trichlorobenzene	0.816	mg/kg	0.00063	0.0023	ND
1,2,4-Trichlorobenzene	0.816	mg/kg	0.00072	0.0023	ND
1,2-Dibromo-3-chloropropane	0.816	mg/kg	0.00063	0.0023	ND
1,2-Dibromoethane	0.816	mg/kg	0.00056	0.0011	ND
1,2-Dichlorobenzene	0.816	mg/kg	0.00059	0.0023	ND
1,2-Dichloroethane	0.816	mg/kg	0.00047	0.0023	ND
1,2-Dichloropropane	0.816	mg/kg	0.00094	0.0023	ND
1,3-Dichlorobenzene	0.816	mg/kg	0.00063	0.0023	ND
1,4-Dichlorobenzene	0.816	mg/kg	0.00061	0.0023	ND
1,4-Dioxane	0.816	mg/kg	0.056	0.11	ND
<b>2-Butanone</b>	<b>0.816</b>	<b>mg/kg</b>	<b>0.0014</b>	0.0023	<b>0.14</b>
2-Hexanone	0.816	mg/kg	0.00098	0.0023	ND
4-Methyl-2-pentanone	0.816	mg/kg	0.00067	0.0023	ND
<b>Acetone</b>	<b>0.816</b>	<b>mg/kg</b>	<b>0.0078</b>	0.011	<b>0.74</b>
Benzene	0.816	mg/kg	0.00084	0.0011	ND
Bromochloromethane	0.816	mg/kg	0.00080	0.0023	ND
Bromodichloromethane	0.816	mg/kg	0.00054	0.0023	ND
Bromoform	0.816	mg/kg	0.00038	0.0023	ND
Bromomethane	0.816	mg/kg	0.0018	0.0023	ND
Carbon disulfide	0.816	mg/kg	0.0039	0.0039	ND
Carbon tetrachloride	0.816	mg/kg	0.0011	0.0023	ND
Chlorobenzene	0.816	mg/kg	0.00071	0.0023	ND
Chloroethane	0.816	mg/kg	0.0022	0.0023	ND
Chloroform	0.816	mg/kg	0.0016	0.0023	ND
Chloromethane	0.816	mg/kg	0.0014	0.0023	ND
cis-1,2-Dichloroethene	0.816	mg/kg	0.00093	0.0023	ND
cis-1,3-Dichloropropene	0.816	mg/kg	0.00061	0.0023	ND
Cyclohexane	0.816	mg/kg	0.0014	0.0023	ND
Dibromochloromethane	0.816	mg/kg	0.00049	0.0023	ND
Dichlorodifluoromethane	0.816	mg/kg	0.0016	0.0023	ND
Ethylbenzene	0.816	mg/kg	0.00079	0.0011	ND
Isopropylbenzene	0.816	mg/kg	0.00095	0.0011	ND
m&p-Xylenes	0.816	mg/kg	0.0014	0.0014	ND
Methyl Acetate	0.816	mg/kg	0.0011	0.0023	ND
Methylcyclohexane	0.816	mg/kg	0.0010	0.0023	ND
<b>Methylene chloride</b>	<b>0.816</b>	<b>mg/kg</b>	<b>0.00086</b>	0.0023	<b>0.0022J</b>
Methyl-t-butyl ether	0.816	mg/kg	0.00062	0.0011	ND
o-Xylene	0.816	mg/kg	0.00082	0.0011	ND
Styrene	0.816	mg/kg	0.00063	0.0023	ND
Tetrachloroethene	0.816	mg/kg	0.0011	0.0023	ND
<b>Toluene</b>	<b>0.816</b>	<b>mg/kg</b>	<b>0.00076</b>	0.0011	<b>0.070</b>
trans-1,2-Dichloroethene	0.816	mg/kg	0.0014	0.0023	ND
trans-1,3-Dichloropropene	0.816	mg/kg	0.00054	0.0023	ND
Trichloroethene	0.816	mg/kg	0.00094	0.0023	ND
<b>Trichlorofluoromethane</b>	<b>0.816</b>	<b>mg/kg</b>	<b>0.0014</b>	0.0023	<b>0.0092</b>
Vinyl chloride	0.816	mg/kg	0.0014	0.0023	ND
Xylenes (Total)	0.816	mg/kg	0.00082	0.0011	ND

Sample ID: HSI-SS-08 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-015

Receipt Date: 9/28/2020

Matrix: Soil

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		94

## Mercury (Soil/Waste) 7471B

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.013	0.089	ND

## Semivolatile Organics (no search) 8270

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	3	mg/kg	0.031	0.11	ND
1,2,4,5-Tetrachlorobenzene	3	mg/kg	0.036	0.11	ND
1,4-Dioxane	3	mg/kg	0.054	0.027	ND
2,3,4,6-Tetrachlorophenol	3	mg/kg	0.040	0.11	ND
2,4,5-Trichlorophenol	3	mg/kg	0.030	0.11	ND
2,4,6-Trichlorophenol	3	mg/kg	0.083	0.11	ND
2,4-Dichlorophenol	3	mg/kg	0.040	0.027	ND
2,4-Dimethylphenol	3	mg/kg	0.052	0.027	ND
2,4-Dinitrophenol	3	mg/kg	0.46	0.53	ND
2,4-Dinitrotoluene	3	mg/kg	0.033	0.11	ND
2,6-Dinitrotoluene	3	mg/kg	0.054	0.11	ND
2-Chloronaphthalene	3	mg/kg	0.047	0.11	ND
2-Chlorophenol	3	mg/kg	0.035	0.11	ND
2-Methylnaphthalene	3	mg/kg	0.033	0.11	ND
2-Methylphenol	3	mg/kg	0.031	0.027	ND
2-Nitroaniline	3	mg/kg	0.050	0.11	ND
2-Nitrophenol	3	mg/kg	0.048	0.11	ND
3&4-Methylphenol	3	mg/kg	0.031	0.027	ND
3,3'-Dichlorobenzidine	3	mg/kg	0.086	0.11	ND
3-Nitroaniline	3	mg/kg	0.041	0.11	ND
4,6-Dinitro-2-methylphenol	3	mg/kg	0.37	0.53	ND
4-Bromophenyl-phenylether	3	mg/kg	0.030	0.11	ND
4-Chloro-3-methylphenol	3	mg/kg	0.026	0.11	ND
4-Chloroaniline	3	mg/kg	0.047	0.027	ND
4-Chlorophenyl-phenylether	3	mg/kg	0.033	0.11	ND
4-Nitroaniline	3	mg/kg	0.041	0.11	ND
4-Nitrophenol	3	mg/kg	0.081	0.11	ND
Acenaphthene	3	mg/kg	0.030	0.11	ND
Acenaphthylene	3	mg/kg	0.032	0.11	ND
Acetophenone	3	mg/kg	0.038	0.11	ND
Anthracene	3	mg/kg	0.029	0.11	ND
Atrazine	3	mg/kg	0.043	0.11	ND
Benzaldehyde	3	mg/kg	1.2	0.11	ND
Benzo[a]anthracene	3	mg/kg	0.035	0.11	ND
Benzo[a]pyrene	3	mg/kg	0.036	0.11	ND
Benzo[b]fluoranthene	3	mg/kg	0.038	0.11	ND
Benzo[g,h,i]perylene	3	mg/kg	0.00073	0.11	0.033J
Benzo[k]fluoranthene	3	mg/kg	0.039	0.11	ND
bis(2-Chloroethoxy)methane	3	mg/kg	0.030	0.11	ND
bis(2-Chloroethyl)ether	3	mg/kg	0.026	0.027	ND
bis(2-Chloroisopropyl)ether	3	mg/kg	0.043	0.11	ND
bis(2-Ethylhexyl)phthalate	3	mg/kg	0.094	0.11	ND
Butylbenzylphthalate	3	mg/kg	0.082	0.11	ND
Caprolactam	3	mg/kg	0.085	0.11	ND
Carbazole	3	mg/kg	0.033	0.11	ND
Chrysene	3	mg/kg	0.036	0.11	ND
Dibenzo[a,h]anthracene	3	mg/kg	0.039	0.11	ND
Dibenzofuran	3	mg/kg	0.027	0.027	ND
Diethylphthalate	3	mg/kg	0.069	0.11	ND
Dimethylphthalate	3	mg/kg	0.030	0.11	ND
Di-n-butylphthalate	3	mg/kg	0.12	0.027	ND
Di-n-octylphthalate	3	mg/kg	0.070	0.11	ND
Fluoranthene	3	mg/kg	0.041	0.11	ND
Fluorene	3	mg/kg	0.029	0.11	ND
Hexachlorobenzene	3	mg/kg	0.044	0.11	ND
Hexachlorobutadiene	3	mg/kg	0.047	0.11	ND
Hexachlorocyclopentadiene	3	mg/kg	0.35	0.11	ND
Hexachloroethane	3	mg/kg	0.047	0.11	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-08 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-015

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	3	mg/kg	0.048	0.11	ND
Isophorone	3	mg/kg	0.034	0.11	ND
Naphthalene	3	mg/kg	0.031	0.027	ND
Nitrobenzene	3	mg/kg	0.0043	0.11	ND
N-Nitroso-di-n-propylamine	3	mg/kg	0.040	0.027	ND
N-Nitrosodiphenylamine	3	mg/kg	0.36	0.11	ND
Pentachlorophenol	3	mg/kg	0.51	0.53	ND
Phenanthrene	3	mg/kg	0.034	0.11	ND
Phenol	3	mg/kg	0.029	0.11	ND
Pyrene	3	mg/kg	0.036	0.11	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	18	210	3900
Barium	1	mg/kg	0.72	11	29
Calcium	1	mg/kg	110	1100	19000
Chromium	1	mg/kg	0.71	5.3	15B
Cobalt	1	mg/kg	0.76	2.7	3.1
Copper	1	mg/kg	0.66	5.3	11B
Iron	1	mg/kg	14	210	8100B
Lead	1	mg/kg	0.66	5.3	6.6
Magnesium	1	mg/kg	21	530	7900
Manganese	1	mg/kg	0.68	11	150
Nickel	1	mg/kg	1.2	5.3	9.1
Potassium	1	mg/kg	100	530	540
Sodium	1	mg/kg	130	270	ND
Zinc	1	mg/kg	1.6	11	22B

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.024	0.85	ND
Arsenic	1	mg/kg	0.019	0.21	2.2B
Beryllium	1	mg/kg	0.017	0.21	0.14J
Cadmium	1	mg/kg	0.015	0.43	0.15J
Selenium	1	mg/kg	0.068	2.1	0.87JB
Silver	1	mg/kg	0.028	0.21	0.048JB
Thallium	1	mg/kg	0.019	0.43	0.028J
Vanadium	1	mg/kg	0.012	0.21	15B

Sample ID: HSI-SS-08 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-016

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.766	mg/kg	0.00079	0.0017	ND
1,1,2,2-Tetrachloroethane	0.766	mg/kg	0.00039	0.0017	0.0015J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.766	mg/kg	0.0012	0.0017	ND
1,1,2-Trichloroethane	0.766	mg/kg	0.00040	0.0017	0.00066J
1,1-Dichloroethane	0.766	mg/kg	0.00075	0.0017	ND
1,1-Dichloroethene	0.766	mg/kg	0.00099	0.0017	ND
1,2,3-Trichlorobenzene	0.766	mg/kg	0.00047	0.0017	ND
1,2,4-Trichlorobenzene	0.766	mg/kg	0.00054	0.0017	ND
1,2-Dibromo-3-chloropropane	0.766	mg/kg	0.00047	0.0017	ND
1,2-Dibromoethane	0.766	mg/kg	0.00042	0.00086	ND
1,2-Dichlorobenzene	0.766	mg/kg	0.00044	0.0017	ND
1,2-Dichloroethane	0.766	mg/kg	0.00035	0.0017	ND
1,2-Dichloropropane	0.766	mg/kg	0.00071	0.0017	ND
1,3-Dichlorobenzene	0.766	mg/kg	0.00047	0.0017	ND
1,4-Dichlorobenzene	0.766	mg/kg	0.00046	0.0017	ND
1,4-Dioxane	0.766	mg/kg	0.042	0.086	ND
2-Butanone	0.766	mg/kg	0.0010	0.0017	ND
2-Hexanone	0.766	mg/kg	0.00073	0.0017	ND
4-Methyl-2-pentanone	0.766	mg/kg	0.00050	0.0017	ND
Acetone	0.766	mg/kg	0.0058	0.0086	0.0074J
Benzene	0.766	mg/kg	0.00063	0.00086	ND
Bromochloromethane	0.766	mg/kg	0.00060	0.0017	ND
Bromodichloromethane	0.766	mg/kg	0.00040	0.0017	ND
Bromoform	0.766	mg/kg	0.00028	0.0017	ND
Bromomethane	0.766	mg/kg	0.0014	0.0017	ND
Carbon disulfide	0.766	mg/kg	0.0029	0.0029	ND
Carbon tetrachloride	0.766	mg/kg	0.00083	0.0017	ND
Chlorobenzene	0.766	mg/kg	0.00053	0.0017	ND
Chloroethane	0.766	mg/kg	0.0017	0.0017	ND
Chloroform	0.766	mg/kg	0.0012	0.0017	ND
Chloromethane	0.766	mg/kg	0.0011	0.0017	ND
cis-1,2-Dichloroethene	0.766	mg/kg	0.00070	0.0017	ND
cis-1,3-Dichloropropene	0.766	mg/kg	0.00046	0.0017	ND
Cyclohexane	0.766	mg/kg	0.0010	0.0017	ND
Dibromochloromethane	0.766	mg/kg	0.00037	0.0017	ND
Dichlorodifluoromethane	0.766	mg/kg	0.0012	0.0017	ND
Ethylbenzene	0.766	mg/kg	0.00059	0.00086	ND
Isopropylbenzene	0.766	mg/kg	0.00071	0.00086	ND
m&p-Xylenes	0.766	mg/kg	0.0010	0.0010	ND
Methyl Acetate	0.766	mg/kg	0.00083	0.0017	ND
Methylcyclohexane	0.766	mg/kg	0.00077	0.0017	ND
Methylene chloride	0.766	mg/kg	0.00065	0.0017	0.0071
Methyl-t-butyl ether	0.766	mg/kg	0.00046	0.00086	ND
o-Xylene	0.766	mg/kg	0.00061	0.00086	ND
Styrene	0.766	mg/kg	0.00047	0.0017	ND
Tetrachloroethene	0.766	mg/kg	0.00084	0.0017	0.0011J
Toluene	0.766	mg/kg	0.00057	0.00086	ND
trans-1,2-Dichloroethene	0.766	mg/kg	0.0010	0.0017	ND
trans-1,3-Dichloropropene	0.766	mg/kg	0.00040	0.0017	ND
Trichloroethene	0.766	mg/kg	0.00071	0.0017	ND
Trichlorofluoromethane	0.766	mg/kg	0.0010	0.0017	ND
Vinyl chloride	0.766	mg/kg	0.0010	0.0017	ND
Xylenes (Total)	0.766	mg/kg	0.00061	0.00086	ND

Sample ID: HSI-SS-09 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-017

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.090	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.010	0.036	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.012	0.036	ND
1,4-Dioxane	1	mg/kg	0.018	0.0090	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.013	0.036	ND
2,4,5-Trichlorophenol	1	mg/kg	0.010	0.036	ND
2,4,6-Trichlorophenol	1	mg/kg	0.028	0.036	ND
2,4-Dichlorophenol	1	mg/kg	0.013	0.0090	ND
2,4-Dimethylphenol	1	mg/kg	0.017	0.0090	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.011	0.036	ND
2,6-Dinitrotoluene	1	mg/kg	0.018	0.036	ND
2-Chloronaphthalene	1	mg/kg	0.016	0.036	ND
2-Chlorophenol	1	mg/kg	0.012	0.036	ND
2-Methylnaphthalene	1	mg/kg	0.011	0.036	ND
2-Methylphenol	1	mg/kg	0.010	0.0090	ND
2-Nitroaniline	1	mg/kg	0.017	0.036	ND
2-Nitrophenol	1	mg/kg	0.016	0.036	ND
3&4-Methylphenol	1	mg/kg	0.010	0.0090	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.029	0.036	ND
3-Nitroaniline	1	mg/kg	0.014	0.036	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.12	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.036	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0086	0.036	ND
4-Chloroaniline	1	mg/kg	0.016	0.0090	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.036	ND
4-Nitroaniline	1	mg/kg	0.014	0.036	ND
4-Nitrophenol	1	mg/kg	0.027	0.036	ND
Acenaphthene	1	mg/kg	0.010	0.036	ND
Acenaphthylene	1	mg/kg	0.011	0.036	ND
Acetophenone	1	mg/kg	0.013	0.036	ND
Anthracene	1	mg/kg	0.0099	0.036	ND
Atrazine	1	mg/kg	0.014	0.036	ND
Benzaldehyde	1	mg/kg	0.39	0.036	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.036	ND
Benzo[a]pyrene	1	mg/kg	0.012	0.036	ND
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b>mg/kg</b>	<b>0.013</b>	0.036	<b>0.015J</b>
Benzo[g,h,i]perylene	1	mg/kg	0.00025	0.036	ND
Benzo[k]fluoranthene	1	mg/kg	0.013	0.036	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.010	0.036	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0087	0.0090	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.014	0.036	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.032</b>	0.036	<b>0.12</b>
Butylbenzylphthalate	1	mg/kg	0.027	0.036	ND
Caprolactam	1	mg/kg	0.029	0.036	ND
Carbazole	1	mg/kg	0.011	0.036	ND
Chrysene	1	mg/kg	0.012	0.036	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.013	0.036	ND
Dibenzofuran	1	mg/kg	0.0091	0.0090	ND
Diethylphthalate	1	mg/kg	0.023	0.036	ND
<b>Dimethylphthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.010</b>	0.036	<b>0.066</b>
<b>Di-n-butylphthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.041</b>	0.0090	<b>0.058</b>
Di-n-octylphthalate	1	mg/kg	0.024	0.036	ND
Fluoranthene	1	mg/kg	0.014	0.036	ND
Fluorene	1	mg/kg	0.0098	0.036	ND
Hexachlorobenzene	1	mg/kg	0.015	0.036	ND
Hexachlorobutadiene	1	mg/kg	0.016	0.036	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.036	ND
Hexachloroethane	1	mg/kg	0.016	0.036	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-09 (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-017

Receipt Date: 9/28/2020

Matrix: Soil

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.016	0.036	ND
Isophorone	1	mg/kg	0.012	0.036	ND
Naphthalene	1	mg/kg	0.010	0.0090	ND
Nitrobenzene	1	mg/kg	0.0015	0.036	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.013	0.0090	ND
N-Nitrosodiphenylamine	1	mg/kg	0.12	0.036	ND
Pentachlorophenol	1	mg/kg	0.17	0.18	ND
Phenanthrene	1	mg/kg	0.011	0.036	ND
Phenol	1	mg/kg	0.0099	0.036	ND
Pyrene	1	mg/kg	0.012	0.036	0.015J

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	18	220	5000
Barium	1	mg/kg	0.73	11	37
Calcium	1	mg/kg	110	1100	1400
Chromium	1	mg/kg	0.72	5.4	17B
Cobalt	1	mg/kg	0.77	2.7	4.0
Copper	1	mg/kg	0.66	5.4	27B
Iron	1	mg/kg	14	220	11000B
Lead	1	mg/kg	0.66	5.4	9.8
Magnesium	1	mg/kg	21	540	2200
Manganese	1	mg/kg	0.69	11	210
Nickel	1	mg/kg	1.2	5.4	9.8
Potassium	1	mg/kg	110	540	550
Sodium	1	mg/kg	140	270	ND
Zinc	1	mg/kg	1.6	11	38B

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.024	0.86	0.031J
Arsenic	1	mg/kg	0.019	0.22	3.5B
Beryllium	1	mg/kg	0.017	0.22	0.19J
Cadmium	1	mg/kg	0.015	0.43	0.26J
Selenium	1	mg/kg	0.068	2.2	0.99JB
Silver	1	mg/kg	0.028	0.22	0.050JB
Thallium	1	mg/kg	0.019	0.43	0.037J
Vanadium	1	mg/kg	0.012	0.22	20B

Sample ID: HSI-SS-09 (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-018

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	1.03	mg/kg	0.0010	0.0022	ND
1,1,2,2-Tetrachloroethane	1.03	mg/kg	0.00050	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.03	mg/kg	0.0015	0.0022	ND
1,1,2-Trichloroethane	1.03	mg/kg	0.00051	0.0022	ND
1,1-Dichloroethane	1.03	mg/kg	0.00096	0.0022	ND
1,1-Dichloroethene	1.03	mg/kg	0.0013	0.0022	ND
1,2,3-Trichlorobenzene	1.03	mg/kg	0.00061	0.0022	ND
1,2,4-Trichlorobenzene	1.03	mg/kg	0.00070	0.0022	ND
1,2-Dibromo-3-chloropropane	1.03	mg/kg	0.00061	0.0022	ND
1,2-Dibromoethane	1.03	mg/kg	0.00054	0.0011	ND
1,2-Dichlorobenzene	1.03	mg/kg	0.00057	0.0022	ND
1,2-Dichloroethane	1.03	mg/kg	0.00045	0.0022	ND
1,2-Dichloropropane	1.03	mg/kg	0.00091	0.0022	ND
1,3-Dichlorobenzene	1.03	mg/kg	0.00061	0.0022	ND
1,4-Dichlorobenzene	1.03	mg/kg	0.00059	0.0022	ND
1,4-Dioxane	1.03	mg/kg	0.054	0.11	ND
2-Butanone	1.03	mg/kg	0.0013	0.0022	ND
2-Hexanone	1.03	mg/kg	0.00094	0.0022	ND
4-Methyl-2-pentanone	1.03	mg/kg	0.00064	0.0022	ND
Acetone	1.03	mg/kg	0.0075	0.011	0.020
Benzene	1.03	mg/kg	0.00081	0.0011	ND
Bromochloromethane	1.03	mg/kg	0.00078	0.0022	ND
Bromodichloromethane	1.03	mg/kg	0.00052	0.0022	ND
Bromoform	1.03	mg/kg	0.00037	0.0022	ND
Bromomethane	1.03	mg/kg	0.0017	0.0022	ND
Carbon disulfide	1.03	mg/kg	0.0038	0.0038	ND
Carbon tetrachloride	1.03	mg/kg	0.0011	0.0022	ND
Chlorobenzene	1.03	mg/kg	0.00069	0.0022	ND
Chloroethane	1.03	mg/kg	0.0022	0.0022	ND
Chloroform	1.03	mg/kg	0.0015	0.0022	ND
Chloromethane	1.03	mg/kg	0.0014	0.0022	ND
cis-1,2-Dichloroethene	1.03	mg/kg	0.00090	0.0022	ND
cis-1,3-Dichloropropene	1.03	mg/kg	0.00059	0.0022	ND
Cyclohexane	1.03	mg/kg	0.0013	0.0022	ND
Dibromochloromethane	1.03	mg/kg	0.00048	0.0022	ND
Dichlorodifluoromethane	1.03	mg/kg	0.0016	0.0022	ND
Ethylbenzene	1.03	mg/kg	0.00076	0.0011	ND
Isopropylbenzene	1.03	mg/kg	0.00092	0.0011	ND
m&p-Xylenes	1.03	mg/kg	0.0013	0.0013	0.0014
Methyl Acetate	1.03	mg/kg	0.0011	0.0022	ND
Methylcyclohexane	1.03	mg/kg	0.0010	0.0022	ND
Methylene chloride	1.03	mg/kg	0.00083	0.0022	0.0046
Methyl-t-butyl ether	1.03	mg/kg	0.00060	0.0011	ND
o-Xylene	1.03	mg/kg	0.00079	0.0011	ND
Styrene	1.03	mg/kg	0.00061	0.0022	ND
Tetrachloroethene	1.03	mg/kg	0.0011	0.0022	0.0011J
Toluene	1.03	mg/kg	0.00073	0.0011	ND
trans-1,2-Dichloroethene	1.03	mg/kg	0.0013	0.0022	ND
trans-1,3-Dichloropropene	1.03	mg/kg	0.00052	0.0022	ND
Trichloroethene	1.03	mg/kg	0.00091	0.0022	ND
Trichlorofluoromethane	1.03	mg/kg	0.0013	0.0022	ND
Vinyl chloride	1.03	mg/kg	0.0014	0.0022	ND
Xylenes (Total)	1.03	mg/kg	0.00079	0.0011	0.0014

Sample ID: HSI-SS-D (0-0.5')

Collection Date: 9/25/2020

Lab#: AD19479-019

Receipt Date: 9/28/2020

Matrix: Soil

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		92

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.091	0.014J

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.010	0.036	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.012	0.036	ND
1,4-Dioxane	1	mg/kg	0.018	0.0091	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.036	ND
2,4,5-Trichlorophenol	1	mg/kg	0.010	0.036	ND
2,4,6-Trichlorophenol	1	mg/kg	0.028	0.036	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0091	ND
2,4-Dimethylphenol	1	mg/kg	0.018	0.0091	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.011	0.036	ND
2,6-Dinitrotoluene	1	mg/kg	0.018	0.036	ND
2-Chloronaphthalene	1	mg/kg	0.016	0.036	ND
2-Chlorophenol	1	mg/kg	0.012	0.036	ND
2-Methylnaphthalene	1	mg/kg	0.011	0.036	ND
2-Methylphenol	1	mg/kg	0.010	0.0091	ND
2-Nitroaniline	1	mg/kg	0.017	0.036	ND
2-Nitrophenol	1	mg/kg	0.016	0.036	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0091	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.029	0.036	ND
3-Nitroaniline	1	mg/kg	0.014	0.036	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.036	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0087	0.036	ND
4-Chloroaniline	1	mg/kg	0.016	0.0091	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.036	ND
4-Nitroaniline	1	mg/kg	0.014	0.036	ND
4-Nitrophenol	1	mg/kg	0.028	0.036	ND
Acenaphthylene	1	mg/kg	0.011	0.036	ND
Acetophenone	1	mg/kg	0.013	0.036	ND
Anthracene	1	mg/kg	0.010	0.036	ND
Alrazine	1	mg/kg	0.015	0.036	ND
Benzaldehyde	1	mg/kg	0.39	0.036	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.036	ND
Benzo[a]pyrene	1	mg/kg	0.012	0.036	ND
Benzo[b]fluoranthene	1	mg/kg	0.013	0.036	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00025	0.036	ND
Benzo[k]fluoranthene	1	mg/kg	0.013	0.036	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.010	0.036	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0088	0.0091	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.014	0.036	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.032</b>	0.036	<b>0.38</b>
Butylbenzylphthalate	1	mg/kg	0.028	0.036	ND
Caprolactam	1	mg/kg	0.029	0.036	ND
Carbazole	1	mg/kg	0.011	0.036	ND
Chrysene	1	mg/kg	0.012	0.036	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.013	0.036	ND
Dibenzofuran	1	mg/kg	0.0092	0.0091	ND
Diethylphthalate	1	mg/kg	0.023	0.036	ND
Dimethylphthalate	1	mg/kg	0.010	0.036	ND
Di-n-butylphthalate	1	mg/kg	0.042	0.0091	0.17
<b>Di-n-octylphthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.024</b>	0.036	<b>0.024J</b>
Fluoranthene	1	mg/kg	0.014	0.036	ND
Fluorene	1	mg/kg	0.0099	0.036	ND
Hexachlorobenzene	1	mg/kg	0.015	0.036	ND
Hexachlorobutadiene	1	mg/kg	0.016	0.036	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.036	ND
Hexachloroethane	1	mg/kg	0.016	0.036	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0092806

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Sample ID: HSI-SS-D (0-0.5')

Lab#: AD19479-019

Matrix: Soil

Collection Date: 9/25/2020

Receipt Date: 9/28/2020

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.016	0.036	ND
Isophorone	1	mg/kg	0.012	0.036	ND
Naphthalene	1	mg/kg	0.010	0.0091	ND
Nitrobenzene	1	mg/kg	0.0015	0.036	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0091	ND
N-Nitrosodiphenylamine	1	mg/kg	0.12	0.036	ND
Pentachlorophenol	1	mg/kg	0.17	0.18	ND
Phenanthrene	1	mg/kg	0.012	0.036	ND
Phenol	1	mg/kg	0.010	0.036	ND
Pyrene	1	mg/kg	0.012	0.036	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	18	220	3700
Barium	1	mg/kg	0.73	11	20
Calcium	1	mg/kg	110	1100	1400
Chromium	1	mg/kg	0.73	5.4	17B
Cobalt	1	mg/kg	0.77	2.7	1.5J
Copper	1	mg/kg	0.67	5.4	16B
Iron	1	mg/kg	14	220	6500B
Lead	1	mg/kg	0.67	5.4	140
Magnesium	1	mg/kg	21	540	550
Manganese	1	mg/kg	0.70	11	56
Nickel	1	mg/kg	1.2	5.4	3.8J
Potassium	1	mg/kg	110	540	160J
Sodium	1	mg/kg	140	270	ND
Zinc	1	mg/kg	1.6	11	26B

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.024	0.87	0.063J
Arsenic	1	mg/kg	0.019	0.22	3.0B
Beryllium	1	mg/kg	0.017	0.22	0.17J
Cadmium	1	mg/kg	0.015	0.43	0.39J
Selenium	1	mg/kg	0.069	2.2	1.3JB
Silver	1	mg/kg	0.028	0.22	0.041JB
Thallium	1	mg/kg	0.019	0.43	ND
Vanadium	1	mg/kg	0.012	0.22	18B

Sample ID: HSI-SS-D (0.5-1')

Collection Date: 9/25/2020

Lab#: AD19479-020

Receipt Date: 9/28/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		79

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.74	mg/kg	0.00086	0.0019	ND
1,1,2,2-Tetrachloroethane	0.74	mg/kg	0.00042	0.0019	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.74	mg/kg	0.0013	0.0019	ND
1,1,2-Trichloroethane	0.74	mg/kg	0.00043	0.0019	ND
1,1-Dichloroethane	0.74	mg/kg	0.00081	0.0019	ND
1,1-Dichloroethene	0.74	mg/kg	0.0011	0.0019	ND
1,2,3-Trichlorobenzene	0.74	mg/kg	0.00051	0.0019	ND
1,2,4-Trichlorobenzene	0.74	mg/kg	0.00059	0.0019	ND
1,2-Dibromo-3-chloropropane	0.74	mg/kg	0.00051	0.0019	ND
1,2-Dibromoethane	0.74	mg/kg	0.00046	0.00094	ND
1,2-Dichlorobenzene	0.74	mg/kg	0.00048	0.0019	ND
1,2-Dichloroethane	0.74	mg/kg	0.00038	0.0019	ND
1,2-Dichloropropane	0.74	mg/kg	0.00077	0.0019	ND
1,3-Dichlorobenzene	0.74	mg/kg	0.00051	0.0019	ND
1,4-Dichlorobenzene	0.74	mg/kg	0.00050	0.0019	ND
1,4-Dioxane	0.74	mg/kg	0.045	0.094	ND
2-Butanone	0.74	mg/kg	0.0011	0.0019	ND
2-Hexanone	0.74	mg/kg	0.00080	0.0019	ND
4-Methyl-2-pentanone	0.74	mg/kg	0.00054	0.0019	ND
Acetone	0.74	mg/kg	0.0063	0.0094	ND
Benzene	0.74	mg/kg	0.00068	0.00094	ND
Bromochloromethane	0.74	mg/kg	0.00066	0.0019	ND
Bromodichloromethane	0.74	mg/kg	0.00044	0.0019	ND
Bromoform	0.74	mg/kg	0.00031	0.0019	ND
Bromomethane	0.74	mg/kg	0.0015	0.0019	ND
Carbon disulfide	0.74	mg/kg	0.0032	0.0032	ND
Carbon tetrachloride	0.74	mg/kg	0.00091	0.0019	ND
Chlorobenzene	0.74	mg/kg	0.00058	0.0019	ND
Chloroethane	0.74	mg/kg	0.0018	0.0019	ND
Chloroform	0.74	mg/kg	0.0013	0.0019	ND
Chloromethane	0.74	mg/kg	0.0012	0.0019	ND
cis-1,2-Dichloroethene	0.74	mg/kg	0.00076	0.0019	ND
cis-1,3-Dichloropropene	0.74	mg/kg	0.00050	0.0019	ND
Cyclohexane	0.74	mg/kg	0.0011	0.0019	ND
Dibromochloromethane	0.74	mg/kg	0.00040	0.0019	ND
Dichlorodifluoromethane	0.74	mg/kg	0.0013	0.0019	ND
Ethylbenzene	0.74	mg/kg	0.00065	0.00094	ND
Isopropylbenzene	0.74	mg/kg	0.00078	0.00094	ND
m&p-Xylenes	0.74	mg/kg	0.0011	0.0011	ND
Methyl Acetate	0.74	mg/kg	0.00090	0.0019	ND
Methylcyclohexane	0.74	mg/kg	0.00084	0.0019	ND
Methylene chloride	0.74	mg/kg	0.00070	0.0019	ND
Methyl-t-butyl ether	0.74	mg/kg	0.00051	0.00094	ND
o-Xylene	0.74	mg/kg	0.00066	0.00094	ND
Styrene	0.74	mg/kg	0.00051	0.0019	ND
Tetrachloroethene	0.74	mg/kg	0.00092	0.0019	ND
Toluene	0.74	mg/kg	0.00062	0.00094	ND
trans-1,2-Dichloroethene	0.74	mg/kg	0.0011	0.0019	ND
trans-1,3-Dichloropropene	0.74	mg/kg	0.00044	0.0019	ND
Trichloroethene	0.74	mg/kg	0.00077	0.0019	ND
Trichlorofluoromethane	0.74	mg/kg	0.0011	0.0019	0.0034
Vinyl chloride	0.74	mg/kg	0.0011	0.0019	ND
Xylenes (Total)	0.74	mg/kg	0.00066	0.00094	ND



## HC Reporting Limit Definitions/Data Qualifiers

### REPORTING DEFINITIONS

**DF** = Dilution Factor

**NA** = Not Applicable

**LCS** = Laboratory Control Spike

**ND** = Not Detected

**MBS** = Method Blank Spike

**PS** = Post Digestion Spike

**MS** = Matrix Spike

**RL\*** = Reporting Limit

**MSD** = Matrix Spike Duplicate

**RT** = Retention Time

**MDL** = Method Detection Limit

*\*Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

### DATA QUALIFIERS

- A-** Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R-** Retention Time is out.
- Y-** Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

# Laboratory Chronicle

0092806 0044

Client: Chesapeake Geosciences Inc

HC Project #: 0092806

Project: Hot Spot Investigation

Lab#: AD19479-001

Sample ID: HSI-SS-01 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:21	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/5/20 22:35	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 13:34	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 16:12	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 11:19	PC

Lab#: AD19479-002

Sample ID: HSI-SS-01 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	9/30/20 23:40	WP

Lab#: AD19479-003

Sample ID: HSI-SS-02 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:35	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/5/20 22:58	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:10	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:00	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:17	PC

Lab#: AD19479-004

Sample ID: HSI-SS-02 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 19:51	WP

# Laboratory Chronicle

0092806 0045

Client: Chesapeake Geosciences Inc  
 Project: Hot Spot Investigation

HC Project #: 0092806

Lab#: AD19479-005 Sample ID: HSI-SS-03 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:37	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/5/20 23:21	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:12	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:14	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:21	PC

Lab#: AD19479-006 Sample ID: HSI-SS-03 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 19:32	WP

Lab#: AD19479-007 Sample ID: HSI-SS-04 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:38	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/5/20 23:45	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:18	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:23	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:26	PC

Lab#: AD19479-008 Sample ID: HSI-SS-04 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 00:20	WP

# Laboratory Chronicle

0092806 0046

Client: Chesapeake Geosciences Inc  
 Project: Hot Spot Investigation

HC Project #: 0092806

Lab#: AD19479-009

Sample ID: HSI-SS-05 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:39	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/6/20 00:08	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:23	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:27	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:30	PC
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 13:11	PC

Lab#: AD19479-010

Sample ID: HSI-SS-05 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 00:39	WP

Lab#: AD19479-011

Sample ID: HSI-SS-06 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:41	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/6/20 00:32	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:27	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:31	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:35	PC

Lab#: AD19479-012

Sample ID: HSI-SS-06 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 20:11	WP

# Laboratory Chronicle

0092806 0047

**Client:** Chesapeake Geosciences Inc  
**Project:** Hot Spot Investigation

**HC Project #:** 0092806

**Lab#:** AD19479-013

**Sample ID:** HSI-SS-07 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:42	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/6/20 00:55	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:35	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:45	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:53	PC

**Lab#:** AD19479-014

**Sample ID:** HSI-SS-07 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 18:52	WP

**Lab#:** AD19479-015

**Sample ID:** HSI-SS-08 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:43	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/6/20 10:02	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:49	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:39	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 12:57	PC

**Lab#:** AD19479-016

**Sample ID:** HSI-SS-08 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 19:12	WP

# Laboratory Chronicle

0092806 0048

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0092806

Lab#: AD19479-017 Sample ID: HSI-SS-09 (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:48	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/6/20 01:42	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:53	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:43	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 13:02	PC

Lab#: AD19479-018 Sample ID: HSI-SS-09 (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 01:59	WP

Lab#: AD19479-019 Sample ID: HSI-SS-D (0-0.5')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/29/20 09:00	asilva	EPA 7471B	9/30/20 11:49	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/05/20	jprevilon	EPA 8270D	10/6/20 09:39	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:47	OA
TAL Metals 6010D	3005&10/3050	09/29/20 09:00	asilva	EPA 6010D	9/29/20 17:57	OA
TAL Metals 6020B	3005&10/3050	09/29/20 09:00	asilva	EPA 6020B	10/1/20 13:06	PC

Lab#: AD19479-020 Sample ID: HSI-SS-D (0.5-1')

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/28/20 00:00	jessica
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/1/20 02:19	WP

## **Chain of Custody**



NEIACNJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Hampton-Clarke  
 A Women-Owned, Disadvantaged, Small Business Enterprise

3) Reporting Requirements (Please Circle)  
 Turnaround: When Available: Report Type: Electronic Data Deliv.  
 NJ Hazslie

**Customer Information**

1a) Customer: Chesapeake Geosciences  
 Address: 5405 Twin Knolls Rd Suite 2  
 Columbia, MD 21045  
 (410) 740-1111 (Ext. 106)  
 Email/Cell/Fax/Ph: nlsr@cgsws.com  
 1c) Send Invoice to: nlsr@cgsws.com  
 1d) Send Report to: nlsr@cgsws.com

**Project Information**

2a) Project: Hot Spot Investigation  
 2b) Project Mgr: Montgomery Brothers Dump  
 Nancy Love  
 2c) Project Location (City/State): North East, MD  
 CG-09-0423, 10  
 2d) Quote/PO # (if Applicable): CG09042310MS

1 Business Day (100%)\*  
 2 Business Days (75%)\*  
 3 Business Days (50%)\*  
 4 Business Days (35%)\*  
 5 Business Days (25%)\*  
 8 Business Days (Stand)  
 Other: \_\_\_\_\_  
 \* Expedited TAT Not Always Available. Please Check with Lab.

**FOR LAB USE ONLY**

Batch # AD194794  
 Matrix Codes: DW - Drinking Water, S - Soil, A - Air, GW - Ground Water, SL - Sludge, WW - Waste Water, OL - Oil, OT - Other (please specify under item 9, Comments)

**7) Analysis (specify methods & parameter lists)**

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample		Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)			8) # of Bottles						9) Comments		
			Date	Time			Sample Type	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:			
001	H5I-SS-01(0.0.5)	S	9/25/20	13:30		G												
002	H5I-SS-01(0.5-1)	S																
003	H5I-SS-02(0-0.5)	S																
004	H5I-SS-02(0.5-1)	S																
005	H5I-SS-03(0-0.5)	S																
006	H5I-SS-03(0.5-1)	S																
007	H5I-SS-04(0-0.5)	S																
008	H5I-SS-04(0.5-1)	S																
009	H5I-SS-05(0-0.5)	S																
010	H5I-SS-05(0.5-1)	S																

10) Completed by: [Signature] Accepted by: [Signature]  
 Date: 9/25/2020 Time: 16:40  
 Date: 9/25/20 Time: 14:50  
 Date: 9/25/20 Time: 14:50

11) Sampler (print name): Meg Staines + Devin Conway Date: 09/25/2020  
 Additional Notes: Samples frozen 9/25/2020 17:00  
 MDE RMS Contract Rates

Comments, Notes, Special Requirements, HAZARDS  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270D SIM)  
 VOC (8260C SIM or 8011)  
 SPLP (BN, BNA, Metals)  
 1,4 Dioxane  
 Check if applicable:  
 Project-Specific Reporting Limits  
 High Contaminant Concentrations  
 NJ LSRP Project (also check boxes above/right)  
 Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.  
 Internal use: sampling plan (check box) HCl [ ] or client [ ] FSP#  
 Cooler Temperature: 2-3



**Hampton-Clarke, Inc. (WBE/DBE/SBE)**  
 175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458  
 Service Center: 137-D Gallier Drive, Mount Laurel, New Jersey 08054  
 PH (Service Center): 856-780-6057 Fax: 856-780-6056  
 NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

**HC**  
 Hampton-Clarke  
 A Women-Owned, Disadvantaged, Small Business Enterprise

**CHAIN OF CUSTODY RECORD**  
 Project # (Lab Use Only) 0042806 Page 2 of 2  
**3) Reporting Requirements (Please Circle)**  
 Turnaround: \_\_\_\_\_  
 When Available:  
 1) Business Day (100%)\*  
 2) Business Days (75%)\*  
 3) Business Days (50%)\*  
 4) Business Days (35%)\*  
 5) Business Days (25%)\*  
 6) Business Days (Stand.)  
 Other: \_\_\_\_\_  
 \* Expedited TAT Not Always Available. Please Check with Lab.

**Customer Information**  
 Customer: Unesaquake Geosciences  
 Address: 5405 Twin Knolls Rd Suite 2  
Columbia, MD 21045  
 (410) 740-1911 (Ext. 106)  
 Email/Ce/In/Fax/Ph: nlove@cgs.us.com  
 1b) Send Invoice to: nlove@cgs.us.com  
 1c) Send Report to: nlove@cgs.us.com  
 1d) Send Report to: \_\_\_\_\_

**Project Information (CG-09-0434)**  
 2a) Project: Hot Spot Investigation  
Montgomery Brothers Dupro  
 Project Mgr: Nancy Love  
 2b) Project Location (City/State): CG-09-0433, 10  
North East, MD  
 2c) Quote/PO # (if Applicable): CG09042310MS

**Reporting Requirements (Please Circle)**  
 Summary: Results + QC (Waste)  
 Reduced: [ ] NJ [ ] NY [ ] PA [ ] Other MD  
 NJ Full / NY ASP Calif NY ASP Calif  
 EQUS: [ ] 4-File [ ] EZ [ ] NYDEC [ ] Region 2 or 5  
 Other: \_\_\_\_\_  
 NJ HazSite  
 Excel Reg. NJ / NY / PA  
 EnviroData

**FOR LAB USE ONLY**  Check if Contingent

Batch # ADW479

Matrix Codes: DW - Drinking Water S - Soil A - Air  
 GW - Ground Water SL - Sludge  
 WW - Waste Water OL - Oil  
 OT - Other (please specify under Item 9, Comments)

Lab Sample #	4) Customer Sample ID	Matrix	6) Sample		Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)			8) # of Bottles						9) Comments			
			Date	Time			SVDs 8270C	TAL Metals 6020A	VOCs 8260	None	MeOH	En Core	NaOH	HCl	H2SO4		HNO3		
011	HST-SS-06(0-0.5)	S	9/25/20	11:25		X	X	X											
012	HST-SS-06(0.5-1')	S		11:30		X	X	X											
013	HST-SS-07(0-0.5)	S		11:00		X	X	X											
014	HST-SS-07(0.5-1')	S		11:05		X	X	X											
015	HST-SS-08(0-0.5)	S		10:40		X	X	X											
016	HST-SS-08(0.5-1')	S		10:45		X	X	X											
017	HST-SS-09(0-0.5)	S		10:15		X	X	X											
018	HST-SS-09(0.5-1')	S		10:20		X	X	X											
019	HST-SS-D(0-0.5')	S		12:00		X	X	X											
020	HST-SS-D(0.5-1')	S		02:00		X	X	X											

10)  Fulfilled by: \_\_\_\_\_ Accepted by: \_\_\_\_\_ Date: 09/25/2020 Time: 10:40

Additional Notes: Mag Staines + Devin Gilroy Date: 09/25/2020

Examples frozen 09/25/2020 17:00

MDE RMS Contract Rates

Comments, Notes, Special Requirements, HAZARDS  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270D SIM) \_\_\_\_\_  
 VOC (8260C SIM or 8011) \_\_\_\_\_  
 SPLP (BN, BNA, Metals) \_\_\_\_\_  
 1,4 Dioxane \_\_\_\_\_  
 Check if applicable: \_\_\_\_\_  
 Project-Specific Reporting Limits  
 High Contaminant Concentrations \_\_\_\_\_  
 NJ LSRP Project (also check boxes above/right) \_\_\_\_\_  
 Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.  
 Internal use: sampling plan (check box) HC [ ] or client [ ] FSP# \_\_\_\_\_  
 Cooler Temperature: 21

## CONDITION UPON RECEIPT

Batch Number AD19479

Entered By: Ricardo

Date Entered 9/28/2020 3:26:00 PM

- 
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T-461 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).  
2.3
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 No Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:  
TERRA CORE SAMPLES COLLECTED ON 9/25/20  
EMAIL STATES CLIENT FROZE TERRA CORE  
SMAPLE WERE RECEIVED IN PORTABLE FREEZER
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
- 14 NA Corrective actions (Specify item number and corrective action taken).
- 15 No Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

0092806 0053

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD19479-001	09/28/20 14:50	RICAR	0	M	Received
AD19479-001	09/28/20 15:25	RICAR	0	M	Login
AD19479-001	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-001	09/28/20 17:06	R12	1	A	NONE
AD19479-001	09/28/20 18:01	R12	1	A	NONE
AD19479-001	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-001	09/29/20 13:47	R12	1	A	NONE
AD19479-001	10/05/20 07:17	JP	1	A	bn-soil
AD19479-001	10/05/20 07:19	R12	1	A	NONE
AD19479-001	09/28/20 18:01	R12	2	A	NONE
AD19479-002	09/28/20 14:50	RICAR	0	M	Received
AD19479-002	09/28/20 15:25	RICAR	0	M	Login
AD19479-002	09/28/20 15:54	R31	1	A	NONE
AD19479-002	09/29/20 07:19	SG	1	A	VOA
AD19479-002	09/29/20 07:20	R31	1	A	NONE
AD19479-002	09/28/20 15:55	F18	2	A	NONE
AD19479-002	09/30/20 16:49	WP	2	A	VOA
AD19479-002	09/28/20 15:55	F18	3	A	NONE
AD19479-002	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-002	09/28/20 17:06	R12	4	A	NONE
AD19479-002	09/28/20 18:01	R12	4	A	NONE
AD19479-003	09/28/20 14:50	RICAR	0	M	Received
AD19479-003	09/28/20 15:25	RICAR	0	M	Login
AD19479-003	09/28/20 18:01	R12	1	A	NONE
AD19479-003	09/28/20 16:20	JMP	2	A	SOLIDS
AD19479-003	09/28/20 17:06	R12	2	A	NONE
AD19479-003	09/28/20 18:01	R12	2	A	NONE
AD19479-003	09/29/20 08:45	ANS	2	A	TDSI/Hg
AD19479-003	09/29/20 13:47	R12	2	A	NONE
AD19479-003	10/05/20 07:17	JP	2	A	bn-soil
AD19479-003	10/05/20 07:19	R12	2	A	NONE
AD19479-004	09/28/20 14:50	RICAR	0	M	Received
AD19479-004	09/28/20 15:25	RICAR	0	M	Login
AD19479-004	09/28/20 15:54	R31	1	A	NONE
AD19479-004	09/29/20 07:19	SG	1	A	VOA
AD19479-004	09/29/20 07:20	R31	1	A	NONE
AD19479-004	09/28/20 15:55	F18	2	A	NONE
AD19479-004	09/30/20 16:49	WP	2	A	VOA
AD19479-004	09/28/20 15:55	F18	3	A	NONE
AD19479-004	10/01/20 16:57	WP	3	A	VOA
AD19479-004	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-004	09/28/20 17:06	R12	4	A	NONE
AD19479-004	09/28/20 18:01	R12	4	A	NONE
AD19479-005	09/28/20 14:50	RICAR	0	M	Received
AD19479-005	09/28/20 15:25	RICAR	0	M	Login
AD19479-005	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-005	09/28/20 17:06	R12	1	A	NONE
AD19479-005	09/28/20 18:01	R12	1	A	NONE
AD19479-005	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-005	09/29/20 13:47	R12	1	A	NONE
AD19479-005	10/05/20 07:17	JP	1	A	bn-soil
AD19479-005	10/05/20 07:19	R12	1	A	NONE
AD19479-006	09/28/20 14:50	RICAR	0	M	Received
AD19479-006	09/28/20 15:25	RICAR	0	M	Login
AD19479-006	09/28/20 15:54	R31	1	A	NONE
AD19479-006	09/29/20 07:19	SG	1	A	VOA
AD19479-006	09/29/20 07:20	R31	1	A	NONE
AD19479-006	09/28/20 15:55	F18	2	A	NONE
AD19479-006	09/30/20 16:49	WP	2	A	VOA
AD19479-006	09/28/20 15:55	F18	3	A	NONE
AD19479-006	10/01/20 16:57	WP	3	A	VOA
AD19479-006	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-006	09/28/20 17:06	R12	4	A	NONE
AD19479-006	09/28/20 18:01	R12	4	A	NONE
AD19479-007	09/28/20 14:50	RICAR	0	M	Received
AD19479-007	09/28/20 15:25	RICAR	0	M	Login
AD19479-007	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-007	09/28/20 17:06	R12	1	A	NONE
AD19479-007	09/28/20 18:01	R12	1	A	NONE
AD19479-007	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-007	09/29/20 13:47	R12	1	A	NONE
AD19479-007	10/05/20 07:17	JP	1	A	bn-soil
AD19479-007	10/05/20 07:19	R12	1	A	NONE
AD19479-007	09/28/20 18:01	R12	2	A	NONE
AD19479-007	10/06/20 07:18	JP	2	A	bn-soil

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD19479-007	10/06/20 07:19	R12	2	A	NONE
AD19479-008	09/28/20 14:50	RICAR	0	M	Received
AD19479-008	09/28/20 15:25	RICAR	0	M	Login
AD19479-008	09/28/20 15:54	R31	1	A	NONE
AD19479-008	09/29/20 07:19	SG	1	A	VOA
AD19479-008	09/29/20 07:20	R31	1	A	NONE
AD19479-008	09/28/20 15:55	F18	2	A	NONE
AD19479-008	09/30/20 16:49	WP	2	A	VOA
AD19479-008	09/28/20 15:55	F18	3	A	NONE
AD19479-008	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-008	09/28/20 17:06	R12	4	A	NONE
AD19479-008	09/28/20 18:01	R12	4	A	NONE
AD19479-009	09/28/20 14:50	RICAR	0	M	Received
AD19479-009	09/28/20 15:25	RICAR	0	M	Login
AD19479-009	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-009	09/28/20 17:06	R12	1	A	NONE
AD19479-009	09/28/20 18:01	R12	1	A	NONE
AD19479-009	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-009	09/29/20 13:47	R12	1	A	NONE
AD19479-009	10/05/20 07:17	JP	1	A	bn-soil
AD19479-009	10/05/20 07:19	R12	1	A	NONE
AD19479-010	09/28/20 18:01	R12	2	A	NONE
AD19479-010	09/28/20 14:50	RICAR	0	M	Received
AD19479-010	09/28/20 15:25	RICAR	0	M	Login
AD19479-010	09/28/20 15:54	R31	1	A	NONE
AD19479-010	09/29/20 07:19	SG	1	A	VOA
AD19479-010	09/29/20 07:20	R31	1	A	NONE
AD19479-010	09/28/20 15:55	F18	2	A	NONE
AD19479-010	09/30/20 16:49	WP	2	A	VOA
AD19479-010	09/28/20 15:55	F18	3	A	NONE
AD19479-010	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-010	09/28/20 17:06	R12	4	A	NONE
AD19479-010	09/28/20 18:01	R12	4	A	NONE
AD19479-011	09/28/20 14:50	RICAR	0	M	Received
AD19479-011	09/28/20 15:25	RICAR	0	M	Login
AD19479-011	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-011	09/28/20 17:06	R12	1	A	NONE
AD19479-011	09/28/20 18:01	R12	1	A	NONE
AD19479-011	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-011	09/29/20 13:47	R12	1	A	NONE
AD19479-011	10/05/20 07:17	JP	1	A	bn-soil
AD19479-011	10/05/20 07:19	R12	1	A	NONE
AD19479-011	09/28/20 18:01	R12	2	A	NONE
AD19479-012	09/28/20 14:50	RICAR	0	M	Received
AD19479-012	09/28/20 15:25	RICAR	0	M	Login
AD19479-012	09/28/20 15:54	R31	1	A	NONE
AD19479-012	09/29/20 07:19	SG	1	A	VOA
AD19479-012	09/29/20 07:20	R31	1	A	NONE
AD19479-012	09/28/20 15:55	F18	2	A	NONE
AD19479-012	09/30/20 16:49	WP	2	A	VOA
AD19479-012	09/28/20 15:55	F18	3	A	NONE
AD19479-012	10/01/20 16:57	WP	3	A	VOA
AD19479-012	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-012	09/28/20 17:06	R12	4	A	NONE
AD19479-012	09/28/20 18:01	R12	4	A	NONE
AD19479-013	09/28/20 14:50	RICAR	0	M	Received
AD19479-013	09/28/20 15:25	RICAR	0	M	Login
AD19479-013	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-013	09/28/20 17:06	R12	1	A	NONE
AD19479-013	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-013	09/29/20 13:47	R12	1	A	NONE
AD19479-013	10/05/20 07:17	JP	1	A	bn-soil
AD19479-013	10/05/20 07:19	R12	1	A	NONE
AD19479-014	09/28/20 14:50	RICAR	0	M	Received
AD19479-014	09/28/20 15:25	RICAR	0	M	Login
AD19479-014	09/28/20 15:54	R31	1	A	NONE
AD19479-014	09/29/20 07:19	SG	1	A	VOA
AD19479-014	09/29/20 07:20	R31	1	A	NONE
AD19479-014	09/28/20 15:55	F18	2	A	NONE
AD19479-014	09/30/20 16:49	WP	2	A	VOA
AD19479-014	09/28/20 15:55	F18	3	A	NONE
AD19479-014	10/01/20 16:57	WP	3	A	VOA
AD19479-014	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-014	09/28/20 17:06	R12	4	A	NONE
AD19479-015	09/28/20 14:50	RICAR	0	M	Received

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

0092806 0054

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD19479-015	09/28/20 15:25	RICAR	0	M	Login
AD19479-015	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-015	09/28/20 17:06	R12	1	A	NONE
AD19479-015	09/28/20 18:01	R12	1	A	NONE
AD19479-015	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-015	09/29/20 13:47	R12	1	A	NONE
AD19479-015	10/05/20 07:17	JP	1	A	bn-soil
AD19479-015	10/05/20 07:19	R12	1	A	NONE
AD19479-015	09/28/20 18:01	R12	2	A	NONE
AD19479-016	09/28/20 14:50	RICAR	0	M	Received
AD19479-016	09/28/20 15:25	RICAR	0	M	Login
AD19479-016	09/28/20 15:54	R31	1	A	NONE
AD19479-016	09/29/20 07:19	SG	1	A	VOA
AD19479-016	09/29/20 07:20	R31	1	A	NONE
AD19479-016	09/28/20 15:55	F18	2	A	NONE
AD19479-016	09/30/20 16:49	WP	2	A	VOA
AD19479-016	09/28/20 15:55	F18	3	A	NONE
AD19479-016	10/01/20 16:57	WP	3	A	VOA
AD19479-016	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-016	09/28/20 17:06	R12	4	A	NONE
AD19479-016	09/28/20 18:01	R12	4	A	NONE
AD19479-017	09/28/20 14:50	RICAR	0	M	Received
AD19479-017	09/28/20 15:25	RICAR	0	M	Login
AD19479-017	09/28/20 16:20	JMP	1	A	SOLIDS
AD19479-017	09/28/20 17:06	R12	1	A	NONE
AD19479-017	09/28/20 18:01	R12	1	A	NONE
AD19479-017	09/29/20 08:45	ANS	1	A	TDSI/Hg
AD19479-017	09/29/20 13:47	R12	1	A	NONE
AD19479-017	10/05/20 07:17	JP	1	A	bn-soil
AD19479-017	10/05/20 07:19	R12	1	A	NONE
AD19479-017	09/28/20 18:01	R12	2	A	NONE
AD19479-018	09/28/20 14:50	RICAR	0	M	Received
AD19479-018	09/28/20 15:25	RICAR	0	M	Login
AD19479-018	09/28/20 15:54	R31	1	A	NONE
AD19479-018	09/29/20 07:19	SG	1	A	VOA
AD19479-018	09/29/20 07:20	R31	1	A	NONE
AD19479-018	09/28/20 15:55	F18	2	A	NONE
AD19479-018	09/30/20 16:49	WP	2	A	VOA
AD19479-018	09/28/20 15:55	F18	3	A	NONE
AD19479-018	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-018	09/28/20 17:06	R12	4	A	NONE
AD19479-019	09/28/20 14:50	RICAR	0	M	Received
AD19479-019	09/28/20 15:25	RICAR	0	M	Login
AD19479-019	09/28/20 18:01	R12	1	A	NONE
AD19479-019	09/28/20 16:20	JMP	2	A	SOLIDS
AD19479-019	09/28/20 17:06	R12	2	A	NONE
AD19479-019	09/29/20 08:45	ANS	2	A	TDSI/Hg
AD19479-019	09/29/20 13:47	R12	2	A	NONE
AD19479-019	10/05/20 07:17	JP	2	A	bn-soil
AD19479-019	10/05/20 07:19	R12	2	A	NONE
AD19479-020	09/28/20 14:50	RICAR	0	M	Received
AD19479-020	09/28/20 15:25	RICAR	0	M	Login
AD19479-020	09/28/20 15:54	R31	1	A	NONE
AD19479-020	09/29/20 07:19	SG	1	A	VOA
AD19479-020	09/29/20 07:20	R31	1	A	NONE
AD19479-020	09/28/20 15:55	F18	2	A	NONE
AD19479-020	09/30/20 16:49	WP	2	A	VOA
AD19479-020	09/28/20 15:55	F18	3	A	NONE
AD19479-020	09/28/20 16:20	JMP	4	A	SOLIDS
AD19479-020	09/28/20 17:06	R12	4	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

## **Volatile Data**

## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19479-002

Client Id: HSI-SS-01 (0.5-1')

Data File: 11M83392.D

Analysis Date: 09/30/20 23:40

Date Rec/Extracted: 09/28/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 6.65g

Final Vol: NA

Dilution: 0.752

Solids: 92

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00075	0.0016	U	56-23-5	Carbon Tetrachloride	0.00079	0.0016	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00037</b>	<b>0.0016</b>	<b>0.0018</b>	108-90-7	Chlorobenzene	0.00051	0.0016	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0011	0.0016	U	75-00-3	Chloroethane	0.0016	0.0016	U
79-00-5	1,1,2-Trichloroethane	0.00038	0.0016	U	67-66-3	Chloroform	0.0011	0.0016	U
75-34-3	1,1-Dichloroethane	0.00071	0.0016	U	74-87-3	Chloromethane	0.0010	0.0016	U
75-35-4	1,1-Dichloroethene	0.00094	0.0016	U	156-59-2	cis-1,2-Dichloroethene	0.00066	0.0016	U
87-61-6	1,2,3-Trichlorobenzene	0.00045	0.0016	U	10061-01-5	cis-1,3-Dichloropropene	0.00043	0.0016	U
120-82-1	1,2,4-Trichlorobenzene	0.00051	0.0016	U	110-82-7	Cyclohexane	0.00098	0.0016	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00045	0.0016	U	124-48-1	Dibromochloromethane	0.00035	0.0016	U
106-93-4	1,2-Dibromoethane	0.00040	0.00082	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0016	U
95-50-1	1,2-Dichlorobenzene	0.00042	0.0016	U	100-41-4	Ethylbenzene	0.00056	0.00082	U
107-06-2	1,2-Dichloroethane	0.00034	0.0016	U	98-82-8	Isopropylbenzene	0.00068	0.00082	U
78-87-5	1,2-Dichloropropane	0.00067	0.0016	U	179601-23-1	m&p-Xylenes	0.00098	0.00098	U
541-73-1	1,3-Dichlorobenzene	0.00045	0.0016	U	79-20-9	Methyl Acetate	0.00078	0.0016	U
106-46-7	1,4-Dichlorobenzene	0.00043	0.0016	U	108-87-2	Methylcyclohexane	0.00074	0.0016	U
123-91-1	1,4-Dioxane	0.040	0.082	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00061</b>	<b>0.0016</b>	<b>0.0036</b>
78-93-3	2-Butanone	0.00098	0.0016	U	1634-04-4	Methyl-t-butyl ether	0.00044	0.00082	U
591-78-6	2-Hexanone	0.00069	0.0016	U	95-47-6	o-Xylene	0.00058	0.00082	U
108-10-1	4-Methyl-2-Pentanone	0.00047	0.0016	U	100-42-5	Styrene	0.00045	0.0016	U
67-64-1	Acetone	0.0055	0.0082	U	127-18-4	Tetrachloroethene	0.00080	0.0016	U
71-43-2	Benzene	0.00060	0.00082	U	108-88-3	Toluene	0.00054	0.00082	U
74-97-5	Bromochloromethane	0.00057	0.0016	U	156-60-5	trans-1,2-Dichloroethene	0.00098	0.0016	U
75-27-4	Bromodichloromethane	0.00038	0.0016	U	10061-02-6	trans-1,3-Dichloropropene	0.00038	0.0016	U
75-25-2	Bromoform	0.00027	0.0016	U	79-01-6	Trichloroethene	0.00067	0.0016	U
74-83-9	Bromomethane	0.0013	0.0016	U	75-69-4	Trichlorofluoromethane	0.00096	0.0016	U
75-15-0	Carbon Disulfide	0.0028	0.0028	U	75-01-4	Vinyl Chloride	0.0010	0.0016	U
1330-20-7	Xylenes (Total)	0.00058	0.00082	U					

Worksheet #: 569452

**Total Target Concentration 0.0054**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-002  
 Data File: 11M83392.D  
 Acq On : 09/30/20 23:40

Operator : WP  
 Sam Mult : 1 Vial# : 55  
 Misc : S,5G!2

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:08  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\09-3020\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.958	96	237392	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.546	117	203075	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	93906	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	65327	30.52	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.73%
39) 1,2-Dichloroethane-d4	4.778	67	31618	33.69	ug/l	0.00	
Spiked Amount	30.000						Recovery = 112.30%
66) Toluene-d8	5.787	98	248200	31.16	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.87%
76) Bromofluorobenzene	7.167	174	76778	31.88	ug/l	0.00	
Spiked Amount	30.000						Recovery = 106.27%
Target Compounds							
15) Methylene Chloride	3.373	84	8811	4.3678	ug/l		Qvalue 81
75) 1,1,2,2-Tetrachloroethane	7.215	83	3769	2.1558	ug/l		92
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

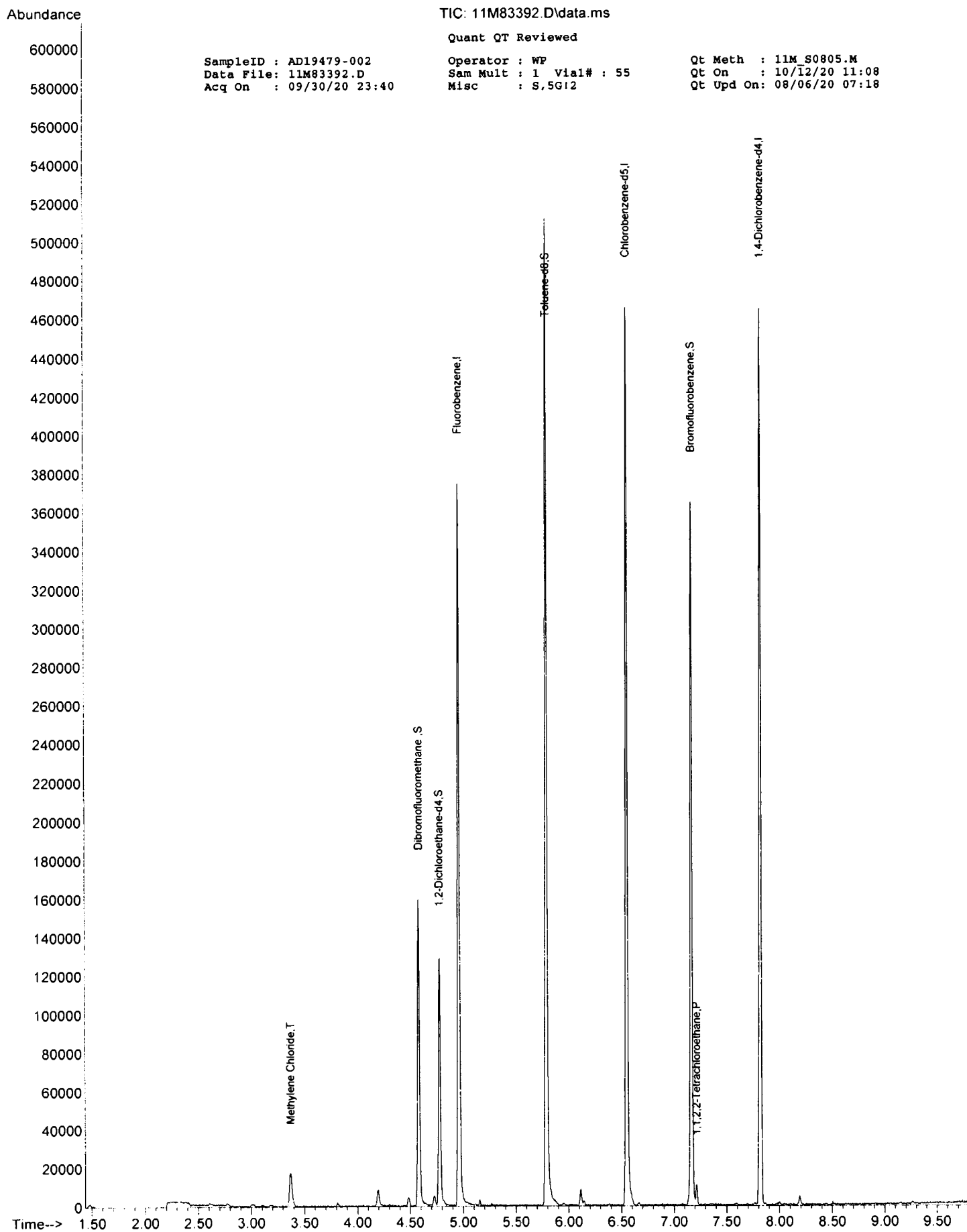
TIC: 11M83392.D\data.ms

Quant QT Reviewed

SampleID : AD19479-002  
Data File: 11M83392.D  
Acq On : 09/30/20 23:40

Operator : WP  
Sam Mult : 1 Vial# : 55  
Misc : S,5G12

Qt Meth : 11M\_S0805.M  
Qt On : 10/12/20 11:08  
Qt Upd On: 08/06/20 07:18





**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-004  
Client Id: HSI-SS-02 (0.5-1')  
Data File: 11M83439.D  
Analysis Date: 10/01/20 19:51  
Date Rec/Extracted: 09/28/20-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Soil  
Initial Vol: 6.76g  
Final Vol: NA  
Dilution: 0.740  
Solids: 91

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00075	0.0016	U	56-23-5	Carbon Tetrachloride	0.00079	0.0016	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00037</b>	<b>0.0016</b>	<b>0.012</b>	108-90-7	Chlorobenzene	0.00050	0.0016	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0011	0.0016	U	75-00-3	Chloroethane	0.0016	0.0016	U
<b>79-00-5</b>	<b>1,1,2-Trichloroethane</b>	<b>0.00037</b>	<b>0.0016</b>	<b>0.0014J</b>	67-66-3	Chloroform	0.0011	0.0016	U
75-34-3	1,1-Dichloroethane	0.00071	0.0016	U	74-87-3	Chloromethane	0.0010	0.0016	U
75-35-4	1,1-Dichloroethene	0.00093	0.0016	U	156-59-2	cis-1,2-Dichloroethene	0.00066	0.0016	U
87-61-6	1,2,3-Trichlorobenzene	0.00045	0.0016	U	10061-01-5	cis-1,3-Dichloropropene	0.00043	0.0016	U
120-82-1	1,2,4-Trichlorobenzene	0.00051	0.0016	U	110-82-7	Cyclohexane	0.00098	0.0016	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00045	0.0016	U	124-48-1	Dibromochloromethane	0.00035	0.0016	U
106-93-4	1,2-Dibromoethane	0.00040	0.00081	U	75-71-8	Dichlorodifluoromethane	0.0011	0.0016	U
95-50-1	1,2-Dichlorobenzene	0.00041	0.0016	U	100-41-4	Ethylbenzene	0.00056	0.00081	U
107-06-2	1,2-Dichloroethane	0.00033	0.0016	U	98-82-8	Isopropylbenzene	0.00067	0.00081	U
78-87-5	1,2-Dichloropropane	0.00067	0.0016	U	179601-23-1	m&p-Xylenes	0.00098	0.00098	U
541-73-1	1,3-Dichlorobenzene	0.00045	0.0016	U	79-20-9	Methyl Acetate	0.00078	0.0016	U
106-46-7	1,4-Dichlorobenzene	0.00043	0.0016	U	108-87-2	Methylcyclohexane	0.00073	0.0016	U
123-91-1	1,4-Dioxane	0.039	0.081	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00061</b>	<b>0.0016</b>	<b>0.0024</b>
<b>78-93-3</b>	<b>2-Butanone</b>	<b>0.00098</b>	<b>0.0016</b>	<b>0.0010J</b>	1634-04-4	Methyl-t-butyl ether	0.00044	0.00081	U
591-78-6	2-Hexanone	0.00069	0.0016	U	95-47-6	o-Xylene	0.00058	0.00081	U
108-10-1	4-Methyl-2-Pentanone	0.00047	0.0016	U	100-42-5	Styrene	0.00045	0.0016	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0055</b>	<b>0.0081</b>	<b>0.044</b>	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.00080</b>	<b>0.0016</b>	<b>0.0045</b>
71-43-2	Benzene	0.00059	0.00081	U	108-88-3	Toluene	0.00054	0.00081	U
74-97-5	Bromochloromethane	0.00057	0.0016	U	156-60-5	trans-1,2-Dichloroethene	0.00098	0.0016	U
75-27-4	Bromodichloromethane	0.00038	0.0016	U	10061-02-6	trans-1,3-Dichloropropene	0.00038	0.0016	U
75-25-2	Bromoform	0.00027	0.0016	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00067</b>	<b>0.0016</b>	<b>0.0021</b>
74-83-9	Bromomethane	0.0013	0.0016	U	75-69-4	Trichlorofluoromethane	0.00096	0.0016	U
75-15-0	Carbon Disulfide	0.0028	0.0028	U	75-01-4	Vinyl Chloride	0.00099	0.0016	U
1330-20-7	Xylenes (Total)	0.00058	0.00081	U					

Worksheet #: 569452

**Total Target Concentration 0.067**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-004  
 Data File: 11M83439.D  
 Acq On : 10/ 1/20 19:51

Operator : WP  
 Sam Mult : 1 Vial# : 28  
 Misc : S,5G13

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:08  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-01-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.958	96	255865	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	214830	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	96325	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	71030	30.79	ug/l	0.00
Spiked Amount	30.000					Recovery = 102.63%
39) 1,2-Dichloroethane-d4	4.778	67	32485	32.12	ug/l	0.00
Spiked Amount	30.000					Recovery = 107.07%
66) Toluene-d8	5.787	98	264701	31.41	ug/l	0.00
Spiked Amount	30.000					Recovery = 104.70%
76) Bromofluorobenzene	7.167	174	81700	33.07	ug/l	0.00
Spiked Amount	30.000					Recovery = 110.23%
Target Compounds						
15) Methylene Chloride	3.366	84	6472	2.9767	ug/l	89
19) Acetone	3.006	43	24869	53.9473	ug/l	99
41) 2-Butanone	4.302	43	1193	1.2364	ug/l	100
49) Trichloroethene	5.157	130	7122	2.5344	ug/l	89
60) 1,1,2-Trichloroethane	6.022	97	3146	1.6703	ug/l	77
65) Tetrachloroethene	6.115	164	12527	5.4883	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.218	83	26617	14.8422	ug/l	97
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

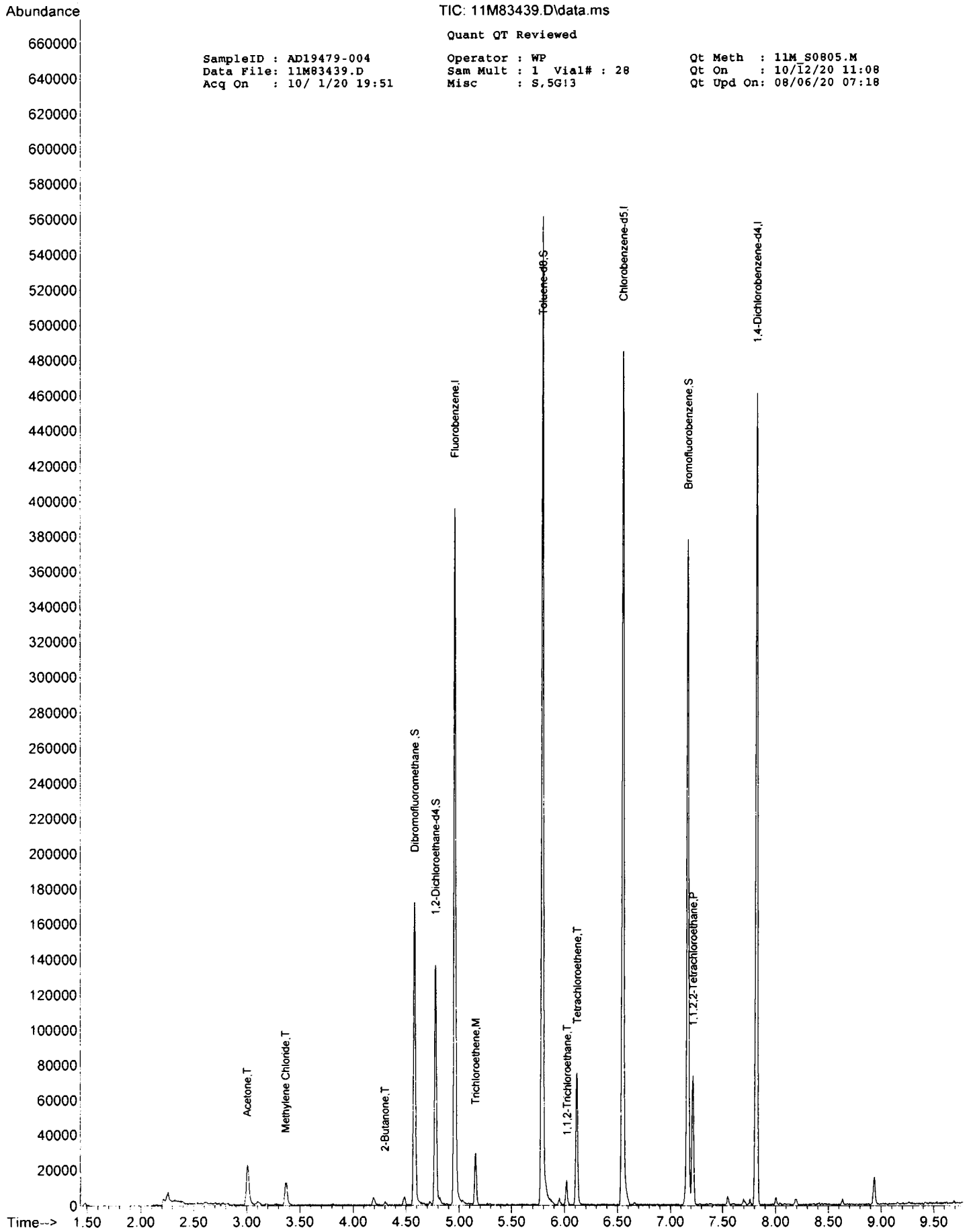
TIC: 11M83439.D\data.ms

Quant QT Reviewed

SampleID : AD19479-004  
Data File: 11M83439.D  
Acq On : 10/ 1/20 19:51

Operator : WP  
Sam Mult : 1 Vial# : 28  
Misc : S,5G13

Qt Meth : 11M\_S0805.M  
Qt On : 10/12/20 11:08  
Qt Upd On: 08/06/20 07:18



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-006  
 Client Id: HSI-SS-03 (0.5-1')  
 Data File: 11M83438.D  
 Analysis Date: 10/01/20 19:32  
 Date Rec/Extracted: 09/28/20-NA  
 Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
 Matrix: Soil  
 Initial Vol: 5.66g  
 Final Vol: NA  
 Dilution: 0.883  
 Solids: 81

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0010	0.0022	U	56-23-5	Carbon Tetrachloride	0.0011	0.0022	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00049</b>	<b>0.0022</b>	<b>0.0065</b>	108-90-7	Chlorobenzene	0.00068	0.0022	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0015	0.0022	U	75-00-3	Chloroethane	0.0021	0.0022	U
79-00-5	1,1,2-Trichloroethane	0.00050	0.0022	U	67-66-3	Chloroform	0.0015	0.0022	U
75-34-3	1,1-Dichloroethane	0.00095	0.0022	U	74-87-3	Chloromethane	0.0013	0.0022	U
75-35-4	1,1-Dichloroethene	0.0013	0.0022	U	156-59-2	cis-1,2-Dichloroethene	0.00088	0.0022	U
87-61-6	1,2,3-Trichlorobenzene	0.00060	0.0022	U	10061-01-5	cis-1,3-Dichloropropene	0.00058	0.0022	U
120-82-1	1,2,4-Trichlorobenzene	0.00069	0.0022	U	110-82-7	Cyclohexane	0.0013	0.0022	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00060	0.0022	U	124-48-1	Dibromochloromethane	0.00047	0.0022	U
106-93-4	1,2-Dibromoethane	0.00053	0.0011	U	75-71-8	Dichlorodifluoromethane	0.0015	0.0022	U
95-50-1	1,2-Dichlorobenzene	0.00056	0.0022	U	100-41-4	Ethylbenzene	0.00075	0.0011	U
107-06-2	1,2-Dichloroethane	0.00045	0.0022	U	98-82-8	Isopropylbenzene	0.00091	0.0011	U
78-87-5	1,2-Dichloropropane	0.00089	0.0022	U	179601-23-1	m&p-Xylenes	0.0013	0.0013	U
541-73-1	1,3-Dichlorobenzene	0.00060	0.0022	U	79-20-9	Methyl Acetate	0.0010	0.0022	U
106-46-7	1,4-Dichlorobenzene	0.00058	0.0022	U	108-87-2	Methylcyclohexane	0.00098	0.0022	U
123-91-1	1,4-Dioxane	0.053	0.11	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00082</b>	<b>0.0022</b>	<b>0.0057</b>
78-93-3	2-Butanone	0.0013	0.0022	U	1634-04-4	Methyl-t-butyl ether	0.00059	0.0011	U
591-78-6	2-Hexanone	0.00093	0.0022	U	95-47-6	o-Xylene	0.00077	0.0011	U
108-10-1	4-Methyl-2-Pentanone	0.00063	0.0022	U	100-42-5	Styrene	0.00060	0.0022	U
67-64-1	Acetone	0.0074	0.011	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.0011</b>	<b>0.0022</b>	<b>0.024</b>
71-43-2	Benzene	0.00080	0.0011	U	108-88-3	Toluene	0.00072	0.0011	U
74-97-5	Bromochloromethane	0.00076	0.0022	U	156-60-5	trans-1,2-Dichloroethene	0.0013	0.0022	U
75-27-4	Bromodichloromethane	0.00051	0.0022	U	10061-02-6	trans-1,3-Dichloropropene	0.00051	0.0022	U
75-25-2	Bromoform	0.00036	0.0022	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00089</b>	<b>0.0022</b>	<b>0.0072</b>
74-83-9	Bromomethane	0.0017	0.0022	U	75-69-4	Trichlorofluoromethane	0.0013	0.0022	U
75-15-0	Carbon Disulfide	0.0037	0.0037	U	75-01-4	Vinyl Chloride	0.0013	0.0022	U
1330-20-7	Xylenes (Total)	0.00077	0.0011	U					

Worksheet #: 569452

**Total Target Concentration 0.043**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-006  
 Data File: 11M83438.D  
 Acq On : 10/ 1/20 19:32

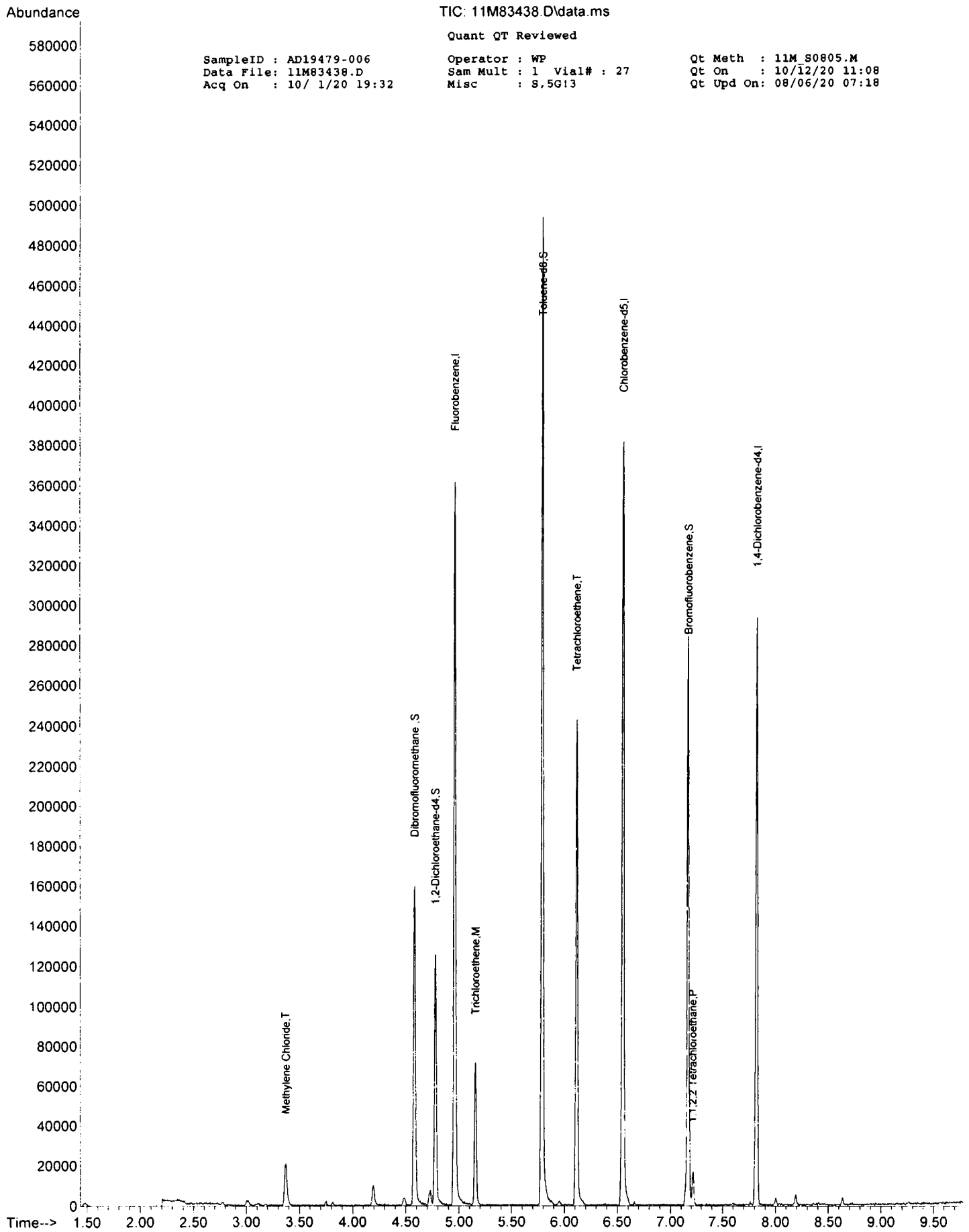
Operator : WP  
 Sam Mult : 1 Vial# : 27  
 Misc : S,5G!3

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:08  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-01-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.958	96	239355	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.549	117	177603	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	60306	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	67524	31.29	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.30%
39) 1,2-Dichloroethane-d4	4.778	67	29707	31.40	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.67%
66) Toluene-d8	5.787	98	239223	34.34	ug/l	0.00	
Spiked Amount	30.000						Recovery = 114.47%
76) Bromofluorobenzene	7.170	174	60826	39.33	ug/l	0.00	
Spiked Amount	30.000						Recovery = 131.10%
Target Compounds							
15) Methylene Chloride	3.373	84	10656	5.2391	ug/l		Qvalue 89
49) Trichloroethene	5.157	130	17371	6.6078	ug/l		91
65) Tetrachloroethene	6.112	164	40789	21.6160	ug/l		99
75) 1,1,2,2-Tetrachloroethane	7.215	83	6650	5.9230	ug/l		88
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19479-008

Client Id: HSI-SS-04 (0.5-1')

Data File: 11M83394.D

Analysis Date: 10/01/20 00:20

Date Rec/Extracted: 09/28/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 6.07g

Final Vol: NA

Dilution: 0.824

Solids: 91

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00083	0.0018	U	56-23-5	Carbon Tetrachloride	0.00088	0.0018	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00041	0.0018	U	108-90-7	Chlorobenzene	0.00056	0.0018	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0013	0.0018	U	75-00-3	Chloroethane	0.0018	0.0018	U
79-00-5	1,1,2-Trichloroethane	0.00042	0.0018	U	67-66-3	Chloroform	0.0012	0.0018	U
75-34-3	1,1-Dichloroethane	0.00079	0.0018	U	74-87-3	Chloromethane	0.0011	0.0018	U
75-35-4	1,1-Dichloroethene	0.0010	0.0018	U	156-59-2	cis-1,2-Dichloroethene	0.00073	0.0018	U
87-61-6	1,2,3-Trichlorobenzene	0.00050	0.0018	U	10061-01-5	cis-1,3-Dichloropropene	0.00048	0.0018	U
120-82-1	1,2,4-Trichlorobenzene	0.00057	0.0018	U	110-82-7	Cyclohexane	0.0011	0.0018	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00050	0.0018	U	124-48-1	Dibromochloromethane	0.00039	0.0018	U
106-93-4	1,2-Dibromoethane	0.00044	0.00091	U	75-71-8	Dichlorodifluoromethane	0.0013	0.0018	U
95-50-1	1,2-Dichlorobenzene	0.00046	0.0018	U	100-41-4	Ethylbenzene	0.00062	0.00091	U
107-06-2	1,2-Dichloroethane	0.00037	0.0018	U	98-82-8	Isopropylbenzene	0.00075	0.00091	U
78-87-5	1,2-Dichloropropane	0.00074	0.0018	U	179601-23-1	m&p-Xylenes	0.0011	0.0011	U
541-73-1	1,3-Dichlorobenzene	0.00050	0.0018	U	79-20-9	Methyl Acetate	0.00087	0.0018	U
106-46-7	1,4-Dichlorobenzene	0.00048	0.0018	U	108-87-2	Methylcyclohexane	0.00081	0.0018	U
123-91-1	1,4-Dioxane	0.044	0.091	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00068</b>	<b>0.0018</b>	<b>0.0049</b>
78-93-3	2-Butanone	0.0011	0.0018	U	1634-04-4	Methyl-t-butyl ether	0.00049	0.00091	U
591-78-6	2-Hexanone	0.00077	0.0018	U	95-47-6	o-Xylene	0.00064	0.00091	U
108-10-1	4-Methyl-2-Pentanone	0.00053	0.0018	U	100-42-5	Styrene	0.00050	0.0018	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0061</b>	<b>0.0091</b>	<b>0.011</b>	127-18-4	Tetrachloroethene	0.00089	0.0018	U
71-43-2	Benzene	0.00066	0.00091	U	108-88-3	Toluene	0.00060	0.00091	U
74-97-5	Bromochloromethane	0.00063	0.0018	U	156-60-5	trans-1,2-Dichloroethene	0.0011	0.0018	U
75-27-4	Bromodichloromethane	0.00043	0.0018	U	10061-02-6	trans-1,3-Dichloropropene	0.00043	0.0018	U
75-25-2	Bromoform	0.00030	0.0018	U	79-01-6	Trichloroethene	0.00074	0.0018	U
74-83-9	Bromomethane	0.0014	0.0018	U	75-69-4	Trichlorofluoromethane	0.0011	0.0018	U
75-15-0	Carbon Disulfide	0.0031	0.0031	U	75-01-4	Vinyl Chloride	0.0011	0.0018	U
1330-20-7	Xylenes (Total)	0.00064	0.00091	U					

Worksheet #: 569452

**Total Target Concentration 0.016**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-008  
 Data File: 11M83394.D  
 Acq On : 10/ 1/20 00:20

Operator : WP  
 Sam Mult : 1 Vial# : 57  
 Misc : S,5G!2

Qt Meth : 11M S0805.M  
 Qt On : 10/12/20 11:09  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\09-3020\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.961	96	233785	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.549	117	203430	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	95982	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	65880	31.25	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.17%
39) 1,2-Dichloroethane-d4	4.778	67	30527	33.03	ug/l	0.00	
Spiked Amount	30.000						Recovery = 110.10%
66) Toluene-d8	5.787	98	246457	30.89	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.97%
76) Bromofluorobenzene	7.170	174	77844	31.63	ug/l	0.00	
Spiked Amount	30.000						Recovery = 105.43%
Target Compounds							
15) Methylene Chloride	3.376	84	10732	5.4022	ug/l	88	Qvalue
19) Acetone	3.012	43	5056	12.0036	ug/l	93	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



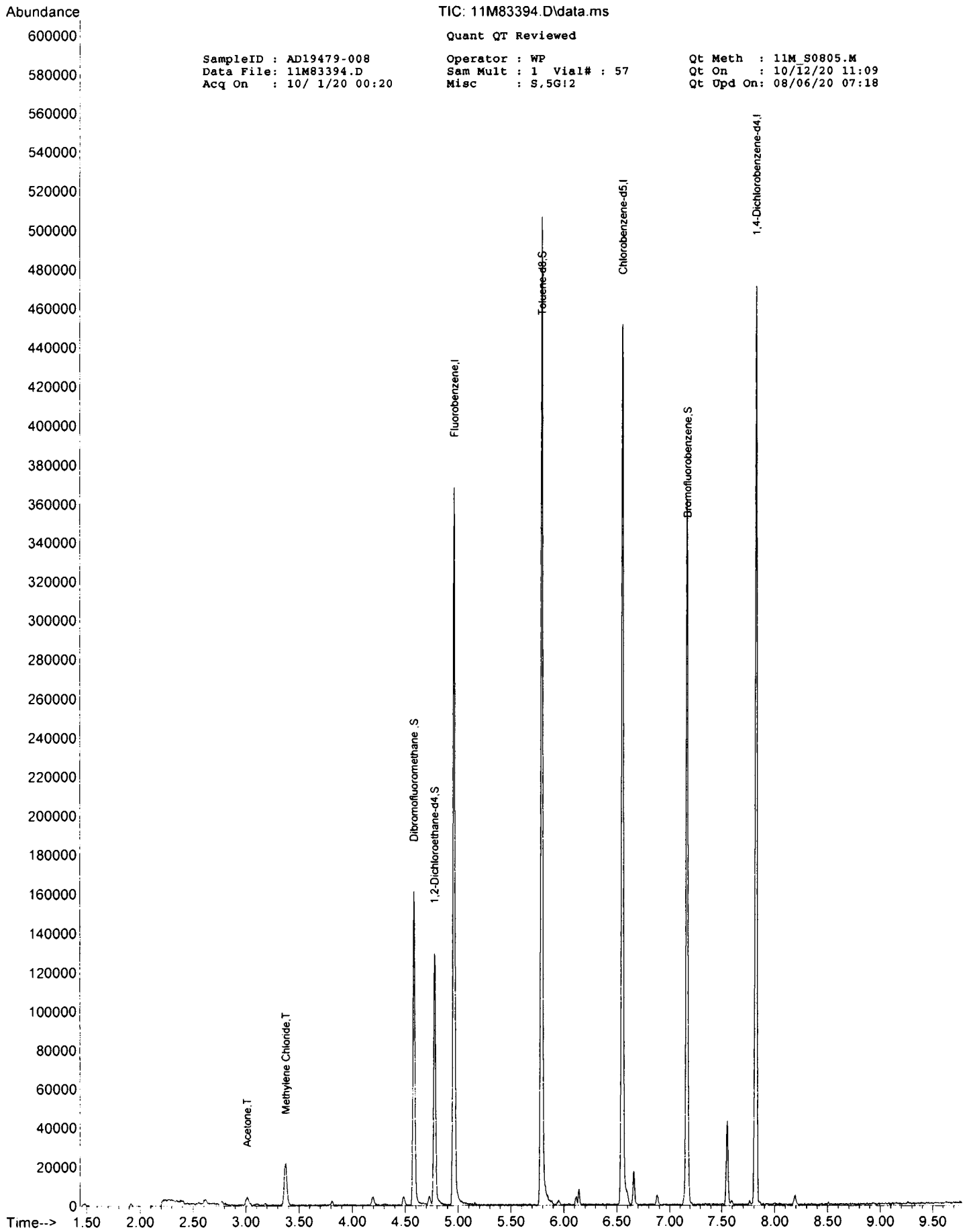
TIC: 11M83394.D\data.ms

Quant QT Reviewed

SampleID : AD19479-008  
Data File: 11M83394.D  
Acq On : 10/ 1/20 00:20

Operator : WP  
Sam Mult : 1 Vial# : 57  
Misc : S,5G12

Qt Meth : 11M\_S0805.M  
Qt On : 10/12/20 11:09  
Qt Upd On: 08/06/20 07:18



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-010      Method: EPA 8260D  
 Client Id: HSI-SS-05 (0.5-1')      Matrix: Soil  
 Data File: 11M83395.D      Initial Vol: 6.92g  
 Analysis Date: 10/01/20 00:39      Final Vol: NA  
 Date Rec/Extracted: 09/28/20-NA      Dilution: 0.723  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 90

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00074	0.0016	U	56-23-5	Carbon Tetrachloride	0.00078	0.0016	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00036</b>	<b>0.0016</b>	<b>0.011</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.00050</b>	<b>0.0016</b>	<b>0.00050J</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0011	0.0016	U	75-00-3	Chloroethane	0.0016	0.0016	U
79-00-5	1,1,2-Trichloroethane	0.00037	0.0016	U	67-66-3	Chloroform	0.0011	0.0016	U
75-34-3	1,1-Dichloroethane	0.00070	0.0016	U	74-87-3	Chloromethane	0.00099	0.0016	U
75-35-4	1,1-Dichloroethene	0.00092	0.0016	U	156-59-2	cis-1,2-Dichloroethene	0.00065	0.0016	U
87-61-6	1,2,3-Trichlorobenzene	0.00044	0.0016	U	10061-01-5	cis-1,3-Dichloropropene	0.00043	0.0016	U
120-82-1	1,2,4-Trichlorobenzene	0.00051	0.0016	U	110-82-7	Cyclohexane	0.00096	0.0016	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00044	0.0016	U	124-48-1	Dibromochloromethane	0.00035	0.0016	U
106-93-4	1,2-Dibromoethane	0.00039	0.00080	U	75-71-8	Dichlorodifluoromethane	0.0011	0.0016	U
95-50-1	1,2-Dichlorobenzene	0.00041	0.0016	U	100-41-4	Ethylbenzene	0.00055	0.00080	U
107-06-2	1,2-Dichloroethane	0.00033	0.0016	U	98-82-8	Isopropylbenzene	0.00067	0.00080	U
78-87-5	1,2-Dichloropropane	0.00066	0.0016	U	179601-23-1	m&p-Xylenes	0.00096	0.00096	U
541-73-1	1,3-Dichlorobenzene	0.00044	0.0016	U	79-20-9	Methyl Acetate	0.00077	0.0016	U
106-46-7	1,4-Dichlorobenzene	0.00043	0.0016	U	108-87-2	Methylcyclohexane	0.00072	0.0016	U
123-91-1	1,4-Dioxane	0.039	0.080	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00060</b>	<b>0.0016</b>	<b>0.0017</b>
78-93-3	2-Butanone	0.00096	0.0016	U	1634-04-4	Methyl-t-butyl ether	0.00043	0.00080	U
591-78-6	2-Hexanone	0.00068	0.0016	U	95-47-6	o-Xylene	0.00057	0.00080	U
108-10-1	4-Methyl-2-Pentanone	0.00047	0.0016	U	100-42-5	Styrene	0.00044	0.0016	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0054</b>	<b>0.0080</b>	<b>0.0069J</b>	127-18-4	Tetrachloroethene	0.00079	0.0016	U
71-43-2	Benzene	0.00059	0.00080	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00053</b>	<b>0.00080</b>	<b>0.00073J</b>
74-97-5	Bromochloromethane	0.00056	0.0016	U	156-60-5	trans-1,2-Dichloroethene	0.00096	0.0016	U
75-27-4	Bromodichloromethane	0.00038	0.0016	U	10061-02-6	trans-1,3-Dichloropropene	0.00038	0.0016	U
75-25-2	Bromoform	0.00026	0.0016	U	79-01-6	Trichloroethene	0.00066	0.0016	U
74-83-9	Bromomethane	0.0013	0.0016	U	75-69-4	Trichlorofluoromethane	0.00095	0.0016	U
75-15-0	Carbon Disulfide	0.0027	0.0027	U	75-01-4	Vinyl Chloride	0.00098	0.0016	U
1330-20-7	Xylenes (Total)	0.00057	0.00080	U					

Worksheet #: 569452

**Total Target Concentration 0.021**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-010  
 Data File: 11M83395.D  
 Acq On : 10/ 1/20 00:39

Operator : WP  
 Sam Mult : 1 Vial# : 58  
 Misc : S,5G!2

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:09  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\09-3020\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.961	96	282735	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.550	117	206570	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	109114	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	79833	31.31	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.37%
39) 1,2-Dichloroethane-d4	4.778	67	34456	30.83	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.77%
66) Toluene-d8	5.788	98	256842	31.70	ug/l	0.00	
Spiked Amount	30.000						Recovery = 105.67%
76) Bromofluorobenzene	7.167	174	83537	29.85	ug/l	0.00	
Spiked Amount	30.000						Recovery = 99.50%
Target Compounds							
15) Methylene Chloride	3.370	84	5111	2.1273	ug/l	82	
19) Acetone	3.013	43	4361	8.5611	ug/l	76	
67) Toluene	5.826	92	5109	0.9100	ug/l	96	
69) Chlorobenzene	6.566	112	3988	0.6221	ug/l	100	
75) 1,1,2,2-Tetrachloroethane	7.218	83	27601	13.5870	ug/l	98	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

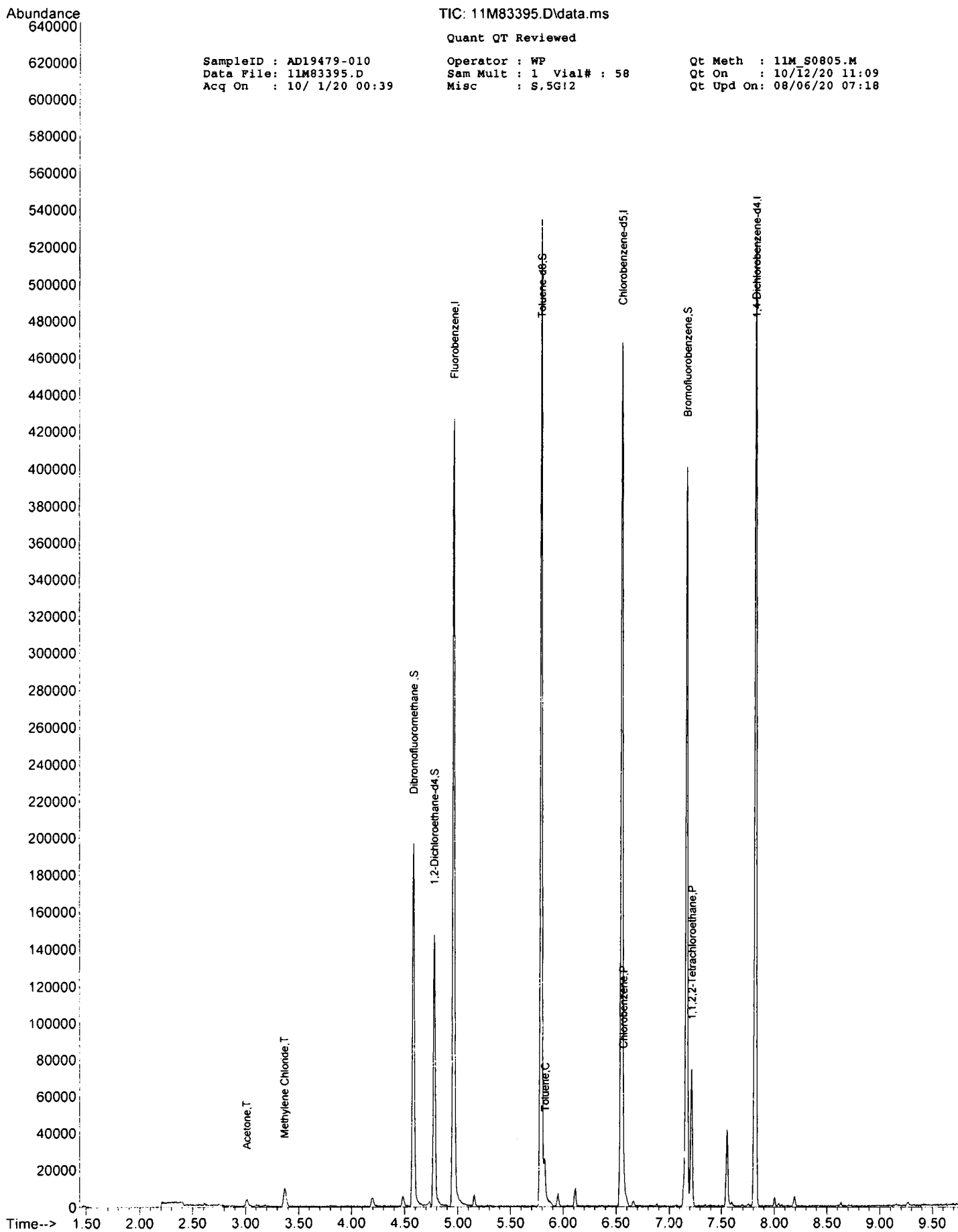
TIC: 11M83395.D\data.ms

Quant QT Reviewed

SampleID : AD19479-010  
Data File: 11M83395.D  
Acq On : 10/ 1/20 00:39

Operator : WP  
Sam Mult : 1 Vial# : 58  
Misc : S,5G12

Qt Meth : 11M\_S0805.M  
Qt On : 10/12/20 11:09  
Qt Upd On: 08/06/20 07:18



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-012  
 Client Id: HSI-SS-06 (0.5-1')  
 Data File: 11M83440.D  
 Analysis Date: 10/01/20 20:11  
 Date Rec/Extracted: 09/28/20-NA  
 Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
 Matrix: Soil  
 Initial Vol: 5.44g  
 Final Vol: NA  
 Dilution: 0.919  
 Solids: 91

				Units: mg/Kg								
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc			
71-55-6	1,1,1-Trichloroethane	0.00093	0.0020	U	56-23-5	Carbon Tetrachloride	0.00098	0.0020	U			
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00045</b>	<b>0.0020</b>	<b>0.0039</b>	108-90-7	Chlorobenzene	0.00063	0.0020	U			
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0014	0.0020	U	75-00-3	Chloroethane	0.0020	0.0020	U			
79-00-5	1,1,2-Trichloroethane	0.00046	0.0020	U	67-66-3	Chloroform	0.0014	0.0020	U			
75-34-3	1,1-Dichloroethane	0.00088	0.0020	U	74-87-3	Chloromethane	0.0012	0.0020	U			
75-35-4	1,1-Dichloroethene	0.0012	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.00082	0.0020	U			
87-61-6	1,2,3-Trichlorobenzene	0.00056	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.00054	0.0020	U			
120-82-1	1,2,4-Trichlorobenzene	0.00064	0.0020	U	110-82-7	Cyclohexane	0.0012	0.0020	U			
96-12-8	1,2-Dibromo-3-Chloropropa	0.00056	0.0020	U	124-48-1	Dibromochloromethane	0.00043	0.0020	U			
106-93-4	1,2-Dibromoethane	0.00049	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0014	0.0020	U			
95-50-1	1,2-Dichlorobenzene	0.00052	0.0020	U	100-41-4	Ethylbenzene	0.00070	0.0010	U			
107-06-2	1,2-Dichloroethane	0.00041	0.0020	U	98-82-8	Isopropylbenzene	0.00084	0.0010	U			
78-87-5	1,2-Dichloropropane	0.00083	0.0020	U	179601-23-1	m&p-Xylenes	0.0012	0.0012	U			
541-73-1	1,3-Dichlorobenzene	0.00056	0.0020	U	79-20-9	Methyl Acetate	0.00097	0.0020	U			
106-46-7	1,4-Dichlorobenzene	0.00054	0.0020	U	<b>108-87-2</b>	<b>Methylcyclohexane</b>	<b>0.00091</b>	<b>0.0020</b>	<b>0.0024</b>			
123-91-1	1,4-Dioxane	0.049	0.10	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00076</b>	<b>0.0020</b>	<b>0.0035</b>			
<b>78-93-3</b>	<b>2-Butanone</b>	<b>0.0012</b>	<b>0.0020</b>	<b>0.0035</b>	1634-04-4	Methyl-t-butyl ether	0.00055	0.0010	U			
591-78-6	2-Hexanone	0.00086	0.0020	U	95-47-6	o-Xylene	0.00072	0.0010	U			
108-10-1	4-Methyl-2-Pentanone	0.00059	0.0020	U	<b>100-42-5</b>	<b>Styrene</b>	<b>0.00056</b>	<b>0.0020</b>	<b>0.36</b>			
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0068</b>	<b>0.010</b>	<b>0.064</b>	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.00099</b>	<b>0.0020</b>	<b>0.0035</b>			
71-43-2	Benzene	0.00074	0.0010	U	108-88-3	Toluene	0.00067	0.0010	U			
74-97-5	Bromochloromethane	0.00071	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0012	0.0020	U			
75-27-4	Bromodichloromethane	0.00047	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.00047	0.0020	U			
75-25-2	Bromoform	0.00033	0.0020	U	79-01-6	Trichloroethene	0.00083	0.0020	U			
74-83-9	Bromomethane	0.0016	0.0020	U	75-69-4	Trichlorofluoromethane	0.0012	0.0020	U			
75-15-0	Carbon Disulfide	0.0034	0.0034	U	75-01-4	Vinyl Chloride	0.0012	0.0020	U			
1330-20-7	Xylenes (Total)	0.00072	0.0010	U								

Worksheet #: 569452

**Total Target Concentration 0.44**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-012  
 Data File: 11M83440.D  
 Acq On : 10/ 1/20 20:11

Operator : WP  
 Sam Mult : 1 Vial# : 29  
 Misc : S,5G13

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:09  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-01-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.958	96	254918	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.550	117	207117	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	89536	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	70854	30.83	ug/l	0.00
Spiked Amount	30.000		Recovery	=	102.77%	
39) 1,2-Dichloroethane-d4	4.778	67	32783	32.53	ug/l	0.00
Spiked Amount	30.000		Recovery	=	108.43%	
66) Toluene-d8	5.788	98	263422	32.43	ug/l	0.00
Spiked Amount	30.000		Recovery	=	108.10%	
76) Bromofluorobenzene	7.167	174	86212	37.55	ug/l	0.00
Spiked Amount	30.000		Recovery	=	125.17%	
Target Compounds						
15) Methylene Chloride	3.366	84	7515	3.4692	ug/l	94
19) Acetone	3.006	43	29092	63.3425	ug/l	93
41) 2-Butanone	4.299	43	3300	3.4373	ug/l	87
46) Methylcyclohexane	5.267	83	7679	2.3338	ug/l	93
65) Tetrachloroethene	6.112	164	7581	3.4450	ug/l	92
75) 1,1,2,2-Tetrachloroethane	7.215	83	6496	3.8970	ug/l	95
77) Styrene	6.881	104	1622792	354.0657	ug/l	88
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

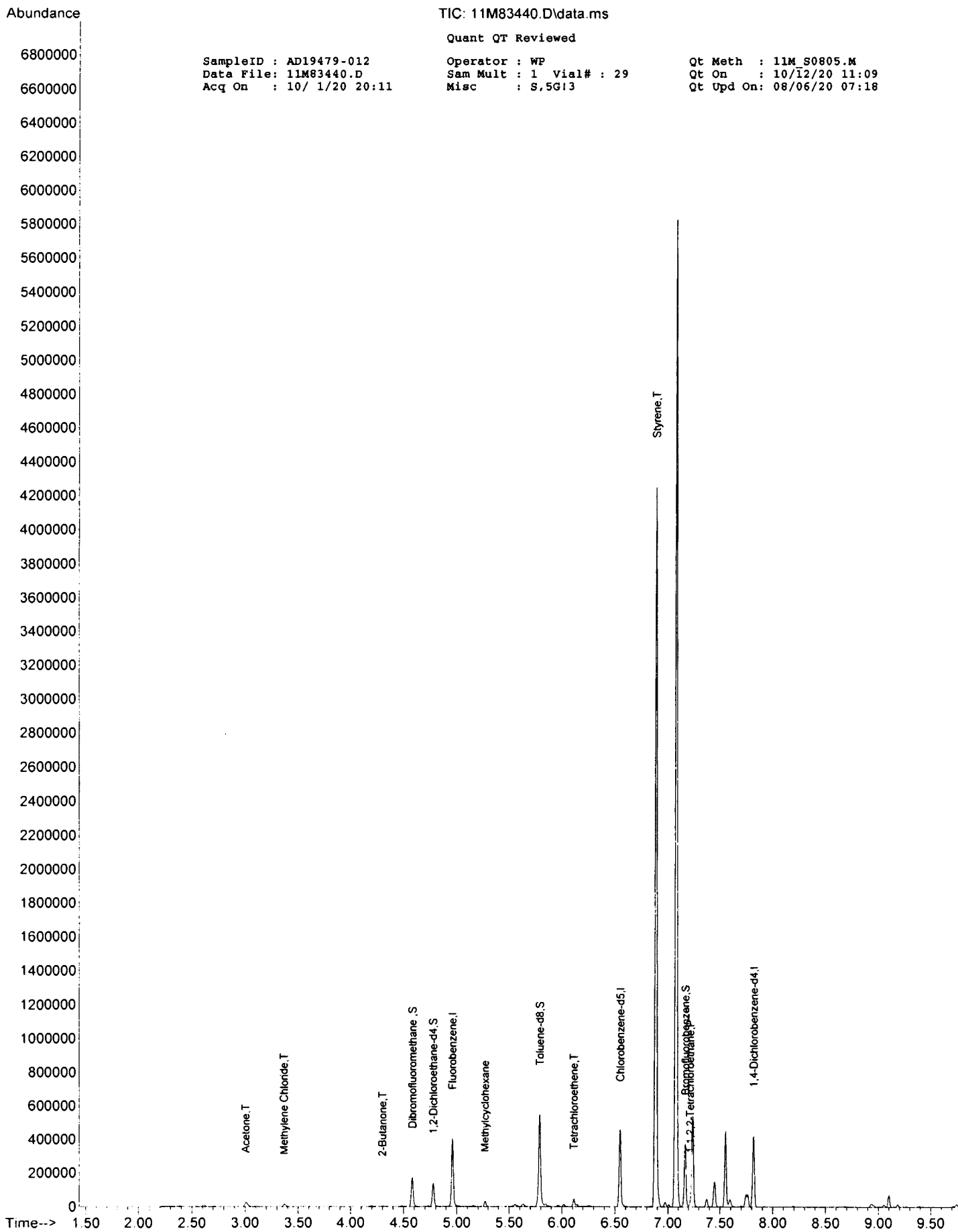
TIC: 11M83440.D\data.ms

Quant QT Reviewed

SampleID : AD19479-012  
Data File: 11M83440.D  
Acq On : 10/ 1/20 20:11

Operator : WP  
Sam Mult : 1 Vial# : 29  
Misc : S,5G13

Qt Meth : 11M\_S0805.M  
Qt On : 10/12/20 11:09  
Qt Upd On: 08/06/20 07:18



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-014  
Client Id: HSI-SS-07 (0.5-1')  
Data File: 11M83436.D  
Analysis Date: 10/01/20 18:52  
Date Rec/Extracted: 09/28/20-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Soil  
Initial Vol: 6.13g  
Final Vol: NA  
Dilution: 0.816  
Solids: 71

Units: mg/Kg										
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc	
71-55-6	1,1,1-Trichloroethane	0.0011	0.0023	U	56-23-5	Carbon Tetrachloride	0.0011	0.0023	U	
79-34-5	1,1,2,2-Tetrachloroethane	0.00052	0.0023	U	108-90-7	Chlorobenzene	0.00071	0.0023	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0016	0.0023	U	75-00-3	Chloroethane	0.0022	0.0023	U	
79-00-5	1,1,2-Trichloroethane	0.00053	0.0023	U	67-66-3	Chloroform	0.0016	0.0023	U	
75-34-3	1,1-Dichloroethane	0.0010	0.0023	U	74-87-3	Chloromethane	0.0014	0.0023	U	
75-35-4	1,1-Dichloroethene	0.0013	0.0023	U	156-59-2	cis-1,2-Dichloroethene	0.00093	0.0023	U	
87-61-6	1,2,3-Trichlorobenzene	0.00063	0.0023	U	10061-01-5	cis-1,3-Dichloropropene	0.00061	0.0023	U	
120-82-1	1,2,4-Trichlorobenzene	0.00072	0.0023	U	110-82-7	Cyclohexane	0.0014	0.0023	U	
96-12-8	1,2-Dibromo-3-Chloropropa	0.00063	0.0023	U	124-48-1	Dibromochloromethane	0.00049	0.0023	U	
106-93-4	1,2-Dibromoethane	0.00056	0.0011	U	75-71-8	Dichlorodifluoromethane	0.0016	0.0023	U	
95-50-1	1,2-Dichlorobenzene	0.00059	0.0023	U	100-41-4	Ethylbenzene	0.00079	0.0011	U	
107-06-2	1,2-Dichloroethane	0.00047	0.0023	U	98-82-8	Isopropylbenzene	0.00095	0.0011	U	
78-87-5	1,2-Dichloropropane	0.00094	0.0023	U	179601-23-1	m&p-Xylenes	0.0014	0.0014	U	
541-73-1	1,3-Dichlorobenzene	0.00063	0.0023	U	79-20-9	Methyl Acetate	0.0011	0.0023	U	
106-46-7	1,4-Dichlorobenzene	0.00061	0.0023	U	108-87-2	Methylcyclohexane	0.0010	0.0023	U	
123-91-1	1,4-Dioxane	0.056	0.11	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00086</b>	<b>0.0023</b>	<b>0.0022J</b>	
<b>78-93-3</b>	<b>2-Butanone</b>	<b>0.0014</b>	<b>0.0023</b>	<b>0.14</b>	1634-04-4	Methyl-t-butyl ether	0.00062	0.0011	U	
591-78-6	2-Hexanone	0.00098	0.0023	U	95-47-6	o-Xylene	0.00082	0.0011	U	
108-10-1	4-Methyl-2-Pentanone	0.00067	0.0023	U	100-42-5	Styrene	0.00063	0.0023	U	
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0078</b>	<b>0.011</b>	<b>0.74</b>	127-18-4	Tetrachloroethene	0.0011	0.0023	U	
71-43-2	Benzene	0.00084	0.0011	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00076</b>	<b>0.0011</b>	<b>0.070</b>	
74-97-5	Bromochloromethane	0.00080	0.0023	U	156-60-5	trans-1,2-Dichloroethene	0.0014	0.0023	U	
75-27-4	Bromodichloromethane	0.00054	0.0023	U	10061-02-6	trans-1,3-Dichloropropene	0.00054	0.0023	U	
75-25-2	Bromoform	0.00038	0.0023	U	79-01-6	Trichloroethene	0.00094	0.0023	U	
74-83-9	Bromomethane	0.0018	0.0023	U	<b>75-69-4</b>	<b>Trichlorofluoromethane</b>	<b>0.0014</b>	<b>0.0023</b>	<b>0.0092</b>	
75-15-0	Carbon Disulfide	0.0039	0.0039	U	75-01-4	Vinyl Chloride	0.0014	0.0023	U	
1330-20-7	Xylenes (Total)	0.00082	0.0011	U						

Worksheet #: 569452

**Total Target Concentration 0.96**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.



SampleID : AD19479-014  
 Data File: 11M83436.D  
 Acq On : 10/ 1/20 18:52

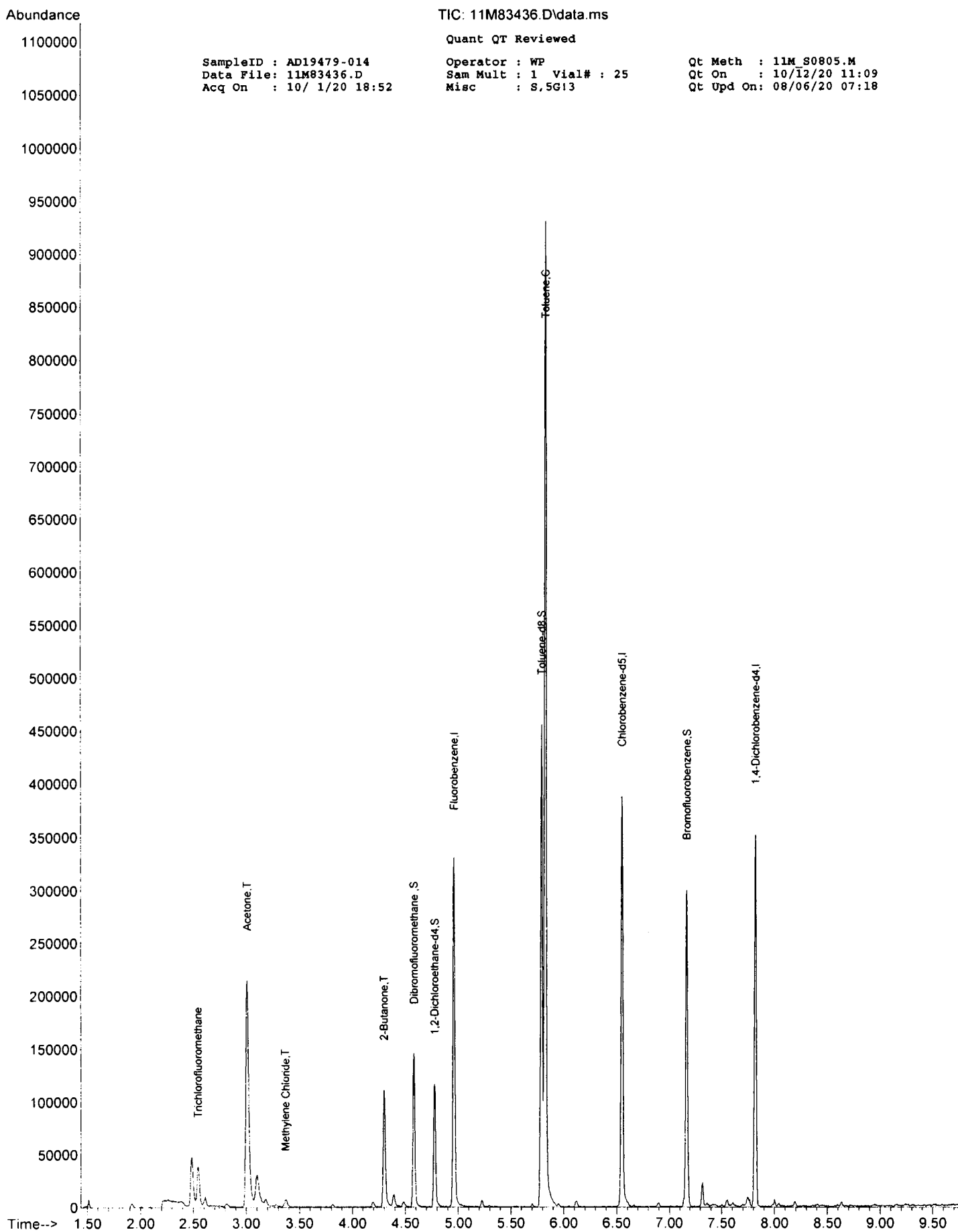
Operator : WP  
 Sam Mult : 1 Vial# : 25  
 Misc : S,SG13

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:09  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-01-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIOn	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.961	96	219691	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.546	117	174839	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	73113	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	61029	30.81	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.70%
39) 1,2-Dichloroethane-d4	4.778	67	28278	32.56	ug/l	0.00	
Spiked Amount	30.000						Recovery = 108.53%
66) Toluene-d8	5.787	98	217240	31.68	ug/l	0.00	
Spiked Amount	30.000						Recovery = 105.60%
76) Bromofluorobenzene	7.167	174	65756	35.07	ug/l	0.00	
Spiked Amount	30.000						Recovery = 116.90%
Target Compounds							
11) Trichlorofluoromethane	2.543	101	27222	8.0385	ug/l	95	Qvalue
15) Methylene Chloride	3.369	84	3570	1.9123	ug/l	71	
19) Acetone	3.009	43	255014	644.2792	ug/l	98	
41) 2-Butanone	4.299	43	93269	121.1500	ug/l	97	
67) Toluene	5.823	92	290628	61.1577	ug/l	99	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-016  
Client Id: HSI-SS-08 (0.5-1')  
Data File: 11M83437.D  
Analysis Date: 10/01/20 19:12  
Date Rec/Extracted: 09/28/20-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Soil  
Initial Vol: 6.53g  
Final Vol: NA  
Dilution: 0.766  
Solids: 89

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00079	0.0017	U	56-23-5	Carbon Tetrachloride	0.00083	0.0017	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00039</b>	<b>0.0017</b>	<b>0.0015J</b>	108-90-7	Chlorobenzene	0.00053	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0012	0.0017	U	75-00-3	Chloroethane	0.0017	0.0017	U
<b>79-00-5</b>	<b>1,1,2-Trichloroethane</b>	<b>0.00040</b>	<b>0.0017</b>	<b>0.00066J</b>	67-66-3	Chloroform	0.0012	0.0017	U
75-34-3	1,1-Dichloroethane	0.00075	0.0017	U	74-87-3	Chloromethane	0.0011	0.0017	U
75-35-4	1,1-Dichloroethene	0.00099	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.00070	0.0017	U
87-61-6	1,2,3-Trichlorobenzene	0.00047	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.00046	0.0017	U
120-82-1	1,2,4-Trichlorobenzene	0.00054	0.0017	U	110-82-7	Cyclohexane	0.0010	0.0017	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00047	0.0017	U	124-48-1	Dibromochloromethane	0.00037	0.0017	U
106-93-4	1,2-Dibromoethane	0.00042	0.00086	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.00044	0.0017	U	100-41-4	Ethylbenzene	0.00059	0.00086	U
107-06-2	1,2-Dichloroethane	0.00035	0.0017	U	98-82-8	Isopropylbenzene	0.00071	0.00086	U
78-87-5	1,2-Dichloropropane	0.00071	0.0017	U	179601-23-1	m&p-Xylenes	0.0010	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.00047	0.0017	U	79-20-9	Methyl Acetate	0.00083	0.0017	U
106-46-7	1,4-Dichlorobenzene	0.00046	0.0017	U	108-87-2	Methylcyclohexane	0.00077	0.0017	U
123-91-1	1,4-Dioxane	0.042	0.086	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00065</b>	<b>0.0017</b>	<b>0.0071</b>
78-93-3	2-Butanone	0.0010	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00046	0.00086	U
591-78-6	2-Hexanone	0.00073	0.0017	U	95-47-6	o-Xylene	0.00061	0.00086	U
108-10-1	4-Methyl-2-Pentanone	0.00050	0.0017	U	100-42-5	Styrene	0.00047	0.0017	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0058</b>	<b>0.0086</b>	<b>0.0074J</b>	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.00084</b>	<b>0.0017</b>	<b>0.0011J</b>
71-43-2	Benzene	0.00063	0.00086	U	108-88-3	Toluene	0.00057	0.00086	U
74-97-5	Bromochloromethane	0.00060	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0010	0.0017	U
75-27-4	Bromodichloromethane	0.00040	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.00040	0.0017	U
75-25-2	Bromoform	0.00028	0.0017	U	79-01-6	Trichloroethene	0.00071	0.0017	U
74-83-9	Bromomethane	0.0014	0.0017	U	75-69-4	Trichlorofluoromethane	0.0010	0.0017	U
75-15-0	Carbon Disulfide	0.0029	0.0029	U	75-01-4	Vinyl Chloride	0.0010	0.0017	U
1330-20-7	Xylenes (Total)	0.00061	0.00086	U					

Worksheet #: 569452

**Total Target Concentration 0.018**

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-016  
 Data File: 11M83437.D  
 Acq On : 10/ 1/20 19:12

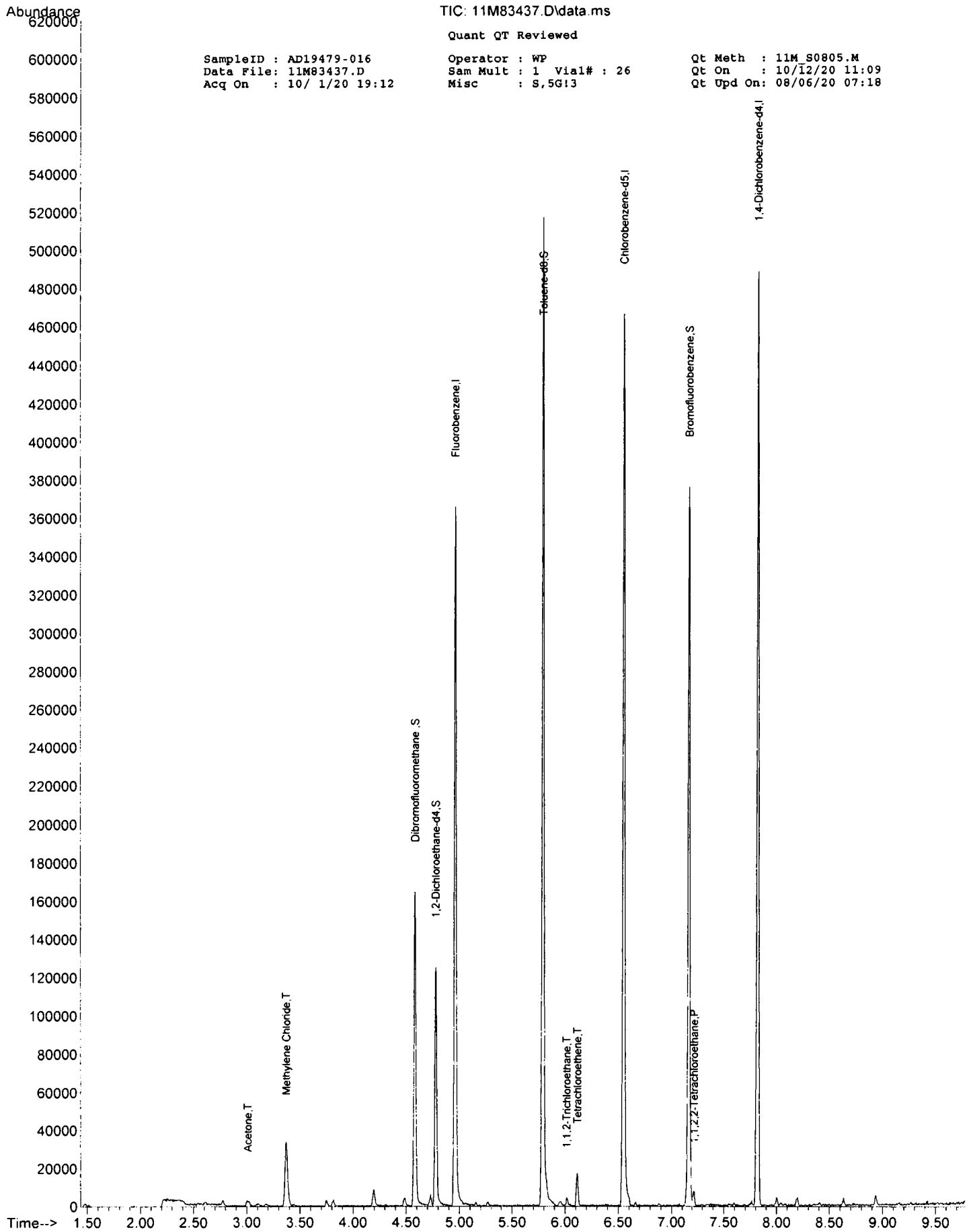
Operator : WP  
 Sam Mult : 1 Vial# : 26  
 Misc : S,SG!3

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:09  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GCMSData\2020\GCMS\_11\Data\10-01-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.958	96	240067	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.546	117	212004	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	101352	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	66664	30.80	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.67%
39) 1,2-Dichloroethane-d4	4.778	67	30126	31.75	ug/l	0.00	
Spiked Amount	30.000						Recovery = 105.83%
66) Toluene-d8	5.787	98	252407	30.35	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.17%
76) Bromofluorobenzene	7.167	174	82433	31.72	ug/l	0.00	
Spiked Amount	30.000						Recovery = 105.73%
Target Compounds							
15) Methylene Chloride	3.373	84	16804	8.2373	ug/l	91	Qvalue
19) Acetone	3.012	43	3735	8.6354	ug/l	83	
60) 1,1,2-Trichloroethane	6.012	97	1427	0.7677	ug/l	65	
65) Tetrachloroethene	6.115	164	2945	1.3074	ug/l	95	
75) 1,1,2,2-Tetrachloroethane	7.218	83	3367	1.7844	ug/l	86	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-018  
 Client Id: HSI-SS-09 (0.5-1')  
 Data File: 11M83399.D  
 Analysis Date: 10/01/20 01:59  
 Date Rec/Extracted: 09/28/20-NA  
 Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
 Matrix: Soil  
 Initial Vol: 4.85g  
 Final Vol: NA  
 Dilution: 1.03  
 Solids: 93

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0010	0.0022	U	56-23-5	Carbon Tetrachloride	0.0011	0.0022	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00050	0.0022	U	108-90-7	Chlorobenzene	0.00069	0.0022	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0015	0.0022	U	75-00-3	Chloroethane	0.0022	0.0022	U
79-00-5	1,1,2-Trichloroethane	0.00051	0.0022	U	67-66-3	Chloroform	0.0015	0.0022	U
75-34-3	1,1-Dichloroethane	0.00096	0.0022	U	74-87-3	Chloromethane	0.0014	0.0022	U
75-35-4	1,1-Dichloroethene	0.0013	0.0022	U	156-59-2	cis-1,2-Dichloroethene	0.00090	0.0022	U
87-61-6	1,2,3-Trichlorobenzene	0.00061	0.0022	U	10061-01-5	cis-1,3-Dichloropropene	0.00059	0.0022	U
120-82-1	1,2,4-Trichlorobenzene	0.00070	0.0022	U	110-82-7	Cyclohexane	0.0013	0.0022	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00061	0.0022	U	124-48-1	Dibromochloromethane	0.00048	0.0022	U
106-93-4	1,2-Dibromoethane	0.00054	0.0011	U	75-71-8	Dichlorodifluoromethane	0.0016	0.0022	U
95-50-1	1,2-Dichlorobenzene	0.00057	0.0022	U	100-41-4	Ethylbenzene	0.00076	0.0011	U
107-06-2	1,2-Dichloroethane	0.00045	0.0022	U	98-82-8	Isopropylbenzene	0.00092	0.0011	U
78-87-5	1,2-Dichloropropane	0.00091	0.0022	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.0013</b>	<b>0.0013</b>	<b>0.0014</b>
541-73-1	1,3-Dichlorobenzene	0.00061	0.0022	U	79-20-9	Methyl Acetate	0.0011	0.0022	U
106-46-7	1,4-Dichlorobenzene	0.00059	0.0022	U	108-87-2	Methylcyclohexane	0.0010	0.0022	U
123-91-1	1,4-Dioxane	0.054	0.11	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00083</b>	<b>0.0022</b>	<b>0.0046</b>
78-93-3	2-Butanone	0.0013	0.0022	U	1634-04-4	Methyl-t-butyl ether	0.00060	0.0011	U
591-78-6	2-Hexanone	0.00094	0.0022	U	95-47-6	o-Xylene	0.00079	0.0011	U
108-10-1	4-Methyl-2-Pentanone	0.00064	0.0022	U	100-42-5	Styrene	0.00061	0.0022	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0075</b>	<b>0.011</b>	<b>0.020</b>	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.0011</b>	<b>0.0022</b>	<b>0.0011J</b>
71-43-2	Benzene	0.00081	0.0011	U	108-88-3	Toluene	0.00073	0.0011	U
74-97-5	Bromochloromethane	0.00078	0.0022	U	156-60-5	trans-1,2-Dichloroethene	0.0013	0.0022	U
75-27-4	Bromodichloromethane	0.00052	0.0022	U	10061-02-6	trans-1,3-Dichloropropene	0.00052	0.0022	U
75-25-2	Bromoform	0.00037	0.0022	U	79-01-6	Trichloroethene	0.00091	0.0022	U
74-83-9	Bromomethane	0.0017	0.0022	U	75-69-4	Trichlorofluoromethane	0.0013	0.0022	U
75-15-0	Carbon Disulfide	0.0038	0.0038	U	75-01-4	Vinyl Chloride	0.0014	0.0022	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.00079</b>	<b>0.0011</b>	<b>0.0014</b>					

Worksheet #: 569452

**Total Target Concentration 0.027**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-018  
 Data File: 11M83399.D  
 Acq On : 10/ 1/20 01:59

Operator : WP  
 Sam Mult : 1 Vial# : 62  
 Misc : S,5G!2

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:10  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GCMSData\2020\GCMS\_11\Data\09-3020\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.958	96	253918	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.549	117	227098	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	117248	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	70258	30.69	ug/l	0.00	
Spiked Amount							30.000
							Recovery = 102.30%
39) 1,2-Dichloroethane-d4	4.778	67	34629	34.50	ug/l	0.00	
Spiked Amount							30.000
							Recovery = 115.00%
66) Toluene-d8	5.787	98	265689	29.83	ug/l	0.00	
Spiked Amount							30.000
							Recovery = 99.43%
76) Bromofluorobenzene	7.167	174	90371	30.06	ug/l	0.00	
Spiked Amount							30.000
							Recovery = 100.20%
Target Compounds							
15) Methylene Chloride	3.376	84	8980	4.1619	ug/l	85	Qvalue
19) Acetone	3.009	43	8284	18.1079	ug/l	88	
65) Tetrachloroethene	6.112	164	2499	1.0357	ug/l	93	
78) m&p-Xylenes	6.662	106	4996	1.2593	ug/l	88	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

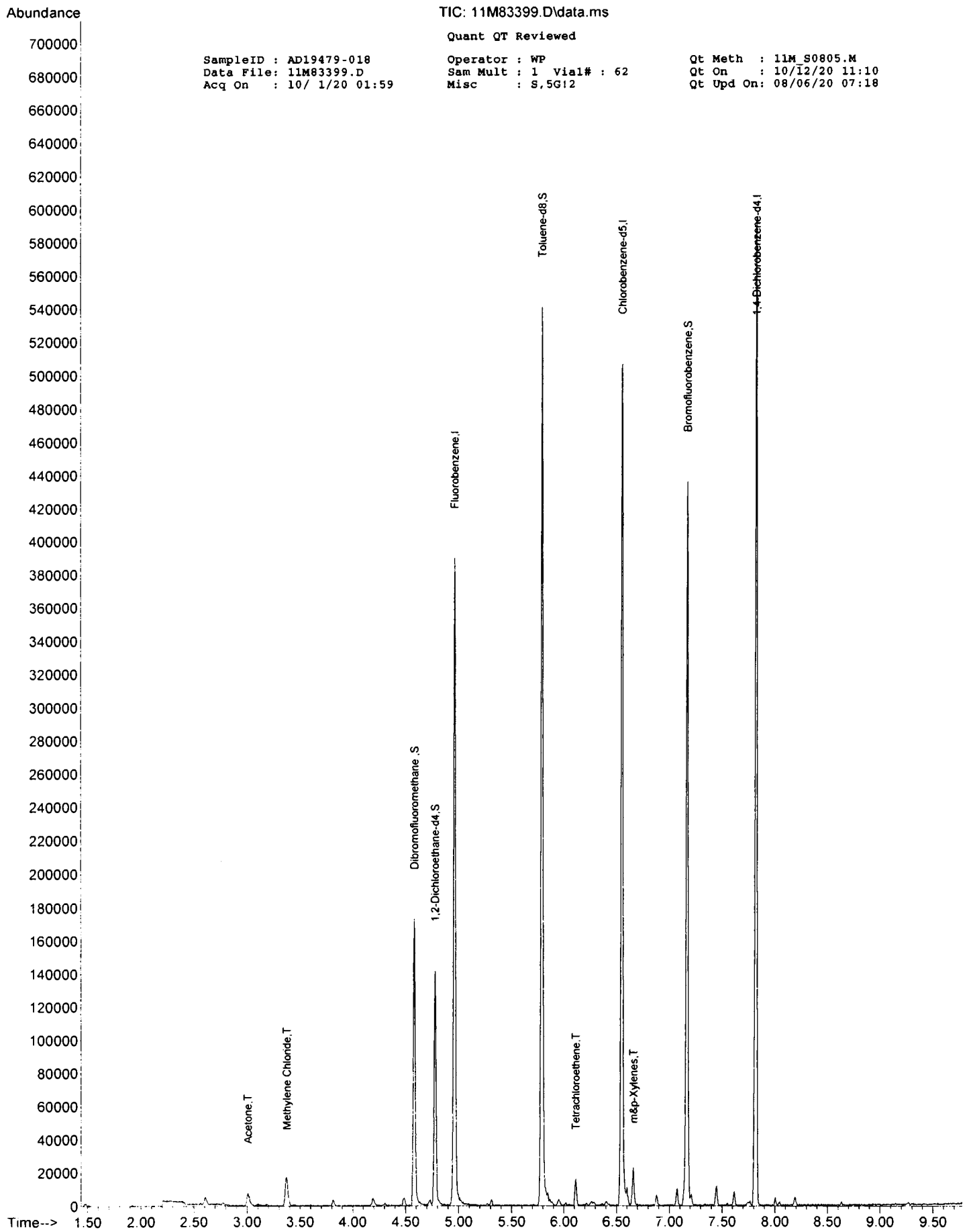
TIC: 11M83399.D\data.ms

Quant QT Reviewed

SampleID : AD19479-018  
Data File: 11M83399.D  
Acq On : 10/ 1/20 01:59

Operator : WP  
Sam Mult : 1 Vial# : 62  
Misc : S,5G12

Qt Meth : 11M\_S0805.M  
Qt On : 10/12/20 11:10  
Qt Upd On: 08/06/20 07:18





**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19479-020  
 Client Id: HSI-SS-D (0.5-1')  
 Data File: 11M83400.D  
 Analysis Date: 10/01/20 02:19  
 Date Rec/Extracted: 09/28/20-NA  
 Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
 Matrix: Soil  
 Initial Vol: 6.76g  
 Final Vol: NA  
 Dilution: 0.740  
 Solids: 79

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00086	0.0019	U	56-23-5	Carbon Tetrachloride	0.00091	0.0019	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00042	0.0019	U	108-90-7	Chlorobenzene	0.00058	0.0019	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0013	0.0019	U	75-00-3	Chloroethane	0.0018	0.0019	U
79-00-5	1,1,2-Trichloroethane	0.00043	0.0019	U	67-66-3	Chloroform	0.0013	0.0019	U
75-34-3	1,1-Dichloroethane	0.00081	0.0019	U	74-87-3	Chloromethane	0.0012	0.0019	U
75-35-4	1,1-Dichloroethene	0.0011	0.0019	U	156-59-2	cis-1,2-Dichloroethene	0.00076	0.0019	U
87-61-6	1,2,3-Trichlorobenzene	0.00051	0.0019	U	10061-01-5	cis-1,3-Dichloropropene	0.00050	0.0019	U
120-82-1	1,2,4-Trichlorobenzene	0.00059	0.0019	U	110-82-7	Cyclohexane	0.0011	0.0019	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00051	0.0019	U	124-48-1	Dibromochloromethane	0.00040	0.0019	U
106-93-4	1,2-Dibromoethane	0.00046	0.00094	U	75-71-8	Dichlorodifluoromethane	0.0013	0.0019	U
95-50-1	1,2-Dichlorobenzene	0.00048	0.0019	U	100-41-4	Ethylbenzene	0.00065	0.00094	U
107-06-2	1,2-Dichloroethane	0.00038	0.0019	U	98-82-8	Isopropylbenzene	0.00078	0.00094	U
78-87-5	1,2-Dichloropropane	0.00077	0.0019	U	179601-23-1	m&p-Xylenes	0.0011	0.0011	U
541-73-1	1,3-Dichlorobenzene	0.00051	0.0019	U	79-20-9	Methyl Acetate	0.00090	0.0019	U
106-46-7	1,4-Dichlorobenzene	0.00050	0.0019	U	108-87-2	Methylcyclohexane	0.00084	0.0019	U
123-91-1	1,4-Dioxane	0.045	0.094	U	75-09-2	Methylene Chloride	0.00070	0.0019	U
78-93-3	2-Butanone	0.0011	0.0019	U	1634-04-4	Methyl-t-butyl ether	0.00051	0.00094	U
591-78-6	2-Hexanone	0.00080	0.0019	U	95-47-6	o-Xylene	0.00066	0.00094	U
108-10-1	4-Methyl-2-Pentanone	0.00054	0.0019	U	100-42-5	Styrene	0.00051	0.0019	U
67-64-1	Acetone	0.0063	0.0094	U	127-18-4	Tetrachloroethene	0.00092	0.0019	U
71-43-2	Benzene	0.00068	0.00094	U	108-88-3	Toluene	0.00062	0.00094	U
74-97-5	Bromochloromethane	0.00066	0.0019	U	156-60-5	trans-1,2-Dichloroethene	0.0011	0.0019	U
75-27-4	Bromodichloromethane	0.00044	0.0019	U	10061-02-6	trans-1,3-Dichloropropene	0.00044	0.0019	U
75-25-2	Bromoform	0.00031	0.0019	U	79-01-6	Trichloroethene	0.00077	0.0019	U
74-83-9	Bromomethane	0.0015	0.0019	U	<b>75-69-4</b>	<b>Trichlorofluoromethane</b>	<b>0.0011</b>	<b>0.0019</b>	<b>0.0034</b>
75-15-0	Carbon Disulfide	0.0032	0.0032	U	75-01-4	Vinyl Chloride	0.0011	0.0019	U
1330-20-7	Xylenes (Total)	0.00066	0.00094	U					

Worksheet #: 569452

**Total Target Concentration 0.0034**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-020  
 Data File: 11M83400.D  
 Acq On : 10/ 1/20 02:19

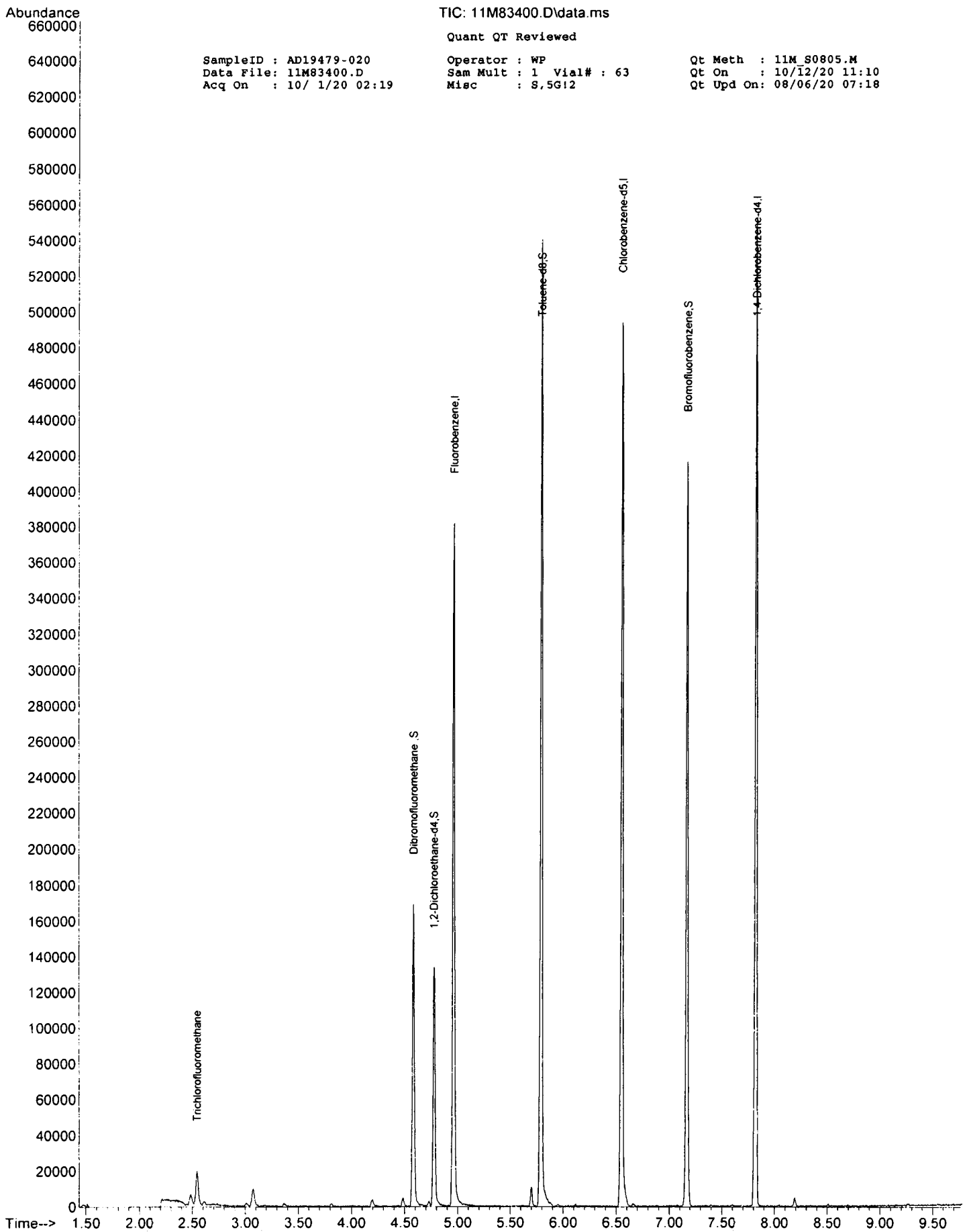
Operator : WP  
 Sam Mult : 1 Vial# : 63  
 Misc : S,SG12

Qt Meth : 11M\_S0805.M  
 Qt On : 10/12/20 11:10  
 Qt Upd On: 08/06/20 07:18

Data Path : C:\GcMsData\2020\GCMS\_11\Data\09-3020\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.961	96	244529	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	219104	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	115090	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	68916	31.26	ug/l	0.00
Spiked Amount	30.000		Recovery	=	104.20%	
39) 1,2-Dichloroethane-d4	4.775	67	32836	33.97	ug/l	0.00
Spiked Amount	30.000		Recovery	=	113.23%	
66) Toluene-d8	5.787	98	256589	29.86	ug/l	0.00
Spiked Amount	30.000		Recovery	=	99.53%	
76) Bromofluorobenzene	7.167	174	87556	29.67	ug/l	0.00
Spiked Amount	30.000		Recovery	=	98.90%	
Target Compounds						
11) Trichlorofluoromethane	2.543	101	13817	3.6657	ug/l	96
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 11M83376.D

Analysis Date: 09/30/20 18:24

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 5g

Final Vol: NA

Dilution: 1.00

Solids: 100

Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00092	0.0020	U	56-23-5	Carbon Tetrachloride	0.00097	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00045	0.0020	U	108-90-7	Chlorobenzene	0.00062	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0014	0.0020	U	75-00-3	Chloroethane	0.0020	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.00046	0.0020	U	67-66-3	Chloroform	0.0014	0.0020	U
75-34-3	1,1-Dichloroethane	0.00087	0.0020	U	74-87-3	Chloromethane	0.0012	0.0020	U
75-35-4	1,1-Dichloroethene	0.0012	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.00081	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.00055	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.00053	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.00063	0.0020	U	110-82-7	Cyclohexane	0.0012	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00055	0.0020	U	124-48-1	Dibromochloromethane	0.00043	0.0020	U
106-93-4	1,2-Dibromoethane	0.00049	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0014	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.00051	0.0020	U	100-41-4	Ethylbenzene	0.00069	0.0010	U
107-06-2	1,2-Dichloroethane	0.00041	0.0020	U	98-82-8	Isopropylbenzene	0.00083	0.0010	U
78-87-5	1,2-Dichloropropane	0.00082	0.0020	U	179601-23-1	m&p-Xylenes	0.0012	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.00055	0.0020	U	79-20-9	Methyl Acetate	0.00096	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.00053	0.0020	U	108-87-2	Methylcyclohexane	0.00090	0.0020	U
123-91-1	1,4-Dioxane	0.049	0.10	U	75-09-2	Methylene Chloride	0.00075	0.0020	U
78-93-3	2-Butanone	0.0012	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.00054	0.0010	U
591-78-6	2-Hexanone	0.00085	0.0020	U	95-47-6	o-Xylene	0.00071	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.00058	0.0020	U	100-42-5	Styrene	0.00055	0.0020	U
67-64-1	Acetone	0.0068	0.010	U	127-18-4	Tetrachloroethene	0.00098	0.0020	U
71-43-2	Benzene	0.00073	0.0010	U	108-88-3	Toluene	0.00066	0.0010	U
74-97-5	Bromochloromethane	0.00070	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0012	0.0020	U
75-27-4	Bromodichloromethane	0.00047	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.00047	0.0020	U
75-25-2	Bromoform	0.00033	0.0020	U	79-01-6	Trichloroethene	0.00082	0.0020	U
74-83-9	Bromomethane	0.0016	0.0020	U	75-69-4	Trichlorofluoromethane	0.0012	0.0020	U
75-15-0	Carbon Disulfide	0.0034	0.0034	U	75-01-4	Vinyl Chloride	0.0012	0.0020	U

Worksheet #: 569452

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 11M83376.D  
 Acq On : 09/30/20 18:24

Operator : WP  
 Sam Mult : 1 Vial# : 39  
 Misc : S,5G

Qt Meth : 11M\_S0805.M  
 Qt On : 10/01/20 08:34  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\09-3020\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.961	96	273164	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	242304	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	130603	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	73304	29.76	ug/l	0.00
Spiked Amount	30.000					
					Recovery =	99.20%
39) 1,2-Dichloroethane-d4	4.778	67	31341	29.02	ug/l	0.00
Spiked Amount	30.000				Recovery =	96.73%
66) Toluene-d8	5.787	98	294738	31.01	ug/l	0.00
Spiked Amount	30.000				Recovery =	103.37%
76) Bromofluorobenzene	7.167	174	99098	29.59	ug/l	0.00
Spiked Amount	30.000				Recovery =	98.63%
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

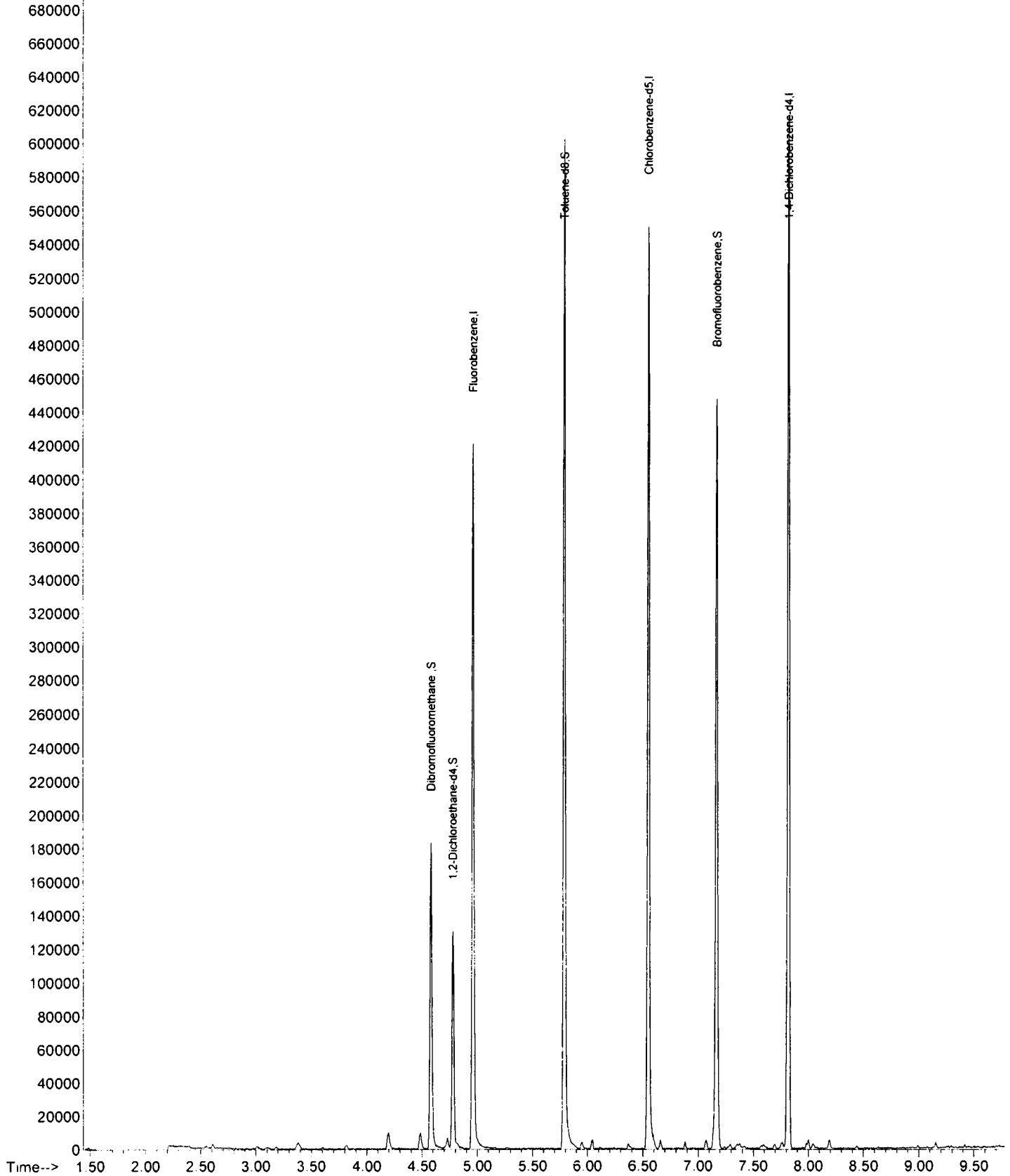
TIC: 11M83376.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 11M83376.D  
Acq On : 09/30/20 18:24

Operator : WP  
Sam Mult : 1 Vial# : 39  
Misc : S.5G

Qt Meth : 11M\_S0805.M  
Qt On : 10/01/20 08:34  
Qt Upd On: 08/06/20 07:18



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK  
Client Id:  
Data File: 11M83418.D  
Analysis Date: 10/01/20 11:57  
Date Rec/Extracted:  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Soil  
Initial Vol: 5g  
Final Vol: NA  
Dilution: 1.00  
Solids: 100

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00092	0.0020	U	56-23-5	Carbon Tetrachloride	0.00097	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00045	0.0020	U	108-90-7	Chlorobenzene	0.00062	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0014	0.0020	U	75-00-3	Chloroethane	0.0020	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.00046	0.0020	U	67-66-3	Chloroform	0.0014	0.0020	U
75-34-3	1,1-Dichloroethane	0.00087	0.0020	U	74-87-3	Chloromethane	0.0012	0.0020	U
75-35-4	1,1-Dichloroethene	0.0012	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.00081	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.00055	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.00053	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.00063	0.0020	U	110-82-7	Cyclohexane	0.0012	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00055	0.0020	U	124-48-1	Dibromochloromethane	0.00043	0.0020	U
106-93-4	1,2-Dibromoethane	0.00049	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0014	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.00051	0.0020	U	100-41-4	Ethylbenzene	0.00069	0.0010	U
107-06-2	1,2-Dichloroethane	0.00041	0.0020	U	98-82-8	Isopropylbenzene	0.00083	0.0010	U
78-87-5	1,2-Dichloropropane	0.00082	0.0020	U	179601-23-1	m&p-Xylenes	0.0012	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.00055	0.0020	U	79-20-9	Methyl Acetate	0.00096	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.00053	0.0020	U	108-87-2	Methylcyclohexane	0.00090	0.0020	U
123-91-1	1,4-Dioxane	0.049	0.10	U	75-09-2	Methylene Chloride	0.00075	0.0020	U
78-93-3	2-Butanone	0.0012	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.00054	0.0010	U
591-78-6	2-Hexanone	0.00085	0.0020	U	95-47-6	o-Xylene	0.00071	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.00058	0.0020	U	100-42-5	Styrene	0.00055	0.0020	U
67-64-1	Acetone	0.0068	0.010	U	127-18-4	Tetrachloroethene	0.00098	0.0020	U
71-43-2	Benzene	0.00073	0.0010	U	108-88-3	Toluene	0.00066	0.0010	U
74-97-5	Bromochloromethane	0.00070	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0012	0.0020	U
75-27-4	Bromodichloromethane	0.00047	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.00047	0.0020	U
75-25-2	Bromoform	0.00033	0.0020	U	79-01-6	Trichloroethene	0.00082	0.0020	U
74-83-9	Bromomethane	0.0016	0.0020	U	75-69-4	Trichlorofluoromethane	0.0012	0.0020	U
75-15-0	Carbon Disulfide	0.0034	0.0034	U	75-01-4	Vinyl Chloride	0.0012	0.0020	U

Worksheet #: 569452

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 11M83418.D  
 Acq On : 10/ 1/20 11:57

Operator : WP  
 Sam Mult : 1 Vial# : 7  
 Misc : S,5G

Qt Meth : 11M\_S0805.M  
 Qt On : 10/01/20 12:12  
 Qt Upd On: 08/06/20 07:18

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-01-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.958	96	268434	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	241584	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	128645	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.579	111	73802	30.49	ug/l	0.00
Spiked Amount	30.000					
						Recovery = 101.63%
39) 1,2-Dichloroethane-d4	4.778	67	33439	31.51	ug/l	0.00
Spiked Amount	30.000					
						Recovery = 105.03%
66) Toluene-d8	5.788	98	284586	30.03	ug/l	0.00
Spiked Amount	30.000					
						Recovery = 100.10%
76) Bromofluorobenzene	7.164	174	96736	29.32	ug/l	0.00
Spiked Amount	30.000					
						Recovery = 97.73%
Target Compounds						
						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



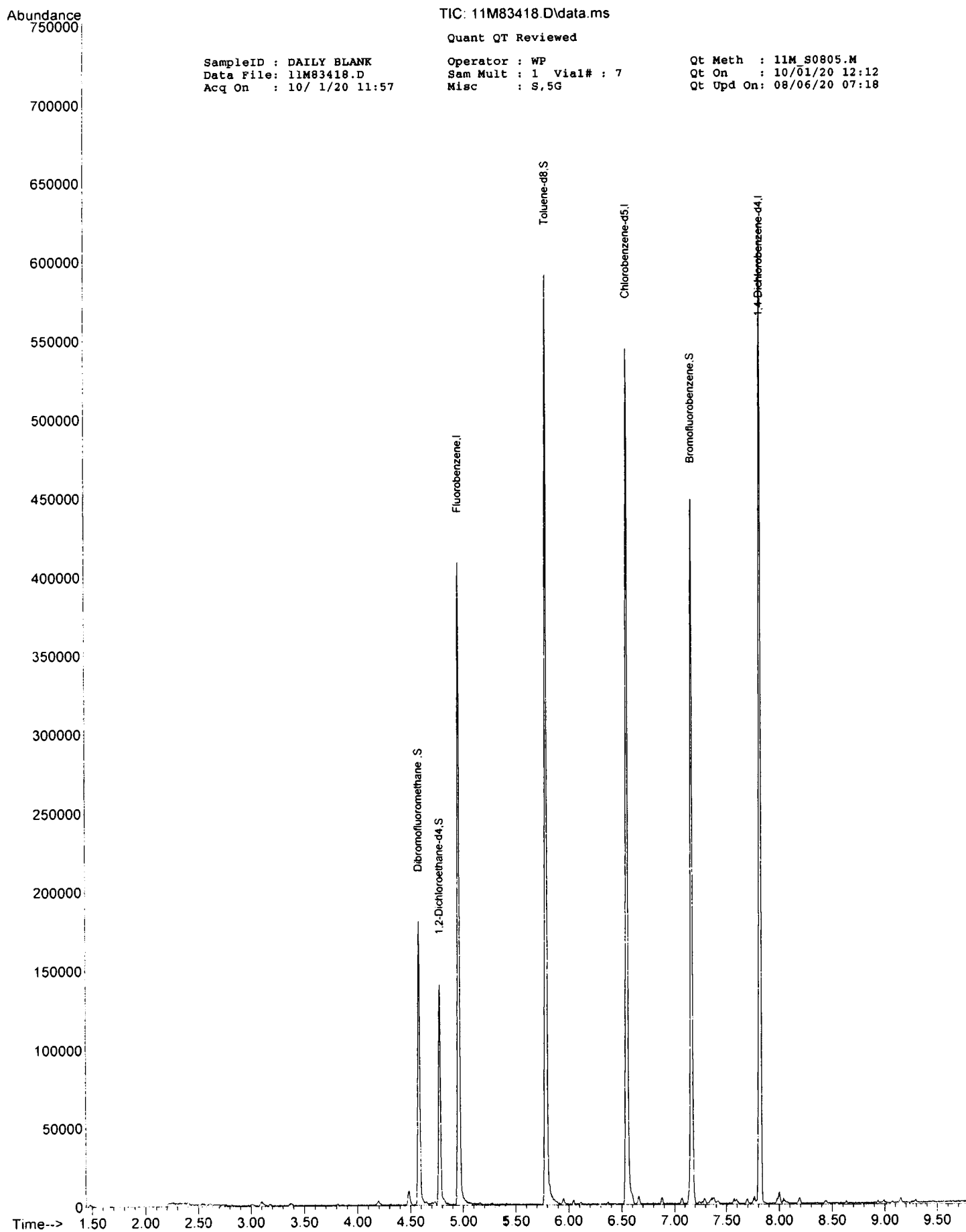
TIC: 11M83418.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 11M83418.D  
Acq On : 10/ 1/20 11:57

Operator : WP  
Sam Mult : 1 Vial# : 7  
Misc : S,5G

Qt Meth : 11M\_S0805.M  
Qt On : 10/01/20 12:12  
Qt Upd On: 08/06/20 07:18



## FORM2

## Surrogate Recovery

Method: EPA 8260D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
11M83376.D	DAILY BLANK	S	09/30/20 18:24	1		99	97	103	99		
11M83418.D	DAILY BLANK	S	10/01/20 11:57	1		102	105	100	98		
11M83392.D	AD19479-002	S	09/30/20 23:40	1		102	112	104	106		
11M83439.D	AD19479-004	S	10/01/20 19:51	1		103	107	105	110		
11M83438.D	AD19479-006	S	10/01/20 19:32	1		104	105	114	129		
11M83394.D	AD19479-008	S	10/01/20 00:20	1		104	110	103	105		
11M83395.D	AD19479-010	S	10/01/20 00:39	1		104	103	106	100		
11M83440.D	AD19479-012	S	10/01/20 20:11	1		103	108	108	125		
11M83436.D	AD19479-014	S	10/01/20 18:52	1		103	109	106	117		
11M83437.D	AD19479-016	S	10/01/20 19:12	1		103	106	101	106		
11M83399.D	AD19479-018	S	10/01/20 01:59	1		102	115	99	100		
11M83400.D	AD19479-020	S	10/01/20 02:19	1		104	113	100	99		
11M83377.D	AD19504-001	S	09/30/20 18:43	1		103	111	100	96		
11M83379.D	MBS89405	S	09/30/20 19:23	1		98	103	103	100		
11M83380.D	AD19504-001(MS)	S	09/30/20 19:43	1		100	105	102	96		
11M83381.D	AD19504-001(MSD)	S	09/30/20 20:03	1		102	102	101	98		
11M83419.D	MBS89411	S	10/01/20 12:17	1		98	104	102	97		
11M83420.D	AD19504-005	S	10/01/20 12:37	1		103	112	100	99		
11M83426.D	AD19504-005(MS)	S	10/01/20 15:35	1		104	105	100	97		
11M83427.D	AD19504-005(MSD)	S	10/01/20 15:54	1		102	102	98	97		

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8260D

## Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89405

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M83379.D	MBS89405	9/30/2020 7:23:00 PM
Non Spike (If applicable):		
Inst Blank (If applicable):		

Method: 8260D                      Matrix: Soil                      QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	54.0547	0	50	108	20	130
<b>Dichlorodifluoromethane</b>	1	<b>47.0532</b>	0	50	94	20	130
Chloromethane	1	43.7766	0	50	88	20	130
<b>Bromomethane</b>	1	<b>52.4311</b>	0	50	105	20	130
<b>Vinyl Chloride</b>	1	<b>51.7061</b>	0	50	103	20	130
Chloroethane	1	55.8784	0	50	112	20	130
<b>Trichlorofluoromethane</b>	1	<b>59.2189</b>	0	50	118	20	130
Ethyl ether	1	60.1305	0	50	120	50	130
Furan	1	57.9766	0	50	116	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>73.5087</b>	0	50	147*	50	130
<b>Methylene Chloride</b>	1	<b>57.8689</b>	0	50	116	50	130
Acrolein	1	296.0368	0	200	148*	20	130
Acrylonitrile	1	57.2397	0	50	114	20	130
Iodomethane	1	41.8926	0	50	84	50	130
<b>Acetone</b>	1	<b>295.7653</b>	0	200	148*	20	130
<b>Carbon Disulfide</b>	1	<b>64.8027</b>	0	50	130	50	130
t-Butyl Alcohol	1	189.825	0	200	95	20	130
n-Hexane	1	61.7931	0	50	124	50	130
Di-isopropyl-ether	1	55.3971	0	50	111	50	130
<b>1,1-Dichloroethene</b>	1	<b>65.6644</b>	0	50	131*	50	130
<b>Methyl Acetate</b>	1	<b>54.0584</b>	0	50	108	50	130
<b>Methyl-t-butyl ether</b>	1	<b>55.8617</b>	0	50	112	50	130
<b>1,1-Dichloroethane</b>	1	<b>57.887</b>	0	50	116	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>57.48</b>	0	50	115	50	130
Ethyl-t-butyl ether	1	46.2963	0	50	93	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>56.033</b>	0	50	112	50	130
<b>Bromochloromethane</b>	1	<b>54.7818</b>	0	50	110	50	130
2,2-Dichloropropane	1	55.2022	0	50	110	50	130
Ethyl acetate	1	49.5595	0	50	99	50	130
<b>1,4-Dioxane</b>	1	<b>2541.481</b>	0	2500	102	50	130
1,1-Dichloropropene	1	58.0407	0	50	116	50	130
<b>Chloroform</b>	1	<b>58.7816</b>	0	50	118	50	130
<b>Cyclohexane</b>	1	<b>58.7672</b>	0	50	118	50	130
<b>1,2-Dichloroethane</b>	1	<b>53.49</b>	0	50	107	50	130
<b>2-Butanone</b>	1	<b>48.6095</b>	0	50	97	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>56.6183</b>	0	50	113	50	130
<b>Carbon Tetrachloride</b>	1	<b>56.2717</b>	0	50	113	50	130
Vinyl Acetate	1	53.9744	0	50	108	50	130
<b>Bromodichloromethane</b>	1	<b>53.953</b>	0	50	108	50	130
<b>Methylcyclohexane</b>	1	<b>60.337</b>	0	50	121	50	130
Dibromomethane	1	46.2842	0	50	93	50	130
<b>1,2-Dichloropropane</b>	1	<b>56.1626</b>	0	50	112	50	130
<b>Trichloroethene</b>	1	<b>53.4971</b>	0	50	107	50	130
<b>Benzene</b>	1	<b>57.0991</b>	0	50	114	50	130
tert-Amyl methyl ether	1	50.7572	0	50	102	50	130
Iso-propylacetate	1	48.4063	0	50	97	50	130
Methyl methacrylate	1	47.8583	0	50	96	50	130
<b>Dibromochloromethane</b>	1	<b>51.8333</b>	0	50	104	50	130
2-Chloroethylvinylether	1	53.7816	0	50	108	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>54.7063</b>	0	50	109	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>55.3334</b>	0	50	111	50	130
Ethyl methacrylate	1	47.2296	0	50	94	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>55.8173</b>	0	50	112	50	130
<b>1,2-Dibromoethane</b>	1	<b>56.0326</b>	0	50	112	50	130
1,3-Dichloropropane	1	56.5612	0	50	113	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>46.3526</b>	0	50	93	20	130
<b>2-Hexanone</b>	1	<b>48.0209</b>	0	50	96	20	130
<b>Tetrachloroethene</b>	1	<b>50.1441</b>	0	50	100	50	130
<b>Toluene</b>	1	<b>54.1319</b>	0	50	108	50	130
1,1,1,2-Tetrachloroethane	1	52.0522	0	50	104	50	130
<b>Chlorobenzene</b>	1	<b>53.9176</b>	0	50	108	50	130

\* - Indicates outside of limits      # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89405

Method: 8260D		Matrix: Soil			QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	57.0542	0	50	114	50	130
n-Amyl acetate	1	54.4234	0	50	109	50	130
<b>Bromoforn</b>	<b>1</b>	<b>55.0943</b>	<b>0</b>	<b>50</b>	<b>110</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>60.2017</b>	<b>0</b>	<b>50</b>	<b>120</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>63.0966</b>	<b>0</b>	<b>50</b>	<b>126</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>62.416</b>	<b>0</b>	<b>50</b>	<b>125</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>114.1571</b>	<b>0</b>	<b>100</b>	<b>114</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>61.1409</b>	<b>0</b>	<b>50</b>	<b>122</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	55.4859	0	50	111	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>57.5686</b>	<b>0</b>	<b>50</b>	<b>115</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>57.2702</b>	<b>0</b>	<b>50</b>	<b>115</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>56.9084</b>	<b>0</b>	<b>50</b>	<b>114</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>61.3289</b>	<b>0</b>	<b>50</b>	<b>123</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	280.0373	0	250	112	50	130
Camphene	1	61.361	0	50	123	50	130
1,2,3-Trichloropropane	1	58.6804	0	50	117	50	130
2-Chlorotoluene	1	59.569	0	50	119	50	130
p-Ethyltoluene	1	61.1236	0	50	122	50	130
4-Chlorotoluene	1	60.0225	0	50	120	50	130
n-Propylbenzene	1	61.2229	0	50	122	50	130
Bromobenzene	1	65.4231	0	50	131*	50	130
1,3,5-Trimethylbenzene	1	59.262	0	50	119	50	130
Butyl methacrylate	1	47.3536	0	50	95	50	130
t-Butylbenzene	1	57.5479	0	50	115	50	130
1,2,4-Trimethylbenzene	1	59.1817	0	50	118	50	130
sec-Butylbenzene	1	61.7666	0	50	124	50	130
4-Isopropyltoluene	1	60.7761	0	50	122	50	130
n-Butylbenzene	1	62.2038	0	50	124	50	130
p-Diethylbenzene	1	59.2846	0	50	119	50	130
1,2,4,5-Tetramethylbenzene	1	62.7196	0	50	125	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>54.1544</b>	<b>0</b>	<b>50</b>	<b>108</b>	<b>50</b>	<b>130</b>
Camphor	1	554.1275	0	500	111	50	130
Hexachlorobutadiene	1	48.601	0	50	97	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>53.6783</b>	<b>0</b>	<b>50</b>	<b>107</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>52.4507</b>	<b>0</b>	<b>50</b>	<b>105</b>	<b>50</b>	<b>130</b>
Naphthalene	1	56.154	0	50	112	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89405

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83380.D		AD19504-001(MS)		9/30/2020 7:43:00 PM			
Non Spike(If applicable): 11M83377.D		AD19504-001		9/30/2020 6:43:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	49.3834	0	50	99	20	130
<b>Dichlorodifluoromethane</b>	1	<b>45.1029</b>	0	50	90	20	130
Chloromethane	1	42.4041	0	50	85	20	130
<b>Bromomethane</b>	1	<b>48.2669</b>	0	50	97	20	130
<b>Vinyl Chloride</b>	1	<b>48.1748</b>	0	50	96	20	130
<b>Chloroethane</b>	1	<b>52.4263</b>	0	50	105	20	130
<b>Trichlorofluoromethane</b>	1	<b>55.2079</b>	0	50	110	20	130
Ethyl ether	1	56.7066	0	50	113	50	130
Furan	1	52.8128	0	50	106	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>68.2773</b>	0	50	137 *	50	130
<b>Methylene Chloride</b>	1	<b>60.3684</b>	0	50	121	50	130
Acrolein	1	197.9851	0	200	99	20	130
Acrylonitrile	1	57.3255	0	50	115	20	130
Iodomethane	1	41.5194	0	50	83	50	130
<b>Acetone</b>	1	<b>271.6498</b>	0	200	136 *	20	130
<b>Carbon Disulfide</b>	1	<b>58.6526</b>	0	50	117	50	130
t-Butyl Alcohol	1	200.0451	0	200	100	20	130
n-Hexane	1	57.5244	0	50	115	50	130
Di-isopropyl-ether	1	52.6531	0	50	105	50	130
<b>1,1-Dichloroethene</b>	1	<b>59.4733</b>	0	50	119	50	130
<b>Methyl Acetate</b>	1	<b>92.0199</b>	0	50	184 *	50	130
<b>Methyl-t-butyl ether</b>	1	<b>61.253</b>	0	50	123	50	130
<b>1,1-Dichloroethane</b>	1	<b>54.1483</b>	0	50	108	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>60.1975</b>	0	50	120	50	130
Ethyl-t-butyl ether	1	45.8039	0	50	92	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>49.9986</b>	0	50	100	50	130
<b>Bromochloromethane</b>	1	<b>51.0953</b>	0	50	102	50	130
2,2-Dichloropropane	1	50.5774	0	50	101	50	130
Ethyl acetate	1	27.4282	0	50	55	50	130
<b>1,4-Dioxane</b>	1	<b>2424.08</b>	0	2500	97	50	130
1,1-Dichloropropene	1	54.2808	0	50	109	50	130
<b>Chloroform</b>	1	<b>54.3015</b>	0	50	109	50	130
<b>Cyclohexane</b>	1	<b>55.2518</b>	0	50	111	50	130
<b>1,2-Dichloroethane</b>	1	<b>51.8448</b>	0	50	104	50	130
<b>2-Butanone</b>	1	<b>35.964</b>	0	50	72	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>53.5241</b>	0	50	107	50	130
<b>Carbon Tetrachloride</b>	1	<b>54.3406</b>	0	50	109	50	130
Vinyl Acetate	1	32.0165	0	50	64	50	130
<b>Bromodichloromethane</b>	1	<b>51.284</b>	0	50	103	50	130
<b>Methylcyclohexane</b>	1	<b>56.8858</b>	0	50	114	50	130
Dibromomethane	1	46.2226	0	50	92	50	130
<b>1,2-Dichloropropane</b>	1	<b>53.6112</b>	0	50	107	50	130
<b>Trichloroethene</b>	1	<b>51.1711</b>	0	50	102	50	130
<b>Benzene</b>	1	<b>53.7386</b>	0	50	107	50	130
tert-Amyl methyl ether	1	49.227	0	50	98	50	130
Iso-propylacetate	1	32.4675	0	50	65	50	130
Methyl methacrylate	1	57.3175	0	50	115	50	130
<b>Dibromochloromethane</b>	1	<b>50.1711</b>	0	50	100	50	130
2-Chloroethylvinylether	1	49.5575	0	50	99	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>51.0948</b>	0	50	102	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>51.569</b>	0	50	103	50	130
Ethyl methacrylate	1	34.1662	0	50	68	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>53.4934</b>	0	50	107	50	130
<b>1,2-Dibromoethane</b>	1	<b>52.7115</b>	0	50	105	50	130
1,3-Dichloropropane	1	52.6395	0	50	105	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>43.4495</b>	0	50	87	20	130
<b>2-Hexanone</b>	1	<b>42.9325</b>	0	50	86	20	130
<b>Tetrachloroethene</b>	1	<b>48.8927</b>	0	50	98	50	130
<b>Toluene</b>	1	<b>49.7691</b>	0	50	100	50	130
1,1,1,2-Tetrachloroethane	1	49.8389	0	50	100	50	130
<b>Chlorobenzene</b>	1	<b>50.3359</b>	0	50	101	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89405

Method: 8260D		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	30.0449	0	50	60	50	130
n-Amyl acetate	1	21.0249	0	50	42 *	50	130
<b>Bromoform</b>	1	<b>50.74</b>	0	<b>50</b>	<b>101</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	1	<b>55.3331</b>	0	<b>50</b>	<b>111</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	1	<b>57.9072</b>	0	<b>50</b>	<b>116</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	1	<b>56.3304</b>	0	<b>50</b>	<b>113</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	1	<b>105.4878</b>	0	<b>100</b>	<b>105</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	1	<b>56.6291</b>	0	<b>50</b>	<b>113</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	48.9266	0	50	98	20	130
<b>1,3-Dichlorobenzene</b>	1	<b>51.0956</b>	0	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	1	<b>51.2007</b>	0	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	1	<b>51.313</b>	0	<b>50</b>	<b>103</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	1	<b>55.8428</b>	0	<b>50</b>	<b>112</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	220.8445	0	250	88	50	130
Camphene	1	54.1708	0	50	108	50	130
1,2,3-Trichloropropane	1	53.6347	0	50	107	50	130
2-Chlorotoluene	1	55.464	0	50	111	50	130
p-Ethyltoluene	1	55.742	0	50	111	50	130
4-Chlorotoluene	1	52.6698	0	50	105	50	130
n-Propylbenzene	1	55.9609	0	50	112	50	130
Bromobenzene	1	58.7041	0	50	117	50	130
1,3,5-Trimethylbenzene	1	53.2883	0	50	107	50	130
Butyl methacrylate	1	33.1586	0	50	66	50	130
t-Butylbenzene	1	52.6223	0	50	105	50	130
1,2,4-Trimethylbenzene	1	53.8755	0	50	108	50	130
sec-Butylbenzene	1	55.1733	0	50	110	50	130
4-Isopropyltoluene	1	54.1024	0	50	108	50	130
n-Butylbenzene	1	54.3632	0	50	109	50	130
p-Diethylbenzene	1	52.7181	0	50	105	50	130
1,2,4,5-Tetramethylbenzene	1	55.5307	0	50	111	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	1	<b>47.3189</b>	0	<b>50</b>	<b>95</b>	<b>50</b>	<b>130</b>
Camphor	1	514.0376	0	500	103	50	130
Hexachlorobutadiene	1	40.3288	0	50	81	50	130
<b>1,2,4-Trichlorobenzene</b>	1	<b>45.9681</b>	0	<b>50</b>	<b>92</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	1	<b>46.272</b>	0	<b>50</b>	<b>93</b>	<b>50</b>	<b>130</b>
Naphthalene	1	50.6254	0	50	101	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89405

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83381.D		AD19504-001(MSD)		9/30/2020 8:03:00 PM			
Non Spike(If applicable): 11M83377.D		AD19504-001		9/30/2020 6:43:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	55.2	0	50	110	20	130
<b>Dichlorodifluoromethane</b>	1	<b>45.4062</b>	0	50	91	20	130
<b>Chloromethane</b>	1	<b>40.8663</b>	0	50	82	20	130
<b>Bromomethane</b>	1	<b>50.6812</b>	0	50	101	20	130
<b>Vinyl Chloride</b>	1	<b>47.2869</b>	0	50	95	20	130
<b>Chloroethane</b>	1	<b>52.1277</b>	0	50	104	20	130
<b>Trichlorofluoromethane</b>	1	<b>54.7862</b>	0	50	110	20	130
Ethyl ether	1	57.1927	0	50	114	50	130
Furan	1	52.5864	0	50	105	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>66.5824</b>	0	50	133*	50	130
<b>Methylene Chloride</b>	1	<b>52.7189</b>	0	50	105	50	130
Acrolein	1	184.9577	0	200	92	20	130
Acrylonitrile	1	54.9436	0	50	110	20	130
Iodomethane	1	33.7163	0	50	67	50	130
<b>Acetone</b>	1	<b>268.6494</b>	0	200	134*	20	130
<b>Carbon Disulfide</b>	1	<b>51.6417</b>	0	50	103	50	130
t-Butyl Alcohol	1	189.3886	0	200	95	20	130
n-Hexane	1	54.7128	0	50	109	50	130
Di-isopropyl-ether	1	53.2575	0	50	107	50	130
<b>1,1-Dichloroethene</b>	1	<b>57.0345</b>	0	50	114	50	130
<b>Methyl Acetate</b>	1	<b>85.1852</b>	0	50	170*	50	130
<b>Methyl-t-butyl ether</b>	1	<b>57.7279</b>	0	50	115	50	130
<b>1,1-Dichloroethane</b>	1	<b>53.0478</b>	0	50	106	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>55.117</b>	0	50	110	50	130
Ethyl-t-butyl ether	1	46.7966	0	50	94	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>49.1227</b>	0	50	98	50	130
<b>Bromochloromethane</b>	1	<b>52.4483</b>	0	50	105	50	130
2,2-Dichloropropane	1	49.8642	0	50	100	50	130
Ethyl acetate	1	24.3761	0	50	49*	50	130
<b>1,4-Dioxane</b>	1	<b>2623.831</b>	0	2500	105	50	130
1,1-Dichloropropene	1	52.8053	0	50	106	50	130
<b>Chloroform</b>	1	<b>54.2009</b>	0	50	108	50	130
<b>Cyclohexane</b>	1	<b>53.0606</b>	0	50	106	50	130
<b>1,2-Dichloroethane</b>	1	<b>50.9951</b>	0	50	102	50	130
<b>2-Butanone</b>	1	<b>41.3825</b>	0	50	83	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>52.9884</b>	0	50	106	50	130
<b>Carbon Tetrachloride</b>	1	<b>53.1832</b>	0	50	106	50	130
Vinyl Acetate	1	31.5439	0	50	63	50	130
<b>Bromodichloromethane</b>	1	<b>50.8</b>	0	50	102	50	130
<b>Methylcyclohexane</b>	1	<b>53.2486</b>	0	50	106	50	130
Dibromomethane	1	45.7686	0	50	92	50	130
<b>1,2-Dichloropropane</b>	1	<b>53.1149</b>	0	50	106	50	130
<b>Trichloroethene</b>	1	<b>50.0574</b>	0	50	100	50	130
<b>Benzene</b>	1	<b>52.4594</b>	0	50	105	50	130
tert-Amyl methyl ether	1	50.6192	0	50	101	50	130
Iso-propylacetate	1	31.7519	0	50	64	50	130
Methyl methacrylate	1	58.0339	0	50	116	50	130
<b>Dibromochloromethane</b>	1	<b>49.6381</b>	0	50	99	50	130
2-Chloroethylvinylether	1	48.3552	0	50	97	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>49.1477</b>	0	50	98	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>49.6715</b>	0	50	99	50	130
Ethyl methacrylate	1	31.9898	0	50	64	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>52.7332</b>	0	50	105	50	130
<b>1,2-Dibromoethane</b>	1	<b>52.6569</b>	0	50	105	50	130
1,3-Dichloropropane	1	52.5799	0	50	105	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>44.0688</b>	0	50	88	20	130
<b>2-Hexanone</b>	1	<b>41.2465</b>	0	50	82	20	130
<b>Tetrachloroethene</b>	1	<b>47.1151</b>	0	50	94	50	130
<b>Toluene</b>	1	<b>48.7928</b>	0	50	98	50	130
1,1,1,2-Tetrachloroethane	1	48.7395	0	50	97	50	130
<b>Chlorobenzene</b>	1	<b>48.7386</b>	0	50	97	50	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89405

Method: 8260D	Matrix: Soil		QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	28.9927	0	50	58	50	130
n-Amyl acetate	1	19.899	0	50	40*	50	130
<b>Bromoform</b>	1	<b>51.493</b>	0	50	103	20	130
<b>Ethylbenzene</b>	1	<b>54.9114</b>	0	50	110	50	130
<b>1,1,2,2-Tetrachloroethane</b>	1	<b>58.2647</b>	0	50	117	50	130
<b>Styrene</b>	1	<b>55.9455</b>	0	50	112	50	130
<b>m&amp;p-Xylenes</b>	1	<b>103.946</b>	0	100	104	50	130
<b>o-Xylene</b>	1	<b>56.0587</b>	0	50	112	50	130
trans-1,4-Dichloro-2-butene	1	48.0211	0	50	96	20	130
<b>1,3-Dichlorobenzene</b>	1	<b>49.7085</b>	0	50	99	50	130
<b>1,4-Dichlorobenzene</b>	1	<b>49.7774</b>	0	50	100	50	130
<b>1,2-Dichlorobenzene</b>	1	<b>50.4913</b>	0	50	101	50	130
<b>Isopropylbenzene</b>	1	<b>55.5281</b>	0	50	111	50	130
Cyclohexanone	1	236.2084	0	250	94	50	130
Camphene	1	52.9361	0	50	106	50	130
1,2,3-Trichloropropane	1	53.3945	0	50	107	50	130
2-Chlorotoluene	1	53.8171	0	50	108	50	130
p-Ethyltoluene	1	54.6961	0	50	109	50	130
4-Chlorotoluene	1	52.3223	0	50	105	50	130
n-Propylbenzene	1	54.4878	0	50	109	50	130
Bromobenzene	1	58.0235	0	50	116	50	130
1,3,5-Trimethylbenzene	1	52.2482	0	50	104	50	130
Butyl methacrylate	1	33.114	0	50	66	50	130
t-Butylbenzene	1	51.4056	0	50	103	50	130
1,2,4-Trimethylbenzene	1	53.1216	0	50	106	50	130
sec-Butylbenzene	1	54.0346	0	50	108	50	130
4-Isopropyltoluene	1	52.4139	0	50	105	50	130
n-Butylbenzene	1	52.1473	0	50	104	50	130
p-Diethylbenzene	1	50.8365	0	50	102	50	130
1,2,4,5-Tetramethylbenzene	1	53.7745	0	50	108	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	1	<b>48.2055</b>	0	50	96	50	130
Camphor	1	546.7788	0	500	109	50	130
Hexachlorobutadiene	1	38.2279	0	50	76	50	130
<b>1,2,4-Trichlorobenzene</b>	1	<b>43.7605</b>	0	50	88	50	130
<b>1,2,3-Trichlorobenzene</b>	1	<b>44.6621</b>	0	50	89	50	130
Naphthalene	1	49.291	0	50	99	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1



**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89405

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M83381.D	AD19504-001(MSD)	9/30/2020 8:03:00 PM
Duplicate (If applicable): 11M83380.D	AD19504-001(MS)	9/30/2020 7:43:00 PM
Inst Blank (If applicable):		
Method: 8260D	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD	Sample/MS/MBS	RPD	Limit
		Conc	Conc		
Chlorodifluoromethane	1	55.2	49.3834	11	30
<b>Dichlorodifluoromethane</b>	1	<b>45.4062</b>	<b>45.1029</b>	<b>0.67</b>	<b>30</b>
<b>Chloromethane</b>	1	<b>40.8663</b>	<b>42.4041</b>	<b>3.7</b>	<b>30</b>
<b>Bromomethane</b>	1	<b>50.6812</b>	<b>48.2669</b>	<b>4.9</b>	<b>30</b>
<b>Vinyl Chloride</b>	1	<b>47.2869</b>	<b>48.1748</b>	<b>1.9</b>	<b>40</b>
<b>Chloroethane</b>	1	<b>52.1277</b>	<b>52.4263</b>	<b>0.57</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	1	<b>54.7862</b>	<b>55.2079</b>	<b>0.77</b>	<b>30</b>
Ethyl ether	1	57.1927	56.7066	0.85	30
Furan	1	52.5864	52.8128	0.43	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>66.5824</b>	<b>68.2773</b>	<b>2.5</b>	<b>30</b>
<b>Methylene Chloride</b>	1	<b>52.7189</b>	<b>60.3684</b>	<b>14</b>	<b>30</b>
Acrolein	1	184.9577	197.9851	6.8	30
Acrylonitrile	1	54.9436	57.3255	4.2	30
Iodomethane	1	33.7163	41.5194	21	30
<b>Acetone</b>	1	<b>268.6494</b>	<b>271.6498</b>	<b>1.1</b>	<b>30</b>
<b>Carbon Disulfide</b>	1	<b>51.6417</b>	<b>58.6526</b>	<b>13</b>	<b>30</b>
t-Butyl Alcohol	1	189.3886	200.0451	5.5	30
n-Hexane	1	54.7128	57.5244	5	30
Di-isopropyl-ether	1	53.2575	52.6531	1.1	30
<b>1,1-Dichloroethene</b>	1	<b>57.0345</b>	<b>59.4733</b>	<b>4.2</b>	<b>40</b>
<b>Methyl Acetate</b>	1	<b>85.1852</b>	<b>92.0199</b>	<b>7.7</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	1	<b>57.7279</b>	<b>61.253</b>	<b>5.9</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	1	<b>53.0478</b>	<b>54.1483</b>	<b>2.1</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	1	<b>55.117</b>	<b>60.1975</b>	<b>8.8</b>	<b>30</b>
Ethyl-t-butyl ether	1	46.7966	45.8039	2.1	30
<b>cis-1,2-Dichloroethene</b>	1	<b>49.1227</b>	<b>49.9986</b>	<b>1.8</b>	<b>30</b>
<b>Bromochloromethane</b>	1	<b>52.4483</b>	<b>51.0953</b>	<b>2.6</b>	<b>30</b>
2,2-Dichloropropane	1	49.8642	50.5774	1.4	30
Ethyl acetate	1	24.3761	27.4282	12	30
<b>1,4-Dioxane</b>	1	<b>2623.831</b>	<b>2424.08</b>	<b>7.9</b>	<b>30</b>
1,1-Dichloropropene	1	52.8053	54.2808	2.8	30
<b>Chloroform</b>	1	<b>54.2009</b>	<b>54.3015</b>	<b>0.19</b>	<b>40</b>
<b>Cyclohexane</b>	1	<b>53.0606</b>	<b>55.2518</b>	<b>4</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	1	<b>50.9951</b>	<b>51.8448</b>	<b>1.7</b>	<b>40</b>
<b>2-Butanone</b>	1	<b>41.3825</b>	<b>35.964</b>	<b>14</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	1	<b>52.9884</b>	<b>53.5241</b>	<b>1</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	1	<b>53.1832</b>	<b>54.3406</b>	<b>2.2</b>	<b>40</b>
Vinyl Acetate	1	31.5439	32.0165	1.5	30
<b>Bromodichloromethane</b>	1	<b>50.8</b>	<b>51.284</b>	<b>0.95</b>	<b>30</b>
<b>Methylcyclohexane</b>	1	<b>53.2486</b>	<b>56.8858</b>	<b>6.6</b>	<b>30</b>
Dibromomethane	1	45.7686	46.2226	0.99	30
<b>1,2-Dichloropropane</b>	1	<b>53.1149</b>	<b>53.6112</b>	<b>0.93</b>	<b>30</b>
<b>Trichloroethene</b>	1	<b>50.0574</b>	<b>51.1711</b>	<b>2.2</b>	<b>40</b>
<b>Benzene</b>	1	<b>52.4594</b>	<b>53.7386</b>	<b>2.4</b>	<b>40</b>
tert-Amyl methyl ether	1	50.6192	49.227	2.8	30
Iso-propylacetate	1	31.7519	32.4675	2.2	30
Methyl methacrylate	1	58.0339	57.3175	1.2	30
<b>Dibromochloromethane</b>	1	<b>49.6381</b>	<b>50.1711</b>	<b>1.1</b>	<b>30</b>
2-Chloroethylvinylether	1	48.3552	49.5575	2.5	30
<b>cis-1,3-Dichloropropene</b>	1	<b>49.1477</b>	<b>51.0948</b>	<b>3.9</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	1	<b>49.6715</b>	<b>51.569</b>	<b>3.7</b>	<b>30</b>
Ethyl methacrylate	1	31.9898	34.1662	6.6	30
<b>1,1,2-Trichloroethane</b>	1	<b>52.7332</b>	<b>53.4934</b>	<b>1.4</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	1	<b>52.6569</b>	<b>52.7115</b>	<b>0.1</b>	<b>30</b>
1,3-Dichloropropane	1	52.5799	52.6395	0.11	30
<b>4-Methyl-2-Pentanone</b>	1	<b>44.0688</b>	<b>43.4495</b>	<b>1.4</b>	<b>30</b>
<b>2-Hexanone</b>	1	<b>41.2465</b>	<b>42.9325</b>	<b>4</b>	<b>30</b>
<b>Tetrachloroethene</b>	1	<b>47.1151</b>	<b>48.8927</b>	<b>3.7</b>	<b>40</b>
<b>Toluene</b>	1	<b>48.7928</b>	<b>49.7691</b>	<b>2</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	48.7395	49.8389	2.2	30
<b>Chlorobenzene</b>	1	<b>48.7386</b>	<b>50.3359</b>	<b>3.2</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89405

Method: 8260D	Matrix: Soil	QC Type: MSD				
Analyte:	Column	Dup/MSD/MBSD		Sample/MS/MBS	RPD	Limit
		Conc	Conc	Conc		
n-Butyl acrylate	1	28.9927	30.0449	3.6	30	
n-Amyl acetate	1	19.899	21.0249	5.5	30	
<b>Bromoform</b>	<b>1</b>	<b><u>51.493</u></b>	<b><u>50.74</u></b>	<b><u>1.5</u></b>	<b><u>30</u></b>	
<b>Ethylbenzene</b>	<b>1</b>	<b><u>54.9114</u></b>	<b><u>55.3331</u></b>	<b><u>0.77</u></b>	<b><u>30</u></b>	
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b><u>58.2647</u></b>	<b><u>57.9072</u></b>	<b><u>0.62</u></b>	<b><u>30</u></b>	
<b>Styrene</b>	<b>1</b>	<b><u>55.9455</u></b>	<b><u>56.3304</u></b>	<b><u>0.69</u></b>	<b><u>30</u></b>	
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b><u>103.946</u></b>	<b><u>105.4878</u></b>	<b><u>1.5</u></b>	<b><u>30</u></b>	
<b>o-Xylene</b>	<b>1</b>	<b><u>56.0587</u></b>	<b><u>56.6291</u></b>	<b><u>1</u></b>	<b><u>30</u></b>	
trans-1,4-Dichloro-2-butene	1	48.0211	48.9266	1.9	30	
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b><u>49.7085</u></b>	<b><u>51.0956</u></b>	<b><u>2.8</u></b>	<b><u>30</u></b>	
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b><u>49.7774</u></b>	<b><u>51.2007</u></b>	<b><u>2.8</u></b>	<b><u>40</u></b>	
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b><u>50.4913</u></b>	<b><u>51.313</u></b>	<b><u>1.6</u></b>	<b><u>40</u></b>	
<b>Isopropylbenzene</b>	<b>1</b>	<b><u>55.5281</u></b>	<b><u>55.8428</u></b>	<b><u>0.57</u></b>	<b><u>30</u></b>	
Cyclohexanone	1	236.2084	220.8445	6.7	30	
Camphene	1	52.9361	54.1708	2.3	30	
1,2,3-Trichloropropane	1	53.3945	53.6347	0.45	30	
2-Chlorotoluene	1	53.8171	55.464	3	30	
p-Ethyltoluene	1	54.6961	55.742	1.9	30	
4-Chlorotoluene	1	52.3223	52.6698	0.66	30	
n-Propylbenzene	1	54.4878	55.9609	2.7	40	
Bromobenzene	1	58.0235	58.7041	1.2	30	
1,3,5-Trimethylbenzene	1	52.2482	53.2883	2	30	
Butyl methacrylate	1	33.114	33.1586	0.13	30	
t-Butylbenzene	1	51.4056	52.6223	2.3	30	
1,2,4-Trimethylbenzene	1	53.1216	53.8755	1.4	30	
sec-Butylbenzene	1	54.0346	55.1733	2.1	40	
4-Isopropyltoluene	1	52.4139	54.1024	3.2	30	
n-Butylbenzene	1	52.1473	54.3632	4.2	30	
p-Diethylbenzene	1	50.8365	52.7181	3.6	30	
1,2,4,5-Tetramethylbenzene	1	53.7745	55.5307	3.2	30	
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b><u>48.2055</u></b>	<b><u>47.3189</u></b>	<b><u>1.9</u></b>	<b><u>30</u></b>	
Camphor	1	546.7788	514.0376	6.2	30	
Hexachlorobutadiene	1	38.2279	40.3288	5.3	30	
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b><u>43.7605</u></b>	<b><u>45.9681</u></b>	<b><u>4.9</u></b>	<b><u>30</u></b>	
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b><u>44.6621</u></b>	<b><u>46.272</u></b>	<b><u>3.5</u></b>	<b><u>30</u></b>	
Naphthalene	1	49.291	50.6254	2.7	30	

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89411

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83419.D		MBS89411		10/1/2020 12:17:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	49.0652	0	50	98	20	130
<b>Dichlorodifluoromethane</b>	1	<b>36.7576</b>	0	50	74	20	130
<b>Chloromethane</b>	1	<b>36.2382</b>	0	50	72	20	130
<b>Bromomethane</b>	1	<b>44.638</b>	0	50	89	20	130
<b>Vinyl Chloride</b>	1	<b>40.2092</b>	0	50	80	20	130
<b>Chloroethane</b>	1	<b>47.6359</b>	0	50	95	20	130
<b>Trichlorofluoromethane</b>	1	<b>47.2047</b>	0	50	94	20	130
Ethyl ether	1	49.238	0	50	98	50	130
Furan	1	45.3974	0	50	91	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>51.3845</b>	0	50	103	50	130
<b>Methylene Chloride</b>	1	<b>50.6926</b>	0	50	101	50	130
Acrolein	1	236.1189	0	200	118	20	130
Acrylonitrile	1	47.6916	0	50	95	20	130
Iodomethane	1	28.1358	0	50	56	50	130
<b>Acetone</b>	1	<b>232.4532</b>	0	200	116	20	130
<b>Carbon Disulfide</b>	1	<b>45.4889</b>	0	50	91	50	130
t-Butyl Alcohol	1	152.49	0	200	76	20	130
n-Hexane	1	50.5062	0	50	101	50	130
Di-isopropyl-ether	1	49.0014	0	50	98	50	130
<b>1,1-Dichloroethene</b>	1	<b>46.9704</b>	0	50	94	50	130
<b>Methyl Acetate</b>	1	<b>45.7528</b>	0	50	92	50	130
<b>Methyl-t-butyl ether</b>	1	<b>51.0527</b>	0	50	102	50	130
<b>1,1-Dichloroethane</b>	1	<b>47.9282</b>	0	50	96	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>46.9281</b>	0	50	94	50	130
Ethyl-t-butyl ether	1	42.324	0	50	85	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>47.4665</b>	0	50	95	50	130
<b>Bromochloromethane</b>	1	<b>47.1695</b>	0	50	94	50	130
2,2-Dichloropropane	1	44.6608	0	50	89	50	130
Ethyl acetate	1	43.1958	0	50	86	50	130
<b>1,4-Dioxane</b>	1	<b>2038.195</b>	0	2500	82	50	130
1,1-Dichloropropene	1	46.625	0	50	93	50	130
<b>Chloroform</b>	1	<b>49.5072</b>	0	50	99	50	130
<b>Cyclohexane</b>	1	<b>46.7679</b>	0	50	94	50	130
<b>1,2-Dichloroethane</b>	1	<b>47.0833</b>	0	50	94	50	130
<b>2-Butanone</b>	1	<b>31.2481</b>	0	50	62	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>45.502</b>	0	50	91	50	130
<b>Carbon Tetrachloride</b>	1	<b>45.879</b>	0	50	92	50	130
Vinyl Acetate	1	48.2254	0	50	96	50	130
<b>Bromodichloromethane</b>	1	<b>47.4851</b>	0	50	95	50	130
<b>Methylcyclohexane</b>	1	<b>49.1561</b>	0	50	98	50	130
Dibromomethane	1	42.1388	0	50	84	50	130
<b>1,2-Dichloropropane</b>	1	<b>47.4374</b>	0	50	95	50	130
<b>Trichloroethene</b>	1	<b>44.2737</b>	0	50	89	50	130
<b>Benzene</b>	1	<b>48.3136</b>	0	50	97	50	130
tert-Amyl methyl ether	1	45.2158	0	50	90	50	130
Iso-propylacetate	1	43.5064	0	50	87	50	130
Methyl methacrylate	1	39.0379	0	50	78	50	130
<b>Dibromochloromethane</b>	1	<b>45.3567</b>	0	50	91	50	130
2-Chloroethylvinylether	1	47.5556	0	50	95	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>47.5586</b>	0	50	95	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>48.3479</b>	0	50	97	50	130
Ethyl methacrylate	1	40.0904	0	50	80	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>48.4521</b>	0	50	97	50	130
<b>1,2-Dibromoethane</b>	1	<b>48.8728</b>	0	50	98	50	130
1,3-Dichloropropane	1	49.3566	0	50	99	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>39.6504</b>	0	50	79	20	130
<b>2-Hexanone</b>	1	<b>40.6568</b>	0	50	81	20	130
<b>Tetrachloroethene</b>	1	<b>41.8074</b>	0	50	84	50	130
<b>Toluene</b>	1	<b>44.4122</b>	0	50	89	50	130
1,1,1,2-Tetrachloroethane	1	44.9364	0	50	90	50	130
<b>Chlorobenzene</b>	1	<b>46.3025</b>	0	50	93	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89411

Method: 8260D	Matrix: Soil		QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	49.8868	0	50	100	50	130
n-Amyl acetate	1	47.9172	0	50	96	50	130
<b>Bromoform</b>	<b>1</b>	<b>46.9964</b>	<b>0</b>	<b>50</b>	<b>94</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>50.5233</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>52.8924</b>	<b>0</b>	<b>50</b>	<b>106</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>52.6538</b>	<b>0</b>	<b>50</b>	<b>105</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>94.2872</b>	<b>0</b>	<b>100</b>	<b>94</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>50.7876</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	45.542	0	50	91	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>49.6447</b>	<b>0</b>	<b>50</b>	<b>99</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>49.6546</b>	<b>0</b>	<b>50</b>	<b>99</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>49.8765</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>50.6554</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	222.4355	0	250	89	50	130
Camphene	1	50.5207	0	50	101	50	130
1,2,3-Trichloropropane	1	50.1397	0	50	100	50	130
2-Chlorotoluene	1	50.4799	0	50	101	50	130
p-Ethyltoluene	1	51.4182	0	50	103	50	130
4-Chlorotoluene	1	50.8258	0	50	102	50	130
n-Propylbenzene	1	51.3635	0	50	103	50	130
Bromobenzene	1	54.9641	0	50	110	50	130
1,3,5-Trimethylbenzene	1	49.1626	0	50	98	50	130
Butyl methacrylate	1	41.9569	0	50	84	50	130
t-Butylbenzene	1	47.9231	0	50	96	50	130
1,2,4-Trimethylbenzene	1	50.6118	0	50	101	50	130
sec-Butylbenzene	1	51.7222	0	50	103	50	130
4-Isopropyltoluene	1	51.148	0	50	102	50	130
n-Butylbenzene	1	52.4835	0	50	105	50	130
p-Diethylbenzene	1	50.3171	0	50	101	50	130
1,2,4,5-Tetramethylbenzene	1	54.9162	0	50	110	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>42.3682</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
Camphor	1	436.5083	0	500	87	50	130
Hexachlorobutadiene	1	41.3539	0	50	83	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>48.2444</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>48.5219</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>50</b>	<b>130</b>
Naphthalene	1	48.5344	0	50	97	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89411

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83426.D		AD19504-005(MS)		10/1/2020 3:35:00 PM			
Non Spike(If applicable): 11M83420.D		AD19504-005		10/1/2020 12:37:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	39.0663	0	50	78	20	130
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>33.061</b>	<b>0</b>	<b>50</b>	<b>66</b>	<b>20</b>	<b>130</b>
Chloromethane	1	32.6144	0	50	65	20	130
Bromomethane	1	39.7397	0	50	79	20	130
Vinyl Chloride	1	36.676	0	50	73	20	130
Chloroethane	1	40.6438	0	50	81	20	130
Trichlorofluoromethane	1	41.524	0	50	83	20	130
Ethyl ether	1	47.6515	0	50	95	50	130
Furan	1	38.7126	0	50	77	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>44.5049</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>44.6246</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
Acrolein	1	133.7812	0	200	67	20	130
Acrylonitrile	1	42.1112	0	50	84	20	130
Iodomethane	1	26.7891	0	50	54	50	130
<b>Acetone</b>	<b>1</b>	<b>190.8121</b>	<b>0</b>	<b>200</b>	<b>95</b>	<b>20</b>	<b>130</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>40.1099</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
t-Butyl Alcohol	1	145.7471	0	200	73	20	130
n-Hexane	1	39.6293	0	50	79	50	130
Di-isopropyl-ether	1	43.1466	0	50	86	50	130
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>42.4968</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>71.4855</b>	<b>0</b>	<b>50</b>	<b>143*</b>	<b>50</b>	<b>130</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>48.0215</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>50</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>42.7247</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>41.2101</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
Ethyl-t-butyl ether	1	38.5057	0	50	77	50	130
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>39.6989</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>43.04</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
2,2-Dichloropropane	1	38.901	0	50	78	50	130
Ethyl acetate	1	21.252	0	50	43*	50	130
<b>1,4-Dioxane</b>	<b>1</b>	<b>1941.512</b>	<b>0</b>	<b>2500</b>	<b>78</b>	<b>50</b>	<b>130</b>
1,1-Dichloropropene	1	40.6404	0	50	81	50	130
<b>Chloroform</b>	<b>1</b>	<b>43.1324</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
<b>Cyclohexane</b>	<b>1</b>	<b>39.9485</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>43.0305</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
<b>2-Butanone</b>	<b>1</b>	<b>28.7724</b>	<b>0</b>	<b>50</b>	<b>58</b>	<b>20</b>	<b>130</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>41.2527</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>39.9271</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
Vinyl Acetate	1	25.1888	0	50	50	50	130
<b>Bromodichloromethane</b>	<b>1</b>	<b>41.312</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>39.401</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
Dibromomethane	1	37.4414	0	50	75	50	130
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>42.3724</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>Trichloroethene</b>	<b>1</b>	<b>39.1313</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>50</b>	<b>130</b>
<b>Benzene</b>	<b>1</b>	<b>41.8835</b>	<b>0</b>	<b>50</b>	<b>84</b>	<b>50</b>	<b>130</b>
tert-Amyl methyl ether	1	40.6965	0	50	81	50	130
Iso-propylacetate	1	26.1554	0	50	52	50	130
Methyl methacrylate	1	46.8319	0	50	94	50	130
<b>Dibromochloromethane</b>	<b>1</b>	<b>40.1614</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
2-Chloroethylvinylether	1	39.5115	0	50	79	50	130
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>39.5513</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>40.6113</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
Ethyl methacrylate	1	25.4546	0	50	51	50	130
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>42.3023</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>42.0195</b>	<b>0</b>	<b>50</b>	<b>84</b>	<b>50</b>	<b>130</b>
1,3-Dichloropropane	1	42.5878	0	50	85	50	130
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>34.1663</b>	<b>0</b>	<b>50</b>	<b>68</b>	<b>20</b>	<b>130</b>
<b>2-Hexanone</b>	<b>1</b>	<b>33.7164</b>	<b>0</b>	<b>50</b>	<b>67</b>	<b>20</b>	<b>130</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>34.9413</b>	<b>0</b>	<b>50</b>	<b>70</b>	<b>50</b>	<b>130</b>
<b>Toluene</b>	<b>1</b>	<b>37.3776</b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>50</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	38.5162	0	50	77	50	130
<b>Chlorobenzene</b>	<b>1</b>	<b>38.001</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89411

Method: 8260D	Matrix: Soil		QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	22.5639	0	50	45*	50	130
n-Amyl acetate	1	14.4545	0	50	29*	50	130
<b>Bromoform</b>	<b>1</b>	<b>40.4712</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>41.3817</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>44.7104</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>42.0914</b>	<b>0</b>	<b>50</b>	<b>84</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>76.6221</b>	<b>0</b>	<b>100</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>41.0794</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	34.8169	0	50	70	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>37.6742</b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>37.4226</b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>38.4247</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>39.7205</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	171.8091	0	250	69	50	130
Camphene	1	35.9626	0	50	72	50	130
1,2,3-Trichloropropane	1	40.8297	0	50	82	50	130
2-Chlorotoluene	1	39.5811	0	50	79	50	130
p-Ethyltoluene	1	39.1732	0	50	78	50	130
4-Chlorotoluene	1	38.1313	0	50	76	50	130
n-Propylbenzene	1	38.7078	0	50	77	50	130
Bromobenzene	1	42.8613	0	50	86	50	130
1,3,5-Trimethylbenzene	1	38.3127	0	50	77	50	130
Butyl methacrylate	1	24.2405	0	50	48*	50	130
t-Butylbenzene	1	36.4538	0	50	73	50	130
1,2,4-Trimethylbenzene	1	38.7398	0	50	77	50	130
sec-Butylbenzene	1	37.4329	0	50	75	50	130
4-Isopropyltoluene	1	36.9062	0	50	74	50	130
n-Butylbenzene	1	35.8062	0	50	72	50	130
p-Diethylbenzene	1	35.4358	0	50	71	50	130
1,2,4,5-Tetramethylbenzene	1	39.2795	0	50	79	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>36.0068</b>	<b>0</b>	<b>50</b>	<b>72</b>	<b>50</b>	<b>130</b>
Camphor	1	412.4506	0	500	82	50	130
Hexachlorobutadiene	1	25.6488	0	50	51	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>31.9547</b>	<b>0</b>	<b>50</b>	<b>64</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>32.6948</b>	<b>0</b>	<b>50</b>	<b>65</b>	<b>50</b>	<b>130</b>
Naphthalene	1	37.0087	1.634	50	71	50	130

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**Bold and underline** - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89411

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83427.D		AD19504-005(MSD)		10/1/2020 3:54:00 PM			
Non Spike(If applicable): 11M83420.D		AD19504-005		10/1/2020 12:37:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	40.3044	0	50	81	20	130
<b>Dichlorodifluoromethane</b>	1	<b>33.2334</b>	<b>0</b>	<b>50</b>	<b>66</b>	<b>20</b>	<b>130</b>
<b>Chloromethane</b>	1	<b>31.5805</b>	<b>0</b>	<b>50</b>	<b>63</b>	<b>20</b>	<b>130</b>
<b>Bromomethane</b>	1	<b>38.4898</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>20</b>	<b>130</b>
<b>Vinyl Chloride</b>	1	<b>35.9296</b>	<b>0</b>	<b>50</b>	<b>72</b>	<b>20</b>	<b>130</b>
<b>Chloroethane</b>	1	<b>40.2106</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>20</b>	<b>130</b>
<b>Trichlorofluoromethane</b>	1	<b>41.3214</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>20</b>	<b>130</b>
Ethyl ether	1	43.4508	0	50	87	50	130
Furan	1	36.9931	0	50	74	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>44.5975</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
<b>Methylene Chloride</b>	1	<b>42.8442</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
Acrolein	1	132.0898	0	200	66	20	130
Acrylonitrile	1	39.6621	0	50	79	20	130
Iodomethane	1	28.1782	0	50	56	50	130
<b>Acetone</b>	1	<b>193.194</b>	<b>0</b>	<b>200</b>	<b>97</b>	<b>20</b>	<b>130</b>
<b>Carbon Disulfide</b>	1	<b>39.3403</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
t-Butyl Alcohol	1	149.9155	0	200	75	20	130
n-Hexane	1	38.3359	0	50	77	50	130
Di-isopropyl-ether	1	42.1995	0	50	84	50	130
<b>1,1-Dichloroethene</b>	1	<b>41.2888</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>Methyl Acetate</b>	1	<b>66.3837</b>	<b>0</b>	<b>50</b>	<b>133*</b>	<b>50</b>	<b>130</b>
<b>Methyl-t-butyl ether</b>	1	<b>46.4026</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>50</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	1	<b>41.5304</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	1	<b>41.0115</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
Ethyl-t-butyl ether	1	36.9482	0	50	74	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>38.9086</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>50</b>	<b>130</b>
<b>Bromochloromethane</b>	1	<b>41.6194</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
2,2-Dichloropropane	1	37.6291	0	50	75	50	130
Ethyl acetate	1	20.4132	0	50	41*	50	130
<b>1,4-Dioxane</b>	1	<b>2151.485</b>	<b>0</b>	<b>2500</b>	<b>86</b>	<b>50</b>	<b>130</b>
1,1-Dichloropropene	1	39.5758	0	50	79	50	130
<b>Chloroform</b>	1	<b>42.6947</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>Cyclohexane</b>	1	<b>38.5772</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	1	<b>40.2784</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
<b>2-Butanone</b>	1	<b>28.897</b>	<b>0</b>	<b>50</b>	<b>58</b>	<b>20</b>	<b>130</b>
<b>1,1,1-Trichloroethane</b>	1	<b>40.1326</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	1	<b>39.3722</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
Vinyl Acetate	1	24.7509	0	50	50	50	130
<b>Bromodichloromethane</b>	1	<b>40.7322</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
<b>Methylcyclohexane</b>	1	<b>38.4475</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
Dibromomethane	1	37.41	0	50	75	50	130
<b>1,2-Dichloropropane</b>	1	<b>41.2771</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>Trichloroethene</b>	1	<b>38.4177</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>Benzene</b>	1	<b>40.8602</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
tert-Amyl methyl ether	1	40.3707	0	50	81	50	130
Iso-propylacetate	1	25.9353	0	50	52	50	130
Methyl methacrylate	1	44.8646	0	50	90	50	130
<b>Dibromochloromethane</b>	1	<b>40.162</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
2-Chloroethylvinylether	1	40.0463	0	50	80	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>39.1186</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>50</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	1	<b>38.95</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>50</b>	<b>130</b>
Ethyl methacrylate	1	26.0503	0	50	52	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>42.554</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	1	<b>41.4307</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
1,3-Dichloropropane	1	41.7784	0	50	84	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>34.3184</b>	<b>0</b>	<b>50</b>	<b>69</b>	<b>20</b>	<b>130</b>
<b>2-Hexanone</b>	1	<b>33.2026</b>	<b>0</b>	<b>50</b>	<b>66</b>	<b>20</b>	<b>130</b>
<b>Tetrachloroethene</b>	1	<b>35.1159</b>	<b>0</b>	<b>50</b>	<b>70</b>	<b>50</b>	<b>130</b>
<b>Toluene</b>	1	<b>36.611</b>	<b>0</b>	<b>50</b>	<b>73</b>	<b>50</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	38.5118	0	50	77	50	130
<b>Chlorobenzene</b>	1	<b>37.8528</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>

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Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89411

Method: 8260D	Matrix: Soil		QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	23.7092	0	50	47*	50	130
n-Amyl acetate	1	15.3123	0	50	31*	50	130
<b>Bromofom</b>	<b>1</b>	<b>40.5078</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>40.1695</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>45.5252</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>41.6827</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>73.4035</b>	<b>0</b>	<b>100</b>	<b>73</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>41.0892</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	34.0682	0	50	68	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>37.1928</b>	<b>0</b>	<b>50</b>	<b>74</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>37.1027</b>	<b>0</b>	<b>50</b>	<b>74</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>38.0385</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>
<b>isopropylbenzene</b>	<b>1</b>	<b>39.6197</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	177.6047	0	250	71	50	130
Camphene	1	36.3339	0	50	73	50	130
1,2,3-Trichloropropane	1	41.0088	0	50	82	50	130
2-Chlorotoluene	1	39.3627	0	50	79	50	130
p-Ethyltoluene	1	38.7981	0	50	78	50	130
4-Chlorotoluene	1	38.4556	0	50	77	50	130
n-Propylbenzene	1	38.4607	0	50	77	50	130
Bromobenzene	1	43.0828	0	50	86	50	130
1,3,5-Trimethylbenzene	1	37.7217	0	50	75	50	130
Butyl methacrylate	1	25.8829	0	50	52	50	130
t-Butylbenzene	1	36.5859	0	50	73	50	130
1,2,4-Trimethylbenzene	1	38.6607	0	50	77	50	130
sec-Butylbenzene	1	37.9148	0	50	76	50	130
4-Isopropyltoluene	1	37.1844	0	50	74	50	130
n-Butylbenzene	1	36.3559	0	50	73	50	130
p-Diethylbenzene	1	35.8178	0	50	72	50	130
1,2,4,5-Tetramethylbenzene	1	39.2621	0	50	79	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>37.9735</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>
Camphor	1	435.09	0	500	87	50	130
Hexachlorobutadiene	1	25.5804	0	50	51	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>33.0605</b>	<b>0</b>	<b>50</b>	<b>66</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>33.8887</b>	<b>0</b>	<b>50</b>	<b>68</b>	<b>50</b>	<b>130</b>
Naphthalene	1	37.7263	1.634	50	72	50	130

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 Bold and underline - Indicates the compounds reported on form1



**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89411

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M83427.D	AD19504-005(MSD)	10/1/2020 3:54:00 PM
Duplicate(If applicable): 11M83426.D	AD19504-005(MS)	10/1/2020 3:35:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	40.3044	39.0663	3.1	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>33.2334</b>	<b>33.061</b>	<b>0.52</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>31.5805</b>	<b>32.6144</b>	<b>3.2</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>38.4898</b>	<b>39.7397</b>	<b>3.2</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>35.9296</b>	<b>36.676</b>	<b>2.1</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>40.2106</b>	<b>40.6438</b>	<b>1.1</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>41.3214</b>	<b>41.524</b>	<b>0.49</b>	<b>30</b>
Ethyl ether	1	43.4508	47.6515	9.2	30
Furan	1	36.9931	38.7126	4.5	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>44.5975</b>	<b>44.5049</b>	<b>0.21</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>42.8442</b>	<b>44.6246</b>	<b>4.1</b>	<b>30</b>
Acrolein	1	132.0898	133.7812	1.3	30
Acrylonitrile	1	39.6621	42.1112	6	30
Iodomethane	1	28.1782	26.7891	5.1	30
<b>Acetone</b>	<b>1</b>	<b>193.194</b>	<b>190.8121</b>	<b>1.2</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>39.3403</b>	<b>40.1099</b>	<b>1.9</b>	<b>30</b>
t-Butyl Alcohol	1	149.9155	145.7471	2.8	30
n-Hexane	1	38.3359	39.6293	3.3	30
Di-isopropyl-ether	1	42.1995	43.1466	2.2	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>41.2888</b>	<b>42.4968</b>	<b>2.9</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>66.3837</b>	<b>71.4855</b>	<b>7.4</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>46.4026</b>	<b>48.0215</b>	<b>3.4</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>41.5304</b>	<b>42.7247</b>	<b>2.8</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>41.0115</b>	<b>41.2101</b>	<b>0.48</b>	<b>30</b>
Ethyl-t-butyl ether	1	36.9482	38.5057	4.1	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>38.9086</b>	<b>39.6989</b>	<b>2</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>41.6194</b>	<b>43.04</b>	<b>3.4</b>	<b>30</b>
2,2-Dichloropropane	1	37.6291	38.901	3.3	30
Ethyl acetate	1	20.4132	21.252	4	30
<b>1,4-Dioxane</b>	<b>1</b>	<b>2151.485</b>	<b>1941.512</b>	<b>10</b>	<b>30</b>
1,1-Dichloropropene	1	39.5758	40.6404	2.7	30
<b>Chloroform</b>	<b>1</b>	<b>42.6947</b>	<b>43.1324</b>	<b>1</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>38.5772</b>	<b>39.9485</b>	<b>3.5</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>40.2784</b>	<b>43.0305</b>	<b>6.6</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>28.897</b>	<b>28.7724</b>	<b>0.43</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>40.1326</b>	<b>41.2527</b>	<b>2.8</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>39.3722</b>	<b>39.9271</b>	<b>1.4</b>	<b>40</b>
Vinyl Acetate	1	24.7509	25.1888	1.8	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>40.7322</b>	<b>41.312</b>	<b>1.4</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>38.4475</b>	<b>39.401</b>	<b>2.4</b>	<b>30</b>
Dibromomethane	1	37.41	37.4414	0.08	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>41.2771</b>	<b>42.3724</b>	<b>2.6</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>38.4177</b>	<b>39.1313</b>	<b>1.8</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>40.8602</b>	<b>41.8835</b>	<b>2.5</b>	<b>40</b>
tert-Amyl methyl ether	1	40.3707	40.6965	0.8	30
Iso-propylacetate	1	25.9353	26.1554	0.85	30
Methyl methacrylate	1	44.8646	46.8319	4.3	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>40.162</b>	<b>40.1614</b>	<b>0</b>	<b>30</b>
2-Chloroethylvinylether	1	40.0463	39.5115	1.3	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>39.1186</b>	<b>39.5513</b>	<b>1.1</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>38.95</b>	<b>40.6113</b>	<b>4.2</b>	<b>30</b>
Ethyl methacrylate	1	26.0503	25.4546	2.3	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>42.554</b>	<b>42.3023</b>	<b>0.59</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>41.4307</b>	<b>42.0195</b>	<b>1.4</b>	<b>30</b>
1,3-Dichloropropane	1	41.7784	42.5878	1.9	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>34.3184</b>	<b>34.1663</b>	<b>0.44</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>33.2026</b>	<b>33.7164</b>	<b>1.5</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>35.1159</b>	<b>34.9413</b>	<b>0.5</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>36.611</b>	<b>37.3776</b>	<b>2.1</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	38.5118	38.5162	0.01	30
<b>Chlorobenzene</b>	<b>1</b>	<b>37.8528</b>	<b>38.001</b>	<b>0.39</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89411

Method: 8260D

Matrix: Soil

QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	23.7092	22.5639	5	30
n-Amyl acetate	1	15.3123	14.4545	5.8	30
<b>Bromoform</b>	<b>1</b>	<b>40.5078</b>	<b>40.4712</b>	<b>0.09</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>40.1695</b>	<b>41.3817</b>	<b>3</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>45.5252</b>	<b>44.7104</b>	<b>1.8</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>41.6827</b>	<b>42.0914</b>	<b>0.98</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>73.4035</b>	<b>76.6221</b>	<b>4.3</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>41.0892</b>	<b>41.0794</b>	<b>0.02</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	34.0682	34.8169	2.2	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>37.1928</b>	<b>37.6742</b>	<b>1.3</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>37.1027</b>	<b>37.4226</b>	<b>0.86</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>38.0385</b>	<b>38.4247</b>	<b>1</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>39.6197</b>	<b>39.7205</b>	<b>0.25</b>	<b>30</b>
Cyclohexanone	1	177.6047	171.8091	3.3	30
Camphene	1	36.3339	35.9626	1	30
1,2,3-Trichloropropane	1	41.0088	40.8297	0.44	30
2-Chlorotoluene	1	39.3627	39.5811	0.55	30
p-Ethyltoluene	1	38.7981	39.1732	0.96	30
4-Chlorotoluene	1	38.4556	38.1313	0.85	30
n-Propylbenzene	1	38.4607	38.7078	0.64	40
Bromobenzene	1	43.0828	42.8613	0.52	30
1,3,5-Trimethylbenzene	1	37.7217	38.3127	1.6	30
Butyl methacrylate	1	25.8829	24.2405	6.6	30
t-Butylbenzene	1	36.5859	36.4538	0.36	30
1,2,4-Trimethylbenzene	1	38.6607	38.7398	0.2	30
sec-Butylbenzene	1	37.9148	37.4329	1.3	40
4-Isopropyltoluene	1	37.1844	36.9062	0.75	30
n-Butylbenzene	1	36.3559	35.8062	1.5	30
p-Diethylbenzene	1	35.8178	35.4358	1.1	30
1,2,4,5-Tetramethylbenzene	1	39.2621	39.2795	0.04	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>37.9735</b>	<b>36.0068</b>	<b>5.3</b>	<b>30</b>
Camphor	1	435.09	412.4506	5.3	30
Hexachlorobutadiene	1	25.5804	25.6488	0.27	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>33.0605</b>	<b>31.9547</b>	<b>3.4</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>33.8887</b>	<b>32.6948</b>	<b>3.6</b>	<b>30</b>
Naphthalene	1	37.7263	37.0087	1.9	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 11M83376.D  
Matrix: SoilBlank Analysis Date: 09/30/20 18:24  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19479-002	11M83392.D	09/30/20 23:40
AD19479-008	11M83394.D	10/01/20 00:20
AD19479-010	11M83395.D	10/01/20 00:39
AD19479-018	11M83399.D	10/01/20 01:59
AD19479-020	11M83400.D	10/01/20 02:19
AD19504-001(MSD	11M83381.D	09/30/20 20:03
AD19504-001(MS)	11M83380.D	09/30/20 19:43
MBS89405	11M83379.D	09/30/20 19:23
AD19504-001	11M83377.D	09/30/20 18:43

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 11M83418.D  
Matrix: SoilBlank Analysis Date: 10/01/20 11:57  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19479-004	11M83439.D	10/01/20 19:51
AD19479-006	11M83438.D	10/01/20 19:32
AD19479-012	11M83440.D	10/01/20 20:11
AD19479-014	11M83436.D	10/01/20 18:52
AD19479-016	11M83437.D	10/01/20 19:12
AD19504-005(MSD	11M83427.D	10/01/20 15:54
MBS89411	11M83419.D	10/01/20 12:17
AD19504-005	11M83420.D	10/01/20 12:37
AD19504-005(MS)	11M83426.D	10/01/20 15:35

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS II

Data File: 11M81478.D  
Analysis Date: 08/05/20 12:08  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.144 to 7.170 min

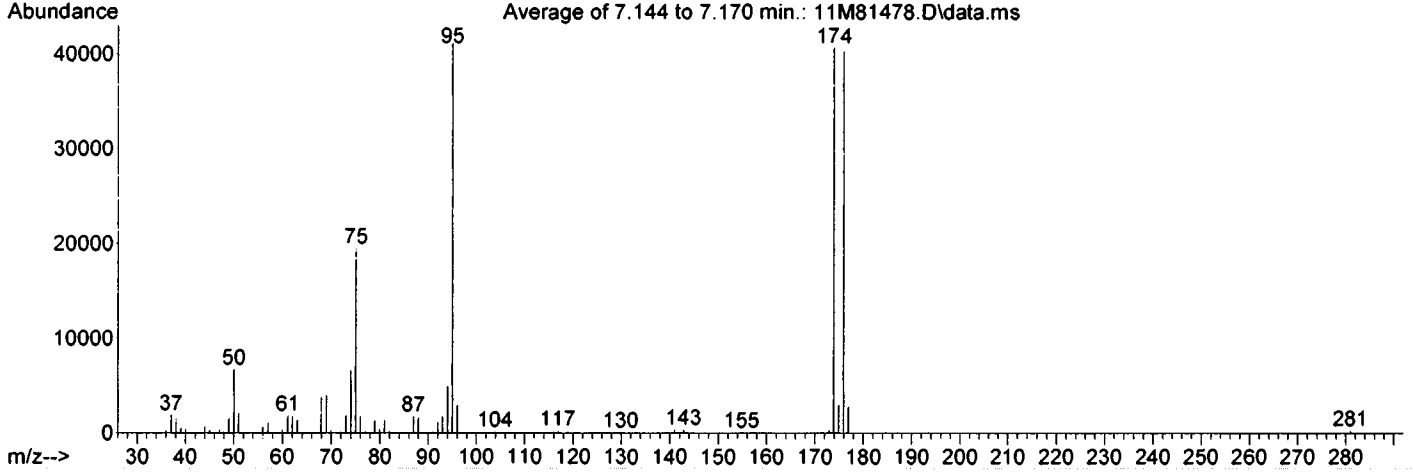
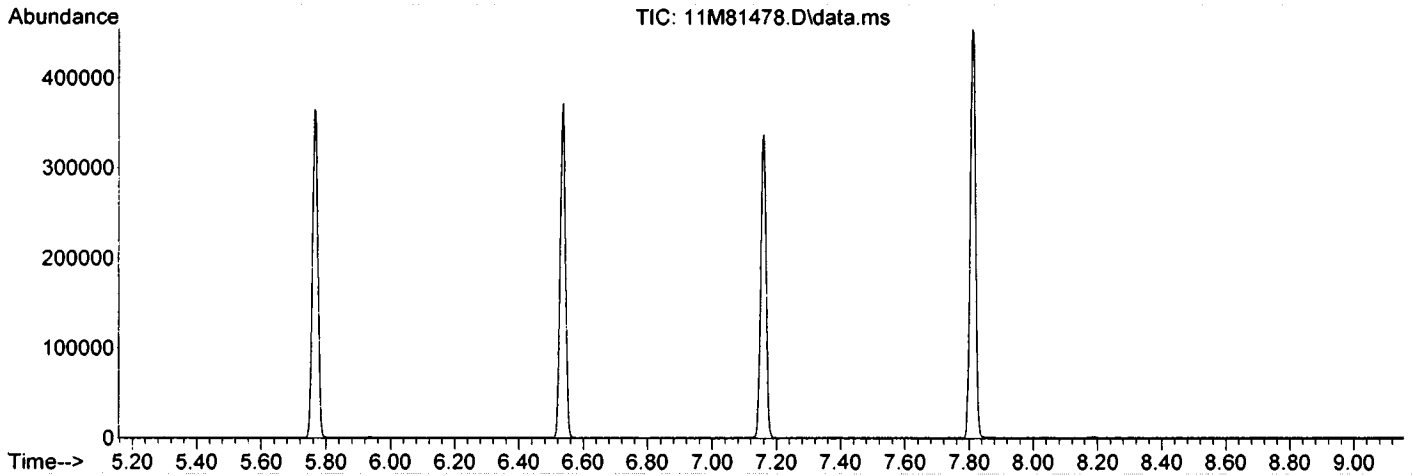
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.4	6729	PASS
75	95	30	60	47.4	19513	PASS
95	95	100	100	100.0	41126	PASS
96	95	5	9	7.1	2911	PASS
173	174	0.00	2	0.7	291	PASS
174	95	50	100	99.0	40704	PASS
175	174	5	9	7.2	2916	PASS
176	174	95	101	99.0	40282	PASS
177	176	5	9	6.9	2794	PASS

Data File	Sample Number	Analysis Date:
11M81482.D	CAL @ 100 PPB	08/05/20 13:21
11M81484.D	CAL @ 250 PPB	08/05/20 14:01
11M81486.D	CAL @ 500 PPB	08/05/20 14:41
11M81487.D	BLK	08/05/20 15:01
11M81493.D	CAL @ 0.5 PPB	08/05/20 17:00
11M81494.D	CAL @ 1 PPB	08/05/20 17:20
11M81495.D	CAL @ 2 PPB	08/05/20 17:40
11M81496.D	CAL @ 5 PPB	08/05/20 18:00
11M81497.D	CAL @ 20 PPB	08/05/20 18:20
11M81498.D	CAL @ 50 PPB	08/05/20 18:39
11M81501.D	ICV	08/05/20 19:39
11M81503.D	DAILY BLANK	08/05/20 20:19

Data Path : G:\GcMsData\2020\GCMS\_11\Data\08-05-20\  
 Data File : 11M81478.D  
 Acq On : 5 Aug 2020 12:08  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S0805.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Thu Aug 06 07:16:09 2020



Spectrum Information: Average of 7.144 to 7.170 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.4	6729	PASS
75	95	30	60	47.4	19513	PASS
95	95	100	100	100.0	41126	PASS
96	95	5	9	7.1	2911	PASS
173	174	0.00	2	0.7	291	PASS
174	95	50	100	99.0	40704	PASS
175	174	5	9	7.2	2916	PASS
176	174	95	101	99.0	40282	PASS
177	176	5	9	6.9	2794	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS IIData File: 11M83370.D  
Analysis Date: 09/30/20 16:31  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.147 to 7.157 min

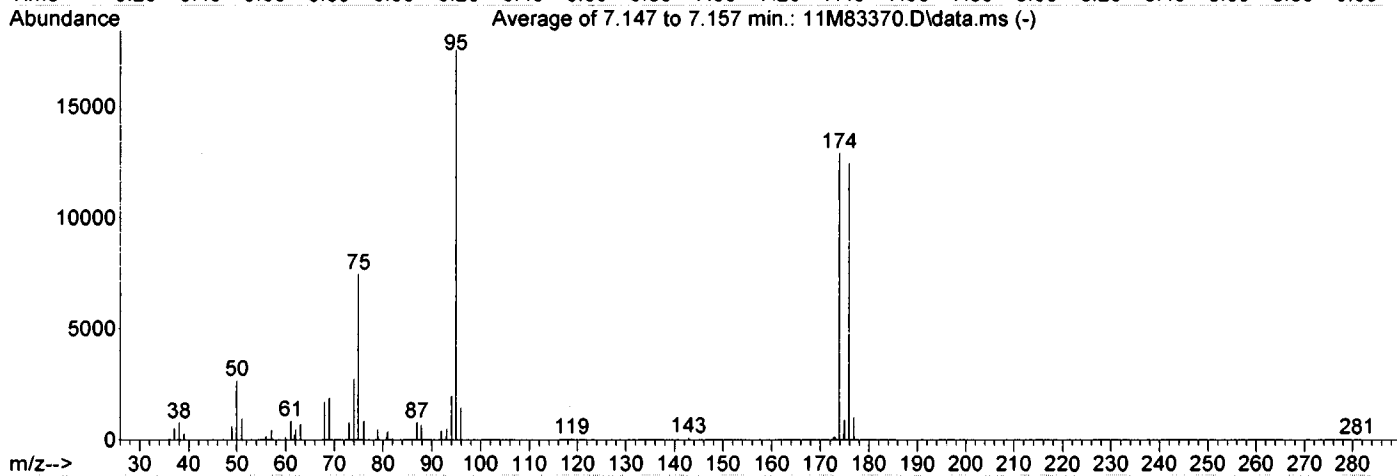
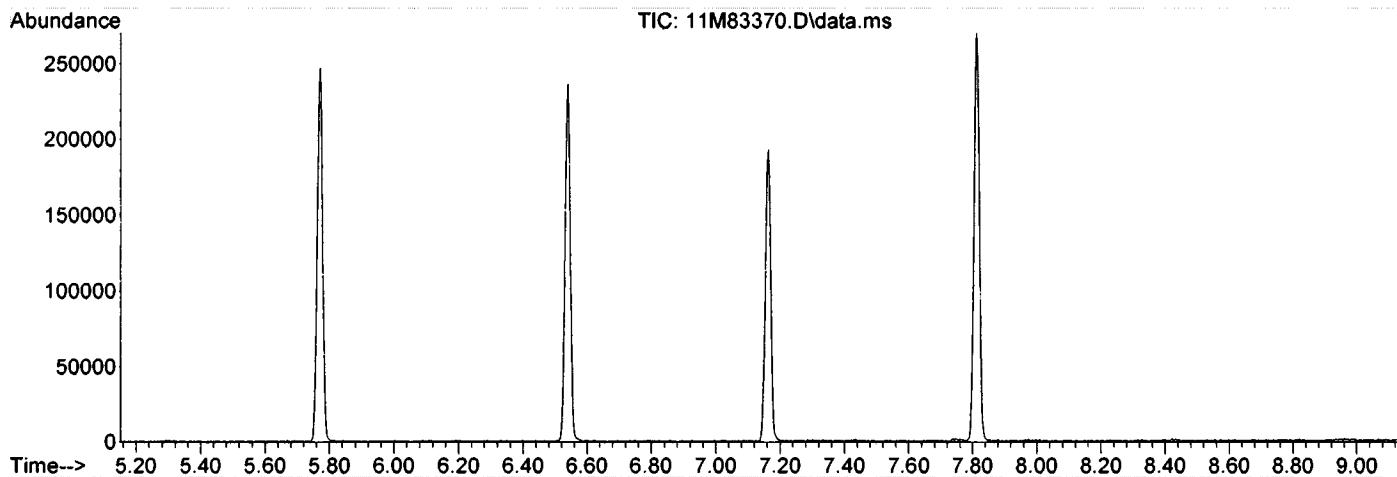
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.3	2684	PASS
75	95	30	60	42.5	7459	PASS
95	95	100	100	100.0	17530	PASS
96	95	5	9	8.2	1440	PASS
173	174	0.00	2	1.2	153	PASS
174	95	50	100	73.6	12905	PASS
175	174	5	9	7.0	902	PASS
176	174	95	101	96.4	12435	PASS
177	176	5	9	8.3	1026	PASS

Data File	Sample Number	Analysis Date:
11M83371.D	CAL @ 50 PPB	09/30/20 16:45
11M83372.D	50 PPB	09/30/20 17:04
11M83373.D	BLK	09/30/20 17:24
11M83374.D	BLK	09/30/20 17:44
11M83375.D	BLK	09/30/20 18:04
11M83376.D	DAILY BLANK	09/30/20 18:24
11M83377.D	AD19504-001	09/30/20 18:43
11M83378.D	AD19504-003	09/30/20 19:03
11M83379.D	MBS89405	09/30/20 19:23
11M83380.D	AD19504-001(MS)	09/30/20 19:43
11M83381.D	AD19504-001(MSD)	09/30/20 20:03
11M83382.D	BLK	09/30/20 20:22
11M83383.D	BLK	09/30/20 20:42
11M83384.D	AD19451-001	09/30/20 21:02
11M83385.D	AD19451-002	09/30/20 21:22
11M83386.D	AD19451-003	09/30/20 21:41
11M83387.D	AD19451-004	09/30/20 22:01
11M83388.D	AD19451-005	09/30/20 22:21
11M83389.D	AD19451-006	09/30/20 22:41
11M83390.D	AD19451-007	09/30/20 23:01
11M83391.D	BLK	09/30/20 23:20
11M83392.D	AD19479-002	09/30/20 23:40
11M83393.D	AD19479-004	10/01/20 00:00
11M83394.D	AD19479-008	10/01/20 00:20
11M83395.D	AD19479-010	10/01/20 00:39
11M83396.D	AD19479-012	10/01/20 00:59
11M83397.D	AD19479-014	10/01/20 01:19
11M83398.D	AD19479-016	10/01/20 01:39
11M83399.D	AD19479-018	10/01/20 01:59
11M83400.D	AD19479-020	10/01/20 02:19
11M83401.D	AD19479-006	10/01/20 02:38
11M83402.D	BLK	10/01/20 02:58
11M83403.D	AD19466-001	10/01/20 03:18
11M83404.D	MBS89406	10/01/20 03:38
11M83405.D	BLK	10/01/20 03:58
11M83406.D	BLK	10/01/20 04:17
11M83407.D	BLK	10/01/20 04:37
11M83408.D	BLK	10/01/20 04:57
11M83409.D	BLK	10/01/20 05:17
11M83410.D	BLK	10/01/20 05:37

Data Path : G:\GcMsData\2020\GCMS\_11\Data\09-3020\  
 Data File : 11M83370.D  
 Acq On : 30 Sep 2020 16:31  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 33 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S0805.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Thu Aug 06 07:16:09 2020



Spectrum Information: Average of 7.147 to 7.157 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.3	2684	PASS
75	95	30	60	42.5	7459	PASS
95	95	100	100	100.0	17530	PASS
96	95	5	9	8.2	1440	PASS
173	174	0.00	2	1.2	153	PASS
174	95	50	100	73.6	12905	PASS
175	174	5	9	7.0	902	PASS
176	174	95	101	96.4	12435	PASS
177	176	5	9	8.3	1026	PASS



## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 11

Data File: 11M83412.D  
Analysis Date: 10/01/20 10:05  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.151 to 7.157 min

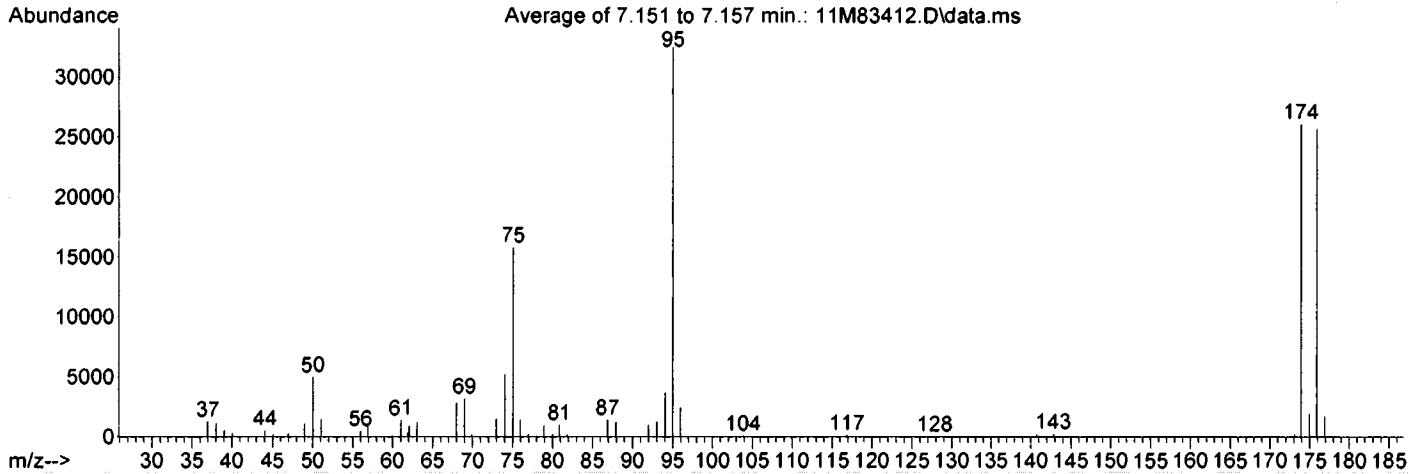
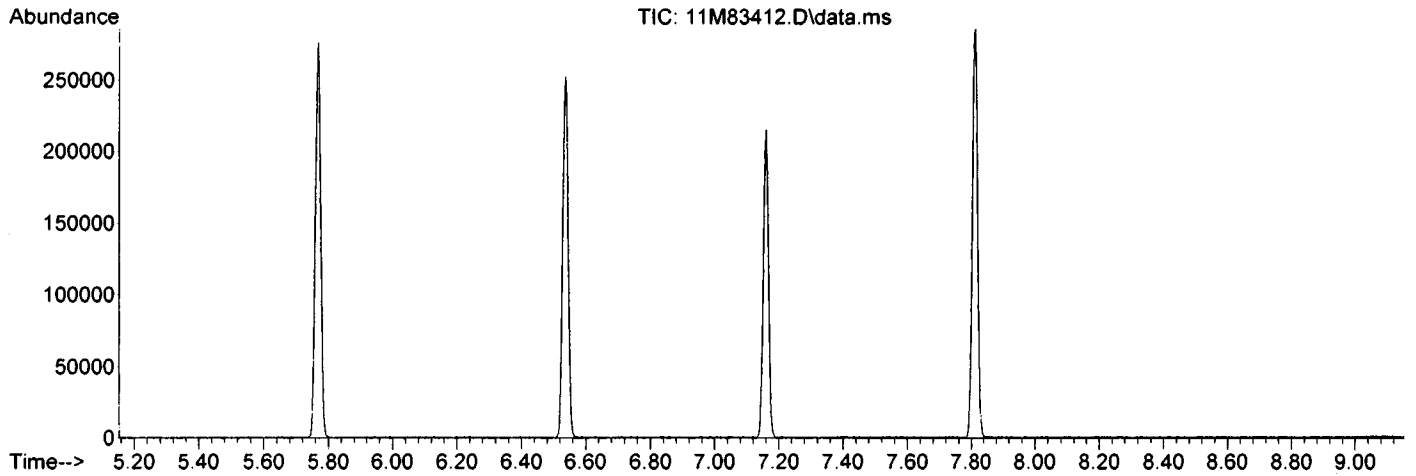
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.5	5028	PASS
75	95	30	60	48.6	15816	PASS
95	95	100	100	100.0	32515	PASS
96	95	5	9	7.6	2458	PASS
173	174	0.00	2	1.2	301	PASS
174	95	50	100	80.2	26093	PASS
175	174	5	9	7.5	1962	PASS
176	174	95	101	98.4	25677	PASS
177	176	5	9	6.8	1751	PASS

Data File	Sample Number	Analysis Date:
11M83414.D	CAL @ 50 PPB	10/01/20 10:38
11M83415.D	50 PPB	10/01/20 10:58
11M83416.D	BLK	10/01/20 11:18
11M83417.D	BLK	10/01/20 11:38
11M83418.D	DAILY BLANK	10/01/20 11:57
11M83419.D	MBS89411	10/01/20 12:17
11M83420.D	AD19504-005	10/01/20 12:37
11M83421.D	AD19487-001	10/01/20 12:57
11M83422.D	AD19487-002	10/01/20 13:16
11M83423.D	AD19487-003	10/01/20 14:35
11M83424.D	AD19514-001	10/01/20 14:55
11M83425.D	AD19514-008	10/01/20 15:15
11M83426.D	AD19504-005(MS)	10/01/20 15:35
11M83427.D	AD19504-005(MSD)	10/01/20 15:54
11M83428.D	BLK	10/01/20 16:14
11M83429.D	BLK	10/01/20 16:34
11M83430.D	AD19472-001	10/01/20 16:54
11M83431.D	AD19472-002	10/01/20 17:13
11M83432.D	AD19472-003	10/01/20 17:33
11M83433.D	BLK	10/01/20 17:53
11M83434.D	AD19487-002	10/01/20 18:13
11M83435.D	AD19514-001	10/01/20 18:32
11M83436.D	AD19479-014	10/01/20 18:52
11M83437.D	AD19479-016	10/01/20 19:12
11M83438.D	AD19479-006	10/01/20 19:32
11M83439.D	AD19479-004	10/01/20 19:51
11M83440.D	AD19479-012	10/01/20 20:11
11M83441.D	BLK	10/01/20 20:31
11M83442.D	AD19501-002	10/01/20 20:51
11M83443.D	AD19501-004	10/01/20 21:10

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-01-20\  
 Data File : 11M83412.D  
 Acq On : 1 Oct 2020 10:05  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S0805.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Thu Aug 06 07:16:09 2020



Spectrum Information: Average of 7.151 to 7.157 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	5028	PASS
75	95	30	60	48.6	15816	PASS
95	95	100	100	100.0	32515	PASS
96	95	5	9	7.6	2458	PASS
173	174	0.00	2	1.2	301	PASS
174	95	50	100	80.2	26093	PASS
175	174	5	9	7.5	1962	PASS
176	174	95	101	98.4	25677	PASS
177	176	5	9	6.8	1751	PASS

*WP*





Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																			
1	11M81497.D	CAL @ 20 PPB	08/05/20 18:20	2	11M81496.D	CAL @ 5 PPB	08/05/20 18:00	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9																			
3	11M81495.D	CAL @ 2 PPB	08/05/20 17:40	4	11M81498.D	CAL @ 50 PPB	08/05/20 18:39	20.00 5.00 2.00 50.00 100.0 250.0 500.0																			
5	11M81482.D	CAL @ 100 PPB	08/05/20 13:21	6	11M81484.D	CAL @ 250 PPB	08/05/20 14:01	20.00 5.00 2.00 50.00 100.0 250.0 500.0																			
7	11M81486.D	CAL @ 500 PPB	08/05/20 14:41	8	11M81494.D	CAL @ 1 PPB	08/05/20 17:20	20.00 5.00 2.00 50.00 100.0 250.0 500.0																			
9	11M81493.D	CAL @ 0.5 PPB	08/05/20 17:00					200.0 50.00 20.00 500.0 1000. 2500.																			
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AVGrI	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
p-Ethyltoluene	1	0	Avg	2.4954	2.5019	2.4524	2.5651	2.3906	2.7364	2.5913	---	---	2.53	7.35	0.999	0.999	4.4	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
4-Chlorotoluene	1	0	Avg	1.3689	1.3985	1.3995	1.4307	1.4421	1.5609	1.4306	---	---	1.44	7.42	0.997	0.999	4.8	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
n-Propylbenzene	1	0	Avg	2.8485	2.8345	2.8410	2.8619	2.6309	2.8899	2.7577	3.0968	---	2.85	7.29	0.999	1.00	4.6	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
Bromobenzene	1	0	Avg	1.3326	1.3364	1.3195	1.3608	1.2754	0.9810	1.0664	---	---	1.24	7.27	0.996	0.996	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
1,3,5-Trimethylbenzen	1	0	Avg	1.9802	1.9977	2.0206	2.0430	1.9456	2.1658	2.0136	2.2769	---	2.06	7.38	0.998	0.999	5.5	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
Buyl methacrylate	1	0	Avg	0.4643	0.4577	0.4709	0.5097	0.5708	0.5415	0.5341	---	---	0.50	7.38	1.00	1.00	8.7	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
1-Buylbenzene	1	0	Avg	2.1134	2.1515	2.1415	2.2196	2.0388	2.3266	1.8560	2.4481	---	2.16	7.57	0.987	0.997	8.3	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
1,2,4-Trimethylbenzen	1	0	Avg	2.0347	2.0777	2.0792	2.1248	2.0704	2.1917	1.7042	2.3864	---	2.08	7.59	0.984	0.998	9.1	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
sec-Butylbenzene	1	0	Avg	2.7315	2.7075	2.6699	2.8314	2.6421	2.8776	1.8517	3.0149	---	2.67	7.69	0.944	0.994	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
4-Isopropyltoluene	1	0	Avg	2.3583	2.3612	2.3496	2.4591	2.3658	2.3987	1.6099	2.7089	---	2.33	7.76	0.954	0.997	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
n-Butylbenzene	1	0	Avg	2.4136	2.4227	2.4259	2.5147	2.5903	2.4433	2.0749	2.9387	---	2.48	8.00	0.992	1.00	9.6	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---	
p-Diethylbenzene	1	0	Avg	1.3852	1.3986	1.3707	1.4160	1.4240	1.5248	1.2925	---	---	1.40	7.98	0.993	0.999	5.0	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
1,2,4,5-Tetramethylbe	1	0	Avg	2.0060	1.9991	2.0066	2.0634	2.0682	2.2110	1.3104	---	---	1.95	8.44	0.913	0.992	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1830	0.1800	0.1651	0.1904	0.1729	0.1965	0.1444	---	---	0.17	8.50	0.974	0.996	9.8	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
Camphor	1	0	Avg	0.0791	0.0806	0.0767	0.0801	0.0683	0.0859	---	---	---	0.07	8.94	0.993	0.998	7.4	200.0	50.00	20.00	500.0	1000. 2500.	---	---	---	---	
Hexachlorobutadiene	1	0	Avg	0.5224	0.4963	0.4837	0.5308	0.4879	0.5231	0.5261	---	---	0.51	9.07	1.00	1.00	3.9	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
1,2,4-Trichlorobenzen	1	0	Avg	0.8177	0.8333	0.8174	0.8256	0.8669	0.9288	0.8390	---	---	0.84	7.99	0.997	0.999	4.7	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
1,2,3-Trichlorobenzen	1	0	Avg	0.7419	0.7213	0.7464	0.7465	0.7611	0.8055	0.7906	---	---	0.75	9.29	1.00	1.00	3.9	20.00	5.00	2.00	50.00	100.0	250.0	500.0	---	---	
Napthalene	1	0	Avg	1.9507	1.9848	1.9726	1.9828	1.8998	2.2135	2.0381	2.3192	---	---	2.04	9.15	0.998	0.999	7.1	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	---

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria(if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 9.305

## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 9/30/2020 4:45:00 PData File: IIM83371.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	43.16	50	20	0.1	0.296	0.255	13.69	
Dichlorodifluoromethane	1	0		1.67	39.01	50	20	0.1	0.193	0.151	21.97	C1
Chloromethane	1	0		1.85	37.01	50	20	0.1	0.231	0.171	25.99	C1
Bromomethane	1	0		2.24	42.97	50	20	0.1	0.213	0.183	14.07	
Vinyl Chloride	1	0		1.94	42.87	50	20	0.1	0.274	0.235	14.25	
Chloroethane	1	0		2.33	46.56	50	20	0.1	0.185	0.172	6.89	
Trichlorofluoromethane	1	0		2.55	46.47	50	20	0.1	0.462	0.430	7.06	
Ethyl ether	1	0		2.78	50.00	50	20	0.5	0.157	0.157	0.01	
Furan	1	0		2.82	47.44	50	20	0.5	0.265	0.252	5.13	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	53.84	50	20	0.1	0.175	0.188	7.69	
Methylene Chloride	1	0		3.38	55.89	50	20	0.1	0.255	0.285	11.78	
Acrolein	1	0		2.89	252.90	250	20		0.026	0.026	1.16	
Acrylonitrile	1	0		3.57	51.49	50	20		0.068	0.070	2.98	
Iodomethane	1	0		3.12	36.92	50	20		0.226	0.307	26.15	C1
Acetone	1	0		3.01	229.31	250	20	0.1	0.054	0.050	8.28	
Carbon Disulfide	1	0		3.19	47.23	50	20	0.1	0.744	0.703	5.55	
t-Butyl Alcohol	1	0		3.44	161.19	250	20		0.034	0.022	35.52	C1
n-Hexane	1	0		3.82	49.99	50	20		0.237	0.237	0.01	
Di-isopropyl-ether	1	0		3.95	51.24	50	20		0.484	0.496	2.48	
1,1-Dichloroethene	1	0		2.98	50.21	50	20	0.1	0.313	0.314	0.41	
Methyl Acetate	1	0		3.28	46.55	50	20	0.1	0.123	0.115	6.89	
Methyl-t-butyl ether	1	0		3.59	55.78	50	20	0.1	0.531	0.593	11.56	
1,1-Dichloroethane	1	0		3.93	51.38	50	20	0.2	0.402	0.413	2.76	
trans-1,2-Dichloroethene	1	0		3.60	52.57	50	20	0.1	0.267	0.281	5.14	
Ethyl-t-butyl ether	1	0		4.20	45.08	50	20	0.5	0.653	0.589	9.84	
cis-1,2-Dichloroethene	1	0		4.31	49.79	50	20	0.1	0.401	0.399	0.42	
Bromochloromethane	1	0		4.46	50.75	50	20		0.163	0.166	1.51	
2,2-Dichloropropane	1	0		4.31	46.95	50	20		0.395	0.371	6.11	
Ethyl acetate	1	0		4.33	43.04	50	20		0.209	0.180	13.93	
1,4-Dioxane	1	0		5.34	1996.59	2500	20		0.004	0.003	20.14	
1,1-Dichloropropene	1	0		4.70	47.89	50	20		0.364	0.348	4.23	
Chloroform	1	0		4.49	52.31	50	20	0.2	0.447	0.467	4.63	
Dibromofluoromethane	1	0	S	4.58	31.52	75	**		0.271	0.284	5.08	
Cyclohexane	1	0		4.65	46.34	50	20	0.1	0.323	0.299	7.33	
1,2-Dichloroethane-d4	1	0	S	4.78	30.81	75	**		0.119	0.122	2.68	
1,2-Dichloroethane	1	0		4.82	49.48	50	20	0.1	0.321	0.318	1.05	
2-Butanone	1	0		4.32	44.19	50	20	0.1	0.094	0.097	11.62	
1,1,1-Trichloroethane	1	0		4.61	48.85	50	20	0.1	0.432	0.422	2.31	
Carbon Tetrachloride	1	0		4.71	47.60	50	20	0.1	0.403	0.384	4.80	
Vinyl Acetate	1	0		3.94	50.56	50	20		0.585	0.592	1.12	
Bromodichloromethane	1	0		5.41	46.44	50	20	0.2	0.352	0.327	7.12	
Methylcyclohexane	1	0		5.27	45.27	50	20	0.1	0.387	0.351	9.47	
Dibromomethane	1	0		5.34	43.79	50	20		0.210	0.184	12.41	
1,2-Dichloropropane	1	0		5.28	47.37	50	20	0.1	0.236	0.223	5.26	
Trichloroethene	1	0		5.16	44.14	50	20	0.2	0.329	0.291	11.71	
Benzene	1	0		4.82	51.36	50	20	0.5	1.015	1.043	2.73	
tert-Amyl methyl ether	1	0		4.86	48.15	50	20		0.637	0.613	3.71	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	45.33	50	20	0.5	0.385	0.349	9.35	
Methyl methacrylate	1	0		5.30	42.20	50	20	0.5	0.210	0.177	15.61	
Dibromochloromethane	1	0		6.24	46.85	50	20	0.1	0.354	0.332	6.31	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 9/30/2020 4:45:00 PData File: IIM83371.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	47.93	50	20	0.063	0.060	4.14		
cis-1,3-Dichloropropene	1	0		5.64	47.03	50	20	0.2	0.465	0.437	5.93	
trans-1,3-Dichloropropene	1	0		5.92	47.83	50	20	0.1	0.428	0.409	4.35	
Ethyl methacrylate	1	0		5.94	41.89	50	20	0.5	0.204	0.171	16.21	
1,1,2-Trichloroethane	1	0		6.02	49.09	50	20	0.1	0.263	0.258	1.81	
1,2-Dibromoethane	1	0		6.32	49.98	50	20	0.1	0.286	0.286	0.04	
1,3-Dichloropropane	1	0		6.11	49.11	50	20		0.435	0.427	1.79	
4-Methyl-2-Pentanone	1	0		5.70	39.33	50	20	0.1	0.248	0.195	21.34	C1
2-Hexanone	1	0		6.12	41.04	50	20	0.1	0.176	0.145	17.92	
Tetrachloroethene	1	0		6.12	42.19	50	20	0.2	0.319	0.269	15.63	
Toluene-d8	1	0	S	5.79	29.74	75	**		1.177	1.167	0.86	
Toluene	1	0		5.83	44.65	50	20	0.4	0.815	0.728	10.69	
1,1,1,2-Tetrachloroethane	1	0		6.60	45.69	50	20		0.332	0.304	8.62	
Chlorobenzene	1	0		6.57	45.86	50	20	0.5	0.931	0.854	8.28	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	50.06	50	20	0.5	0.722	0.723	0.12	
n-Amyl acetate	1	0		6.91	48.63	50	20	0.5	0.575	0.560	2.75	
Bromoform	1	0		7.01	48.28	50	20	0.1	0.414	0.400	3.44	
Ethylbenzene	1	0		6.60	49.52	50	20	0.1	0.665	0.658	0.96	
1,1,2,2-Tetrachloroethane	1	0		7.22	53.10	50	20	0.1	0.559	0.593	6.19	
Bromofluorobenzene	1	0	S	7.17	29.72	75	**		0.769	0.762	0.93	
Styrene	1	0		6.88	52.01	50	20	0.3	1.536	1.597	4.02	
m&p-Xylenes	1	0		6.66	93.05	100	20	0.1	1.015	0.945	6.95	
o-Xylene	1	0		6.88	50.08	50	20	0.3	0.912	0.914	0.15	
trans-1,4-Dichloro-2-butene	1	0		7.24	44.81	50	20		0.247	0.222	10.38	
1,3-Dichlorobenzene	1	0		7.78	48.96	50	20	0.6	1.250	1.224	2.07	
1,4-Dichlorobenzene	1	0		7.83	48.46	50	20	0.5	1.252	1.214	3.07	
1,2-Dichlorobenzene	1	0		8.05	48.76	50	20	0.4	1.160	1.131	2.47	
Isopropylbenzene	1	0		7.07	49.48	50	20	0.1	2.436	2.411	1.03	
Cyclohexanone	1	0		7.14	214.86	250	20		0.022	0.019	14.06	
Camphene	1	0		7.24	48.66	50	20		0.854	0.831	2.68	
1,2,3-Trichloropropane	1	0		7.26	49.69	50	20		0.717	0.713	0.62	
2-Chlorotoluene	1	0		7.36	48.75	50	20		1.421	1.385	2.51	
p-Ethyltoluene	1	0		7.35	51.15	50	20		2.533	2.591	2.29	
4-Chlorotoluene	1	0		7.42	47.66	50	20		1.436	1.369	4.68	
n-Propylbenzene	1	0		7.29	48.93	50	20		2.845	2.784	2.14	
Bromobenzene	1	0		7.27	53.59	50	20		1.239	1.328	7.18	
1,3,5-Trimethylbenzene	1	0		7.38	45.92	50	20		2.058	1.890	8.16	
Butyl methacrylate	1	0		7.38	40.96	50	20	0.5	0.507	0.415	18.09	
t-Butylbenzene	1	0		7.57	46.99	50	20		2.162	2.032	6.03	
1,2,4-Trimethylbenzene	1	0		7.60	48.89	50	20		2.084	2.037	2.22	
sec-Butylbenzene	1	0		7.69	50.10	50	20		2.666	2.671	0.21	
4-Isopropyltoluene	1	0		7.76	49.83	50	20		2.326	2.318	0.34	
n-Butylbenzene	1	0		8.00	50.31	50	20		2.478	2.494	0.63	
p-Diethylbenzene	1	0		7.98	49.58	50	20		1.402	1.390	0.84	
1,2,4,5-Tetramethylbenzene	1	0		8.44	54.28	50	20		1.952	2.119	8.56	
1,2-Dibromo-3-Chloropropane	1	0		8.50	43.72	50	20	0.05	0.176	0.154	12.55	
Camphor	1	0		8.94	458.98	500	20		0.079	0.072	8.20	
Hexachlorobutadiene	1	0		9.07	42.22	50	20		0.510	0.431	15.57	
1,2,4-Trichlorobenzene	1	0		8.99	48.65	50	20	0.2	0.847	0.824	2.70	
1,2,3-Trichlorobenzene	1	0		9.29	48.93	50	20		0.759	0.743	2.13	
Naphthalene	1	0		9.15	48.68	50	20		2.044	1.990	2.65	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/1/2020 10:38:00

Data File: IIM83414.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	52.99	50	20	0.1	0.296	0.314	5.98	
Dichlorodifluoromethane	1	0		1.67	45.26	50	20	0.1	0.193	0.175	9.49	
Chloromethane	1	0		1.84	41.08	50	20	0.1	0.231	0.190	17.84	
Bromomethane	1	0		2.24	48.49	50	20	0.1	0.213	0.206	3.02	
Vinyl Chloride	1	0		1.94	47.88	50	20	0.1	0.274	0.262	4.23	
Chloroethane	1	0		2.33	52.78	50	20	0.1	0.185	0.195	5.55	
Trichlorofluoromethane	1	0		2.55	54.11	50	20	0.1	0.462	0.500	8.23	
Ethyl ether	1	0		2.77	54.74	50	20	0.5	0.157	0.172	9.48	
Furan	1	0		2.82	50.17	50	20	0.5	0.265	0.266	0.35	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	58.59	50	20	0.1	0.175	0.205	17.18	
Methylene Chloride	1	0		3.37	57.48	50	20	0.1	0.255	0.293	14.96	
Acrolein	1	0		2.88	260.31	250	20		0.026	0.027	4.13	
Acrylonitrile	1	0		3.57	54.82	50	20		0.068	0.074	9.64	
Iodomethane	1	0		3.12	36.42	50	20		0.226	0.303	27.15	C1
Acetone	1	0		3.01	253.21	250	20	0.1	0.054	0.055	1.28	
Carbon Disulfide	1	0		3.18	51.26	50	20	0.1	0.744	0.763	2.51	
t-Butyl Alcohol	1	0		3.43	167.27	250	20		0.034	0.023	33.09	C1
n-Hexane	1	0		3.81	57.83	50	20		0.237	0.275	15.66	
Di-isopropyl-ether	1	0		3.95	52.26	50	20		0.484	0.506	4.52	
1,1-Dichloroethene	1	0		2.98	54.61	50	20	0.1	0.313	0.342	9.21	
Methyl Acetate	1	0		3.28	48.52	50	20	0.1	0.123	0.120	2.96	
Methyl-t-butyl ether	1	0		3.59	54.82	50	20	0.1	0.531	0.583	9.65	
1,1-Dichloroethane	1	0		3.93	52.83	50	20	0.2	0.402	0.425	5.66	
trans-1,2-Dichloroethene	1	0		3.60	53.69	50	20	0.1	0.267	0.287	7.38	
Ethyl-t-butyl ether	1	0		4.19	44.58	50	20	0.5	0.653	0.582	10.85	
cis-1,2-Dichloroethene	1	0		4.31	52.40	50	20	0.1	0.401	0.420	4.80	
Bromochloromethane	1	0		4.45	52.30	50	20		0.163	0.171	4.60	
2,2-Dichloropropane	1	0		4.31	50.02	50	20		0.395	0.395	0.04	
Ethyl acetate	1	0		4.33	46.70	50	20		0.209	0.196	6.59	
1,4-Dioxane	1	0		5.34	2246.90	2500	20		0.004	0.004	10.12	
1,1-Dichloropropene	1	0		4.70	52.32	50	20		0.364	0.381	4.64	
Chloroform	1	0		4.49	53.97	50	20	0.2	0.447	0.482	7.93	
Dibromofluoromethane	1	0	S	4.58	29.62	75	**		0.271	0.267	1.27	
Cyclohexane	1	0		4.65	52.17	50	20	0.1	0.323	0.337	4.35	
1,2-Dichloroethane-d4	1	0	S	4.78	30.84	75	**		0.119	0.122	2.81	
1,2-Dichloroethane	1	0		4.82	50.45	50	20	0.1	0.321	0.324	0.90	
2-Butanone	1	0		4.30	45.96	50	20	0.1	0.094	0.101	8.07	
1,1,1-Trichloroethane	1	0		4.61	51.47	50	20	0.1	0.432	0.444	2.95	
Carbon Tetrachloride	1	0		4.71	50.91	50	20	0.1	0.403	0.410	1.83	
Vinyl Acetate	1	0		3.94	52.22	50	20		0.585	0.611	4.44	
Bromodichloromethane	1	0		5.41	50.96	50	20	0.2	0.352	0.359	1.93	
Methylcyclohexane	1	0		5.27	53.12	50	20	0.1	0.387	0.411	6.25	
Dibromomethane	1	0		5.34	46.69	50	20		0.210	0.196	6.62	
1,2-Dichloropropane	1	0		5.28	52.64	50	20	0.1	0.236	0.248	5.27	
Trichloroethene	1	0		5.15	48.46	50	20	0.2	0.329	0.319	3.08	
Benzene	1	0		4.82	52.32	50	20	0.5	1.015	1.062	4.64	
tert-Amyl methyl ether	1	0		4.85	47.62	50	20		0.637	0.607	4.76	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	46.09	50	20	0.5	0.385	0.355	7.83	
Methyl methacrylate	1	0		5.30	42.67	50	20	0.5	0.210	0.179	14.66	
Dibromochloromethane	1	0		6.24	49.01	50	20	0.1	0.354	0.347	1.98	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF



## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/1/2020 10:38:00Data File: IIM83414.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	51.76	50	20	0.063	0.065		3.52	
cis-1,3-Dichloropropene	1	0		5.64	50.49	50	20	0.2	0.465	0.469	0.99	
trans-1,3-Dichloropropene	1	0		5.92	49.94	50	20	0.1	0.428	0.427	0.11	
Ethyl methacrylate	1	0		5.93	45.26	50	20	0.5	0.204	0.184	9.48	
1,1,2-Trichloroethane	1	0		6.02	52.86	50	20	0.1	0.263	0.278	5.71	
1,2-Dibromoethane	1	0		6.31	52.33	50	20	0.1	0.286	0.299	4.66	
1,3-Dichloropropane	1	0		6.11	51.82	50	20		0.435	0.451	3.65	
4-Methyl-2-Pentanone	1	0		5.70	43.58	50	20	0.1	0.248	0.216	12.84	
2-Hexanone	1	0		6.12	43.90	50	20	0.1	0.176	0.155	12.19	
Tetrachloroethene	1	0		6.11	43.80	50	20	0.2	0.319	0.279	12.40	
Toluene-d8	1	0	S	5.79	30.44	75	**		1.177	1.194	1.45	
Toluene	1	0		5.82	47.77	50	20	0.4	0.815	0.779	4.46	
1,1,1,2-Tetrachloroethane	1	0		6.59	46.72	50	20		0.332	0.311	6.56	
Chlorobenzene	1	0		6.56	48.06	50	20	0.5	0.931	0.895	3.89	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	53.14	50	20	0.5	0.722	0.767	6.29	
n-Amyl acetate	1	0		6.91	50.72	50	20	0.5	0.575	0.584	1.45	
Bromoform	1	0		7.01	51.82	50	20	0.1	0.414	0.429	3.65	
Ethylbenzene	1	0		6.60	52.32	50	20	0.1	0.665	0.696	4.63	
1,1,2,2-Tetrachloroethane	1	0		7.21	58.18	50	20	0.1	0.559	0.650	16.36	
Bromofluorobenzene	1	0	S	7.17	29.88	75	**		0.769	0.766	0.39	
Styrene	1	0		6.88	54.75	50	20	0.3	1.536	1.682	9.50	
m&p-Xylenes	1	0		6.66	97.97	100	20	0.1	1.015	0.994	2.03	
o-Xylene	1	0		6.88	52.61	50	20	0.3	0.912	0.960	5.21	
trans-1,4-Dichloro-2-butene	1	0		7.24	49.34	50	20		0.247	0.244	1.31	
1,3-Dichlorobenzene	1	0		7.78	49.75	50	20	0.6	1.250	1.244	0.51	
1,4-Dichlorobenzene	1	0		7.83	49.79	50	20	0.5	1.252	1.247	0.42	
1,2-Dichlorobenzene	1	0		8.05	49.82	50	20	0.4	1.160	1.156	0.35	
Isopropylbenzene	1	0		7.07	50.87	50	20	0.1	2.436	2.478	1.74	
Cyclohexanone	1	0		7.14	255.74	250	20		0.022	0.023	2.30	
Camphene	1	0		7.24	50.39	50	20		0.854	0.861	0.79	
1,2,3-Trichloropropane	1	0		7.26	54.54	50	20		0.717	0.783	9.08	
2-Chlorotoluene	1	0		7.36	49.64	50	20		1.421	1.410	0.73	
p-Ethyltoluene	1	0		7.35	51.58	50	20		2.533	2.613	3.15	
4-Chlorotoluene	1	0		7.42	50.41	50	20		1.436	1.448	0.82	
n-Propylbenzene	1	0		7.29	50.87	50	20		2.845	2.894	1.73	
Bromobenzene	1	0		7.27	56.55	50	20		1.239	1.401	13.10	
1,3,5-Trimethylbenzene	1	0		7.38	48.46	50	20		2.058	1.995	3.08	
Butyl methacrylate	1	0		7.38	44.28	50	20	0.5	0.507	0.449	11.44	
t-Butylbenzene	1	0		7.57	47.53	50	20		2.162	2.055	4.94	
1,2,4-Trimethylbenzene	1	0		7.59	49.99	50	20		2.084	2.083	0.02	
sec-Butylbenzene	1	0		7.69	51.14	50	20		2.666	2.727	2.28	
4-Isopropyltoluene	1	0		7.76	50.48	50	20		2.326	2.349	0.96	
n-Butylbenzene	1	0		8.00	51.93	50	20		2.478	2.574	3.87	
p-Diethylbenzene	1	0		7.98	50.15	50	20		1.402	1.406	0.31	
1,2,4,5-Tetramethylbenzene	1	0		8.44	53.60	50	20		1.952	2.093	7.20	
1,2-Dibromo-3-Chloropropane	1	0		8.50	46.99	50	20	0.05	0.176	0.165	6.03	
Camphor	1	0		8.94	481.61	500	20		0.079	0.076	3.68	
Hexachlorobutadiene	1	0		9.07	40.94	50	20		0.510	0.418	18.12	
1,2,4-Trichlorobenzene	1	0		8.99	48.00	50	20	0.2	0.847	0.813	4.01	
1,2,3-Trichlorobenzene	1	0		9.29	46.77	50	20		0.759	0.710	6.45	
Naphthalene	1	0		9.15	49.06	50	20		2.044	2.006	1.87	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM B**

Internal Standard Areas  
 Evaluation Std Data File: 11M81497.D  
 Analysis Date/Time: 08/05/20 18:20  
 Lab File ID: CAL @ 20 PPB  
 Method: EPA 8260D

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	258034	4.96	232410	6.55	139752	7.82								
Eval File Area Limit:	129017-516068		116205-464820		69876-279504									
Eval File RI Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M81482.D	CAL @ 100 PPB	312620	4.96	284253	6.55	192828	7.82						
11M81484.D	CAL @ 250 PPB	284913	4.96	260434	6.55	223187	7.82						
11M81486.D	CAL @ 500 PPB	408017	4.96	308305	6.55	226457	7.82						
11M81487.D	BLK	318048	4.96	293526	6.55	178494	7.82						
11M81493.D	CAL @ 0.5 PPB	278118	4.96	256046	6.55	151405	7.82						
11M81494.D	CAL @ 1 PPB	275903	4.96	251070	6.55	149647	7.82						
11M81495.D	CAL @ 2 PPB	282662	4.96	258662	6.55	156817	7.82						
11M81496.D	CAL @ 5 PPB	264467	4.96	241421	6.55	143398	7.82						
11M81497.D	CAL @ 20 PPB	258034	4.96	232410	6.55	139752	7.82						
11M81498.D	CAL @ 50 PPB	260431	4.96	233289	6.55	146679	7.82						
11M81501.D	ICV	298211	4.96	268203	6.55	170736	7.82						
11M81503.D	DAILY BLANK	306747	4.96	286735	6.55	169630	7.82						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30µg/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5µg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria  
 R - Indicates the compound failed the internal standard retention time criteria.

FORM 8

Internal Standard Areas

Evaluation Std Data File: 11M83371.D

Analysis Date/Time: 09/30/20 16:45

Lab File ID: CAL @ 50 PPB

Method: EPA 8260D

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Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
335546	4.96		287189	6.55	168971	7.82								
167773-671092			143594-574378		84486-337942									
Eval File RI Limit:			6.05-7.05		7.32-8.32									
4.46-5.46														

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83372.D	50 PPB	265692	4.96	231929	6.55	134667	7.82								
11M83373.D	BLK	292064	4.96	260474	6.55	142806	7.82								
11M83374.D	BLK	287248	4.96	255196	6.55	137393	7.82								
11M83375.D	BLK	283581	4.96	251919	6.55	133688	7.82								
11M83376.D	DAILY BLANK	273164	4.96	242304	6.55	130603	7.82								
11M83377.D	AD19504-001	282988	4.96	257865	6.55	137005	7.82								
11M83378.D	AD19504-003	242842	4.96	218034	6.55	116258	7.82								
11M83379.D	MBS89405	254621	4.96	220641	6.55	125842	7.82								
11M83380.D	AD19504-001(MS)	257046	4.96	228292	6.55	134461	7.82								
11M83381.D	AD19504-001(MSD)	263396	4.96	233623	6.55	133495	7.82								
11M83382.D	BLK	289627	4.96	257382	6.55	138328	7.82								
11M83383.D	BLK	310193	4.96	285042	6.55	160552	7.82								
11M83384.D	AD19451-001	261138	4.96	228181	6.55	111369	7.82								
11M83385.D	AD19451-002	279101	4.96	250827	6.55	136890	7.82								
11M83386.D	AD19451-003	269106	4.96	247744	6.55	133942	7.81								
11M83387.D	AD19451-004	274730	4.96	247735	6.55	133372	7.82								
11M83388.D	AD19451-005	301044	4.96	237565	6.55	124284	7.82								
11M83389.D	AD19451-006	260274	4.96	236180	6.55	127399	7.82								
11M83390.D	AD19451-007	301918	4.96	244457	6.55	129808	7.81								
11M83391.D	BLK	257964	4.96	231001	6.55	121432	7.82								
11M83392.D	AD19479-002	237392	4.96	203075	6.55	93906	7.82								
11M83393.D	AD19479-004	220921	4.96	188264	6.55	80776	7.82								
11M83394.D	AD19479-008	233785	4.96	203430	6.55	95982	7.82								
11M83395.D	AD19479-010	282735	4.96	206570	6.55	109114	7.82								
11M83396.D	AD19479-012	226708	4.96	180418	6.55	74488	7.82								
11M83397.D	AD19479-014	226727	4.96	184824	6.55	79223	7.82								
11M83398.D	AD19479-016	218432	4.96	172811	6.55	69582	7.82								
11M83399.D	AD19479-018	253918	4.96	227098	6.55	117248	7.82								
11M83400.D	AD19479-020	244529	4.96	219104	6.55	115090	7.82								
11M83401.D	AD19479-006	193227	4.96	129413	6.55	42360	7.82								
11M83402.D	BLK	242422	4.96	217840	6.55	112827	7.82								
11M83403.D	AD19466-001	283669	4.96	253456	6.55	105793	7.82								

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria  
R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 11M83371.D

Analysis Date/Time: 09/30/20 16:45

Method: EPA 8260D

Lab File ID: CAL @ 50 PPB

92120  
90802  
90225  
90055

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
335546	4.96		287189	6.55	168971	7.82								
Eval File Area Limit:	167773-671092		143594-574378		84486-337942									
Eval File RT Limit:	4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83404.D	MBS89406	228334	4.96	198661	6.55	114587	7.82						
11M83405.D	BLK	276310	4.96	245701	6.55	131990	7.81						
11M83406.D	BLK	130556	4.96	111948	6.55	59352	7.82						
11M83407.D	BLK	235942	4.96	208141	6.55	119032	7.82						
11M83408.D	BLK	0	0.00R	218816	6.55	125212	7.82						
11M83409.D	BLK	275299	4.96	243398	6.55	130560	7.82						
11M83410.D	BLK	262949	4.96	236582	6.55	125993	7.82						

11 =	Fluorobenzene	14 =	17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria  
 R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM B

Internal Standard Areas

Evaluation Std Data File: 11M83414.D

Method: EPA 8260D

Analysis Date/Time: 10/01/20 10:38

Lab File ID: CAL @ 50 PPB

127  
0127  
0083  
0025  
0025  
0025

Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
282305	4.96	247438	6.55	143046	7.82								
Eval File Area Limit: 141152-564610		123719-494876		71523-286092									
Eval File RI Limit: 4.46-5.46		6.05-7.05		7.32-8.32									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83415.D	50 PPB	286214	4.96	249524	6.55	144893	7.82						
11M83416.D	BLK	291791	4.96	264437	6.55	139568	7.82						
11M83417.D	BLK	276839	4.96	254122	6.55	134037	7.82						
11M83418.D	DAILY BLANK	268434	4.96	241584	6.55	128645	7.82						
11M83419.D	MBS89411	284055	4.96	249397	6.55	147376	7.82						
11M83420.D	AD19504-005	280786	4.96	255884	6.55	137466	7.82						
11M83421.D	AD19487-001	212560	4.96	191472	6.55	105556	7.82						
11M83422.D	AD19487-002	243562	4.96	222837	6.55	129081	7.82						
11M83423.D	AD19487-003	238060	4.96	220384	6.55	126202	7.82						
11M83424.D	AD19514-001	252356	4.96	208834	6.55	85138	7.82						
11M83425.D	AD19514-008	247598	4.96	196511	6.55	79557	7.82						
11M83426.D	AD19504-005(MS)	311130	4.96	281507	6.55	167300	7.82						
11M83427.D	AD19504-005(MSD)	316025	4.96	283632	6.55	166237	7.82						
11M83428.D	BLK	293019	4.96	266902	6.55	146046	7.82						
11M83429.D	BLK	280046	4.96	253095	6.55	138294	7.82						
11M83430.D	AD19472-001	272021	4.96	237648	6.55	119537	7.82						
11M83431.D	AD19472-002	254832	4.96	230715	6.55	121677	7.82						
11M83432.D	AD19472-003	283050	4.96	261556	6.55	143533	7.82						
11M83433.D	BLK	276436	4.96	247492	6.55	134421	7.82						
11M83434.D	AD19487-002	253345	4.96	228559	6.55	126683	7.82						
11M83435.D	AD19514-001	222332	4.96	169149	6.55	62824	7.82						
11M83436.D	AD19479-014	219691	4.96	174839	6.55	73113	7.82						
11M83437.D	AD19479-016	240067	4.96	212004	6.55	101352	7.82						
11M83438.D	AD19479-006	239355	4.96	177603	6.55	60306	7.82						
11M83439.D	AD19479-004	255865	4.96	214830	6.55	96325	7.82						
11M83440.D	AD19479-012	254918	4.96	207117	6.55	89536	7.82						
11M83441.D	BLK	269349	4.96	246030	6.55	134044	7.82						
11M83442.D	AD19501-002	264988	4.96	237605	6.55	127751	7.82						
11M83443.D	AD19501-004	253862	4.96	234719	6.55	126348	7.82						

11 = Fluorobenzene  
 12 = Chlorobenzene-d5  
 13 = 1,4-Dichlorobenzene-d4

14 =  
 15 =  
 16 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
 624/8260 Internal Standard concentration = 30ug/L  
 524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria  
 R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## **Base Neutral/Acid Extractable Data**

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-001

Client Id: HSI-SS-01 (0-0.5')

Data File: 7M109875.D

Analysis Date: 10/05/20 22:35

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 90

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.037	U	<b>50-32-8</b>	<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>0.037</b>	<b>0.014J</b>
95-94-3	1,2,4,5-Tetrachlorobenzene	0.012	0.037	U	205-99-2	Benzo[b]fluoranthene	0.013	0.037	U
123-91-1	1,4-Dioxane	0.019	0.0093	U	<b>191-24-2</b>	<b>Benzo[g,h,i]perylene</b>	<b>0.00026</b>	<b>0.037</b>	<b>0.0092J</b>
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.037	U	207-08-9	Benzo[k]fluoranthene	0.014	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.010	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.029	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0090	0.0093	U
120-83-2	2,4-Dichlorophenol	0.014	0.0093	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.037	U
105-67-9	2,4-Dimethylphenol	0.018	0.0093	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.033</b>	<b>0.037</b>	<b>0.24</b>
51-28-5	2,4-Dinitrophenol	0.16	0.19	U	85-68-7	Butylbenzylphthalate	0.028	0.037	U
121-14-2	2,4-Dinitrotoluene	0.012	0.037	U	105-60-2	Caprolactam	0.030	0.037	U
606-20-2	2,6-Dinitrotoluene	0.019	0.037	U	86-74-8	Carbazole	0.012	0.037	U
91-58-7	2-Chloronaphthalene	0.016	0.037	U	<b>218-01-9</b>	<b>Chrysene</b>	<b>0.013</b>	<b>0.037</b>	<b>0.016J</b>
95-57-8	2-Chlorophenol	0.012	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.014	0.037	U
91-57-6	2-Methylnaphthalene	0.011	0.037	U	132-64-9	Dibenzofuran	0.0094	0.0093	U
95-48-7	2-Methylphenol	0.011	0.0093	U	84-66-2	Diethylphthalate	0.024	0.037	U
88-74-4	2-Nitroaniline	0.017	0.037	U	131-11-3	Dimethylphthalate	0.010	0.037	U
88-75-5	2-Nitrophenol	0.017	0.037	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.042</b>	<b>0.0093</b>	<b>0.12</b>
106-44-5	3&4-Methylphenol	0.011	0.0093	U	117-84-0	Di-n-octylphthalate	0.025	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.030	0.037	U	206-44-0	Fluoranthene	0.014	0.037	U
99-09-2	3-Nitroaniline	0.014	0.037	U	86-73-7	Fluorene	0.010	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.19	U	118-74-1	Hexachlorobenzene	0.015	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.037	U	87-68-3	Hexachlorobutadiene	0.017	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.0089	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.037	U
106-47-8	4-Chloroaniline	0.016	0.0093	U	67-72-1	Hexachloroethane	0.016	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.037	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.037	U
100-01-6	4-Nitroaniline	0.014	0.037	U	78-59-1	Isophorone	0.012	0.037	U
100-02-7	4-Nitrophenol	0.028	0.037	U	91-20-3	Naphthalene	0.011	0.0093	U
83-32-9	Acenaphthene	0.011	0.037	U	98-95-3	Nitrobenzene	0.0015	0.037	U
208-96-8	Acenaphthylene	0.011	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0093	U
<b>98-86-2</b>	<b>Acetophenone</b>	<b>0.013</b>	<b>0.037</b>	<b>0.019J</b>	86-30-6	n-Nitrosodiphenylamine	0.13	0.037	U
120-12-7	Anthracene	0.010	0.037	U	87-86-5	Pentachlorophenol	0.18	0.19	U
1912-24-9	Atrazine	0.015	0.037	U	85-01-8	Phenanthrene	0.012	0.037	U
100-52-7	Benzaldehyde	0.40	0.037	U	108-95-2	Phenol	0.010	0.037	U
56-55-3	Benzo[a]anthracene	0.012	0.037	U	129-00-0	Pyrene	0.013	0.037	U

Worksheet #: 569464

**Total Target Concentration 0.42**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19479-001  
 Data File: 7M109875.D  
 Acq On : 10/ 5/20 22:35

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 35  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:26  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.693	96	82457	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.895	152	158148	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	606772	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	309832	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	561172	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	440553	40.00	ng	0.00	
103) Perylene-d12	14.538	264	409159	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	314501	64.77	ng	0.01	
Spiked Amount			Recovery	=	64.77%		
16) Phenol-d5	5.583	99	409049	70.11	ng	0.00	
Spiked Amount			Recovery	=	70.11%		
32) Nitrobenzene-d5	6.336	128	81613	33.86	ng	0.00	
Spiked Amount			Recovery	=	67.72%		
55) 2-Fluorobiphenyl	7.740	172	375264	36.31	ng	0.00	
Spiked Amount			Recovery	=	72.62%		
80) 2,4,6-Tribromophenol	9.091	330	99578	68.87	ng	0.00	
Spiked Amount			Recovery	=	68.87%		
94) Terphenyl-d14	11.635	244	291428	41.54	ng	0.00	
Spiked Amount			Recovery	=	83.08%		
Target Compounds							
27) Acetophenone	6.218	105	7159m	1.0136	ng		Qvalue
89) Di-n-butylphthalate	10.448	149	112823	6.6350	ng		97
101) Chrysene	12.922	228	10134m	0.8474	ng		
102) bis(2-Ethylhexyl)phtha...	12.922	149	109919	13.1916	ng		91
107) Benzo[a]pyrene	14.467	252	7673m	0.7478	ng		
110) Benzo[g,h,i]perylene	16.324	276	4735m	0.4961	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



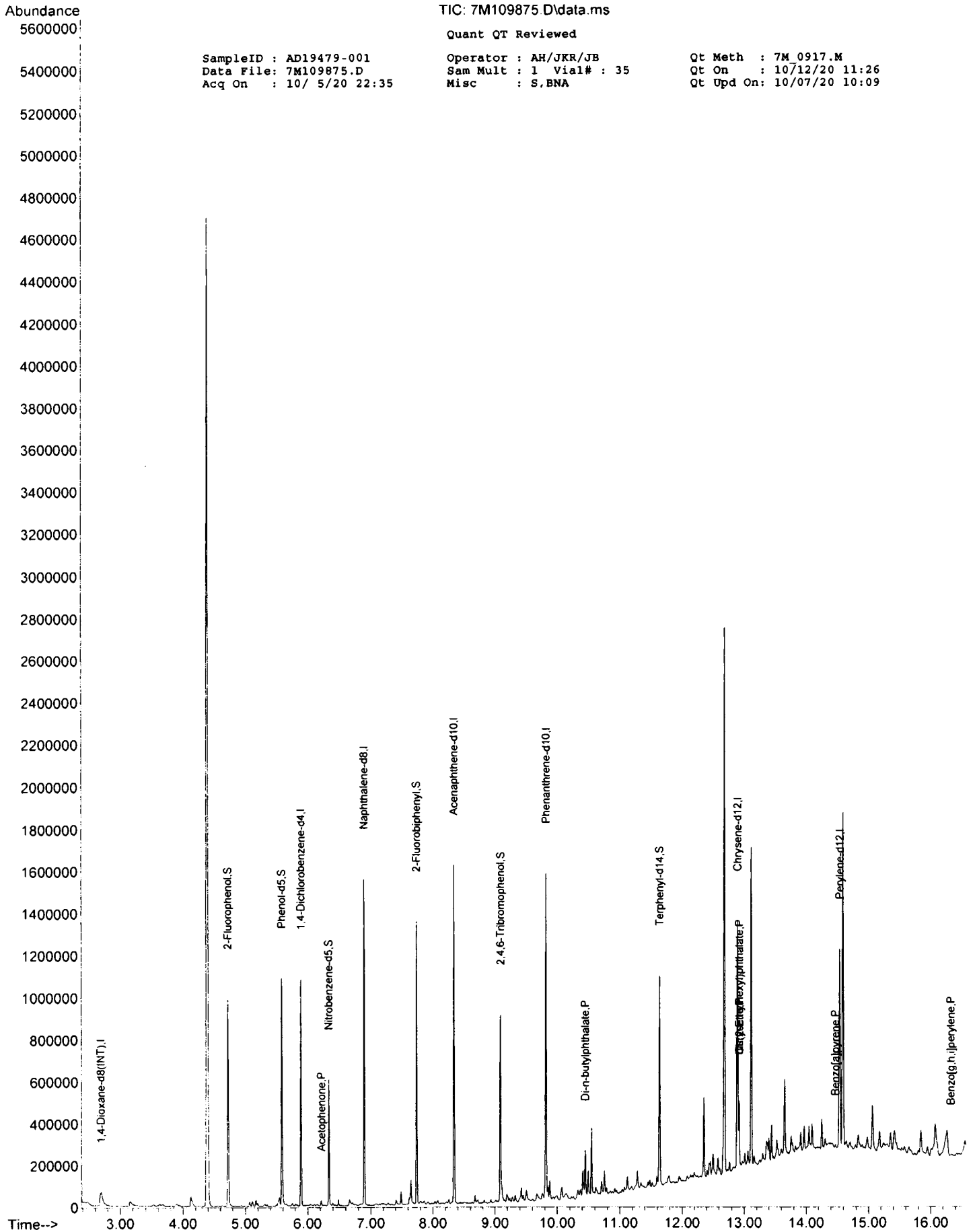
TIC: 7M109875.D\data.ms

Quant QT Reviewed

SampleID : AD19479-001  
 Data File: 7M109875.D  
 Acq On : 10/ 5/20 22:35

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 35  
 Misc : S.BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:26  
 Qt Upd On: 10/07/20 10:09



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-003

Client Id: HSI-SS-02 (0-0.5')

Data File: 7M109876.D

Analysis Date: 10/05/20 22:58

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 91

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.037	U	50-32-8	Benzo[a]pyrene	0.012	0.037	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.012	0.037	U	205-99-2	Benzo[b]fluoranthene	0.013	0.037	U
123-91-1	1,4-Dioxane	0.018	0.0092	U	191-24-2	Benzo[g,h,i]perylene	0.00025	0.037	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.037	U	207-08-9	Benzo[k]fluoranthene	0.013	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.010	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.010	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.028	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0089	0.0092	U
120-83-2	2,4-Dichlorophenol	0.014	0.0092	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.037	U
105-67-9	2,4-Dimethylphenol	0.018	0.0092	U	117-81-7	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.032</b>	<b>0.037</b>	<b>0.44</b>
51-28-5	2,4-Dinitrophenol	0.16	0.18	U	85-68-7	Butylbenzylphthalate	0.028	0.037	U
121-14-2	2,4-Dinitrotoluene	0.011	0.037	U	105-60-2	Caprolactam	0.029	0.037	U
606-20-2	2,6-Dinitrotoluene	0.019	0.037	U	86-74-8	Carbazole	0.011	0.037	U
91-58-7	2-Chloronaphthalene	0.016	0.037	U	218-01-9	Chrysene	0.012	0.037	U
95-57-8	2-Chlorophenol	0.012	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.013	0.037	U
91-57-6	2-Methylnaphthalene	0.011	0.037	U	132-64-9	Dibenzofuran	0.0093	0.0092	U
95-48-7	2-Methylphenol	0.011	0.0092	U	84-66-2	Diethylphthalate	0.024	0.037	U
88-74-4	2-Nitroaniline	0.017	0.037	U	131-11-3	Dimethylphthalate	0.010	0.037	U
88-75-5	2-Nitrophenol	0.017	0.037	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.042</b>	<b>0.0092</b>	<b>0.16</b>
106-44-5	3&4-Methylphenol	0.011	0.0092	U	117-84-0	Di-n-octylphthalate	0.024	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.030	0.037	U	206-44-0	Fluoranthene	0.014	0.037	U
99-09-2	3-Nitroaniline	0.014	0.037	U	86-73-7	Fluorene	0.010	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.18	U	118-74-1	Hexachlorobenzene	0.015	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.037	U	87-68-3	Hexachlorobutadiene	0.016	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.0088	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.037	U
106-47-8	4-Chloroaniline	0.016	0.0092	U	67-72-1	Hexachloroethane	0.016	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.037	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.037	U
100-01-6	4-Nitroaniline	0.014	0.037	U	78-59-1	Isophorone	0.012	0.037	U
100-02-7	4-Nitrophenol	0.028	0.037	U	91-20-3	Naphthalene	0.011	0.0092	U
83-32-9	Acenaphthene	0.010	0.037	U	98-95-3	Nitrobenzene	0.0015	0.037	U
208-96-8	Acenaphthylene	0.011	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0092	U
<b>98-86-2</b>	<b>Acetophenone</b>	<b>0.013</b>	<b>0.037</b>	<b>0.023 J</b>	86-30-6	n-Nitrosodiphenylamine	0.12	0.037	U
120-12-7	Anthracene	0.010	0.037	U	87-86-5	Pentachlorophenol	0.18	0.18	U
1912-24-9	Atrazine	0.015	0.037	U	85-01-8	Phenanthrene	0.012	0.037	U
100-52-7	Benzaldehyde	0.40	0.037	U	108-95-2	Phenol	0.010	0.037	U
56-55-3	Benzo[a]anthracene	0.012	0.037	U	129-00-0	Pyrene	0.012	0.037	U

Worksheet #: 569464

**Total Target Concentration 0.62**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19479-003  
 Data File: 7M109876.D  
 Acq On : 10/ 5/20 22:58

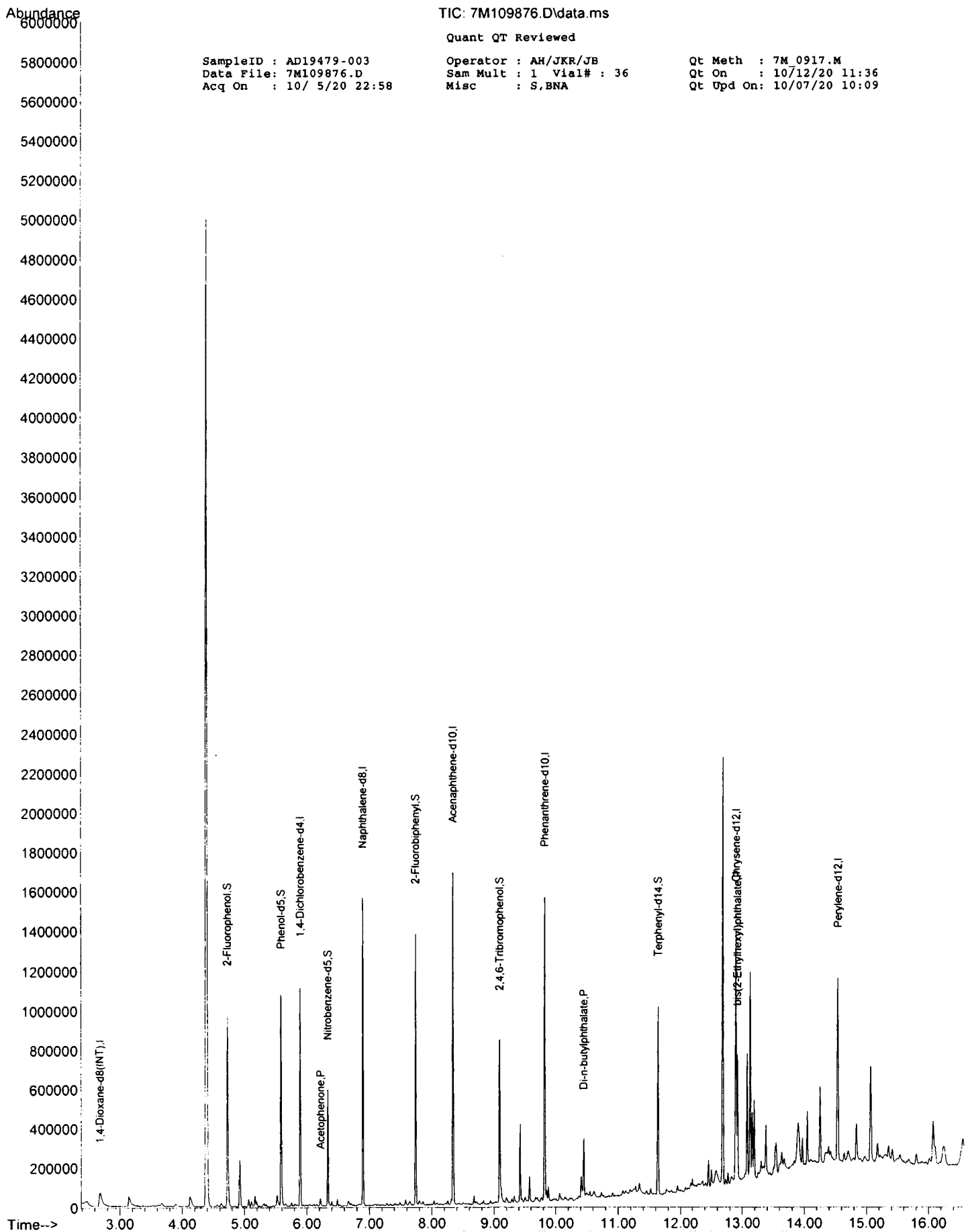
Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 36  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:36  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.681	96	83332	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.895	152	165188	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	626415	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	324415	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	575402	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	457582	40.00	ng	0.00	
103) Perylene-d12	14.538	264	413308	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	309585	63.09	ng	0.01	
Spiked Amount	100.000		Recovery	=	63.09%		
16) Phenol-d5	5.590	99	411292	69.75	ng	0.01	
Spiked Amount	100.000		Recovery	=	69.75%		
32) Nitrobenzene-d5	6.336	128	80969	32.54	ng	0.00	
Spiked Amount	50.000		Recovery	=	65.08%		
55) 2-Fluorobiphenyl	7.740	172	373459	34.51	ng	0.00	
Spiked Amount	50.000		Recovery	=	69.02%		
80) 2,4,6-Tribromophenol	9.091	330	99640	67.21	ng	0.00	
Spiked Amount	100.000		Recovery	=	67.21%		
94) Terphenyl-d14	11.635	244	278905	38.28	ng	0.00	
Spiked Amount	50.000		Recovery	=	76.56%		
Target Compounds							
27) Acetophenone	6.218	105	9294	1.2598	ng	54	Qvalue
89) Di-n-butylphthalate	10.449	149	147882	8.4817	ng	97	
102) bis(2-Ethylhexyl)phtha...	12.916	149	209744	24.2351	ng	93	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-005

Client Id: HSI-SS-03 (0-0.5')

Data File: 7M109877.D

Analysis Date: 10/05/20 23:21

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 82

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.012	0.041	U	50-32-8	Benzo[a]pyrene	0.014	0.041	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.014	0.041	U	205-99-2	Benzo[b]fluoranthene	0.015	0.041	U
123-91-1	1,4-Dioxane	0.020	0.010	U	191-24-2	Benzo[g,h,i]perylene	0.00028	0.041	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.015	0.041	U	207-08-9	Benzo[k]fluoranthene	0.015	0.041	U
95-95-4	2,4,5-Trichlorophenol	0.012	0.041	U	111-91-1	bis(2-Chloroethoxy)methan	0.012	0.041	U
88-06-2	2,4,6-Trichlorophenol	0.032	0.041	U	111-44-4	bis(2-Chloroethyl)ether	0.0099	0.010	U
120-83-2	2,4-Dichlorophenol	0.015	0.010	U	108-60-1	bis(2-chloroisopropyl)ether	0.016	0.041	U
105-67-9	2,4-Dimethylphenol	0.020	0.010	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.036</b>	<b>0.041</b>	<b>0.036J</b>
51-28-5	2,4-Dinitrophenol	0.18	0.20	U	85-68-7	Butylbenzylphthalate	0.031	0.041	U
121-14-2	2,4-Dinitrotoluene	0.013	0.041	U	105-60-2	Caprolactam	0.033	0.041	U
606-20-2	2,6-Dinitrotoluene	0.021	0.041	U	86-74-8	Carbazole	0.013	0.041	U
91-58-7	2-Chloronaphthalene	0.018	0.041	U	218-01-9	Chrysene	0.014	0.041	U
95-57-8	2-Chlorophenol	0.013	0.041	U	53-70-3	Dibenzo[a,h]anthracene	0.015	0.041	U
91-57-6	2-Methylnaphthalene	0.013	0.041	U	132-64-9	Dibenzofuran	0.010	0.010	U
95-48-7	2-Methylphenol	0.012	0.010	U	84-66-2	Diethylphthalate	0.026	0.041	U
88-74-4	2-Nitroaniline	0.019	0.041	U	131-11-3	Dimethylphthalate	0.011	0.041	U
88-75-5	2-Nitrophenol	0.018	0.041	U	84-74-2	Di-n-butylphthalate	0.047	0.010	U
106-44-5	3&4-Methylphenol	0.012	0.010	U	117-84-0	Di-n-octylphthalate	0.027	0.041	U
91-94-1	3,3'-Dichlorobenzidine	0.033	0.041	U	206-44-0	Fluoranthene	0.016	0.041	U
99-09-2	3-Nitroaniline	0.016	0.041	U	<b>86-73-7</b>	<b>Fluorene</b>	<b>0.011</b>	<b>0.041</b>	<b>0.012J</b>
534-52-1	4,6-Dinitro-2-methylphenol	0.14	0.20	U	118-74-1	Hexachlorobenzene	0.017	0.041	U
101-55-3	4-Bromophenyl-phenylether	0.011	0.041	U	87-68-3	Hexachlorobutadiene	0.018	0.041	U
59-50-7	4-Chloro-3-methylphenol	0.0098	0.041	U	77-47-4	Hexachlorocyclopentadiene	0.13	0.041	U
106-47-8	4-Chloroaniline	0.018	0.010	U	67-72-1	Hexachloroethane	0.018	0.041	U
7005-72-3	4-Chlorophenyl-phenylether	0.012	0.041	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.018	0.041	U
100-01-6	4-Nitroaniline	0.016	0.041	U	78-59-1	Isophorone	0.013	0.041	U
100-02-7	4-Nitrophenol	0.031	0.041	U	91-20-3	Naphthalene	0.012	0.010	U
83-32-9	Acenaphthene	0.012	0.041	U	98-95-3	Nitrobenzene	0.0016	0.041	U
208-96-8	Acenaphthylene	0.012	0.041	U	621-64-7	N-Nitroso-di-n-propylamine	0.015	0.010	U
98-86-2	Acetophenone	0.015	0.041	U	86-30-6	n-Nitrosodiphenylamine	0.14	0.041	U
120-12-7	Anthracene	0.011	0.041	U	87-86-5	Pentachlorophenol	0.20	0.20	U
1912-24-9	Atrazine	0.016	0.041	U	85-01-8	Phenanthrene	0.013	0.041	U
100-52-7	Benzaldehyde	0.44	0.041	U	108-95-2	Phenol	0.011	0.041	U
56-55-3	Benzo[a]anthracene	0.014	0.041	U	129-00-0	Pyrene	0.014	0.041	U

Worksheet #: 569464

**Total Target Concentration 0.048**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*N*-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-005  
 Data File: 7M109877.D  
 Acq On : 10/ 5/20 23:21

Operator : AH/JKR/JP  
 Sam Mult : 1 Vial# : 37  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:37  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GCMSData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.675	96	77148	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.895	152	152621	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	584803	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	298777	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	538286	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	426281	40.00	ng	0.00	
103) Perylene-d12	14.538	264	380114	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	278961	61.41	ng	0.01	
Spiked Amount	100.000		Recovery	=	61.41%		
16) Phenol-d5	5.584	99	369973	67.77	ng	0.00	
Spiked Amount	100.000		Recovery	=	67.77%		
32) Nitrobenzene-d5	6.336	128	71751	30.88	ng	0.00	
Spiked Amount	50.000		Recovery	=	61.76%		
55) 2-Fluorobiphenyl	7.740	172	332678	33.38	ng	0.00	
Spiked Amount	50.000		Recovery	=	66.76%		
80) 2,4,6-Tribromophenol	9.091	330	93336	67.30	ng	0.00	
Spiked Amount	100.000		Recovery	=	67.30%		
94) Terphenyl-d14	11.636	244	265118	39.06	ng	0.00	
Spiked Amount	50.000		Recovery	=	78.12%		
Target Compounds							
72) Fluorene	9.086	166	6332	0.6140	ng		Qvalue 87
102) bis(2-Ethylhexyl)phtha...	12.922	149	14384m	1.7841	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance  
5400000

TIC: 7M109877.D\data.ms

Quant QT Reviewed

SampleID : AD19479-005  
Data File: 7M109877.D  
Acq On : 10/ 5/20 23:21Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 37  
Misc : S.BNAQt Meth : 7M\_0917.M  
Qt On : 10/12/20 11:37  
Qt Upd On: 10/07/20 10:095200000  
5000000  
4800000  
4600000  
4400000  
4200000  
4000000  
3800000  
3600000  
3400000  
3200000  
3000000  
2800000  
2600000  
2400000  
2200000  
2000000  
1800000  
1600000  
1400000  
1200000  
1000000  
800000  
600000  
400000  
200000  
0  
Time--> 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00

1,4-Dioxane-d8(NT).I

2-Fluorophenol.S

Phenol-d5.S

1,4-Dichlorobenzene-d4.I

Nitrobenzene-d5.S

Naphthalene-d8.I

2-Fluorobiphenyl.S

Acenaphthene-d10.I

2,4,6-Trifluorophenol.S

Phenanthrene-d10.I

Terphenyl-d14.S

Chrysene-d12.I

bis(2-Ethylhexyl)phthalate.P

Perylene-d12.I

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-007

Client Id: HSI-SS-04 (0-0.5')

Data File: 7M109878.D

Analysis Date: 10/05/20 23:45

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 90

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.037	U	50-32-8	Benzo[a]pyrene	0.013	0.037	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.012	0.037	U	<b>205-99-2</b>	<b>Benzo[b]fluoranthene</b>	<b>0.013</b>	<b>0.037</b>	<b>0.018J</b>
123-91-1	1,4-Dioxane	0.019	0.0093	U	191-24-2	Benzo[g,h,i]perylene	0.00026	0.037	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.037	U	207-08-9	Benzo[k]fluoranthene	0.014	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.010	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.029	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0090	0.0093	U
120-83-2	2,4-Dichlorophenol	0.014	0.0093	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.037	U
105-67-9	2,4-Dimethylphenol	0.018	0.0093	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.033</b>	<b>0.037</b>	<b>0.15</b>
51-28-5	2,4-Dinitrophenol	0.16	0.19	U	85-68-7	Butylbenzylphthalate	0.028	0.037	U
121-14-2	2,4-Dinitrotoluene	0.012	0.037	U	105-60-2	Caprolactam	0.030	0.037	U
606-20-2	2,6-Dinitrotoluene	0.019	0.037	U	86-74-8	Carbazole	0.012	0.037	U
91-58-7	2-Chloronaphthalene	0.016	0.037	U	218-01-9	Chrysene	0.013	0.037	U
95-57-8	2-Chlorophenol	0.012	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.014	0.037	U
91-57-6	2-Methylnaphthalene	0.011	0.037	U	132-64-9	Dibenzofuran	0.0094	0.0093	U
95-48-7	2-Methylphenol	0.011	0.0093	U	84-66-2	Diethylphthalate	0.024	0.037	U
88-74-4	2-Nitroaniline	0.017	0.037	U	131-11-3	Dimethylphthalate	0.010	0.037	U
88-75-5	2-Nitrophenol	0.017	0.037	U	84-74-2	Di-n-butylphthalate	0.042	0.0093	U
106-44-5	3&4-Methylphenol	0.011	0.0093	U	117-84-0	Di-n-octylphthalate	0.025	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.030	0.037	U	206-44-0	Fluoranthene	0.014	0.037	U
99-09-2	3-Nitroaniline	0.014	0.037	U	86-73-7	Fluorene	0.010	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.19	U	118-74-1	Hexachlorobenzene	0.015	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.037	U	87-68-3	Hexachlorobutadiene	0.017	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.0089	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.037	U
106-47-8	4-Chloroaniline	0.016	0.0093	U	67-72-1	Hexachloroethane	0.016	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.037	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.037	U
100-01-6	4-Nitroaniline	0.014	0.037	U	78-59-1	Isophorone	0.012	0.037	U
100-02-7	4-Nitrophenol	0.028	0.037	U	91-20-3	Naphthalene	0.011	0.0093	U
83-32-9	Acenaphthene	0.011	0.037	U	98-95-3	Nitrobenzene	0.0015	0.037	U
208-96-8	Acenaphthylene	0.011	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0093	U
98-86-2	Acetophenone	0.013	0.037	U	86-30-6	n-Nitrosodiphenylamine	0.13	0.037	U
120-12-7	Anthracene	0.010	0.037	U	87-86-5	Pentachlorophenol	0.18	0.19	U
1912-24-9	Atrazine	0.015	0.037	U	85-01-8	Phenanthrene	0.012	0.037	U
100-52-7	Benzaldehyde	0.40	0.037	U	108-95-2	Phenol	0.010	0.037	U
56-55-3	Benzo[a]anthracene	0.012	0.037	U	129-00-0	Pyrene	0.013	0.037	U

Worksheet #: 569464

**Total Target Concentration 0.17**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine



SampleID : AD19479-007  
 Data File: 7M109878.D  
 Acq On : 10/ 5/20 23:45

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 38  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:37  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.675	96	72871	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.895	152	144393	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	553167	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	281015	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	511208	40.00	ng	0.00	
91) Chrysene-d12	12.887	240	409452	40.00	ng	0.00	
103) Perylene-d12	14.538	264	356768	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	275254	64.15	ng	0.01	
Spiked Amount 100.000			Recovery =	64.15%			
16) Phenol-d5	5.584	99	352220	68.31	ng	0.00	
Spiked Amount 100.000			Recovery =	68.31%			
32) Nitrobenzene-d5	6.336	128	68837	31.32	ng	0.00	
Spiked Amount 50.000			Recovery =	62.64%			
55) 2-Fluorobiphenyl	7.740	172	309659	33.04	ng	0.00	
Spiked Amount 50.000			Recovery =	66.08%			
80) 2,4,6-Tribromophenol	9.091	330	76802	58.31	ng	0.00	
Spiked Amount 100.000			Recovery =	58.31%			
94) Terphenyl-d14	11.635	244	222165	34.07	ng	0.00	
Spiked Amount 50.000			Recovery =	68.14%			
Target Compounds							
102) bis(2-Ethylhexyl)phtha...	12.916	149	61443	7.9340	ng		Qvalue 91
105) Benzo[b]fluoranthene	14.097	252	9607m	0.9530	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

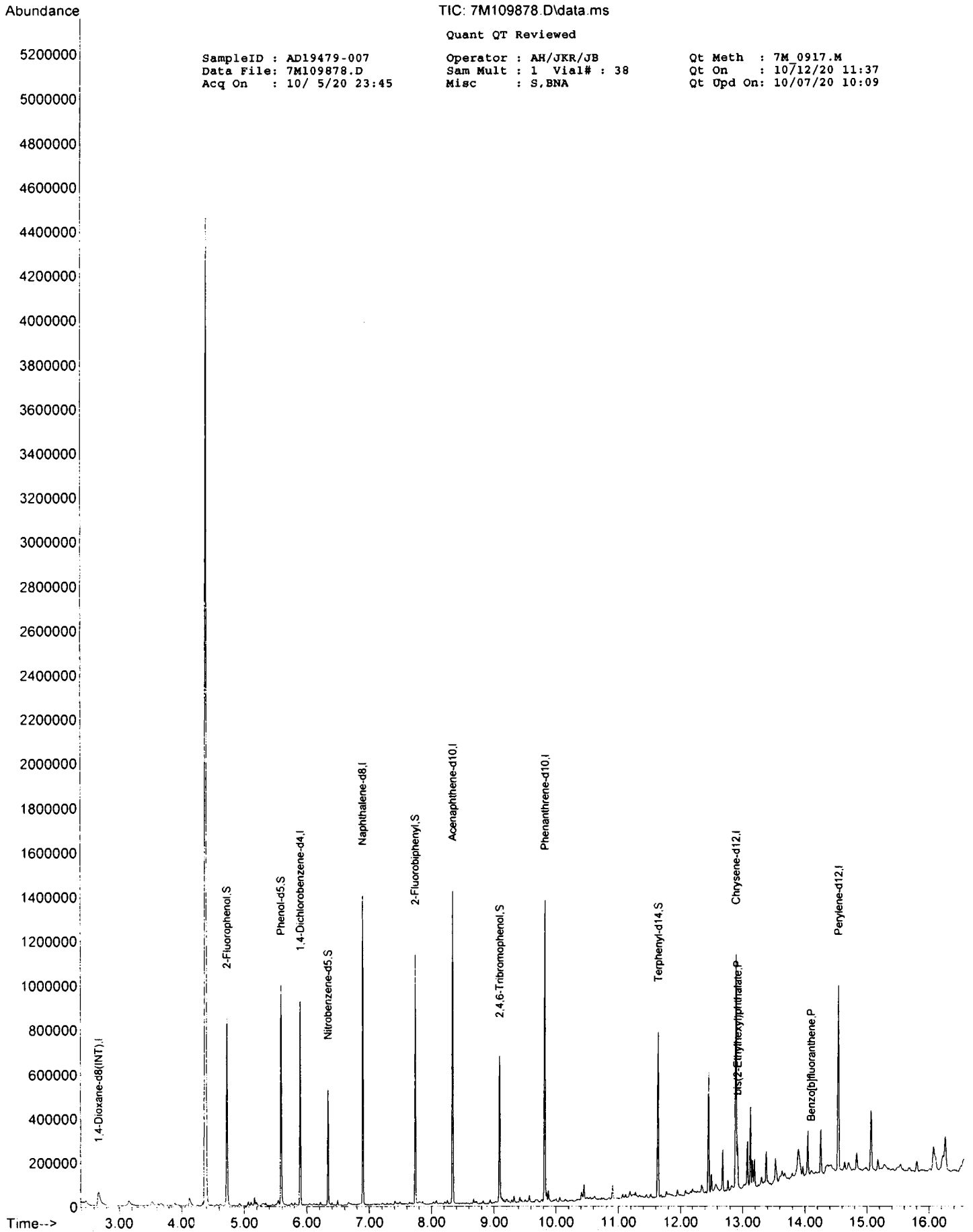
TIC: 7M109878.D\data.ms

Quant QT Reviewed

SampleID : AD19479-007  
Data File: 7M109878.D  
Acq On : 10/ 5/20 23:45

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 38  
Misc : S,BNA

Qt Meth : 7M 0917.M  
Qt On : 10/12/20 11:37  
Qt Upd On: 10/07/20 10:09



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-009

Client Id: HSI-SS-05 (0-0.5')

Data File: 7M109879.D

Analysis Date: 10/06/20 00:08

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 87

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.038	U	50-32-8	Benzo[a]pyrene	0.013	0.038	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.013	0.038	U	205-99-2	Benzo[b]fluoranthene	0.014	0.038	U
123-91-1	1,4-Dioxane	0.019	0.0096	U	191-24-2	Benzo[g,h,i]perylene	0.00026	0.038	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.038	U	207-08-9	Benzo[k]fluoranthene	0.014	0.038	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.038	U	111-91-1	bis(2-Chloroethoxy)methan	0.011	0.038	U
88-06-2	2,4,6-Trichlorophenol	0.030	0.038	U	111-44-4	bis(2-Chloroethyl)ether	0.0093	0.0096	U
120-83-2	2,4-Dichlorophenol	0.014	0.0096	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.038	U
105-67-9	2,4-Dimethylphenol	0.019	0.0096	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.034	0.038	0.28
51-28-5	2,4-Dinitrophenol	0.17	0.19	U	85-68-7	Butylbenzylphthalate	0.029	0.038	0.033J
121-14-2	2,4-Dinitrotoluene	0.012	0.038	U	105-60-2	Caprolactam	0.031	0.038	U
606-20-2	2,6-Dinitrotoluene	0.020	0.038	U	86-74-8	Carbazole	0.012	0.038	U
91-58-7	2-Chloronaphthalene	0.017	0.038	U	218-01-9	Chrysene	0.013	0.038	U
95-57-8	2-Chlorophenol	0.013	0.038	U	53-70-3	Dibenzo[a,h]anthracene	0.014	0.038	U
91-57-6	2-Methylnaphthalene	0.012	0.038	U	132-64-9	Dibenzofuran	0.0097	0.0096	U
95-48-7	2-Methylphenol	0.011	0.0096	U	84-66-2	Diethylphthalate	0.025	0.038	U
88-74-4	2-Nitroaniline	0.018	0.038	U	131-11-3	Dimethylphthalate	0.011	0.038	U
88-75-5	2-Nitrophenol	0.017	0.038	U	84-74-2	Di-n-butylphthalate	0.044	0.0096	0.067
106-44-5	3&4-Methylphenol	0.011	0.0096	U	117-84-0	Di-n-octylphthalate	0.025	0.038	U
91-94-1	3,3'-Dichlorobenzidine	0.031	0.038	U	206-44-0	Fluoranthene	0.015	0.038	U
99-09-2	3-Nitroaniline	0.015	0.038	U	86-73-7	Fluorene	0.010	0.038	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.19	U	118-74-1	Hexachlorobenzene	0.016	0.038	U
101-55-3	4-Bromophenyl-phenylether	0.011	0.038	U	87-68-3	Hexachlorobutadiene	0.017	0.038	U
59-50-7	4-Chloro-3-methylphenol	0.0092	0.038	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.038	U
106-47-8	4-Chloroaniline	0.017	0.0096	U	67-72-1	Hexachloroethane	0.017	0.038	U
7005-72-3	4-Chlorophenyl-phenylether	0.012	0.038	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.038	U
100-01-6	4-Nitroaniline	0.015	0.038	U	78-59-1	Isophorone	0.012	0.038	U
100-02-7	4-Nitrophenol	0.029	0.038	U	91-20-3	Naphthalene	0.011	0.0096	U
83-32-9	Acenaphthene	0.011	0.038	U	98-95-3	Nitrobenzene	0.0016	0.038	U
208-96-8	Acenaphthylene	0.011	0.038	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0096	U
98-86-2	Acetophenone	0.014	0.038	U	86-30-6	n-Nitrosodiphenylamine	0.13	0.038	U
120-12-7	Anthracene	0.011	0.038	U	87-86-5	Pentachlorophenol	0.18	0.19	U
1912-24-9	Atrazine	0.015	0.038	U	85-01-8	Phenanthrene	0.012	0.038	U
100-52-7	Benzaldehyde	0.42	0.038	U	108-95-2	Phenol	0.011	0.038	U
56-55-3	Benzo[a]anthracene	0.013	0.038	U	129-00-0	Pyrene	0.013	0.038	U

Worksheet #: 569464

Total Target Concentration 0.38

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-009  
 Data File: 7M109879.D  
 Acq On : 10/ 6/20 00:08

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 39  
 Misc : S.BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:37  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GCMSData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.675	96	82445	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.895	152	158438	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	608113	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	314636	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	568431	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	451204	40.00	ng	0.00	
103) Perylene-d12	14.538	264	397848	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	287898	59.30	ng	0.01	
Spiked Amount	100.000		Recovery	=	59.30%		
16) Phenol-d5	5.584	99	369634	63.36	ng	0.00	
Spiked Amount	100.000		Recovery	=	63.36%		
32) Nitrobenzene-d5	6.336	128	74691	30.92	ng	0.00	
Spiked Amount	50.000		Recovery	=	61.84%		
55) 2-Fluorobiphenyl	7.740	172	331501	31.59	ng	0.00	
Spiked Amount	50.000		Recovery	=	63.18%		
80) 2,4,6-Tribromophenol	9.091	330	84485	57.68	ng	0.00	
Spiked Amount	100.000		Recovery	=	57.68%		
94) Terphenyl-d14	11.635	244	244208	33.99	ng	0.00	
Spiked Amount	50.000		Recovery	=	67.98%		
Target Compounds							
89) Di-n-butylphthalate	10.449	149	60099	3.4892	ng		97
97) Butylbenzylphthalate	12.223	149	11064m	1.7395	ng		
102) bis(2-Ethylhexyl)phtha...	12.916	149	125634	14.7217	ng		94
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

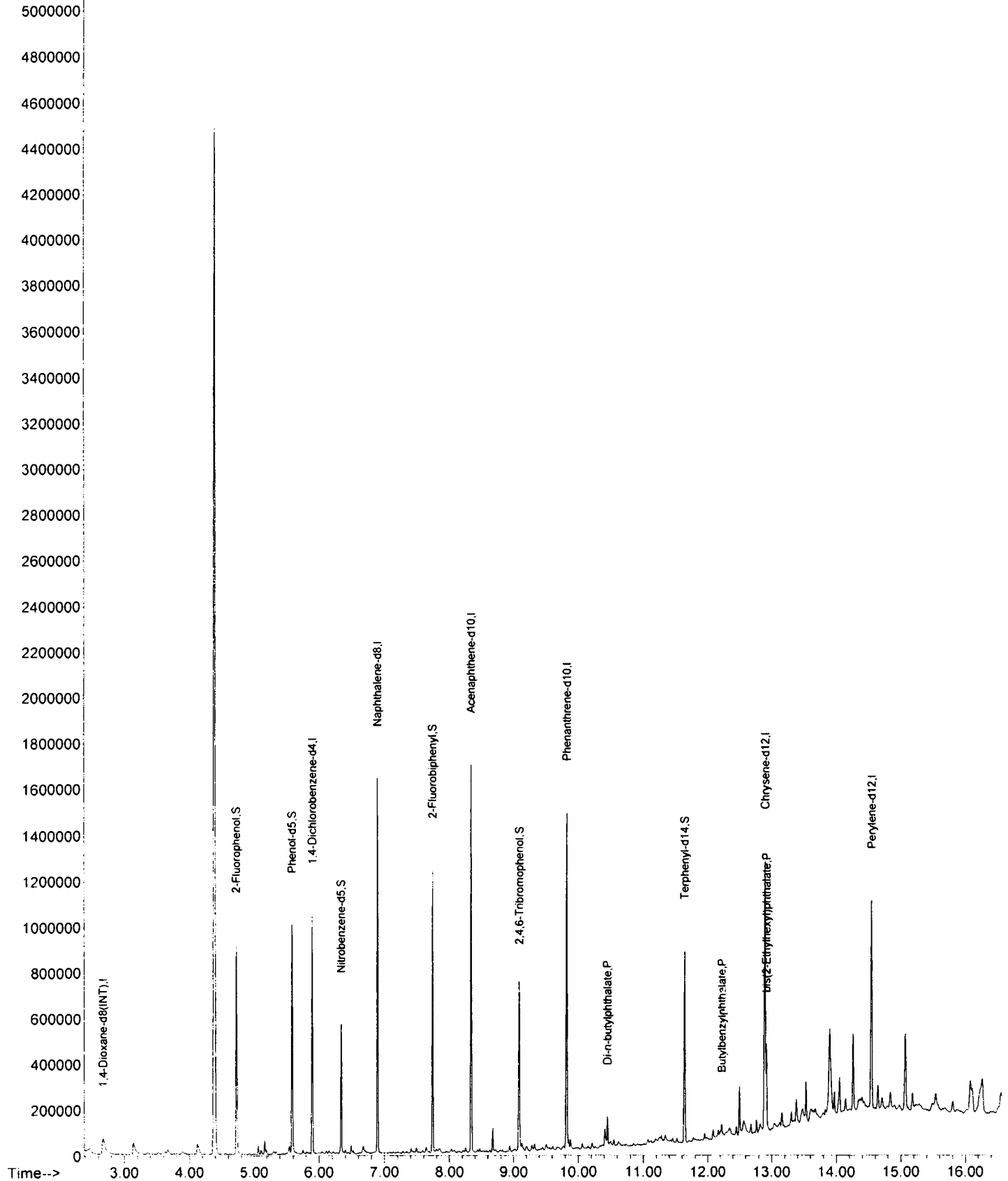
TIC: 7M109879.D\data.ms

Quant QT Reviewed

SampleID : AD19479-009  
Data File: 7M109879.D  
Acq On : 10/ 6/20 00:08

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 39  
Misc : S.BNA

Qt Meth : 7M\_0917.M  
Qt On : 10/12/20 11:37  
Qt Upd On: 10/07/20 10:09



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-011

Client Id: HSI-SS-06 (0-0.5')

Data File: 7M109880.D

Analysis Date: 10/06/20 00:32

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 92

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.010	0.036	U	50-32-8	Benzo[a]pyrene	0.012	0.036	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.012	0.036	U	205-99-2	Benzo[b]fluoranthene	0.013	0.036	U
123-91-1	1,4-Dioxane	0.018	0.0091	U	191-24-2	Benzo[g,h,i]perylene	0.00025	0.036	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.036	U	207-08-9	Benzo[k]fluoranthene	0.013	0.036	U
95-95-4	2,4,5-Trichlorophenol	0.010	0.036	U	111-91-1	bis(2-Chloroethoxy)methan	0.010	0.036	U
88-06-2	2,4,6-Trichlorophenol	0.028	0.036	U	111-44-4	bis(2-Chloroethyl)ether	0.0088	0.0091	U
120-83-2	2,4-Dichlorophenol	0.014	0.0091	U	108-60-1	bis(2-chloroisopropyl)ether	0.014	0.036	U
105-67-9	2,4-Dimethylphenol	0.018	0.0091	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.032</b>	<b>0.036</b>	<b>0.34</b>
51-28-5	2,4-Dinitrophenol	0.16	0.18	U	85-68-7	Butylbenzylphthalate	0.028	0.036	U
121-14-2	2,4-Dinitrotoluene	0.011	0.036	U	105-60-2	Caprolactam	0.029	0.036	U
606-20-2	2,6-Dinitrotoluene	0.018	0.036	U	86-74-8	Carbazole	0.011	0.036	U
91-58-7	2-Chloronaphthalene	0.016	0.036	U	218-01-9	Chrysene	0.012	0.036	U
95-57-8	2-Chlorophenol	0.012	0.036	U	53-70-3	Dibenzo[a,h]anthracene	0.013	0.036	U
91-57-6	2-Methylnaphthalene	0.011	0.036	U	132-64-9	Dibenzofuran	0.0092	0.0091	U
95-48-7	2-Methylphenol	0.010	0.0091	U	<b>84-66-2</b>	<b>Diethylphthalate</b>	<b>0.023</b>	<b>0.036</b>	<b>U</b>
88-74-4	2-Nitroaniline	0.017	0.036	U	131-11-3	Dimethylphthalate	0.010	0.036	U
88-75-5	2-Nitrophenol	0.016	0.036	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.042</b>	<b>0.0091</b>	<b>0.077</b>
106-44-5	3&4-Methylphenol	0.011	0.0091	U	117-84-0	Di-n-octylphthalate	0.024	0.036	U
91-94-1	3,3'-Dichlorobenzidine	0.029	0.036	U	206-44-0	Fluoranthene	0.014	0.036	U
99-09-2	3-Nitroaniline	0.014	0.036	U	86-73-7	Fluorene	0.0099	0.036	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.18	U	118-74-1	Hexachlorobenzene	0.015	0.036	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.036	U	87-68-3	Hexachlorobutadiene	0.016	0.036	U
59-50-7	4-Chloro-3-methylphenol	0.0087	0.036	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.036	U
106-47-8	4-Chloroaniline	0.016	0.0091	U	67-72-1	Hexachloroethane	0.016	0.036	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.036	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.016	0.036	U
100-01-6	4-Nitroaniline	0.014	0.036	U	78-59-1	Isophorone	0.012	0.036	U
100-02-7	4-Nitrophenol	0.028	0.036	U	91-20-3	Naphthalene	0.010	0.0091	U
83-32-9	Acenaphthene	0.010	0.036	U	98-95-3	Nitrobenzene	0.0015	0.036	U
208-96-8	Acenaphthylene	0.011	0.036	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0091	U
98-86-2	Acetophenone	0.013	0.036	U	86-30-6	n-Nitrosodiphenylamine	0.12	0.036	U
120-12-7	Anthracene	0.010	0.036	U	87-86-5	Pentachlorophenol	0.17	0.18	U
1912-24-9	Atrazine	0.015	0.036	U	85-01-8	Phenanthrene	0.012	0.036	U
100-52-7	Benzaldehyde	0.39	0.036	U	108-95-2	Phenol	0.010	0.036	U
56-55-3	Benzo[a]anthracene	0.012	0.036	U	129-00-0	Pyrene	0.012	0.036	U

Worksheet #: 569464

Total Target Concentration 0.42

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19479-011  
 Data File: 7M109880.D  
 Acq On : 10/ 6/20 00:32

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 40  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:38  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GCMSData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.687	96	87367	40.00	ng	-0.01	
21) 1,4-Dichlorobenzene-d4	5.895	152	174584	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	663283	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	336093	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	608064	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	481069	40.00	ng	0.00	
103) Perylene-d12	14.538	264	427798	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	325528	63.27	ng	0.01	
Spiked Amount			Recovery	=	63.27%		
16) Phenol-d5	5.584	99	448281	72.51	ng	0.00	
Spiked Amount			Recovery	=	72.51%		
32) Nitrobenzene-d5	6.336	128	86689	32.90	ng	0.00	
Spiked Amount			Recovery	=	65.80%		
55) 2-Fluorobiphenyl	7.740	172	415163	37.03	ng	0.00	
Spiked Amount			Recovery	=	74.06%		
80) 2,4,6-Tribromophenol	9.091	330	118505	75.64	ng	0.00	
Spiked Amount			Recovery	=	75.64%		
94) Terphenyl-d14	11.636	244	328121	42.83	ng	0.00	
Spiked Amount			Recovery	=	85.66%		
Target Compounds							
89) Di-n-butylphthalate	10.449	149	78006	4.2337	ng	98	
102) bis(2-Ethylhexyl)phtha...	12.916	149	169700	18.6509	ng	93	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

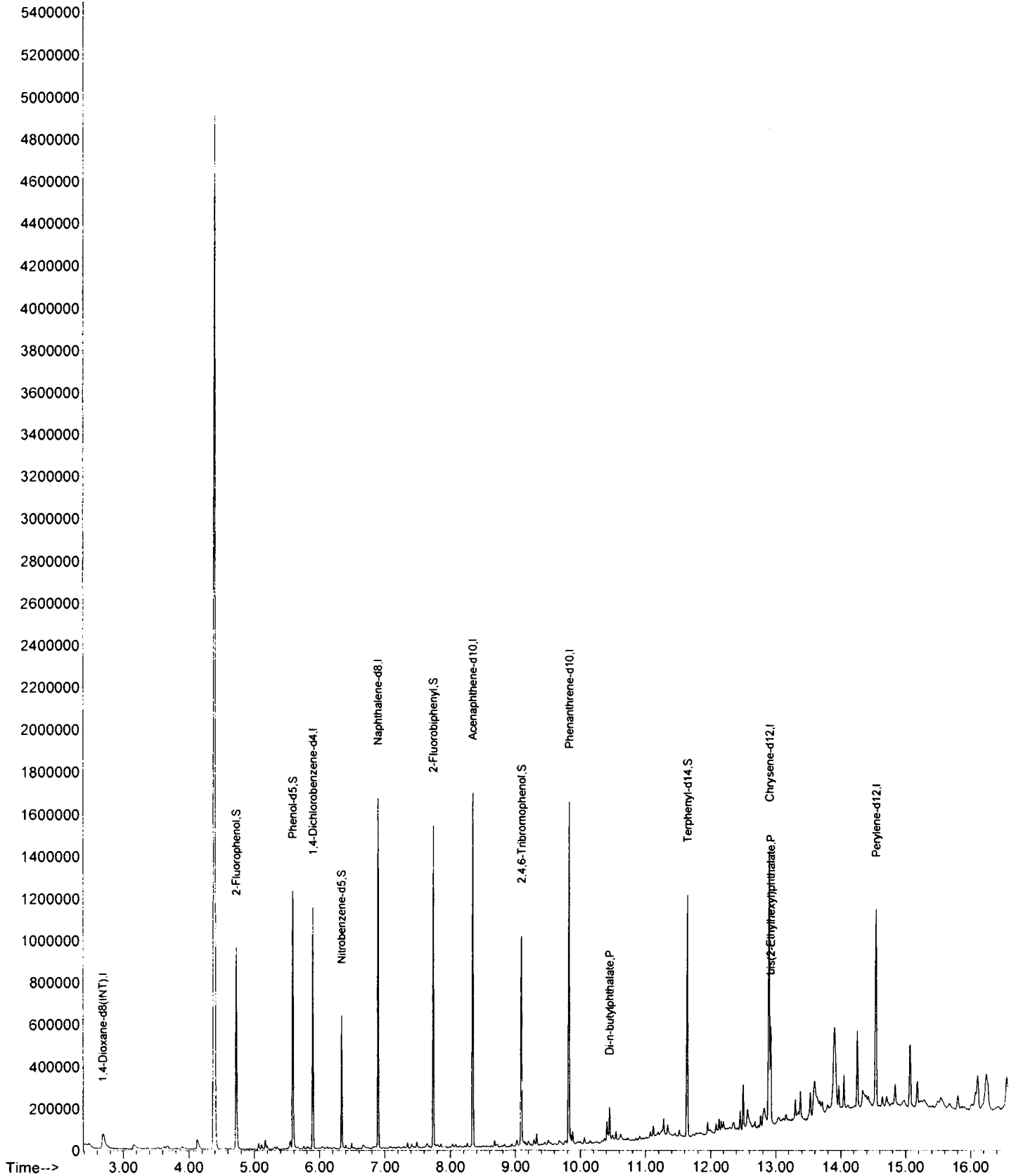
TIC: 7M109880.D\data.ms

Quant QT Reviewed

SampleID : AD19479-011  
Data File: 7M109880.D  
Acq On : 10/ 6/20 00:32

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 40  
Misc : S.BNA

Qt Meth : 7M\_0917.M  
Qt On : 10/12/20 11:38  
Qt Upd On: 10/07/20 10:09





## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-013

Client Id: HSI-SS-07 (0-0.5')

Data File: 7M109881.D

Analysis Date: 10/06/20 00:55

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 82

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.012	0.041	U	50-32-8	Benzo[a]pyrene	0.014	0.041	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.014	0.041	U	205-99-2	Benzo[b]fluoranthene	0.015	0.041	U
123-91-1	1,4-Dioxane	0.020	0.010	U	191-24-2	Benzo[g,h,i]perylene	0.00028	0.041	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.015	0.041	U	207-08-9	Benzo[k]fluoranthene	0.015	0.041	U
95-95-4	2,4,5-Trichlorophenol	0.012	0.041	U	111-91-1	bis(2-Chloroethoxy)methan	0.012	0.041	U
88-06-2	2,4,6-Trichlorophenol	0.032	0.041	U	111-44-4	bis(2-Chloroethyl)ether	0.0099	0.010	U
120-83-2	2,4-Dichlorophenol	0.015	0.010	U	108-60-1	bis(2-chloroisopropyl)ether	0.016	0.041	U
105-67-9	2,4-Dimethylphenol	0.020	0.010	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.036</b>	<b>0.041</b>	<b>0.42</b>
51-28-5	2,4-Dinitrophenol	0.18	0.20	U	85-68-7	Butylbenzylphthalate	0.031	0.041	U
121-14-2	2,4-Dinitrotoluene	0.013	0.041	U	105-60-2	Caprolactam	0.033	0.041	U
606-20-2	2,6-Dinitrotoluene	0.021	0.041	U	86-74-8	Carbazole	0.013	0.041	U
91-58-7	2-Chloronaphthalene	0.018	0.041	U	218-01-9	Chrysene	0.014	0.041	U
95-57-8	2-Chlorophenol	0.013	0.041	U	53-70-3	Dibenzo[a,h]anthracene	0.015	0.041	U
91-57-6	2-Methylnaphthalene	0.013	0.041	U	132-64-9	Dibenzofuran	0.010	0.010	U
95-48-7	2-Methylphenol	0.012	0.010	U	84-66-2	Diethylphthalate	0.026	0.041	U
88-74-4	2-Nitroaniline	0.019	0.041	U	131-11-3	Dimethylphthalate	0.011	0.041	U
88-75-5	2-Nitrophenol	0.018	0.041	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.047</b>	<b>0.010</b>	<b>0.061</b>
106-44-5	3&4-Methylphenol	0.012	0.010	U	117-84-0	Di-n-octylphthalate	0.027	0.041	U
91-94-1	3,3'-Dichlorobenzidine	0.033	0.041	U	206-44-0	Fluoranthene	0.016	0.041	U
99-09-2	3-Nitroaniline	0.016	0.041	U	86-73-7	Fluorene	0.011	0.041	U
534-52-1	4,6-Dinitro-2-methylphenol	0.14	0.20	U	118-74-1	Hexachlorobenzene	0.017	0.041	U
101-55-3	4-Bromophenyl-phenylether	0.011	0.041	U	87-68-3	Hexachlorobutadiene	0.018	0.041	U
59-50-7	4-Chloro-3-methylphenol	0.0098	0.041	U	77-47-4	Hexachlorocyclopentadiene	0.13	0.041	U
106-47-8	4-Chloroaniline	0.018	0.010	U	67-72-1	Hexachloroethane	0.018	0.041	U
7005-72-3	4-Chlorophenyl-phenylether	0.012	0.041	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.018	0.041	U
100-01-6	4-Nitroaniline	0.016	0.041	U	78-59-1	Isophorone	0.013	0.041	U
100-02-7	4-Nitrophenol	0.031	0.041	U	91-20-3	Naphthalene	0.012	0.010	U
83-32-9	Acenaphthene	0.012	0.041	U	93-95-3	Nitrobenzene	0.0016	0.041	U
208-96-8	Acenaphthylene	0.012	0.041	U	621-64-7	N-Nitroso-di-n-propylamine	0.015	0.010	U
98-86-2	Acetophenone	0.015	0.041	U	83-30-6	n-Nitrosodiphenylamine	0.14	0.041	U
120-12-7	Anthracene	0.011	0.041	U	87-86-5	Pentachlorophenol	0.20	0.20	U
1912-24-9	Atrazine	0.016	0.041	U	85-01-8	Phenanthrene	0.013	0.041	U
100-52-7	Benzaldehyde	0.44	0.041	U	108-95-2	Phenol	0.011	0.041	U
56-55-3	Benzo[a]anthracene	0.014	0.041	U	129-00-0	Pyrene	0.014	0.041	U

Worksheet #: 569464

**Total Target Concentration 0.48**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19479-013  
 Data File: 7M109881.D  
 Acq On : 10/ 6/20 00:55

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 41  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:38  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.681	96	88377	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.895	152	174784	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	666794	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	338694	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	601200	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	484798	40.00	ng	0.00	
103) Perylene-d12	14.538	264	433232	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	327112	62.86	ng	0.01	
Spiked Amount 100.000			Recovery =	62.86%			
16) Phenol-d5	5.590	99	432827	69.21	ng	0.01	
Spiked Amount 100.000			Recovery =	69.21%			
32) Nitrobenzene-d5	6.336	128	86698	32.73	ng	0.00	
Spiked Amount 50.000			Recovery =	65.46%			
55) 2-Fluorobiphenyl	7.740	172	392602	34.75	ng	0.00	
Spiked Amount 50.000			Recovery =	69.50%			
80) 2,4,6-Tribromophenol	9.091	330	102982	66.48	ng	0.00	
Spiked Amount 100.000			Recovery =	66.48%			
94) Terphenyl-d14	11.635	244	293603	38.03	ng	0.00	
Spiked Amount 50.000			Recovery =	76.06%			
Target Compounds							
89) Di-n-butylphthalate	10.449	149	55087	3.0239	ng	97	
102) bis(2-Ethylhexyl)phtha...	12.922	149	191339	20.8673	ng	93	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

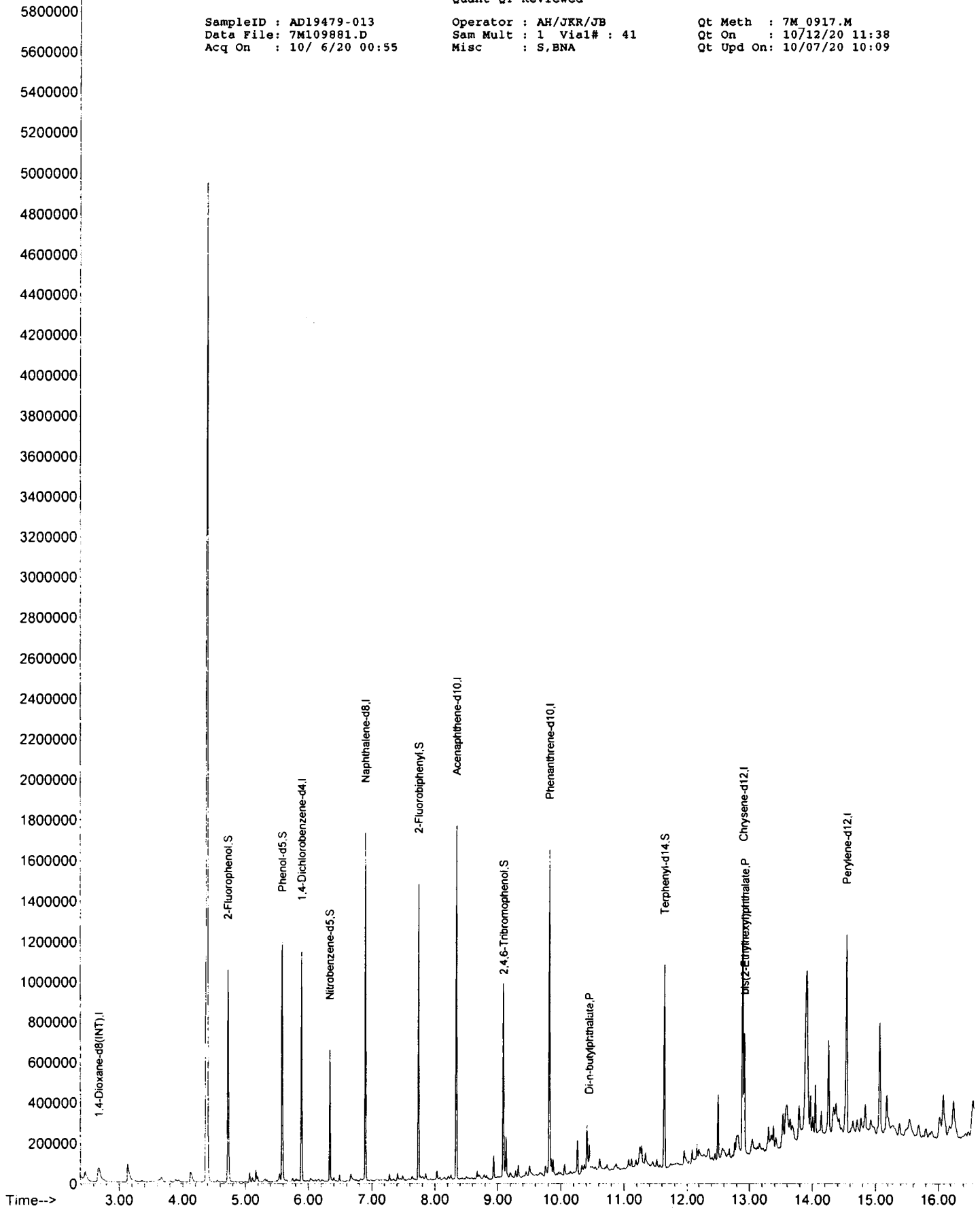
TIC: 7M109881.D\data.ms

Quant QT Reviewed

SampleID : AD19479-013  
Data File: 7M109881.D  
Acq On : 10/ 6/20 00:55

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 41  
Misc : S,BNA

Qt Meth : 7M\_0917.M  
Qt On : 10/12/20 11:38  
Qt Upd On: 10/07/20 10:09



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-015(3X)

Client Id: HSI-SS-08 (0-0.5')

Data File: 7M109887.D

Analysis Date: 10/06/20 10:02

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 3

Solids: 94

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.031	0.11	U	50-32-8	Benzo[a]pyrene	0.036	0.11	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.036	0.11	U	205-99-2	Benzo[b]fluoranthene	0.038	0.11	U
123-91-1	1,4-Dioxane	0.054	0.027	U	<b>191-24-2</b>	<b>Benzo[g,h,i]perylene</b>	<b>0.00073</b>	<b>0.11</b>	<b>0.033J</b>
58-90-2	2,3,4,6-Tetrachlorophenol	0.040	0.11	U	207-08-9	Benzo[k]fluoranthene	0.039	0.11	U
95-95-4	2,4,5-Trichlorophenol	0.030	0.11	U	111-91-1	bis(2-Chloroethoxy)methan	0.030	0.11	U
88-06-2	2,4,6-Trichlorophenol	0.083	0.11	U	111-44-4	bis(2-Chloroethyl)ether	0.026	0.027	U
120-83-2	2,4-Dichlorophenol	0.040	0.027	U	108-60-1	bis(2-chloroisopropyl)ether	0.043	0.11	U
105-67-9	2,4-Dimethylphenol	0.052	0.027	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.094	0.11	U
51-28-5	2,4-Dinitrophenol	0.46	0.53	U	85-68-7	Butylbenzylphthalate	0.082	0.11	U
121-14-2	2,4-Dinitrotoluene	0.033	0.11	U	105-60-2	Caprolactam	0.085	0.11	U
606-20-2	2,6-Dinitrotoluene	0.054	0.11	U	86-74-8	Carbazole	0.033	0.11	U
91-58-7	2-Chloronaphthalene	0.047	0.11	U	218-01-9	Chrysene	0.036	0.11	U
95-57-8	2-Chlorophenol	0.035	0.11	U	53-70-3	Dibenzo[a,h]anthracene	0.039	0.11	U
91-57-6	2-Methylnaphthalene	0.033	0.11	U	132-64-9	Dibenzofuran	0.027	0.027	U
95-48-7	2-Methylphenol	0.031	0.027	U	84-66-2	Diethylphthalate	0.069	0.11	U
88-74-4	2-Nitroaniline	0.050	0.11	U	131-11-3	Dimethylphthalate	0.030	0.11	U
88-75-5	2-Nitrophenol	0.048	0.11	U	84-74-2	Di-n-butylphthalate	0.12	0.027	U
106-44-5	3&4-Methylphenol	0.031	0.027	U	117-84-0	Di-n-octylphthalate	0.070	0.11	U
91-94-1	3,3'-Dichlorobenzidine	0.086	0.11	U	206-44-0	Fluoranthene	0.041	0.11	U
99-09-2	3-Nitroaniline	0.041	0.11	U	86-73-7	Fluorene	0.029	0.11	U
534-52-1	4,6-Dinitro-2-methylphenol	0.37	0.53	U	118-74-1	Hexachlorobenzene	0.044	0.11	U
101-55-3	4-Bromophenyl-phenylether	0.030	0.11	U	87-68-3	Hexachlorobutadiene	0.047	0.11	U
59-50-7	4-Chloro-3-methylphenol	0.026	0.11	U	77-47-4	Hexachlorocyclopentadiene	0.35	0.11	U
106-47-8	4-Chloroaniline	0.047	0.027	U	67-72-1	Hexachloroethane	0.047	0.11	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	0.11	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.048	0.11	U
100-01-6	4-Nitroaniline	0.041	0.11	U	78-59-1	Isophorone	0.034	0.11	U
100-02-7	4-Nitrophenol	0.081	0.11	U	91-20-3	Naphthalene	0.031	0.027	U
83-32-9	Acenaphthene	0.030	0.11	U	98-95-3	Nitrobenzene	0.0043	0.11	U
208-96-8	Acenaphthylene	0.032	0.11	U	621-64-7	N-Nitroso-di-n-propylamine	0.040	0.027	U
98-86-2	Acetophenone	0.038	0.11	U	86-30-6	n-Nitrosodiphenylamine	0.36	0.11	U
120-12-7	Anthracene	0.029	0.11	U	87-86-5	Pentachlorophenol	0.51	0.53	U
1912-24-9	Atrazine	0.043	0.11	U	85-01-8	Phenanthrene	0.034	0.11	U
100-52-7	Benzaldehyde	1.2	0.11	U	108-95-2	Phenol	0.029	0.11	U
56-55-3	Benzo[a]anthracene	0.035	0.11	U	129-00-0	Pyrene	0.036	0.11	U

Worksheet #: 569464

**Total Target Concentration 0.033**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19479-015(3X)  
 Data File: 7M109887.D  
 Acq On : 10/ 6/20 10:02

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 4  
 Misc : S,BNA:3

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:38  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcmsData\2020\GCMS\_7\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

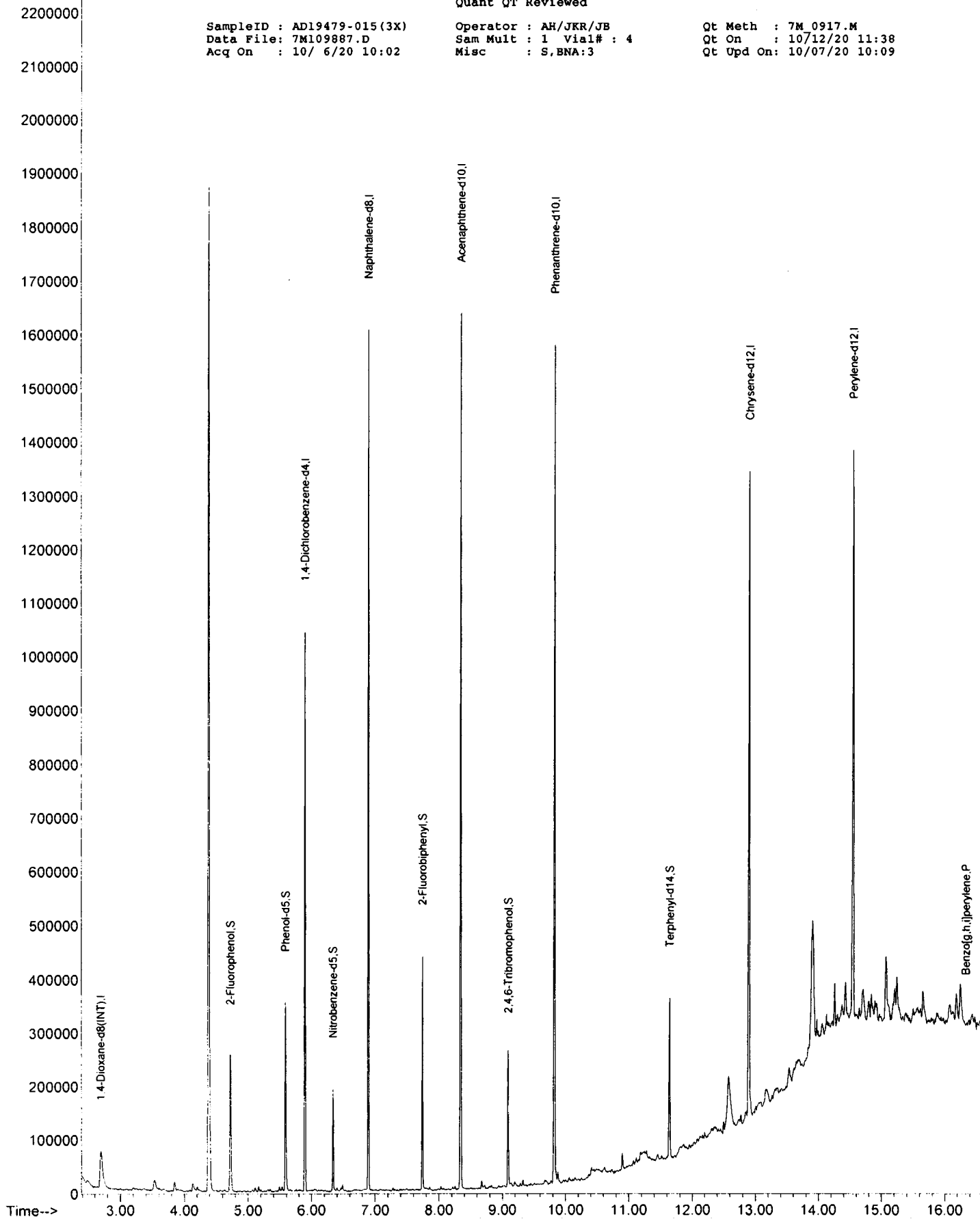
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
-----							
Internal Standards							
7) 1,4-Dioxane-d8(INT)	2.693	96	82337	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.895	152	160985	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	615133	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	321469	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	588836	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	456084	40.00	ng	0.00	
103) Perylene-d12	14.538	264	460132	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	98955	20.41	ng	0.01	
Spiked Amount			Recovery	=	20.41%		
16) Phenol-d5	5.584	99	130463	22.39	ng	0.00	
Spiked Amount			Recovery	=	22.39%		
32) Nitrobenzene-d5	6.336	128	25969	10.63	ng	0.00	
Spiked Amount			Recovery	=	21.26%		
55) 2-Fluorobiphenyl	7.740	172	119788	11.17	ng	0.00	
Spiked Amount			Recovery	=	22.34%		
80) 2,4,6-Tribromophenol	9.091	330	29136	19.20	ng	0.00	
Spiked Amount			Recovery	=	19.20%		
94) Terphenyl-d14	11.635	244	89884	12.38	ng	0.00	
Spiked Amount			Recovery	=	24.76%		
Target Compounds							
110) Benzo[g,h,i]perylene	16.330	276	6586	0.6136	ng		75
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

TIC: 7M109887.D\data.ms

Quant QT Reviewed

SampleID : AD19479-015 (3X)  
Data File : 7M109887.D  
Acq On : 10/ 6/20 10:02Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 4  
Misc : S,BNA:3Qt Meth : 7M\_0917.M  
Qt On : 10/12/20 11:38  
Qt Upd On : 10/07/20 10:09

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-017

Client Id: HSI-SS-09 (0-0.5')

Data File: 7M109883.D

Analysis Date: 10/06/20 01:42

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 93

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.010	0.036	U	50-32-8	Benzo[a]pyrene	0.012	0.036	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.012	0.036	U	<b>205-99-2</b>	<b>Benzo[b]fluoranthene</b>	<b>0.013</b>	<b>0.036</b>	<b>0.015J</b>
123-91-1	1,4-Dioxane	0.018	0.0090	U	191-24-2	Benzo[g,h,i]perylene	0.00025	0.036	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.013	0.036	U	207-08-9	Benzo[k]fluoranthene	0.013	0.036	U
95-95-4	2,4,5-Trichlorophenol	0.010	0.036	U	111-91-1	bis(2-Chloroethoxy)methan	0.010	0.036	U
88-06-2	2,4,6-Trichlorophenol	0.028	0.036	U	111-44-4	bis(2-Chloroethyl)ether	0.0087	0.0090	U
120-83-2	2,4-Dichlorophenol	0.013	0.0090	U	108-60-1	bis(2-chloroisopropyl)ether	0.014	0.036	U
105-67-9	2,4-Dimethylphenol	0.017	0.0090	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.032</b>	<b>0.036</b>	<b>0.12</b>
51-28-5	2,4-Dinitrophenol	0.16	0.18	U	85-68-7	Butylbenzylphthalate	0.027	0.036	U
121-14-2	2,4-Dinitrotoluene	0.011	0.036	U	105-60-2	Caprolactam	0.029	0.036	U
606-20-2	2,6-Dinitrotoluene	0.018	0.036	U	86-74-8	Carbazole	0.011	0.036	U
91-58-7	2-Chloronaphthalene	0.016	0.036	U	218-01-9	Chrysene	0.012	0.036	U
95-57-8	2-Chlorophenol	0.012	0.036	U	53-70-3	Dibenzo[a,h]anthracene	0.013	0.036	U
91-57-6	2-Methylnaphthalene	0.011	0.036	U	132-64-9	Dibenzofuran	0.0091	0.0090	U
95-48-7	2-Methylphenol	0.010	0.0090	U	84-66-2	Diethylphthalate	0.023	0.036	U
88-74-4	2-Nitroaniline	0.017	0.036	U	<b>131-11-3</b>	<b>Dimethylphthalate</b>	<b>0.010</b>	<b>0.036</b>	<b>0.066</b>
88-75-5	2-Nitrophenol	0.016	0.036	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.041</b>	<b>0.0090</b>	<b>0.058</b>
106-44-5	3&4-Methylphenol	0.010	0.0090	U	117-84-0	Di-n-octylphthalate	0.024	0.036	U
91-94-1	3,3'-Dichlorobenzidine	0.029	0.036	U	206-44-0	Fluoranthene	0.014	0.036	U
99-09-2	3-Nitroaniline	0.014	0.036	U	86-73-7	Fluorene	0.0098	0.036	U
534-52-1	4,6-Dinitro-2-methylphenol	0.12	0.18	U	118-74-1	Hexachlorobenzene	0.015	0.036	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.036	U	87-68-3	Hexachlorobutadiene	0.016	0.036	U
59-50-7	4-Chloro-3-methylphenol	0.0086	0.036	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.036	U
106-47-8	4-Chloroaniline	0.016	0.0090	U	67-72-1	Hexachloroethane	0.016	0.036	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.036	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.016	0.036	U
100-01-6	4-Nitroaniline	0.014	0.036	U	78-59-1	Isophorone	0.012	0.036	U
100-02-7	4-Nitrophenol	0.027	0.036	U	91-20-3	Naphthalene	0.010	0.0090	U
83-32-9	Acenaphthene	0.010	0.036	U	98-95-3	Nitrobenzene	0.0015	0.036	U
208-96-8	Acenaphthylene	0.011	0.036	U	621-64-7	N-Nitroso-di-n-propylamine	0.013	0.0090	U
98-86-2	Acetophenone	0.013	0.036	U	86-30-6	n-Nitrosodiphenylamine	0.12	0.036	U
120-12-7	Anthracene	0.0099	0.036	U	87-86-5	Pentachlorophenol	0.17	0.18	U
1912-24-9	Atrazine	0.014	0.036	U	85-01-8	Phenanthrene	0.011	0.036	U
100-52-7	Benzaldehyde	0.39	0.036	U	108-95-2	Phenol	0.0099	0.036	U
56-55-3	Benzo[a]anthracene	0.012	0.036	U	<b>129-00-0</b>	<b>Pyrene</b>	<b>0.012</b>	<b>0.036</b>	<b>0.015J</b>

Worksheet #: 569464

**Total Target Concentration 0.27**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19479-017  
 Data File: 7M109883.D  
 Acq On : 10/ 6/20 01:42

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 43  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:39  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GCMSData\2020\GCMS\_7\Data\10-0520\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.693	96	77171	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.895	152	151157	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	569885	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	286841	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	517556	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	410089	40.00	ng	0.00	
103) Perylene-d12	14.538	264	354317	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	235877	51.91	ng	0.01	
Spiked Amount 100.000			Recovery =	51.91%			
16) Phenol-d5	5.584	99	329707	60.38	ng	0.00	
Spiked Amount 100.000			Recovery =	60.38%			
32) Nitrobenzene-d5	6.336	128	64364	28.43	ng	0.00	
Spiked Amount 50.000			Recovery =	56.86%			
55) 2-Fluorobiphenyl	7.740	172	309983	32.40	ng	0.00	
Spiked Amount 50.000			Recovery =	64.80%			
80) 2,4,6-Tribromophenol	9.091	330	82937	62.19	ng	0.00	
Spiked Amount 100.000			Recovery =	62.19%			
94) Terphenyl-d14	11.635	244	238229	36.48	ng	0.00	
Spiked Amount 50.000			Recovery =	72.96%			
Target Compounds							
63) Dimethylphthalate	8.069	163	36653	3.7038	ng	97	Qvalue
89) Di-n-butylphthalate	10.449	149	50496	3.2199	ng	98	
92) Pyrene	11.453	202	10496	0.8211	ng	88	
102) bis(2-Ethylhexyl)phtha...	12.916	149	53656m	6.9177	ng		
105) Benzo[b]fluoranthene	14.103	252	8523m	0.8513	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



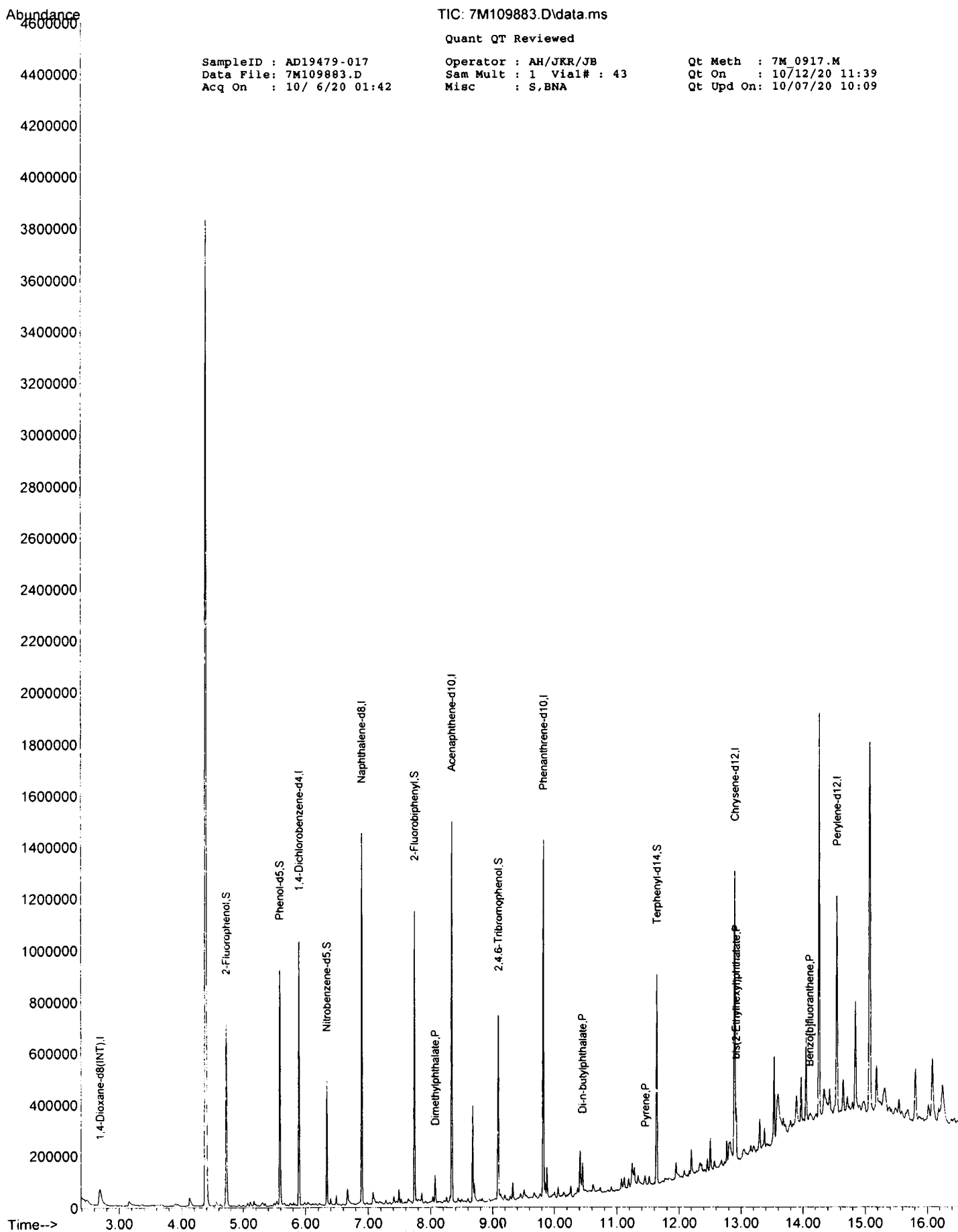
TIC: 7M109883.D\data.ms

Quant QT Reviewed

SampleID : AD19479-017  
Data File: 7M109883.D  
Acq On : 10/ 6/20 01:42

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 43  
Misc : S,BNA

Qt Meth : 7M\_0917.M  
Qt On : 10/12/20 11:39  
Qt Upd On: 10/07/20 10:09



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19479-019

Client Id: HSI-SS-D (0-0.5')

Data File: 7M109886.D

Analysis Date: 10/06/20 09:39

Date Rec/Extracted: 09/28/20-10/05/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 92

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.010	0.036	U	50-32-8	Benzo[a]pyrene	0.012	0.036	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.012	0.036	U	205-99-2	Benzo[b]fluoranthene	0.013	0.036	U
123-91-1	1,4-Dioxane	0.018	0.0091	U	191-24-2	Benzo[g,h,i]perylene	0.00025	0.036	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.036	U	207-08-9	Benzo[k]fluoranthene	0.013	0.036	U
95-95-4	2,4,5-Trichlorophenol	0.010	0.036	U	111-91-1	bis(2-Chloroethoxy)methan	0.010	0.036	U
88-06-2	2,4,6-Trichlorophenol	0.028	0.036	U	111-44-4	bis(2-Chloroethyl)ether	0.0088	0.0091	U
120-83-2	2,4-Dichlorophenol	0.014	0.0091	U	108-60-1	bis(2-chloroisopropyl)ether	0.014	0.036	U
105-67-9	2,4-Dimethylphenol	0.018	0.0091	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.032</b>	<b>0.036</b>	<b>0.38</b>
51-28-5	2,4-Dinitrophenol	0.16	0.18	U	85-68-7	Butylbenzylphthalate	0.028	0.036	U
121-14-2	2,4-Dinitrotoluene	0.011	0.036	U	105-60-2	Caprolactam	0.029	0.036	U
606-20-2	2,6-Dinitrotoluene	0.018	0.036	U	86-74-8	Carbazole	0.011	0.036	U
91-58-7	2-Chloronaphthalene	0.016	0.036	U	218-01-9	Chrysene	0.012	0.036	U
95-57-8	2-Chlorophenol	0.012	0.036	U	53-70-3	Dibenzo[a,h]anthracene	0.013	0.036	U
91-57-6	2-Methylnaphthalene	0.011	0.036	U	132-64-9	Dibenzofuran	0.0092	0.0091	U
95-48-7	2-Methylphenol	0.010	0.0091	U	84-66-2	Diethylphthalate	0.023	0.036	U
88-74-4	2-Nitroaniline	0.017	0.036	U	131-11-3	Dimethylphthalate	0.010	0.036	U
88-75-5	2-Nitrophenol	0.016	0.036	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.042</b>	<b>0.0091</b>	<b>0.17</b>
106-44-5	3&4-Methylphenol	0.011	0.0091	U	<b>117-84-0</b>	<b>Di-n-octylphthalate</b>	<b>0.024</b>	<b>0.036</b>	<b>0.024J</b>
91-94-1	3,3'-Dichlorobenzidine	0.029	0.036	U	206-44-0	Fluoranthene	0.014	0.036	U
99-09-2	3-Nitroaniline	0.014	0.036	U	86-73-7	Fluorene	0.0099	0.036	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.18	U	118-74-1	Hexachlorobenzene	0.015	0.036	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.036	U	87-68-3	Hexachlorobutadiene	0.016	0.036	U
59-50-7	4-Chloro-3-methylphenol	0.0087	0.036	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.036	U
106-47-8	4-Chloroaniline	0.016	0.0091	U	67-72-1	Hexachloroethane	0.016	0.036	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.036	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.016	0.036	U
100-01-6	4-Nitroaniline	0.014	0.036	U	78-59-1	Isophorone	0.012	0.036	U
100-02-7	4-Nitrophenol	0.028	0.036	U	91-20-3	Naphthalene	0.010	0.0091	U
83-32-9	Acenaphthene	0.010	0.036	U	ε8-95-3	Nitrobenzene	0.0015	0.036	U
208-96-8	Acenaphthylene	0.011	0.036	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0091	U
98-86-2	Acetophenone	0.013	0.036	U	66-30-6	n-Nitrosodiphenylamine	0.12	0.036	U
120-12-7	Anthracene	0.010	0.036	U	37-86-5	Pentachlorophenol	0.17	0.18	U
1912-24-9	Atrazine	0.015	0.036	U	85-01-8	Phenanthrene	0.012	0.036	U
100-52-7	Benzaldehyde	0.39	0.036	U	108-95-2	Phenol	0.010	0.036	U
56-55-3	Benzo[a]anthracene	0.012	0.036	U	129-00-0	Pyrene	0.012	0.036	U

Worksheet #: 569464

**Total Target Concentration 0.57**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19479-019  
 Data File: 7M109886.D  
 Acq On : 10/ 6/20 09:39

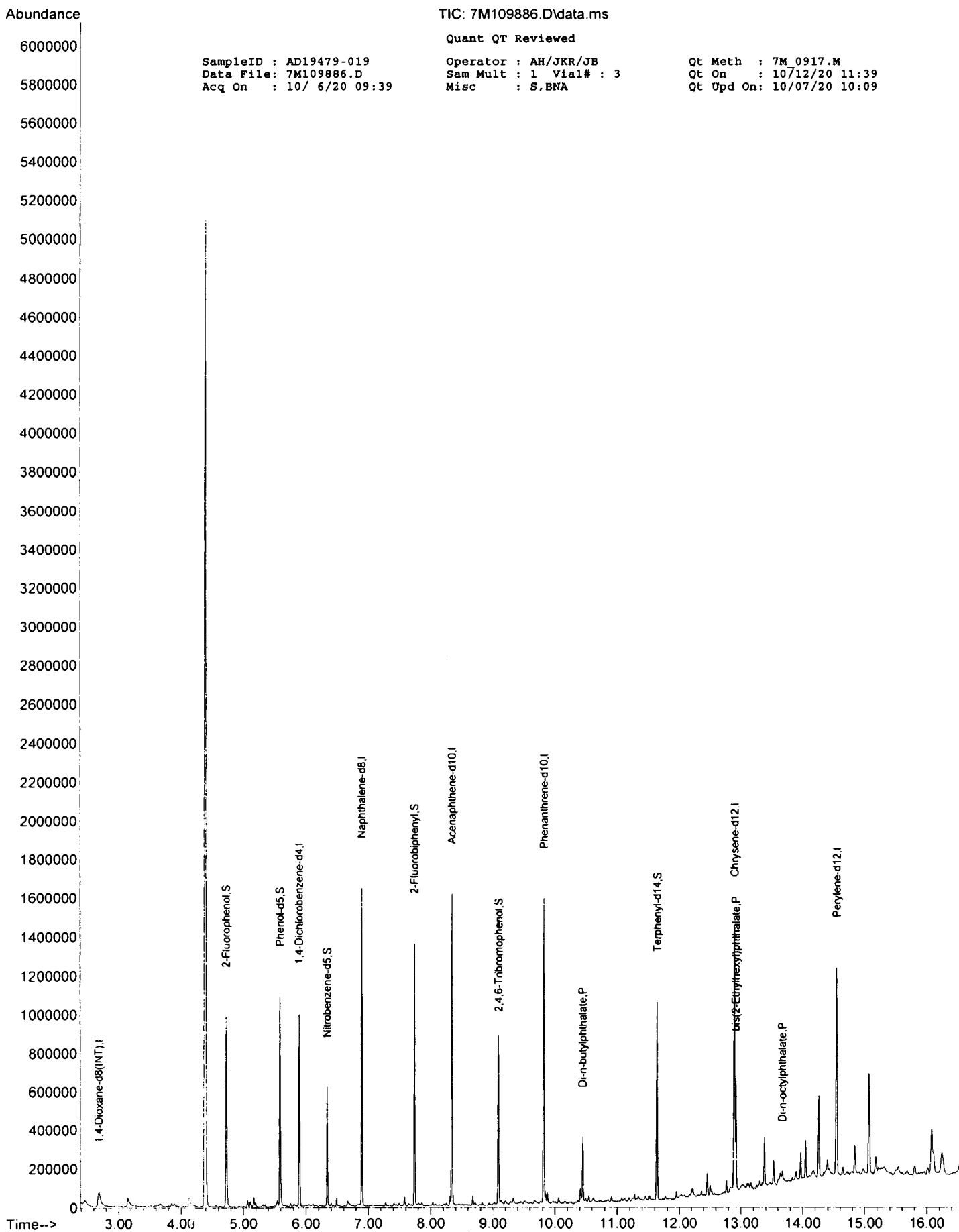
Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 3  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/12/20 11:39  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GCMSData\2020\GCMS\_7\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIion	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.681	96	83793	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.889	152	160154	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	618098	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	321180	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	597610	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	505526	40.00	ng	0.00	
103) Perylene-d12	14.538	264	468940	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	308526	62.53	ng	0.01	
Spiked Amount 100.000			Recovery =	62.53%			
16) Phenol-d5	5.590	99	401267	67.68	ng	0.01	
Spiked Amount 100.000			Recovery =	67.68%			
32) Nitrobenzene-d5	6.336	128	81362	33.13	ng	0.00	
Spiked Amount 50.000			Recovery =	66.26%			
55) 2-Fluorobiphenyl	7.740	172	367885	34.34	ng	0.00	
Spiked Amount 50.000			Recovery =	68.68%			
80) 2,4,6-Tribromophenol	9.091	330	97291	63.18	ng	0.00	
Spiked Amount 100.000			Recovery =	63.18%			
94) Terphenyl-d14	11.635	244	300836	37.37	ng	0.00	
Spiked Amount 50.000			Recovery =	74.74%			
Target Compounds							
89) Di-n-butylphthalate	10.449	149	170885	9.4368	ng	97	
102) bis(2-Ethylhexyl)phtha...	12.916	149	201686	21.0939	ng	93	
104) Di-n-octylphthalate	13.668	149	20059m	1.3396	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB88130      Method: EPA 8270E  
 Client Id:      Matrix: Soil  
 Data File: 7M109845.D      Initial Vol: 30g  
 Analysis Date: 10/05/20 10:43      Final Vol: 0.5ml  
 Date Rec/Extracted: NA-10/05/20      Dilution: 1  
 Column: DB-5MS 30M 0.250mm ID 0.25um film      Solids: 100

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.0096	0.033	U	50-32-8	Benzo[a]pyrene	0.011	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.011	0.033	U	205-99-2	Benzo[b]fluoranthene	0.012	0.033	U
123-91-1	1,4-Dioxane	0.017	0.0083	U	191-24-2	Benzo[g,h,i]perylene	0.00023	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.013	0.033	U	207-08-9	Benzo[k]fluoranthene	0.012	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.0095	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.0094	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.026	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0081	0.033	U
120-83-2	2,4-Dichlorophenol	0.013	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.013	0.033	U
105-67-9	2,4-Dimethylphenol	0.016	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.029	0.033	U
51-28-5	2,4-Dinitrophenol	0.14	0.17	U	85-68-7	Butylbenzylphthalate	0.026	0.033	U
121-14-2	2,4-Dinitrotoluene	0.010	0.033	U	105-60-2	Caprolactam	0.027	0.033	U
606-20-2	2,6-Dinitrotoluene	0.017	0.033	U	86-74-8	Carbazole	0.010	0.033	U
91-58-7	2-Chloronaphthalene	0.015	0.033	U	218-01-9	Chrysene	0.011	0.033	U
95-57-8	2-Chlorophenol	0.011	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.012	0.033	U
91-57-6	2-Methylnaphthalene	0.010	0.033	U	132-64-9	Dibenzofuran	0.0084	0.0083	U
95-48-7	2-Methylphenol	0.0096	0.0083	U	84-66-2	Diethylphthalate	0.021	0.033	U
88-74-4	2-Nitroaniline	0.016	0.033	U	131-11-3	Dimethylphthalate	0.0094	0.033	U
88-75-5	2-Nitrophenol	0.015	0.033	U	84-74-2	Di-n-butylphthalate	0.038	0.0083	U
106-44-5	3&4-Methylphenol	0.0097	0.0083	U	117-84-0	Di-n-octylphthalate	0.022	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.027	0.033	U	206-44-0	Fluoranthene	0.013	0.033	U
99-09-2	3-Nitroaniline	0.013	0.033	U	86-73-7	Fluorene	0.0091	0.033	U
534 52-1	4,6-Dinitro-2-methylphenol	0.12	0.17	U	118-74-1	Hexachlorobenzene	0.014	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.0093	0.033	U	87-68-3	Hexachlorobutadiene	0.015	0.033	U
59 50-7	4-Chloro-3-methylphenol	0.0080	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.11	0.033	U
106-47-8	4-Chloroaniline	0.015	0.0083	U	67-72-1	Hexachloroethane	0.015	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.010	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.015	0.033	U
100-01-6	4-Nitroaniline	0.013	0.033	U	78-59-1	Isophorone	0.011	0.033	U
100-02-7	4-Nitrophenol	0.025	0.033	U	91-20-3	Naphthalene	0.0096	0.0083	U
83-32-9	Acenaphthene	0.0095	0.033	U	98-95-3	Nitrobenzene	0.0013	0.033	U
208-96-8	Acenaphthylene	0.010	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.013	0.0083	U
98-86-2	Acetophenone	0.012	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.11	0.033	U
120-12-7	Anthracene	0.0092	0.033	U	87-86-5	Pentachlorophenol	0.16	0.17	U
1912-24-9	Atrazine	0.013	0.033	U	85-01-8	Phenanthrene	0.011	0.033	U
100-52-7	Benzaldehyde	0.36	0.033	U	108-95-2	Phenol	0.0092	0.033	U
56-55-3	Benzo[a]anthracene	0.011	0.033	U	129-00-0	Pyrene	0.011	0.033	U

Worksheet #: 569464

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.*N*-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : SMB88130  
 Data File: 7M109845.D  
 Acq On : 10/ 5/20 10:43

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 7  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/05/20 11:27  
 Qt Upd On: 09/17/20 14:01

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-05-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

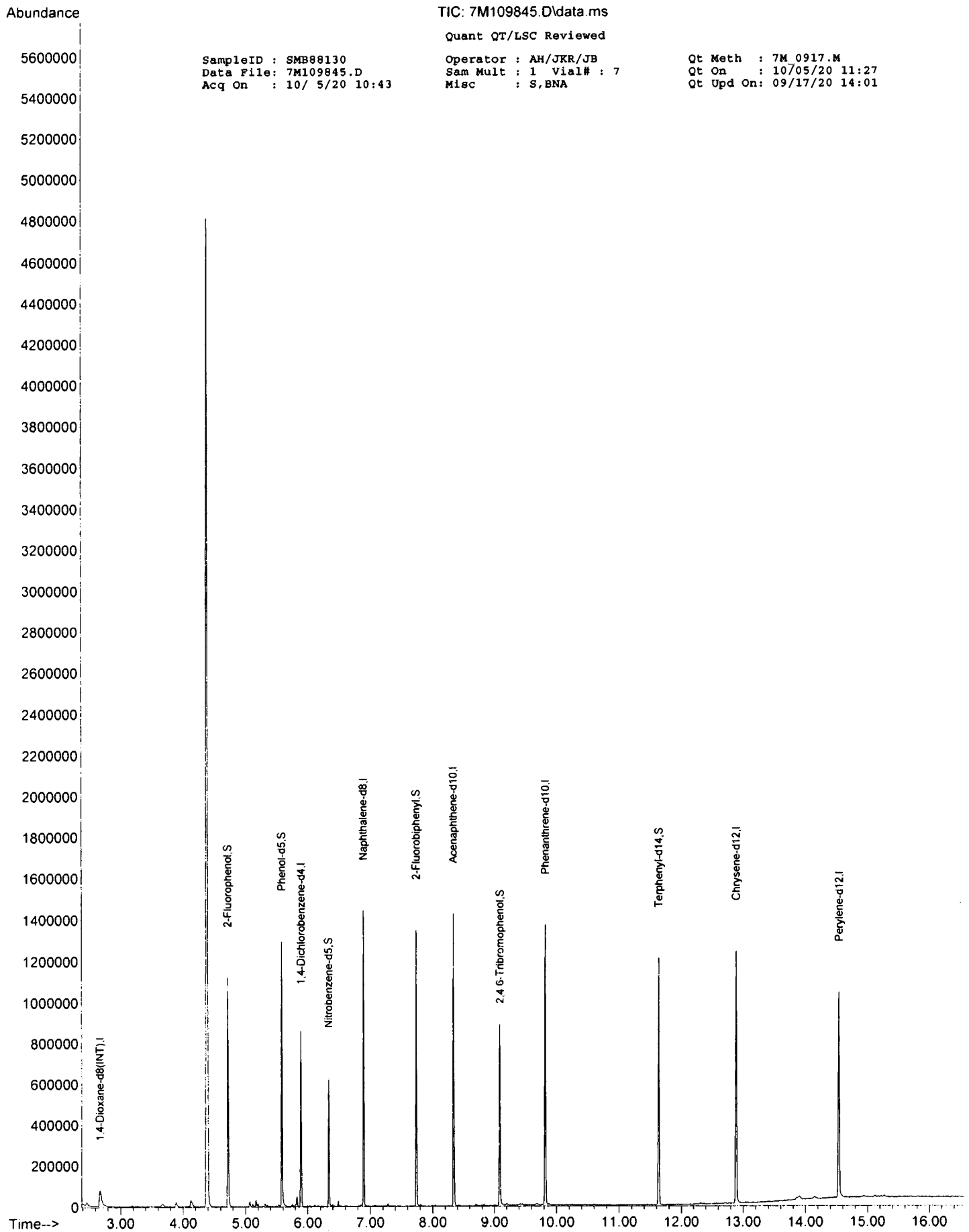
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.675	96	77260	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.895	152	140606	40.00	ng	0.00
31) Naphthalene-d8	6.894	136	537431	40.00	ng	0.00
50) Acenaphthene-d10	8.339	164	276316	40.00	ng	0.00
77) Phenanthrene-d10	9.820	188	521492	40.00	ng	0.00
91) Chrysene-d12	12.887	240	461150	40.00	ng	0.00
103) Perylene-d12	14.538	264	437220	40.00	ng	0.00

System Monitoring Compounds						
11) 2-Fluorophenol	4.720	112	319448	70.22	ng	0.00
Spiked Amount 100.000			Recovery =	70.22%		
16) Phenol-d5	5.584	99	422333	77.25	ng	0.00
Spiked Amount 100.000			Recovery =	77.25%		
32) Nitrobenzene-d5	6.336	128	82221	38.51	ng	0.00
Spiked Amount 50.000			Recovery =	77.02%		
55) 2-Fluorobiphenyl	7.740	172	372189	40.38	ng	0.00
Spiked Amount 50.000			Recovery =	80.76%		
80) 2,4,6-Tribromophenol	9.091	330	96455	71.79	ng	0.00
Spiked Amount 100.000			Recovery =	71.79%		
94) Terphenyl-d14	11.635	244	342088	46.58	ng	0.00
Spiked Amount 50.000			Recovery =	93.16%		

Target Compounds Qvalue

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(#) = qualifier out of range (m) = manual integration (+) = signals summed



## FORM2

Surrogate Recovery

Method: EPA 8270E

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
7M109845.D	SMB88130	S	10/05/20 10:43	1		70	77	77	81	72	93
7M109875.D	DAD19479-001	S	10/05/20 22:35	1		65	70	68	73	69	83
7M109876.D	DAD19479-003	S	10/05/20 22:58	1		63	70	65	69	67	77
7M109877.D	DAD19479-005	S	10/05/20 23:21	1		61	68	62	67	67	78
7M109878.D	DAD19479-007	S	10/05/20 23:45	1		64	68	63	66	58	68
7M109879.D	DAD19479-009	S	10/06/20 00:08	1		59	63	62	63	58	68
7M109880.D	DAD19479-011	S	10/06/20 00:32	1		63	73	66	74	76	86
7M109881.D	DAD19479-013	S	10/06/20 00:55	1		63	69	65	70	66	76
7M109887.D	DAD19479-015(3X)	S	10/06/20 10:02	3		61	67	64	67	58	74
7M109883.D	DAD19479-017	S	10/06/20 01:42	1		52	60	57	65	62	73
7M109886.D	DAD19479-019	S	10/06/20 09:39	1		63	68	66	69	63	75
9M101532.D	SMB88130(MS)	S	10/05/20 10:27	1		73	75	76	76	85	88
9M101541.D	DAD19587-004	S	10/05/20 16:08	1		54	57	53	58	55	66
9M101542.D	DAD19587-004(MS)	S	10/05/20 16:32	1		52	58	59	63	75	78
9M101543.D	DAD19587-004(MSD)	S	10/05/20 16:55	1		64	67	70	73	83	84

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 Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8270E

## Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148



Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88130

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101532.D		SMB88130(MS)		10/5/2020 10:27:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	16.7937	0	50	34	1	150
N-Nitrosodimethylamine	1	31.6951	0	50	63	50	130
<b><u>Benzaldehyde</u></b>	1	<b><u>35.9888</u></b>	0	<b><u>50</u></b>	<b><u>72</u></b>	<b><u>20</u></b>	<b><u>220</u></b>
Aniline	1	21.3561	0	50	43	20	150
Pentachloroethane	1	31.5428	0	50	63	50	130
<b><u>bis(2-Chloroethyl)ether</u></b>	1	<b><u>37.4174</u></b>	0	<b><u>50</u></b>	<b><u>75</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Phenol</u></b>	1	<b><u>65.3694</u></b>	0	<b><u>100</u></b>	<b><u>65</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2-Chlorophenol</u></b>	1	<b><u>67.5568</u></b>	0	<b><u>100</u></b>	<b><u>68</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
N-Decane	1	22.4913	0	50	45	20	130
1,3-Dichlorobenzene	1	32.376	0	50	65	60	130
1,4-Dichlorobenzene	1	35.2996	0	50	71	60	130
1,2-Dichlorobenzene	1	35.7978	0	50	72	50	130
Benzyl alcohol	1	39.7032	0	50	79	20	130
<b><u>bis(2-chloroisopropyl)ether</u></b>	1	<b><u>36.3361</u></b>	0	<b><u>50</u></b>	<b><u>73</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>2-Methylphenol</u></b>	1	<b><u>74.8523</u></b>	0	<b><u>100</u></b>	<b><u>75</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Acetophenone</u></b>	1	<b><u>39.5852</u></b>	0	<b><u>50</u></b>	<b><u>79</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Hexachloroethane</u></b>	1	<b><u>35.0088</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	1	<b><u>42.377</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>3&amp;4-Methylphenol</u></b>	1	<b><u>79.4264</u></b>	0	<b><u>100</u></b>	<b><u>79</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Nitrobenzene</u></b>	1	<b><u>41.6744</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Isophorone</u></b>	1	<b><u>41.5859</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2-Nitrophenol</u></b>	1	<b><u>72.8349</u></b>	0	<b><u>100</u></b>	<b><u>73</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dimethylphenol</u></b>	1	<b><u>81.3898</u></b>	0	<b><u>100</u></b>	<b><u>81</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
Benzoic Acid	1	39.8153	0	100	40	20	130
<b><u>bis(2-Chloroethoxy)methane</u></b>	1	<b><u>43.2789</u></b>	0	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2,4-Dichlorophenol</u></b>	1	<b><u>76.0615</u></b>	0	<b><u>100</u></b>	<b><u>76</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2,4-Trichlorobenzene	1	40.0968	0	50	80	50	130
<b><u>Naphthalene</u></b>	1	<b><u>39.1919</u></b>	0	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloroaniline</u></b>	1	<b><u>19.9435</u></b>	0	<b><u>50</u></b>	<b><u>40</u></b>	<b><u>10</u></b>	<b><u>150</u></b>
<b><u>Hexachlorobutadiene</u></b>	1	<b><u>37.6886</u></b>	0	<b><u>50</u></b>	<b><u>75</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Caprolactam</u></b>	1	<b><u>44.5528</u></b>	0	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloro-3-methylphenol</u></b>	1	<b><u>75.9851</u></b>	0	<b><u>100</u></b>	<b><u>76</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Methylnaphthalene</u></b>	1	<b><u>38.6848</u></b>	0	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1-Methylnaphthalene	1	43.1567	0	50	86	70	130
<b><u>1,1'-Biphenyl</u></b>	1	<b><u>35.7149</u></b>	0	<b><u>50</u></b>	<b><u>71</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	1	<b><u>38.9456</u></b>	0	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorocyclopentadiene</u></b>	1	<b><u>43.0408</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>20</u></b>	<b><u>160</u></b>
<b><u>2,4,6-Trichlorophenol</u></b>	1	<b><u>76.099</u></b>	0	<b><u>100</u></b>	<b><u>76</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4,5-Trichlorophenol</u></b>	1	<b><u>75.1244</u></b>	0	<b><u>100</u></b>	<b><u>75</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Chloronaphthalene</u></b>	1	<b><u>43.8025</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,4-Dimethylnaphthalene	1	36.4356	0	50	73	70	130
Diphenyl Ether	1	42.9049	0	50	86	70	130
<b><u>2-Nitroaniline</u></b>	1	<b><u>45.5392</u></b>	0	<b><u>50</u></b>	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Coumarin	1	38.7658	0	50	78	70	130
<b><u>Acenaphthylene</u></b>	1	<b><u>46.8968</u></b>	0	<b><u>50</u></b>	<b><u>94</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dimethylphthalate</u></b>	1	<b><u>45.1991</u></b>	0	<b><u>50</u></b>	<b><u>90</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	1	<b><u>46.1928</u></b>	0	<b><u>50</u></b>	<b><u>92</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Acenaphthene</u></b>	1	<b><u>44.2115</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3-Nitroaniline</u></b>	1	<b><u>32.8267</u></b>	0	<b><u>50</u></b>	<b><u>66</u></b>	<b><u>10</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrophenol</u></b>	1	<b><u>57.0095</u></b>	0	<b><u>100</u></b>	<b><u>57</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>Dibenzofuran</u></b>	1	<b><u>41.7483</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	1	<b><u>48.5072</u></b>	0	<b><u>50</u></b>	<b><u>97</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>4-Nitrophenol</u></b>	1	<b><u>72.0555</u></b>	0	<b><u>100</u></b>	<b><u>72</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2,3,4,6-Tetrachlorophenol</u></b>	1	<b><u>71.1108</u></b>	0	<b><u>100</u></b>	<b><u>71</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Fluorene</u></b>	1	<b><u>44.7463</u></b>	0	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chlorophenyl-phenylether</u></b>	1	<b><u>45.1244</u></b>	0	<b><u>50</u></b>	<b><u>90</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Diethylphthalate</u></b>	1	<b><u>45.7582</u></b>	0	<b><u>50</u></b>	<b><u>92</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>4-Nitroaniline</u></b>	1	<b><u>45.5429</u></b>	0	<b><u>50</u></b>	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Atrazine</u></b>	1	<b><u>43.5592</u></b>	0	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4,6-Dinitro-2-methylphenol</u></b>	1	<b><u>70.9556</u></b>	0	<b><u>100</u></b>	<b><u>71</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	1	<b><u>39.0179</u></b>	0	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>50</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88130

Method: 8270E	Matrix: Soil		QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	46.31	0	50	93	70	130
<b><u>4-Bromophenyl-phenylether</u></b>	<b><u>1</u></b>	<b><u>46.4506</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>93</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorobenzene</u></b>	<b><u>1</u></b>	<b><u>42.3453</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
N-Octadecane	1	45.8504	0	50	92	70	130
<b><u>Pentachlorophenol</u></b>	<b><u>1</u></b>	<b><u>57.0503</u></b>	<b><u>0</u></b>	<b><u>100</u></b>	<b><u>57</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Phenanthrene</u></b>	<b><u>1</u></b>	<b><u>46.7991</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>94</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Anthracene</u></b>	<b><u>1</u></b>	<b><u>46.833</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>94</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Carbazole</u></b>	<b><u>1</u></b>	<b><u>39.2734</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>79</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Di-n-butylphthalate</u></b>	<b><u>1</u></b>	<b><u>47.3127</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>95</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Fluoranthene</u></b>	<b><u>1</u></b>	<b><u>49.1617</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>98</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Pyrene</u></b>	<b><u>1</u></b>	<b><u>47.0842</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>94</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Benzidine	1	2.8991	0	50	5.8	1	130
<b><u>Butylbenzylphthalate</u></b>	<b><u>1</u></b>	<b><u>47.5158</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>95</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3,3'-Dichlorobenzidine</u></b>	<b><u>1</u></b>	<b><u>29.7834</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>60</u></b>	<b><u>10</u></b>	<b><u>130</u></b>
<b><u>Benzo[a]anthracene</u></b>	<b><u>1</u></b>	<b><u>44.3658</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Chrysene</u></b>	<b><u>1</u></b>	<b><u>40.2837</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>bis(2-Ethylhexyl)phthalate</u></b>	<b><u>1</u></b>	<b><u>48.2868</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>97</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Di-n-octylphthalate</u></b>	<b><u>1</u></b>	<b><u>49.8542</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>100</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Benzo[b]fluoranthene</u></b>	<b><u>1</u></b>	<b><u>56.9958</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>114</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Benzo[k]fluoranthene</u></b>	<b><u>1</u></b>	<b><u>49.6271</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>99</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Benzo[a]pyrene</u></b>	<b><u>1</u></b>	<b><u>52.8318</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>106</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Indeno[1,2,3-cd]pyrene</u></b>	<b><u>1</u></b>	<b><u>52.5882</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>105</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dibenzo[a,h]anthracene</u></b>	<b><u>1</u></b>	<b><u>52.4511</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>105</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Benzo[g,h,i]perylene</u></b>	<b><u>1</u></b>	<b><u>52.3267</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>105</u></b>	<b><u>70</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88130

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101542.D		AD19587-004(MS)		10/5/2020 4:32:00 PM			
Non Spike(If applicable): 9M101541.D		AD19587-004		10/5/2020 4:08:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	18.0441	0	50	36	1	150
N-Nitrosodimethylamine	1	28.6618	0	50	57	50	130
<b><u>Benzaldehyde</u></b>	1	<b><u>27.1896</u></b>	0	<b><u>50</u></b>	<b><u>54</u></b>	<b><u>20</u></b>	<b><u>220</u></b>
Aniline	1	24.9614	0	50	50	20	150
Pentachloroethane	1	27.0807	0	50	54	50	130
<b><u>bis(2-Chloroethyl)ether</u></b>	1	<b><u>31.85</u></b>	0	<b><u>50</u></b>	<b><u>64</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
N-Decane	1	21.5689	0	50	43	20	130
1,3-Dichlorobenzene	1	27.9767	0	50	56*	60	130
1,4-Dichlorobenzene	1	31.0516	0	50	62	60	130
1,2-Dichlorobenzene	1	31.2548	0	50	63	50	130
Benzyl alcohol	1	35.6284	0	50	71	20	130
<b><u>bis(2-chloroisopropyl)ether</u></b>	1	<b><u>30.4369</u></b>	0	<b><u>50</u></b>	<b><u>61</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Acetophenone</u></b>	1	<b><u>34.9098</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Hexachloroethane</u></b>	1	<b><u>30.0584</u></b>	0	<b><u>50</u></b>	<b><u>60</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	1	<b><u>36.8661</u></b>	0	<b><u>50</u></b>	<b><u>74</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Nitrobenzene</u></b>	1	<b><u>36.8698</u></b>	0	<b><u>50</u></b>	<b><u>74</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Isophorone</u></b>	1	<b><u>37.4108</u></b>	0	<b><u>50</u></b>	<b><u>75</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
Benzoic Acid	1	71.9922	0	100	72	20	130
<b><u>bis(2-Chloroethoxy)methane</u></b>	1	<b><u>38.3086</u></b>	0	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
1,2,4-Trichlorobenzene	1	35.3301	0	50	71	50	130
<b><u>Naphthalene</u></b>	1	<b><u>37.0809</u></b>	0	<b><u>50</u></b>	<b><u>74</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloroaniline</u></b>	1	<b><u>27.0111</u></b>	0	<b><u>50</u></b>	<b><u>54</u></b>	<b><u>10</u></b>	<b><u>150</u></b>
<b><u>Hexachlorobutadiene</u></b>	1	<b><u>32.0669</u></b>	0	<b><u>50</u></b>	<b><u>64</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Caprolactam</u></b>	1	<b><u>41.8394</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Methylnaphthalene</u></b>	1	<b><u>34.9545</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1-Methylnaphthalene	1	39.9123	0	50	80	70	130
<b><u>1,1'-Biphenyl</u></b>	1	<b><u>33.7811</u></b>	0	<b><u>50</u></b>	<b><u>68</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	1	<b><u>34.8398</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorocyclopentadiene</u></b>	1	<b><u>35.081</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>20</u></b>	<b><u>160</u></b>
<b><u>2-Chloronaphthalene</u></b>	1	<b><u>39.8714</u></b>	0	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,4-Dimethylnaphthalene	1	34.0877	0	50	68*	70	130
Diphenyl Ether	1	39.0119	0	50	78	70	130
<b><u>2-Nitroaniline</u></b>	1	<b><u>41.022</u></b>	0	<b><u>50</u></b>	<b><u>82</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Coumarin	1	36.312	0	50	73	70	130
<b><u>Acenaphthylene</u></b>	1	<b><u>42.9164</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dimethylphthalate</u></b>	1	<b><u>41.7641</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	1	<b><u>42.541</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Acenaphthene</u></b>	1	<b><u>40.3593</u></b>	0	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3-Nitroaniline</u></b>	1	<b><u>33.6221</u></b>	0	<b><u>50</u></b>	<b><u>67*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dibenzofuran</u></b>	1	<b><u>38.7499</u></b>	0	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	1	<b><u>44.0034</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Fluorene</u></b>	1	<b><u>41.6519</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chlorophenyl-phenylether</u></b>	1	<b><u>42.2221</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Diethylphthalate</u></b>	1	<b><u>42.808</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>4-Nitroaniline</u></b>	1	<b><u>41.4621</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Atrazine</u></b>	1	<b><u>40.4217</u></b>	0	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	1	<b><u>36.8174</u></b>	0	<b><u>50</u></b>	<b><u>74</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,2-Diphenylhydrazine	1	42.7759	0	50	86	70	130
<b><u>4-Bromophenyl-phenylether</u></b>	1	<b><u>43.4169</u></b>	0	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorobenzene</u></b>	1	<b><u>40.2093</u></b>	0	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
N-Octadecane	1	43.7783	0	50	88	70	130
<b><u>Phenanthrene</u></b>	1	<b><u>44.0696</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Anthracene</u></b>	1	<b><u>43.8094</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Carbazole</u></b>	1	<b><u>37.656</u></b>	0	<b><u>50</u></b>	<b><u>75</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Di-n-butylphthalate</u></b>	1	<b><u>43.4788</u></b>	0	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Fluoranthene</u></b>	1	<b><u>45.9679</u></b>	0	<b><u>50</u></b>	<b><u>92</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Pyrene</u></b>	1	<b><u>44.5868</u></b>	0	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Benzidine	1	0	0	50	0*	1	130
<b><u>Butylbenzylphthalate</u></b>	1	<b><u>43.9607</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3,3'-Dichlorobenzidine</u></b>	1	<b><u>30.2305</u></b>	0	<b><u>50</u></b>	<b><u>60</u></b>	<b><u>10</u></b>	<b><u>130</u></b>
<b><u>Benzo[a]anthracene</u></b>	1	<b><u>41.529</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>

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 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88130

Method: 8270E		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b>Chrysene</b>	1	<b>38.2204</b>	0	50	76	60	130
<b>bis(2-Ethylhexyl)phthalate</b>	1	<b>44.4361</b>	0	50	89	70	130
<b>Di-n-octylphthalate</b>	1	<b>44.1402</b>	0	50	88	70	130
<b>Benzo[b]fluoranthene</b>	1	<b>49.7478</b>	0	50	99	70	130
<b>Benzo[k]fluoranthene</b>	1	<b>49.171</b>	0	50	98	70	130
<b>Benzo[a]pyrene</b>	1	<b>48.9844</b>	0	50	98	70	130
<b>Indeno[1,2,3-cd]pyrene</b>	1	<b>48.7868</b>	0	50	98	70	130
<b>Dibenzo[a,h]anthracene</b>	1	<b>48.4889</b>	0	50	97	60	130
<b>Benzo[ghi]perylene</b>	1	<b>48.4303</b>	0	50	97	70	130

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 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88130

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101543.D		AD19587-004(MSD)		10/5/2020 4:55:00 PM			
Non Spike(If applicable): 9M101541.D		AD19587-004		10/5/2020 4:08:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	19.9352	0	50	40	1	150
N-Nitrosodimethylamine	1	31.0892	0	50	62	50	130
<b><u>Benzaldehyde</u></b>	1	<b><u>32.6312</u></b>	0	50	<b><u>65</u></b>	<b><u>20</u></b>	<b><u>220</u></b>
Aniline	1	26.2099	0	50	52	20	150
Pentachloroethane	1	29.8623	0	50	60	50	130
<b><u>bis(2-Chloroethyl)ether</u></b>	1	<b><u>34.1362</u></b>	0	50	<b><u>68</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
N-Decane	1	23.586	0	50	47	20	130
1,3-Dichlorobenzene	1	30.4275	0	50	61	60	130
1,4-Dichlorobenzene	1	34.2314	0	50	68	60	130
1,2-Dichlorobenzene	1	34.1477	0	50	68	50	130
Benzyl alcohol	1	35.9225	0	50	72	20	130
<b><u>bis(2-chloroisopropyl)ether</u></b>	1	<b><u>32.4897</u></b>	0	50	<b><u>65</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Acetophenone</u></b>	1	<b><u>36.7936</u></b>	0	50	<b><u>74</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Hexachloroethane</u></b>	1	<b><u>32.9257</u></b>	0	50	<b><u>66</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	1	<b><u>37.613</u></b>	0	50	<b><u>75</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Nitrobenzene</u></b>	1	<b><u>38.3427</u></b>	0	50	<b><u>77</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Isophorone</u></b>	1	<b><u>37.856</u></b>	0	50	<b><u>76</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
Benzoic Acid	1	76.7438	0	100	77	20	130
<b><u>bis(2-Chloroethoxy)methane</u></b>	1	<b><u>38.9632</u></b>	0	50	<b><u>78</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
1,2,4-Trichlorobenzene	1	36.9078	0	50	74	50	130
<b><u>Naphthalene</u></b>	1	<b><u>37.6149</u></b>	0	50	<b><u>75</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloroaniline</u></b>	1	<b><u>27.2037</u></b>	0	50	<b><u>54</u></b>	<b><u>10</u></b>	<b><u>150</u></b>
<b><u>Hexachlorobutadiene</u></b>	1	<b><u>35.0175</u></b>	0	50	<b><u>70</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Caprolactam</u></b>	1	<b><u>44.0502</u></b>	0	50	<b><u>88</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Methylnaphthalene</u></b>	1	<b><u>36.2503</u></b>	0	50	<b><u>73</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1-Methylnaphthalene	1	40.8193	0	50	82	70	130
<b><u>1,1'-Biphenyl</u></b>	1	<b><u>35.1347</u></b>	0	50	<b><u>70</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	1	<b><u>36.7843</u></b>	0	50	<b><u>74</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorocyclopentadiene</u></b>	1	<b><u>36.0646</u></b>	0	50	<b><u>72</u></b>	<b><u>20</u></b>	<b><u>160</u></b>
<b><u>2-Chloronaphthalene</u></b>	1	<b><u>40.7068</u></b>	0	50	<b><u>81</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,4-Dimethylnaphthalene	1	35.2206	0	50	70	70	130
Diphenyl Ether	1	40.748	0	50	81	70	130
<b><u>2-Nitroaniline</u></b>	1	<b><u>43.1439</u></b>	0	50	<b><u>86</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Coumarin	1	38.6552	0	50	77	70	130
<b><u>Acenaphthylene</u></b>	1	<b><u>44.0316</u></b>	0	50	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dimethylphthalate</u></b>	1	<b><u>42.9246</u></b>	0	50	<b><u>86</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	1	<b><u>44.2213</u></b>	0	50	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Acenaphthene</u></b>	1	<b><u>41.3093</u></b>	0	50	<b><u>83</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3-Nitroaniline</u></b>	1	<b><u>35.6254</u></b>	0	50	<b><u>71</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dibenzofuran</u></b>	1	<b><u>39.7938</u></b>	0	50	<b><u>80</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	1	<b><u>45.548</u></b>	0	50	<b><u>91</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>Fluorene</u></b>	1	<b><u>42.6018</u></b>	0	50	<b><u>85</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chlorophenyl-phenylether</u></b>	1	<b><u>43.4574</u></b>	0	50	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Diethylphthalate</u></b>	1	<b><u>43.9004</u></b>	0	50	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>4-Nitroaniline</u></b>	1	<b><u>42.9744</u></b>	0	50	<b><u>86</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Atrazine</u></b>	1	<b><u>42.4857</u></b>	0	50	<b><u>85</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	1	<b><u>37.3336</u></b>	0	50	<b><u>75</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,2-Diphenylhydrazine	1	44.5483	0	50	89	70	130
<b><u>4-Bromophenyl-phenylether</u></b>	1	<b><u>43.4446</u></b>	0	50	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorobenzene</u></b>	1	<b><u>40.9109</u></b>	0	50	<b><u>82</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
N-Octadecane	1	44.9255	0	50	90	70	130
<b><u>Phenanthrene</u></b>	1	<b><u>43.9113</u></b>	0	50	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Anthracene</u></b>	1	<b><u>44.3694</u></b>	0	50	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Carbazole</u></b>	1	<b><u>37.9276</u></b>	0	50	<b><u>76</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Di-n-butylphthalate</u></b>	1	<b><u>44.322</u></b>	0	50	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Fluoranthene</u></b>	1	<b><u>46.2706</u></b>	0	50	<b><u>93</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Pyrene</u></b>	1	<b><u>44.562</u></b>	0	50	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Benzidine	1	3.2479	0	50	6.5	1	130
<b><u>Butylbenzylphthalate</u></b>	1	<b><u>44.6051</u></b>	0	50	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3,3'-Dichlorobenzidine</u></b>	1	<b><u>32.6648</u></b>	0	50	<b><u>65</u></b>	<b><u>10</u></b>	<b><u>130</u></b>
<b><u>Benzo[a]anthracene</u></b>	1	<b><u>41.8715</u></b>	0	50	<b><u>84</u></b>	<b><u>70</u></b>	<b><u>130</u></b>

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Form3  
 Recovery Data Laboratory Limits  
 QC Batch: SMB88130

Method: 8270E		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b>Chrysene</b>	<b>1</b>	<b>37.6961</b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>60</b>	<b>130</b>
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>44.7836</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>Di-n-octylphthalate</b>	<b>1</b>	<b>44.7584</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b>52.0256</b>	<b>0</b>	<b>50</b>	<b>104</b>	<b>70</b>	<b>130</b>
<b>Benzo[k]fluoranthene</b>	<b>1</b>	<b>46.561</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>Benzo[a]pyrene</b>	<b>1</b>	<b>49.0971</b>	<b>0</b>	<b>50</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b>Indeno[1,2,3-cd]pyrene</b>	<b>1</b>	<b>48.5385</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>Dibenzof[a,h]anthracene</b>	<b>1</b>	<b>48.093</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>60</b>	<b>130</b>
<b>Benzo[g,h,i]perylene</b>	<b>1</b>	<b>48.009</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>70</b>	<b>130</b>

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### Form3 RPD Data Laboratory Limits

QC Batch: SMB88130

Data File	Sample ID:	Analysis Date
Spike or Dup: 9M101543.D	AD19587-004(MSD)	10/5/2020 4:55:00 PM
Duplicate(if applicable): 9M101542.D	AD19587-004(MS)	10/5/2020 4:32:00 PM
Inst Blank(if applicable):		
Method: 8270E	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	19.9352	18.0441	10	30
N-Nitrosodimethylamine	1	31.0892	28.6618	8.1	30
<b><u>Benzaldehyde</u></b>	<b>1</b>	<b><u>32.6312</u></b>	<b><u>27.1896</u></b>	<b>18</b>	<b>30</b>
Aniline	1	26.2099	24.9614	4.9	30
Pentachloroethane	1	29.8623	27.0807	9.8	30
<b><u>bis(2-Chloroethyl)ether</u></b>	<b>1</b>	<b><u>34.1362</u></b>	<b><u>31.85</u></b>	<b>6.9</b>	<b>30</b>
N-Decane	1	23.586	21.5689	8.9	30
1,3-Dichlorobenzene	1	30.4275	27.9767	8.4	30
1,4-Dichlorobenzene	1	34.2314	31.0516	9.7	40
1,2-Dichlorobenzene	1	34.1477	31.2548	8.8	30
Benzyl alcohol	1	35.9225	35.6284	0.82	30
<b><u>bis(2-chloroisopropyl)ether</u></b>	<b>1</b>	<b><u>32.4897</u></b>	<b><u>30.4369</u></b>	<b>6.5</b>	<b>30</b>
<b><u>Acetophenone</u></b>	<b>1</b>	<b><u>36.7936</u></b>	<b><u>34.9098</u></b>	<b>5.3</b>	<b>30</b>
<b><u>Hexachloroethane</u></b>	<b>1</b>	<b><u>32.9257</u></b>	<b><u>30.0584</u></b>	<b>9.1</b>	<b>30</b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	<b>1</b>	<b><u>37.613</u></b>	<b><u>36.8661</u></b>	<b>2</b>	<b>40</b>
<b><u>Nitrobenzene</u></b>	<b>1</b>	<b><u>38.3427</u></b>	<b><u>36.8698</u></b>	<b>3.9</b>	<b>30</b>
<b><u>Isophorone</u></b>	<b>1</b>	<b><u>37.856</u></b>	<b><u>37.4108</u></b>	<b>1.2</b>	<b>30</b>
Benzoic Acid	1	76.7438	71.9922	6.4	30
<b><u>bis(2-Chloroethoxy)methane</u></b>	<b>1</b>	<b><u>38.9632</u></b>	<b><u>38.3086</u></b>	<b>1.7</b>	<b>30</b>
1,2,4-Trichlorobenzene	1	36.9078	35.3301	4.4	40
<b><u>Naphthalene</u></b>	<b>1</b>	<b><u>37.6149</u></b>	<b><u>37.0809</u></b>	<b>1.4</b>	<b>40</b>
<b><u>4-Chloroaniline</u></b>	<b>1</b>	<b><u>27.2037</u></b>	<b><u>27.0111</u></b>	<b>0.71</b>	<b>30</b>
<b><u>Hexachlorobutadiene</u></b>	<b>1</b>	<b><u>35.0175</u></b>	<b><u>32.0669</u></b>	<b>8.8</b>	<b>30</b>
<b><u>Caprolactam</u></b>	<b>1</b>	<b><u>44.0502</u></b>	<b><u>41.8394</u></b>	<b>5.1</b>	<b>30</b>
<b><u>2-Methylnaphthalene</u></b>	<b>1</b>	<b><u>36.2503</u></b>	<b><u>34.9545</u></b>	<b>3.6</b>	<b>30</b>
1-Methylnaphthalene	1	40.8193	39.9123	2.2	30
<b><u>1,1'-Biphenyl</u></b>	<b>1</b>	<b><u>35.1347</u></b>	<b><u>33.7811</u></b>	<b>3.9</b>	<b>30</b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	<b>1</b>	<b><u>36.7843</u></b>	<b><u>34.8398</u></b>	<b>5.4</b>	<b>30</b>
<b><u>Hexachlorocyclopentadiene</u></b>	<b>1</b>	<b><u>36.0646</u></b>	<b><u>35.081</u></b>	<b>2.8</b>	<b>30</b>
<b><u>2-Chloronaphthalene</u></b>	<b>1</b>	<b><u>40.7068</u></b>	<b><u>39.8714</u></b>	<b>2.1</b>	<b>30</b>
1,4-Dimethylnaphthalene	1	35.2206	34.0877	3.3	30
Diphenyl Ether	1	40.748	39.0119	4.4	30
<b><u>2-Nitroaniline</u></b>	<b>1</b>	<b><u>43.1439</u></b>	<b><u>41.022</u></b>	<b>5</b>	<b>30</b>
Coumarin	1	38.6552	36.312	6.3	30
<b><u>Acenaphthylene</u></b>	<b>1</b>	<b><u>44.0316</u></b>	<b><u>42.9164</u></b>	<b>2.6</b>	<b>30</b>
<b><u>Dimethylphthalate</u></b>	<b>1</b>	<b><u>42.9246</u></b>	<b><u>41.7641</u></b>	<b>2.7</b>	<b>30</b>
<b><u>2,6-Dinitrotoluene</u></b>	<b>1</b>	<b><u>44.2213</u></b>	<b><u>42.541</u></b>	<b>3.9</b>	<b>30</b>
<b><u>Acenaphthene</u></b>	<b>1</b>	<b><u>41.3093</u></b>	<b><u>40.3593</u></b>	<b>2.3</b>	<b>40</b>
<b><u>3-Nitroaniline</u></b>	<b>1</b>	<b><u>35.6254</u></b>	<b><u>33.6221</u></b>	<b>5.8</b>	<b>30</b>
<b><u>Dibenzofuran</u></b>	<b>1</b>	<b><u>39.7938</u></b>	<b><u>38.7499</u></b>	<b>2.7</b>	<b>30</b>
<b><u>2,4-Dinitrotoluene</u></b>	<b>1</b>	<b><u>45.548</u></b>	<b><u>44.0034</u></b>	<b>3.4</b>	<b>40</b>
<b><u>Fluorene</u></b>	<b>1</b>	<b><u>42.6018</u></b>	<b><u>41.6519</u></b>	<b>2.3</b>	<b>40</b>
<b><u>4-Chlorophenyl-phenylether</u></b>	<b>1</b>	<b><u>43.4574</u></b>	<b><u>42.2221</u></b>	<b>2.9</b>	<b>30</b>
<b><u>Diethylphthalate</u></b>	<b>1</b>	<b><u>43.9004</u></b>	<b><u>42.808</u></b>	<b>2.5</b>	<b>30</b>
<b><u>4-Nitroaniline</u></b>	<b>1</b>	<b><u>42.9744</u></b>	<b><u>41.4621</u></b>	<b>3.6</b>	<b>30</b>
<b><u>Atrazine</u></b>	<b>1</b>	<b><u>42.4857</u></b>	<b><u>40.4217</u></b>	<b>5</b>	<b>30</b>
<b><u>n-Nitrosodiphenylamine</u></b>	<b>1</b>	<b><u>37.3336</u></b>	<b><u>36.8174</u></b>	<b>1.4</b>	<b>30</b>
1,2-Diphenylhydrazine	1	44.5483	42.7759	4.1	30
<b><u>4-Bromophenyl-phenylether</u></b>	<b>1</b>	<b><u>43.4446</u></b>	<b><u>43.4169</u></b>	<b>0.06</b>	<b>30</b>
<b><u>Hexachlorobenzene</u></b>	<b>1</b>	<b><u>40.9109</u></b>	<b><u>40.2093</u></b>	<b>1.7</b>	<b>30</b>
N-Octadecane	1	44.9255	43.7783	2.6	30
<b><u>Phenanthrene</u></b>	<b>1</b>	<b><u>43.9113</u></b>	<b><u>44.0696</u></b>	<b>0.36</b>	<b>30</b>
<b><u>Anthracene</u></b>	<b>1</b>	<b><u>44.3694</u></b>	<b><u>43.8094</u></b>	<b>1.3</b>	<b>30</b>
<b><u>Carbazole</u></b>	<b>1</b>	<b><u>37.9276</u></b>	<b><u>37.656</u></b>	<b>0.72</b>	<b>30</b>
<b><u>Di-n-butylphthalate</u></b>	<b>1</b>	<b><u>44.322</u></b>	<b><u>43.4788</u></b>	<b>1.9</b>	<b>30</b>
<b><u>Fluoranthene</u></b>	<b>1</b>	<b><u>46.2706</u></b>	<b><u>45.9679</u></b>	<b>0.66</b>	<b>30</b>
<b><u>Pyrene</u></b>	<b>1</b>	<b><u>44.562</u></b>	<b><u>44.5868</u></b>	<b>0.06</b>	<b>40</b>
Benzidine	1	3.2479	0	200*	30
<b><u>Butylbenzylphthalate</u></b>	<b>1</b>	<b><u>44.6051</u></b>	<b><u>43.9607</u></b>	<b>1.5</b>	<b>40</b>
<b><u>3,3'-Dichlorobenzidine</u></b>	<b>1</b>	<b><u>32.6648</u></b>	<b><u>30.2305</u></b>	<b>7.7</b>	<b>30</b>
<b><u>Benzo[a]anthracene</u></b>	<b>1</b>	<b><u>41.8715</u></b>	<b><u>41.529</u></b>	<b>0.82</b>	<b>30</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3  
RPD Data Laboratory Limits

QC Batch: SMB88130

Method: 8270E	Matrix: Soil	QC Type: MSD			
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
<b>Chrysene</b>	<b>1</b>	<b><u>37.6961</u></b>	<b><u>38.2204</u></b>	<b><u>1.4</u></b>	<b><u>30</u></b>
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b><u>44.7836</u></b>	<b><u>44.4361</u></b>	<b><u>0.78</u></b>	<b><u>30</u></b>
<b>Di-n-octylphthalate</b>	<b>1</b>	<b><u>44.7584</u></b>	<b><u>44.1402</u></b>	<b><u>1.4</u></b>	<b><u>30</u></b>
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b><u>52.0256</u></b>	<b><u>49.7478</u></b>	<b><u>4.5</u></b>	<b><u>30</u></b>
<b>Benzo[k]fluoranthene</b>	<b>1</b>	<b><u>46.561</u></b>	<b><u>49.171</u></b>	<b><u>5.5</u></b>	<b><u>30</u></b>
<b>Benzo[a]pyrene</b>	<b>1</b>	<b><u>49.0971</u></b>	<b><u>48.9844</u></b>	<b><u>0.23</u></b>	<b><u>30</u></b>
<b>Indeno[1,2,3-cd]pyrene</b>	<b>1</b>	<b><u>48.5385</u></b>	<b><u>48.7868</u></b>	<b><u>0.51</u></b>	<b><u>30</u></b>
<b>Dibenzof[a,h]anthracene</b>	<b>1</b>	<b><u>48.093</u></b>	<b><u>48.4889</u></b>	<b><u>0.82</u></b>	<b><u>30</u></b>
<b>Benzo[g,h,i]perylene</b>	<b>1</b>	<b><u>48.009</u></b>	<b><u>48.4303</u></b>	<b><u>0.87</u></b>	<b><u>30</u></b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1



**FORM 4**  
Blank SummaryBlank Number: SMB88130  
Blank Data File: 7M109845.D  
Matrix: SoilBlank Analysis Date: 10/05/20 10:43  
Blank Extraction Date: 10/05/20  
(If Applicable)  
Method: EPA 8270E

Sample Number	Data File	Analysis Date
AD19479-001	7M109875.D	10/05/20 22:35
AD19479-003	7M109876.D	10/05/20 22:58
AD19479-005	7M109877.D	10/05/20 23:21
AD19479-007	7M109878.D	10/05/20 23:45
AD19479-009	7M109879.D	10/06/20 00:08
AD19479-011	7M109880.D	10/06/20 00:32
AD19479-013	7M109881.D	10/06/20 00:55
AD19479-015(3X)	7M109887.D	10/06/20 10:02
AD19479-017	7M109883.D	10/06/20 01:42
AD19479-019	7M109886.D	10/06/20 09:39
AD19587-004(MSD)	9M101543.D	10/05/20 16:55
AD19587-004(MS)	9M101542.D	10/05/20 16:32
AD19587-004	9M101541.D	10/05/20 16:08
SMB88130(MS)	9M101532.D	10/05/20 10:27

## Form 5

Tune Name: CAL DFTPP

Data File: 7M109431.D

Instrument: GCMS 7

Analysis Date: 09/17/20 09:43

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.108 min

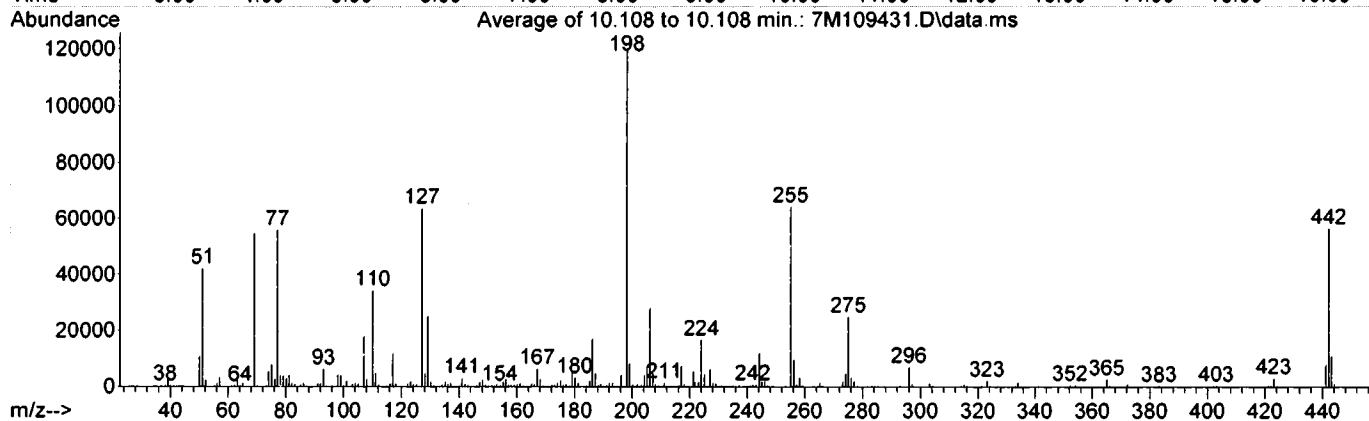
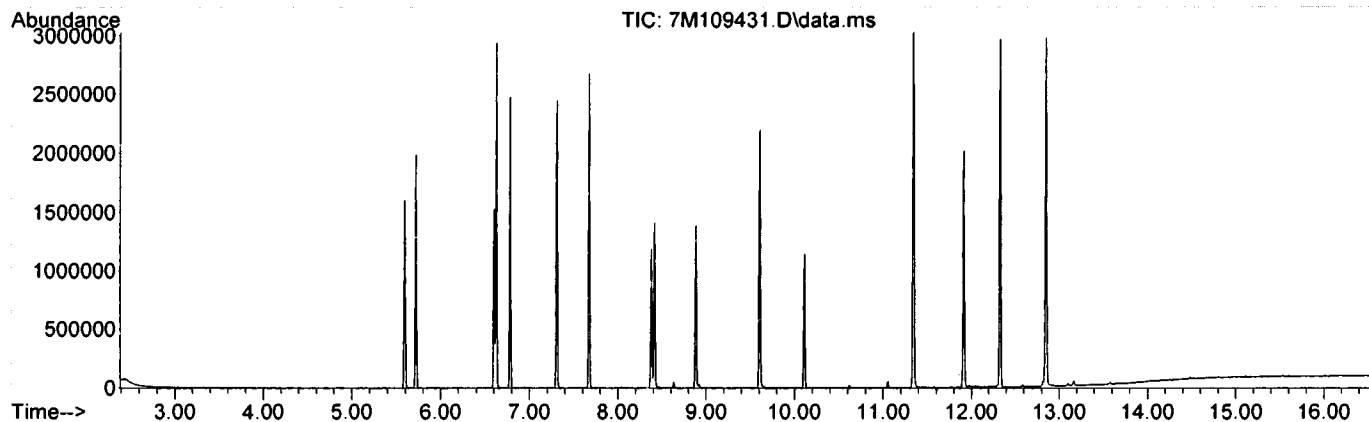
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60		35.1	42072	PASS
68	69	0.00	2		0.0	0	PASS
69	198	0.00	100		45.6	54704	PASS
70	69	0.00	2		0.7	373	PASS
127	198	40	60		53.1	63672	PASS
197	198	0.00	1		0.0	0	PASS
198	198	100	100		100.0	120000	PASS
199	198	5	9		6.8	8197	PASS
275	198	10	30		20.8	24936	PASS
365	198	1	100		2.2	2683	PASS
441	443	0.01	100		72.0	7872	PASS
442	198	40	100		47.1	56488	PASS
443	442	17	23		19.3	10930	PASS

Data File	Sample Number	Analysis Date:
7M109432.D	CAL BNA@2PPM	09/17/20 10:08
7M109433.D	CAL BNA@10PPM	09/17/20 10:32
7M109434.D	CAL BNA@196PP	09/17/20 10:55
7M109435.D	CAL BNA@160PP	09/17/20 11:22
7M109436.D	CAL BNA@120PP	09/17/20 11:46
7M109437.D	CAL BNA@80PPM	09/17/20 12:09
7M109438.D	CAL BNA@20PPM	09/17/20 12:33
7M109439.D	CAL BNA@0.5PP	09/17/20 12:57
7M109440.D	CAL BNA@50PPM	09/17/20 13:20
7M109441.D	ICV BNA@50PPM	09/17/20 13:44

Data Path : G:\GcMsData\2020\GCMS\_7\Data\09-17-20\  
 Data File : 7M109431.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.108 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.1	42072	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.6	54704	PASS
70	69	0.00	2	0.7	373	PASS
127	198	40	60	53.1	63672	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	120000	PASS
199	198	5	9	6.8	8197	PASS
275	198	10	30	20.8	24936	PASS
365	198	1	100	2.2	2683	PASS
441	443	0.01	100	72.0	7872	PASS
442	198	40	100	47.1	56488	PASS
443	442	17	23	19.3	10930	PASS

RR

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 9

Data File: 9M101312.D  
Analysis Date: 09/17/20 09:43  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.107 to 10.107 min

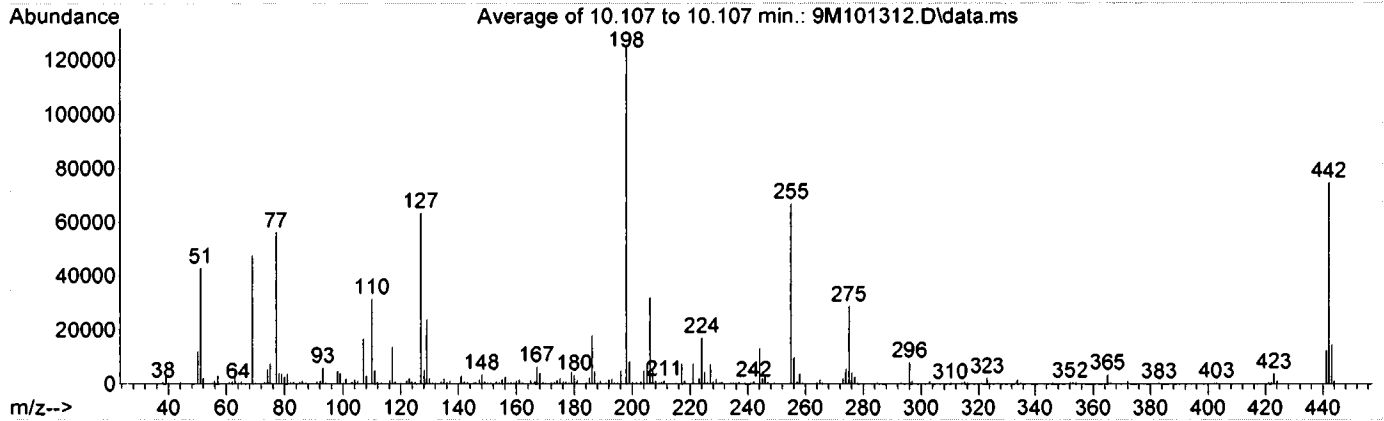
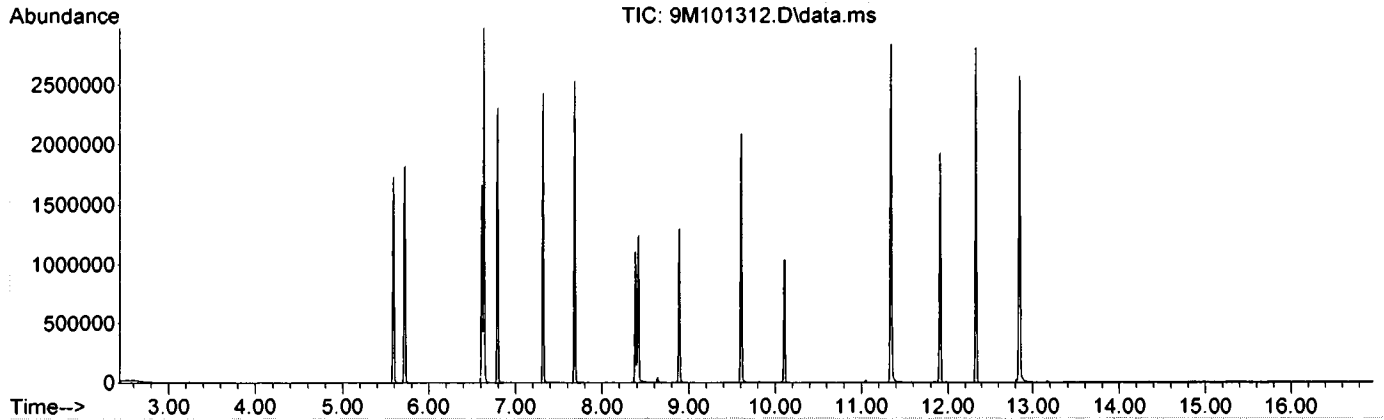
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60		34.3	42992	PASS
68	69	0.00	2		0.0	0	PASS
69	198	0.00	100		38.1	47736	PASS
70	69	0.00	2		0.4	213	PASS
127	198	40	60		50.6	63424	PASS
197	198	0.00	1		0.0	0	PASS
198	198	100	100		100.0	125368	PASS
199	198	5	9		6.6	8281	PASS
275	198	10	30		23.1	28904	PASS
365	198	1	100		2.9	3594	PASS
441	443	0.01	100		85.2	12575	PASS
442	198	40	100		59.7	74840	PASS
443	442	17	23		19.7	14757	PASS

Data File	Sample Number	Analysis Date:
9M101313.D	CAL BNA@10PPM	09/17/20 10:10
9M101314.D	CAL BNA@2PPM	09/17/20 10:34
9M101315.D	CAL BNA@196PP	09/17/20 11:00
9M101316.D	CAL BNA@160PP	09/17/20 11:24
9M101317.D	CAL BNA@120PP	09/17/20 11:47
9M101318.D	CAL BNA@80PPM	09/17/20 12:12
9M101319.D	CAL BNA@20PPM	09/17/20 12:35
9M101320.D	CAL BNA@0.5PP	09/17/20 12:58
9M101321.D	CAL BNA@50PPM	09/17/20 13:22
9M101322.D	ICV BNA@50PPM	09/17/20 13:47
9M101323.D	SMB88017	09/17/20 14:11
9M101324.D	SMB88018	09/17/20 14:34
9M101326.D	88018	09/17/20 15:48

Data Path : G:\GcMsData\2020\GCMS\_9\Data\09-17-20\  
 Data File : 9M101312.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.107 to 10.107 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.3	42992	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.1	47736	PASS
70	69	0.00	2	0.4	213	PASS
127	198	40	60	50.6	63424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	125368	PASS
199	198	5	9	6.6	8281	PASS
275	198	10	30	23.1	28904	PASS
365	198	1	100	2.9	3594	PASS
441	443	0.01	100	85.2	12575	PASS
442	198	40	100	59.7	74840	PASS
443	442	17	23	19.7	14757	PASS

*JKR*

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 7

Data File: 7M109839.D  
Analysis Date: 10/05/20 08:20  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.102 to 10.108 min

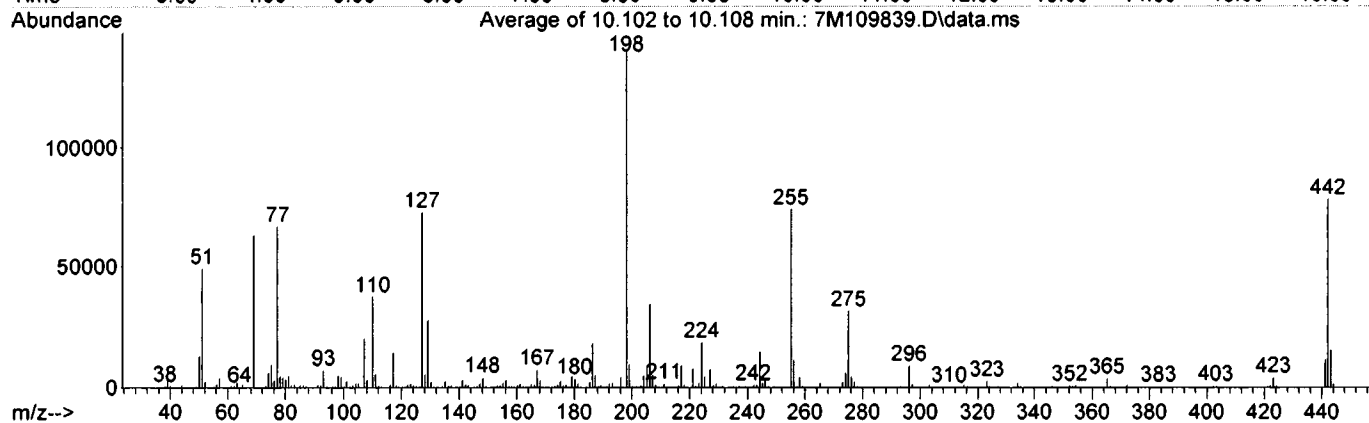
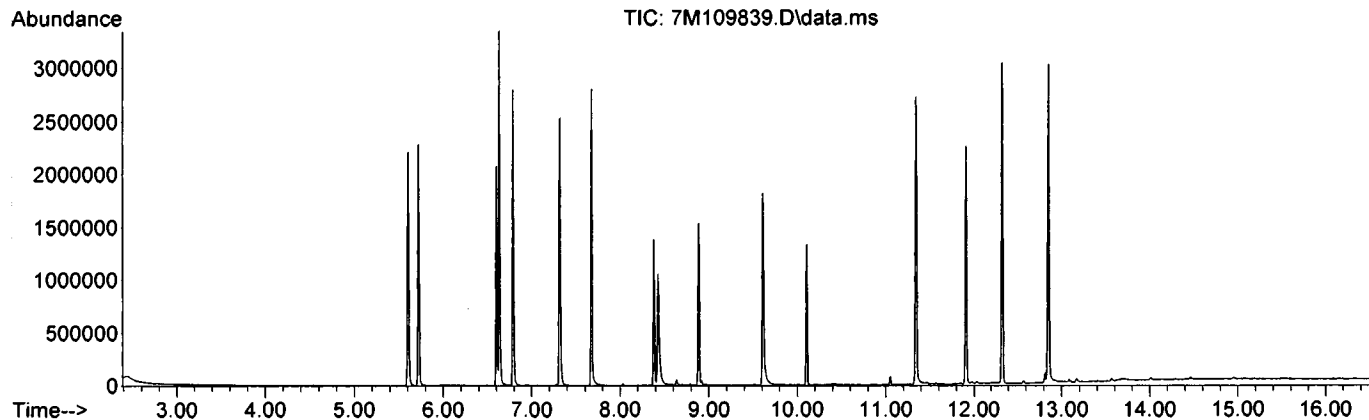
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60		35.0	49408	PASS
68	69	0.00	2		0.0	0	PASS
69	198	0.00	100		44.8	63184	PASS
70	69	0.00	2		0.7	422	PASS
127	198	40	60		51.6	72828	PASS
197	198	0.00	1		0.3	434	PASS
198	198	100	100		100.0	141156	PASS
199	198	5	9		6.7	9497	PASS
275	198	10	30		22.5	31764	PASS
365	198	1	100		2.6	3713	PASS
441	443	0.01	100		74.4	11351	PASS
442	198	40	100		55.5	78400	PASS
443	442	17	23		19.5	15260	PASS

Data File	Sample Number	Analysis Date:
7M109840.D	CAL BNA@50PPM	10/05/20 08:44
7M109841.D	AD19515-005	10/05/20 09:09
7M109842.D	AD19451-004	10/05/20 09:32
7M109843.D	AD19451-005	10/05/20 09:56
7M109844.D	AD19451-006	10/05/20 10:20
7M109845.D	SMB88130	10/05/20 10:43
7M109846.D	AD19265-002(3X)	10/05/20 11:07
7M109847.D	AD19265-002	10/05/20 11:30
7M109848.D	AD19414-003(3X)	10/05/20 11:54
7M109849.D	AD19451-007	10/05/20 12:17
7M109850.D	AD19501-001(R)	10/05/20 12:40
7M109851.D	AD19501-003(R)	10/05/20 13:04
7M109852.D	AD19506-002(R)	10/05/20 13:27

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-05-20\  
 Data File : 7M109839.D  
 Acq On : 5 Oct 2020 8:20  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.102 to 10.108 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.0	49408	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.8	63184	PASS
70	69	0.00	2	0.7	422	PASS
127	198	40	60	51.6	72828	PASS
197	198	0.00	1	0.3	434	PASS
198	198	100	100	100.0	141156	PASS
199	198	5	9	6.7	9497	PASS
275	198	10	30	22.5	31764	PASS
365	198	1	100	2.6	3713	PASS
441	443	0.01	100	74.4	11351	PASS
442	198	40	100	55.5	78400	PASS
443	442	17	23	19.5	15260	PASS

*RR*

## Form 5

Tune Name: CAL DFTPP

Data File: 9M101530.D

Instrument: GCMS 9

Analysis Date: 10/05/20 08:27

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.101 to 10.113 min

Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30		60	30.8	20735	PASS
68	69	0.00		2	0.0	0	PASS
69	198	0.00		100	34.4	23178	PASS
70	69	0.00		2	0.2	53	PASS
127	198	40		60	48.4	32628	PASS
197	198	0.00		1	0.0	0	PASS
198	198	100		100	100.0	67408	PASS
199	198	5		9	6.9	4649	PASS
275	198	10		30	26.4	17797	PASS
365	198	1		100	3.4	2296	PASS
441	443	0.01		100	89.2	10493	PASS
442	198	40		100	89.8	60533	PASS
443	442	17		23	19.4	11768	PASS

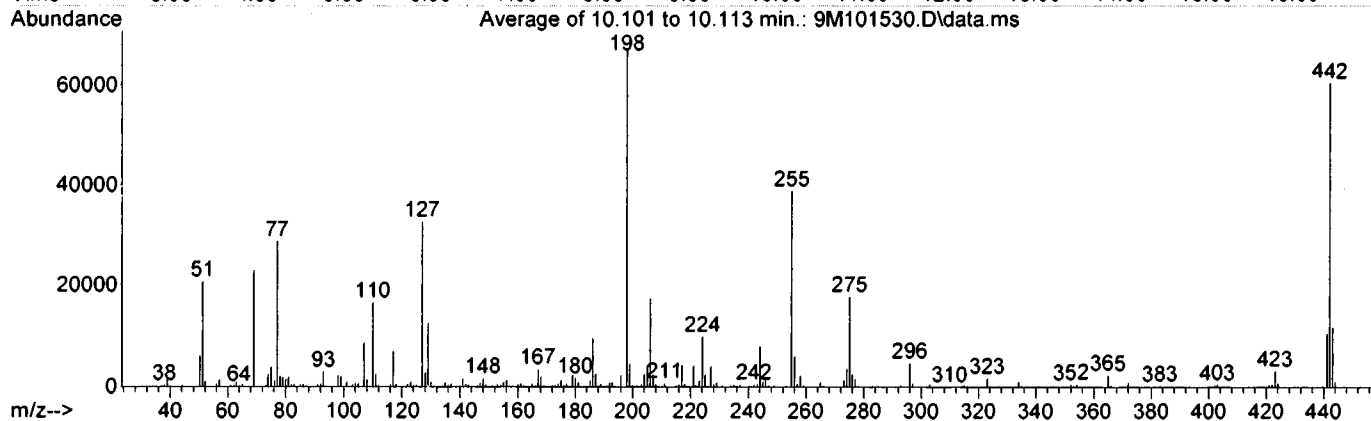
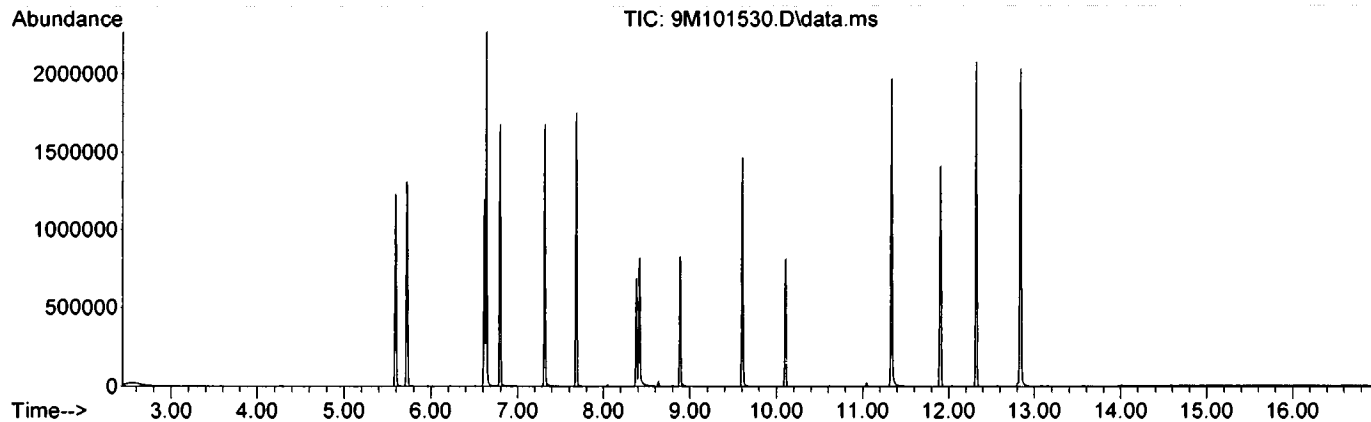
Data File	Sample Number	Analysis Date:
9M101531.D	CAL BNA@50PPM	10/05/20 08:52
9M101532.D	SMB88130(MS)	10/05/20 10:27
9M101533.D	SMB88131(MS)	10/05/20 10:50
9M101534.D	SMB88130	10/05/20 11:14
9M101535.D	SMB88131	10/05/20 11:37
9M101536.D	PEST MIX@50	10/05/20 13:27
9M101537.D	BENZALDEHYDE	10/05/20 13:50
9M101538.D	EXT MIX 1ST	10/05/20 14:47
9M101539.D	EXT MIX 2ST	10/05/20 15:22
9M101540.D	AD19540-002(R)	10/05/20 15:45
9M101541.D	AD19587-004	10/05/20 16:08
9M101542.D	AD19587-004(MS)	10/05/20 16:32
9M101543.D	AD19587-004(MSD)	10/05/20 16:55



Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-05-20\  
 Data File : 9M101530.D  
 Acq On : 5 Oct 2020 8:27  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.101 to 10.113 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.8	20735	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.4	23178	PASS
70	69	0.00	2	0.2	53	PASS
127	198	40	60	48.4	32628	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	67408	PASS
199	198	5	9	6.9	4649	PASS
275	198	10	30	26.4	17797	PASS
365	198	1	100	3.4	2296	PASS
441	443	0.01	100	89.2	10493	PASS
442	198	40	100	89.8	60533	PASS
443	442	17	23	19.4	11768	PASS

*RR*

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 7

Data File: 7M109853.D  
Analysis Date: 10/05/20 13:59  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.096 to 10.119 min

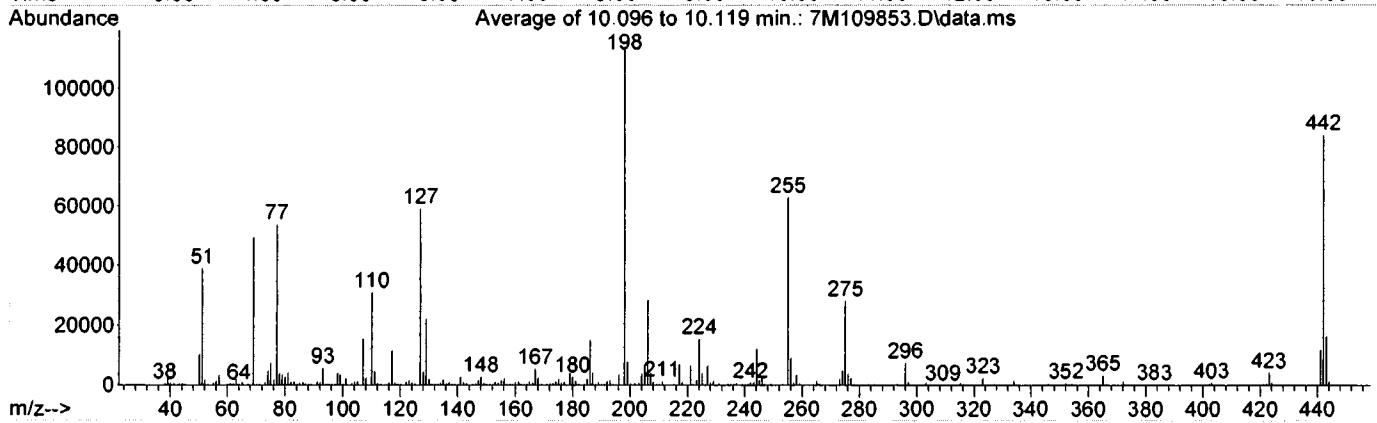
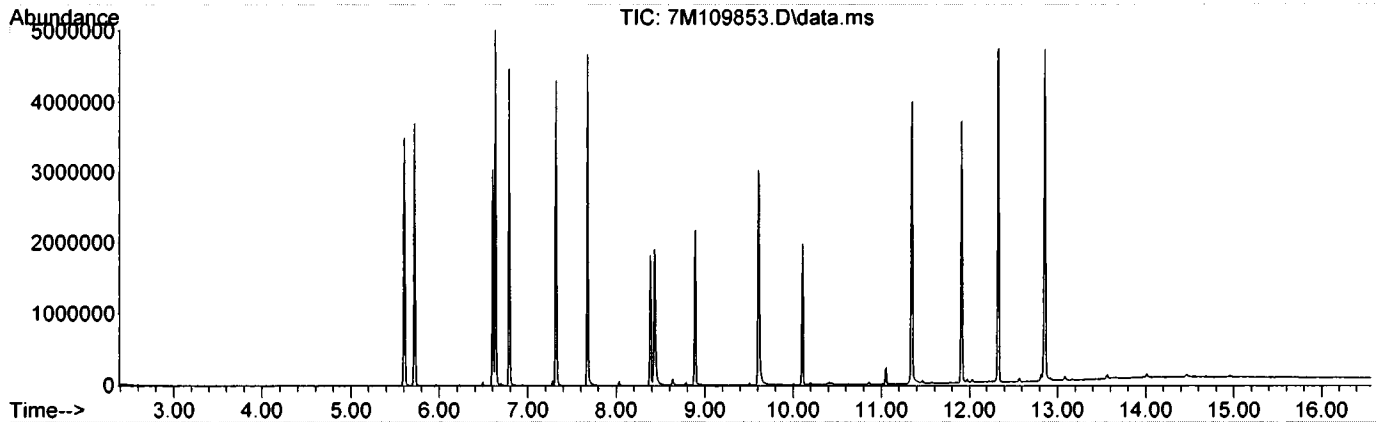
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	34.2	39017	PASS
68	69	0.00	2	0.1	43	PASS
69	198	0.00	100	43.4	49582	PASS
70	69	0.00	2	0.7	357	PASS
127	198	40	60	51.8	59173	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114240	PASS
199	198	5	9	6.9	7865	PASS
275	198	10	30	24.6	28112	PASS
365	198	1	100	3.0	3391	PASS
441	443	0.01	100	73.0	11980	PASS
442	198	40	100	73.9	84464	PASS
443	442	17	23	19.4	16410	PASS

Data File	Sample Number	Analysis Date:
7M109854.D	CAL BNA@50PPM	10/05/20 14:23
7M109855.D	SMB88131	10/05/20 14:46
7M109856.D	AD19506-004(R)	10/05/20 15:10
7M109857.D	AD19505-002(R)	10/05/20 15:33
7M109858.D	AD19505-004(R)	10/05/20 15:56
7M109859.D	AD19507-006(R)	10/05/20 16:20
7M109860.D	AD19510-006(R)	10/05/20 16:43
7M109861.D	AD19509-006(3X)	10/05/20 17:07
7M109862.D	AD19515-005(R)	10/05/20 17:30
7M109863.D	AD19515-004(R)	10/05/20 17:54
7M109864.D	19513-003(R)	10/05/20 18:17
7M109865.D	AD19513-004(R)	10/05/20 18:41
7M109866.D	AD19587-001	10/05/20 19:04
7M109867.D	AD19587-003	10/05/20 19:28
7M109868.D	AD19587-005	10/05/20 19:51
7M109869.D	AD19587-006	10/05/20 20:14
7M109870.D	AD19587-002(5X)	10/05/20 20:38
7M109871.D	AD19560-001(5X)	10/05/20 21:01
7M109872.D	AD19581-008(5X)	10/05/20 21:24
7M109873.D	AD19596-001(5X)	10/05/20 21:48
7M109874.D	AD19443-002(3X)	10/05/20 22:11
7M109875.D	AD19479-001	10/05/20 22:35
7M109876.D	AD19479-003	10/05/20 22:58
7M109877.D	AD19479-005	10/05/20 23:21
7M109878.D	AD19479-007	10/05/20 23:45
7M109879.D	AD19479-009	10/06/20 00:08
7M109880.D	AD19479-011	10/06/20 00:32
7M109881.D	AD19479-013	10/06/20 00:55
7M109882.D	AD19479-015(5X)	10/06/20 01:19
7M109883.D	AD19479-017	10/06/20 01:42

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0520\  
 Data File : 7M109853.D  
 Acq On : 5 Oct 2020 13:59  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.096 to 10.119 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.2	39017	PASS
68	69	0.00	2	0.1	43	PASS
69	198	0.00	100	43.4	49582	PASS
70	69	0.00	2	0.7	357	PASS
127	198	40	60	51.8	59173	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114240	PASS
199	198	5	9	6.9	7865	PASS
275	198	10	30	24.6	28112	PASS
365	198	1	100	3.0	3391	PASS
441	443	0.01	100	73.0	11980	PASS
442	198	40	100	73.9	84464	PASS
443	442	17	23	19.4	16410	PASS

*RR*

## Form 5

Tune Name: CAL DFTPP

Data File: 7M109884.D

Instrument: GCMS 7

Analysis Date: 10/06/20 08:51

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.114 min

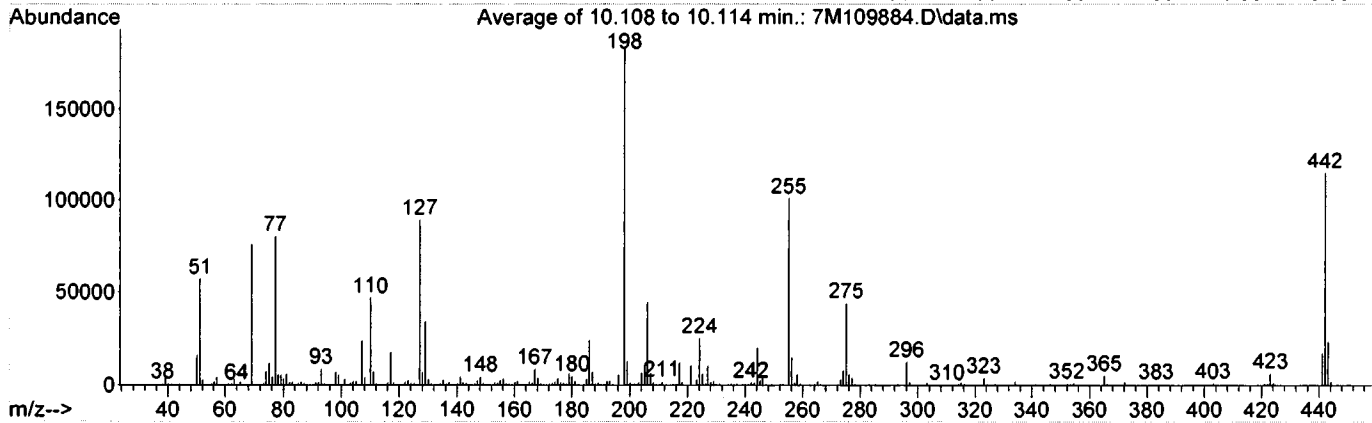
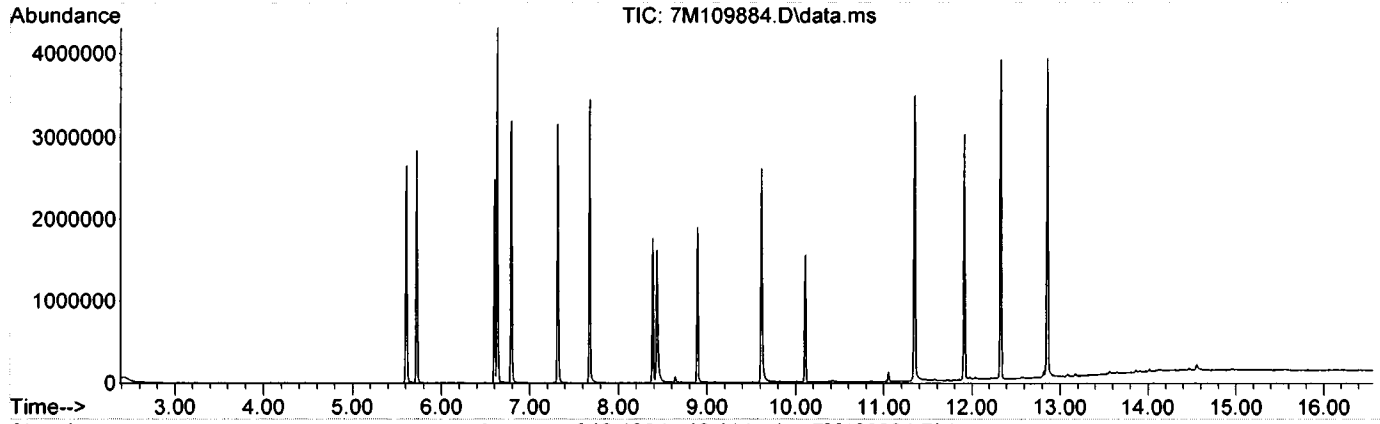
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30		60	31.2	57412	PASS
68	69	0.00		2	0.0	0	PASS
69	198	0.00		100	41.4	76120	PASS
70	69	0.00		2	0.7	546	PASS
127	198	40		60	48.8	89624	PASS
197	198	0.00		1	0.0	0	PASS
198	198	100		100	100.0	183840	PASS
199	198	5		9	6.8	12578	PASS
275	198	10		30	24.1	44340	PASS
365	198	1		100	2.7	5040	PASS
441	443	0.01		100	73.6	17173	PASS
442	198	40		100	62.8	115524	PASS
443	442	17		23	20.2	23348	PASS

Data File	Sample Number	Analysis Date:
7M109885.D	CAL BNA@50PPM	10/06/20 09:15
7M109886.D	AD19479-019	10/06/20 09:39
7M109887.D	AD19479-015(3X)	10/06/20 10:02
7M109888.D	19515-004	10/06/20 10:26
7M109889.D	AD19515-004	10/06/20 11:19
7M109890.D	AD19587-002	10/06/20 11:42
7M109891.D	AD19414-003	10/06/20 12:05
7M109892.D	19513-003	10/06/20 12:29
7M109893.D	AD19560-001(25X)	10/06/20 12:53
7M109894.D	AD19560-001(25X)	10/06/20 13:16
7M109895.D	AD19515-003(R)	10/06/20 13:40
7M109896.D	AD19560-001(25X)	10/06/20 14:03

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-06-20\  
 Data File : 7M109884.D  
 Acq On : 6 Oct 2020 8:51  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.114 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.2	57412	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.4	76120	PASS
70	69	0.00	2	0.7	546	PASS
127	198	40	60	48.8	89624	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	183840	PASS
199	198	5	9	6.8	12578	PASS
275	198	10	30	24.1	44340	PASS
365	198	1	100	2.7	5040	PASS
441	443	0.01	100	73.6	17173	PASS
442	198	40	100	62.8	115524	PASS
443	442	17	23	20.2	23348	PASS

*RR*

Table with columns: Level #, Data File, Call Identifier, Analysis Date/Time, Level #, Data File, Call Identifier, Analysis Date/Time, AvgRt, RT, Corr1, Corr2, %Rsd, Calibration Level Concentrations (LV1-LV8).

Flags a - failed the min rf criteria

Note: Corr 1 = Correlation Coefficient for linear Eq. Corr 2 = Correlation Coefficient for quad Eq. Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound. c - failed the minimum correlation coeff criteria (if applicable)



Level #	Data File	Cal Identifier	Analysis Date/Time							Level #	Data File	Cal Identifier	Analysis Date/Time												
			RF1	RF2	RF3	RF4	RF5	RF6	RF7				RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6
1	7M109440.D	CAL BNA@50PPM	0.3503	0.3655	0.3774	0.3341	0.3460	0.3571	0.3595	0.3678	---	0.357	11.57	0.999	1.00	3.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
3	7M109433.D	CAL BNA@10PPM	0.5173	0.5040	0.5516	0.4863	0.5081	0.5152	0.5081	0.5278	---	0.515	11.97	0.999	1.00	3.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
5	7M109437.D	CAL BNA@80PPM	0.5670	0.5750	0.6106	0.5386	0.5454	0.5565	0.5463	0.5709	---	0.564	12.23	0.999	0.999	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
7	7M109435.D	CAL BNA@160PPM	0.5993	0.5393	0.6429	0.5529	0.5709	0.5754	0.5760	0.5874	---	0.581	12.33	0.999	0.999	5.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
9	7M109439.D	CAL BNA@0.5PPM	0.4587	0.4820	0.4897	0.4247	0.4479	0.4540	0.4440	0.4567	---	0.457	12.85	1.00	1.00	4.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
1	0 Avg	1.1813	1.2500	1.2776	1.1055	1.1167	1.1531	1.1306	1.1707	---	1.17	12.88	0.999	0.999	5.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.0967	1.1295	1.2176	1.0668	1.0498	1.0409	1.0250	1.0596	---	1.09	12.92	0.999	0.999	5.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.7615	0.8450	0.8447	0.7274	0.7265	0.7171	0.7088	0.7210	---	0.757	12.92	1.00	1.00	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.2794	1.3745	1.4455	1.2328	1.2345	1.2196	1.1919	1.2391	---	1.28	13.68	0.999	0.999	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.1394	1.2007	1.2147	1.1224	1.0944	1.0793	1.0414	1.1490	---	1.13	14.11	0.998	0.998	5.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.0417	1.1169	1.1984	0.9900	1.0351	1.0321	1.0449	1.0116	---	1.06	14.14	0.999	1.00	6.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.0102	1.0406	1.0815	0.9527	0.9757	0.9811	0.9730	1.0095	---	1.00	14.48	0.999	1.00	4.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.1141	1.1817	1.2143	1.0361	1.0844	1.0993	1.0993	1.1488	---	1.12	15.94	0.999	0.999	5.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.9343	0.9522	1.0181	0.8771	0.9158	0.9263	0.9176	0.9561	---	0.937	15.96	0.999	1.00	4.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.9171	1.0021	1.0080	0.8577	0.8974	0.9121	0.9112	0.9585	---	0.933	16.33	0.998	0.999	5.6	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.





Compound	Level #	Data File	Call Identifier	Analysis Date/Time									Level #	Data File	Call Identifier	Calibration Level Concentrations									
				RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9				AVGrT	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5
Hexachlorocyclopenta	1	0 Avg	0.3481	0.2828	0.3280	0.3067	0.3608	0.3644	0.3556	0.3631	0.3397	7.59	1.00	1.00	8.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2,4,6-Trichlorophenol	1	0 Avg	0.3818	0.3248	0.4552	0.3448	0.3853	0.3923	0.3806	0.3812	0.3817	6.8	1.00	1.00	10	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2,4,5-Trichlorophenol	1	0 Avg	0.4023	0.3246	0.3934	0.3768	0.4135	0.4211	0.4052	0.3981	0.3927	7.71	0.999	0.999	7.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2-Fluorophenyl	1	0 Avg	1.3707	1.4571	1.4528	1.2908	1.3521	1.3636	1.3329	1.3300	1.3777	8.75	1.00	1.00	4.3	0.80	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	98.00
2-Fluorobiphenyl	1	0 Avg	1.2079	1.2890	1.3133	1.1381	1.1798	1.1686	1.1251	1.1160	1.1978	7.57	0.999	1.00	6.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
1,4-Dimethylnaphthalene	1	0 Avg	0.9255	1.0309	1.0294	0.8805	0.8951	0.8660	0.8244	0.7969	0.9068	8.15	0.997	1.00	9.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Dimethylnaphthalenes	1	0 Avg	0.9255	1.0309	1.0294	0.8805	0.8951	0.8660	0.8244	0.7969	0.9068	8.15	0.997	1.00	9.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Diphenyl Ether	1	0 Avg	0.8661	0.9916	0.9581	0.8489	0.8725	0.8651	0.8299	0.8203	0.8847	7.92	0.999	1.00	6.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2-Nitroaniline	1	0 Avg	0.3455	0.2687	0.3218	0.3181	0.3488	0.3541	0.3419	0.3389	0.3307	7.94	0.999	1.00	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Coumarin	1	0 Avg	0.4511	0.4731	0.4791	0.4300	0.4470	0.4410	0.4208	0.4099	0.4448	8.12	0.998	1.00	5.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Acenaphthylene	1	0 Avg	1.8381	1.8503	1.9043	1.7123	1.8061	1.7964	1.7130	1.6895	1.7988	8.22	0.999	1.00	4.3	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Dimethylphthalate	1	0 Avg	1.3525	1.4157	1.4280	1.2755	1.3394	1.3346	1.2880	1.2749	1.3480	8.08	0.999	1.00	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2,6-Dinitrotoluene	1	0 Avg	0.3044	0.2449	0.3025	0.2801	0.2964	0.2966	0.2777	0.2668	0.2848	8.14	0.996	1.00	7.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Acenaphthene	1	0 Avg	1.2402	1.4463	1.3577	1.1957	1.2207	1.1972	1.1275	1.1242	1.2483	8.38	0.998	1.00	9.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
3-Nitroaniline	1	0 Avg	0.3485	0.2526	0.3288	0.3132	0.3512	0.3507	0.3385	0.3339	0.3278	8.29	0.999	1.00	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2,4-Dinitrophenol	1	0 Qua	0.1451	0.1154	0.1019	0.1745	0.1875	0.1863	0.1848	0.1848	0.1578	8.54	0.995	0.996	23	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Dibenzofuran	1	0 Avg	1.7149	1.9669	1.8542	1.6174	1.6911	1.6830	1.6085	1.5976	1.7388	8.58	0.999	1.00	7.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0 Avg	0.3988	0.2634	0.3715	0.3555	0.4106	0.4225	0.4123	0.4121	0.3818	8.50	1.00	1.00	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
4-Nitrophenol	1	0 Qua	0.2152	0.1023	0.2441	0.1898	0.2276	0.2348	0.2293	0.2277	0.2098	8.41	0.999	0.999	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2,3,4,6-Tetrachlorophe	1	0 Avg	0.3563	0.3052	0.3476	0.3237	0.3660	0.3748	0.3546	0.3612	0.3498	8.64	0.999	0.999	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Fluorene	1	0 Avg	1.3868	1.5023	1.5050	1.3185	1.3438	1.3197	1.2672	1.2622	1.3688	8.86	0.999	1.00	7.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
4-Chlorophenyl-phenyl	1	0 Avg	0.6712	0.7592	0.7211	0.6296	0.6632	0.6608	0.6366	0.6304	0.6728	8.85	0.999	1.00	6.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Diethylphthalate	1	0 Avg	1.3019	1.3008	1.3220	1.1977	1.2888	1.3053	1.2566	1.2415	1.2888	8.72	0.999	1.00	3.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
4-Nitroaniline	1	0 Avg	0.3607	0.2379	0.3413	0.3283	0.3708	0.3753	0.3607	0.3617	0.3428	8.86	0.999	1.00	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Atrazine	1	0 Avg	0.4163	0.3187	0.3805	0.3762	0.4223	0.4277	0.4183	0.4117	0.3979	9.50	0.999	1.00	9.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
4,6-Dinitro-2-methylph	1	0 Avg	0.1223	0.1139	0.0958	0.1330	0.1407	0.1391	0.1378	0.1378	0.1268	8.89	0.999	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
n-Nitrosodiphenylamin	1	0 Avg	0.6288	0.6407	0.6630	0.6065	0.6239	0.6160	0.6038	0.5906	0.6228	8.96	0.999	1.00	3.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
2,4,6-Tribromophenol	1	0 Avg	0.0964	0.0626	0.0902	0.0859	0.1005	0.1016	0.1003	0.0991	0.0921	9.10	1.00	1.00	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
1,2-Diphenylhydrazine	1	0 Avg	0.6511	0.6875	0.6713	0.6013	0.6289	0.6180	0.6524	0.6535	0.6419	9.01	0.999	1.00	4.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
4-Bromophenyl-phenyl	1	0 Avg	0.2038	0.2183	0.2079	0.1914	0.2055	0.2067	0.2060	0.2055	0.2069	9.34	1.00	1.00	3.5	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Hexachlorobenzene	1	0 Avg	0.2198	0.2662	0.2378	0.2107	0.2233	0.2263	0.2229	0.2213	0.2299	9.41	1.00	1.00	7.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
N-Octadecane	1	0 Avg	0.3090	0.2392	0.3093	0.2832	0.3054	0.2996	0.2828	0.2698	0.2879	9.68	0.995	1.00	8.4	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Pentachlorophenol	1	0 Avg	0.1414	0.1466	0.1187	0.1506	0.1575	0.1544	0.1549	0.1549	0.1469	9.61	0.998	0.998	9.1	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Phenanthrene	1	0 Avg	1.0499	1.2518	1.1464	1.0090	1.0378	1.0254	1.0012	0.9849	1.0699	9.85	0.999	1.00	8.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Anthracene	1	0 Avg	1.0753	1.1218	1.1276	1.0259	1.0713	1.0503	1.0307	0.9983	1.0699	9.85	0.999	1.00	4.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Carbazole	1	0 Avg	0.9801	0.9423	1.0058	0.9287	0.9786	0.9766	0.9442	0.9399	0.9621	10.07	0.999	1.00	2.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Di-n-butylphthalate	1	0 Qua	1.1066	0.7721	0.9731	0.9755	1.1298	1.1395	1.1174	1.0853	0.9871	10.45	0.999	1.00	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0 Avg	1.1752	1.0345	1.1343	1.0740	1.1771	1.1804	1.1547	1.1440	1.1311	11.18	1.00	1.00	4.7	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Pyrene	1	0 Avg	1.1991	1.1646	1.2120	1.1032	1.1754	1.2103	1.1905	1.1796	1.1811	11.45	1.00	1.00	3.0	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Benzzidine	1	0 Qua	0.6242	0.2647	0.5975	0.5110	0.6516	0.6623	0.6553	0.6510	0.5777	11.34	0.999	0.999	24	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
Terphenyl-d14	1	0 Avg	0.5839	0.5338	0.5769	0.5302	0.5876	0.6160	0.6119	0.6171	0.5821	11.64	1.00	1.00	5.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																		
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@20PPM	09/17/20 10:34	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9										
1	9M101313.D	CAL BNA@10PPM	09/17/20 10:10	4	9M101319.D	CAL BNA@20PPM	09/17/20 12:35	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
3	9M101318.D	CAL BNA@80PPM	09/17/20 12:12	6	9M101317.D	CAL BNA@120PPM	09/17/20 11:47	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
5	9M101316.D	CAL BNA@160PPM	09/17/20 11:24	8	9M101315.D	CAL BNA@196PPM	09/17/20 11:00	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
7	9M101320.D	CAL BNA@0.SPPM	09/17/20 12:58					50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
9								50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.3164	0.3085	0.3251	0.2870	0.3181	0.3368	0.3355	0.3357	---	0.320	11.57	0.999	1.00	5.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4676	0.3298	0.4118	0.4039	0.4696	0.4943	0.4859	0.4842	---	0.443	11.97	0.999	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.4710	0.2384	0.3600	0.3840	0.4937	0.5153	0.5030	0.5012	---	0.433	12.23	0.999	0.999	23	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.5607	0.4100	0.6178	0.5043	0.5646	0.5801	0.5774	0.5756	---	0.549	12.33	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3898	0.2240	0.4113	0.3352	0.4035	0.4225	0.4142	0.3995	---	0.375	12.85	0.999	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzoflathracene	1	0	Avg	1.1262	1.1259	1.1404	1.0406	1.1448	1.1645	1.1679	1.1421	---	1.13	12.88	1.00	1.00	3.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1020	1.2634	1.1943	1.0445	1.0556	1.0822	1.0400	1.0496	---	1.10	12.92	1.00	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6559	0.3313	0.5540	0.5664	0.6633	0.6739	0.6511	0.6267	---	0.590	12.92	0.998	0.999	19	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.0321	0.3373	0.6180	0.8050	1.0983	1.1633	1.1157	1.0860	---	0.907	13.68	0.998	0.999	33	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzobifluoranthene	1	0	Avg	1.0627	0.8442	0.9841	0.9332	1.0674	1.1317	1.1321	1.1712	---	1.04	14.10	0.999	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.1059	1.0441	1.1654	1.0308	1.0850	1.0826	1.0345	0.9585	---	1.06	14.13	0.994	0.999	5.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluorene	1	0	Avg	0.9862	0.7020	0.9358	0.8535	0.9952	1.0171	1.0027	0.9943	---	0.936	14.47	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl,2,3-cdlpyren	1	0	Avg	1.1882	0.9198	1.0889	1.0476	1.2176	1.2755	1.2625	1.2526	---	1.16	15.89	1.00	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofl,anthracen	1	0	Avg	1.0042	0.7706	0.9347	0.8922	1.0083	1.0517	1.0405	1.0286	---	0.966	15.92	1.00	1.00	9.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofl, h,lberylene	1	0	Avg	0.9795	0.8174	0.9208	0.8688	0.9875	1.0324	1.0163	1.0094	---	0.954	16.29	1.00	1.00	8.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

**Flags**  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

**Note:**  
Avg Rsd: 8.313  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 8:44:00 AData File: 7M109840.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.69	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.73	47.86	50	**	1.035	0.991		4.28	
Pyridine	1	0		3.21	49.76	50	**	2.335	2.323		0.49	
N-Nitrosodimethylamine	1	0		3.15	55.81	50	**	1.466	1.637		11.61	
2-Fluorophenol	1	0	S	4.72	48.80	50	**	2.355	2.299		2.39	
Benzaldehyde	1	0		5.52	49.55	50	20	0.01	2.298	2.277	0.91	
Aniline	1	0		5.61	48.53	50	**	3.788	3.676		2.95	
Pentachloroethane	1	0		5.66	47.99	50	**	0.05	0.836	0.803	4.03	
bis(2-Chloroethyl)ether	1	0		5.67	51.31	50	20	0.7	2.509	2.515	2.63	
Phenol-d5	1	0	S	5.58	50.43	50	**	2.830	2.855		0.86	
Phenol	1	0		5.60	50.04	50	20	0.8	3.460	3.462	0.07	
2-Chlorophenol	1	0		5.72	47.03	50	20	0.8	2.749	2.586	5.94	
N-Decane	1	0		5.76	55.59	50	**	0.05	1.917	2.132	11.18	
1,3-Dichlorobenzene	1	0		5.85	45.80	50	**	2.994	2.743		8.40	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	50.07	50	20	1.484	1.486		0.14	
1,2-Dichlorobenzene	1	0		6.03	50.70	50	**	1.410	1.429		1.40	
Benzyl alcohol	1	0		6.01	38.51	50	**	0.837	0.645		22.99	
bis(2-chloroisopropyl)ether	1	0		6.11	64.17	50	20	0.01	1.103	1.416	28.34	C1
2-Methylphenol	1	0		6.09	55.73	50	20	0.7	1.172	1.306	11.45	
Acetophenone	1	0		6.22	53.08	50	20	0.01	1.786	1.897	6.17	
Hexachloroethane	1	0		6.31	50.27	50	20	0.3	0.571	0.574	0.55	
N-Nitroso-di-n-propylamine	1	0		6.22	56.85	50	20	0.5	0.843	0.958	13.70	
3&4-Methylphenol	1	0		6.22	52.71	50	20	1.200	1.265		5.42	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.20	25	**	0.159	0.160		0.80	
Nitrobenzene	1	0		6.35	54.26	50	20	0.2	0.343	0.372	8.53	
Isophorone	1	0		6.54	54.08	50	20	0.4	0.627	0.678	8.16	
2-Nitrophenol	1	0		6.60	50.60	50	20	0.1	0.195	0.198	1.20	
2,4-Dimethylphenol	1	0		6.63	50.18	50	20	0.2	0.320	0.321	0.36	
Benzoic Acid	1	0		6.69	24.93	50	**	0.233	0.107		50.15	
bis(2-Chloroethoxy)methane	1	0		6.70	55.05	50	20	0.3	0.383	0.422	10.09	
2,4-Dichlorophenol	1	0		6.79	47.86	50	20	0.2	0.306	0.293	4.29	
1,2,4-Trichlorobenzene	1	0		6.85	47.00	50	**	0.334	0.314		5.99	
Naphthalene	1	0		6.91	50.06	50	20	0.7	1.040	1.041	0.12	
4-Chloroaniline	1	0		6.95	48.61	50	20	0.01	0.418	0.406	2.78	
Hexachlorobutadiene	1	0		7.00	45.20	50	20	0.01	0.188	0.170	9.60	
Caprolactam	1	0		7.22	51.89	50	20	0.01	0.118	0.123	3.78	
4-Chloro-3-methylphenol	1	0		7.32	47.51	50	20	0.2	0.308	0.292	4.99	
2-Methylnaphthalene	1	0		7.45	50.18	50	**	0.4	0.702	0.705	0.36	
1-Methylnaphthalene	1	0		7.53	50.15	50	**	0.4	0.662	0.664	0.31	
Methylnaphthalenes	1	0		7.45	100.35	50	**			1.369	100.70	
1,1'-Biphenyl	1	0		7.83	49.18	50	20	0.01	0.825	0.811	1.63	
Acenaphthene-d10	1	0	I	8.34	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.59	48.66	50	20	0.01	0.627	0.610	2.68	
Hexachlorocyclopentadiene	1	0		7.58	34.99	50	20	0.05	0.351	0.246	30.03	C1
2,4,6-Trichlorophenol	1	0		7.68	47.82	50	20	0.2	0.417	0.398	4.37	
2,4,5-Trichlorophenol	1	0		7.72	48.85	50	20	0.2	0.434	0.424	2.31	
2-Fluorobiphenyl	1	0	S	7.74	24.82	25	**	1.334	1.325		0.72	
2-Chloronaphthalene	1	0		7.86	50.93	50	20	0.8	1.201	1.223	1.87	
1,4-Dimethylnaphthalene	1	0		8.14	52.67	50	**	0.879	0.926		5.35	
Dimethylnaphthalenes	1	0		8.14	52.67	50	20			0.926	5.35	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 1 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 8:44:00 AData File: 7M109840.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	50.92	50	**	0.859	0.875	0.875	1.84	
2-Nitroaniline	1	0		7.93	57.76	50	20	0.01	0.367	0.423	15.52	
Coumarin	1	0		8.12	52.93		**	0.454				
Acenaphthylene	1	0		8.22	51.90	50	20	0.9	1.762	1.829	3.80	
Dimethylphthalate	1	0		8.07	51.03	50	20	0.01	1.380	1.408	2.06	
2,6-Dinitrotoluene	1	0		8.13	53.00	50	20	0.2	0.313	0.332	6.00	
Acenaphthene	1	0		8.37	52.47	50	20	0.9	1.171	1.229	4.94	
3-Nitroaniline	1	0		8.29	52.55	50	20	0.01	0.349	0.367	5.11	
2,4-Dinitrophenol	1	0		8.38	48.33	50	20	0.2	0.184	0.178	3.34	
Dibenzofuran	1	0		8.53	50.59	50	20	0.8	1.723	1.744	1.18	
2,4-Dinitrotoluene	1	0		8.50	52.86	50	20	0.2	0.433	0.457	5.71	
4-Nitrophenol	1	0		8.43	48.66	50	20	0.01	0.248	0.241	2.68	
2,3,4,6-Tetrachlorophenol	1	0		8.64	48.53	50	20	0.01	0.376	0.365	2.94	
Fluorene	1	0		8.86	52.36	50	20	0.9	1.381	1.446	4.71	
4-Chlorophenyl-phenylether	1	0		8.84	49.81	50	20	0.4	0.694	0.692	0.39	
Diethylphthalate	1	0		8.72	51.93	50	20	0.01	1.375	1.428	3.85	
4-Nitroaniline	1	0		8.86	53.27	50	20	0.01	0.371	0.395	6.54	
Atrazine	1	0		9.50	47.82	50	20	0.01	0.455	0.435	4.35	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	51.06	50	20	0.01	0.133	0.136	2.12	
n-Nitrosodiphenylamine	1	0		8.96	52.44	50	20	0.01	0.622	0.652	4.88	
2,4,6-Tribromophenol	1	0	S	9.09	47.17	50	**	0.103	0.097	0.097	5.67	
1,2-Diphenylhydrazine	1	0		9.00	58.04	50	**	0.652	0.757	0.757	16.08	
4-Bromophenyl-phenylether	1	0		9.34	49.15	50	20	0.1	0.219	0.216	1.70	
Hexachlorobenzene	1	0		9.41	48.21	50	20	0.1	0.234	0.226	3.58	
N-Octadecane	1	0		9.67	64.88	50	**	0.05	0.299	0.388	29.75	
Pentachlorophenol	1	0		9.61	40.57	50	20	0.05	0.154	0.125	18.86	
Phenanthrene	1	0		9.85	51.93	50	20	0.7	1.051	1.091	3.85	
Anthracene	1	0		9.90	52.10	50	20	0.7	1.079	1.125	4.21	
Carbazole	1	0		10.07	52.30	50	20	0.01	0.990	1.035	4.59	
Di-n-butylphthalate	1	0		10.45	53.01	50	20	0.01	1.212	1.285	6.01	
Fluoranthene	1	0		11.19	51.67	50	20	0.6	1.193	1.232	3.35	
Chrysene-d12	1	0	I	12.89	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.45	51.58	50	20	0.6	1.247	1.286	3.15	
Benzidine	1	0		11.34	39.55	50	**	0.737	0.583	0.583	20.90	
Terphenyl-d14	1	0	S	11.64	25.07	25	**	0.637	0.639	0.639	0.29	
4,4'-DDE	1	0		11.57	50.53		**	0.357				
4,4'-DDD	1	0		11.98	51.62		**	0.515				
Butylbenzylphthalate	1	0		12.23	54.09	50	20	0.01	0.564	0.610	8.18	
4,4'-DDT	1	0		12.33	52.86		**	0.581				
3,3'-Dichlorobenzidine	1	0		12.85	49.59	50	20	0.01	0.457	0.453	0.82	
Benzo[a]anthracene	1	0		12.88	50.89	50	20	0.8	1.173	1.194	1.78	
Chrysene	1	0		12.93	52.42	50	20	0.7	1.086	1.138	4.85	
bis(2-Ethylhexyl)phthalate	1	0		12.92	54.09	50	20	0.01	0.757	0.818	8.17	
Perylene-d12	1	0	I	14.54	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.67	55.57	50	20	0.01	1.277	1.419	11.14	
Benzo[b]fluoranthene	1	0		14.10	53.06	50	20	0.7	1.130	1.199	6.11	
Benzo[k]fluoranthene	1	0		14.13	51.03	50	20	0.7	1.059	1.081	2.07	
Benzo[a]pyrene	1	0		14.47	51.93	50	20	0.7	1.003	1.042	3.86	
Indeno[1,2,3-cd]pyrene	1	0		15.94	53.13	50	20	0.5	1.122	1.193	6.27	
Dibenzo[a,h]anthracene	1	0		15.95	53.33	50	20	0.4	0.937	1.000	6.66	
Benzo[g,h,i]perylene	1	0		16.34	52.78	50	20	0.5	0.933	0.985	5.56	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 8:44:00 AData File: 7M109840.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.682	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.879	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 3 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 8:52:00 AData File: 9M101531.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.71	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.74	47.26	50	**	1.057		0.999	5.48	
Pyridine	1	0		3.20	50.75	50	**	2.196		2.229	1.49	
N-Nitrosodimethylamine	1	0		3.14	52.81	50	**	1.391		1.469	5.61	
2-Fluorophenol	1	0	S	4.71	51.69	50	**	2.092		2.163	3.37	
Benzaldehyde	1	0		5.52	49.41	50	20	0.01	2.004	1.980	1.19	
Aniline	1	0		5.62	51.60	50	**		3.460	3.571	3.19	
Pentachloroethane	1	0		5.67	50.08	50	**	0.05	0.724	0.725	0.15	
bis(2-Chloroethyl)ether	1	0		5.68	52.21	50	20	0.7	2.274	2.375	4.43	
Phenol-d5	1	0	S	5.58	52.08	50	**		2.531	2.636	4.16	
Phenol	1	0		5.59	50.40	50	20	0.8	3.242	3.268	0.80	
2-Chlorophenol	1	0		5.72	50.31	50	20	0.8	2.529	2.545	0.63	
N-Decane	1	0		5.77	51.54	50	**	0.05	1.907	1.965	3.07	
1,3-Dichlorobenzene	1	0		5.85	49.74	50	**		2.771	2.756	0.52	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.92	50.84	50	20		1.496	1.521	1.67	
1,2-Dichlorobenzene	1	0		6.04	51.11	50	**		1.415	1.447	2.23	
Benzyl alcohol	1	0		6.01	51.04	50	**		0.812	0.829	2.08	
bis(2-chloroisopropyl)ether	1	0		6.12	53.22	50	20	0.01	1.260	1.341	6.44	
2-Methylphenol	1	0		6.10	52.83	50	20	0.7	1.157	1.223	5.66	
Acetophenone	1	0		6.22	53.10	50	20	0.01	1.702	1.808	6.19	
Hexachloroethane	1	0		6.32	51.67	50	20	0.3	0.526	0.544	3.34	
N-Nitroso-di-n-propylamine	1	0		6.22	54.24	50	20	0.5	0.741	0.804	8.48	
3&4-Methylphenol	1	0		6.22	54.92	50	20		1.136	1.247	9.83	
Naphthalene-d8	1	0	I	6.91	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.35	26.86	25	**		0.144	0.155	7.45	
Nitrobenzene	1	0		6.36	52.32	50	20	0.2	0.314	0.328	4.63	
Isophorone	1	0		6.55	52.71	50	20	0.4	0.574	0.605	5.41	
2-Nitrophenol	1	0		6.61	52.26	50	20	0.1	0.177	0.185	4.52	
2,4-Dimethylphenol	1	0		6.64	52.21	50	20	0.2	0.294	0.307	4.43	
Benzoic Acid	1	0		6.70	43.19	50	**		0.206	0.167	13.61	
bis(2-Chloroethoxy)methane	1	0		6.71	52.30	50	20	0.3	0.365	0.381	4.60	
2,4-Dichlorophenol	1	0		6.79	52.60	50	20	0.2	0.270	0.284	5.20	
1,2,4-Trichlorobenzene	1	0		6.86	49.62	50	**		0.312	0.310	0.76	
Naphthalene	1	0		6.92	50.94	50	20	0.7	1.062	1.082	1.87	
4-Chloroaniline	1	0		6.95	50.91	50	20	0.01	0.390	0.397	1.82	
Hexachlorobutadiene	1	0		7.01	49.77	50	20	0.01	0.175	0.174	0.46	
Caprolactam	1	0		7.22	53.55	50	20	0.01	0.105	0.113	7.11	
4-Chloro-3-methylphenol	1	0		7.32	50.91	50	20	0.2	0.276	0.281	1.81	
2-Methylnaphthalene	1	0		7.46	51.17	50	**	0.4	0.697	0.714	2.34	
1-Methylnaphthalene	1	0		7.54	50.93	50	**	0.4	0.666	0.678	1.86	
Methylnaphthalenes	1	0		7.54	102.20	50	**			1.393	104.40	
1,1'-Biphenyl	1	0		7.84	50.82	50	20	0.01	0.805	0.818	1.65	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.60	50.13	50	20	0.01	0.629	0.630	0.26	
Hexachlorocyclopentadiene	1	0		7.58	50.86	50	20	0.05	0.339	0.345	1.72	
2,4,6-Trichlorophenol	1	0		7.68	49.91	50	20	0.2	0.381	0.380	0.18	
2,4,5-Trichlorophenol	1	0		7.71	51.01	50	20	0.2	0.392	0.400	2.02	
2-Fluorobiphenyl	1	0	S	7.75	25.47	25	**		1.369	1.395	1.90	
2-Chloronaphthalene	1	0		7.86	51.32	50	20	0.8	1.192	1.224	2.63	
1,4-Dimethylnaphthalene	1	0		8.14	51.43	50	**		0.906	0.932	2.86	
Dimethylnaphthalenes	1	0		8.14	51.43	50	20			0.932	2.86	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 8:52:00 AData File: 9M101531.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	52.03	50	**	0.884	0.920	0.920	4.07	
2-Nitroaniline	1	0		7.94	55.38	50	20	0.01	0.330	0.365	10.75	
Coumarin	1	0		8.12	52.82		**	0.444				
Acenaphthylene	1	0		8.22	52.24	50	20	0.9	1.789	1.869	4.49	
Dimethylphthalate	1	0		8.08	51.32	50	20	0.01	1.339	1.374	2.65	
2,6-Dinitrotoluene	1	0		8.14	54.27	50	20	0.2	0.284	0.308	8.54	
Acenaphthene	1	0		8.38	51.67	50	20	0.9	1.239	1.280	3.34	
3-Nitroaniline	1	0		8.29	54.72	50	20	0.01	0.327	0.358	9.45	
2,4-Dinitrophenol	1	0		8.38	55.88	50	20	0.2	0.157	0.174	11.75	
Dibenzofuran	1	0		8.53	50.63	50	20	0.8	1.727	1.749	1.27	
2,4-Dinitrotoluene	1	0		8.50	54.22	50	20	0.2	0.381	0.413	8.45	
4-Nitrophenol	1	0		8.41	51.74	50	20	0.01	0.209	0.236	3.49	
2,3,4,6-Tetrachlorophenol	1	0		8.64	52.62	50	20	0.01	0.349	0.367	5.23	
Fluorene	1	0		8.86	51.14	50	20	0.9	1.363	1.394	2.27	
4-Chlorophenyl-phenylether	1	0		8.85	50.88	50	20	0.4	0.672	0.684	1.75	
Diethylphthalate	1	0		8.72	51.85	50	20	0.01	1.277	1.324	3.70	
4-Nitroaniline	1	0		8.86	55.08	50	20	0.01	0.342	0.377	10.17	
Atrazine	1	0		9.49	51.62	50	20	0.01	0.397	0.409	3.24	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	52.14	50	20	0.01	0.126	0.132	4.28	
n-Nitrosodiphenylamine	1	0		8.96	52.64	50	20	0.01	0.622	0.655	5.28	
2,4,6-Tribromophenol	1	0	S	9.09	52.41	50	**		0.092	0.097	4.82	
1,2-Diphenylhydrazine	1	0		9.00	52.27	50	**		0.641	0.670	4.53	
4-Bromophenyl-phenylether	1	0		9.34	50.86	50	20	0.1	0.206	0.209	1.72	
Hexachlorobenzene	1	0		9.41	49.42	50	20	0.1	0.229	0.226	1.16	
N-Octadecane	1	0		9.68	56.92	50	**	0.05	0.287	0.327	13.83	
Pentachlorophenol	1	0		9.61	50.01	50	20	0.05	0.146	0.146	0.02	
Phenanthrene	1	0		9.85	50.78	50	20	0.7	1.063	1.080	1.55	
Anthracene	1	0		9.90	52.43	50	20	0.7	1.063	1.114	4.86	
Carbazole	1	0		10.07	53.11	50	20	0.01	0.962	1.022	6.22	
Di-n-butylphthalate	1	0		10.45	50.34	50	20	0.01	0.987	1.150	0.68	
Fluoranthene	1	0		11.18	53.50	50	20	0.6	1.134	1.214	6.99	
Chrysene-d12	1	0	I	12.88	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.45	52.05	50	20	0.6	1.179	1.228	4.09	
Benzidine	1	0		11.33	46.08	50	**		0.577	0.568	7.84	
Terphenyl-d14	1	0	S	11.63	25.80	25	**		0.582	0.601	3.21	
4,4'-DDE	1	0		11.57	51.06		**		0.320			
4,4'-DDD	1	0		11.97	54.34		**		0.443			
Butylbenzylphthalate	1	0		12.22	49.95	50	20	0.01	0.433	0.492	0.09	
4,4'-DDT	1	0		12.32	53.34		**		0.549			
3,3'-Dichlorobenzidine	1	0		12.84	48.46	50	20	0.01	0.375	0.401	3.07	
Benzo[a]anthracene	1	0		12.87	51.70	50	20	0.8	1.132	1.170	3.40	
Chrysene	1	0		12.91	50.29	50	20	0.7	1.104	1.110	0.59	
bis(2-Ethylhexyl)phthalate	1	0		12.91	50.81	50	20	0.01	0.590	0.690	1.62	
Perylene-d12	1	0	I	14.51	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.66	48.94	50	20	0.01	0.907	1.090	2.11	
Benzo[b]fluoranthene	1	0		14.08	53.49	50	20	0.7	1.041	1.114	6.99	
Benzo[k]fluoranthene	1	0		14.12	51.85	50	20	0.7	1.063	1.103	3.71	
Benzo[a]pyrene	1	0		14.45	54.23	50	20	0.7	0.936	1.015	8.47	
Indeno[1,2,3-cd]pyrene	1	0		15.88	53.82	50	20	0.5	1.157	1.245	7.64	
Dibenzo[a,h]anthracene	1	0		15.89	54.13	50	20	0.4	0.966	1.046	8.26	
Benzo[g,h,i]perylene	1	0		16.27	53.76	50	20	0.5	0.954	1.026	7.51	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF



## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 8:52:00 AData File: 9M101531.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2,4-Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.681	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.906	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 3 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 2:23:00 PData File: 7M109854.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.69	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.73	49.57	50	**	1.035	1.026		0.87	
Pyridine	1	0		3.21	53.52	50	**	2.335	2.499		7.04	
N-Nitrosodimethylamine	1	0		3.15	57.71	50	**	1.466	1.692		15.42	
2-Fluorophenol	1	0	S	4.72	50.74	50	**	2.355	2.390		1.48	
Benzaldehyde	1	0		5.52	52.40	50	20	0.01	2.298	2.409	4.81	
Aniline	1	0		5.61	49.74	50	**	3.788	3.768		0.52	
Pentachloroethane	1	0		5.65	49.64	50	**	0.05	0.836	0.830	0.71	
bis(2-Chloroethyl)ether	1	0		5.67	54.92	50	20	0.7	2.509	2.692	9.84	
Phenol-d5	1	0	S	5.58	53.01	50	**	2.830	3.001		6.01	
Phenol	1	0		5.60	52.97	50	20	0.8	3.460	3.665	5.93	
2-Chlorophenol	1	0		5.72	49.89	50	20	0.8	2.749	2.743	0.22	
N-Decane	1	0		5.76	57.87	50	**	0.05	1.917	2.219	15.73	
1,3-Dichlorobenzene	1	0		5.84	48.27	50	**	2.994	2.890		3.47	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	53.70	50	20		1.484	1.594	7.41	
1,2-Dichlorobenzene	1	0		6.03	53.77	50	**	1.410	1.516		7.54	
Benzyl alcohol	1	0		6.01	43.68	50	**	0.837	0.731		12.64	
bis(2-chloroisopropyl)ether	1	0		6.11	68.33	50	20	0.01	1.103	1.508	36.66	C1
2-Methylphenol	1	0		6.09	58.20	50	20	0.7	1.172	1.364	16.39	
Acetophenone	1	0		6.22	56.75	50	20	0.01	1.786	2.027	13.49	
Hexachloroethane	1	0		6.31	54.17	50	20	0.3	0.571	0.619	8.34	
N-Nitroso-di-n-propylamine	1	0		6.22	61.00	50	20	0.5	0.843	1.028	22.00	C1
3&4-Methylphenol	1	0		6.22	57.15	50	20		1.200	1.372	14.30	
Naphthalene-d8	1	0	I	6.89	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.65	25	**	0.159	0.163		2.61	
Nitrobenzene	1	0		6.35	55.69	50	20	0.2	0.343	0.382	11.38	
Isophorone	1	0		6.54	56.83	50	20	0.4	0.627	0.713	13.66	
2-Nitrophenol	1	0		6.60	54.02	50	20	0.1	0.195	0.211	8.05	
2,4-Dimethylphenol	1	0		6.63	52.17	50	20	0.2	0.320	0.334	4.34	
Benzoic Acid	1	0		6.68	20.30	50	**	0.233	0.086		59.41	
bis(2-Chloroethoxy)methane	1	0		6.70	57.91	50	20	0.3	0.383	0.444	15.83	
2,4-Dichlorophenol	1	0		6.79	50.10	50	20	0.2	0.306	0.306	0.21	
1,2,4-Trichlorobenzene	1	0		6.85	49.19	50	**	0.334	0.329		1.62	
Naphthalene	1	0		6.91	52.78	50	20	0.7	1.040	1.098	5.56	
4-Chloroaniline	1	0		6.95	67.10	50	20	0.01	0.418	0.561	34.19	C1
Hexachlorobutadiene	1	0		7.00	46.67	50	20	0.01	0.188	0.175	6.66	
Caprolactam	1	0		7.22	53.88	50	20	0.01	0.118	0.128	7.75	
4-Chloro-3-methylphenol	1	0		7.32	50.86	50	20	0.2	0.308	0.313	1.72	
2-Methylnaphthalene	1	0		7.45	52.72	50	**	0.4	0.702	0.740	5.44	
1-Methylnaphthalene	1	0		7.53	53.08	50	**	0.4	0.662	0.703	6.16	
Methylnaphthalenes	1	0		7.45	54.28	50	**			0.740	8.55	
1,1'-Biphenyl	1	0		7.83	52.12	50	20	0.01	0.825	0.860	4.24	
Acenaphthene-d10	1	0	I	8.34	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.59	50.37	50	20	0.01	0.627	0.632	0.74	
Hexachlorocyclopentadiene	1	0		7.58	34.89	50	20	0.05	0.351	0.245	30.23	C1
2,4,6-Trichlorophenol	1	0		7.68	50.02	50	20	0.2	0.417	0.417	0.04	
2,4,5-Trichlorophenol	1	0		7.71	51.92	50	20	0.2	0.434	0.451	3.84	
2-Fluorobiphenyl	1	0	S	7.74	25.97	25	**	1.334	1.386		3.90	
2-Chloronaphthalene	1	0		7.85	53.06	50	20	0.8	1.201	1.274	6.12	
1,4-Dimethylnaphthalene	1	0		8.14	55.07	50	**	0.879	0.968		10.13	
Dimethylnaphthalenes	1	0		8.14	55.07	50	20			0.968	10.13	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 1 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form 7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 2:23:00 PData File: 7M109854.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	52.68	50	**		0.859	0.905	5.37	
2-Nitroaniline	1	0		7.93	60.56	50	20	0.01	0.367	0.444	21.12	C1
Coumarin	1	0		8.12	55.52		**		0.454			
Acenaphthylene	1	0		8.22	54.50	50	20	0.9	1.762	1.920	9.00	
Dimethylphthalate	1	0		8.07	53.28	50	20	0.01	1.380	1.470	6.56	
2,6-Dinitrotoluene	1	0		8.13	55.34	50	20	0.2	0.313	0.346	10.68	
Acenaphthene	1	0		8.37	54.98	50	20	0.9	1.171	1.288	9.96	
3-Nitroaniline	1	0		8.29	54.26	50	20	0.01	0.349	0.379	8.51	
2,4-Dinitrophenol	1	0		8.38	50.08	50	20	0.2	0.184	0.184	0.16	
Dibenzofuran	1	0		8.53	52.88	50	20	0.8	1.723	1.823	5.77	
2,4-Dinitrotoluene	1	0		8.50	54.23	50	20	0.2	0.433	0.469	8.46	
4-Nitrophenol	1	0		8.43	47.38	50	20	0.01	0.248	0.235	5.25	
2,3,4,6-Tetrachlorophenol	1	0		8.63	50.84	50	20	0.01	0.376	0.383	1.69	
Fluorene	1	0		8.86	54.99	50	20	0.9	1.381	1.519	9.99	
4-Chlorophenyl-phenylether	1	0		8.84	51.50	50	20	0.4	0.694	0.715	2.99	
Diethylphthalate	1	0		8.72	54.13	50	20	0.01	1.375	1.488	8.26	
4-Nitroaniline	1	0		8.86	55.99	50	20	0.01	0.371	0.415	11.98	
Atrazine	1	0		9.49	49.53	50	20	0.01	0.455	0.451	0.93	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	52.25	50	20	0.01	0.133	0.139	4.50	
n-Nitrosodiphenylamine	1	0		8.96	54.40	50	20	0.01	0.622	0.676	8.80	
2,4,6-Tribromophenol	1	0	S	9.09	48.91	50	**		0.103	0.101	2.18	
1,2-Diphenylhydrazine	1	0		9.00	60.55	50	**		0.652	0.789	21.10	
4-Bromophenyl-phenylether	1	0		9.34	51.35	50	20	0.1	0.219	0.225	2.70	
Hexachlorobenzene	1	0		9.41	50.63	50	20	0.1	0.234	0.237	1.26	
N-Octadecane	1	0		9.67	68.27	50	**	0.05	0.299	0.408	36.53	
Pentachlorophenol	1	0		9.61	41.00	50	20	0.05	0.154	0.127	18.01	
Phenanthrene	1	0		9.84	53.89	50	20	0.7	1.051	1.132	7.77	
Anthracene	1	0		9.90	54.32	50	20	0.7	1.079	1.172	8.64	
Carbazole	1	0		10.07	54.76	50	20	0.01	0.990	1.084	9.51	
Di-n-butylphthalate	1	0		10.45	55.88	50	20	0.01	1.212	1.355	11.76	
Fluoranthene	1	0		11.19	53.21	50	20	0.6	1.193	1.269	6.41	
Chrysene-d12	1	0	I	12.89	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.45	54.95	50	20	0.6	1.247	1.370	9.90	
Benzidine	1	0		11.34	42.37	50	**		0.737	0.625	15.26	
Terphenyl-d14	1	0	S	11.64	26.11	25	**		0.637	0.665	4.43	
4,4'-DDE	1	0		11.57	53.46		**		0.357			
4,4'-DDD	1	0		11.97	56.06		**		0.515			
Butylbenzylphthalate	1	0		12.22	57.23	50	20	0.01	0.564	0.645	14.46	
4,4'-DDT	1	0		12.33	56.92		**		0.581			
3,3'-Dichlorobenzidine	1	0		12.85	53.39	50	20	0.01	0.457	0.488	6.78	
Benzo[a]anthracene	1	0		12.88	53.17	50	20	0.8	1.173	1.248	6.34	
Chrysene	1	0		12.92	55.29	50	20	0.7	1.086	1.201	10.57	
bis(2-Ethylhexyl)phthalate	1	0		12.92	57.60	50	20	0.01	0.757	0.872	15.20	
Perylene-d12	1	0	I	14.54	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.67	58.72	50	20	0.01	1.277	1.500	17.44	
Benzo[b]fluoranthene	1	0		14.10	57.68	50	20	0.7	1.130	1.304	15.35	
Benzo[k]fluoranthene	1	0		14.13	54.80	50	20	0.7	1.059	1.161	9.60	
Benzo[a]pyrene	1	0		14.47	54.67	50	20	0.7	1.003	1.097	9.35	
Indeno[1,2,3-cd]pyrene	1	0		15.93	54.79	50	20	0.5	1.122	1.230	9.58	
Dibenzo[a,h]anthracene	1	0		15.95	54.49	50	20	0.4	0.937	1.021	8.97	
Benzo[g,h,i]perylene	1	0		16.33	53.72	50	20	0.5	0.933	1.002	7.43	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 2 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/5/2020 2:23:00 PData File: 7M109854.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Methoxychlor	1	100		0.00	0.00	10	**		0.000	100.00		
Endrin	1	100		0.00	0.00	50	**		0.000	100.00		
2,4 Diaminotoluene	1	100		0.00	0.00	50	**		0.000	100.00		
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**		0.000	100.00		
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.682	0.000	100.00		
Heptachlor	1	100		0.00	0.00	10	**		0.000	100.00		
gamma-BHC	1	100		0.00	0.00	10	**		0.000	100.00		
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.879	0.000	100.00		
1,4-Dioxane-d8	1	100		0.00	0.00	40	**		0.000	100.00		
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**		0.000	100.00		
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**		0.000	100.00		
Toluene Diisocyanate	1	100		0.00	0.00	50	**		0.000	100.00		
4-Methylphenol	1	100		0.00	0.00	50	**	0.6	0.000	100.00		
Heptachlor epoxide	1	100		0.00	0.00	10	**		0.000	100.00		

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 3 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 9:15:00 AData File: 7M109885.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.69	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.73	49.60	50	**	1.035	1.027		0.81	
Pyridine	1	0		3.21	51.76	50	**	2.335	2.417		3.52	
N-Nitrosodimethylamine	1	0		3.15	58.37	50	**	1.466	1.712		16.74	
2-Fluorophenol	1	0	S	4.72	51.52	50	**	2.355	2.427		3.05	
Benzaldehyde	1	0		5.52	53.03	50	20	0.01	2.298	2.438	6.07	
Aniline	1	0		5.61	51.47	50	**	3.788	3.899		2.95	
Pentachloroethane	1	0		5.65	49.46	50	**	0.05	0.836	0.827	1.08	
bis(2-Chloroethyl)ether	1	0		5.67	54.46	50	20	0.7	2.509	2.669	8.92	
Phenol-d5	1	0	S	5.58	53.90	50	**	2.830	3.051		7.80	
Phenol	1	0		5.60	53.47	50	20	0.8	3.460	3.700	6.93	
2-Chlorophenol	1	0		5.72	50.96	50	20	0.8	2.749	2.802	1.93	
N-Decane	1	0		5.76	58.29	50	**	0.05	1.917	2.235	16.58	
1,3-Dichlorobenzene	1	0		5.85	49.34	50	**	2.994	2.955		1.32	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	50.92	50	20		1.484	1.512	1.84	
1,2-Dichlorobenzene	1	0		6.03	51.64	50	**	1.410	1.456		3.29	
Benzyl alcohol	1	0		6.01	44.92	50	**	0.837	0.752		10.16	
bis(2-chloroisopropyl)ether	1	0		6.11	64.78	50	20	0.01	1.103	1.429	29.55	C1
2-Methylphenol	1	0		6.10	55.68	50	20	0.7	1.172	1.305	11.37	
Acetophenone	1	0		6.22	54.49	50	20	0.01	1.786	1.947	8.97	
Hexachloroethane	1	0		6.31	51.53	50	20	0.3	0.571	0.589	3.06	
N-Nitroso-di-n-propylamine	1	0		6.22	58.66	50	20	0.5	0.843	0.989	17.31	
3&4-Methylphenol	1	0		6.22	54.16	50	20		1.200	1.300	8.32	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.12	25	**	0.159	0.160		0.49	
Nitrobenzene	1	0		6.35	53.51	50	20	0.2	0.343	0.367	7.02	
Isophorone	1	0		6.54	54.22	50	20	0.4	0.627	0.680	8.45	
2-Nitrophenol	1	0		6.60	51.48	50	20	0.1	0.195	0.201	2.97	
2,4-Dimethylphenol	1	0		6.63	50.02	50	20	0.2	0.320	0.320	0.04	
Benzoic Acid	1	0		6.69	29.69	50	**	0.233	0.128		40.63	
bis(2-Chloroethoxy)methane	1	0		6.70	54.59	50	20	0.3	0.383	0.418	9.17	
2,4-Dichlorophenol	1	0		6.79	48.70	50	20	0.2	0.306	0.298	2.61	
1,2,4-Trichlorobenzene	1	0		6.85	47.40	50	**	0.334	0.317		5.20	
Naphthalene	1	0		6.91	50.51	50	20	0.7	1.040	1.051	1.02	
4-Chloroaniline	1	0		6.95	48.47	50	20	0.01	0.418	0.405	3.05	
Hexachlorobutadiene	1	0		7.00	45.61	50	20	0.01	0.188	0.171	8.78	
Caprolactam	1	0		7.22	52.39	50	20	0.01	0.118	0.124	4.78	
4-Chloro-3-methylphenol	1	0		7.32	49.58	50	20	0.2	0.308	0.305	0.83	
2-Methylnaphthalene	1	0		7.45	50.49	50	**	0.4	0.702	0.709	0.99	
1-Methylnaphthalene	1	0		7.53	50.28	50	**	0.4	0.662	0.666	0.56	
Methylnaphthalenes	1	0		7.45	100.77	50	**			1.374	101.54	
1,1'-Biphenyl	1	0		7.83	49.75	50	20	0.01	0.825	0.821	0.51	
Acenaphthene-d10	1	0	I	8.34	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.59	49.55	50	20	0.01	0.627	0.622	0.89	
Hexachlorocyclopentadiene	1	0		7.58	32.71	50	20	0.05	0.351	0.230	34.57	C1
2,4,6-Trichlorophenol	1	0		7.68	48.30	50	20	0.2	0.417	0.402	3.41	
2,4,5-Trichlorophenol	1	0		7.72	49.64	50	20	0.2	0.434	0.431	0.72	
2-Fluorobiphenyl	1	0	S	7.74	25.05	25	**	1.334	1.337		0.20	
2-Chloronaphthalene	1	0		7.85	51.75	50	20	0.8	1.201	1.242	3.49	
1,4-Dimethylnaphthalene	1	0		8.14	52.13	50	**	0.879	0.916		4.26	
Dimethylnaphthalenes	1	0		8.14	52.13	50	20			0.916	4.26	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limitsPage 1 of 3  
\*\* - No limit specified in methodNote: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 9:15:00 AData File: 7M109885.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	51.64	50	**	0.859	0.887		3.28	
2-Nitroaniline	1	0		7.93	57.61	50	20	0.01	0.367	0.422	15.22	
Coumarin	1	0		8.12	53.80		**	0.454				
Acenaphthylene	1	0		8.22	52.17	50	20	0.9	1.762	1.838	4.33	
Dimethylphthalate	1	0		8.07	51.75	50	20	0.01	1.380	1.428	3.51	
2,6-Dinitrotoluene	1	0		8.13	52.76	50	20	0.2	0.313	0.330	5.51	
Acenaphthene	1	0		8.37	52.63	50	20	0.9	1.171	1.233	5.27	
3-Nitroaniline	1	0		8.29	52.76	50	20	0.01	0.349	0.369	5.53	
2,4-Dinitrophenol	1	0		8.38	50.19	50	20	0.2	0.184	0.184	0.37	
Dibenzofuran	1	0		8.53	51.07	50	20	0.8	1.723	1.760	2.15	
2,4-Dinitrotoluene	1	0		8.50	53.90	50	20	0.2	0.433	0.467	7.81	
4-Nitrophenol	1	0		8.43	45.43	50	20	0.01	0.248	0.225	9.14	
2,3,4,6-Tetrachlorophenol	1	0		8.64	49.25	50	20	0.01	0.376	0.371	1.51	
Fluorene	1	0		8.86	52.78	50	20	0.9	1.381	1.457	5.57	
4-Chlorophenyl-phenylether	1	0		8.84	50.86	50	20	0.4	0.694	0.706	1.72	
Diethylphthalate	1	0		8.72	52.45	50	20	0.01	1.375	1.442	4.90	
4-Nitroaniline	1	0		8.86	53.98	50	20	0.01	0.371	0.400	7.96	
Atrazine	1	0		9.50	49.01	50	20	0.01	0.455	0.446	1.98	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	52.16	50	20	0.01	0.133	0.139	4.32	
n-Nitrosodiphenylamine	1	0		8.96	52.45	50	20	0.01	0.622	0.652	4.90	
2,4,6-Tribromophenol	1	0	S	9.09	48.69	50	**	0.103	0.100		2.63	
1,2-Diphenylhydrazine	1	0		9.00	55.98	50	**	0.652	0.730		11.95	
4-Bromophenyl-phenylether	1	0		9.34	49.32	50	20	0.1	0.219	0.216	1.37	
Hexachlorobenzene	1	0		9.41	48.71	50	20	0.1	0.234	0.228	2.57	
N-Octadecane	1	0		9.67	63.20	50	**	0.05	0.299	0.378	26.40	
Pentachlorophenol	1	0		9.61	41.43	50	20	0.05	0.154	0.128	17.14	
Phenanthrene	1	0		9.85	51.93	50	20	0.7	1.051	1.091	3.87	
Anthracene	1	0		9.90	51.76	50	20	0.7	1.079	1.117	3.53	
Carbazole	1	0		10.07	52.49	50	20	0.01	0.990	1.039	4.98	
Di-n-butylphthalate	1	0		10.45	53.21	50	20	0.01	1.212	1.290	6.41	
Fluoranthene	1	0		11.19	50.50	50	20	0.6	1.193	1.204	1.00	
Chrysene-d12	1	0	I	12.90	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.46	53.71	50	20	0.6	1.247	1.340	7.43	
Benzidine	1	0		11.34	43.00	50	**	0.737	0.634		14.01	
Terphenyl-d14	1	0	S	11.64	26.06	25	**	0.637	0.664		4.24	
4,4'-DDE	1	0		11.57	51.87		**	0.357				
4,4'-DDD	1	0		11.98	53.17		**	0.515				
Butylbenzylphthalate	1	0		12.22	54.86	50	20	0.01	0.564	0.619	9.71	
4,4'-DDT	1	0		12.33	54.79		**	0.581				
3,3'-Dichlorobenzidine	1	0		12.85	52.35	50	20	0.01	0.457	0.479	4.69	
Benzo[a]anthracene	1	0		12.89	51.50	50	20	0.8	1.173	1.208	3.01	
Chrysene	1	0		12.93	52.98	50	20	0.7	1.086	1.150	5.95	
bis(2-Ethylhexyl)phthalate	1	0		12.92	56.29	50	20	0.01	0.757	0.852	12.59	
Perylene-d12	1	0	I	14.54	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.67	55.49	50	20	0.01	1.277	1.418	10.99	
Benzo[b]fluoranthene	1	0		14.11	50.79	50	20	0.7	1.130	1.148	1.59	
Benzo[k]fluoranthene	1	0		14.14	51.42	50	20	0.7	1.059	1.089	2.84	
Benzo[a]pyrene	1	0		14.48	51.60	50	20	0.7	1.003	1.035	3.19	
Indeno[1,2,3-cd]pyrene	1	0		15.94	53.08	50	20	0.5	1.122	1.191	6.16	
Dibenzo[a,h]anthracene	1	0		15.96	52.90	50	20	0.4	0.937	0.992	5.80	
Benzo[g,h,i]perylene	1	0		16.34	51.97	50	20	0.5	0.933	0.970	3.94	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 9:15:00 AData File: 7M109885.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Heptachlor	1	100		0.00	0.00	10	**		0.000	100.00		
Toluene Diisocyanate	1	100		0.00	0.00	50	**		0.000	100.00		
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**		0.000	100.00		
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.682	0.000	100.00		
Methoxychlor	1	100		0.00	0.00	10	**		0.000	100.00		
1,4-Dioxane-d8	1	100		0.00	0.00	40	**		0.000	100.00		
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**		0.000	100.00		
2,4 Diaminotoluene	1	100		0.00	0.00	50	**		0.000	100.00		
gamma-BHC	1	100		0.00	0.00	10	**		0.000	100.00		
Endrin	1	100		0.00	0.00	50	**		0.000	100.00		
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.879	0.000	100.00		
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**		0.000	100.00		
4-Methylphenol	1	100		0.00	0.00	50	**	0.6	0.000	100.00		
Heptachlor epoxide	1	100		0.00	0.00	10	**		0.000	100.00		

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 3 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 7M109440.D

Analysis Date/Time: 09/17/20 13:20

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
73342	2.70	143111	5.90	535871	6.90	299982	8.35	591079	9.83	566863	12.89	606663	14.54	
Eval File Area Limit:	36671-146684	71556-286222	267936-1071742	149991-599964	295540-1182158	283432-1133726	303332-1213326							
Eval File Rt Limit:	2.2-3.2	5.4-6.4	6.4-7.4	7.85-8.85	9.33-10.33	12.39-13.39	14.04-15.04							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M109432.D	CAL BNA@2PPM	69531	2.70	148428	5.90	561422	6.90	316478	8.35	606550	9.82	573487	12.89	547194	14.53
7M109433.D	CAL BNA@10PPM	64785	2.70	134629	5.89	507069	6.90	279139	8.35	539654	9.82	514810	12.89	506378	14.53
7M109434.D	CAL BNA@196PPM	67077	2.70	128427	5.90	488036	6.91	277961	8.35	551065	9.83	511721	12.90	549912	14.54
7M109435.D	CAL BNA@160PPM	67760	2.70	136063	5.90	515749	6.91	291779	8.35	586013	9.83	545173	12.90	587760	14.54
7M109436.D	CAL BNA@120PPM	69954	2.70	139227	5.90	527795	6.90	296088	8.35	589714	9.83	559462	12.90	599997	14.54
7M109437.D	CAL BNA@80PPM	70857	2.70	145864	5.90	544080	6.91	297856	8.36	591364	9.83	573376	12.89	606957	14.54
7M109438.D	CAL BNA@20PPM	72238	2.70	147645	5.90	554057	6.90	303248	8.35	586639	9.82	574202	12.89	588787	14.54
7M109439.D	CAL BNA@0.5PPM	76478	2.70	159729	5.89	603591	6.91	332270	8.35	642708	9.83	623159	12.89	617986	14.56
7M109440.D	CAL BNA@50PPM	73342	2.70	143111	5.90	535871	6.90	299982	8.35	591079	9.83	566863	12.89	606663	14.54
7M109441.D	ICV BNA@50PPM	67053	2.70	134202	5.90	503057	6.90	276686	8.35	543669	9.83	533914	12.89	555170	14.54

11 =	1,4-Dioxane-d8(N/T)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORMB**

Internal Standard Areas

Evaluation Std Data File: 9M101321.D

Method: EPA 8270E

Analysis Date/Time: 09/17/20 13:22

Lab File ID: CAL BNA@50PPM

Eval File Area/RT	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53
Eval File Area Limit:	26070-104282		48526-194106		184986-739944		96780-387120		187272-749086		187988-751954		193707-774828	
Eval File Rt Limit:	2.2-3.2		5.4-6.4		6.41-7.41		7.85-8.85		9.32-10.32		12.39-13.39		14.03-15.03	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101313.D	CAL BNA@10PPM	51565	2.70	94603	5.90	357644	6.91	186206	8.35	356949	9.82	362365	12.89	363176	14.52
9M101314.D	CAL BNA@2PPM	57993	2.71	109516	5.90	415864	6.91	224715	8.35	427849	9.82	428070	12.89	441726	14.52
9M101315.D	CAL BNA@196PPM	54800	2.71	98295	5.91	370914	6.91	198313	8.35	385348	9.83	372874	12.90	404382	14.54
9M101316.D	CAL BNA@160PPM	54281	2.70	99671	5.91	380119	6.91	201097	8.35	386668	9.82	376869	12.90	404156	14.54
9M101317.D	CAL BNA@120PPM	53716	2.70	100690	5.90	388633	6.91	204304	8.35	396990	9.82	389040	12.90	411181	14.53
9M101318.D	CAL BNA@80PPM	50413	2.70	96900	5.90	367645	6.91	189022	8.35	364874	9.82	368614	12.89	384858	14.53
9M101319.D	CAL BNA@20PPM	50283	2.70	98086	5.90	373409	6.91	195446	8.35	372145	9.82	381268	12.89	390149	14.53
9M101320.D	CAL BNA@0.5PPM	54868	2.70	105764	5.90	401840	6.91	207520	8.35	400507	9.82	398325	12.89	412513	14.52
9M101321.D	CAL BNA@50PPM	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53
9M101322.D	ICV BNA@50PPM	46870	2.70	89922	5.90	342712	6.91	179589	8.35	348639	9.82	350075	12.89	359279	14.54
9M101323.D	SMB88017	49284	2.68	94546	5.90	357728	6.91	185930	8.35	361831	9.82	347985	12.89	341541	14.52
9M101324.D	SMB88018	45386	2.68	84733	5.90	321859	6.91	165009	8.35	323960	9.82	309160	12.88	301351	14.54
9M101326.D	88018	51046	2.68	92137	5.91	348476	6.93	179935	8.38	346012	9.84	345538	12.91	349749	14.58

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 9M101531.D

Analysis Date/Time: 10/05/20 08:52

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

4  
2  
0  
0  
2  
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Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
65105	2.71	119885	5.90	461983	6.91	239583	8.35	457492	9.82	462375	12.88	483656	14.51	
Eval File Area Limit:	32552-130210	59942-239770	230992-923966	119792-479166	228746-914984	231188-924750	241828-967312							
Eval File RT Limit:	2.21-3.21	5.4-6.4	6.41-7.41	7.85-8.85	9.32-10.32	12.38-13.38	14.01-15.01							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101532.D	SMB88130(MS)	53806	2.69	96572	5.90	368822	6.92	189186	8.37	358445	9.83	357125	12.89	353175	14.57
9M101533.D	SMB88131(MS)	48079	2.68	86973	5.90	332718	6.91	173758	8.34	331275	9.82	329856	12.88	328524	14.52
9M101534.D	SMB88130	49594	2.69	90885	5.90	344510	6.91	176047	8.34	344433	9.82	324771	12.88	322191	14.51
9M101535.D	SMB88131	49814	2.69	91840	5.90	345735	6.91	177057	8.34	344028	9.82	328824	12.88	320931	14.51
9M101536.D	PEST MIX@50	62302	2.71	114423	5.90	435540	6.92	224827	8.36	434485	9.83	420707	12.88	414737	14.53
9M101537.D	BENZALDEHYDE	59207	2.70	109480	5.90	409281	6.91	212137	8.34	412363	9.82	392719	12.88	394091	14.51
9M101538.D	EXT MIX 1ST	62406	2.71	115890	5.90	440134	6.91	233916	8.35	455575	9.82	433921	12.88	435348	14.52
9M101539.D	EXT MIX 2ST	61863	2.71	113399	5.90	429558	6.91	223874	8.35	437158	9.82	411076	12.88	402448	14.52
9M101540.D	AD19540-002(R)	55865	2.68	101694	5.90	383591	6.91	198633	8.34	381877	9.82	364232	12.88	353248	14.51
9M101541.D	AD19587-004	55046	2.68	100537	5.90	380382	6.91	200151	8.34	383916	9.82	364894	12.88	356488	14.51
9M101542.D	AD19587-004(MS)	54752	2.70	97303	5.90	365617	6.91	192345	8.35	361810	9.82	357957	12.88	358978	14.52
9M101543.D	AD19587-004(MSD)	54395	2.70	96549	5.90	365321	6.91	191480	8.35	365053	9.82	362200	12.88	362771	14.51

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 7M109840.D

Method: EPA 8270E

Analysis Date/Time: 10/05/20 08:44

Lab File ID: CAL BNA@50PPM

Eval File Area/RT:	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	97949	2.69	180878	5.90	689370	6.90	365958	8.34	708422	9.82	662824	12.89	682268	14.54
Eval File Area Limit:	48974-195898		90439-361756		344685-1378740		182979-731916		354211-1416844		331412-1325648		341134-1364536	
Eval File Rt Limit:	2.19-3.19		5.4-6.4		6.4-7.4		7.84-8.84		9.32-10.32		12.39-13.39		14.04-15.04	

Data File	Sample#	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area
7M109841.D	AD19515-005	82133	2.68	149669	5.90	581634	6.89	191756	8.34	531685	9.82	296579	12.89	6408	14.54
7M109842.D	AD19451-004	71283	2.68	140040	5.90	545937	6.89	284669	8.34	542110	9.82	487627	12.89	409996	14.54
7M109843.D	AD19451-005	74016	2.68	142877	5.89	551741	6.89	287214	8.34	547366	9.82	486057	12.89	441123	14.54
7M109844.D	AD19451-006	77515	2.68	153084	5.89	589753	6.89	306656	8.34	581987	9.82	506861	12.89	472619	14.54
7M109845.D	SMB88130	77260	2.68	140606	5.89	537431	6.89	276316	8.34	521492	9.82	461150	12.89	437220	14.54
7M109846.D	AD19265-002(3X)	81318	2.70	149161	5.90	564166	6.89	291481	8.34	542836	9.82	465541	12.89	437293	14.54
7M109847.D	AD19265-002	80776	2.68	148910	5.89	577257	6.89	296743	8.34	545085	9.82	447707	12.89	424925	14.54
7M109848.D	AD19414-003(3X)	83338	2.69	170698	5.90	644525	6.89	328428	8.34	573484	9.82	527304	12.90	536485	14.56
7M109849.D	AD19451-007	72277	2.70	154129	5.90	600547	6.89	308080	8.34	551343	9.82	462460	12.89	465774	14.54
7M109850.D	AD19501-001(R)	73346	2.69	155836	5.89	605964	6.89	316300	8.34	575569	9.82	478277	12.89	453961	14.54
7M109851.D	AD19501-003(R)	79543	2.69	163983	5.89	646828	6.89	331604	8.34	625221	9.82	528856	12.89	480380	14.54
7M109852.D	AD19506-002(R)	85144	2.69	170535	5.89	665669	6.89	342053	8.34	639604	9.82	539083	12.89	494301	14.54

11 =	1,4-Dioxane-d8(NT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt

A - Indicates the compound failed the internal standard area criteria

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 7M1098854.D

Analysis Date/Time: 10/05/20 14:23

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

Eval File Area/RT:	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
85650	2.69	156565	5.90	614305	6.89	327784	8.34	637192	9.82	583707	12.89	602390	14.54	
Eval File Area Limit:	42825-171300	78282-313130	307152-1222610	163892-655568	318596-1274384	291854-1167414	301195-1204780							
Eval File Rt Limit:	2.19-3.19	5.4-6.4	6.39-7.39	7.84-8.84	9.32-10.32	12.39-13.39	14.04-15.04							

Data File	Sample#	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area
7M1098855.D	SMB88131	76069	2.68	142494	5.89	546364	6.89	286125	8.34	548215	9.82	495110	12.89	464138	14.53				
7M1098856.D	AD19506-004(R)	85253	2.68	163102	5.89	642717	6.89	334603	8.34	632581	9.82	552559	12.89	516215	14.54				
7M1098857.D	AD19505-002(R)	81152	2.68	162841	5.89	637072	6.89	336948	8.34	626607	9.82	542260	12.89	510594	14.54				
7M1098858.D	AD19505-004(R)	83559	2.68	164721	5.89	645144	6.89	338771	8.34	629794	9.82	537771	12.89	499968	14.53				
7M1098859.D	AD19507-006(R)	81889	2.68	168915	5.89	652968	6.89	335292	8.34	634376	9.82	533513	12.89	492803	14.54				
7M109860.D	AD19510-006(R)	82883	2.68	167501	5.90	642857	6.89	332096	8.34	589801	9.82	482028	12.89	502539	14.54				
7M109861.D	AD19509-006(3X)(R)	94004	2.69	195426	5.90	734107	6.89	375549	8.34	653912	9.82	528235	12.89	543075	14.54				
7M109862.D	AD19515-005(R)	88196	2.68	174686	5.90	679158	6.89	347617	8.34	615505	9.82	476149	12.89	473488	14.54				
7M109863.D	AD19515-004(R)	83303	2.70	163501	5.89	613909	6.89	317066	8.34	576402	9.82	435133	12.89	426012	14.54				
7M109864.D	19513-003(R)	90942	2.69	175902	5.89	664455	6.89	341195	8.34	615293	9.82	482755	12.89	486358	14.54				
7M109865.D	AD19513-004(R)	88789	2.68	175884	5.89	666828	6.89	340008	8.34	590550	9.82	481784	12.89	478247	14.54				
7M109866.D	AD19587-001	82647	2.68	161160	5.89	620518	6.89	313260	8.34	560532	9.82	434137	12.89	421659	14.54				
7M109867.D	AD19587-003	90755	2.68	174743	5.89	651083	6.89	311969	8.34	578793	9.82	498191	12.89	464676	14.54				
7M109868.D	AD19587-005	84124	2.69	164584	5.90	621697	6.89	309133	8.34	555063	9.82	435479	12.89	418140	14.54				
7M109869.D	AD19587-006	88246	2.68	173291	5.90	654189	6.89	336173	8.34	608392	9.82	483257	12.89	458526	14.54				
7M109870.D	AD19587-002(5X)	84615	2.70	166519	5.90	625518	6.89	322974	8.34	590145	9.82	460773	12.89	434238	14.54				
7M109871.D	AD19560-001(5X)	90464	2.69	178782	5.90	684578	6.89	349074	8.34	610232	9.82	490374	12.89	472219	14.54				
7M109872.D	AD19561-008(5X)	88094	2.70	173682	5.89	644940	6.89	323908	8.34	574072	9.82	502469	12.90	484464	14.54				
7M109873.D	AD19596-001(5X)	85410	2.70	168376	5.90	606003	6.89	302688	8.34	562361	9.82	477309	12.89	459031	14.54				
7M109874.D	AD19443-002(3X)	82675	2.69	154329	5.90	522398	6.90	320276	8.35	519978	9.84	484559	12.90	457863	14.54				
7M109875.D	AD19479-001	82457	2.69	158148	5.89	606772	6.89	309832	8.34	561172	9.82	440553	12.89	409159	14.54				
7M109876.D	AD19479-003	83332	2.68	165188	5.90	626415	6.89	324415	8.34	575402	9.82	457582	12.89	413308	14.54				
7M109877.D	AD19479-005	77148	2.68	152621	5.90	584803	6.89	298777	8.34	538286	9.82	426281	12.89	380114	14.54				
7M109878.D	AD19479-007	72871	2.68	144393	5.90	553167	6.89	281015	8.34	511208	9.82	409452	12.89	356768	14.54				
7M109879.D	AD19479-009	82445	2.68	158438	5.89	608113	6.89	314636	8.34	568431	9.82	451204	12.89	397848	14.54				
7M109880.D	AD19479-011	87367	2.69	174584	5.90	663283	6.89	336093	8.34	608064	9.82	481069	12.89	427798	14.54				
7M109881.D	AD19479-013	88377	2.68	174784	5.90	666794	6.89	338694	8.34	601200	9.82	484798	12.89	433232	14.54				
7M109882.D	AD19479-015(5X)	88279	2.70	173638	5.90	664401	6.89	340306	8.34	620956	9.82	476418	12.89	426238	14.54				
7M109883.D	AD19479-017	77171	2.69	151157	5.90	569885	6.89	286841	8.34	517556	9.82	410089	12.89	354317	14.54				

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 7M109885.D

Analysis Date/Time: 10/06/20 09:15

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

Data File	Sample#	11		12		13		14		15		16		17	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M109886.D	AD19479-019	83793	2.68	160154	5.89	618098	6.89	321180	8.34	597610	9.82	505526	12.89	468940	14.54
7M109887.D	AD19479-015(3X)	82337	2.69	160985	5.89	615133	6.89	321469	8.34	588836	9.82	456084	12.89	460132	14.54
7M109888.D	19515-004	0	0.00R	0	0.00R	0	0.00R	0	0.00R	0	0.00R	0	0.00R	0	0.00R
7M109889.D	AD19515-004	73157	2.68	141708	5.90	545756	6.89	243714	8.34	520005	9.82	400130	12.89	195413	14.54
7M109890.D	AD19587-002	85281	2.69	161933	5.89	620364	6.90	316838	8.34	574926	9.82	453572	12.89	458925	14.56
7M109891.D	AD19414-003	73559	2.69	139422	5.89	523742	6.90	262216	8.35	455980	9.83	437385	12.92	459276	14.61
7M109892.D	19513-003	93369	2.69	201422	5.89	781157	6.91	395073	8.35	691965	9.83	597970	12.90	615322	14.57
7M109893.D	AD19560-001(25X)	90485	2.70	185660	5.89	710563	6.91	366491	8.35	653476	9.83	520753	12.90	537754	14.57
7M109894.D	AD19560-001(25X)(M)	85726	2.70	178711	5.90	671504	6.90	353480	8.35	629315	9.83	479788	12.89	491237	14.56
7M109895.D	AD19515-003(R)	82798	2.69	165731	5.90	635241	6.90	329877	8.35	594494	9.83	455790	12.89	453165	14.57
7M109896.D	AD19560-001(25X)(M)	85827	2.71	177650	5.90	673748	6.90	351038	8.35	630572	9.82	489758	12.89	486851	14.55

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## **Metal Data**

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-001  
Client Id: HSI-SS-01 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 90  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	19	220	3200	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7440-39-3	Barium	0.75	11	21	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7440-70-2	Calcium	110	1100	1700	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7440-47-3	Chromium	0.74	5.6	19B	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7440-48-4	Cobalt	0.79	2.8	0.95J	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7440-50-8	Copper	0.68	5.6	14B	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7439-89-6	Iron	15	220	6500B	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7439-92-1	Lead	0.68	5.6	17	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7439-95-4	Magnesium	22	560	450J	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7439-96-5	Manganese	0.71	11	50	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7439-97-6	Mercury	0.014	0.093	ND	1	0.15	25	09/30/20	85348	6287SMDL	16	CV	HGCV3A
7440-02-0	Nickel	1.2	5.6	3.5J	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A
7440-09-7	Potassium	110	560	150J	1	1	100	09/29/20	85348	287A4MDL	17	P	PEICPRAD4A
7440-23-5	Sodium	140	280	ND	1	1	100	09/29/20	85348	287A4MDL	17	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	43B	1	1	100	09/29/20	85348	287A3MDL	17	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-001  
Client Id: HSI-SS-01 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 90  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.025	0.89	0.13J	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7440-38-2	Arsenic	0.019	0.22	3.9B	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7440-41-7	Beryllium	0.017	0.22	0.18J	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7440-43-9	Cadmium	0.016	0.44	0.38J	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7782-49-2	Selenium	0.071	2.2	1.2JB	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7440-22-4	Silver	0.029	0.22	0.067JB	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7440-28-0	Thallium	0.020	0.44	0.10J	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.22	47B	1	0.5	100	10/01/20	85347	0120AMD	21		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS



**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-003  
Client Id: HSI-SS-02 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 91  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	18	220	3800	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7440-39-3	Barium	0.74	11	20	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7440-70-2	Calcium	110	1100	1600	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7440-47-3	Chromium	0.74	5.5	20B	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7440-48-4	Cobalt	0.78	2.7	1.4J	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7440-50-8	Copper	0.68	5.5	18B	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7439-89-6	Iron	15	220	6700B	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7439-92-1	Lead	0.68	5.5	23	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7439-95-4	Magnesium	21	550	540J	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7439-96-5	Manganese	0.71	11	61	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7439-97-6	Mercury	0.014	0.092	0.020J	1	0.15	25	09/30/20	85348	6287SMDL	26	CV	HGCV3A
7440-02-0	Nickel	1.2	5.5	4.5J	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A
7440-09-7	Potassium	110	550	160J	1	0.5	50	09/29/20	85348	287B4MDL	14	P	PEICPRAD4A
7440-23-5	Sodium	140	270	ND	1	0.5	50	09/29/20	85348	287B4MDL	14	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	29B	1	0.5	50	09/29/20	85348	287A3MDL	29	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-003  
Client Id: HSI-SS-02 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 91  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.025	0.88	0.11J	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7440-38-2	Arsenic	0.019	0.22	3.2B	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7440-41-7	Beryllium	0.017	0.22	0.18J	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7440-43-9	Cadmium	0.016	0.44	0.49	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7782-49-2	Selenium	0.070	2.2	1.4JB	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7440-22-4	Silver	0.029	0.22	0.048JB	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7440-28-0	Thallium	0.019	0.44	0.020J	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.22	18B	1	0.5	100	10/01/20	85347	0120AMD	34		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form 1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-005	% Solid: 82	Lab Name: Veritech	Nras No:
Client Id: HSI-SS-03 (0-0.5')	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 9/28/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	20	240	4000	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7440-39-3	Barium	0.82	12	22	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7440-70-2	Calcium	120	1200	1700	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7440-47-3	Chromium	0.82	6.1	23B	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7440-48-4	Cobalt	0.87	3.0	1.2J	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7440-50-8	Copper	0.75	6.1	9.2B	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7439-89-6	Iron	16	240	7100B	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7439-92-1	Lead	0.75	6.1	3.9J	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7439-95-4	Magnesium	24	610	560J	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7439-96-5	Manganese	0.78	12	54	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7439-97-6	Mercury	0.015	0.10	ND	1	0.15	25	09/30/20	85348	6287SMDL	27	CV	HGCV3A
7440-02-0	Nickel	1.3	6.1	3.0J	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A
7440-09-7	Potassium	120	610	180J	1	0.5	50	09/29/20	85348	287B4MDL	15	P	PEICPRAD4A
7440-23-5	Sodium	150	300	ND	1	0.5	50	09/29/20	85348	287B4MDL	15	P	PEICPRAD4A
7440-66-6	Zinc	1.8	12	22B	1	0.5	50	09/29/20	85348	287A3MDL	32	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-005  
Client Id: HSI-SS-03 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 82  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.027	0.98	ND	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7440-38-2	Arsenic	0.021	0.24	3.6B	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7440-41-7	Beryllium	0.019	0.24	0.19J	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7440-43-9	Cadmium	0.017	0.49	0.17J	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7782-49-2	Selenium	0.077	2.4	1.2JB	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7440-22-4	Silver	0.032	0.24	0.050JB	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7440-28-0	Thallium	0.022	0.49	0.026J	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA
7440-62-2	Vanadium	0.013	0.24	19B	1	0.5	100	10/01/20	85347	0120AMD	35		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-007	% Solid: 90	Lab Name: Veritech	Nras No:
Client Id: HSI-SS-04 (0-0.5')	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 9/28/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	19	220	6700	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7440-39-3	Barium	0.75	11	22	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7440-70-2	Calcium	110	1100	210J	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7440-47-3	Chromium	0.74	5.6	24B	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7440-48-4	Cobalt	0.79	2.8	1.5J	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7440-50-8	Copper	0.68	5.6	7.3B	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7439-89-6	Iron	15	220	11000B	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7439-92-1	Lead	0.68	5.6	7.1	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7439-95-4	Magnesium	22	560	680	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7439-96-5	Manganese	0.71	11	31	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7439-97-6	Mercury	0.014	0.093	ND	1	0.15	25	09/30/20	85348	6287SMDL	28	CV	HGCV3A
7440-02-0	Nickel	1.2	5.6	4.2J	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A
7440-09-7	Potassium	110	560	220J	1	0.5	50	09/29/20	85348	287B4MDL	16	P	PEICPRAD4A
7440-23-5	Sodium	140	280	ND	1	0.5	50	09/29/20	85348	287B4MDL	16	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	18B	1	0.5	50	09/29/20	85348	287A3MDL	35	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-007  
Client Id: HSI-SS-04 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 90  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.025	0.89	0.031J	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7440-38-2	Arsenic	0.019	0.22	7.1B	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7440-41-7	Beryllium	0.017	0.22	0.20J	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7440-43-9	Cadmium	0.016	0.44	0.15J	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7782-49-2	Selenium	0.071	2.2	0.88JB	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7440-22-4	Silver	0.029	0.22	0.037JB	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7440-28-0	Thallium	0.020	0.44	0.039J	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.22	22B	1	0.5	100	10/01/20	85347	0120AMD	36		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-009	% Solid: 87	Lab Name: Veritech	Nras No:
Client Id: HSI-SS-05 (0-0.5')	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 9/28/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	19	230	3300	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7440-39-3	Barium	0.78	11	15	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7440-70-2	Calcium	120	1100	190J	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7440-47-3	Chromium	0.77	5.7	20B	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7440-48-4	Cobalt	0.82	2.9	0.94J	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7440-50-8	Copper	0.71	5.7	13B	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7439-89-6	Iron	15	230	7000B	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7439-92-1	Lead	0.71	5.7	22	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7439-95-4	Magnesium	22	570	340J	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7439-96-5	Manganese	0.74	11	28	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7439-97-6	Mercury	0.015	0.096	ND	1	0.15	25	09/30/20	85348	6287SMDL	29	CV	HGCV3A
7440-02-0	Nickel	1.3	5.7	4.7J	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A
7440-09-7	Potassium	110	570	140J	1	0.5	50	09/29/20	85348	287B4MDL	17	P	PEICPRAD4A
7440-23-5	Sodium	140	290	ND	1	0.5	50	09/29/20	85348	287B4MDL	17	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	24B	1	0.5	50	09/29/20	85348	287A3MDL	36	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-009  
Client Id: HSI-SS-05 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 87  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.026	0.92	0.058J	1	0.5	100	10/01/20	85347	0120AMD	37		MSMS3_7700SWA
7440-38-2	Arsenic	0.020	0.23	3.0B	1	0.5	100	10/01/20	85347	0120AMD	37		MSMS3_7700SWA
7440-41-7	Beryllium	0.054	0.69	0.20J	3	0.5	100	10/01/20	85347	0120AMD	46		MSMS3_7700SWA
7440-43-9	Cadmium	0.016	0.46	0.50	1	0.5	100	10/01/20	85347	0120AMD	37		MSMS3_7700SWA
7782-49-2	Selenium	0.073	2.3	4.0B	1	0.5	100	10/01/20	85347	0120AMD	37		MSMS3_7700SWA
7440-22-4	Silver	0.030	0.23	0.061JB	1	0.5	100	10/01/20	85347	0120AMD	37		MSMS3_7700SWA
7440-28-0	Thallium	0.061	1.4	ND	3	0.5	100	10/01/20	85347	0120AMD	46		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.23	21B	1	0.5	100	10/01/20	85347	0120AMD	37		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS



**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-011      % Solid: 92      Lab Name: Veritech      Nras No:  
 Client Id: HSI-SS-06 (0-0.5')      Units: MG/KG      Lab Code:      Sdg No:  
 Matrix: SOIL      Date Rec: 9/28/2020      Contract:      Case No:  
 Level: LOW

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	18	220	5000	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7440-39-3	Barium	0.73	11	24	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7440-70-2	Calcium	110	1100	290J	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7440-47-3	Chromium	0.73	5.4	21B	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7440-48-4	Cobalt	0.77	2.7	1.5J	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7440-50-8	Copper	0.67	5.4	8.9B	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7439-89-6	Iron	14	220	9900B	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7439-92-1	Lead	0.67	5.4	15	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7439-95-4	Magnesium	21	540	510J	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7439-96-5	Manganese	0.70	11	37	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7439-97-6	Mercury	0.014	0.091	ND	1	0.15	25	09/30/20	85348	6287SMDL	30	CV	HGCV3A
7440-02-0	Nickel	1.2	5.4	3.8J	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A
7440-09-7	Potassium	110	540	150J	1	0.5	50	09/29/20	85348	287B4MDL	18	P	PEICPRAD4A
7440-23-5	Sodium	140	270	ND	1	0.5	50	09/29/20	85348	287B4MDL	18	P	PEICPRAD4A
7440-66-6	Zinc	1.6	11	25B	1	0.5	50	09/29/20	85348	287A3MDL	37	P	PEICP3A

Comments: \_\_\_\_\_  
 \_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
 P - ICP-AES  
 CV - Cold Vapor  
 MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-011  
Client Id: HSI-SS-06 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 92  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.024	0.87	0.053J	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7440-38-2	Arsenic	0.019	0.22	3.2B	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7440-41-7	Beryllium	0.017	0.22	0.18J	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7440-43-9	Cadmium	0.015	0.43	0.18J	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7782-49-2	Selenium	0.069	2.2	1.1JB	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7440-22-4	Silver	0.028	0.22	0.047JB	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7440-28-0	Thallium	0.019	0.43	0.035J	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.22	17B	1	0.5	100	10/01/20	85347	0120AMD	38		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-013  
Client Id: HSI-SS-07 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 82  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	20	240	3200	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7440-39-3	Barium	0.82	12	21	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7440-70-2	Calcium	120	1200	410J	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7440-47-3	Chromium	0.82	6.1	18B	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7440-48-4	Cobalt	0.87	3.0	1.6J	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7440-50-8	Copper	0.75	6.1	12B	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7439-89-6	Iron	16	240	14000B	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7439-92-1	Lead	0.75	6.1	22	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7439-95-4	Magnesium	24	610	300J	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7439-96-5	Manganese	0.78	12	68	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7439-97-6	Mercury	0.015	0.10	0.038J	1	0.15	25	09/30/20	85348	6287SMDL	31	CV	HGCV3A
7440-02-0	Nickel	1.3	6.1	4.6J	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A
7440-09-7	Potassium	120	610	150J	1	0.5	50	09/29/20	85348	287B4MDL	22	P	PEICPRAD4A
7440-23-5	Sodium	150	300	ND	1	0.5	50	09/29/20	85348	287B4MDL	22	P	PEICPRAD4A
7440-66-6	Zinc	1.8	12	42B	1	0.5	50	09/29/20	85348	287A3MDL	38	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-013  
Client Id: HSI-SS-07 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 82  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.027	0.98	0.084J	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7440-38-2	Arsenic	0.021	0.24	2.2B	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7440-41-7	Beryllium	0.019	0.24	0.14J	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7440-43-9	Cadmium	0.017	0.49	0.48J	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7782-49-2	Selenium	0.077	2.4	1.4JB	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7440-22-4	Silver	0.032	0.24	0.084JB	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7440-28-0	Thallium	0.022	0.49	0.022J	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA
7440-62-2	Vanadium	0.013	0.24	16B	1	0.5	100	10/01/20	85347	0120AMD	42		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-015  
Client Id: HSI-SS-08 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 94  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	18	210	3900	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7440-39-3	Barium	0.72	11	29	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7440-70-2	Calcium	110	1100	19000	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7440-47-3	Chromium	0.71	5.3	15B	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7440-48-4	Cobalt	0.76	2.7	3.1	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7440-50-8	Copper	0.66	5.3	11B	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7439-89-6	Iron	14	210	8100B	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7439-92-1	Lead	0.66	5.3	6.6	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7439-95-4	Magnesium	21	530	7900	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7439-96-5	Manganese	0.68	11	150	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7439-97-6	Mercury	0.013	0.089	ND	1	0.15	25	09/30/20	85348	6287SMDL	32	CV	HGCV3A
7440-02-0	Nickel	1.2	5.3	9.1	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A
7440-09-7	Potassium	100	530	540	1	0.5	50	09/29/20	85348	287B4MDL	23	P	PEICPRAD4A
7440-23-5	Sodium	130	270	ND	1	0.5	50	09/29/20	85348	287B4MDL	23	P	PEICPRAD4A
7440-66-6	Zinc	1.6	11	22B	1	0.5	50	09/29/20	85348	287A3MDL	39	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-015  
Client Id: HSI-SS-08 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 94  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.024	0.85	ND	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7440-38-2	Arsenic	0.019	0.21	2.2B	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7440-41-7	Beryllium	0.017	0.21	0.14J	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7440-43-9	Cadmium	0.015	0.43	0.15J	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7782-49-2	Selenium	0.068	2.1	0.87JB	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7440-22-4	Silver	0.028	0.21	0.049JB	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7440-28-0	Thallium	0.019	0.43	0.028J	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.21	15B	1	0.5	100	10/01/20	85347	0120AMD	43		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-017  
Client Id: HSI-SS-09 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 93  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	18	220	5000	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7440-39-3	Barium	0.73	11	37	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7440-70-2	Calcium	110	1100	1400	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7440-47-3	Chromium	0.72	5.4	17B	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7440-48-4	Cobalt	0.77	2.7	4.0	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7440-50-8	Copper	0.66	5.4	27B	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7439-89-6	Iron	14	220	11000B	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7439-92-1	Lead	0.66	5.4	9.8	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7439-95-4	Magnesium	21	540	2200	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7439-96-5	Manganese	0.69	11	210	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7439-97-6	Mercury	0.014	0.090	ND	1	0.15	25	09/30/20	85348	6287SMDL	35	CV	HGCV3A
7440-02-0	Nickel	1.2	5.4	9.8	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A
7440-09-7	Potassium	110	540	550	1	0.5	50	09/29/20	85348	287B4MDL	24	P	PEICPRAD4A
7440-23-5	Sodium	140	270	ND	1	0.5	50	09/29/20	85348	287B4MDL	24	P	PEICPRAD4A
7440-66-6	Zinc	1.6	11	38B	1	0.5	50	09/29/20	85348	287A3MDL	40	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-017  
Client Id: HSI-SS-09 (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 93  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.024	0.86	0.031J	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7440-38-2	Arsenic	0.019	0.22	3.5B	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7440-41-7	Beryllium	0.017	0.22	0.19J	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7440-43-9	Cadmium	0.015	0.43	0.26J	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7782-49-2	Selenium	0.068	2.2	0.99JB	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7440-22-4	Silver	0.028	0.22	0.050JB	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7440-28-0	Thallium	0.019	0.43	0.037J	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.22	20B	1	0.5	100	10/01/20	85347	0120AMDL	44		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS



**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-019  
Client Id: HSI-SS-D (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 92  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	18	220	3700	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7440-39-3	Barium	0.73	11	20	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7440-70-2	Calcium	110	1100	1400	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7440-47-3	Chromium	0.73	5.4	17B	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7440-48-4	Cobalt	0.77	2.7	1.5J	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7440-50-8	Copper	0.67	5.4	16B	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7439-89-6	Iron	14	220	6500B	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7439-92-1	Lead	0.67	5.4	140	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7439-95-4	Magnesium	21	540	550	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7439-96-5	Manganese	0.70	11	56	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7439-97-6	Mercury	0.014	0.091	0.014J	1	0.15	25	09/30/20	85348	6287SMDL	36	CV	HGCV3A
7440-02-0	Nickel	1.2	5.4	3.8J	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A
7440-09-7	Potassium	110	540	160J	1	0.5	50	09/29/20	85348	287B4MDL	25	P	PEICPRAD4A
7440-23-5	Sodium	140	270	ND	1	0.5	50	09/29/20	85348	287B4MDL	25	P	PEICPRAD4A
7440-66-6	Zinc	1.6	11	26B	1	0.5	50	09/29/20	85348	287A3MDL	41	P	PEICP3A

Comments: \_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19479-019  
Client Id: HSI-SS-D (0-0.5')  
Matrix: SOIL  
Level: LOW

% Solid: 92  
Units: MG/KG  
Date Rec: 9/28/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.024	0.87	0.063J	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7440-38-2	Arsenic	0.019	0.22	3.0B	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7440-41-7	Beryllium	0.017	0.22	0.17J	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7440-43-9	Cadmium	0.015	0.43	0.39J	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7782-49-2	Selenium	0.069	2.2	1.3JB	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7440-22-4	Silver	0.028	0.22	0.041JB	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7440-28-0	Thallium	0.019	0.43	ND	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	
7440-62-2	Vanadium	0.012	0.22	18B	1	0.5	100	10/01/20	85347	0120AMD	45	MSMS3_7700SWA	

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85347  
Client Id: MB 85347  
Matrix: SOIL  
Level: LOW

% Solid: 0  
Units: MG/KG

Lab Name: Veritech  
Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	0.79	100	1.1J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-36-0	Antimony	0.011	0.80	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-38-2	Arsenic	0.0087	0.20	0.011J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-39-3	Barium	0.028	1.0	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-41-7	Beryllium	0.0078	0.20	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-43-9	Cadmium	0.0071	0.40	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-70-2	Calcium	9.5	100	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-47-3	Chromium	0.043	0.40	0.073J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-48-4	Cobalt	0.0054	0.40	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-50-8	Copper	0.097	2.0	0.16J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7439-89-6	Iron	2.1	100	5.6J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7439-92-1	Lead	0.019	0.40	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7439-95-4	Magnesium	1.2	100	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7439-96-5	Manganese	0.12	1.2	0.80J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7439-98-7	Molybdenum	0.027	0.20	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-02-0	Nickel	0.026	0.60	0.030J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-09-7	Potassium	2.9	100	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7782-49-2	Selenium	0.032	2.0	0.081J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-22-4	Silver	0.013	0.20	0.042J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-23-5	Sodium	8.9	100	9.8J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-28-0	Thallium	0.0088	0.40	ND	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-62-2	Vanadium	0.0054	0.20	0.032J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA
7440-66-6	Zinc	0.73	4.0	0.79J	1	0.5	100	10/01/20	8534700120AMDL		18		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85348 (100)  
Client Id: MB 85348 (100)  
Matrix: SOIL  
Level: LOW

% Solid: 0  
Units: MG/KG

Lab Name: Veritech  
Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	8.4	200	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-39-3	Barium	0.34	10	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-70-2	Calcium	50	1000	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-47-3	Chromium	0.33	5.0	0.56J	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-48-4	Cobalt	0.36	2.5	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-50-8	Copper	0.31	5.0	0.63J	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7439-89-6	Iron	6.6	200	12J	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7439-92-1	Lead	0.31	5.0	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7439-95-4	Magnesium	9.8	500	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7439-96-5	Manganese	0.32	10	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-02-0	Nickel	0.55	5.0	ND	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-09-7	Potassium	49	500	ND	1	0.5	50	09/29/20	853486287A4MDL	14	P	PEICPRAD4A	
7440-23-5	Sodium	63	250	ND	1	0.5	50	09/29/20	853486287A4MDL	14	P	PEICPRAD4A	
7440-62-2	Vanadium	0.48	10	0.54J	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	
7440-66-6	Zinc	0.75	10	2.3J	1	0.5	50	09/29/20	853486287A3MDL	14	P	PEICP3A	

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85348 (167)  
 Client Id: MB 85348 (167)  
 Matrix: SOIL  
 Level: LOW

% Solid: 0  
 Units: MG/KG

Lab Name: Veritech  
 Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.013	0.083	ND	1	0.15	25	09/30/20	85348	26287SMDL	11	CV	HGCV3A

Comments: \_\_\_\_\_  
 \_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
 P - ICP-AES  
 CV -ColdVapor  
 MS - ICP-MS

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 09/29/20  
 Data File: S26287A3MDL  
 Prep Batch: 85348  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-333673-5		CCV V-333673-12		CCV V-333673-23		CCV V-333673-33		CCV V-333673-42		Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec						
Aluminum	10/5	4.95455	99	4.98287	100	4.77561	96	4.74271	95	4.74945	95				
Barium	1/.5	0.50047	100	0.50060	100	0.49024	98	0.47828	96	0.48352	97				
Calcium	100/50	52.42130	105	52.04800	104	50.65290	101	50.19470	100	50.23190	100				
Chromium	1/.5	0.50480	101	0.49799	100	0.48654	97	0.48205	96	0.48536	97				
Cobalt	1/.5	0.51145	102	0.51009	102	0.49904	100	0.48598	97	0.49093	98				
Copper	1/.5	0.51689	103	0.50490	101	0.49242	98	0.49241	98	0.49118	98				
Iron	10/5	5.02495	100	5.02998	101	4.87332	97	4.82870	97	4.86155	97				
Lead	1/.5	0.51323	103	0.50707	101	0.49356	99	0.47970	96	0.48327	97				
Magnesium	100/50	52.14400	104	51.77960	104	50.26480	101	49.63770	99	49.75630	100				
Manganese	1/.5	0.51166	102	0.50602	101	0.49377	99	0.48971	98	0.49081	98				
Nickel	1/.5	0.51849	104	0.51506	103	0.50387	101	0.49220	98	0.49960	100				
Zinc	1/.5	0.51414	103	0.50675	101	0.49241	98	0.47567	95	0.48289	97				

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 09/29/20  
 Data File: S26287A3MDL  
 Prep Batch: 85348  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLCV V- 333871	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V- 335063	Recovery	Low Limit	High Limit
Magnesium	5.0	4.93753	99	80	120	500	499.889	100	90	110
Silver	0.015	0.0135465	90	80	120	1	1.05843	106	90	110
Aluminum	2.0	2.01031	101	80	120	500	476.267	95	90	110
Arsenic	0.04	0.0388412	97	80	120	10	10.2896	103	90	110
Boron	0.2	0.217566	109	80	120	5	8.34135	167 a	90	110
Barium	0.1	0.0936159	94	80	120	10	9.46857	95	90	110
Beryllium	0.012	0.0116395	97	80	120	5	4.78074	96	90	110
Calcium	10	9.90648	99	80	120	500	476.325	95	90	110
Cadmium	0.012	0.0042451	35 a	80	120	5	5.06504	101	90	110
Cobalt	0.025	0.0208125	83	80	120	5	5.07216	101	90	110
Chromium	0.05	0.0558798	112	80	120	10	9.52314	95	90	110
Copper	0.05	0.0529418	106	80	120	10	11.0839	111 a	90	110
Silicon	0.1	0.113610	114	80	120	25	26.7256	107	90	110
Potassium	NA	-593.634		80	120	200	254.205	127 a	90	110
Zinc	0.1	0.0871587	87	80	120	10	9.54040	95	90	110
Manganese	0.1	0.102803	103	80	120	10	9.99086	100	90	110
Molybdenum	0.025	0.0196390	79 a	80	120	10	10.0027	100	90	110
Sodium	NA	3.60949		80	120	1000	1072.88	107	90	110
Nickel	0.05	0.0484991	97	80	120	10	9.70405	97	90	110
Lead	0.05	0.0448466	90	80	120	10	10.0589	101	90	110
Antimony	0.04	0.0235084	59 a	80	120	5	5.25456	105	90	110
Selenium	0.05	0.0494130	99	80	120	5	5.14259	103	90	110
Tin	0.2	0.197553	99	80	120	10	10.3034	103	90	110
Titanium	0.1	0.0995872	100	80	120	10	10.0881	101	90	110
Thallium	0.05	0.0658311	132 a	80	120	5	5.31473	106	90	110
Vanadium	0.1	0.107023	107	80	120	10	9.97004	100	90	110
Iron	2.0	2.04685	102	80	120	400	383.507	96	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 09/29/20  
 Data File: S26287A4MDL  
 Prep Batch: 85348  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-333673-5 Rec	CCV V-333673-12 Rec	CCV V-333673-23 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	50.39370	101	50.20520	100	49.85960	100					
Sodium	100/50	51.50420	103	51.67370	103	52.11520	104					

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120



## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 09/29/20  
 Data File: S26287A4MDL  
 Prep Batch: 85348  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0214371	86	80	120	10	9.38486	94	90	110
Boron	0.2	0.193178	97	80	120	5	4.44860	89 a	90	110
Barium	0.1	0.0927602	93	80	120	10	9.08901	91	90	110
Calcium	10.00	9.59227	96	80	120	500	460.547	92	90	110
Copper	0.05	0.0497909	100	80	120	10	9.47780	95	90	110
Iron	2.00	1.92142	96	80	120	400	366.767	92	90	110
Potassium	5.00	4.74378	95	80	120	200	210.263	105	90	110
Aluminum	2.00	1.93489	97	80	120	500	500.438	100	90	110
Manganese	0.10	0.0952512	95	80	120	10	9.06384	91	90	110
Zinc	0.1	0.0845846	85	80	120	10	9.22307	92	90	110
Sodium	2.50	2.45305	98	80	120	1000	933.978	93	90	110
Nickel	0.05	0.0407765	82	80	120	10	9.55245	96	90	110
Selenium	0.05	-0.0140360	-28 a	80	120	5	5.39001	108	90	110
Silicon	0.1	0.130774	131 a	80	120	25	25.2465	101	90	110
Tin	0.2	0.208588	104	80	120	10	10.1264	101	90	110
Titanium	0.1	0.0985430	99	80	120	10	9.29844	93	90	110
Vanadium	0.1	0.0991873	99	80	120	10	8.86566	89 a	90	110
Magnesium	5.00	4.64097	93	80	120	500	491.077	98	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 09/29/20  
 Data File: S26287B4MDL  
 Prep Batch: 85348  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-333673-5		CCV V-333673-12		CCV V-333673-19		CCV V-333673-27		Rec	Rec	Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec								
Potassium	100/50	49.30180	99	49.52890	99	49.43500	99	49.28950	99						
Sodium	100/50	49.54650	99	50.01810	100	50.01690	100	50.08140	100						

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 09/29/20  
 Data File: S26287B4MDL  
 Prep Batch: 85348  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V- 333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V- 333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0153208	81 a	80	120	10	9.43651	94	90	110
Boron	0.2	0.193469	97	80	120	5	4.59302	92	90	110
Barium	0.1	0.0971529	97	80	120	10	9.16858	92	90	110
Calcium	10.00	10.0904	101	80	120	500	464.559	93	90	110
Copper	0.05	0.0479485	96	80	120	10	9.54184	95	90	110
Iron	2.00	1.93626	97	80	120	400	365.848	91	90	110
Potassium	5.00	4.94896	99	80	120	200	211.545	106	90	110
Aluminum	2.00	1.92212	96	80	120	500	506.185	101	90	110
Manganese	0.10	0.0993190	99	80	120	10	9.02971	90	90	110
Zinc	0.1	0.0992511	99	80	120	10	9.21569	92	90	110
Sodium	2.50	2.39580	96	80	120	1000	950.883	95	90	110
Nickel	0.05	0.0557994	112	80	120	10	9.53391	95	90	110
Selenium	0.05	0.114853	230 a	80	120	5	4.12752	83 a	90	110
Silicon	0.1	0.168684	169 a	80	120	25	25.7078	103	90	110
Tin	0.2	0.218376	109	80	120	10	10.4749	105	90	110
Titanium	0.1	0.0985580	99	80	120	10	9.32297	93	90	110
Vanadium	0.1	0.0968455	97	80	120	10	8.95563	90	90	110
Magnesium	5.00	4.98045	100	80	120	500	496.257	99	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 09/30/20  
 Data File: H26287SMDL  
 Prep Batch: 85348  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-21		CCV-33		CCV-37		Rec	Rec	Rec	Rec	Rec	Rec	Rec	
	ICV/CCV Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec								
<b>Mercury</b>	20/10	20.02000	100	10.03000	100	10.11000	101	10.11000	101							

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/01/20  
 Data File: S100120AMD  
 Prep Batch: 85347  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-335544-8		CCV V-335548-16		CCV V-335548-28		CCV V-335548-40		CCV V-335548-48		Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec						
Antimony	50/30	50.74600	101	46.83200	94	51.15200	102	48.93100	98	49.23100	98				
Arsenic	50/30	51.94600	104	51.29300	103	51.14400	102	50.54300	101	50.35000	101				
Beryllium	50/30	51.35600	103	50.38200	101	49.93200	100	47.54400	95	49.62100	99				
Cadmium	50/30	51.17800	102	47.62700	95	50.46800	101	48.28500	97	48.80700	98				
Selenium	50/30	52.31500	105	259.78300	104	257.43100	103	254.65100	102	256.82300	103				
Silver	10/6	10.21500	102	46.93300	94	51.88700	104	50.42800	101	50.61100	101				
Thallium	50/30	49.89900	100	51.38200	103	51.30700	103	49.21700	98	49.68200	99				
Vanadium	50/30	50.66300	101	50.73800	101	50.88900	102	49.85400	100	49.48900	99				

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/01/20  
 Data File: S100120AMD  
 Prep Batch: 85347  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-335549	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-335547	Recovery	Low Limit	High Limit
Magnesium	500	493.367	99	80	120	50000	51699.197	103	90	110
Aluminum	500	509.192	102	80	120	15000	15934.248	106	90	110
Chromium	2	2.055	103	80	120	500	535.413	107	90	110
Copper	10	10.323	103	80	120	500	523.172	105	90	110
Iron	500	524.224	105	80	120	50000	52652.805	105	90	110
Arsenic	1	1.014	101	80	120	500	525.595	105	90	110
Barium	5	4.988	100	80	120	500	534.453	107	90	110
Beryllium	1	0.996	100	80	120	500	487.596	98	90	110
Calcium	500	512.238	102	80	120	50000	55127.085	110	90	110
Cadmium	2	1.893	95	80	120	500	532.773	107	90	110
Silver	1	0.947	95	80	120	500	183.223	37 a	90	110
Potassium	500	498.534	100	80	120	50000	53166.454	106	90	110
Zinc	20	19.552	98	80	120	500	493.361	99	90	110
Manganese	6	5.904	98	80	120	500	545.002	109	90	110
Molybdenum	1	1.016	102	80	120	500	544.859	109	90	110
Sodium	500	469.782	94	80	120	50000	52482.637	105	90	110
Nickel	3	3.072	102	80	120	500	536.000	107	90	110
Lead	2	1.848	92	80	120	500	482.793	97	90	110
Antimony	4	3.718	93	80	120	500	532.921	107	90	110
Selenium	10	10.135	101	80	120	2500	2602.671	104	90	110
Thallium	2	1.778	89	80	120	500	481.756	96	90	110
Vanadium	1	0.995	100	80	120	500	543.251	109	90	110
Cobalt	2	1.957	98	80	120	500	532.848	107	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 09/29/20

Data File: S26287A3MDL

Prep Batch: 85348

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0092806

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-333667- 6	CCB V-333667- 13	CCB V-333667- 24	CCB V-333667- 34	CCB V-333667- 43	MB 85348 (100)-14		
Aluminum	.0835 U	.167 U	.167 U	.167 U	.167 U	8.4U		
Barium	-.00422 a	.00676 U	.00676 U	.00676 U	.00676 U	.34U		
Calcium	.505 U	1.01 U	1.01 U	1.01 U	1.01 U	51U		
Chromium	.00385 a	.0067 U	.0067 U	.0067 U	.0067 U	.56a		
Cobalt	.00356 U	.00713 U	.00713 U	.00713 U	.00713 U	.36U		
Copper	.00888 a	.00616 U	.00616 U	.00616 U	.00616 U	.63a		
Iron	.066 U	.132 U	.132 U	.132 U	.132 U	12a		
Lead	-.00675 a	-.0115 a	-.00665 a	-.0105 a	-.00974 a	.31U		
Magnesium	-.209 a	-.206 a	-.204 a	-.212 a	-.218 a	9.8U		
Manganese	.00321 U	.00642 U	.00642 U	.00642 U	.00642 U	.32U		
Nickel	.0055 U	.011 U	.011 U	.011 U	.011 U	.55U		
Zinc	-.00784 a	.0151 U	.0151 U	.0151 U	.0151 U	2.3a		

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

## FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 09/29/20

Data File: S26287A4MDL

Prep Batch: 85348

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: PEICPRAD4A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0092806

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-333667- 6	CCB V-333667- 13	CCB V-333667- 24	MB 85348 (100)-14				
Potassium	.493 U	.987 U	.987 U	49 U				
Sodium	.628 U	1.26 U	1.26 U	63 U				

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit



## FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 09/29/20

Data File: S26287B4MDL

Prep Batch: 85348

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: PEICPRAD4A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0092806

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-333667- 6	CCB V-333667- 13	CCB V-333667- 20	CCB V-333667- 28				
Potassium	.493 U	.987 U	.987 U	.987 U				
Sodium	.628 U	1.26 U	1.26 U	1.26 U				

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

## FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 09/30/20

Data File: H26287SMDL

Prep Batch: 85348

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: HGCV3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0092806

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-38	MB 85348 (167)-11			
Mercury	.0757 U	-.085 a	.0757 U	.0757 U	13 U			

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/01/20

Data File: S100120AMD

Prep Batch: 85347

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: MS3\_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0092806

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-335545-10	CCB V-335545-17	CCB V-335545-29	CCB V-335545-41	CCB V-335545-49	MB 85347-18
Antimony	-.135 a	-.116 a	-.145 a	-.15 a	-.15 a	11U
Arsenic	.0437 U	.0874 U	.0874 U	.0874 U	.0874 U	11a
Beryllium	.0391 U	.0783 U	.0783 U	.0783 U	.0783 U	7.8U
Cadmium	.0353 U	.0706 U	.0706 U	.0706 U	.0706 U	7.1U
Selenium	.192 a	.318 U	.318 U	.318 U	.318 U	81a
Silver	.0652 U	.13 U	.13 U	.13 U	.13 U	42a
Thallium	.0441 U	.0882 U	.0882 U	.0882 U	.0882 U	8.8U
Vanadium	.0271 U	.0542 U	.0542 U	.0542 U	.0542 U	32a

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 09/29/20  
 Data File: S26287A3MDL  
 Prep Batch: 85348  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	514.242	103							
Barium	0	U								
Calcium	500	518.059	104							
Chromium	0	U								
Cobalt	0	U								
Copper	0	-.0300415a								
Iron	200	197.768	99							
Lead	0	-.033936a								
Magnesium	500	537.501	108							
Manganese	0	-.028529a								
Nickel	0	U								
Zinc	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits in the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 09/29/20  
 Data File: S26287A4MDL  
 Prep Batch: 85348  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	515.722	103							
Calcium	500	505.672	101							
Iron	200	184.926	92							
Magnesium	500	507.172	101							
Potassium	0	U								
Sodium	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 09/29/20  
 Data File: S26287B4MDL  
 Prep Batch: 85348  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	526.079	105							
Calcium	500	511.237	102							
Iron	200	187.712	94							
Magnesium	500	517.081	103							
Potassium	0	U								
Sodium	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/01/20  
 Data File: S100120AMD  
 Prep Batch: 85347  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0092806

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-335546-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	50898.6	102							
Antimony	0	.232a								
Arsenic	0	.26a								
Beryllium	0	U								
Cadmium	0	1.297a								
Calcium	150000	161621.5	108							
Iron	125000	126165	101							
Magnesium	50000	49641.29	99							
Selenium	0	.383b								
Silver	0	.179b								
Thallium	0	U								
Vanadium	0	.111a								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85347

0092806 0250

Instrument Type: ICPMS  
 Analytical Method(s): 6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85347								
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim		
Antimony	85347	1	S100120A	20	37.8660	117	32	10	110			
Arsenic	85347	1	S100120A	20	47.1760	49.4	95	61	113			
Beryllium	85347	1	S100120A	20	166.5650	187	89	66	110			
Cadmium	85347	1	S100120A	20	182.5200	197	93	64	110			
Selenium	85347	1	S100120A	20	350.7950	364	96	60	112			
Silver	85347	1	S100120A	20	93.0830	94.0	99	61	111			
Thallium	85347	1	S100120A	20	202.9060	229	89	61	110			
Vanadium	85347	1	S100120A	20	281.1180	300	94	66	110			

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 85347								
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim		
Antimony	85347	1	S100120A	19	36.6160	117	31	10	110			
Arsenic	85347	1	S100120A	19	41.5980	49.4	84	61	113			
Beryllium	85347	1	S100120A	19	147.1960	187	79	66	110			
Cadmium	85347	1	S100120A	19	164.0540	197	83	64	110			
Selenium	85347	1	S100120A	19	300.6640	364	83	60	112			
Silver	85347	1	S100120A	19	84.8560	94.0	90	61	111			
Thallium	85347	1	S100120A	19	175.5660	229	77	61	110			
Vanadium	85347	1	S100120A	19	245.8990	300	82	66	110			

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19479-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85347	1	S100120A	25	S100120A	21	71.1210	0.5840	250	28	a	75	125
Arsenic	85347	1	S100120A	25	S100120A	21	230.8610	17.6350	250	85		75	125
Beryllium	85347	1	S100120A	25	S100120A	21	197.6950	0.7970	250	79		75	125
Cadmium	85347	1	S100120A	25	S100120A	21	219.9040	1.6960	250	87		75	125
Selenium	85347	1	S100120A	25	S100120A	21	209.8380	5.4710	250	82		75	125
Silver	85347	1	S100120A	25	S100120A	21	43.7240	0.3000	50	87		75	125
Thallium	85347	1	S100120A	25	S100120A	21	194.8700	0.4670	250	78		75	125
Vanadium	85347	1	S100120A	25	S100120A	21	306.2560	212.0810	250	38	a	75	125

TxtQcType: MS		Matrix: SOIL		SampleID: AD19479-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85347	1	S100120A	24	S100120A	21	67.2390	0.5840	250	27	a	75	125
Arsenic	85347	1	S100120A	24	S100120A	21	232.9120	17.6350	250	86		75	125
Beryllium	85347	1	S100120A	24	S100120A	21	193.3760	0.7970	250	77		75	125
Cadmium	85347	1	S100120A	24	S100120A	21	217.5450	1.6960	250	86		75	125
Selenium	85347	1	S100120A	24	S100120A	21	209.7510	5.4710	250	82		75	125
Silver	85347	1	S100120A	24	S100120A	21	43.3920	0.3000	50	86		75	125
Thallium	85347	1	S100120A	24	S100120A	21	190.2050	0.4670	250	76		75	125
Vanadium	85347	1	S100120A	24	S100120A	21	320.0080	212.0810	250	43	a	75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount



**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH:85347

**0092806 0251**

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD19479-001								
Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S100120A	26	S100120A	21	49.4780	0.5840	50	98		75	125
Arsenic	1	S100120A	26	S100120A	21	67.0580	17.6350	50	99		75	125
Beryllium	1	S100120A	26	S100120A	21	43.1330	0.7970	50	85		75	125
Cadmium	1	S100120A	26	S100120A	21	50.1660	1.6960	50	97		75	125
Selenium	1	S100120A	26	S100120A	21	249.2780	5.4710	250	98		75	125
Silver	1	S100120A	26	S100120A	21	49.3990	0.3000	50	98		75	125
Thallium	1	S100120A	26	S100120A	21	45.3800	0.4670	50	90		75	125
Vanadium	1	S100120A	26	S100120A	21	266.3740	212.0810	50	109		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85348

0092806 0252

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85348								
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim		
Aluminum	85348	1	S26287A3	16	77.5682	110	71	55	152			
Barium	85348	1	S26287A3	16	7.1677	8.92	80	65	110			
Calcium	85348	1	S26287A3	16	181.9040	207.00	88	69	110			
Chromium	85348	1	S26287A3	16	1.8197	2.27	80	61	114			
Cobalt	85348	1	S26287A3	16	2.4286	2.87	85	64	110			
Copper	85348	4	S26287A3	31	0.4283	2.09	82	66	110			
Iron	85348	1	S26287A3	16	126.9690	192.00	66	34	138			
Lead	85348	1	S26287A3	16	1.3716	1.63	84	62	110			
Magnesium	85348	1	S26287A3	16	63.0571	74.60	85	26	114			
Manganese	85348	1	S26287A3	16	5.1248	6.03	85	68	110			
Mercury	85348	4	H26287SM	15	6.6430	41.64	64	39	110			
Nickel	85348	1	S26287A3	16	0.4675	.553	85	61	114			
Potassium	85348	1	S26287A4	16	16.1564	22.60	71	61	140			
Sodium	85348	1	S26287A4	16	7.6666	8.67	88	57	125			
Zinc	85348	1	S26287A3	16	5.7369	7.13	80	60	112			

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 85348								
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim		
Aluminum	85348	1	S26287A3	15	78.0373	110	71	55	152			
Barium	85348	1	S26287A3	15	7.2381	8.92	81	65	110			
Calcium	85348	1	S26287A3	15	186.1730	207.00	90	69	110			
Chromium	85348	1	S26287A3	15	1.9406	2.27	85	61	114			
Cobalt	85348	1	S26287A3	15	2.4334	2.87	85	64	110			
Copper	85348	4	S26287A3	30	0.4358	2.09	83	66	110			
Iron	85348	1	S26287A3	15	125.0020	192.00	65	34	138			
Lead	85348	1	S26287A3	15	1.3902	1.63	85	62	110			
Magnesium	85348	1	S26287A3	15	63.6629	74.60	85	26	114			
Manganese	85348	1	S26287A3	15	5.2648	6.03	87	68	110			
Mercury	85348	4	H26287SM	14	6.7810	41.64	65	39	110			
Nickel	85348	1	S26287A3	15	0.4663	.553	84	61	114			
Potassium	85348	1	S26287A4	15	16.1603	22.60	72	61	140			
Sodium	85348	1	S26287A4	15	7.6695	8.67	88	57	125			
Zinc	85348	1	S26287A3	15	5.8182	7.13	82	60	112			

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19479-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85348	1	S26287A3	20	S26287A3	17	51.5347	28.8089	5.0	455	b	75	125
Barium	85348	1	S26287A3	20	S26287A3	17	0.7160	0.1910	0.5	105		75	125
Calcium	85348	1	S26287A3	20	S26287A3	17	62.7309	14.9423	50	96		75	125
Chromium	85348	1	S26287A3	20	S26287A3	17	0.6547	0.1748	0.5	96		75	125
Cobalt	85348	1	S26287A3	20	S26287A3	17	0.4961	0.0086	0.5	98		75	125
Copper	85348	1	S26287A3	20	S26287A3	17	0.6104	0.1236	0.5	97		75	125
Iron	85348	1	S26287A3	20	S26287A3	17	75.9866	58.2815	5.0	354	b	75	125
Lead	85348	1	S26287A3	20	S26287A3	17	0.6579	0.1532	0.5	101		75	125
Magnesium	85348	1	S26287A3	20	S26287A3	17	52.0601	4.0690	50	96		75	125
Manganese	85348	1	S26287A3	20	S26287A3	17	0.9794	0.4462	0.5	107		75	125
Mercury	85348	1	H26287SM	19	H26287SM	16	9.8970	0.075725U	10	99		75	125
Nickel	85348	1	S26287A3	20	S26287A3	17	0.5285	0.0312	0.5	99		75	125
Potassium	85348	1	S26287A4	20	S26287A4	17	46.4840	1.3750	50	90		75	125
Sodium	85348	1	S26287A4	20	S26287A4	17	45.9992	1.255852743U	50	92		75	125
Zinc	85348	1	S26287A3	20	S26287A3	17	0.8942	0.3910	0.5	101		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH:85348

**0092806 0253**

Instrument Type: ICP/HG

Analytical Method(s):6010/200.77470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS		Matrix: SOIL			SampleID: AD19479-001								
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85348	1	S26287A3	19	S26287A3	17	53.4327	28.8089	5.0	492	b	75	125
Barium	85348	1	S26287A3	19	S26287A3	17	0.7111	0.1910	0.5	104		75	125
Calcium	85348	1	S26287A3	19	S26287A3	17	64.9542	14.9423	50	100		75	125
Chromium	85348	1	S26287A3	19	S26287A3	17	0.7100	0.1748	0.5	107		75	125
Cobalt	85348	1	S26287A3	19	S26287A3	17	0.5001	0.0086	0.5	98		75	125
Copper	85348	1	S26287A3	19	S26287A3	17	0.6299	0.1236	0.5	101		75	125
Iron	85348	1	S26287A3	19	S26287A3	17	70.7174	58.2815	5.0	249	b	75	125
Lead	85348	1	S26287A3	19	S26287A3	17	0.6702	0.1532	0.5	103		75	125
Magnesium	85348	1	S26287A3	19	S26287A3	17	53.8427	4.0690	50	100		75	125
Manganese	85348	1	S26287A3	19	S26287A3	17	1.0197	0.4462	0.5	115		75	125
Mercury	85348	1	H26287SM	18	H26287SM	16	9.9870	0.075725U	10	100		75	125
Nickel	85348	1	S26287A3	19	S26287A3	17	0.5345	0.0312	0.5	101		75	125
Potassium	85348	1	S26287A4	19	S26287A4	17	47.9307	1.3750	50	93		75	125
Sodium	85348	1	S26287A4	19	S26287A4	17	47.2295	1.255852743U	50	94		75	125
Zinc	85348	1	S26287A3	19	S26287A3	17	0.9700	0.3910	0.5	116		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85348

**0092806 0254**

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD19479-001									
Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Aluminum	1	S26287A3	21	S26287A3	17	32.5098	28.8089	5.0	74	b	75	125	
Barium	1	S26287A3	21	S26287A3	17	0.6921	0.1910	0.50	100		75	125	
Calcium	1	S26287A3	21	S26287A3	17	63.6371	14.9423	50	97		75	125	
Chromium	1	S26287A3	21	S26287A3	17	0.6219	0.1748	0.50	89		75	125	
Cobalt	1	S26287A3	21	S26287A3	17	0.5131	0.0086	0.50	101		75	125	
Copper	1	S26287A3	21	S26287A3	17	0.6045	0.1236	0.50	96		75	125	
Iron	1	S26287A3	21	S26287A3	17	61.7919	58.2815	5.0	70	b	75	125	
Lead	1	S26287A3	21	S26287A3	17	0.6527	0.1532	0.50	100		75	125	
Magnesium	1	S26287A3	21	S26287A3	17	52.9873	4.0690	50	98		75	125	
Manganese	1	S26287A3	21	S26287A3	17	0.9186	0.4462	0.50	94		75	125	
Nickel	1	S26287A3	21	S26287A3	17	0.5409	0.0312	0.50	102		75	125	
Potassium	1	S26287A4	21	S26287A4	17	48.5280	1.3750	50	94		75	125	
Sodium	1	S26287A4	21	S26287A4	17	48.1698	1.255852743U	50	96		75	125	
Zinc	1	S26287A3	21	S26287A3	17	0.8476	0.3910	0.50	91		75	125	

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

FORM6/FORM9  
RPD/%Difference Data  
PREP BATCH:85347

0092806 0255

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85347					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85347	S100120A	20	S100120A	19	37.8660	36.6160	3.4	20
Arsenic	85347	S100120A	20	S100120A	19	47.1760	41.5980	13	20
Beryllium	85347	S100120A	20	S100120A	19	166.5650	147.1960	12	20
Cadmium	85347	S100120A	20	S100120A	19	182.5200	164.0540	11	20
Selenium	85347	S100120A	20	S100120A	19	350.7950	300.6640	15	20
Silver	85347	S100120A	20	S100120A	19	93.0830	84.8560	9.2	20
Thallium	85347	S100120A	20	S100120A	19	202.9060	175.5660	14	20
Vanadium	85347	S100120A	20	S100120A	19	281.1180	245.8990	13	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD19479-001					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85347	S100120A	22	S100120A	21	0.4920	0.5840	17	20
Arsenic	85347	S100120A	22	S100120A	21	16.0020	17.6350	9.7	20
Beryllium	85347	S100120A	22	S100120A	21	0.6880	0.7970	15	20
Cadmium	85347	S100120A	22	S100120A	21	1.5420	1.6960	9.5	20
Selenium	85347	S100120A	22	S100120A	21	5.4800	5.4710	0.16	20
Silver	85347	S100120A	22	S100120A	21	0.2860	0.3000	4.8	20
Thallium	85347	S100120A	22	S100120A	21	0.1580	0.4670	99	b 20
Vanadium	85347	S100120A	22	S100120A	21	73.6920	212.0810	97	a 20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19479-001					
Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85347	S100120A	25	S100120A	24	71.1210	67.2390	5.6	20
Arsenic	85347	S100120A	25	S100120A	24	230.8610	232.9120	.88	20
Beryllium	85347	S100120A	25	S100120A	24	197.6950	193.3760	2.2	20
Cadmium	85347	S100120A	25	S100120A	24	219.9040	217.5450	1.1	20
Selenium	85347	S100120A	25	S100120A	24	209.8380	209.7510	.041	20
Silver	85347	S100120A	25	S100120A	24	43.7240	43.3920	.76	20
Thallium	85347	S100120A	25	S100120A	24	194.8700	190.2050	2.4	20
Vanadium	85347	S100120A	25	S100120A	24	306.2560	320.0080	4.4	20

TxtQcType: SD		Matrix: SOIL		SampleID: AD19479-001						
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	85347	S100120A	23	S100120A	21	5	-0.0270	0.5840	---	20
Arsenic	85347	S100120A	23	S100120A	21	5	3.7730	17.6350	7	20
Beryllium	85347	S100120A	23	S100120A	21	5	0.1920	0.7970	20	c 20
Cadmium	85347	S100120A	23	S100120A	21	5	0.3270	1.6960	3.6	20
Selenium	85347	S100120A	23	S100120A	21	5	1.1640	5.4710	6.4	20
Silver	85347	S100120A	23	S100120A	21	5	0.0580	0.3000	3.3	20
Thallium	85347	S100120A	23	S100120A	21	5	0.0290	0.4670	69	c 20
Vanadium	85347	S100120A	23	S100120A	21	5	43.1170	212.0810	1.7	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5\*RL

c-Serial dilution Out but conc < 10 \* IDL

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH:85348

**0092806 0256**

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85348					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85348	S26287A3	16	S26287A3	15	77.5682	78.0373	.6	20
Barium	85348	S26287A3	16	S26287A3	15	7.1677	7.2381	.98	20
Calcium	85348	S26287A3	16	S26287A3	15	181.9040	186.1730	2.3	20
Chromium	85348	S26287A3	16	S26287A3	15	1.8197	1.9406	6.4	20
Cobalt	85348	S26287A3	16	S26287A3	15	2.4286	2.4334	.19	20
Copper	85348	S26287A3	31	S26287A3	30	0.4283	0.4358	1.7	20
Iron	85348	S26287A3	16	S26287A3	15	126.9690	125.0020	1.6	20
Lead	85348	S26287A3	16	S26287A3	15	1.3716	1.3902	1.3	20
Magnesium	85348	S26287A3	16	S26287A3	15	63.0571	63.6629	.96	20
Manganese	85348	S26287A3	16	S26287A3	15	5.1248	5.2648	2.7	20
Mercury	85348	H26287SM	15	H26287SM	14	6.6430	6.7810	2.1	20
Nickel	85348	S26287A3	16	S26287A3	15	0.4675	0.4663	.27	20
Potassium	85348	S26287A4	16	S26287A4	15	16.1564	16.1603	.024	20
Sodium	85348	S26287A4	16	S26287A4	15	7.6666	7.6695	.038	20
Zinc	85348	S26287A3	16	S26287A3	15	5.7369	5.8182	1.4	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD19479-001					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85348	S26287A3	18	S26287A3	17	32.9102	28.8089	13	20
Barium	85348	S26287A3	18	S26287A3	17	0.2197	0.1910	14	20
Calcium	85348	S26287A3	18	S26287A3	17	17.1285	14.9423	14	20
Chromium	85348	S26287A3	18	S26287A3	17	0.2062	0.1748	16	20
Cobalt	85348	S26287A3	18	S26287A3	17	0.0133	0.0086	43 b	20
Copper	85348	S26287A3	18	S26287A3	17	0.1478	0.1236	18	20
Iron	85348	S26287A3	18	S26287A3	17	67.7515	58.2815	15	20
Lead	85348	S26287A3	18	S26287A3	17	0.1988	0.1532	26 a	20
Magnesium	85348	S26287A3	18	S26287A3	17	4.8365	4.0690	17	20
Manganese	85348	S26287A3	18	S26287A3	17	0.5217	0.4462	16	20
Mercury	85348	H26287SM	17	H26287SM	16	0.1070	0.075725U	---	20
Nickel	85348	S26287A3	18	S26287A3	17	0.0373	0.0312	18	20
Potassium	85348	S26287A4	18	S26287A4	17	1.6067	1.3750	16	20
Sodium	85348	S26287A4	18	S26287A4	17	1.255852743U	1.255852743U	---	20
Zinc	85348	S26287A3	18	S26287A3	17	0.4602	0.3910	16	20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19479-001					
Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85348	S26287A3	20	S26287A3	19	51.5347	53.4327	3.6	20
Barium	85348	S26287A3	20	S26287A3	19	0.7160	0.7111	.69	20
Calcium	85348	S26287A3	20	S26287A3	19	62.7309	64.9542	3.5	20
Chromium	85348	S26287A3	20	S26287A3	19	0.6547	0.7100	8.1	20
Cobalt	85348	S26287A3	20	S26287A3	19	0.4961	0.5001	.8	20
Copper	85348	S26287A3	20	S26287A3	19	0.6104	0.6299	3.1	20
Iron	85348	S26287A3	20	S26287A3	19	75.9866	70.7174	7.2	20
Lead	85348	S26287A3	20	S26287A3	19	0.6579	0.6702	1.9	20
Magnesium	85348	S26287A3	20	S26287A3	19	52.0601	53.8427	3.4	20
Manganese	85348	S26287A3	20	S26287A3	19	0.9794	1.0197	4	20
Mercury	85348	H26287SM	19	H26287SM	18	9.8970	9.9870	.91	20
Nickel	85348	S26287A3	20	S26287A3	19	0.5285	0.5345	1.1	20
Potassium	85348	S26287A4	20	S26287A4	19	46.4840	47.9307	3.1	20
Sodium	85348	S26287A4	20	S26287A4	19	45.9992	47.2295	2.6	20
Zinc	85348	S26287A3	20	S26287A3	19	0.8942	0.9700	8.1	20

a-Indicates Rpd Failed the criteria  
 b-Method Rep Out but concentrations < 5\*RL  
 c-Serial dilution Out but conc < 10 \* IDL

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH:85348

**0092806 0257**

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD		Matrix: SOIL		SampleID: AD19479-001						
Analyte	BatchId	Data File	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff		Limit
Aluminum	85348	S26287A3	22	S26287A3	17 5	6.8754	28.8089	19	a	10
Barium	85348	S26287A3	22	S26287A3	17 5	0.0425	0.1910	11	a	10
Calcium	85348	S26287A3	22	S26287A3	17 5	3.3193	14.9423	11	a	10
Chromium	85348	S26287A3	22	S26287A3	17 5	0.0428	0.1748	23	a	10
Cobalt	85348	S26287A3	22	S26287A3	17 5	0.0010	0.0086	42	c	10
Copper	85348	S26287A3	22	S26287A3	17 5	0.0334	0.1236	35	a	10
Iron	85348	S26287A3	22	S26287A3	17 5	13.6223	58.2815	17	a	10
Lead	85348	S26287A3	22	S26287A3	17 5	0.0263	0.1532	14	c	10
Magnesium	85348	S26287A3	22	S26287A3	17 5	0.8101	4.0690	0.45		10
Manganese	85348	S26287A3	22	S26287A3	17 5	0.1088	0.4462	22	a	10
Nickel	85348	S26287A3	22	S26287A3	17 5	0.0069	0.0312	11	c	10
Potassium	85348	S26287A4	22	S26287A4	17 5	0.4032	1.3750	47	c	10
Sodium	85348	S26287A4	22	S26287A4	17 5	0.1383	0.2677	158	c	10
Zinc	85348	S26287A3	22	S26287A3	17 5	0.0801	0.3910	2.4		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5\*RL

c-Serial dilution Out but conc < 10 \* IDL

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER \_\_\_\_\_

Batch No.: 26288  
 QC Number: 85347  
 Matrix: soil 6020

Analyst: ANS  
 Prep Date: 9/29/20  
 Reviewed By: h

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. <u>AD19479-001</u>	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR ↓ -001							
MS ↓ -001							Balance used: 0.32
MSD ↓ -001							Pipettes used: 149, 155
2. <u>19451-006</u>							
3. <u>19472-001</u>							Hot Block used: 4
4. ↓ -002							
5. ↓ -003							
6. <u>19479-003</u>							
7. ↓ -005							
8. ↓ -007							
9. ↓ -009							
10. ↓ -011							
11. ↓ -013							
12. ↓ -015							
13. ↓ -017							
14. ↓ -019							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.4 C (90-95° C) Start Time: 9:00am End Time: 10:30am

	Volume mL	Lot #
LCS, LCSD	0.1g	V-13005
LLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO <sub>3</sub>	2.5	V-13457
HCl		V-
H <sub>2</sub> O <sub>2</sub>	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>	5.0	V-334735
1:1 HCl		V-

Relinquished By ANS Date 9/29/20  
 Received By h Date 9/29/20



Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER \_\_\_\_\_

Batch No.: 26287

Analyst: ANS

QC Number: 85348

Prep Date: 9/29/20

Matrix: soil 6010

Reviewed By: EA

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD						--	
1. <u>AD19479-001</u>							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR <u>-001</u>							
MS <u>-001</u>							Balance used: <u>032</u>
MSD <u>-001</u>							Pipettes used: <u>149, 155</u>
2. <u>19451-006</u>							
3. <u>19472-001</u>							Hot Block used: <u>5</u>
4. <u>-002</u>							
5. <u>-003</u>							
6. <u>19479-003</u>							
7. <u>-005</u>							
8. <u>-007</u>							
9. <u>-009</u>							
10. <u>-011</u>							
11. <u>-013</u>							
12. <u>-015</u>							
13. <u>-017</u>							
14. <u>-019</u>							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 99.1 C (90-95° C) Start Time: 8:00am End Time: 11:00am

	Volume mL	Lot #
LCS, LCSD	<u>0.5g</u>	V- <u>13005</u>
LLCS, LLLCSD		V-
MS, MSD	<u>0.25ml</u>	V- <u>13172, 13178</u>
LLMS, LLMSD		V- <u>331982</u>

Acid	Vol mL	Lot#
HNO <sub>3</sub>	<u>2.5</u>	V- <u>13457</u>
HCl	<u>5.0</u>	V- <u>13392</u>
H <sub>2</sub> O <sub>2</sub>	<u>1.5</u>	V- <u>13067</u>

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>	<u>5.0</u>	V- <u>334725</u>
1:1 HCl		V-

Relinquished By: ANS Date: 9/29/20  
 Received By: EA Date: 09/29/2020

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER \_\_\_\_\_

Batch No.: \* 26287  
 QC Number: 85348  
 Matrix: soil

Analyst: ANS  
 Prep Date: 9/29/20  
 Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 335726
LCS	0.15g			
LCSD				STD 0.2 ppb V- 335727
1 AD 19479-001				STD 0.5 ppb V- 335728
MR -001				STD 1.0 ppb V- 335729
MS -001				STD 2.0 ppb V- 335730
MSD ↓ -001				STD 5.0 ppb V- 335731
2 19451-006				STD 10.0 ppb V- 335732
3 19472-001				STD 25.0 ppb V- 335733
4 ↓ -002				ICV 10.0 ppb V- 335724
5 ↓ -003				CCV 20.0 ppb V- 335725
6 19479-003				
7 -005				
8 -007				Balance used: 032
9 -009				Pipettes used: 155, 143, 159
10 -011				
11 -013				Hot Block used: <del>6</del> 6
12 -015				9/29/20
13 -017				
14 ↓ -019				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> : V- 335298	3.75	HNO <sub>3</sub>		V-
K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> : V-		HCl		V-
NH <sub>4</sub> OH: V- 33487	1.5	H <sub>2</sub> SO <sub>4</sub>		V-
		Aqua Regia	1.25	V- 335723

\*\*Block Temp.: °C  
92.3  
 Time In Block: g: 30m  
 Time Out of Block: 10:00am

Spike Volume & Lot #  
 LCS v. 13005 @ 0.15g / 0.25 ml  
 MS v. 335704 0.250 ml  
 Standards/Control Batch B- 335704

Start time: 9:00am End Time: 10:30am

\*\*Temperature  
 245.1 / 7470A: 90-95C  
 7471B: 92-98C

Relinquished By: ANS

\*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprogram using the standard batch number and the corresponding V #s.

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26287A3MDL.txt

Analysis Date: 09/29/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	15:07	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	15:11	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	15:15	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	15:19	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	15:23	5							V-333673(CCV)
ICB V-333667	1	ICB	15:26	6							V-333667(ICB/CCB)
LRS V-335063	1	LRS	15:30	7	MET-TAL6010S	SOIL	SOIL	SW846	85348	Cu failed (1 ppm used as LR)	V-335063(LRS)
ICS3 V-333666	1	ICS	15:35	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	15:39	9	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
LLICV V-333671	1	LLICV	15:43	10	MET-TAL6010S	SOIL	SOIL	SW846	85348		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	15:47	11							V-333668(ICSA)
CCV V-333673	1	CCV	15:51	12							V-333673(CCV)
CCB V-333667	1	CCB	15:55	13							V-333667(ICB/CCB)
MB 85348 (100)	1	MB	15:59	14	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
LCS 85348	1	LCS	16:03	15	MET-TAL6010S	SOIL	SOIL	SW846	85348	Cu NOT reported (Cu> LR)	0
LCS MR 85348	1	LCS	16:07	16	MET-TAL6010S	SOIL	SOIL	SW846	85348	Cu NOT reported (Cu> LR)	0
AD19479-001	1	SMP	16:12	17	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MR	16:16	18	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MS	16:20	19	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MSD	16:24	20	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	PS	16:29	21	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	5	SD	16:33	22	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
CCV V-333673	1	CCV	16:36	23							V-333673(CCV)
CCB V-333667	1	CCB	16:40	24							V-333667(ICB/CCB)
AD19451-006	1	SMP	16:44	25	MET-RCRA-S	SOIL	SOIL	SW846	85348		0
AD19472-001	1	SMP	16:48	26	MET-RCRA-S	SOIL	SOIL	SW846	85348		0
AD19472-002	1	SMP	16:52	27	MET-RCRA-S	SOIL	SOIL	SW846	85348		0
AD19472-003	1	SMP	16:56	28	MET-RCRA-S	SOIL	SOIL	SW846	85348		0
AD19479-003	1	SMP	17:00	29	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
LCS 85348 4D	4	LCS	17:04	30	MET-TAL6010S	SOIL	SOIL	SW846	85348	Cu reported	0
LCS MR 85348 4D	4	LCS	17:08	31	MET-TAL6010S	SOIL	SOIL	SW846	85348	Cu reported	0
AD19479-005	1	SMP	17:12	32	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
CCV V-333673	1	CCV	17:15	33							V-333673(CCV)
CCB V-333667	1	CCB	17:19	34							V-333667(ICB/CCB)
AD19479-007	1	SMP	17:23	35	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-009	1	SMP	17:27	36	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-011	1	SMP	17:31	37	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-013	1	SMP	17:35	38	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-015	1	SMP	17:39	39	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-017	1	SMP	17:43	40	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-019	1	SMP	17:47	41	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
CCV V-333673	1	CCV	17:50	42							V-333673(CCV)
CCB V-333667	1	CCB	17:54	43							V-333667(ICB/CCB)

Comments/Reviewed by:

olufemi  
192.168.1.89 10/12/2020 4:49:39 PM

RUN IS OK  
All elements reported, except Na, K

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

*olufemi* 10/12/20

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S26287A4MDL.txt

Analysis Date: 09/29/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	12:26	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	12:30	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	12:35	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	12:40	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	12:44	5							V-333673(CCV)
ICB V-333667	1	ICB	12:48	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	12:52	7		SOIL	SOIL	SW846	85348		V-333662(LRS)
ICS3 V-333666	1	ICS	12:57	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	13:01	9		SOIL	SOIL	SW846	85348		0
LLICV V-333671	1	LLICV	13:05	10		SOIL	SOIL	SW846	85348		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	13:10	11							V-333668(ICSA)
CCV V-333673	1	CCV	13:14	12							V-333673(CCV)
CCB V-333667	1	CCB	13:18	13							V-333667(ICB/CCB)
MB 85348 (100)	1	MB	13:22	14		SOIL	SOIL	SW846	85348		0
LCS 85348	1	LCS	13:27	15		SOIL	SOIL	SW846	85348		0
LCS MR 85348	1	LCS	13:30	16		SOIL	SOIL	SW846	85348		0
AD19479-001	1	SMP	13:34	17	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MR	13:38	18	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MS	13:42	19	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MSD	13:47	20	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	1	PS	13:52	21	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-001	5	SD	13:57	22	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
CCV V-333673	1	CCV	14:02	23							V-333673(CCV)
CCB V-333667	1	CCB	14:07	24							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 5:12:07 PM

RUN IS OK  
Na, K reported

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

*olufemi* 10/12/20

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S26287B4MDL.txt

Analysis Date: 09/29/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	16:11	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	16:15	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	16:19	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	16:24	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	16:29	5							V-333673(CCV)
ICB V-333667	1	ICB	16:34	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	16:38	7	MET-TAL6010S	SOIL	SOIL	SW846	85348		V-333662(LRS)
ICS3 V-333666	1	ICS	16:42	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	16:47	9	MET-TAL6010S	SOIL	SOIL	SW846	85348		()
LLICV V-333671	1	LLICV	16:52	10	MET-TAL6010S	SOIL	SOIL	SW846	85348		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	16:56	11							V-333668(ICSA)
CCV V-333673	1	CCV	17:00	12							V-333673(CCV)
CCB V-333667	1	CCB	17:05	13							V-333667(ICB/CCB)
AD19479-003	1	SMP	17:10	14	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-005	1	SMP	17:14	15	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-007	1	SMP	17:18	16	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-009	1	SMP	17:23	17	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-011	1	SMP	17:27	18	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
CCV V-333673	1	CCV	17:31	19							V-333673(CCV)
CCB V-333667	1	CCB	17:36	20							V-333667(ICB/CCB)
AD19479-013	1	NA	17:40	21	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-013	1	SMP	17:45	22	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-015	1	SMP	17:49	23	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-017	1	SMP	17:53	24	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19479-019	1	SMP	17:57	25	MET-TAL6010S	SOIL	SOIL	SW846	85348		0
AD19463-001	1	SMP	18:01	26	MET-TAL6010S	SOIL	SOIL	SW846	85342		0
CCV V-333673	1	CCV	18:06	27							V-333673(CCV)
CCB V-333667	1	CCB	18:11	28							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 5:18:28 PM

RUN IS OK  
Na, K reported

*olufemi* 10/12/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26287SMDL.txt

Analysis Date: 09/30/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	10:59	1							0
.2 PPB	1	CAL	11:00	2							0
.5 PPB	1	CAL	11:02	3							0
1 PPB	1	CAL	11:03	4							0
2 PPB	1	CAL	11:04	5							0
5 PPB	1	CAL	11:06	6							0
10 PPB	1	CAL	11:07	7							0
25 PPB	1	CAL	11:09	8							0
ICV (2)	1	ICV	11:11	9							0
ICB	1	ICB	11:12	10							0
MB 85348 (167)	1	MB	11:14	11		SOIL	SOIL	SW846	85348		0
LCS 85348	1	NA	11:15	12		SOIL	SOIL	SW846	85348	Conc. Is greater than calibration limit	0
LCS MR 85348	1	NA	11:17	13		SOIL	SOIL	SW846	85348	Conc. Is greater than calibration limit	0
LCS 4D	4	LCS	11:18	14		SOIL	SOIL	SW846	85348		0
LCS MR 4D	4	LCS	11:20	15		SOIL	SOIL	SW846	85348		0
AD19479-001	1	SMP	11:21	16	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MR	11:22	17	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MS	11:24	18	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-001	1	MSD	11:25	19	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19451-006	1	SMP	11:27	20	HG-SOIL	SOIL	SOIL	SW846	85348		0
CCV	1	CCV	11:28	21							0
CCB	1	CCB	11:30	22							0
AD19472-001	1	SMP	11:31	23	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19472-002	1	SMP	11:33	24	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19472-003	1	SMP	11:34	25	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-003	1	SMP	11:35	26	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-005	1	SMP	11:37	27	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-007	1	SMP	11:38	28	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-009	1	SMP	11:39	29	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-011	1	SMP	11:41	30	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-013	1	SMP	11:42	31	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-015	1	SMP	11:43	32	HG-SOIL	SOIL	SOIL	SW846	85348		0
CCV	1	CCV	11:45	33							0
CCB	1	CCB	11:46	34							0
AD19479-017	1	SMP	11:48	35	HG-SOIL	SOIL	SOIL	SW846	85348		0
AD19479-019	1	SMP	11:49	36	HG-SOIL	SOIL	SOIL	SW846	85348		0
CCV	1	CCV	11:50	37							0
CCB	1	CCB	11:52	38							0

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 4:26:00 PM

RUN IS OK

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

10/12/20

# Run Log

Data File: W\METALS\FRM\ICPDATA\New\MS3\_7700SWAS100120AMDL.txt

Analysis Date: 10/01/20

Instrument: MS3\_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	09:50	1	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
CalBlk V-335538	1	ISBLK	09:54	2		SOIL	SOIL				V-335538(Cal Blk WARNING)
CalStd1 V-335539	1	CAL	09:59	3							V-335539(Cal Std-1 WARNING)
CalStd2 V-335540	1	CAL	10:03	4							V-335540(Cal Std-2 WARNING)
CalStd3 V-335541	1	CAL	10:08	5							V-335541(Cal Std-3 WARNING)
CalStd4 V-335542	1	CAL	10:12	6							V-335542(Cal Std-4 WARNING)
CalStd5 V-335543	1	CAL	10:17	7							V-335543(Cal Std-5 WARNING)
ICV V-335544	1	ICV	10:21	8							V-335544(ICV WARNING)
LLICV V-335549	1	LLICV	10:26	9	MET-TAL6020S	SOIL	SOIL	SW846	85347		V-335549(LL-ICV/CCV SOIL WARNING)
ICB V-335545	1	ICB	10:30	10							V-335545(ICB/CCB WARNING)
ICSA V-335546	1	ICSA	10:35	11							V-335546(ICSA WARNING)
RINSE	1	NA	10:39	12	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
LRS V-335547	1	LRS	10:44	13	MET-TAL6020S	SOIL	SOIL	SW846	85347	Ag fail	V-335547(LRS WARNING)
RINSE	1	NA	10:48	14	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
RINSE	1	NA	10:53	15	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
CCV V-335548	1	CCV	10:57	16							V-335548(CCV WARNING)
CCB V-335545	1	CCB	11:02	17							V-335545(ICB/CCB WARNING)
MB 85347	1	MB	11:06	18	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
LCS 85347	1	LCS	11:11	19	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
LCS MR 85347	1	LCS	11:15	20	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-001	1	SMP	11:19	21	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-001	1	MR	11:24	22	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-001	5	SD	11:28	23	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-001	1	MS	11:33	24	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-001	1	MSD	11:37	25	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-001	1	PS	11:41	26	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
RINSE	1	NA	11:45	27	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
CCV V-335548	1	CCV	11:50	28							V-335548(CCV WARNING)
CCB V-335545	1	CCB	11:54	29							V-335545(ICB/CCB WARNING)
AD19451-006	1	NA	11:59	30	MET-RCRA-MS	SOIL	SOIL	SW846	85347		0
AD19472-001	1	NA	12:03	31	MET-RCRA-MS	SOIL	SOIL	SW846	85347		0
AD19472-002	1	NA	12:08	32	MET-RCRA-MS	SOIL	SOIL	SW846	85347		0
AD19472-003	1	NA	12:12	33	MET-RCRA-MS	SOIL	SOIL	SW846	85347		0
AD19479-003	1	SMP	12:17	34	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-005	1	SMP	12:21	35	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-007	1	SMP	12:26	36	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-009	1	SMP	12:30	37	MET-TAL6020S	SOIL	SOIL	SW846	85347	Rerun Be, TI (IS)	0
AD19479-011	1	SMP	12:35	38	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
RINSE	1	NA	12:39	39	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
CCV V-335548	1	CCV	12:44	40							V-335548(CCV WARNING)
CCB V-335545	1	CCB	12:48	41							V-335545(ICB/CCB WARNING)
AD19479-013	1	SMP	12:53	42	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-015	1	SMP	12:57	43	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-017	1	SMP	13:02	44	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-019	1	SMP	13:06	45	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
AD19479-009	3	SMP	13:11	46	MET-TAL6020S	SOIL	SOIL	SW846	85347	Report Be, TI	0
RINSE	1	NA	13:15	47	MET-TAL6020S	SOIL	SOIL	SW846	85347		0
CCV V-335548	1	CCV	13:20	48							V-335548(CCV WARNING)
CCB V-335545	1	CCB	13:24	49							V-335545(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau  
192 168 1 87 10/13/2020 10:16:25 AM

Run ok Report Ag, As, Be, Cd, Sb, Se, TI, v LRS fail for Ag AG LR = 100ppb  
Reran Be, TI for 19479-009 (int. std. Fail). PC.

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 20 10/1/20

Standard/Batch/SnCl2 Lot #:

10/13/20

# ICPMS Internal Standard Summary Report

0092806 0266

TuneID: 1

Batch/FileID: S100120AM Sample ID: CalBlk V-335538 Sample Date 10/01/20 Sample Time: 09:54

IS ID:	Area	Area Limit
Ho-1	1867556.26	1307289.382 - 2427823.138
In-1	1239591.53	867714.071 - 1611468.989
Sc-1	949092.10	664364.47 - 1233819.73
Tb-1	1953718.53	1367602.971 - 2539834.089

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-335538	2	1867556.	1239591.	949092.1	1953718.				
SMP	RINSE	1	1890605.	1239955.	949398.7	1948137.				
CAL	CalStd1 V-33553	3	1884899.	1264948.	973508.9	1953955.				
CAL	CalStd2 V-33554	4	1953230.	1299900.	978578.9	2004387.				
CAL	CalStd3 V-33554	5	1938544.	1281387.	981390.7	2006116.				
CAL	CalStd4 V-33554	6	1917704.	1245770.	963567.3	1967213.				
CAL	CalStd5 V-33554	7	1893748.	1221640.	952777.6	1936564.				
ICV	ICV V-335544	8	1942952.	1279349.	988275.7	2001283.				
LLICV	LLICV V-335549	9	1984522.	1350518.	1017608.	2046051.				
ICB	ICB V-335545	10	1904903.	1281264.	1001512.	1969921.				
ICSA	ICSA V-335546	11	1965584.	1221987.	992190.2	2043657.				
SMP	RINSE	12	1981926.	1387095.	1013762.	2071333.				
LRS	LRS V-335547	13	1952465.	1245524.	1002360.	2011131.				
SMP	RINSE	14	1954984.	1429250.	1027489.	2049929.				
SMP	RINSE	15	1970145.	1368428.	1008983.	2049070.				
CCV	CCV V-335548	16	1985946.	1400622.	1022610.	2049839.				
CCB	CCB V-335545	17	1936263.	1316538.	993418.2	2009436.				
MB	MB 85347	18	2018814.	1406757.	998953.1	2077026.				
LCS	LCS 85347	19	2032541.	1299299.	1056041.	2117375.				
MR	LCS MR 85347	20	2029660.	1343027.	1044309.	2101759.				
SMP	AD19479-001	21	2161397.	1273959.	1507502.	* 2204955.				
MR	AD19479-001	22	2159181.	1322830.	1445167.	* 2220723.				
SD	AD19479-001	23	1973262.	1264224.	1064404.	2042781.				
MS	AD19479-001	24	2104030.	1249422.	1439328.	* 2134598.				
MSD	AD19479-001	25	2096147.	1259724.	1428817.	* 2155322.				
PS	AD19479-001	26	2144411.	1265193.	1477992.	* 2192372.				
SMP	RINSE	27	1844729.	1212766.	942042.2	1923094.				
CCV	CCV V-335548	28	1875256.	1215489.	931701.8	1937018.				
CCB	CCB V-335545	29	1842787.	1189556.	911557.6	1906148.				
SMP	AD19451-006	30	2063788.	1284303.	1423663.	* 2126112.				
SMP	AD19472-001	31	2096034.	1359554.	1622229.	* 2156562.				
SMP	AD19472-002	32	2084863.	1365833.	1402846.	* 2152305.				
SMP	AD19472-003	33	2076291.	1306239.	1306740.	* 2146049.				
SMP	AD19479-003	34	2161325.	1304396.	1466972.	* 2211959.				
SMP	AD19479-005	35	2157283.	1285404.	1441677.	* 2198901.				
SMP	AD19479-007	36	2103184.	1278823.	1446662.	* 2176393.				
SMP	AD19479-009	37	2649831. *	1291758.	1582600.	* 2587283. *				
SMP	AD19479-011	38	2133623.	1345645.	1381634.	* 2196825.				
SMP	RINSE	39	1865617.	1224829.	943654.7	1944238.				
CCV	CCV V-335548	40	1915018.	1237564.	950938.9	1963917.				
CCB	CCB V-335545	41	1829540.	1207751.	917523.4	1898084.				
SMP	AD19479-013	42	2198200.	1333866.	1473931.	* 2231993.				
SMP	AD19479-015	43	2067544.	1263437.	1270674.	* 2127104.				
SMP	AD19479-017	44	2193926.	1418665.	1435051.	* 2225882.				
SMP	AD19479-019	45	2180296.	1404307.	1509773.	* 2233115.				
SMP	AD19479-009	46	2208375.	1302432.	1251900.	* 2237206.				
SMP	RINSE	47	1899541.	1253424.	957308.3	1952429.				
CCV	CCV V-335548	48	1922863.	1252141.	974758.3	1989631.				

\* Indicates Internal Standard Area outside of limits



# ICPMS Internal Standard Summary Report

0092806 0267

TuneID: 1

CCB CCB V-335545 49 1872768. 1236729. 943765.1 1930533.

# ICPMS Internal Standard Summary Report

0092806 0268

TuneID: 2

Batch/FileID: S100120AMS Sample ID: CalBlk V-335538 Sample Date 10/01/20 Sample Time: 09:54

IS ID:	Area	Area Limit
Ho-2	821636.05	575145.235 - 1068126.865
In-2	257993.71	180595.597 - 335391.823
Sc-2	46556.07	32589.249 - 60522.891
Tb-2	827462.16	579223.512 - 1075700.808

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-335538	2	821636.0	257993.7	46556.07	827462.1				
SMP	RINSE	1	816617.2	253905.3	46437.01	819415.0				
CAL	CalStd1 V-33553	3	837305.1	260403.1	47157.45	844156.1				
CAL	CalStd2 V-33554	4	848533.1	265883.4	47802.44	857074.9				
CAL	CalStd3 V-33554	5	844580.4	265309.7	47899.30	849717.2				
CAL	CalStd4 V-33554	6	825854.2	255469.2	45423.28	837247.6				
CAL	CalStd5 V-33554	7	830870.1	252189.2	46528.07	833828.1				
ICV	ICV V-335544	8	848065.7	264075.2	48214.51	854795.6				
LLICV	LLICV V-335549	9	862458.9	274597.9	50129.41	876912.3				
ICB	ICB V-335545	10	833345.4	265684.5	49344.33	842019.9				
ICSA	ICSA V-335546	11	853923.3	256126.8	50280.04	858841.6				
SMP	RINSE	12	858391.5	273413.0	49655.03	868050.6				
LRS	LRS V-335547	13	852987.1	261988.9	49848.74	856864.2				
SMP	RINSE	14	867709.9	279485.5	51205.92	871680.8				
SMP	RINSE	15	851854.7	273707.1	50870.69	863155.8				
CCV	CCV V-335548	16	869347.8	275096.2	51069.72	878624.8				
CCB	CCB V-335545	17	835070.4	268061.1	48872.83	845384.7				
MB	MB 85347	18	852391.5	261766.4	46748.89	859728.9				
LCS	LCS 85347	19	858947.8	259441.1	49641.70	866397.3				
MR	LCS MR 85347	20	858560.4	257562.4	49118.31	863834.6				
SMP	AD19479-001	21	912869.4	255501.8	68624.79	* 909999.8				
MR	AD19479-001	22	926192.3	256526.4	65466.14	* 920554.5				
SD	AD19479-001	23	853529.1	257902.2	51101.12	859493.3				
MS	AD19479-001	24	901751.7	253049.5	67160.97	* 897472.7				
MSD	AD19479-001	25	895262.1	256050.2	64972.07	* 894590.8				
PS	AD19479-001	26	912419.8	255030.0	67827.56	* 907521.6				
SMP	RINSE	27	811616.4	254839.5	46329.79	817448.9				
CCV	CCV V-335548	28	813555.5	250229.5	45507.91	820515.0				
CCB	CCB V-335545	29	797148.9	249832.7	45218.33	802826.3				
SMP	AD19451-006	30	878172.6	262012.4	66285.79	* 879708.6				
SMP	AD19472-001	31	886243.6	260385.7	74916.10	* 891333.9				
SMP	AD19472-002	32	878667.0	259025.4	62131.40	* 887912.6				
SMP	AD19472-003	33	897376.1	259583.4	59503.04	896184.9				
SMP	AD19479-003	34	925369.6	258793.9	68213.64	* 925573.4				
SMP	AD19479-005	35	916577.6	258270.2	65709.10	* 908785.5				
SMP	AD19479-007	36	900975.7	259198.2	65959.67	* 898291.6				
SMP	AD19479-009	37	1170984. *	262068.2	72832.86	* 1102349. *				
SMP	AD19479-011	38	899904.8	258108.4	61901.00	* 906793.4				
SMP	RINSE	39	815554.6	260185.9	46315.43	826572.7				
CCV	CCV V-335548	40	831733.8	257040.3	46188.29	837587.9				
CCB	CCB V-335545	41	806153.8	252530.1	45973.60	812390.3				
SMP	AD19479-013	42	941466.5	262941.0	67097.13	* 940091.9				
SMP	AD19479-015	43	867965.2	244959.7	56519.73	872226.3				
SMP	AD19479-017	44	928224.3	263292.9	65604.56	* 926738.7				
SMP	AD19479-019	45	942786.5	264327.3	69969.96	* 941739.4				
SMP	AD19479-009	46	976905.4	270101.0	57460.08	953246.1				
SMP	RINSE	47	830339.3	265083.4	47318.90	841502.0				
CCV	CCV V-335548	48	849038.9	262879.5	47316.84	851980.0				

\* Indicates Internal Standard Area outside of limits

# ICPMS Internal Standard Summary Report

0092806 0269

TuneID: 2

CCB CCB V-335545 49 836994.3 265948.0 47938.40 843042.2

\* Indicates Internal Standard Area outside of limits

## **Wet Chemistry Data**

**VERITECH Wet Chem Form1 Analysis Summary**  
**% Solids**

**TestGroupName: % Solids SM2540G**

**Project #: 0092806**

**TestGroup: %SOLIDS**

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19479-001	HSI-SS-01 (0-0.5')	Soil	1	90	Percent			09/28/20	09/28/20	09/25/20
AD19479-002	HSI-SS-01 (0.5-1')	Soil/Terracore	1	92	Percent			09/28/20	09/28/20	09/25/20
AD19479-003	HSI-SS-02 (0-0.5')	Soil	1	91	Percent			09/28/20	09/28/20	09/25/20
AD19479-004	HSI-SS-02 (0.5-1')	Soil/Terracore	1	91	Percent			09/28/20	09/28/20	09/25/20
AD19479-005	HSI-SS-03 (0-0.5')	Soil	1	82	Percent			09/28/20	09/28/20	09/25/20
AD19479-006	HSI-SS-03 (0.5-1')	Soil/Terracore	1	81	Percent			09/28/20	09/28/20	09/25/20
AD19479-007	HSI-SS-04 (0-0.5')	Soil	1	90	Percent			09/28/20	09/28/20	09/25/20
AD19479-008	HSI-SS-04 (0.5-1')	Soil/Terracore	1	91	Percent			09/28/20	09/28/20	09/25/20
AD19479-009	HSI-SS-05 (0-0.5')	Soil	1	87	Percent			09/28/20	09/28/20	09/25/20
AD19479-010	HSI-SS-05 (0.5-1')	Soil/Terracore	1	90	Percent			09/28/20	09/28/20	09/25/20
AD19479-011	HSI-SS-06 (0-0.5')	Soil	1	92	Percent			09/28/20	09/28/20	09/25/20
AD19479-012	HSI-SS-06 (0.5-1')	Soil/Terracore	1	91	Percent			09/28/20	09/28/20	09/25/20
AD19479-013	HSI-SS-07 (0-0.5')	Soil	1	82	Percent			09/28/20	09/28/20	09/25/20
AD19479-014	HSI-SS-07 (0.5-1')	Soil/Terracore	1	71	Percent			09/28/20	09/28/20	09/25/20
AD19479-015	HSI-SS-08 (0-0.5')	Soil	1	94	Percent			09/28/20	09/28/20	09/25/20
AD19479-016	HSI-SS-08 (0.5-1')	Soil/Terracore	1	89	Percent			09/28/20	09/28/20	09/25/20
AD19479-017	HSI-SS-09 (0-0.5')	Soil	1	93	Percent			09/28/20	09/28/20	09/25/20
AD19479-018	HSI-SS-09 (0.5-1')	Soil/Terracore	1	93	Percent			09/28/20	09/28/20	09/25/20
AD19479-019	HSI-SS-D (0-0.5')	Soil	1	92	Percent			09/28/20	09/28/20	09/25/20
AD19479-020	HSI-SS-D (0.5-1')	Soil/Terracore	1	79	Percent			09/28/20	09/28/20	09/25/20

## % Solids Report

Analysis Type: SOLIDS-SS  
 BatchID: SOLIDS-SS-11020

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19479-001	90	90.10340	Percent	1.36	8.13	7.47	09/28/20	jessica	0.046	5
Sample	AD19479-001	90	90.14493	Percent	1.35	11.70	10.68	09/28/20	jessica		
Sample	AD19479-002	92	92.49395	Percent	1.36	9.62	9.00	09/28/20	jessica		
Sample	AD19479-003	91	91.37597	Percent	1.36	11.68	10.79	09/28/20	jessica		
Sample	AD19479-004	91	90.51173	Percent	1.36	10.74	9.85	09/28/20	jessica		
Sample	AD19479-005	82	81.98294	Percent	1.34	10.72	9.03	09/28/20	jessica		
Sample	AD19479-006	81	80.95975	Percent	1.37	14.29	11.83	09/28/20	jessica		
Sample	AD19479-007	90	90.39666	Percent	1.35	10.93	10.01	09/28/20	jessica		
Sample	AD19479-008	91	90.77670	Percent	1.36	7.54	6.97	09/28/20	jessica		
Sample	AD19479-009	87	87.24672	Percent	1.34	9.73	8.67	09/28/20	jessica		
Sample	AD19479-010	90	90.07315	Percent	1.36	10.93	9.98	09/28/20	jessica		
Sample	AD19479-011	92	91.81637	Percent	1.36	11.38	10.56	09/28/20	jessica		
Sample	AD19479-012	91	90.61697	Percent	1.37	9.15	8.42	09/28/20	jessica		
Sample	AD19479-013	82	82.44444	Percent	1.36	10.36	8.78	09/28/20	jessica		
Sample	AD19479-014	71	71.04430	Percent	1.36	7.68	5.85	09/28/20	jessica		
Sample	AD19479-015	94	93.76771	Percent	1.36	11.95	11.29	09/28/20	jessica		
Sample	AD19479-016	89	89.41642	Percent	1.38	11.49	10.42	09/28/20	jessica		
Sample	AD19479-017	93	93.12377	Percent	1.36	11.54	10.84	09/28/20	jessica		
Sample	AD19479-018	93	92.84165	Percent	1.32	10.54	9.88	09/28/20	jessica		
Sample	AD19479-019	92	92.33449	Percent	1.36	9.97	9.31	09/28/20	jessica		
Sample	AD19479-020	79	79.03635	Percent	1.37	13.20	10.72	09/28/20	jessica		

\* - Indicates Failed Rpd Criteria



Last Page of Report

**ATTACHMENT G**

**GROUNDWATER, SUBSURFACE SOIL, AND WASTE CHARACTERIZATION SAMPLE  
LABORATORY ANALYTICAL REPORTS**



## Project: Hot Spot Investigation

**Client PO:** CG09042310MS

**Report To:** Chesapeake Geosciences Inc  
5405 Twin Knolls Rd.  
Suite 1  
Columbia, MD 21045  
Attn: Nancy Love

**Received Date:** 9/30/2020

**Report Date:** 10/26/2020

**Deliverables:** MDE-R

**Lab ID:** AD19539

**Lab Project No:** 0093024

**REVISED**  
10/28/2020

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This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

---

  
Sean Beris - Quality Assurance Officer

OR

Jean Revolus - Laboratory Director

NJ (07071)  
PA (68-00463)

NY (ELAP11408)  
KY (90124)

CT (PH-0671)





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Form 1 Sample Results

Inorganic Spreadsheet / QC Summary

# Sample Summary

**Client:** Chesapeake Geosciences Inc

**HC Project #:** 0093024

**Project:** Hot Spot Investigation

<b>Lab#</b>	<b>SampleID</b>	<b>Matrix</b>	<b>Collection Date</b>	<b>Receipt Date</b>
AD19539-001	HSI-TB-01	Aqueous	9/28/2020	9/30/2020
AD19539-002	HSI-GW-01	Aqueous	9/28/2020	9/30/2020
AD19539-003	HSI-GW-02	Aqueous	9/28/2020	9/30/2020
AD19539-004	HSI-GW-03	Aqueous	9/28/2020	9/30/2020
AD19539-005	HSI-GW-04	Aqueous	9/28/2020	9/30/2020
AD19539-006	HSI-SB-02(3.5-4)	Soil/Terracore	9/28/2020	9/30/2020
AD19539-007	HSI-SB-02(10-10.5)	Soil/Terracore	9/28/2020	9/30/2020
AD19539-008	HSI-SB-02(11-11.5)	Soil/Terracore	9/28/2020	9/30/2020
AD19539-009	HSI-SB-04 (9.5-10)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-010	HSI-SB-03 (3.5-4)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-011	HSI-SB-03 (10-10.5)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-012	HSI-SB-03 (11-11.5)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-013	HSI-SB-01 (2.5-3)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-014	HSI-SB-01 (6-6.5)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-015	HSI-SB-01 (10-10.5)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-016	HSI-SB-01 (14.5-15)	Soil/Terracore	9/29/2020	9/30/2020
AD19539-017	HSI-SB-D1	Soil/Terracore	9/29/2020	9/30/2020

# HC Case Narrative

**Client:** Chesapeake Geosciences Inc  
**Project:** Hot Spot Investigation

**HC Project:** 0093024

*This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.*

## **Volatile Organic Analysis:**

Methyl acetate was recovered in Method Blank 89447 and in samples AD19539-002, -003, -004, -005 due to possible laboratory contamination.

The Method Blank Spike for batches 89425, 89426, 89427, 89437, 89447, 89475 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 89425, 89426, 89427, 89437, 89447, 89475 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

2-Chloroethylvinylether did not recover in the Matrix Spike and/or Matrix Spike Duplicate in batches 89427, 89447 due to acid preservation of sample. 2-Chloroethylvinylether readily decomposes under acidic conditions. The recovery of 2-Chloroethylvinylether is within QC limits in the Laboratory Control Sample. Please refer to the applicable Form 3 for the recoveries.

Sample AD19539-007 had one or more surrogate recoveries outside QC limits. The sample was reanalyzed confirming recoveries outside QC limits due to matrix interference. The initial analysis is reported. Please refer to the applicable Form 2 for the recoveries.

## **Base Neutral/Acid Extractable Analysis:**

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 88132 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Samples AD19539-014, -017 had one or more surrogates outside QC limits. Please refer to the applicable Form 2 for the recoveries.

## **Metals Analysis:**

Sample AD19539-007 was reported at a dilution for Be, Tl due to internal standard interference.

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batches 85372, 85373 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the LCS and the LCS Replicate had recoveries outside QC limits in batch 85372. Please refer to the applicable Form 6/9 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batches 85372, 85373. Please refer to the applicable Form 6/9 for the recoveries.

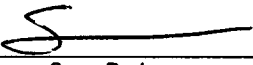
The MS/MSD RPD had recoveries outside QC limits in batch 85372. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 85372 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Reported to MDL per client request. When reporting to the MDL, detections are typically found in the blanks. Acceptance criteria for blanks are based on the RL.

**Wet Chemistry Analysis:**

Data conforms to method requirements.

  
\_\_\_\_\_  
Sean Berls  
Quality Assurance Officer

Or

\_\_\_\_\_  
Jean Revolus  
Laboratory Director

10/26/20  
Date

# HC Executive Summary

0093024 0004

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-002

Sample ID: HSI-GW-01

Analyte	Units	RL/MDL	Result	Analytical Method
1,1-Dichloroethane	ug/l	2.1	6.9	EPA 8260D
1,2-Dichloroethane	ug/l	3.2	35	EPA 8260D
Benzene	ug/l	1.5	40	EPA 8260D
Chlorobenzene	ug/l	1.7	510	EPA 8260D
cis-1,2-Dichloroethene	ug/l	3.2	360	EPA 8260D
Ethylbenzene	ug/l	2.3	3.6J	EPA 8260D
m&p-Xylenes	ug/l	4.2	6.6	EPA 8260D
Methyl Acetate	ug/l	3.5	11B	EPA 8260D
Methyl-t-butyl ether	ug/l	1.6	18	EPA 8260D
o-Xylene	ug/l	3.4	3.6J	EPA 8260D
Toluene	ug/l	1.6	2.1J	EPA 8260D
trans-1,2-Dichloroethene	ug/l	1.5	91	EPA 8260D
Trichloroethene	ug/l	1.7	10	EPA 8260D
Vinyl chloride	ug/l	3.5	65	EPA 8260D
Xylenes (Total)	ug/l	3.4	10	EPA 8260D

Lab#: AD19539-003

Sample ID: HSI-GW-02

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	ug/l	2.2	7.5	EPA 8260D
1,1-Dichloroethane	ug/l	2.1	3.6J	EPA 8260D
1,2-Dichloroethane	ug/l	3.2	24	EPA 8260D
Benzene	ug/l	1.5	36	EPA 8260D
Chlorobenzene	ug/l	1.7	550	EPA 8260D
cis-1,2-Dichloroethene	ug/l	3.2	97	EPA 8260D
Ethylbenzene	ug/l	2.3	17	EPA 8260D
Isopropylbenzene	ug/l	2.5	2.9J	EPA 8260D
m&p-Xylenes	ug/l	4.2	39	EPA 8260D
Methyl Acetate	ug/l	3.5	13B	EPA 8260D
Methyl-t-butyl ether	ug/l	1.6	4.1	EPA 8260D
o-Xylene	ug/l	3.4	13	EPA 8260D
Toluene	ug/l	1.6	120	EPA 8260D
trans-1,2-Dichloroethene	ug/l	1.5	15	EPA 8260D
Trichloroethene	ug/l	1.7	16	EPA 8260D
Vinyl chloride	ug/l	3.5	45	EPA 8260D
Xylenes (Total)	ug/l	3.4	52	EPA 8260D

Lab#: AD19539-004

Sample ID: HSI-GW-03

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	ug/l	2.2	2.4J	EPA 8260D
1,1-Dichloroethane	ug/l	2.1	2.7J	EPA 8260D
Benzene	ug/l	1.5	13	EPA 8260D
Chlorobenzene	ug/l	1.7	320	EPA 8260D
Chloroethane	ug/l	2.9	4.5J	EPA 8260D
cis-1,2-Dichloroethene	ug/l	3.2	4.7J	EPA 8260D
Methyl Acetate	ug/l	3.5	15B	EPA 8260D
Methyl-t-butyl ether	ug/l	1.6	1.9J	EPA 8260D
trans-1,2-Dichloroethene	ug/l	1.5	1.9J	EPA 8260D
Vinyl chloride	ug/l	3.5	9.0	EPA 8260D

# HC Executive Summary

0093024 0005

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-005

Sample ID: HSI-GW-04

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	ug/l	2.2	12	EPA 8260D
1,1-Dichloroethane	ug/l	2.1	4.5J	EPA 8260D
1,2-Dichloroethane	ug/l	3.2	20	EPA 8260D
Benzene	ug/l	1.5	28	EPA 8260D
Chlorobenzene	ug/l	1.7	460	EPA 8260D
Chloroethane	ug/l	2.9	3.6J	EPA 8260D
cis-1,2-Dichloroethene	ug/l	3.2	120	EPA 8260D
Methyl Acetate	ug/l	3.5	14B	EPA 8260D
Methylene chloride	ug/l	1.5	1.9J	EPA 8260D
Methyl-t-butyl ether	ug/l	1.6	9.6	EPA 8260D
Toluene	ug/l	1.6	4.3J	EPA 8260D
trans-1,2-Dichloroethene	ug/l	1.5	32	EPA 8260D
Trichloroethene	ug/l	1.7	26	EPA 8260D
Vinyl chloride	ug/l	3.5	48	EPA 8260D

Lab#: AD19539-006

Sample ID: HSI-SB-02(3.5-4)

Analyte	Units	RL/MDL	Result	Analytical Method
Chlorobenzene	mg/kg	0.030	9.1	EPA 8260D
Ethylbenzene	mg/kg	0.042	0.78	EPA 8260D
m&p-Xylenes	mg/kg	0.076	4.1	EPA 8260D
o-Xylene	mg/kg	0.061	1.3	EPA 8260D
Toluene	mg/kg	0.029	0.31	EPA 8260D
Xylenes (Total)	mg/kg	0.061	5.4	EPA 8260D



# HC Executive Summary

0093024 0006

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-007

Sample ID: HSI-SB-02(10-10.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	21	2200	EPA 6010D
Barium	mg/kg	0.84	15	EPA 6010D
Calcium	mg/kg	130	200J	EPA 6010D
Chromium	mg/kg	0.84	21	EPA 6010D
Copper	mg/kg	0.77	8.0	EPA 6010D
Iron	mg/kg	16	5300	EPA 6010D
Lead	mg/kg	0.77	13	EPA 6010D
Magnesium	mg/kg	24	160J	EPA 6010D
Manganese	mg/kg	0.80	12J	EPA 6010D
Nickel	mg/kg	1.4	2.5J	EPA 6010D
Zinc	mg/kg	1.9	23	EPA 6010D
Antimony	mg/kg	0.028	0.053J	EPA 6020B
Arsenic	mg/kg	0.022	1.9	EPA 6020B
Beryllium	mg/kg	0.059	0.12J	EPA 6020B
Cadmium	mg/kg	0.018	0.24J	EPA 6020B
Selenium	mg/kg	0.079	3.1	EPA 6020B
Silver	mg/kg	0.033	0.12J	EPA 6020B
Vanadium	mg/kg	0.014	32	EPA 6020B
1,1,2,2-Tetrachloroethane	mg/kg	0.00039	0.0063	EPA 8260D
1,1-Dichloroethane	mg/kg	0.00075	0.0011J	EPA 8260D
1,2-Dichlorobenzene	mg/kg	0.00044	0.0016J	EPA 8260D
1,4-Dichlorobenzene	mg/kg	0.00046	0.00075J	EPA 8260D
2-Butanone	mg/kg	0.0010	0.0093	EPA 8260D
4-Methyl-2-pentanone	mg/kg	0.00050	0.0042	EPA 8260D
Acetone	mg/kg	0.0058	0.034	EPA 8260D
Benzene	mg/kg	0.00063	0.083	EPA 8260D
Ethylbenzene	mg/kg	0.00059	0.074	EPA 8260D
Isopropylbenzene	mg/kg	0.00071	0.035	EPA 8260D
m&p-Xylenes	mg/kg	0.0010	0.29	EPA 8260D
Methylcyclohexane	mg/kg	0.00077	0.0025	EPA 8260D
Methylene chloride	mg/kg	0.00064	0.0024	EPA 8260D
o-Xylene	mg/kg	0.00061	0.12	EPA 8260D
Toluene	mg/kg	0.00057	0.17	EPA 8260D
Xylenes (Total)	mg/kg	0.00061	0.41	EPA 8260D
bis(2-Ethylhexyl)phthalate	mg/kg	0.037	0.34	EPA 8270E
Di-n-butylphthalate	mg/kg	0.048	1.6	EPA 8270E
Naphthalene	mg/kg	0.012	0.058	EPA 8270E

Lab#: AD19539-008

Sample ID: HSI-SB-02(11-11.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Benzene	mg/kg	0.021	0.098	EPA 8260D
Chlorobenzene	mg/kg	0.024	2.7	EPA 8260D
Ethylbenzene	mg/kg	0.034	0.046J	EPA 8260D
m&p-Xylenes	mg/kg	0.061	0.14	EPA 8260D
Toluene	mg/kg	0.023	1.2	EPA 8260D
Xylenes (Total)	mg/kg	0.049	0.14	EPA 8260D

# HC Executive Summary

0093024 0007

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-009

Sample ID: HSI-SB-04 (9.5-10)

Analyte	Units	RL/MDL	Result	Analytical Method
1,1-Dichloroethane	mg/kg	0.00071	0.0014J	EPA 8260D
1,2-Dichloroethane	mg/kg	0.00034	0.0028	EPA 8260D
Benzene	mg/kg	0.00060	0.0072	EPA 8260D
Chlorobenzene	mg/kg	0.00051	0.097	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.00066	0.030	EPA 8260D
m&p-Xylenes	mg/kg	0.00099	0.0010	EPA 8260D
Methylene chloride	mg/kg	0.00062	0.0022	EPA 8260D
Methyl-t-butyl ether	mg/kg	0.00044	0.00070J	EPA 8260D
o-Xylene	mg/kg	0.00058	0.0014	EPA 8260D
Toluene	mg/kg	0.00054	0.0049	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.00099	0.0033	EPA 8260D
Trichloroethene	mg/kg	0.00067	0.0012J	EPA 8260D
Vinyl chloride	mg/kg	0.0010	0.14	EPA 8260D
Xylenes (Total)	mg/kg	0.00058	0.0024	EPA 8260D

Lab#: AD19539-010

Sample ID: HSI-SB-03 (3.5-4)

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.034	0.43	EPA 8260D
1,1,2-Trichloroethane	mg/kg	0.024	0.025J	EPA 8260D
1,2-Dichloroethane	mg/kg	0.048	0.39	EPA 8260D
Chlorobenzene	mg/kg	0.025	0.057J	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.048	0.18	EPA 8260D
Tetrachloroethene	mg/kg	0.027	0.17	EPA 8260D
Toluene	mg/kg	0.025	0.042J	EPA 8260D
Trichloroethene	mg/kg	0.026	2.3	EPA 8260D

Lab#: AD19539-011

Sample ID: HSI-SB-03 (10-10.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	20	570	EPA 6010D
Chromium	mg/kg	0.80	1.0J	EPA 6010D
Copper	mg/kg	0.73	1.0J	EPA 6010D
Iron	mg/kg	16	1400	EPA 6010D
Lead	mg/kg	0.73	1.2J	EPA 6010D
Manganese	mg/kg	0.76	1.4J	EPA 6010D
Arsenic	mg/kg	0.021	0.30	EPA 6020B
Beryllium	mg/kg	0.019	0.040J	EPA 6020B
Selenium	mg/kg	0.076	1.1J	EPA 6020B
Silver	mg/kg	0.031	0.077J	EPA 6020B
Vanadium	mg/kg	0.013	7.5	EPA 6020B
Chlorobenzene	mg/kg	0.026	0.33	EPA 8260D
Toluene	mg/kg	0.025	0.37	EPA 8260D

# HC Executive Summary

0093024 0008

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-012

Sample ID: HSI-SB-03 (11-11.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Chlorobenzene	mg/kg	0.029	0.19	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.055	0.079J	EPA 8260D
Toluene	mg/kg	0.028	0.082J	EPA 8260D
Trichloroethene	mg/kg	0.030	0.032J	EPA 8260D

Lab#: AD19539-013

Sample ID: HSI-SB-01 (2.5-3)

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	19	4200	EPA 6010D
Barium	mg/kg	0.78	9.1J	EPA 6010D
Chromium	mg/kg	0.77	20	EPA 6010D
Copper	mg/kg	0.71	7.0	EPA 6010D
Iron	mg/kg	15	7600	EPA 6010D
Lead	mg/kg	0.71	9.8	EPA 6010D
Magnesium	mg/kg	22	350J	EPA 6010D
Manganese	mg/kg	0.74	13	EPA 6010D
Nickel	mg/kg	1.3	3.5J	EPA 6010D
Potassium	mg/kg	110	160J	EPA 6010D
Zinc	mg/kg	1.7	9.0J	EPA 6010D
Antimony	mg/kg	0.026	0.045J	EPA 6020B
Arsenic	mg/kg	0.020	1.8	EPA 6020B
Beryllium	mg/kg	0.018	0.059J	EPA 6020B
Cadmium	mg/kg	0.016	0.40J	EPA 6020B
Selenium	mg/kg	0.073	0.80J	EPA 6020B
Silver	mg/kg	0.030	0.054J	EPA 6020B
Vanadium	mg/kg	0.012	14	EPA 6020B
1,1,2,2-Tetrachloroethane	mg/kg	0.033	2.7	EPA 8260D
1,1,2-Trichloroethane	mg/kg	0.023	0.031J	EPA 8260D
1,2-Dichloroethane	mg/kg	0.047	1.8	EPA 8260D
4-Methyl-2-pentanone	mg/kg	0.035	0.59	EPA 8260D
Benzene	mg/kg	0.022	0.034J	EPA 8260D
Chlorobenzene	mg/kg	0.024	1.5	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.046	0.35	EPA 8260D
m&p-Xylenes	mg/kg	0.062	0.11	EPA 8260D
Methylene chloride	mg/kg	0.021	2.3	EPA 8260D
Tetrachloroethene	mg/kg	0.026	0.21	EPA 8260D
Toluene	mg/kg	0.024	0.75	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.023	0.088	EPA 8260D
Trichloroethene	mg/kg	0.025	4.4	EPA 8260D
Xylenes (Total)	mg/kg	0.050	0.11	EPA 8260D
2-Chlorophenol	mg/kg	0.013	0.35	EPA 8270E
2-Methylphenol	mg/kg	0.011	0.013	EPA 8270E
bis(2-Ethylhexyl)phthalate	mg/kg	0.034	0.25	EPA 8270E
Di-n-butylphthalate	mg/kg	0.044	0.25	EPA 8270E
Naphthalene	mg/kg	0.011	0.063	EPA 8270E

# HC Executive Summary

0093024 0009

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-014

Sample ID: HSI-SB-01 (6-6.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	20	4200	EPA 6010D
Barium	mg/kg	0.81	75	EPA 6010D
Calcium	mg/kg	120	290J	EPA 6010D
Chromium	mg/kg	0.81	60	EPA 6010D
Cobalt	mg/kg	0.86	1.3J	EPA 6010D
Copper	mg/kg	0.74	12	EPA 6010D
Iron	mg/kg	16	8200	EPA 6010D
Lead	mg/kg	0.74	160	EPA 6010D
Magnesium	mg/kg	23	420J	EPA 6010D
Manganese	mg/kg	0.77	27	EPA 6010D
Nickel	mg/kg	1.3	8.1	EPA 6010D
Potassium	mg/kg	120	160J	EPA 6010D
Zinc	mg/kg	1.8	33	EPA 6010D
Antimony	mg/kg	0.027	0.84J	EPA 6020B
Arsenic	mg/kg	0.021	2.3	EPA 6020B
Beryllium	mg/kg	0.019	0.20J	EPA 6020B
Cadmium	mg/kg	0.017	11	EPA 6020B
Selenium	mg/kg	0.077	3.3	EPA 6020B
Silver	mg/kg	0.031	0.062J	EPA 6020B
Vanadium	mg/kg	0.013	18	EPA 6020B
Mercury	mg/kg	0.015	0.063J	EPA 7471B
1,1,2,2-Tetrachloroethane	mg/kg	0.66	58	EPA 8260D
1,2-Dichloroethane	mg/kg	0.94	19	EPA 8260D
4-Methyl-2-pentanone	mg/kg	0.72	14	EPA 8260D
Benzene	mg/kg	0.44	2.4	EPA 8260D
Chlorobenzene	mg/kg	0.49	320	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.94	9.9	EPA 8260D
Ethylbenzene	mg/kg	0.69	12	EPA 8260D
Isopropylbenzene	mg/kg	0.72	1.2J	EPA 8260D
m&p-Xylenes	mg/kg	1.3	57	EPA 8260D
Methylcyclohexane	mg/kg	0.90	1.8	EPA 8260D
Methylene chloride	mg/kg	0.43	49	EPA 8260D
o-Xylene	mg/kg	1.0	13	EPA 8260D
Tetrachloroethene	mg/kg	0.53	29	EPA 8260D
Toluene	mg/kg	0.48	570	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.46	3.4	EPA 8260D
Trichloroethene	mg/kg	0.51	460	EPA 8260D
Xylenes (Total)	mg/kg	1.0	70	EPA 8260D
2-Chlorophenol	mg/kg	2.6	13	EPA 8270E
bis(2-Ethylhexyl)phthalate	mg/kg	7.1	50	EPA 8270E
Di-n-butylphthalate	mg/kg	9.2	720	EPA 8270E
Naphthalene	mg/kg	2.3	16	EPA 8270E

# HC Executive Summary

0093024 0010

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-015

Sample ID: HSI-SB-01 (10-10.5)

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00034	0.0011J	EPA 8260D
1,1-Dichloroethane	mg/kg	0.00065	0.00097J	EPA 8260D
1,1-Dichloroethene	mg/kg	0.00086	0.0016	EPA 8260D
1,2-Dichloroethane	mg/kg	0.00031	0.0073	EPA 8260D
4-Methyl-2-pentanone	mg/kg	0.00044	0.0040	EPA 8260D
Acetone	mg/kg	0.0051	0.0080	EPA 8260D
Benzene	mg/kg	0.00055	0.0086	EPA 8260D
Chlorobenzene	mg/kg	0.00047	0.18	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.00061	0.052	EPA 8260D
Ethylbenzene	mg/kg	0.00052	0.0028	EPA 8260D
m&p-Xylenes	mg/kg	0.00090	0.0024	EPA 8260D
Methylcyclohexane	mg/kg	0.00068	0.00093J	EPA 8260D
Methylene chloride	mg/kg	0.00056	0.0031	EPA 8260D
o-Xylene	mg/kg	0.00053	0.0019	EPA 8260D
Toluene	mg/kg	0.00050	0.0094	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.00090	0.0027	EPA 8260D
Trichloroethene	mg/kg	0.00062	0.030	EPA 8260D
Vinyl chloride	mg/kg	0.00092	0.084	EPA 8260D
Xylenes (Total)	mg/kg	0.00053	0.0043	EPA 8260D

Lab#: AD19539-016

Sample ID: HSI-SB-01 (14.5-15)

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00040	0.0024	EPA 8260D
1,2-Dichloroethane	mg/kg	0.00036	0.010	EPA 8260D
4-Methyl-2-pentanone	mg/kg	0.00051	0.00081J	EPA 8260D
Acetone	mg/kg	0.0060	0.012	EPA 8260D
Benzene	mg/kg	0.00065	0.0030	EPA 8260D
Chlorobenzene	mg/kg	0.00055	0.065	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.00072	0.014	EPA 8260D
Ethylbenzene	mg/kg	0.00061	0.00070J	EPA 8260D
m&p-Xylenes	mg/kg	0.0011	0.0013	EPA 8260D
Methylene chloride	mg/kg	0.00067	0.022	EPA 8260D
Methyl-t-butyl ether	mg/kg	0.00048	0.0012	EPA 8260D
Toluene	mg/kg	0.00059	0.035	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.0011	0.0027	EPA 8260D
Trichloroethene	mg/kg	0.00073	0.040	EPA 8260D
Vinyl chloride	mg/kg	0.0011	0.0075	EPA 8260D
Xylenes (Total)	mg/kg	0.00063	0.0013	EPA 8260D

# HC Executive Summary

0093024 0011

Client: Chesapeake Geosciences Inc

HC Project #: 0093024

Project: Hot Spot Investigation

Lab#: AD19539-017

Sample ID: HSI-SB-D1

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	20	5000	EPA 6010D
Barium	mg/kg	0.80	37	EPA 6010D
Calcium	mg/kg	120	1300	EPA 6010D
Chromium	mg/kg	0.80	49	EPA 6010D
Cobalt	mg/kg	0.85	1.4J	EPA 6010D
Copper	mg/kg	0.73	12	EPA 6010D
Iron	mg/kg	16	9700	EPA 6010D
Lead	mg/kg	0.73	140	EPA 6010D
Magnesium	mg/kg	23	440J	EPA 6010D
Manganese	mg/kg	0.76	27	EPA 6010D
Nickel	mg/kg	1.3	9.0	EPA 6010D
Potassium	mg/kg	120	190J	EPA 6010D
Zinc	mg/kg	1.8	31	EPA 6010D
Antimony	mg/kg	0.027	1.3	EPA 6020B
Arsenic	mg/kg	0.021	2.3	EPA 6020B
Beryllium	mg/kg	0.019	0.17J	EPA 6020B
Cadmium	mg/kg	0.017	6.2	EPA 6020B
Selenium	mg/kg	0.076	2.8	EPA 6020B
Silver	mg/kg	0.031	0.064J	EPA 6020B
Vanadium	mg/kg	0.013	19	EPA 6020B
Mercury	mg/kg	0.015	0.14	EPA 7471B
1,1,2,2-Tetrachloroethane	mg/kg	3.5	200	EPA 8260D
1,2-Dichloroethane	mg/kg	5.0	74	EPA 8260D
4-Methyl-2-pentanone	mg/kg	3.8	76	EPA 8260D
Benzene	mg/kg	2.3	9.7	EPA 8260D
Chlorobenzene	mg/kg	2.6	1200	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	5.0	33	EPA 8260D
Ethylbenzene	mg/kg	3.7	44	EPA 8260D
Isopropylbenzene	mg/kg	3.9	5.0J	EPA 8260D
m&p-Xylenes	mg/kg	6.7	200	EPA 8260D
Methylene chloride	mg/kg	2.3	160	EPA 8260D
o-Xylene	mg/kg	5.4	46	EPA 8260D
Tetrachloroethene	mg/kg	2.8	95	EPA 8260D
Toluene	mg/kg	2.6	2200	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	2.4	12	EPA 8260D
Trichloroethene	mg/kg	2.7	1700	EPA 8260D
Xylenes (Total)	mg/kg	5.4	250	EPA 8260D
2-Chlorophenol	mg/kg	5.2	24	EPA 8270E
bis(2-Ethylhexyl)phthalate	mg/kg	14	58	EPA 8270E
Di-n-butylphthalate	mg/kg	18	1200	EPA 8270E
Naphthalene	mg/kg	4.6	26	EPA 8270E

# HC Report of Analysis

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0093024

Sample ID: HSI-TB-01  
Lab#: AD19539-001  
Matrix: Aqueous

Collection Date: 9/28/2020  
Receipt Date: 9/30/2020

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	1	ug/l	0.36	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	0.45	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	0.73	1.0	ND
1,1,2-Trichloroethane	1	ug/l	0.32	1.0	ND
1,1-Dichloroethane	1	ug/l	0.43	1.0	ND
1,1-Dichloroethene	1	ug/l	0.53	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	0.79	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	0.73	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	0.83	1.0	ND
1,2-Dibromoethane	1	ug/l	0.34	1.0	ND
1,2-Dichlorobenzene	1	ug/l	0.32	1.0	ND
1,2-Dichloroethane	1	ug/l	0.64	0.64	ND
1,2-Dichloropropane	1	ug/l	0.30	1.0	ND
1,3-Dichlorobenzene	1	ug/l	0.38	1.0	ND
1,4-Dichlorobenzene	1	ug/l	0.37	1.0	ND
1,4-Dioxane	1	ug/l	39	50	ND
2-Butanone	1	ug/l	0.75	1.0	ND
2-Hexanone	1	ug/l	0.60	1.0	ND
4-Methyl-2-pentanone	1	ug/l	0.49	1.0	ND
Acetone	1	ug/l	4.6	5.0	ND
Benzene	1	ug/l	0.30	0.50	ND
Bromochloromethane	1	ug/l	0.79	1.0	ND
Bromodichloromethane	1	ug/l	0.35	1.0	ND
Bromoform	1	ug/l	0.54	1.0	ND
Bromomethane	1	ug/l	0.50	1.0	ND
Carbon disulfide	1	ug/l	0.42	1.0	ND
Carbon tetrachloride	1	ug/l	0.32	1.0	ND
Chlorobenzene	1	ug/l	0.33	1.0	ND
Chloroethane	1	ug/l	0.58	1.0	ND
Chloroform	1	ug/l	2.0	2.0	ND
Chloromethane	1	ug/l	0.52	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	0.64	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	0.32	1.0	ND
Cyclohexane	1	ug/l	0.49	1.0	ND
Dibromochloromethane	1	ug/l	0.24	1.0	ND
Dichlorodifluoromethane	1	ug/l	0.62	1.0	ND
Ethylbenzene	1	ug/l	0.47	1.0	ND
Isopropylbenzene	1	ug/l	0.49	1.0	ND
m&p-Xylenes	1	ug/l	0.85	1.0	ND
Methyl Acetate	1	ug/l	0.70	1.0	ND
Methylcyclohexane	1	ug/l	0.61	1.0	ND
Methylene chloride	1	ug/l	0.29	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.31	0.50	ND
o-Xylene	1	ug/l	0.68	1.0	ND
Styrene	1	ug/l	0.54	1.0	ND
Tetrachloroethene	1	ug/l	0.36	1.0	ND
Toluene	1	ug/l	0.33	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	0.31	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	0.31	1.0	ND
Trichloroethene	1	ug/l	0.35	1.0	ND
Trichlorofluoromethane	1	ug/l	0.31	1.0	ND
Vinyl chloride	1	ug/l	0.71	1.0	ND
Xylenes (Total)	1	ug/l	0.68	1.0	ND

Sample ID: HSI-GW-01  
 Lab#: AD19539-002  
 Matrix: Aqueous

Collection Date: 9/28/2020  
 Receipt Date: 9/30/2020

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	5	ug/l	1.8	5.0	ND
1,1,2,2-Tetrachloroethane	5	ug/l	2.2	5.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ug/l	3.6	5.0	ND
1,1,2-Trichloroethane	5	ug/l	1.6	5.0	ND
<b>1,1-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.1</b>	<b>5.0</b>	<b>6.9</b>
1,1-Dichloroethene	5	ug/l	2.7	5.0	ND
1,2,3-Trichlorobenzene	5	ug/l	3.9	5.0	ND
1,2,4-Trichlorobenzene	5	ug/l	3.6	5.0	ND
1,2-Dibromo-3-chloropropane	5	ug/l	4.2	5.0	ND
1,2-Dibromoethane	5	ug/l	1.7	5.0	ND
1,2-Dichlorobenzene	5	ug/l	1.6	5.0	ND
<b>1,2-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	<b>3.2</b>	<b>35</b>
1,2-Dichloropropane	5	ug/l	1.5	5.0	ND
1,3-Dichlorobenzene	5	ug/l	1.9	5.0	ND
1,4-Dichlorobenzene	5	ug/l	1.8	5.0	ND
1,4-Dioxane	5	ug/l	200	250	ND
2-Butanone	5	ug/l	3.7	5.0	ND
2-Hexanone	5	ug/l	3.0	5.0	ND
4-Methyl-2-pentanone	5	ug/l	2.4	5.0	ND
Acetone	5	ug/l	23	25	ND
<b>Benzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	<b>2.5</b>	<b>40</b>
Bromochloromethane	5	ug/l	3.9	5.0	ND
Bromodichloromethane	5	ug/l	1.7	5.0	ND
Bromoform	5	ug/l	2.7	5.0	ND
Bromomethane	5	ug/l	2.5	5.0	ND
Carbon disulfide	5	ug/l	2.1	5.0	ND
Carbon tetrachloride	5	ug/l	1.6	5.0	ND
<b>Chlorobenzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	<b>5.0</b>	<b>510</b>
Chloroethane	5	ug/l	2.9	5.0	ND
Chloroform	5	ug/l	9.8	9.8	ND
Chloromethane	5	ug/l	2.6	5.0	ND
<b>cis-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	<b>5.0</b>	<b>380</b>
cis-1,3-Dichloropropene	5	ug/l	1.6	5.0	ND
Cyclohexane	5	ug/l	2.4	5.0	ND
Dibromochloromethane	5	ug/l	1.2	5.0	ND
Dichlorodifluoromethane	5	ug/l	3.1	5.0	ND
<b>Ethylbenzene</b>	<b>5</b>	<b>ug/l</b>	<b>2.3</b>	<b>5.0</b>	<b>3.6J</b>
Isopropylbenzene	5	ug/l	2.5	5.0	ND
<b>m&amp;p-Xylenes</b>	<b>5</b>	<b>ug/l</b>	<b>4.2</b>	<b>5.0</b>	<b>6.6</b>
<b>Methyl Acetate</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	<b>5.0</b>	<b>11B</b>
Methylcyclohexane	5	ug/l	3.1	5.0	ND
Methylene chloride	5	ug/l	1.5	5.0	ND
<b>Methyl-t-butyl ether</b>	<b>5</b>	<b>ug/l</b>	<b>1.6</b>	<b>2.5</b>	<b>18</b>
<b>o-Xylene</b>	<b>5</b>	<b>ug/l</b>	<b>3.4</b>	<b>5.0</b>	<b>3.6J</b>
Styrene	5	ug/l	2.7	5.0	ND
Tetrachloroethene	5	ug/l	1.8	5.0	ND
<b>Toluene</b>	<b>5</b>	<b>ug/l</b>	<b>1.6</b>	<b>5.0</b>	<b>2.1J</b>
<b>trans-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	<b>5.0</b>	<b>91</b>
trans-1,3-Dichloropropene	5	ug/l	1.5	5.0	ND
<b>Trichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	<b>5.0</b>	<b>10</b>
Trichlorofluoromethane	5	ug/l	1.5	5.0	ND
<b>Vinyl chloride</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	<b>5.0</b>	<b>65</b>
<b>Xylenes (Total)</b>	<b>5</b>	<b>ug/l</b>	<b>3.4</b>	<b>5.0</b>	<b>10</b>



Sample ID: HSI-GW-02  
 Lab#: AD19539-003  
 Matrix: Aqueous

Collection Date: 9/28/2020  
 Receipt Date: 9/30/2020

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	5	ug/l	1.8	5.0	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.2</b>	5.0	<b>7.5</b>
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ug/l	3.6	5.0	ND
1,1,2-Trichloroethane	5	ug/l	1.6	5.0	ND
<b>1,1-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.1</b>	5.0	<b>3.6J</b>
1,1-Dichloroethene	5	ug/l	2.7	5.0	ND
1,2,3-Trichlorobenzene	5	ug/l	3.9	5.0	ND
1,2,4-Trichlorobenzene	5	ug/l	3.6	5.0	ND
1,2-Dibromo-3-chloropropane	5	ug/l	4.2	5.0	ND
1,2-Dibromoethane	5	ug/l	1.7	5.0	ND
1,2-Dichlorobenzene	5	ug/l	1.6	5.0	ND
<b>1,2-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	3.2	<b>24</b>
1,2-Dichloropropane	5	ug/l	1.5	5.0	ND
1,3-Dichlorobenzene	5	ug/l	1.9	5.0	ND
1,4-Dichlorobenzene	5	ug/l	1.8	5.0	ND
1,4-Dioxane	5	ug/l	200	250	ND
2-Butanone	5	ug/l	3.7	5.0	ND
2-Hexanone	5	ug/l	3.0	5.0	ND
4-Methyl-2-pentanone	5	ug/l	2.4	5.0	ND
Acetone	5	ug/l	23	25	ND
<b>Benzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	2.5	<b>36</b>
Bromochloromethane	5	ug/l	3.9	5.0	ND
Bromodichloromethane	5	ug/l	1.7	5.0	ND
Bromoform	5	ug/l	2.7	5.0	ND
Bromomethane	5	ug/l	2.5	5.0	ND
Carbon disulfide	5	ug/l	2.1	5.0	ND
Carbon tetrachloride	5	ug/l	1.6	5.0	ND
<b>Chlorobenzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	5.0	<b>550</b>
Chloroethane	5	ug/l	2.9	5.0	ND
Chloroform	5	ug/l	9.8	9.8	ND
Chloromethane	5	ug/l	2.6	5.0	ND
<b>cis-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	5.0	<b>97</b>
cis-1,3-Dichloropropene	5	ug/l	1.6	5.0	ND
Cyclohexane	5	ug/l	2.4	5.0	ND
Dibromochloromethane	5	ug/l	1.2	5.0	ND
Dichlorodifluoromethane	5	ug/l	3.1	5.0	ND
<b>Ethylbenzene</b>	<b>5</b>	<b>ug/l</b>	<b>2.3</b>	5.0	<b>17</b>
<b>Isopropylbenzene</b>	<b>5</b>	<b>ug/l</b>	<b>2.5</b>	5.0	<b>2.9J</b>
<b>m&amp;p-Xylenes</b>	<b>5</b>	<b>ug/l</b>	<b>4.2</b>	5.0	<b>39</b>
<b>Methyl Acetate</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	5.0	<b>13B</b>
Methylcyclohexane	5	ug/l	3.1	5.0	ND
Methylene chloride	5	ug/l	1.5	5.0	ND
<b>Methyl-t-butyl ether</b>	<b>5</b>	<b>ug/l</b>	<b>1.6</b>	2.5	<b>4.1</b>
<b>o-Xylene</b>	<b>5</b>	<b>ug/l</b>	<b>3.4</b>	5.0	<b>13</b>
Styrene	5	ug/l	2.7	5.0	ND
Tetrachloroethene	5	ug/l	1.8	5.0	ND
<b>Toluene</b>	<b>5</b>	<b>ug/l</b>	<b>1.6</b>	5.0	<b>120</b>
<b>trans-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	5.0	<b>15</b>
trans-1,3-Dichloropropene	5	ug/l	1.5	5.0	ND
<b>Trichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	5.0	<b>16</b>
Trichlorofluoromethane	5	ug/l	1.5	5.0	ND
<b>Vinyl chloride</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	5.0	<b>45</b>
<b>Xylenes (Total)</b>	<b>5</b>	<b>ug/l</b>	<b>3.4</b>	5.0	<b>52</b>

Sample ID: HSI-GW-03  
 Lab#: AD19539-004  
 Matrix: Aqueous

Collection Date: 9/28/2020  
 Receipt Date: 9/30/2020

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	5	ug/l	1.8	5.0	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.2</b>	5.0	<b>2.4J</b>
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ug/l	3.6	5.0	ND
1,1,2-Trichloroethane	5	ug/l	1.6	5.0	ND
<b>1,1-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.1</b>	5.0	<b>2.7J</b>
1,1-Dichloroethene	5	ug/l	2.7	5.0	ND
1,2,3-Trichlorobenzene	5	ug/l	3.9	5.0	ND
1,2,4-Trichlorobenzene	5	ug/l	3.6	5.0	ND
1,2-Dibromo-3-chloropropane	5	ug/l	4.2	5.0	ND
1,2-Dibromoethane	5	ug/l	1.7	5.0	ND
1,2-Dichlorobenzene	5	ug/l	1.6	5.0	ND
1,2-Dichloroethane	5	ug/l	3.2	3.2	ND
1,2-Dichloropropane	5	ug/l	1.5	5.0	ND
1,3-Dichlorobenzene	5	ug/l	1.9	5.0	ND
1,4-Dichlorobenzene	5	ug/l	1.8	5.0	ND
1,4-Dioxane	5	ug/l	200	250	ND
2-Butanone	5	ug/l	3.7	5.0	ND
2-Hexanone	5	ug/l	3.0	5.0	ND
4-Methyl-2-pentanone	5	ug/l	2.4	5.0	ND
Acetone	5	ug/l	23	25	ND
<b>Benzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	2.5	<b>13</b>
Bromochloromethane	5	ug/l	3.9	5.0	ND
Bromodichloromethane	5	ug/l	1.7	5.0	ND
Bromoform	5	ug/l	2.7	5.0	ND
Bromomethane	5	ug/l	2.5	5.0	ND
Carbon disulfide	5	ug/l	2.1	5.0	ND
Carbon tetrachloride	5	ug/l	1.6	5.0	ND
<b>Chlorobenzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	5.0	<b>320</b>
<b>Chloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.9</b>	5.0	<b>4.5J</b>
Chloroform	5	ug/l	9.8	9.8	ND
Chloromethane	5	ug/l	2.6	5.0	ND
<b>cis-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	5.0	<b>4.7J</b>
cis-1,3-Dichloropropene	5	ug/l	1.6	5.0	ND
Cyclohexane	5	ug/l	2.4	5.0	ND
Dibromochloromethane	5	ug/l	1.2	5.0	ND
Dichlorodifluoromethane	5	ug/l	3.1	5.0	ND
Ethylbenzene	5	ug/l	2.3	5.0	ND
Isopropylbenzene	5	ug/l	2.5	5.0	ND
m&p-Xylenes	5	ug/l	4.2	5.0	ND
<b>Methyl Acetate</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	5.0	<b>15B</b>
Methylcyclohexane	5	ug/l	3.1	5.0	ND
Methylene chloride	5	ug/l	1.5	5.0	ND
<b>Methyl-t-butyl ether</b>	<b>5</b>	<b>ug/l</b>	<b>1.6</b>	2.5	<b>1.9J</b>
o-Xylene	5	ug/l	3.4	5.0	ND
Styrene	5	ug/l	2.7	5.0	ND
Tetrachloroethene	5	ug/l	1.8	5.0	ND
Toluene	5	ug/l	1.6	5.0	ND
<b>trans-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	5.0	<b>1.9J</b>
trans-1,3-Dichloropropene	5	ug/l	1.5	5.0	ND
Trichloroethene	5	ug/l	1.7	5.0	ND
Trichlorofluoromethane	5	ug/l	1.5	5.0	ND
<b>Vinyl chloride</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	5.0	<b>9.0</b>
Xylenes (Total)	5	ug/l	3.4	5.0	ND

Sample ID: HSI-GW-04  
 Lab#: AD19539-005  
 Matrix: Aqueous

Collection Date: 9/28/2020  
 Receipt Date: 9/30/2020

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	5	ug/l	1.8	5.0	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.2</b>	5.0	<b>12</b>
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ug/l	3.6	5.0	ND
1,1,2-Trichloroethane	5	ug/l	1.6	5.0	ND
<b>1,1-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.1</b>	5.0	<b>4.5J</b>
1,1-Dichloroethene	5	ug/l	2.7	5.0	ND
1,2,3-Trichlorobenzene	5	ug/l	3.9	5.0	ND
1,2,4-Trichlorobenzene	5	ug/l	3.6	5.0	ND
1,2-Dibromo-3-chloropropane	5	ug/l	4.2	5.0	ND
1,2-Dibromoethane	5	ug/l	1.7	5.0	ND
1,2-Dichlorobenzene	5	ug/l	1.6	5.0	ND
<b>1,2-Dichloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	3.2	<b>20</b>
1,2-Dichloropropane	5	ug/l	1.5	5.0	ND
1,3-Dichlorobenzene	5	ug/l	1.9	5.0	ND
1,4-Dichlorobenzene	5	ug/l	1.8	5.0	ND
1,4-Dioxane	5	ug/l	200	250	ND
2-Butanone	5	ug/l	3.7	5.0	ND
2-Hexanone	5	ug/l	3.0	5.0	ND
4-Methyl-2-pentanone	5	ug/l	2.4	5.0	ND
Acetone	5	ug/l	23	25	ND
<b>Benzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	2.5	<b>28</b>
Bromochloromethane	5	ug/l	3.9	5.0	ND
Bromodichloromethane	5	ug/l	1.7	5.0	ND
Bromoform	5	ug/l	2.7	5.0	ND
Bromomethane	5	ug/l	2.5	5.0	ND
Carbon disulfide	5	ug/l	2.1	5.0	ND
Carbon tetrachloride	5	ug/l	1.6	5.0	ND
<b>Chlorobenzene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	5.0	<b>460</b>
<b>Chloroethane</b>	<b>5</b>	<b>ug/l</b>	<b>2.9</b>	5.0	<b>3.6J</b>
Chloroform	5	ug/l	9.8	9.8	ND
Chloromethane	5	ug/l	2.6	5.0	ND
<b>cis-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>3.2</b>	5.0	<b>120</b>
cis-1,3-Dichloropropene	5	ug/l	1.6	5.0	ND
Cyclohexane	5	ug/l	2.4	5.0	ND
Dibromochloromethane	5	ug/l	1.2	5.0	ND
Dichlorodifluoromethane	5	ug/l	3.1	5.0	ND
Ethylbenzene	5	ug/l	2.3	5.0	ND
Isopropylbenzene	5	ug/l	2.5	5.0	ND
m&p-Xylenes	5	ug/l	4.2	5.0	ND
<b>Methyl Acetate</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	5.0	<b>14B</b>
Methylcyclohexane	5	ug/l	3.1	5.0	ND
<b>Methylene chloride</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	5.0	<b>1.9J</b>
<b>Methyl-t-butyl ether</b>	<b>5</b>	<b>ug/l</b>	<b>1.8</b>	2.5	<b>9.6</b>
o-Xylene	5	ug/l	3.4	5.0	ND
Styrene	5	ug/l	2.7	5.0	ND
Tetrachloroethene	5	ug/l	1.8	5.0	ND
<b>Toluene</b>	<b>5</b>	<b>ug/l</b>	<b>1.6</b>	5.0	<b>4.3J</b>
<b>trans-1,2-Dichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.5</b>	5.0	<b>32</b>
trans-1,3-Dichloropropene	5	ug/l	1.5	5.0	ND
<b>Trichloroethene</b>	<b>5</b>	<b>ug/l</b>	<b>1.7</b>	5.0	<b>26</b>
Trichlorofluoromethane	5	ug/l	1.5	5.0	ND
<b>Vinyl chloride</b>	<b>5</b>	<b>ug/l</b>	<b>3.5</b>	5.0	<b>48</b>
Xylenes (Total)	5	ug/l	3.4	5.0	ND

Sample ID: HSI-SB-02(3.5-4)

Collection Date: 9/28/2020

Lab#: AD19539-006

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	74.5	mg/kg	0.032	0.090	ND
1,1,2,2-Tetrachloroethane	74.5	mg/kg	0.040	0.090	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	74.5	mg/kg	0.065	0.090	ND
1,1,2-Trichloroethane	74.5	mg/kg	0.029	0.090	ND
1,1-Dichloroethane	74.5	mg/kg	0.038	0.090	ND
1,1-Dichloroethene	74.5	mg/kg	0.048	0.090	ND
1,2,3-Trichlorobenzene	74.5	mg/kg	0.071	0.090	ND
1,2,4-Trichlorobenzene	74.5	mg/kg	0.065	0.090	ND
1,2-Dibromo-3-chloropropane	74.5	mg/kg	0.075	0.090	ND
1,2-Dibromoethane	74.5	mg/kg	0.031	0.090	ND
1,2-Dichlorobenzene	74.5	mg/kg	0.029	0.090	ND
1,2-Dichloroethane	74.5	mg/kg	0.057	0.057	ND
1,2-Dichloropropane	74.5	mg/kg	0.027	0.090	ND
1,3-Dichlorobenzene	74.5	mg/kg	0.034	0.090	ND
1,4-Dichlorobenzene	74.5	mg/kg	0.033	0.090	ND
1,4-Dioxane	74.5	mg/kg	3.5	4.5	ND
2-Butanone	74.5	mg/kg	0.067	0.090	ND
2-Hexanone	74.5	mg/kg	0.054	0.090	ND
4-Methyl-2-pentanone	74.5	mg/kg	0.044	0.090	ND
Acetone	74.5	mg/kg	0.41	0.45	ND
Benzene	74.5	mg/kg	0.027	0.045	ND
Bromochloromethane	74.5	mg/kg	0.071	0.090	ND
Bromodichloromethane	74.5	mg/kg	0.031	0.090	ND
Bromoform	74.5	mg/kg	0.049	0.090	ND
Bromomethane	74.5	mg/kg	0.045	0.090	ND
Carbon disulfide	74.5	mg/kg	0.038	0.090	ND
Carbon tetrachloride	74.5	mg/kg	0.029	0.090	ND
<b>Chlorobenzene</b>	<b>74.5</b>	<b>mg/kg</b>	<b>0.030</b>	<b>0.090</b>	<b>9.1</b>
Chloroethane	74.5	mg/kg	0.052	0.090	ND
Chloroform	74.5	mg/kg	0.18	0.18	ND
Chloromethane	74.5	mg/kg	0.046	0.090	ND
cis-1,2-Dichloroethene	74.5	mg/kg	0.057	0.090	ND
cis-1,3-Dichloropropene	74.5	mg/kg	0.029	0.090	ND
Cyclohexane	74.5	mg/kg	0.044	0.090	ND
Dibromochloromethane	74.5	mg/kg	0.021	0.090	ND
Dichlorodifluoromethane	74.5	mg/kg	0.056	0.090	ND
<b>Ethylbenzene</b>	<b>74.5</b>	<b>mg/kg</b>	<b>0.042</b>	<b>0.090</b>	<b>0.78</b>
Isopropylbenzene	74.5	mg/kg	0.044	0.090	ND
<b>m&amp;p-Xylenes</b>	<b>74.5</b>	<b>mg/kg</b>	<b>0.076</b>	<b>0.090</b>	<b>4.1</b>
Methyl Acetate	74.5	mg/kg	0.063	0.090	ND
Methylcyclohexane	74.5	mg/kg	0.055	0.090	ND
Methylene chloride	74.5	mg/kg	0.026	0.090	ND
Methyl-t-butyl ether	74.5	mg/kg	0.028	0.045	ND
<b>o-Xylene</b>	<b>74.5</b>	<b>mg/kg</b>	<b>0.061</b>	<b>0.090</b>	<b>1.3</b>
Styrene	74.5	mg/kg	0.049	0.090	ND
Tetrachloroethene	74.5	mg/kg	0.032	0.090	ND
<b>Toluene</b>	<b>74.5</b>	<b>mg/kg</b>	<b>0.029</b>	<b>0.090</b>	<b>0.31</b>
trans-1,2-Dichloroethene	74.5	mg/kg	0.028	0.090	ND
trans-1,3-Dichloropropene	74.5	mg/kg	0.028	0.090	ND
Trichloroethene	74.5	mg/kg	0.031	0.090	ND
Trichlorofluoromethane	74.5	mg/kg	0.028	0.090	ND
Vinyl chloride	74.5	mg/kg	0.063	0.090	ND
<b>Xylenes (Total)</b>	<b>74.5</b>	<b>mg/kg</b>	<b>0.061</b>	<b>0.090</b>	<b>5.4</b>

Sample ID: HSI-SB-02(10-10.5)

Lab#: AD19539-007

Matrix: Soil/Terracore

Collection Date: 9/28/2020

Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.016	0.10	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.012	0.042	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.014	0.042	ND
1,4-Dioxane	1	mg/kg	0.021	0.021	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.016	0.042	ND
2,4,5-Trichlorophenol	1	mg/kg	0.012	0.042	ND
2,4,6-Trichlorophenol	1	mg/kg	0.032	0.042	ND
2,4-Dichlorophenol	1	mg/kg	0.016	0.016	ND
2,4-Dimethylphenol	1	mg/kg	0.020	0.020	ND
2,4-Dinitrophenol	1	mg/kg	0.18	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.013	0.042	ND
2,6-Dinitrotoluene	1	mg/kg	0.021	0.042	ND
2-Chloronaphthalene	1	mg/kg	0.019	0.042	ND
2-Chlorophenol	1	mg/kg	0.014	0.042	ND
2-Methylnaphthalene	1	mg/kg	0.013	0.042	ND
2-Methylphenol	1	mg/kg	0.012	0.012	ND
2-Nitroaniline	1	mg/kg	0.020	0.042	ND
2-Nitrophenol	1	mg/kg	0.019	0.042	ND
3&4-Methylphenol	1	mg/kg	0.012	0.012	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.034	0.042	ND
3-Nitroaniline	1	mg/kg	0.016	0.042	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.15	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.012	0.042	ND
4-Chloro-3-methylphenol	1	mg/kg	0.010	0.042	ND
4-Chloroaniline	1	mg/kg	0.018	0.018	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.013	0.042	ND
4-Nitroaniline	1	mg/kg	0.016	0.042	ND
4-Nitrophenol	1	mg/kg	0.032	0.042	ND
Acenaphthene	1	mg/kg	0.012	0.042	ND
Acenaphthylene	1	mg/kg	0.012	0.042	ND
Acetophenone	1	mg/kg	0.015	0.042	ND
Anthracene	1	mg/kg	0.011	0.042	ND
Atrazine	1	mg/kg	0.017	0.042	ND
Benzaldehyde	1	mg/kg	0.45	0.45	ND
Benzo[a]anthracene	1	mg/kg	0.014	0.042	ND
Benzo[a]pyrene	1	mg/kg	0.014	0.042	ND
Benzo[b]fluoranthene	1	mg/kg	0.015	0.042	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00029	0.042	ND
Benzo[k]fluoranthene	1	mg/kg	0.015	0.042	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.012	0.042	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.017	0.042	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.037	0.042	0.34
Butylbenzylphthalate	1	mg/kg	0.032	0.042	ND
Caprolactam	1	mg/kg	0.033	0.042	ND
Carbazole	1	mg/kg	0.013	0.042	ND
Chrysene	1	mg/kg	0.014	0.042	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.015	0.042	ND
Dibenzofuran	1	mg/kg	0.011	0.011	ND
Diethylphthalate	1	mg/kg	0.027	0.042	ND
Dimethylphthalate	1	mg/kg	0.012	0.042	ND
Di-n-butylphthalate	1	mg/kg	0.048	0.048	1.6
Di-n-octylphthalate	1	mg/kg	0.028	0.042	ND
Fluoranthene	1	mg/kg	0.016	0.042	ND
Fluorene	1	mg/kg	0.011	0.042	ND
Hexachlorobenzene	1	mg/kg	0.017	0.042	ND
Hexachlorobutadiene	1	mg/kg	0.019	0.042	ND
Hexachlorocyclopentadiene	1	mg/kg	0.14	0.14	ND
Hexachloroethane	1	mg/kg	0.018	0.042	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-02(10-10.5)

Lab#: AD19539-007

Matrix: Soil/Terracore

Collection Date: 9/28/2020

Receipt Date: 9/30/2020

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.019	0.042	ND
Isophorone	1	mg/kg	0.013	0.042	ND
<b>Naphthalene</b>	<b>1</b>	<b>mg/kg</b>	<b>0.012</b>	0.012	<b>0.058</b>
Nitrobenzene	1	mg/kg	0.0017	0.042	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.016	0.016	ND
N-Nitrosodiphenylamine	1	mg/kg	0.14	0.14	ND
Pentachlorophenol	1	mg/kg	0.20	0.21	ND
Phenanthrene	1	mg/kg	0.013	0.042	ND
Phenol	1	mg/kg	0.012	0.042	ND
Pyrene	1	mg/kg	0.014	0.042	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	21	250	2200
Barium	1	mg/kg	0.84	12	15
Calcium	1	mg/kg	130	1200	200J
Chromium	1	mg/kg	0.84	6.2	21
Cobalt	1	mg/kg	0.89	3.1	ND
Copper	1	mg/kg	0.77	6.2	8.0
Iron	1	mg/kg	16	250	5300
Lead	1	mg/kg	0.77	6.2	13
Magnesium	1	mg/kg	24	620	160J
Manganese	1	mg/kg	0.80	12	12J
Nickel	1	mg/kg	1.4	6.2	2.5J
Potassium	1	mg/kg	120	620	ND
Sodium	1	mg/kg	160	310	ND
Zinc	1	mg/kg	1.9	12	23

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.028	1.0	0.053J
Arsenic	1	mg/kg	0.022	0.25	1.9
Beryllium	3	mg/kg	0.059	0.75	0.12J
Cadmium	1	mg/kg	0.018	0.50	0.24J
Selenium	1	mg/kg	0.079	2.5	3.1
Silver	1	mg/kg	0.033	0.25	0.12J
Thallium	3	mg/kg	0.066	1.5	ND
Vanadium	1	mg/kg	0.014	0.25	32

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.687	mg/kg	0.00079	0.0017	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00039</b>	0.0017	<b>0.0063</b>
1,1,2-Trichloro-1,2,2-trifluoroethane	0.687	mg/kg	0.0012	0.0017	ND
1,1,2-Trichloroethane	0.687	mg/kg	0.00039	0.0017	ND
<b>1,1-Dichloroethane</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00075</b>	0.0017	<b>0.0011J</b>
1,1-Dichloroethene	0.687	mg/kg	0.00099	0.0017	ND
1,2,3-Trichlorobenzene	0.687	mg/kg	0.00047	0.0017	ND
1,2,4-Trichlorobenzene	0.687	mg/kg	0.00054	0.0017	ND
1,2-Dibromo-3-chloropropane	0.687	mg/kg	0.00047	0.0017	ND
1,2-Dibromoethane	0.687	mg/kg	0.00042	0.00043	ND
<b>1,2-Dichlorobenzene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00044</b>	0.0017	<b>0.0016J</b>
1,2-Dichloroethane	0.687	mg/kg	0.00035	0.0017	ND
1,2-Dichloropropane	0.687	mg/kg	0.00070	0.0017	ND
1,3-Dichlorobenzene	0.687	mg/kg	0.00047	0.0017	ND
<b>1,4-Dichlorobenzene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00046</b>	0.0017	<b>0.00075J</b>
1,4-Dioxane	0.687	mg/kg	0.042	0.086	ND
<b>2-Butanone</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.0010</b>	0.0017	<b>0.0093</b>
2-Hexanone	0.687	mg/kg	0.00073	0.0017	ND
<b>4-Methyl-2-pentanone</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00050</b>	0.0017	<b>0.0042</b>
<b>Acetone</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.0058</b>	0.0086	<b>0.034</b>
<b>Benzene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00063</b>	0.00086	<b>0.083</b>
Bromochloromethane	0.687	mg/kg	0.00060	0.0017	ND
Bromodichloromethane	0.687	mg/kg	0.00040	0.0017	ND
Bromofom	0.687	mg/kg	0.00028	0.0017	ND
Bromomethane	0.687	mg/kg	0.0013	0.0017	ND
Carbon disulfide	0.687	mg/kg	0.0029	0.0029	ND
Carbon tetrachloride	0.687	mg/kg	0.00083	0.0017	ND
Chlorobenzene	0.687	mg/kg	0.00053	0.0017	ND

NOTE: Soil Results are reported to Dry Weigh

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Sample ID: HSI-SB-02(10-10.5)

Lab#: AD19539-007

Matrix: Soil/Terracore

Collection Date: 9/28/2020

Receipt Date: 9/30/2020

Chloroethane	0.687	mg/kg	0.0017	0.0017	ND
Chloroform	0.687	mg/kg	0.0012	0.0017	ND
Chloromethane	0.687	mg/kg	0.0011	0.0017	ND
cis-1,2-Dichloroethene	0.687	mg/kg	0.00070	0.0017	ND
cis-1,3-Dichloropropene	0.687	mg/kg	0.00046	0.0017	ND
Cyclohexane	0.687	mg/kg	0.0010	0.0017	ND
Dibromochloromethane	0.687	mg/kg	0.00037	0.0017	ND
Dichlorodifluoromethane	0.687	mg/kg	0.0012	0.0017	ND
<b>Ethylbenzene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00059</b>	<b>0.00086</b>	<b>0.074</b>
<b>Isopropylbenzene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00071</b>	<b>0.00086</b>	<b>0.035</b>
<b>m&amp;p-Xylenes</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.29</b>
Methyl Acetate	0.687	mg/kg	0.00082	0.0017	ND
<b>Methylcyclohexane</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00077</b>	<b>0.0017</b>	<b>0.0025</b>
<b>Methylene chloride</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00064</b>	<b>0.0017</b>	<b>0.0024</b>
Methyl-t-butyl ether	0.687	mg/kg	0.00046	0.00086	ND
<b>o-Xylene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00061</b>	<b>0.00086</b>	<b>0.12</b>
Styrene	0.687	mg/kg	0.00047	0.0017	ND
Tetrachloroethene	0.687	mg/kg	0.00084	0.0017	ND
<b>Toluene</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00057</b>	<b>0.00086</b>	<b>0.17</b>
trans-1,2-Dichloroethene	0.687	mg/kg	0.0010	0.0017	ND
trans-1,3-Dichloropropene	0.687	mg/kg	0.00040	0.0017	ND
Trichloroethene	0.687	mg/kg	0.00070	0.0017	ND
Trichlorofluoromethane	0.687	mg/kg	0.0010	0.0017	ND
Vinyl chloride	0.687	mg/kg	0.0010	0.0017	ND
<b>Xylenes (Total)</b>	<b>0.687</b>	<b>mg/kg</b>	<b>0.00061</b>	<b>0.00086</b>	<b>0.41</b>

Sample ID: HSI-SB-02(11-11.5)

Lab#: AD19539-008

Matrix: Soil/Terracore

Collection Date: 9/28/2020

Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		79

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	56.9	mg/kg	0.026	0.072	ND
1,1,2,2-Tetrachloroethane	56.9	mg/kg	0.032	0.072	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	56.9	mg/kg	0.052	0.072	ND
1,1,2-Trichloroethane	56.9	mg/kg	0.023	0.072	ND
1,1-Dichloroethane	56.9	mg/kg	0.031	0.072	ND
1,1-Dichloroethene	56.9	mg/kg	0.038	0.072	ND
1,2,3-Trichlorobenzene	56.9	mg/kg	0.057	0.072	ND
1,2,4-Trichlorobenzene	56.9	mg/kg	0.052	0.072	ND
1,2-Dibromo-3-chloropropane	56.9	mg/kg	0.060	0.072	ND
1,2-Dibromoethane	56.9	mg/kg	0.025	0.072	ND
1,2-Dichlorobenzene	56.9	mg/kg	0.023	0.072	ND
1,2-Dichloroethane	56.9	mg/kg	0.046	0.046	ND
1,2-Dichloropropane	56.9	mg/kg	0.022	0.072	ND
1,3-Dichlorobenzene	56.9	mg/kg	0.027	0.072	ND
1,4-Dichlorobenzene	56.9	mg/kg	0.026	0.072	ND
1,4-Dioxane	56.9	mg/kg	2.8	3.6	ND
2-Butanone	56.9	mg/kg	0.054	0.072	ND
2-Hexanone	56.9	mg/kg	0.043	0.072	ND
4-Methyl-2-pentanone	56.9	mg/kg	0.035	0.072	ND
Acetone	56.9	mg/kg	0.33	0.36	ND
<b>Benzene</b>	<b>56.9</b>	<b>mg/kg</b>	<b>0.021</b>	<b>0.036</b>	<b>0.098</b>
Bromochloromethane	56.9	mg/kg	0.057	0.072	ND
Bromodichloromethane	56.9	mg/kg	0.025	0.072	ND
Bromoform	56.9	mg/kg	0.039	0.072	ND
Bromomethane	56.9	mg/kg	0.036	0.072	ND
Carbon disulfide	56.9	mg/kg	0.031	0.072	ND
Carbon tetrachloride	56.9	mg/kg	0.023	0.072	ND
<b>Chlorobenzene</b>	<b>56.9</b>	<b>mg/kg</b>	<b>0.024</b>	<b>0.072</b>	<b>2.7</b>
Chloroethane	56.9	mg/kg	0.042	0.072	ND
Chloroform	56.9	mg/kg	0.14	0.14	ND
Chloromethane	56.9	mg/kg	0.037	0.072	ND
cis-1,2-Dichloroethene	56.9	mg/kg	0.046	0.072	ND
cis-1,3-Dichloropropene	56.9	mg/kg	0.023	0.072	ND
Cyclohexane	56.9	mg/kg	0.035	0.072	ND
Dibromochloromethane	56.9	mg/kg	0.017	0.072	ND
Dichlorodifluoromethane	56.9	mg/kg	0.045	0.072	ND
<b>Ethylbenzene</b>	<b>56.9</b>	<b>mg/kg</b>	<b>0.034</b>	<b>0.072</b>	<b>0.046J</b>
Isopropylbenzene	56.9	mg/kg	0.035	0.072	ND
<b>m&amp;p-Xylenes</b>	<b>56.9</b>	<b>mg/kg</b>	<b>0.061</b>	<b>0.072</b>	<b>0.14</b>
Methyl Acetate	56.9	mg/kg	0.051	0.072	ND
Methylcyclohexane	56.9	mg/kg	0.044	0.072	ND
Methylene chloride	56.9	mg/kg	0.021	0.072	ND
Methyl-t-butyl ether	56.9	mg/kg	0.022	0.036	ND
o-Xylene	56.9	mg/kg	0.049	0.072	ND
Styrene	56.9	mg/kg	0.039	0.072	ND
Tetrachloroethene	56.9	mg/kg	0.026	0.072	ND
<b>Toluene</b>	<b>56.9</b>	<b>mg/kg</b>	<b>0.023</b>	<b>0.072</b>	<b>1.2</b>
trans-1,2-Dichloroethene	56.9	mg/kg	0.022	0.072	ND
trans-1,3-Dichloropropene	56.9	mg/kg	0.022	0.072	ND
Trichloroethene	56.9	mg/kg	0.025	0.072	ND
Trichlorofluoromethane	56.9	mg/kg	0.022	0.072	ND
Vinyl chloride	56.9	mg/kg	0.051	0.072	ND
<b>Xylenes (Total)</b>	<b>56.9</b>	<b>mg/kg</b>	<b>0.049</b>	<b>0.072</b>	<b>0.14</b>



Sample ID: HSI-SB-04 (9.5-10)  
 Lab#: AD19539-009  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.665	mg/kg	0.00076	0.0016	ND
1,1,2,2-Tetrachloroethane	0.665	mg/kg	0.00037	0.0016	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.665	mg/kg	0.0011	0.0016	ND
1,1,2-Trichloroethane	0.665	mg/kg	0.00038	0.0016	ND
<b>1,1-Dichloroethane</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00071</b>	0.0016	<b>0.0014J</b>
1,1-Dichloroethene	0.665	mg/kg	0.00094	0.0016	ND
1,2,3-Trichlorobenzene	0.665	mg/kg	0.00045	0.0016	ND
1,2,4-Trichlorobenzene	0.665	mg/kg	0.00052	0.0016	ND
1,2-Dibromo-3-chloropropane	0.665	mg/kg	0.00045	0.0016	ND
1,2-Dibromoethane	0.665	mg/kg	0.00040	0.00041	ND
1,2-Dichlorobenzene	0.665	mg/kg	0.00042	0.0016	ND
<b>1,2-Dichloroethane</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00034</b>	0.0016	<b>0.0028</b>
1,2-Dichloropropane	0.665	mg/kg	0.00067	0.0016	ND
1,3-Dichlorobenzene	0.665	mg/kg	0.00045	0.0016	ND
1,4-Dichlorobenzene	0.665	mg/kg	0.00044	0.0016	ND
1,4-Dioxane	0.665	mg/kg	0.040	0.082	ND
2-Butanone	0.665	mg/kg	0.00099	0.0016	ND
2-Hexanone	0.665	mg/kg	0.00070	0.0016	ND
4-Methyl-2-pentanone	0.665	mg/kg	0.00048	0.0016	ND
Acetone	0.665	mg/kg	0.0056	0.0082	ND
<b>Benzene</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00060</b>	0.00082	<b>0.0072</b>
Bromochloromethane	0.665	mg/kg	0.00057	0.0016	ND
Bromodichloromethane	0.665	mg/kg	0.00039	0.0016	ND
Bromoform	0.665	mg/kg	0.00027	0.0016	ND
Bromomethane	0.665	mg/kg	0.0013	0.0016	ND
Carbon disulfide	0.665	mg/kg	0.0028	0.0028	ND
Carbon tetrachloride	0.665	mg/kg	0.00080	0.0016	ND
<b>Chlorobenzene</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00051</b>	0.0016	<b>0.097</b>
Chloroethane	0.665	mg/kg	0.0016	0.0016	ND
Chloroform	0.665	mg/kg	0.0011	0.0016	ND
Chloromethane	0.665	mg/kg	0.0010	0.0016	ND
<b>cis-1,2-Dichloroethene</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00066</b>	0.0016	<b>0.030</b>
cis-1,3-Dichloropropene	0.665	mg/kg	0.00044	0.0016	ND
Cyclohexane	0.665	mg/kg	0.00099	0.0016	ND
Dibromochloromethane	0.665	mg/kg	0.00035	0.0016	ND
Dichlorodifluoromethane	0.665	mg/kg	0.0012	0.0016	ND
Ethylbenzene	0.665	mg/kg	0.00057	0.00082	ND
Isopropylbenzene	0.665	mg/kg	0.00068	0.00082	ND
<b>m&amp;p-Xylenes</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00099</b>	0.00099	<b>0.0010</b>
Methyl Acetate	0.665	mg/kg	0.00079	0.0016	ND
Methylcyclohexane	0.665	mg/kg	0.00074	0.0016	ND
<b>Methylene chloride</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00062</b>	0.0016	<b>0.0022</b>
<b>Methyl-t-butyl ether</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00044</b>	0.00082	<b>0.00070J</b>
<b>o-Xylene</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00058</b>	0.00082	<b>0.0014</b>
Styrene	0.665	mg/kg	0.00045	0.0016	ND
Tetrachloroethene	0.665	mg/kg	0.00080	0.0016	ND
Toluene	0.665	mg/kg	0.00054	0.00082	0.0049
<b>trans-1,2-Dichloroethene</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00099</b>	0.0016	<b>0.0033</b>
trans-1,3-Dichloropropene	0.665	mg/kg	0.00039	0.0016	ND
Trichloroethene	0.665	mg/kg	0.00067	0.0016	0.0012J
Trichlorofluoromethane	0.665	mg/kg	0.00097	0.0016	ND
Vinyl chloride	0.665	mg/kg	0.0010	0.0016	0.14
<b>Xylenes (Total)</b>	<b>0.665</b>	<b>mg/kg</b>	<b>0.00058</b>	0.00082	<b>0.0024</b>

Sample ID: HSI-SB-03 (3.5-4)  
 Lab#: AD19539-010  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	65.2	mg/kg	0.027	0.076	ND
1,1,2,2-Tetrachloroethane	65.2	mg/kg	0.034	0.076	0.43
1,1,2-Trichloro-1,2,2-trifluoroethane	65.2	mg/kg	0.055	0.076	ND
1,1,2-Trichloroethane	65.2	mg/kg	0.024	0.076	0.025J
1,1-Dichloroethane	65.2	mg/kg	0.032	0.076	ND
1,1-Dichloroethene	65.2	mg/kg	0.040	0.076	ND
1,2,3-Trichlorobenzene	65.2	mg/kg	0.060	0.076	ND
1,2,4-Trichlorobenzene	65.2	mg/kg	0.055	0.076	ND
1,2-Dibromo-3-chloropropane	65.2	mg/kg	0.063	0.076	ND
1,2-Dibromoethane	65.2	mg/kg	0.026	0.076	ND
1,2-Dichlorobenzene	65.2	mg/kg	0.025	0.076	ND
1,2-Dichloroethane	65.2	mg/kg	0.048	0.048	0.39
1,2-Dichloropropane	65.2	mg/kg	0.023	0.076	ND
1,3-Dichlorobenzene	65.2	mg/kg	0.029	0.076	ND
1,4-Dichlorobenzene	65.2	mg/kg	0.028	0.076	ND
1,4-Dioxane	65.2	mg/kg	3.0	3.8	ND
2-Butanone	65.2	mg/kg	0.057	0.076	ND
2-Hexanone	65.2	mg/kg	0.046	0.076	ND
4-Methyl-2-pentanone	65.2	mg/kg	0.037	0.076	ND
Acetone	65.2	mg/kg	0.35	0.38	ND
Benzene	65.2	mg/kg	0.022	0.038	ND
Bromochloromethane	65.2	mg/kg	0.060	0.076	ND
Bromodichloromethane	65.2	mg/kg	0.026	0.076	ND
Bromoform	65.2	mg/kg	0.041	0.076	ND
Bromomethane	65.2	mg/kg	0.038	0.076	ND
Carbon disulfide	65.2	mg/kg	0.032	0.076	ND
Carbon tetrachloride	65.2	mg/kg	0.024	0.076	ND
Chlorobenzene	65.2	mg/kg	0.025	0.076	0.057J
Chloroethane	65.2	mg/kg	0.044	0.076	ND
Chloroform	65.2	mg/kg	0.15	0.15	ND
Chloromethane	65.2	mg/kg	0.039	0.076	ND
cis-1,2-Dichloroethene	65.2	mg/kg	0.048	0.076	0.18
cis-1,3-Dichloropropene	65.2	mg/kg	0.024	0.076	ND
Cyclohexane	65.2	mg/kg	0.037	0.076	ND
Dibromochloromethane	65.2	mg/kg	0.018	0.076	ND
Dichlorodifluoromethane	65.2	mg/kg	0.047	0.076	ND
Ethylbenzene	65.2	mg/kg	0.035	0.076	ND
Isopropylbenzene	65.2	mg/kg	0.037	0.076	ND
m&p-Xylenes	65.2	mg/kg	0.064	0.076	ND
Methyl Acetate	65.2	mg/kg	0.053	0.076	ND
Methylcyclohexane	65.2	mg/kg	0.047	0.076	ND
Methylene chloride	65.2	mg/kg	0.022	0.076	ND
Methyl-t-butyl ether	65.2	mg/kg	0.024	0.038	ND
o-Xylene	65.2	mg/kg	0.052	0.076	ND
Styrene	65.2	mg/kg	0.041	0.076	ND
Tetrachloroethene	65.2	mg/kg	0.027	0.076	0.17
Toluene	65.2	mg/kg	0.025	0.076	0.042J
trans-1,2-Dichloroethene	65.2	mg/kg	0.023	0.076	ND
trans-1,3-Dichloropropene	65.2	mg/kg	0.023	0.076	ND
Trichloroethene	65.2	mg/kg	0.026	0.076	2.3
Trichlorofluoromethane	65.2	mg/kg	0.023	0.076	ND
Vinyl chloride	65.2	mg/kg	0.054	0.076	ND
Xylenes (Total)	65.2	mg/kg	0.052	0.076	ND

Sample ID: HSI-SB-03 (10-10.5)

Collection Date: 9/29/2020

Lab#: AD19539-011

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		84

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.099	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.013	0.040	ND
1,4-Dioxane	1	mg/kg	0.020	0.020	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.015	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.040	ND
2,4,6-Trichlorophenol	1	mg/kg	0.031	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.015	0.015	ND
2,4-Dimethylphenol	1	mg/kg	0.019	0.019	ND
2,4-Dinitrophenol	1	mg/kg	0.17	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.020	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.018	0.040	ND
2-Chlorophenol	1	mg/kg	0.013	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.012	0.040	ND
2-Methylphenol	1	mg/kg	0.011	0.011	ND
2-Nitroaniline	1	mg/kg	0.019	0.040	ND
2-Nitrophenol	1	mg/kg	0.018	0.040	ND
3&4-Methylphenol	1	mg/kg	0.012	0.012	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.032	0.040	ND
3-Nitroaniline	1	mg/kg	0.015	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.14	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.011	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0096	0.040	ND
4-Chloroaniline	1	mg/kg	0.017	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.012	0.040	ND
4-Nitroaniline	1	mg/kg	0.015	0.040	ND
4-Nitrophenol	1	mg/kg	0.030	0.040	ND
Acenaphthene	1	mg/kg	0.011	0.040	ND
Acenaphthylene	1	mg/kg	0.012	0.040	ND
Acetophenone	1	mg/kg	0.014	0.040	ND
Anthracene	1	mg/kg	0.011	0.040	ND
Atrazine	1	mg/kg	0.016	0.040	ND
Benzaldehyde	1	mg/kg	0.43	0.43	ND
Benzo[a]anthracene	1	mg/kg	0.013	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.014	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.014	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00027	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.015	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.011	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0096	0.0099	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.016	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.035	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.030	0.040	ND
Caprolactam	1	mg/kg	0.032	0.040	ND
Carbazole	1	mg/kg	0.012	0.040	ND
Chrysene	1	mg/kg	0.013	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.015	0.040	ND
Dibenzofuran	1	mg/kg	0.010	0.010	ND
Diethylphthalate	1	mg/kg	0.026	0.040	ND
Dimethylphthalate	1	mg/kg	0.011	0.040	ND
Di-n-butylphthalate	1	mg/kg	0.046	0.046	ND
Di-n-octylphthalate	1	mg/kg	0.026	0.040	ND
Fluoranthene	1	mg/kg	0.015	0.040	ND
Fluorene	1	mg/kg	0.011	0.040	ND
Hexachlorobenzene	1	mg/kg	0.017	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.018	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.13	0.13	ND
Hexachloroethane	1	mg/kg	0.018	0.040	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-03 (10-10.5)

Collection Date: 9/29/2020

Lab#: AD19539-011

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.018	0.040	ND
Isophorone	1	mg/kg	0.013	0.040	ND
Naphthalene	1	mg/kg	0.011	0.011	ND
Nitrobenzene	1	mg/kg	0.0016	0.040	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.015	0.015	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.13	ND
Pentachlorophenol	1	mg/kg	0.19	0.20	ND
Phenanthrene	1	mg/kg	0.013	0.040	ND
Phenol	1	mg/kg	0.011	0.040	ND
Pyrene	1	mg/kg	0.014	0.040	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	20	240	570
Barium	1	mg/kg	0.80	12	ND
Calcium	1	mg/kg	120	1200	ND
Chromium	1	mg/kg	0.80	6.0	1.0J
Cobalt	1	mg/kg	0.85	3.0	ND
Copper	1	mg/kg	0.73	6.0	1.0J
Iron	1	mg/kg	16	240	1400
Lead	1	mg/kg	0.73	6.0	1.2J
Magnesium	1	mg/kg	23	600	ND
Manganese	1	mg/kg	0.76	12	1.4J
Nickel	1	mg/kg	1.3	6.0	ND
Potassium	1	mg/kg	120	600	ND
Sodium	1	mg/kg	150	300	ND
Zinc	1	mg/kg	1.8	12	ND

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.027	0.95	ND
Arsenic	1	mg/kg	0.021	0.24	0.30
Beryllium	1	mg/kg	0.019	0.24	0.040J
Cadmium	1	mg/kg	0.017	0.48	ND
Selenium	1	mg/kg	0.076	2.4	1.1J
Silver	1	mg/kg	0.031	0.24	0.077J
Thallium	1	mg/kg	0.021	0.48	ND
Vanadium	1	mg/kg	0.013	0.24	7.5

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	65.2	mg/kg	0.028	0.078	ND
1,1,2,2-Tetrachloroethane	65.2	mg/kg	0.035	0.078	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	65.2	mg/kg	0.056	0.078	ND
1,1,2-Trichloroethane	65.2	mg/kg	0.025	0.078	ND
1,1-Dichloroethane	65.2	mg/kg	0.033	0.078	ND
1,1-Dichloroethene	65.2	mg/kg	0.041	0.078	ND
1,2,3-Trichlorobenzene	65.2	mg/kg	0.061	0.078	ND
1,2,4-Trichlorobenzene	65.2	mg/kg	0.056	0.078	ND
1,2-Dibromo-3-chloropropane	65.2	mg/kg	0.065	0.078	ND
1,2-Dibromoethane	65.2	mg/kg	0.027	0.078	ND
1,2-Dichlorobenzene	65.2	mg/kg	0.025	0.078	ND
1,2-Dichloroethane	65.2	mg/kg	0.050	0.050	ND
1,2-Dichloropropane	65.2	mg/kg	0.023	0.078	ND
1,3-Dichlorobenzene	65.2	mg/kg	0.029	0.078	ND
1,4-Dichlorobenzene	65.2	mg/kg	0.028	0.078	ND
1,4-Dioxane	65.2	mg/kg	3.1	3.9	ND
2-Butanone	65.2	mg/kg	0.058	0.078	ND
2-Hexanone	65.2	mg/kg	0.047	0.078	ND
4-Methyl-2-pentanone	65.2	mg/kg	0.038	0.078	ND
Acetone	65.2	mg/kg	0.36	0.39	ND
Benzene	65.2	mg/kg	0.023	0.039	ND
Bromochloromethane	65.2	mg/kg	0.061	0.078	ND
Bromodichloromethane	65.2	mg/kg	0.027	0.078	ND
Bromoform	65.2	mg/kg	0.042	0.078	ND
Bromomethane	65.2	mg/kg	0.039	0.078	ND
Carbon disulfide	65.2	mg/kg	0.033	0.078	ND
Carbon tetrachloride	65.2	mg/kg	0.025	0.078	ND
Chlorobenzene	65.2	mg/kg	0.026	0.078	0.33

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-03 (10-10.5)

Collection Date: 9/29/2020

Lab#: AD19539-011

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

Chloroethane	65.2	mg/kg	0.045	0.078	ND
Chloroform	65.2	mg/kg	0.15	0.15	ND
Chloromethane	65.2	mg/kg	0.040	0.078	ND
cis-1,2-Dichloroethene	65.2	mg/kg	0.049	0.078	ND
cis-1,3-Dichloropropene	65.2	mg/kg	0.025	0.078	ND
Cyclohexane	65.2	mg/kg	0.038	0.078	ND
Dibromochloromethane	65.2	mg/kg	0.019	0.078	ND
Dichlorodifluoromethane	65.2	mg/kg	0.048	0.078	ND
Ethylbenzene	65.2	mg/kg	0.036	0.078	ND
Isopropylbenzene	65.2	mg/kg	0.038	0.078	ND
m&p-Xylenes	65.2	mg/kg	0.066	0.078	ND
Methyl Acetate	65.2	mg/kg	0.055	0.078	ND
Methylcyclohexane	65.2	mg/kg	0.048	0.078	ND
Methylene chloride	65.2	mg/kg	0.023	0.078	ND
Methyl-t-butyl ether	65.2	mg/kg	0.024	0.039	ND
o-Xylene	65.2	mg/kg	0.053	0.078	ND
Styrene	65.2	mg/kg	0.042	0.078	ND
Tetrachloroethene	65.2	mg/kg	0.028	0.078	ND
<b>Toluene</b>	<b>65.2</b>	<b>mg/kg</b>	<b>0.025</b>	<b>0.078</b>	<b>0.37</b>
trans-1,2-Dichloroethene	65.2	mg/kg	0.024	0.078	ND
trans-1,3-Dichloropropene	65.2	mg/kg	0.024	0.078	ND
Trichloroethene	65.2	mg/kg	0.027	0.078	ND
Trichlorofluoromethane	65.2	mg/kg	0.024	0.078	ND
Vinyl chloride	65.2	mg/kg	0.055	0.078	ND
Xylenes (Total)	65.2	mg/kg	0.053	0.078	ND

Sample ID: HSI-SB-03 (11-11.5)  
 Lab#: AD19539-012  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	69.1	mg/kg	0.031	0.086	ND
1,1,2,2-Tetrachloroethane	69.1	mg/kg	0.039	0.086	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	69.1	mg/kg	0.063	0.086	ND
1,1,2-Trichloroethane	69.1	mg/kg	0.028	0.086	ND
1,1-Dichloroethane	69.1	mg/kg	0.037	0.086	ND
1,1-Dichloroethene	69.1	mg/kg	0.046	0.086	ND
1,2,3-Trichlorobenzene	69.1	mg/kg	0.068	0.086	ND
1,2,4-Trichlorobenzene	69.1	mg/kg	0.063	0.086	ND
1,2-Dibromo-3-chloropropane	69.1	mg/kg	0.072	0.086	ND
1,2-Dibromoethane	69.1	mg/kg	0.030	0.086	ND
1,2-Dichlorobenzene	69.1	mg/kg	0.028	0.086	ND
1,2-Dichloroethane	69.1	mg/kg	0.055	0.055	ND
1,2-Dichloropropane	69.1	mg/kg	0.026	0.086	ND
1,3-Dichlorobenzene	69.1	mg/kg	0.033	0.086	ND
1,4-Dichlorobenzene	69.1	mg/kg	0.032	0.086	ND
1,4-Dioxane	69.1	mg/kg	3.4	4.3	ND
2-Butanone	69.1	mg/kg	0.065	0.086	ND
2-Hexanone	69.1	mg/kg	0.052	0.086	ND
4-Methyl-2-pentanone	69.1	mg/kg	0.042	0.086	ND
Acetone	69.1	mg/kg	0.40	0.43	ND
Benzene	69.1	mg/kg	0.026	0.043	ND
Bromochloromethane	69.1	mg/kg	0.068	0.086	ND
Bromodichloromethane	69.1	mg/kg	0.030	0.086	ND
Bromoform	69.1	mg/kg	0.047	0.086	ND
Bromomethane	69.1	mg/kg	0.043	0.086	ND
Carbon disulfide	69.1	mg/kg	0.037	0.086	ND
Carbon tetrachloride	69.1	mg/kg	0.028	0.086	ND
<b>Chlorobenzene</b>	<b>69.1</b>	<b>mg/kg</b>	<b>0.029</b>	0.086	<b>0.19</b>
Chloroethane	69.1	mg/kg	0.050	0.086	ND
Chloroform	69.1	mg/kg	0.17	0.17	ND
Chloromethane	69.1	mg/kg	0.045	0.086	ND
<b>cis-1,2-Dichloroethene</b>	<b>69.1</b>	<b>mg/kg</b>	<b>0.055</b>	0.086	<b>0.079J</b>
cis-1,3-Dichloropropene	69.1	mg/kg	0.028	0.086	ND
Cyclohexane	69.1	mg/kg	0.042	0.086	ND
Dibromochloromethane	69.1	mg/kg	0.021	0.086	ND
Dichlorodifluoromethane	69.1	mg/kg	0.053	0.086	ND
Ethylbenzene	69.1	mg/kg	0.040	0.086	ND
Isopropylbenzene	69.1	mg/kg	0.042	0.086	ND
m&p-Xylenes	69.1	mg/kg	0.073	0.086	ND
Methyl Acetate	69.1	mg/kg	0.061	0.086	ND
Methylcyclohexane	69.1	mg/kg	0.053	0.086	ND
Methylene chloride	69.1	mg/kg	0.025	0.086	ND
Methyl-t-butyl ether	69.1	mg/kg	0.027	0.043	ND
o-Xylene	69.1	mg/kg	0.059	0.086	ND
Styrene	69.1	mg/kg	0.047	0.086	ND
Tetrachloroethene	69.1	mg/kg	0.031	0.086	ND
<b>Toluene</b>	<b>69.1</b>	<b>mg/kg</b>	<b>0.028</b>	0.086	<b>0.082J</b>
trans-1,2-Dichloroethene	69.1	mg/kg	0.027	0.086	ND
trans-1,3-Dichloropropene	69.1	mg/kg	0.026	0.086	ND
<b>Trichloroethene</b>	<b>69.1</b>	<b>mg/kg</b>	<b>0.030</b>	0.086	<b>0.032J</b>
Trichlorofluoromethane	69.1	mg/kg	0.027	0.086	ND
Vinyl chloride	69.1	mg/kg	0.061	0.086	ND
Xylenes (Total)	69.1	mg/kg	0.059	0.086	ND

Sample ID: HSI-SB-01 (2.5-3)  
 Lab#: AD19539-013  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		87

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.096	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.038	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.013	0.038	ND
1,4-Dioxane	1	mg/kg	0.019	0.019	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.038	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.038	ND
2,4,6-Trichlorophenol	1	mg/kg	0.030	0.038	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.014	ND
2,4-Dimethylphenol	1	mg/kg	0.019	0.019	ND
2,4-Dinitrophenol	1	mg/kg	0.17	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.038	ND
2,6-Dinitrotoluene	1	mg/kg	0.020	0.038	ND
2-Chloronaphthalene	1	mg/kg	0.017	0.038	ND
<b>2-Chlorophenol</b>	<b>1</b>	<b>mg/kg</b>	<b>0.013</b>	0.038	<b>0.35</b>
2-Methylnaphthalene	1	mg/kg	0.012	0.038	ND
<b>2-Methylphenol</b>	<b>1</b>	<b>mg/kg</b>	<b>0.011</b>	0.011	<b>0.013</b>
2-Nitroaniline	1	mg/kg	0.018	0.038	ND
2-Nitrophenol	1	mg/kg	0.017	0.038	ND
3&4-Methylphenol	1	mg/kg	0.011	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.031	0.038	ND
3-Nitroaniline	1	mg/kg	0.015	0.038	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.011	0.038	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0092	0.038	ND
4-Chloroaniline	1	mg/kg	0.017	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.012	0.038	ND
4-Nitroaniline	1	mg/kg	0.015	0.038	ND
4-Nitrophenol	1	mg/kg	0.029	0.038	ND
Acenaphthene	1	mg/kg	0.011	0.038	ND
Acenaphthylene	1	mg/kg	0.011	0.038	ND
Acetophenone	1	mg/kg	0.014	0.038	ND
Anthracene	1	mg/kg	0.011	0.038	ND
Atrazine	1	mg/kg	0.015	0.038	ND
Benzaldehyde	1	mg/kg	0.42	0.42	ND
Benzo[a]anthracene	1	mg/kg	0.013	0.038	ND
Benzo[a]pyrene	1	mg/kg	0.013	0.038	ND
Benzo[b]fluoranthene	1	mg/kg	0.014	0.038	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00026	0.038	ND
Benzo[k]fluoranthene	1	mg/kg	0.014	0.038	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.011	0.038	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0093	0.0096	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.038	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.034</b>	0.038	<b>0.25</b>
Butylbenzylphthalate	1	mg/kg	0.029	0.038	ND
Caprolactam	1	mg/kg	0.031	0.038	ND
Carbazole	1	mg/kg	0.012	0.038	ND
Chrysene	1	mg/kg	0.013	0.038	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.014	0.038	ND
Dibenzofuran	1	mg/kg	0.0097	0.0097	ND
Diethylphthalate	1	mg/kg	0.025	0.038	ND
Dimethylphthalate	1	mg/kg	0.011	0.038	ND
<b>Di-n-butylphthalate</b>	<b>1</b>	<b>mg/kg</b>	<b>0.044</b>	0.044	<b>0.25</b>
Di-n-octylphthalate	1	mg/kg	0.025	0.038	ND
Fluoranthene	1	mg/kg	0.015	0.038	ND
Fluorene	1	mg/kg	0.010	0.038	ND
Hexachlorobenzene	1	mg/kg	0.016	0.038	ND
Hexachlorobutadiene	1	mg/kg	0.017	0.038	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.12	ND
Hexachloroethane	1	mg/kg	0.017	0.038	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-01 (2.5-3)

Lab#: AD19539-013

Matrix: Soil/Terracore

Collection Date: 9/29/2020

Receipt Date: 9/30/2020

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.038	ND
Isophorone	1	mg/kg	0.012	0.038	ND
<b>Naphthalene</b>	<b>1</b>	<b>mg/kg</b>	<b>0.011</b>	<b>0.011</b>	<b>0.063</b>
Nitrobenzene	1	mg/kg	0.0016	0.038	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.014	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.13	ND
Pentachlorophenol	1	mg/kg	0.18	0.19	ND
Phenanthrene	1	mg/kg	0.012	0.038	ND
Phenol	1	mg/kg	0.011	0.038	ND
Pyrene	1	mg/kg	0.013	0.038	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	19	230	4200
Barium	1	mg/kg	0.78	11	9.1J
Calcium	1	mg/kg	120	1100	ND
<b>Chromium</b>	<b>1</b>	<b>mg/kg</b>	<b>0.77</b>	<b>5.7</b>	<b>20</b>
Cobalt	1	mg/kg	0.82	2.9	ND
Copper	1	mg/kg	0.71	5.7	7.0
Iron	1	mg/kg	15	230	7600
Lead	1	mg/kg	0.71	5.7	9.8
Magnesium	1	mg/kg	22	570	350J
Manganese	1	mg/kg	0.74	11	13
Nickel	1	mg/kg	1.3	5.7	3.5J
<b>Potassium</b>	<b>1</b>	<b>mg/kg</b>	<b>110</b>	<b>570</b>	<b>160J</b>
Sodium	1	mg/kg	140	290	ND
Zinc	1	mg/kg	1.7	11	9.0J

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.026	0.92	0.045J
Arsenic	1	mg/kg	0.020	0.23	1.8
Beryllium	1	mg/kg	0.018	0.23	0.059J
Cadmium	1	mg/kg	0.016	0.46	0.40J
Selenium	1	mg/kg	0.073	2.3	0.80J
Silver	1	mg/kg	0.030	0.23	0.054J
Thallium	1	mg/kg	0.020	0.46	ND
Vanadium	1	mg/kg	0.012	0.23	14

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	63.5	mg/kg	0.026	0.073	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.033</b>	<b>0.073</b>	<b>2.7</b>
1,1,2-Trichloro-1,2,2-trifluoroethane	63.5	mg/kg	0.053	0.073	ND
<b>1,1,2-Trichloroethane</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.023</b>	<b>0.073</b>	<b>0.031J</b>
1,1-Dichloroethane	63.5	mg/kg	0.031	0.073	ND
1,1-Dichloroethene	63.5	mg/kg	0.039	0.073	ND
1,2,3-Trichlorobenzene	63.5	mg/kg	0.057	0.073	ND
1,2,4-Trichlorobenzene	63.5	mg/kg	0.053	0.073	ND
1,2-Dibromo-3-chloropropane	63.5	mg/kg	0.061	0.073	ND
1,2-Dibromoethane	63.5	mg/kg	0.025	0.073	ND
1,2-Dichlorobenzene	63.5	mg/kg	0.024	0.073	ND
<b>1,2-Dichloroethane</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.047</b>	<b>0.047</b>	<b>1.8</b>
1,2-Dichloropropane	63.5	mg/kg	0.022	0.073	ND
1,3-Dichlorobenzene	63.5	mg/kg	0.028	0.073	ND
1,4-Dichlorobenzene	63.5	mg/kg	0.027	0.073	ND
1,4-Dioxane	63.5	mg/kg	2.9	3.7	ND
2-Butanone	63.5	mg/kg	0.055	0.073	ND
2-Hexanone	63.5	mg/kg	0.044	0.073	ND
<b>4-Methyl-2-pentanone</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.035</b>	<b>0.073</b>	<b>0.59</b>
Acetone	63.5	mg/kg	0.33	0.37	ND
<b>Benzene</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.022</b>	<b>0.037</b>	<b>0.034J</b>
Bromochloromethane	63.5	mg/kg	0.057	0.073	ND
Bromodichloromethane	63.5	mg/kg	0.025	0.073	ND
Bromoform	63.5	mg/kg	0.039	0.073	ND
Bromomethane	63.5	mg/kg	0.037	0.073	ND
Carbon disulfide	63.5	mg/kg	0.031	0.073	ND
Carbon tetrachloride	63.5	mg/kg	0.024	0.073	ND
Chlorobenzene	63.5	mg/kg	0.024	0.073	1.5

NOTE: Soil Results are reported to Dry Weigh

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Sample ID: HSI-SB-01 (2.5-3)

Collection Date: 9/29/2020

Lab#: AD19539-013

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

Chloroethane	63.5	mg/kg	0.042	0.073	ND
Chloroform	63.5	mg/kg	0.14	0.14	ND
Chloromethane	63.5	mg/kg	0.038	0.073	ND
<b>cis-1,2-Dichloroethene</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.046</b>	0.073	<b>0.35</b>
cis-1,3-Dichloropropene	63.5	mg/kg	0.023	0.073	ND
Cyclohexane	63.5	mg/kg	0.036	0.073	ND
Dibromochloromethane	63.5	mg/kg	0.017	0.073	ND
Dichlorodifluoromethane	63.5	mg/kg	0.045	0.073	ND
Ethylbenzene	63.5	mg/kg	0.034	0.073	ND
Isopropylbenzene	63.5	mg/kg	0.036	0.073	ND
<b>m&amp;p-Xylenes</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.062</b>	0.073	<b>0.11</b>
Methyl Acetate	63.5	mg/kg	0.051	0.073	ND
Methylcyclohexane	63.5	mg/kg	0.045	0.073	ND
<b>Methylene chloride</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.021</b>	0.073	<b>2.3</b>
Methyl-t-butyl ether	63.5	mg/kg	0.023	0.037	ND
o-Xylene	63.5	mg/kg	0.050	0.073	ND
Styrene	63.5	mg/kg	0.040	0.073	ND
<b>Tetrachloroethene</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.026</b>	0.073	<b>0.21</b>
Toluene	63.5	mg/kg	0.024	0.073	0.75
<b>trans-1,2-Dichloroethene</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.023</b>	0.073	<b>0.088</b>
trans-1,3-Dichloropropene	63.5	mg/kg	0.022	0.073	ND
<b>Trichloroethene</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.025</b>	0.073	<b>4.4</b>
Trichlorofluoromethane	63.5	mg/kg	0.022	0.073	ND
Vinyl chloride	63.5	mg/kg	0.052	0.073	ND
<b>Xylenes (Total)</b>	<b>63.5</b>	<b>mg/kg</b>	<b>0.050</b>	0.073	<b>0.11</b>

Sample ID: HSI-SB-01 (6-6.5)

Collection Date: 9/29/2020

Lab#: AD19539-014

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.10	0.063J

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	200	mg/kg	2.3	8.0	ND
1,2,4,5-Tetrachlorobenzene	200	mg/kg	2.7	8.0	ND
1,4-Dioxane	200	mg/kg	4.0	4.0	ND
2,3,4,6-Tetrachlorophenol	200	mg/kg	3.0	8.0	ND
2,4,5-Trichlorophenol	200	mg/kg	2.3	8.0	ND
2,4,6-Trichlorophenol	200	mg/kg	6.2	8.0	ND
2,4-Dichlorophenol	200	mg/kg	3.0	3.0	ND
2,4-Dimethylphenol	200	mg/kg	3.9	3.9	ND
2,4-Dinitrophenol	200	mg/kg	35	40	ND
2,4-Dinitrotoluene	200	mg/kg	2.5	8.0	ND
2,6-Dinitrotoluene	200	mg/kg	4.1	8.0	ND
2-Chloronaphthalene	200	mg/kg	3.6	8.0	ND
<b>2-Chlorophenol</b>	<b>200</b>	<b>mg/kg</b>	<b>2.6</b>	8.0	<b>13</b>
2-Methylnaphthalene	200	mg/kg	2.5	8.0	ND
2-Methylphenol	200	mg/kg	2.3	2.3	ND
2-Nitroaniline	200	mg/kg	3.8	8.0	ND
2-Nitrophenol	200	mg/kg	3.6	8.0	ND
3&4-Methylphenol	200	mg/kg	2.3	2.3	ND
3,3'-Dichlorobenzidine	200	mg/kg	6.5	8.0	ND
3-Nitroaniline	200	mg/kg	3.1	8.0	ND
4,6-Dinitro-2-methylphenol	200	mg/kg	28	40	ND
4-Bromophenyl-phenylether	200	mg/kg	2.2	8.0	ND
4-Chloro-3-methylphenol	200	mg/kg	1.9	8.0	ND
4-Chloroaniline	200	mg/kg	3.5	3.5	ND
4-Chlorophenyl-phenylether	200	mg/kg	2.5	8.0	ND
4-Nitroaniline	200	mg/kg	3.1	8.0	ND
4-Nitrophenol	200	mg/kg	6.1	8.0	ND
Acenaphthene	200	mg/kg	2.3	8.0	ND
Acenaphthylene	200	mg/kg	2.4	8.0	ND
Acetophenone	200	mg/kg	2.9	8.0	ND
Anthracene	200	mg/kg	2.2	8.0	ND
Atrazine	200	mg/kg	3.2	8.0	ND
Benzaldehyde	200	mg/kg	87	87	ND
Benzo[a]anthracene	200	mg/kg	2.7	8.0	ND
Benzo[a]pyrene	200	mg/kg	2.7	8.0	ND
Benzo[b]fluoranthene	200	mg/kg	2.9	8.0	ND
Benzo[g,h,i]perylene	200	mg/kg	0.055	8.0	ND
Benzo[k]fluoranthene	200	mg/kg	3.0	8.0	ND
bis(2-Chloroethoxy)methane	200	mg/kg	2.3	8.0	ND
bis(2-Chloroethyl)ether	200	mg/kg	1.9	2.0	ND
bis(2-Chloroisopropyl)ether	200	mg/kg	3.2	8.0	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>200</b>	<b>mg/kg</b>	<b>7.1</b>	8.0	<b>50</b>
Butylbenzylphthalate	200	mg/kg	6.2	8.0	ND
Caprolactam	200	mg/kg	6.4	8.0	ND
Carbazole	200	mg/kg	2.5	8.0	ND
Chrysene	200	mg/kg	2.7	8.0	ND
Dibenzo[a,h]anthracene	200	mg/kg	2.9	8.0	ND
Dibenzofuran	200	mg/kg	2.0	2.0	ND
Diethylphthalate	200	mg/kg	5.2	8.0	ND
Dimethylphthalate	200	mg/kg	2.3	8.0	ND
<b>DI-n-butylphthalate</b>	<b>200</b>	<b>mg/kg</b>	<b>9.2</b>	9.2	<b>720</b>
Di-n-octylphthalate	200	mg/kg	5.3	8.0	ND
Fluoranthene	200	mg/kg	3.1	8.0	ND
Fluorene	200	mg/kg	2.2	8.0	ND
Hexachlorobenzene	200	mg/kg	3.4	8.0	ND
Hexachlorobutadiene	200	mg/kg	3.6	8.0	ND
Hexachlorocyclopentadiene	200	mg/kg	26	26	ND
Hexachloroethane	200	mg/kg	3.5	8.0	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-01 (6-6.5)

Collection Date: 9/29/2020

Lab#: AD19539-014

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

Indeno[1,2,3-cd]pyrene	200	mg/kg	3.6	8.0	ND
Isophorone	200	mg/kg	2.6	8.0	ND
<b>Naphthalene</b>	<b>200</b>	<b>mg/kg</b>	<b>2.3</b>	2.3	16
Nitrobenzene	200	mg/kg	0.33	8.0	ND
N-Nitroso-di-n-propylamine	200	mg/kg	3.0	3.0	ND
N-Nitrosodiphenylamine	200	mg/kg	27	27	ND
Pentachlorophenol	200	mg/kg	39	40	ND
Phenanthrene	200	mg/kg	2.6	8.0	ND
Phenol	200	mg/kg	2.2	8.0	ND
Pyrene	200	mg/kg	2.7	8.0	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	20	240	4200
Barium	1	mg/kg	0.81	12	75
Calcium	1	mg/kg	120	1200	290J
Chromium	1	mg/kg	0.81	6.0	60
Cobalt	1	mg/kg	0.86	3.0	1.3J
Copper	1	mg/kg	0.74	6.0	12
Iron	1	mg/kg	16	240	8200
Lead	1	mg/kg	0.74	6.0	160
Magnesium	1	mg/kg	23	600	420J
Manganese	1	mg/kg	0.77	12	27
Nickel	1	mg/kg	1.3	6.0	8.1
Potassium	1	mg/kg	120	600	160J
Sodium	1	mg/kg	150	300	ND
Zinc	1	mg/kg	1.8	12	33

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.027	0.96	0.84J
Arsenic	1	mg/kg	0.021	0.24	2.3
Beryllium	1	mg/kg	0.019	0.24	0.20J
Cadmium	1	mg/kg	0.017	0.48	11
Selenium	1	mg/kg	0.077	2.4	3.3
Silver	1	mg/kg	0.031	0.24	0.062J
Thallium	1	mg/kg	0.021	0.48	ND
Vanadium	1	mg/kg	0.013	0.24	18

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	1220	mg/kg	0.53	1.5	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.66</b>	1.5	58
1,1,2-Trichloro-1,2,2-trifluoroethane	1220	mg/kg	1.1	1.5	ND
1,1,2-Trichloroethane	1220	mg/kg	0.47	1.5	ND
1,1-Dichloroethane	1220	mg/kg	0.63	1.5	ND
1,1-Dichloroethene	1220	mg/kg	0.78	1.5	ND
1,2,3-Trichlorobenzene	1220	mg/kg	1.2	1.5	ND
1,2,4-Trichlorobenzene	1220	mg/kg	1.1	1.5	ND
1,2-Dibromo-3-chloropropane	1220	mg/kg	1.2	1.5	ND
1,2-Dibromoethane	1220	mg/kg	0.50	1.5	ND
1,2-Dichlorobenzene	1220	mg/kg	0.48	1.5	ND
<b>1,2-Dichloroethane</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.94</b>	0.94	19
1,2-Dichloropropane	1220	mg/kg	0.44	1.5	ND
1,3-Dichlorobenzene	1220	mg/kg	0.55	1.5	ND
1,4-Dichlorobenzene	1220	mg/kg	0.54	1.5	ND
1,4-Dioxane	1220	mg/kg	58	74	ND
2-Butanone	1220	mg/kg	1.1	1.5	ND
2-Hexanone	1220	mg/kg	0.88	1.5	ND
<b>4-Methyl-2-pentanone</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.72</b>	1.5	14
Acetone	1220	mg/kg	6.7	7.4	ND
<b>Benzene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.44</b>	0.74	2.4
Bromochloromethane	1220	mg/kg	1.2	1.5	ND
Bromodichloromethane	1220	mg/kg	0.51	1.5	ND
Bromoform	1220	mg/kg	0.80	1.5	ND
Bromomethane	1220	mg/kg	0.74	1.5	ND
Carbon disulfide	1220	mg/kg	0.62	1.5	ND
Carbon tetrachloride	1220	mg/kg	0.48	1.5	ND
<b>Chlorobenzene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.49</b>	1.5	320

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-01 (6-6.5)

Collection Date: 9/29/2020

Lab#: AD19539-014

Receipt Date: 9/30/2020

Matrix: Soil/Terracore

Chloroethane	1220	mg/kg	0.85	1.5	ND
Chloroform	1220	mg/kg	2.9	2.9	ND
Chloromethane	1220	mg/kg	0.76	1.5	ND
<b>cis-1,2-Dichloroethene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.94</b>	1.5	<b>9.9</b>
cis-1,3-Dichloropropene	1220	mg/kg	0.47	1.5	ND
Cyclohexane	1220	mg/kg	0.72	1.5	ND
Dibromochloromethane	1220	mg/kg	0.35	1.5	ND
Dichlorodifluoromethane	1220	mg/kg	0.91	1.5	ND
<b>Ethylbenzene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.69</b>	1.5	<b>12</b>
<b>Isopropylbenzene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.72</b>	1.5	<b>1.2J</b>
<b>m&amp;p-Xylenes</b>	<b>1220</b>	<b>mg/kg</b>	<b>1.3</b>	1.5	<b>57</b>
Methyl Acetate	1220	mg/kg	1.0	1.5	ND
<b>Methylcyclohexane</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.90</b>	1.5	<b>1.8</b>
<b>Methylene chloride</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.43</b>	1.5	<b>49</b>
Methyl-t-butyl ether	1220	mg/kg	0.46	0.74	ND
<b>o-Xylene</b>	<b>1220</b>	<b>mg/kg</b>	<b>1.0</b>	1.5	<b>13</b>
Styrene	1220	mg/kg	0.80	1.5	ND
<b>Tetrachloroethene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.53</b>	1.5	<b>29</b>
<b>Toluene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.48</b>	1.5	<b>570</b>
<b>trans-1,2-Dichloroethene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.46</b>	1.5	<b>3.4</b>
trans-1,3-Dichloropropene	1220	mg/kg	0.45	1.5	ND
<b>Trichloroethene</b>	<b>1220</b>	<b>mg/kg</b>	<b>0.51</b>	1.5	<b>460</b>
Trichlorofluoromethane	1220	mg/kg	0.45	1.5	ND
Vinyl chloride	1220	mg/kg	1.0	1.5	ND
<b>Xylenes (Total)</b>	<b>1220</b>	<b>mg/kg</b>	<b>1.0</b>	1.5	<b>70</b>

Sample ID: HSI-SB-01 (10-10.5)

Lab#: AD19539-015

Matrix: Soil/Terracore

Collection Date: 9/29/2020

Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.616	mg/kg	0.00069	0.0015	ND
1,1,2,2-Tetrachloroethane	0.616	mg/kg	0.00034	0.0015	0.0011J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.616	mg/kg	0.0010	0.0015	ND
1,1,2-Trichloroethane	0.616	mg/kg	0.00035	0.0015	ND
1,1-Dichloroethane	0.616	mg/kg	0.00065	0.0015	0.00097J
1,1-Dichloroethene	0.616	mg/kg	0.00086	0.0015	0.0016
1,2,3-Trichlorobenzene	0.616	mg/kg	0.00041	0.0015	ND
1,2,4-Trichlorobenzene	0.616	mg/kg	0.00047	0.0015	ND
1,2-Dibromo-3-chloropropane	0.616	mg/kg	0.00041	0.0015	ND
1,2-Dibromoethane	0.616	mg/kg	0.00037	0.00038	ND
1,2-Dichlorobenzene	0.616	mg/kg	0.00038	0.0015	ND
1,2-Dichloroethane	0.616	mg/kg	0.00031	0.0015	0.0073
1,2-Dichloropropane	0.616	mg/kg	0.00062	0.0015	ND
1,3-Dichlorobenzene	0.616	mg/kg	0.00041	0.0015	ND
1,4-Dichlorobenzene	0.616	mg/kg	0.00040	0.0015	ND
1,4-Dioxane	0.616	mg/kg	0.036	0.075	ND
2-Butanone	0.616	mg/kg	0.00090	0.0015	ND
2-Hexanone	0.616	mg/kg	0.00064	0.0015	ND
4-Methyl-2-pentanone	0.616	mg/kg	0.00044	0.0015	0.0040
Acetone	0.616	mg/kg	0.0051	0.0075	0.0080
Benzene	0.616	mg/kg	0.00055	0.00075	0.0086
Bromochloromethane	0.616	mg/kg	0.00053	0.0015	ND
Bromodichloromethane	0.616	mg/kg	0.00035	0.0015	ND
Bromoform	0.616	mg/kg	0.00025	0.0015	ND
Bromomethane	0.616	mg/kg	0.0012	0.0015	ND
Carbon disulfide	0.616	mg/kg	0.0026	0.0026	ND
Carbon tetrachloride	0.616	mg/kg	0.00073	0.0015	ND
Chlorobenzene	0.616	mg/kg	0.00047	0.0015	0.18
Chloroethane	0.616	mg/kg	0.0015	0.0015	ND
Chloroform	0.616	mg/kg	0.0010	0.0015	ND
Chloromethane	0.616	mg/kg	0.00092	0.0015	ND
cis-1,2-Dichloroethene	0.616	mg/kg	0.00061	0.0015	0.052
cis-1,3-Dichloropropene	0.616	mg/kg	0.00040	0.0015	ND
Cyclohexane	0.616	mg/kg	0.00090	0.0015	ND
Dibromochloromethane	0.616	mg/kg	0.00032	0.0015	ND
Dichlorodifluoromethane	0.616	mg/kg	0.0011	0.0015	ND
Ethylbenzene	0.616	mg/kg	0.00052	0.00075	0.0028
Isopropylbenzene	0.616	mg/kg	0.00062	0.00075	ND
m&p-Xylenes	0.616	mg/kg	0.00090	0.00090	0.0024
Methyl Acetate	0.616	mg/kg	0.00072	0.0015	ND
Methylcyclohexane	0.616	mg/kg	0.00068	0.0015	0.00093J
Methylene chloride	0.616	mg/kg	0.00056	0.0015	0.0031
Methyl-t-butyl ether	0.616	mg/kg	0.00041	0.00075	ND
o-Xylene	0.616	mg/kg	0.00053	0.00075	0.0019
Styrene	0.616	mg/kg	0.00041	0.0015	ND
Tetrachloroethene	0.616	mg/kg	0.00074	0.0015	ND
Toluene	0.616	mg/kg	0.00050	0.00075	0.0094
trans-1,2-Dichloroethene	0.616	mg/kg	0.00090	0.0015	0.0027
trans-1,3-Dichloropropene	0.616	mg/kg	0.00035	0.0015	ND
Trichloroethene	0.616	mg/kg	0.00062	0.0015	0.030
Trichlorofluoromethane	0.616	mg/kg	0.00089	0.0015	ND
Vinyl chloride	0.616	mg/kg	0.00092	0.0015	0.084
Xylenes (Total)	0.616	mg/kg	0.00053	0.00075	0.0043

Sample ID: HSI-SB-01 (14.5-15)  
 Lab#: AD19539-016  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.71	mg/kg	0.00082	0.0018	ND
1,1,2,2-Tetrachloroethane	0.71	mg/kg	0.00040	0.0018	0.0024
1,1,2-Trichloro-1,2,2-trifluoroethane	0.71	mg/kg	0.0012	0.0018	ND
1,1,2-Trichloroethane	0.71	mg/kg	0.00041	0.0018	ND
1,1-Dichloroethane	0.71	mg/kg	0.00077	0.0018	ND
1,1-Dichloroethene	0.71	mg/kg	0.0010	0.0018	ND
1,2,3-Trichlorobenzene	0.71	mg/kg	0.00049	0.0018	ND
1,2,4-Trichlorobenzene	0.71	mg/kg	0.00056	0.0018	ND
1,2-Dibromo-3-chloropropane	0.71	mg/kg	0.00049	0.0018	ND
1,2-Dibromoethane	0.71	mg/kg	0.00044	0.00044	ND
1,2-Dichlorobenzene	0.71	mg/kg	0.00045	0.0018	ND
1,2-Dichloroethane	0.71	mg/kg	0.00036	0.0018	0.010
1,2-Dichloropropane	0.71	mg/kg	0.00073	0.0018	ND
1,3-Dichlorobenzene	0.71	mg/kg	0.00049	0.0018	ND
1,4-Dichlorobenzene	0.71	mg/kg	0.00047	0.0018	ND
1,4-Dioxane	0.71	mg/kg	0.043	0.089	ND
2-Butanone	0.71	mg/kg	0.0011	0.0018	ND
2-Hexanone	0.71	mg/kg	0.00075	0.0018	ND
4-Methyl-2-pentanone	0.71	mg/kg	0.00051	0.0018	0.00081J
Acetone	0.71	mg/kg	0.0060	0.0089	0.012
Benzene	0.71	mg/kg	0.00065	0.00089	0.0030
Bromochloromethane	0.71	mg/kg	0.00062	0.0018	ND
Bromodichloromethane	0.71	mg/kg	0.00042	0.0018	ND
Bromoform	0.71	mg/kg	0.00029	0.0018	ND
Bromomethane	0.71	mg/kg	0.0014	0.0018	ND
Carbon disulfide	0.71	mg/kg	0.0030	0.0030	ND
Carbon tetrachloride	0.71	mg/kg	0.00086	0.0018	ND
Chlorobenzene	0.71	mg/kg	0.00055	0.0018	0.065
Chloroethane	0.71	mg/kg	0.0017	0.0018	ND
Chloroform	0.71	mg/kg	0.0012	0.0018	ND
Chloromethane	0.71	mg/kg	0.0011	0.0018	ND
cis-1,2-Dichloroethene	0.71	mg/kg	0.00072	0.0018	0.014
cis-1,3-Dichloropropene	0.71	mg/kg	0.00047	0.0018	ND
Cyclohexane	0.71	mg/kg	0.0011	0.0018	ND
Dibromochloromethane	0.71	mg/kg	0.00038	0.0018	ND
Dichlorodifluoromethane	0.71	mg/kg	0.0013	0.0018	ND
Ethylbenzene	0.71	mg/kg	0.00061	0.00089	0.00070J
Isopropylbenzene	0.71	mg/kg	0.00074	0.00089	ND
m&p-Xylenes	0.71	mg/kg	0.0011	0.0011	0.0013
Methyl Acetate	0.71	mg/kg	0.00085	0.0018	ND
Methylcyclohexane	0.71	mg/kg	0.00080	0.0018	ND
Methylene chloride	0.71	mg/kg	0.00067	0.0018	0.022
Methyl-t-butyl ether	0.71	mg/kg	0.00048	0.00089	0.0012
o-Xylene	0.71	mg/kg	0.00063	0.00089	ND
Styrene	0.71	mg/kg	0.00049	0.0018	ND
Tetrachloroethene	0.71	mg/kg	0.00087	0.0018	ND
Toluene	0.71	mg/kg	0.00059	0.00089	0.035
trans-1,2-Dichloroethene	0.71	mg/kg	0.0011	0.0018	0.0027
trans-1,3-Dichloropropene	0.71	mg/kg	0.00042	0.0018	ND
Trichloroethene	0.71	mg/kg	0.00073	0.0018	0.040
Trichlorofluoromethane	0.71	mg/kg	0.0010	0.0018	ND
Vinyl chloride	0.71	mg/kg	0.0011	0.0018	0.0075
Xylenes (Total)	0.71	mg/kg	0.00063	0.00089	0.0013

Sample ID: HSI-SB-D1  
 Lab#: AD19539-017  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		84

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.099	0.14

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	400	mg/kg	4.6	16	ND
1,2,4,5-Tetrachlorobenzene	400	mg/kg	5.3	16	ND
1,4-Dioxane	400	mg/kg	8.0	8.0	ND
2,3,4,6-Tetrachlorophenol	400	mg/kg	6.0	16	ND
2,4,5-Trichlorophenol	400	mg/kg	4.5	16	ND
2,4,6-Trichlorophenol	400	mg/kg	12	16	ND
2,4-Dichlorophenol	400	mg/kg	6.0	6.0	ND
2,4-Dimethylphenol	400	mg/kg	7.7	7.7	ND
2,4-Dinitrophenol	400	mg/kg	69	79	ND
2,4-Dinitrotoluene	400	mg/kg	4.9	16	ND
2,6-Dinitrotoluene	400	mg/kg	8.1	16	ND
2-Chloronaphthalene	400	mg/kg	7.1	16	ND
<b>2-Chlorophenol</b>	<b>400</b>	<b>mg/kg</b>	<b>5.2</b>	<b>16</b>	<b>24</b>
2-Methylnaphthalene	400	mg/kg	4.9	16	ND
2-Methylphenol	400	mg/kg	4.6	4.6	ND
2-Nitroaniline	400	mg/kg	7.5	16	ND
2-Nitrophenol	400	mg/kg	7.2	16	ND
3&4-Methylphenol	400	mg/kg	4.6	4.6	ND
3,3'-Dichlorobenzidine	400	mg/kg	13	16	ND
3-Nitroaniline	400	mg/kg	6.2	16	ND
4,6-Dinitro-2-methylphenol	400	mg/kg	55	79	ND
4-Bromophenyl-phenylether	400	mg/kg	4.4	16	ND
4-Chloro-3-methylphenol	400	mg/kg	3.8	16	ND
4-Chloroaniline	400	mg/kg	7.0	7.0	ND
4-Chlorophenyl-phenylether	400	mg/kg	4.9	16	ND
4-Nitroaniline	400	mg/kg	6.1	16	ND
4-Nitrophenol	400	mg/kg	12	16	ND
Acenaphthene	400	mg/kg	4.5	16	ND
Acenaphthylene	400	mg/kg	4.7	16	ND
Acetophenone	400	mg/kg	5.7	16	ND
Anthracene	400	mg/kg	4.4	16	ND
Atrazine	400	mg/kg	6.4	16	ND
Benzaldehyde	400	mg/kg	170	170	ND
Benzo[a]anthracene	400	mg/kg	5.3	16	ND
Benzo[a]pyrene	400	mg/kg	5.4	16	ND
Benzo[b]fluoranthene	400	mg/kg	5.7	16	ND
Benzo[g,h,i]perylene	400	mg/kg	0.11	16	ND
Benzo[k]fluoranthene	400	mg/kg	5.8	16	ND
bis(2-Chloroethoxy)methane	400	mg/kg	4.5	16	ND
bis(2-Chloroethyl)ether	400	mg/kg	3.9	4.0	ND
bis(2-Chloroisopropyl)ether	400	mg/kg	6.3	16	ND
<b>bis(2-Ethylhexyl)phthalate</b>	<b>400</b>	<b>mg/kg</b>	<b>14</b>	<b>16</b>	<b>58</b>
Butylbenzylphthalate	400	mg/kg	12	16	ND
Caprolactam	400	mg/kg	13	16	ND
Carbazole	400	mg/kg	4.9	16	ND
Chrysene	400	mg/kg	5.4	16	ND
Dibenzo[a,h]anthracene	400	mg/kg	5.8	16	ND
Dibenzofuran	400	mg/kg	4.0	4.0	ND
Diethylphthalate	400	mg/kg	10	16	ND
Dimethylphthalate	400	mg/kg	4.5	16	ND
<b>DI-n-butylphthalate</b>	<b>400</b>	<b>mg/kg</b>	<b>18</b>	<b>18</b>	<b>1200</b>
Di-n-octylphthalate	400	mg/kg	11	16	ND
Fluoranthene	400	mg/kg	6.1	16	ND
Fluorene	400	mg/kg	4.3	16	ND
Hexachlorobenzene	400	mg/kg	6.6	16	ND
Hexachlorobutadiene	400	mg/kg	7.1	16	ND
Hexachlorocyclopentadiene	400	mg/kg	52	52	ND
Hexachloroethane	400	mg/kg	7.0	16	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

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Sample ID: HSI-SB-D1  
 Lab#: AD19539-017  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

Indeno[1,2,3-cd]pyrene	400	mg/kg	7.2	16	ND
Isophorone	400	mg/kg	5.1	16	ND
<b>Naphthalene</b>	<b>400</b>	<b>mg/kg</b>	<b>4.6</b>	<b>4.6</b>	<b>26</b>
Nitrobenzene	400	mg/kg	0.64	16	ND
N-Nitroso-di-n-propylamine	400	mg/kg	6.0	6.0	ND
N-Nitrosodiphenylamine	400	mg/kg	54	54	ND
Pentachlorophenol	400	mg/kg	76	79	ND
Phenanthrene	400	mg/kg	5.1	16	ND
Phenol	400	mg/kg	4.4	16	ND
Pyrene	400	mg/kg	5.4	16	ND

**TAL Metals 6010D**

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	20	240	5000
Barium	1	mg/kg	0.80	12	37
Calcium	1	mg/kg	120	1200	1300
Chromium	1	mg/kg	0.80	6.0	49
Cobalt	1	mg/kg	0.85	3.0	1.4J
Copper	1	mg/kg	0.73	6.0	12
Iron	1	mg/kg	16	240	9700
Lead	1	mg/kg	0.73	6.0	140
Magnesium	1	mg/kg	23	600	440J
Manganese	1	mg/kg	0.76	12	27
Nickel	1	mg/kg	1.3	6.0	9.0
Potassium	1	mg/kg	120	600	190J
Sodium	1	mg/kg	150	300	ND
Zinc	1	mg/kg	1.8	12	31

**TAL Metals 6020B**

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.027	0.95	1.3
Arsenic	1	mg/kg	0.021	0.24	2.3
Beryllium	1	mg/kg	0.019	0.24	0.17J
Cadmium	1	mg/kg	0.017	0.48	6.2
Selenium	1	mg/kg	0.076	2.4	2.8
Silver	1	mg/kg	0.031	0.24	0.064J
Thallium	1	mg/kg	0.021	0.48	ND
Vanadium	1	mg/kg	0.013	0.24	19

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	6590	mg/kg	2.8	7.8	ND
<b>1,1,2,2-Tetrachloroethane</b>	<b>6590</b>	<b>mg/kg</b>	<b>3.5</b>	<b>7.8</b>	<b>200</b>
1,1,2-Trichloro-1,2,2-trifluoroethane	6590	mg/kg	5.7	7.8	ND
1,1,2-Trichloroethane	6590	mg/kg	2.5	7.8	ND
1,1-Dichloroethane	6590	mg/kg	3.4	7.8	ND
1,1-Dichloroethene	6590	mg/kg	4.2	7.8	ND
1,2,3-Trichlorobenzene	6590	mg/kg	6.2	7.8	ND
1,2,4-Trichlorobenzene	6590	mg/kg	5.7	7.8	ND
1,2-Dibromo-3-chloropropane	6590	mg/kg	6.5	7.8	ND
1,2-Dibromoethane	6590	mg/kg	2.7	7.8	ND
1,2-Dichlorobenzene	6590	mg/kg	2.5	7.8	ND
<b>1,2-Dichloroethane</b>	<b>6590</b>	<b>mg/kg</b>	<b>5.0</b>	<b>5.0</b>	<b>74</b>
1,2-Dichloropropane	6590	mg/kg	2.3	7.8	ND
1,3-Dichlorobenzene	6590	mg/kg	3.0	7.8	ND
1,4-Dichlorobenzene	6590	mg/kg	2.9	7.8	ND
1,4-Dioxane	6590	mg/kg	310	390	ND
2-Butanone	6590	mg/kg	5.9	7.8	ND
2-Hexanone	6590	mg/kg	4.7	7.8	ND
<b>4-Methyl-2-pentanone</b>	<b>6590</b>	<b>mg/kg</b>	<b>3.8</b>	<b>7.8</b>	<b>76</b>
Acetone	6590	mg/kg	36	39	ND
<b>Benzene</b>	<b>6590</b>	<b>mg/kg</b>	<b>2.3</b>	<b>3.9</b>	<b>9.7</b>
Bromochloromethane	6590	mg/kg	6.2	7.8	ND
Bromodichloromethane	6590	mg/kg	2.7	7.8	ND
Bromoform	6590	mg/kg	4.2	7.8	ND
Bromomethane	6590	mg/kg	3.9	7.8	ND
Carbon disulfide	6590	mg/kg	3.3	7.8	ND
Carbon tetrachloride	6590	mg/kg	2.5	7.8	ND
Chlorobenzene	6590	mg/kg	2.6	7.8	1200

NOTE: Soil Results are reported to Dry Weigh

Project #: 0093024

Page 26 of 27



Sample ID: HSI-SB-D1  
 Lab#: AD19539-017  
 Matrix: Soil/Terracore

Collection Date: 9/29/2020  
 Receipt Date: 9/30/2020

Chloroethane	6590	mg/kg	4.5	7.8	ND
Chloroform	6590	mg/kg	15	15	ND
Chloromethane	6590	mg/kg	4.0	7.8	ND
<b>cis-1,2-Dichloroethene</b>	<b>6590</b>	<b>mg/kg</b>	<b>5.0</b>	<b>7.8</b>	<b>33</b>
cis-1,3-Dichloropropene	6590	mg/kg	2.5	7.8	ND
Cyclohexane	6590	mg/kg	3.8	7.8	ND
Dibromochloromethane	6590	mg/kg	1.9	7.8	ND
Dichlorodifluoromethane	6590	mg/kg	4.9	7.8	ND
<b>Ethylbenzene</b>	<b>6590</b>	<b>mg/kg</b>	<b>3.7</b>	<b>7.8</b>	<b>44</b>
<b>Isopropylbenzene</b>	<b>6590</b>	<b>mg/kg</b>	<b>3.9</b>	<b>7.8</b>	<b>5.0J</b>
<b>m&amp;p-Xylenes</b>	<b>6590</b>	<b>mg/kg</b>	<b>6.7</b>	<b>7.8</b>	<b>200</b>
Methyl Acetate	6590	mg/kg	5.5	7.8	ND
Methylcyclohexane	6590	mg/kg	4.8	7.8	ND
<b>Methylene chloride</b>	<b>6590</b>	<b>mg/kg</b>	<b>2.3</b>	<b>7.8</b>	<b>160</b>
Methyl-t-butyl ether	6590	mg/kg	2.4	3.9	ND
<b>o-Xylene</b>	<b>6590</b>	<b>mg/kg</b>	<b>5.4</b>	<b>7.8</b>	<b>46</b>
Styrene	6590	mg/kg	4.3	7.8	ND
<b>Tetrachloroethene</b>	<b>6590</b>	<b>mg/kg</b>	<b>2.8</b>	<b>7.8</b>	<b>95</b>
<b>Toluene</b>	<b>6590</b>	<b>mg/kg</b>	<b>2.6</b>	<b>7.8</b>	<b>2200</b>
<b>trans-1,2-Dichloroethene</b>	<b>6590</b>	<b>mg/kg</b>	<b>2.4</b>	<b>7.8</b>	<b>12</b>
trans-1,3-Dichloropropene	6590	mg/kg	2.4	7.8	ND
<b>Trichloroethene</b>	<b>6590</b>	<b>mg/kg</b>	<b>2.7</b>	<b>7.8</b>	<b>1700</b>
Trichlorofluoromethane	6590	mg/kg	2.4	7.8	ND
Vinyl chloride	6590	mg/kg	5.5	7.8	ND
<b>Xylenes (Total)</b>	<b>6590</b>	<b>mg/kg</b>	<b>5.4</b>	<b>7.8</b>	<b>250</b>

## HC Reporting Limit Definitions/Data Qualifiers

### REPORTING DEFINITIONS

**DF** = Dilution Factor

**LCS** = Laboratory Control Spike

**MBS** = Method Blank Spike

**MS** = Matrix Spike

**MSD** = Matrix Spike Duplicate

**MDL** = Method Detection Limit

**NA** = Not Applicable

**ND** = Not Detected

**PS** = Post Digestion Spike

**RL\*** = Reporting Limit

**RT** = Retention Time

*\*Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

### DATA QUALIFIERS

- A-** Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R-** Retention Time is out.
- Y-** Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

# Laboratory Chronicle

0093024 0039

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0093024

Lab#: AD19539-001

Sample ID: HSI-TB-01

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/5/20 17:54	WP

Lab#: AD19539-002

Sample ID: HSI-GW-01

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 18:54	RL

Lab#: AD19539-003

Sample ID: HSI-GW-02

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 19:13	RL

Lab#: AD19539-004

Sample ID: HSI-GW-03

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 19:33	RL

Lab#: AD19539-005

Sample ID: HSI-GW-04

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 19:53	RL

Lab#: AD19539-006

Sample ID: HSI-SB-02(3.5-4)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 02:11	WP

# Laboratory Chronicle

0093024 0040

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0093024

Lab#: AD19539-007

Sample ID: HSI-SB-02(10-10.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/06/20 08:00	asilva	EPA 7471B	10/6/20 12:01	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/6/20 17:57	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 13:49	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:40	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 18:57	OA
TAL Metals 6020B	3005&10/3050	10/06/20 08:00	asilva	EPA 6020B	10/7/20 11:26	PC
TAL Metals 6020B	3005&10/3050	10/06/20 08:00	asilva	EPA 6020B	10/7/20 11:03	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 18:28	SG

Lab#: AD19539-008

Sample ID: HSI-SB-02(11-11.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 01:29	WP

Lab#: AD19539-009

Sample ID: HSI-SB-04 (9.5-10)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 00:57	WP

Lab#: AD19539-010

Sample ID: HSI-SB-03 (3.5-4)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 00:06	WP

# Laboratory Chronicle

0093024 0041

**Client:** Chesapeake Geosciences Inc  
**Project:** Hot Spot Investigation

**HC Project #:** 0093024

**Lab#:** AD19539-011

**Sample ID:** HSI-SB-03 (10-10.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/06/20 08:00	asilva	EPA 7471B	10/6/20 12:03	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/6/20 12:59	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 13:53	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:43	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 19:01	OA
TAL Metals 6020B	3005&10/3050	10/06/20 08:00	asilva	EPA 6020B	10/7/20 11:08	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/5/20 23:46	WP

**Lab#:** AD19539-012

**Sample ID:** HSI-SB-03 (11-11.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/9/20 13:20	BK

**Lab#:** AD19539-013

**Sample ID:** HSI-SB-01 (2.5-3)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/06/20 08:00	asilva	EPA 7471B	10/6/20 12:04	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/6/20 18:20	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 13:57	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:47	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 19:05	OA
TAL Metals 6020B	3005&10/3050	10/06/20 08:00	asilva	EPA 6020B	10/7/20 11:12	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 00:48	WP

# Laboratory Chronicle

0093024 0042

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0093024

Lab#: AD19539-014

Sample ID: HSI-SB-01 (6-6.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/06/20 08:00	asilva	EPA 7471B	10/6/20 12:05	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/7/20 16:06	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:51	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 19:09	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:02	OA
TAL Metals 6020B	3005&10/3050	10/06/20 08:00	asilva	EPA 6020B	10/7/20 11:17	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/9/20 11:57	BK

Lab#: AD19539-015

Sample ID: HSI-SB-01 (10-10.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/6/20 11:52	SG

Lab#: AD19539-016

Sample ID: HSI-SB-01 (14.5-15)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G		
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D		

Lab#: AD19539-017

Sample ID: HSI-SB-D1

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/2/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/06/20 08:00	asilva	EPA 7471B	10/6/20 12:07	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/7/20 16:29	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:06	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 14:55	OA
TAL Metals 6010D	3005&10/3050	10/06/20 08:00	asilva	EPA 6010D	10/6/20 19:13	OA
TAL Metals 6020B	3005&10/3050	10/06/20 08:00	asilva	EPA 6020B	10/7/20 11:21	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/5/20 19:58	WP

## **Chain of Custody**

**Hampton-Clarke, Inc. (WBE/DBE/SBE)**  
 175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458  
 Service Center: 137-D Galther Drive, Mount Laurel, New Jersey, 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-6055  
 NEIACINJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #0124 | DE HSCA Approved



**CHAIN OF CUSTODY RECORD**  
 A Women-Owned, Disadvantaged, Small Business Enterprise

Project # (Lab Use Only) **0093024**  
**3) Reporting Requirements (Please Circle)**

Page **1** of **1**

**1a) Customer:** Chesapeake Food Services  
 5905 Turn Kwoles Rd Ste J  
 Columbia MD 21045  
**1b) Email/Cell/Fax/Ph:** nlaw@csb.us.com  
 nlaw@csb.us.com  
 nlaw@csb.us.com  
**1c) Send Invoice to:** nlaw@csb.us.com  
**1d) Send Report to:** nlaw@csb.us.com

**Customer Information**  
**2a) Project:** Hot Spot Investigation  
**2b) Project No.:** Management Bathrooms  
**2c) Project Location (City/State):** Newark, NJ  
**2d) Quote/PO # (if Applicable):** CS609042310MS

**When Available:**  
 1 Business Day (100%)\*  
 Business Days (75%)\*  
 3 Business Days (50%)\*  
 4 Business Days (35%)\*  
 5 Business Days (25%)\*  
 8 Business Days (Standard)  
 Other: \_\_\_\_\_

**Report Type:** Summary  
 Results + QC (Waste)  
 Reduced: [ ] NJ [ ] NY [ ] PA [ ] MD  
 [ ] PA [ ] NY [ ] MD  
 [ ] PA [ ] NY [ ] MD  
 [ ] PA [ ] NY [ ] MD  
 [ ] PA [ ] NY [ ] MD  
 [ ] PA [ ] NY [ ] MD  
 [ ] PA [ ] NY [ ] MD

**Electronic Data Deliv.:** NJ HazSite  
 Execl Reg. NJ / NY / PA  
 EnviroData  
 EQUIS: [ ] 4-File [ ] EZ  
 [ ] NYDEC [ ] Region 2 or 5  
 Other: \_\_\_\_\_

\* Expedited TAT Not Always Available. Please Check with Lab.

**FOR LAB USE ONLY**  
**Matrix Codes**  
 DW - Drinking Water S - Soil A - Air  
 GW - Ground Water SL - Sludge  
 WW - Waste Water OL - Oil  
 OT - Other (please specify under item 9, Comments)

**7) Analysis (Specify methods & parameter lists)**  
 VOCs 8260  
 SVOCs 8270  
 TAL Metals 6020

**8) # of Bottles**  
 None [ ] MeOH [ ] En Core [ ] NaOH [ ] HCl [ ] H2SO4 [ ] HNO3 [ ] Other: \_\_\_\_\_

**9) Comments**  
 Trip Blank

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time	Composite (C)	Grab (G)	8) # of Bottles					9) Comments					
							None	MeOH	En Core	NaOH	HCl		H2SO4	HNO3	Other:		
001	HST-TB-01	GW	9/30/20	08:00	X	X											
002	HST-GW-01		11:55		X	X											
003	HST-GW-02		13:20		X	X											
004	HST-GW-03		15:50		X	X											
001	HST-GW-04		14:50		X	X											
004	HST-GB-02(35-4)		08:10		X	X											
007	HST-GB-02(4-10)		08:20		X	X											
008	HST-GB-02(11-5)		08:30		X	X											
005	HST-GB-01(15-10)		09:40		X	X											
010	HST-GB-03(35-4)		11:50		X	X											

**10) Relinquished by:** [Signature] **Accepted by:** [Signature] **Date:** 9/30/20 **Time:** 09:25

**Additional Notes:** Mag Journals, CS Date: 9/30/20

**Comments, Notes, Special Requirements, HAZARDS**

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):

BN or BNA (8270D SIM) [ ]  
 VOC (8260C SIM or 8011) [ ]  
 SPLP (BN, BNA, Metals) [ ]  
 1,4 Dioxane [ ]

Check if applicable: [ ]

**Project-Specific Reporting Limits**  
 High Contaminant Concentrations HST-GB-01 samples  
 NJ LSRP Project (also check boxes above/right)  
 Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

**Internal use: sampling plan (check box) HCl [ ] or client [ ] FSP#**

**For NJ LSRP projects, indicate which standards need to be met:**  
 NUDEP GWQS [ ]  
 NUDEP SRS [ ]  
 NUDEP SPLP [ ]  
 Other (specify): [ ]

Cooler Temperature: 2-4



175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458  
 Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056



Hampton-Clarke  
 A Women-Owned, Disadvantaged, Small Business Enterprise  
 NEAC/NJ #07071 | PA #68-004631 NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

**1a) Customer:** Chesapeake Good Sciences  
 Address: 5105 Twin Knolls Rd Ste 1  
 Columbia, MD 21045  
**1b) Email/Cell/Fax/Ph:** nlohr@cgslab.com  
**1c) Send Invoice to:**  
**1d) Send Report to:**

**2a) Project:** HSPOT INVESTIGATION  
**2b) Project Mgr:** Monique Barry  
**2c) Project Location (City/State):** Prince Georges, VA  
**2d) Quoter/PO # (if Applicable):** North East, Maryland

**3) Reporting Requirements (Please Circle)**

When Available: 1 Business Day (100%)\*  
 2 Business Days (75%)\*  
 3 Business Days (50%)\*  
 4 Business Days (35%)\*  
 5 Business Days (25%)  
 8 Business Days (Stand)

Report Type: Summary  
 Results + QC (Waste)  
 Reduced: [ ] NJ [ ] NY  
 [ ] PA [ ] Other MD  
 NY Full / NY ASP CalB  
 NY ASP CalA

Electronic Data Deliv.: [ ] NJ HazSite  
 [ ] Excel Reg. NJ / NY / PA  
 [ ] EnviroData  
 [ ] EQUS:  
 [ ] 4-File [ ] EZ  
 [ ] NYDEC  
 [ ] Region 2 or 5

**FOR LAB USE ONLY** **Matrix Codes** **Check if Contingent**

**Matrix Codes:** DW - Drinking Water S - Soil A - Air  
 GW - Ground Water SL - Sludge  
 WW - Waste Water OL - Oil  
 OT - Other (please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Sample Time	Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)	8) # of Bottles						9) Comments	
								None	MeOH	En Core	NaOH	HCl	H2SO4		HNO3
011	HSE-SB-03 (p-1025)	S	9/29/20	12:00	X	X	VOCs 8260 X VOCs 8270 X TAL Metals 6020X								
012	HSE-SB-08 (1-11.5)	S	12:10	12:10	X	X									
013	HSE-SB-01 (3.5-3)	S	12:30	12:30	X	X									
014	HSE-SB-01 (6-6.5)	S	11:30	11:30	X	X									
015	HSE-SB-01 (10-10.5)	S	5:30	5:30	X	X									
016	HSE-SB-01 (14.5-15)	S	5:40	5:40	X	X									
017	HSE-SB-01 (15-15)	S	8:00	8:00	X	X									

**10) Reimbursed by:** [Signature] **Accepted by:** [Signature] **Date:** 9/30/20 **Time:** 09:25

**11) Sampler (print name):** Log Stevens **CES** **Date:** 9/30/20

**Additional Notes:**

**Comments, Notes, Special Requirements, HAZARDS**

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270D SIM) [ ]  
 VOC (8260C SIM or 8011) [ ]  
 SPLP (BN, BNA, Metals) [ ]  
 1,4 Dioxane [ ]  
 Check if applicable: [ ]

Project-Specific Reporting Limits: HSE-SB-01  
 High Contaminant Concentrations (above/right)  
 NJ LSRP Project (also check boxes above/right)  
 Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] **FSF#**

**Other (specify):** Hold Analysis

# PROJECT MODIFICATIONS

Client: CGS

HC Project #: 0093024

Project: Hot Spot Investigation

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mkennedy192.168.1.42  
10/23/2020 5:40:03 PM  
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Per client, sample ID for AD19539-017 should be HSI-SB-D1.

Per client, analyze the following samples for BNA and TAL Metals:

HSI-SB-02(10-10.5) (AD19539-007)  
HSI-SB-03 (10-10.5) (AD19539-011)  
HSI-SB-01 (2.5-3) (AD19539-013)  
HSI-SB-01 (6-6.5) (AD19539-014)  
HSI-SB-D1 (AD19539-017)

MK 10/23/20

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mkennedy192.168.1.42  
10/28/2020 11:06:31 AM  
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Per Meg Staines via email, HSI-SB-01 (14.5-15) @ 15:40 should be logged in for VO.  
MK 10/28/20

## CONDITION UPON RECEIPT

Batch Number AD19539

Entered By: Ricardo

Date Entered 10/1/2020 1:00:00 PM

- 
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T-461 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).  
2.4
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 No Is there enough sample sent for the analyses listed on the COC? If no, specify:  
TWO 40ML VIALS RECEIVED FOR TB.PH NOT TAKEN
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
- 14 NA Corrective actions (Specify item number and corrective action taken).
- 15 No Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

## PRESERVATION DOCUMENT

Batch Number AD19539

Entered By: Ricardo

Date Entered 10/1/2020 1:00:00 PM

Lab#	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD19539-001	NA	NA	NA	NA	NA	NA	NA
AD19539-002	40ml	G	VO	HCL	329861	1	HC998032
AD19539-003	40ml	G	VO	HCL	329861	1	HC998032
AD19539-004	40ml	G	VO	HCL	329861	1	HC998032
AD19539-005	40ml	G	VO	HCL	329861	1	HC998032
AD19539-006	NA	NA	NA	NA	NA	NA	NA
AD19539-007	NA	NA	NA	NA	NA	NA	NA
AD19539-008	NA	NA	NA	NA	NA	NA	NA
AD19539-009	NA	NA	NA	NA	NA	NA	NA
AD19539-010	NA	NA	NA	NA	NA	NA	NA
AD19539-011	NA	NA	NA	NA	NA	NA	NA
AD19539-012	NA	NA	NA	NA	NA	NA	NA
AD19539-013	NA	NA	NA	NA	NA	NA	NA
AD19539-014	NA	NA	NA	NA	NA	NA	NA
AD19539-015	NA	NA	NA	NA	NA	NA	NA
AD19539-016	NA	NA	NA	NA	NA	NA	NA
AD19539-017	NA	NA	NA	NA	NA	NA	NA

Internal Chain of Custody

0093024 0049

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19539-001	09/30/20 17:10	RICAR	0	M	Received	AD19539-008	10/01/20 21:48	R12	4	A	NONE
AD19539-001	09/30/20 17:59	RICAR	0	M	Login	AD19539-008	10/02/20 08:46	BCT	4	A	% SOLIDS
AD19539-001	09/30/20 19:13	R31	1	A	NONE	AD19539-008	10/02/20 11:04	R12	4	A	NONE
AD19539-001	09/30/20 19:13	R31	2	A	NONE	AD19539-009	09/30/20 17:10	RICAR	0	M	Received
AD19539-001	10/05/20 15:35	WP	2	A	VOA	AD19539-009	09/30/20 17:59	RICAR	0	M	Login
AD19539-002	09/30/20 17:10	RICAR	0	M	Received	AD19539-009	09/30/20 19:13	R31	1	A	NONE
AD19539-002	09/30/20 17:59	RICAR	0	M	Login	AD19539-009	10/01/20 09:42	RL	1	A	VOA
AD19539-002	10/01/20 14:10	R31P	1	A	NONE	AD19539-009	10/01/20 10:43	R31	1	A	NONE
AD19539-002	10/01/20 14:10	R31	2	A	NONE	AD19539-009	09/30/20 19:14	F19	2	A	none
AD19539-002	10/07/20 10:34	RL	2	A	VOA	AD19539-009	10/05/20 18:45	WP	2	A	VOA
AD19539-002	10/01/20 14:10	R31	3	A	NONE	AD19539-009	09/30/20 19:14	F19	3	A	none
AD19539-003	09/30/20 17:10	RICAR	0	M	Received	AD19539-009	10/01/20 13:03	R12	4	A	NONE
AD19539-003	09/30/20 17:59	RICAR	0	M	Login	AD19539-009	10/01/20 21:47	PA	4	A	mix
AD19539-003	10/01/20 14:10	R31P	1	A	NONE	AD19539-009	10/01/20 21:48	R12	4	A	NONE
AD19539-003	10/01/20 14:10	R31	2	A	NONE	AD19539-009	10/02/20 08:46	BCT	4	A	% SOLIDS
AD19539-003	10/07/20 10:34	RL	2	A	VOA	AD19539-009	10/02/20 11:04	R12	4	A	NONE
AD19539-003	10/01/20 14:10	R31	3	A	NONE	AD19539-010	09/30/20 17:10	RICAR	0	M	Received
AD19539-003	10/01/20 14:10	R31	3	A	NONE	AD19539-010	09/30/20 17:59	RICAR	0	M	Login
AD19539-004	09/30/20 17:10	RICAR	0	M	Received	AD19539-010	09/30/20 19:13	R31	1	A	NONE
AD19539-004	09/30/20 17:59	RICAR	0	M	Login	AD19539-010	10/01/20 09:42	RL	1	A	VOA
AD19539-004	10/01/20 14:10	R31P	1	A	NONE	AD19539-010	10/01/20 10:43	R31	1	A	NONE
AD19539-004	10/01/20 14:10	R31	2	A	NONE	AD19539-010	10/05/20 20:45	WP	1	A	VOA
AD19539-004	10/07/20 10:34	RL	2	A	VOA	AD19539-010	10/05/20 20:50	R31	1	A	NONE
AD19539-004	10/01/20 14:10	R31	3	A	NONE	AD19539-010	09/30/20 19:14	F19	2	A	none
AD19539-005	09/30/20 17:10	RICAR	0	M	Received	AD19539-010	09/30/20 19:14	F19	2	A	none
AD19539-005	09/30/20 17:59	RICAR	0	M	Login	AD19539-010	09/30/20 19:14	F19	3	A	none
AD19539-005	10/01/20 14:10	R31P	1	A	NONE	AD19539-010	10/01/20 13:03	R12	4	A	NONE
AD19539-005	10/01/20 14:10	R31	2	A	NONE	AD19539-010	10/01/20 21:47	PA	4	A	mix
AD19539-005	10/07/20 13:50	RL	2	A	VOA	AD19539-010	10/01/20 21:48	R12	4	A	NONE
AD19539-005	10/01/20 14:10	R31	3	A	NONE	AD19539-010	10/02/20 08:46	BCT	4	A	% SOLIDS
AD19539-006	09/30/20 17:10	RICAR	0	M	Received	AD19539-010	10/02/20 11:04	R12	4	A	NONE
AD19539-006	09/30/20 17:59	RICAR	0	M	Login	AD19539-011	09/30/20 17:10	RICAR	0	M	Received
AD19539-006	09/30/20 19:13	R31	1	A	NONE	AD19539-011	09/30/20 17:59	RICAR	0	M	Login
AD19539-006	10/01/20 09:42	RL	1	A	VOA	AD19539-011	09/30/20 19:13	R31	1	A	NONE
AD19539-006	10/01/20 10:43	R31	1	A	NONE	AD19539-011	10/01/20 09:42	RL	1	A	VOA
AD19539-006	10/05/20 20:45	WP	1	A	VOA	AD19539-011	10/01/20 10:43	R31	1	A	NONE
AD19539-006	10/05/20 20:50	R31	1	A	NONE	AD19539-011	10/05/20 20:45	WP	1	A	VOA
AD19539-006	09/30/20 19:14	F19	2	A	none	AD19539-011	10/05/20 20:50	R31	1	A	NONE
AD19539-006	09/30/20 19:14	F19	3	A	none	AD19539-011	10/06/20 10:55	RL	1	A	VOA
AD19539-006	10/01/20 13:03	R12	4	A	NONE	AD19539-011	10/06/20 11:27	R31	1	A	NONE
AD19539-006	10/01/20 21:47	PA	4	A	mix	AD19539-011	09/30/20 19:14	F19	2	A	none
AD19539-006	10/01/20 21:48	R12	4	A	NONE	AD19539-011	10/05/20 17:47	WP	2	A	VOA
AD19539-006	10/02/20 08:46	BCT	4	A	% SOLIDS	AD19539-011	10/06/20 11:06	SG	2	A	VOA
AD19539-006	10/02/20 11:04	R12	4	A	NONE	AD19539-011	09/30/20 19:14	F19	3	A	none
AD19539-007	09/30/20 17:10	RICAR	0	M	Received	AD19539-011	10/01/20 13:03	R12	4	A	NONE
AD19539-007	09/30/20 17:59	RICAR	0	M	Login	AD19539-011	10/06/20 07:57	ANS	4	A	TDSI/Hg
AD19539-007	09/30/20 19:13	R31	1	A	NONE	AD19539-011	10/06/20 09:14	R12	4	A	NONE
AD19539-007	10/01/20 09:42	RL	1	A	VOA	AD19539-011	10/01/20 13:03	R12	5	A	NONE
AD19539-007	10/01/20 10:43	R31	1	A	NONE	AD19539-011	10/01/20 21:47	PA	5	A	mix
AD19539-007	10/05/20 20:45	WP	1	A	VOA	AD19539-011	10/01/20 21:48	R12	5	A	NONE
AD19539-007	10/05/20 20:50	R31	1	A	NONE	AD19539-011	10/02/20 08:46	BCT	5	A	% SOLIDS
AD19539-007	09/30/20 19:14	F19	2	A	none	AD19539-011	10/02/20 11:04	R12	5	A	NONE
AD19539-007	10/05/20 17:47	WP	2	A	VOA	AD19539-011	10/06/20 07:18	JP	5	A	bn-soil
AD19539-007	10/06/20 13:24	SG	2	A	VOA	AD19539-011	10/06/20 07:19	R12	5	A	NONE
AD19539-007	09/30/20 19:14	F19	3	A	none	AD19539-012	09/30/20 17:10	RICAR	0	M	Received
AD19539-007	10/01/20 13:03	R12	4	A	NONE	AD19539-012	09/30/20 17:59	RICAR	0	M	Login
AD19539-007	10/01/20 13:03	R12	5	A	NONE	AD19539-012	09/30/20 19:13	R31	1	A	NONE
AD19539-007	10/01/20 21:47	PA	5	A	mix	AD19539-012	10/01/20 09:42	RL	1	A	VOA
AD19539-007	10/01/20 21:48	R12	5	A	NONE	AD19539-012	10/01/20 10:43	R31	1	A	NONE
AD19539-007	10/02/20 08:46	BCT	5	A	% SOLIDS	AD19539-012	10/09/20 09:38	RL	1	A	VOA
AD19539-007	10/02/20 11:04	R12	5	A	NONE	AD19539-012	10/09/20 13:41	R31	1	A	NONE
AD19539-007	10/06/20 07:18	JP	5	A	bn-soil	AD19539-012	09/30/20 19:14	F19	2	A	none
AD19539-007	10/06/20 07:19	R12	5	A	NONE	AD19539-012	10/05/20 18:45	WP	2	A	VOA
AD19539-007	10/06/20 08:37	ANS	5	A	TDSI/Hg	AD19539-012	09/30/20 19:14	F19	3	A	none
AD19539-007	10/06/20 09:14	R12	5	A	NONE	AD19539-012	10/01/20 13:03	R12	4	A	NONE
AD19539-008	09/30/20 17:10	RICAR	0	M	Received	AD19539-012	10/01/20 21:47	PA	4	A	mix
AD19539-008	09/30/20 17:59	RICAR	0	M	Login	AD19539-012	10/01/20 21:48	R12	4	A	NONE
AD19539-008	09/30/20 19:13	R31	1	A	NONE	AD19539-012	10/02/20 08:46	BCT	4	A	% SOLIDS
AD19539-008	10/01/20 09:42	RL	1	A	VOA	AD19539-012	10/02/20 11:04	R12	4	A	NONE
AD19539-008	10/01/20 10:43	R31	1	A	NONE	AD19539-013	09/30/20 17:10	RICAR	0	M	Received
AD19539-008	10/05/20 20:45	WP	1	A	VOA	AD19539-013	09/30/20 17:59	RICAR	0	M	Login
AD19539-008	10/05/20 20:50	R31	1	A	NONE	AD19539-013	09/30/20 19:13	R31	1	A	NONE
AD19539-008	09/30/20 19:14	F19	2	A	none	AD19539-013	10/01/20 09:42	RL	1	A	VOA
AD19539-008	09/30/20 19:14	F19	3	A	none	AD19539-013	10/01/20 10:43	R31	1	A	NONE
AD19539-008	10/01/20 13:03	R12	4	A	NONE	AD19539-013	10/05/20 20:45	WP	1	A	VOA
AD19539-008	10/01/20 21:47	PA	4	A	mix	AD19539-013	10/05/20 20:50	R31	1	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

0093024 0050

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19539-013	09/30/20 19:14	F19	2	A	none
AD19539-013	09/30/20 19:14	F19	3	A	none
AD19539-013	10/01/20 13:03	R12	4	A	NONE
AD19539-013	10/06/20 07:57	ANS	4	A	TDSI/Hg
AD19539-013	10/06/20 09:14	R12	4	A	NONE
AD19539-013	10/01/20 13:03	R12	5	A	NONE
AD19539-013	10/01/20 21:47	PA	5	A	mix
AD19539-013	10/01/20 21:48	R12	5	A	NONE
AD19539-013	10/02/20 08:46	BCT	5	A	% SOLIDS
AD19539-013	10/02/20 11:04	R12	5	A	NONE
AD19539-013	10/06/20 07:18	JP	5	A	bn-soil
AD19539-013	10/06/20 07:19	R12	5	A	NONE
AD19539-014	09/30/20 17:10	RICAR	0	M	Received
AD19539-014	09/30/20 17:59	RICAR	0	M	Login
AD19539-014	09/30/20 19:13	R31	1	A	NONE
AD19539-014	10/01/20 09:42	RL	1	A	VOA
AD19539-014	10/01/20 10:43	R31	1	A	NONE
AD19539-014	10/05/20 20:45	WP	1	A	VOA
AD19539-014	10/05/20 20:50	R31	1	A	NONE
AD19539-014	10/09/20 09:38	RL	1	A	VOA
AD19539-014	10/09/20 13:41	R31	1	A	NONE
AD19539-014	09/30/20 19:14	F19	2	A	none
AD19539-014	09/30/20 19:14	F19	3	A	none
AD19539-014	10/01/20 13:03	R12	4	A	NONE
AD19539-014	10/06/20 07:57	ANS	4	A	TDSI/Hg
AD19539-014	10/06/20 09:14	R12	4	A	NONE
AD19539-014	10/01/20 13:03	R12	5	A	NONE
AD19539-014	10/01/20 21:47	PA	5	A	mix
AD19539-014	10/01/20 21:48	R12	5	A	NONE
AD19539-014	10/02/20 08:46	BCT	5	A	% SOLIDS
AD19539-014	10/02/20 11:04	R12	5	A	NONE
AD19539-014	10/06/20 07:18	JP	5	A	bn-soil
AD19539-014	10/06/20 07:19	R12	5	A	NONE
AD19539-015	09/30/20 17:10	RICAR	0	M	Received
AD19539-015	09/30/20 17:59	RICAR	0	M	Login
AD19539-015	09/30/20 19:13	R31	1	A	NONE
AD19539-015	10/01/20 09:42	RL	1	A	VOA
AD19539-015	10/01/20 10:43	R31	1	A	NONE
AD19539-015	10/05/20 20:45	WP	1	A	VOA
AD19539-015	10/05/20 20:50	R31	1	A	NONE
AD19539-015	09/30/20 19:14	F19	2	A	none
AD19539-015	10/06/20 11:06	SG	2	A	VOA
AD19539-015	09/30/20 19:14	F19	3	A	none
AD19539-015	10/01/20 13:03	R12	4	A	NONE
AD19539-015	10/01/20 21:47	PA	4	A	mix
AD19539-015	10/01/20 21:48	R12	4	A	NONE
AD19539-015	10/02/20 08:46	BCT	4	A	% SOLIDS
AD19539-015	10/02/20 11:04	R12	4	A	NONE
AD19539-016	09/30/20 17:10	RICAR	0	M	Received
AD19539-016	09/30/20 17:59	RICAR	0	M	Login
AD19539-016	09/30/20 19:13	R31	1	A	NONE
AD19539-016	10/01/20 09:42	RL	1	A	VOA
AD19539-016	10/01/20 10:43	R31	1	A	NONE
AD19539-016	10/05/20 20:45	WP	1	A	VOA
AD19539-016	10/05/20 20:50	R31	1	A	NONE
AD19539-016	09/30/20 19:14	F19	2	A	none
AD19539-016	10/05/20 17:47	WP	2	A	VOA
AD19539-016	10/06/20 11:06	SG	2	A	VOA
AD19539-016	09/30/20 19:14	F19	3	A	none
AD19539-016	10/01/20 13:03	R12	4	A	NONE
AD19539-016	10/07/20 10:11	BCT	4	A	SOLIDS/MIXING
AD19539-016	10/07/20 12:10	R12	4	A	NONE
AD19539-017	09/30/20 17:10	RICAR	0	M	Received
AD19539-017	09/30/20 17:59	RICAR	0	M	Login
AD19539-017	09/30/20 19:13	R31	1	A	NONE
AD19539-017	10/01/20 09:42	RL	1	A	VOA
AD19539-017	10/01/20 10:43	R31	1	A	NONE
AD19539-017	10/05/20 20:45	WP	1	A	VOA
AD19539-017	10/05/20 20:50	R31	1	A	NONE
AD19539-017	09/30/20 19:14	F19	2	A	none
AD19539-017	09/30/20 19:14	F19	3	A	none
AD19539-017	10/01/20 13:03	R12	4	A	NONE
AD19539-017	10/06/20 07:57	ANS	4	A	TDSI/Hg
AD19539-017	10/06/20 09:14	R12	4	A	NONE
AD19539-017	10/01/20 13:03	R12	5	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19539-017	10/01/20 21:47	PA	5	A	mix
AD19539-017	10/01/20 21:48	R12	5	A	NONE
AD19539-017	10/02/20 08:46	BCT	5	A	% SOLIDS
AD19539-017	10/02/20 11:04	R12	5	A	NONE
AD19539-017	10/06/20 07:18	JP	5	A	bn-soil
AD19539-017	10/06/20 07:19	R12	5	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

## **Volatile Data**

**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-001      Method: EPA 8260D  
 Client Id: HSI-TB-01      Matrix: Aqueous  
 Data File: 1M140094.D      Initial Vol: 5ml  
 Analysis Date: 10/05/20 17:54      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 1.00  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 0

Units: ug/L									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.36	1.0	U	56-23-5	Carbon Tetrachloride	0.32	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.45	1.0	U	108-90-7	Chlorobenzene	0.33	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.73	1.0	U	75-00-3	Chloroethane	0.58	1.0	U
79-00-5	1,1,2-Trichloroethane	0.32	1.0	U	67-66-3	Chloroform	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.43	1.0	U	74-87-3	Chloromethane	0.52	1.0	U
75-35-4	1,1-Dichloroethene	0.53	1.0	U	156-59-2	cis-1,2-Dichloroethene	0.64	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.79	1.0	U	10061-01-5	cis-1,3-Dichloropropene	0.32	1.0	U
120-82-1	1,2,4-Trichlorobenzene	0.73	1.0	U	110-82-7	Cyclohexane	0.49	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.83	1.0	U	124-48-1	Dibromochloromethane	0.24	1.0	U
106-93-4	1,2-Dibromoethane	0.34	1.0	U	75-71-8	Dichlorodifluoromethane	0.62	1.0	U
95-50-1	1,2-Dichlorobenzene	0.32	1.0	U	100-41-4	Ethylbenzene	0.47	1.0	U
107-06-2	1,2-Dichloroethane	0.64	0.64	U	98-82-8	Isopropylbenzene	0.49	1.0	U
78-87-5	1,2-Dichloropropane	0.30	1.0	U	179601-23-1	m&p-Xylenes	0.85	1.0	U
541-73-1	1,3-Dichlorobenzene	0.38	1.0	U	79-20-9	Methyl Acetate	0.70	1.0	U
106-46-7	1,4-Dichlorobenzene	0.37	1.0	U	108-87-2	Methylcyclohexane	0.61	1.0	U
123-91-1	1,4-Dioxane	39	50	U	75-09-2	Methylene Chloride	0.29	1.0	U
78-93-3	2-Butanone	0.75	1.0	U	1634-04-4	Methyl-t-butyl ether	0.31	0.50	U
591-78-6	2-Hexanone	0.60	1.0	U	95-47-6	o-Xylene	0.68	1.0	U
108-10-1	4-Methyl-2-Pentanone	0.49	1.0	U	100-42-5	Styrene	0.54	1.0	U
67-64-1	Acetone	4.6	5.0	U	127-18-4	Tetrachloroethene	0.36	1.0	U
71-43-2	Benzene	0.30	0.50	U	108-88-3	Toluene	0.33	1.0	U
74-97-5	Bromochloromethane	0.79	1.0	U	156-60-5	trans-1,2-Dichloroethene	0.31	1.0	U
75-27-4	Bromodichloromethane	0.35	1.0	U	10061-02-6	trans-1,3-Dichloropropene	0.31	1.0	U
75-25-2	Bromoform	0.54	1.0	U	79-01-6	Trichloroethene	0.35	1.0	U
74-83-9	Bromomethane	0.50	1.0	U	75-69-4	Trichlorofluoromethane	0.31	1.0	U
75-15-0	Carbon Disulfide	0.42	1.0	U	75-01-4	Vinyl Chloride	0.71	1.0	U
1330-20-7	Xylenes (Total)	0.68	1.0	U					

Worksheet #: 569387

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.



SampleID : AD19539-001  
 Data File: 1M140094.D  
 Acq On : 10/05/20 17:54

Operator : WP  
 Sam Mult : 1 Vial# : 11  
 Misc : A,5ML!2

Qt Meth : 1M\_A0909.M  
 Qt On : 10/05/20 18:08  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.339	96	349770	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.989	117	358749	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.281	152	214156	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.947	111	102038	31.27	ug/l	0.00
Spiked Amount						
						Recovery = 104.23%
39) 1,2-Dichloroethane-d4	5.149	67	53032	29.84	ug/l	0.00
Spiked Amount						
						Recovery = 99.47%
66) Toluene-d8	6.201	98	389278	26.85	ug/l	0.00
Spiked Amount						
						Recovery = 89.50%
76) Bromofluorobenzene	7.622	174	166014	30.77	ug/l	0.00
Spiked Amount						
						Recovery = 102.57%
-----						
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



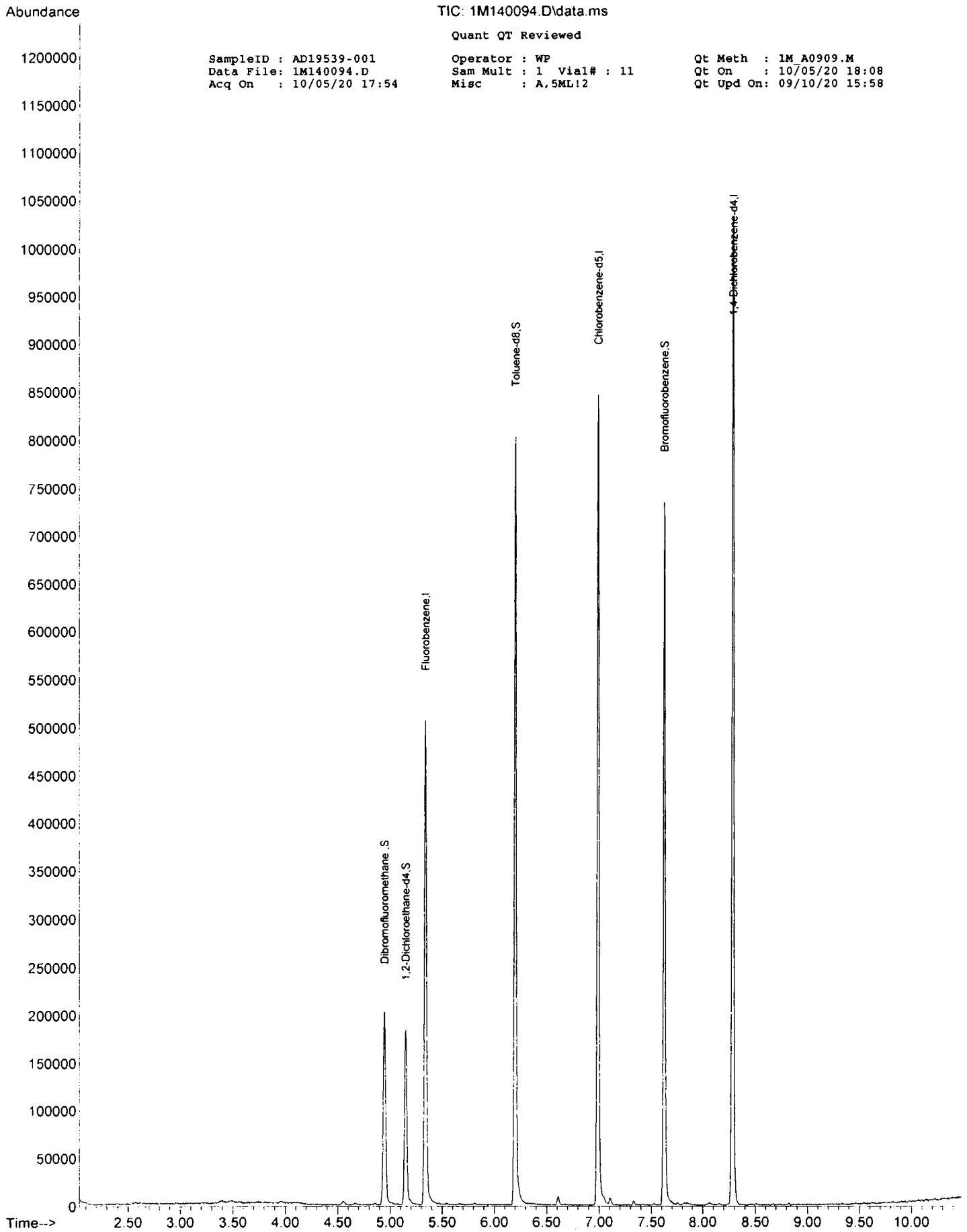
TIC: 1M140094.D\data.ms

Quant QT Reviewed

SampleID : AD19539-001  
Data File: 1M140094.D  
Acq On : 10/05/20 17:54

Operator : WP  
Sam Mult : 1 Vial# : 11  
Misc : A,5ML:2

Qt Meth : 1M\_A0909.M  
Qt On : 10/05/20 18:08  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-002(5X)  
Client Id: HSI-GW-01  
Data File: 2M142841.D  
Analysis Date: 10/07/20 18:54  
Date Rec/Extracted: 09/30/20-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Aqueous  
Initial Vol: 5ml  
Final Vol: NA  
Dilution: 5.00  
Solids: 0

Units: ug/L									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.8	5.0	U	56-23-5	Carbon Tetrachloride	1.6	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.2	5.0	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>1.7</b>	<b>5.0</b>	<b>510</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	3.6	5.0	U	75-00-3	Chloroethane	2.9	5.0	U
79-00-5	1,1,2-Trichloroethane	1.6	5.0	U	67-66-3	Chloroform	9.8	9.8	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>2.1</b>	<b>5.0</b>	<b>6.9</b>	74-87-3	Chloromethane	2.6	5.0	U
75-35-4	1,1-Dichloroethene	2.7	5.0	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>3.2</b>	<b>5.0</b>	<b>360</b>
87-61-6	1,2,3-Trichlorobenzene	3.9	5.0	U	10061-01-5	cis-1,3-Dichloropropene	1.6	5.0	U
120-82-1	1,2,4-Trichlorobenzene	3.6	5.0	U	110-82-7	Cyclohexane	2.4	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	4.2	5.0	U	124-48-1	Dibromochloromethane	1.2	5.0	U
106-93-4	1,2-Dibromoethane	1.7	5.0	U	75-71-8	Dichlorodifluoromethane	3.1	5.0	U
95-50-1	1,2-Dichlorobenzene	1.6	5.0	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>2.3</b>	<b>5.0</b>	<b>3.6J</b>
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>3.2</b>	<b>3.2</b>	<b>35</b>	98-82-8	Isopropylbenzene	2.5	5.0	U
78-87-5	1,2-Dichloropropane	1.5	5.0	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>4.2</b>	<b>5.0</b>	<b>6.6</b>
541-73-1	1,3-Dichlorobenzene	1.9	5.0	U	<b>79-20-9</b>	<b>Methyl Acetate</b>	<b>3.5</b>	<b>5.0</b>	<b>11B</b>
106-46-7	1,4-Dichlorobenzene	1.8	5.0	U	108-87-2	Methylcyclohexane	3.1	5.0	U
123-91-1	1,4-Dioxane	200	250	U	75-09-2	Methylene Chloride	1.5	5.0	U
78-93-3	2-Butanone	3.7	5.0	U	<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>1.6</b>	<b>2.5</b>	<b>18</b>
591-78-6	2-Hexanone	3.0	5.0	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>3.4</b>	<b>5.0</b>	<b>3.6J</b>
108-10-1	4-Methyl-2-Pentanone	2.4	5.0	U	100-42-5	Styrene	2.7	5.0	U
67-64-1	Acetone	23	25	U	127-18-4	Tetrachloroethene	1.8	5.0	U
<b>71-43-2</b>	<b>Benzene</b>	<b>1.5</b>	<b>2.5</b>	<b>40</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>1.6</b>	<b>5.0</b>	<b>2.1J</b>
74-97-5	Bromochloromethane	3.9	5.0	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>1.5</b>	<b>5.0</b>	<b>91</b>
75-27-4	Bromodichloromethane	1.7	5.0	U	10061-02-6	trans-1,3-Dichloropropene	1.5	5.0	U
75-25-2	Bromoform	2.7	5.0	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>1.7</b>	<b>5.0</b>	<b>10</b>
74-83-9	Bromomethane	2.5	5.0	U	75-69-4	Trichlorofluoromethane	1.5	5.0	U
75-15-0	Carbon Disulfide	2.1	5.0	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>3.5</b>	<b>5.0</b>	<b>65</b>
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>3.4</b>	<b>5.0</b>	<b>10</b>					

Worksheet #: 569387

**Total Target Concentration 1200**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-002(5X)  
 Data File: 2M142841.D  
 Acq On : 10/07/20 18:54

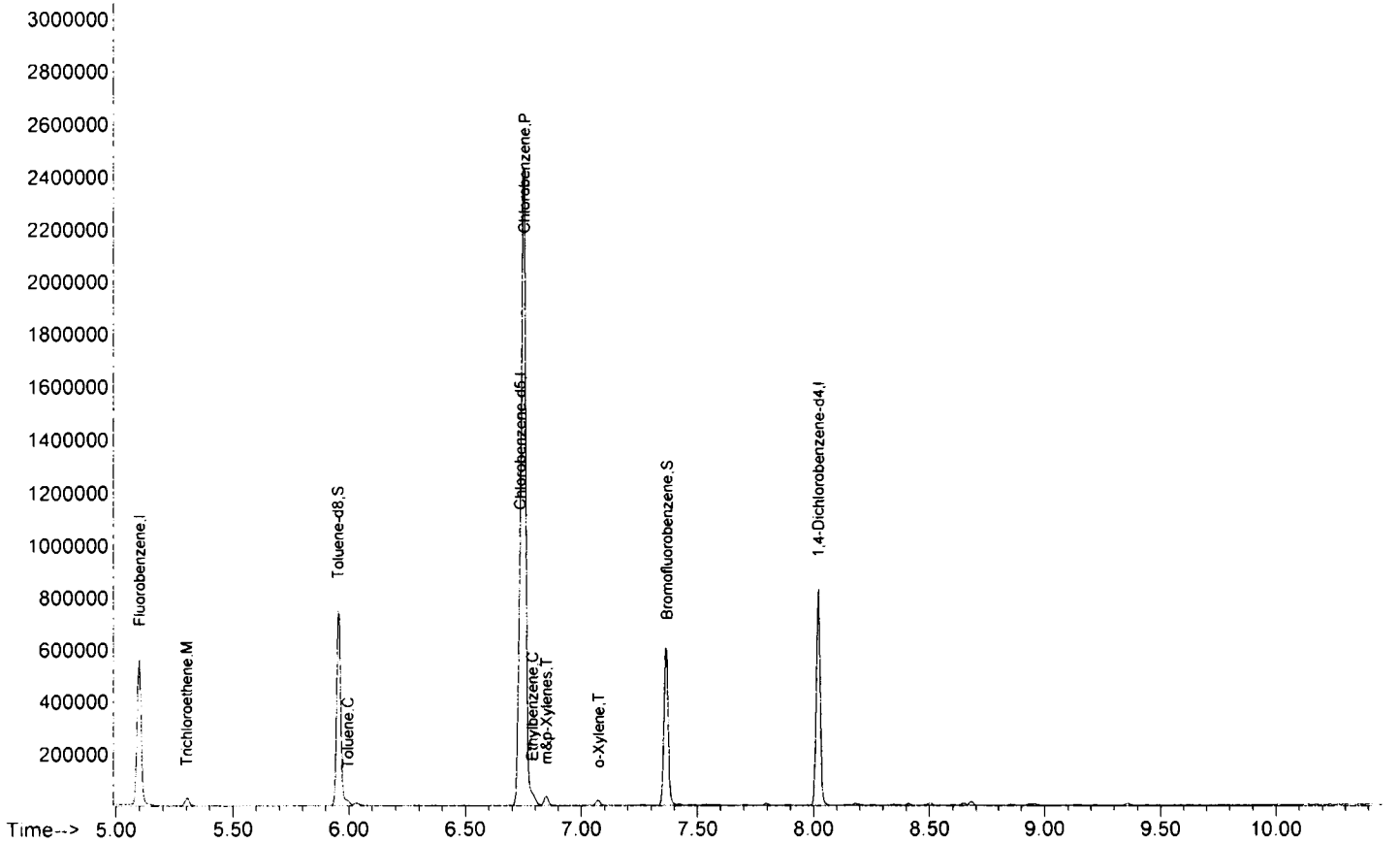
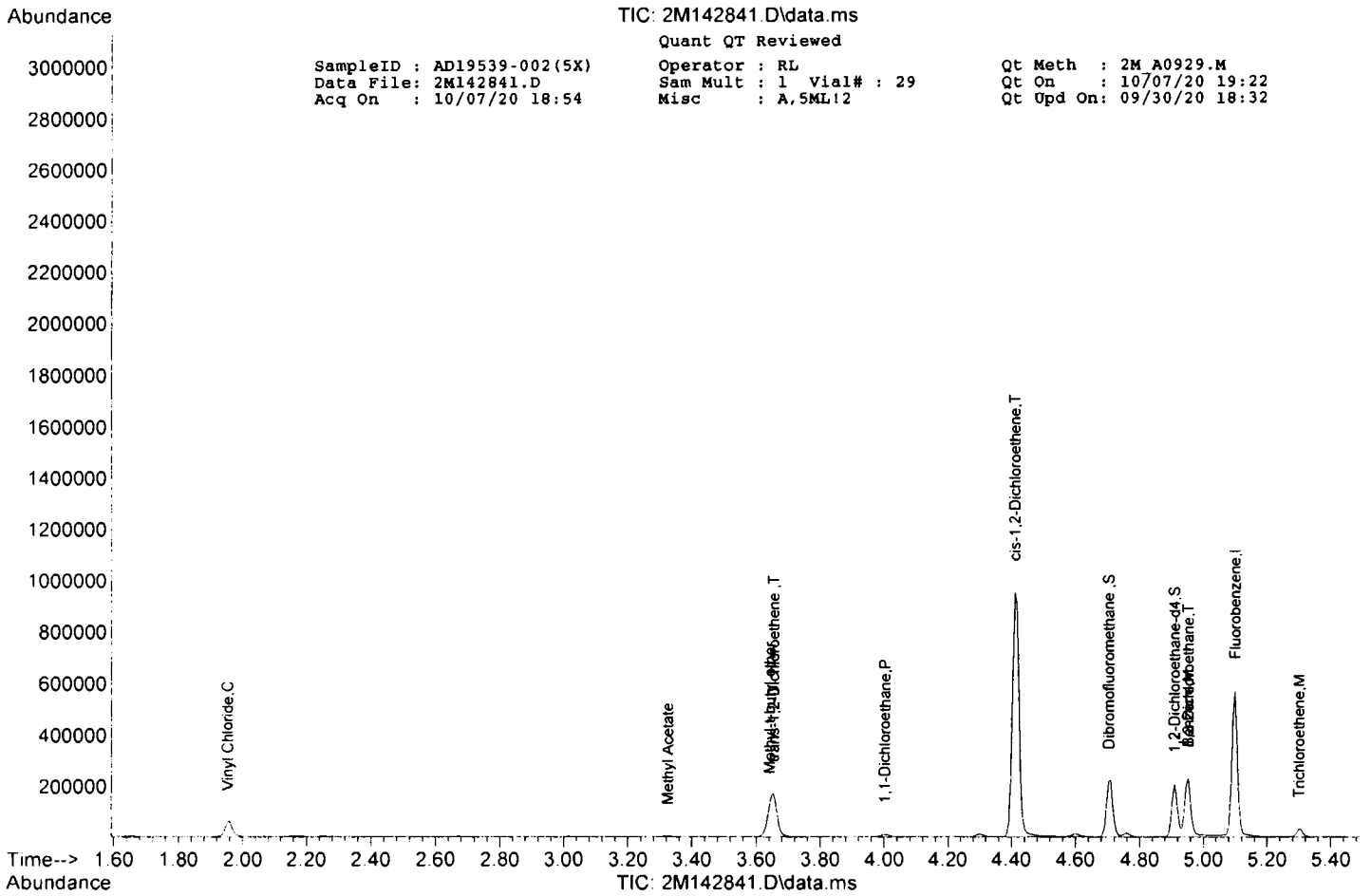
Operator : RL  
 Sam Mult : 1 Vial# : 29  
 Misc : A,SML!2

Qt Meth : 2M\_A0929.M  
 Qt On : 10/07/20 19:22  
 Qt Upd On: 09/30/20 18:32

Data Path : G:\GCMSData\2020\GCMS\_2\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.098	96	331281	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.732	117	317809	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.019	152	159324	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.702	111	92046	29.00	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	96.67%		
39) 1,2-Dichloroethane-d4	4.910	67	47667	29.09	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	96.97%		
66) Toluene-d8	5.952	98	352004	28.31	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	94.37%		
76) Bromofluorobenzene	7.366	174	133084	31.80	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	106.00%		
Target Compounds							
							Qvalue
9) Vinyl Chloride	1.953	62	53600	13.0263	ug/l		99
25) Methyl Acetate	3.324	43	4613	2.2943	ug/l		100
26) Methyl-t-butyl ether	3.641	73	32721	3.6759	ug/l		98
27) 1,1-Dichloroethane	4.001	63	7134	1.3732	ug/l		89
28) trans-1,2-Dichloroethene	3.654	96	57379	18.2630	ug/l		95
30) cis-1,2-Dichloroethene	4.410	61	378788	71.7325	ug/l		93
40) 1,2-Dichloroethane	4.952	62	33465	6.9816	ug/l		98
49) Trichloroethene	5.300	130	7128	2.0350	ug/l		91
50) Benzene	4.952	78	100029	8.0653	ug/l		100
67) Toluene	5.995	92	3517	0.4189	ug/l		86
69) Chlorobenzene	6.751	112	954637	101.9065	ug/l		100
74) Ethylbenzene	6.787	106	2604	0.7181	ug/l		95
78) m&p-Xylenes	6.848	106	7314	1.3251	ug/l		92
79) o-Xylene	7.074	106	3735	0.7150	ug/l		98
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19539-003(5X)

Client Id: HSI-GW-02

Data File: 2M142842.D

Analysis Date: 10/07/20 19:13

Date Rec/Extracted: 09/30/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 5.00

Solids: 0

Cas #	Compound	MDL	RL	Units: ug/L		Cas #	Compound	MDL	RL	Conc
				Conc	Conc					
71-55-6	1,1,1-Trichloroethane	1.8	5.0	U		56-23-5	Carbon Tetrachloride	1.6	5.0	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>2.2</b>	<b>5.0</b>	<b>7.5</b>		<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>1.7</b>	<b>5.0</b>	<b>550</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	3.6	5.0	U		75-00-3	Chloroethane	2.9	5.0	U
79-00-5	1,1,2-Trichloroethane	1.6	5.0	U		67-66-3	Chloroform	9.8	9.8	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>2.1</b>	<b>5.0</b>	<b>3.6J</b>		74-87-3	Chloromethane	2.6	5.0	U
75-35-4	1,1-Dichloroethene	2.7	5.0	U		<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>3.2</b>	<b>5.0</b>	<b>97</b>
87-61-6	1,2,3-Trichlorobenzene	3.9	5.0	U		10061-01-5	cis-1,3-Dichloropropene	1.6	5.0	U
120-82-1	1,2,4-Trichlorobenzene	3.6	5.0	U		110-82-7	Cyclohexane	2.4	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	4.2	5.0	U		124-48-1	Dibromochloromethane	1.2	5.0	U
106-93-4	1,2-Dibromoethane	1.7	5.0	U		75-71-8	Dichlorodifluoromethane	3.1	5.0	U
95-50-1	1,2-Dichlorobenzene	1.6	5.0	U		<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>2.3</b>	<b>5.0</b>	<b>17</b>
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>3.2</b>	<b>3.2</b>	<b>24</b>		<b>98-82-8</b>	<b>Isopropylbenzene</b>	<b>2.5</b>	<b>5.0</b>	<b>2.9J</b>
78-87-5	1,2-Dichloropropane	1.5	5.0	U		<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>4.2</b>	<b>5.0</b>	<b>39</b>
541-73-1	1,3-Dichlorobenzene	1.9	5.0	U		<b>79-20-9</b>	<b>Methyl Acetate</b>	<b>3.5</b>	<b>5.0</b>	<b>13B</b>
106-46-7	1,4-Dichlorobenzene	1.8	5.0	U		108-87-2	Methylcyclohexane	3.1	5.0	U
123-91-1	1,4-Dioxane	200	250	U		75-09-2	Methylene Chloride	1.5	5.0	U
78-93-3	2-Butanone	3.7	5.0	U		<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>1.6</b>	<b>2.5</b>	<b>4.1</b>
591-78-6	2-Hexanone	3.0	5.0	U		<b>95-47-6</b>	<b>o-Xylene</b>	<b>3.4</b>	<b>5.0</b>	<b>13</b>
108-10-1	4-Methyl-2-Pentanone	2.4	5.0	U		100-42-5	Styrene	2.7	5.0	U
67-64-1	Acetone	23	25	U		127-18-4	Tetrachloroethene	1.8	5.0	U
<b>71-43-2</b>	<b>Benzene</b>	<b>1.5</b>	<b>2.5</b>	<b>36</b>		<b>108-88-3</b>	<b>Toluene</b>	<b>1.6</b>	<b>5.0</b>	<b>120</b>
74-97-5	Bromochloromethane	3.9	5.0	U		<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>1.5</b>	<b>5.0</b>	<b>15</b>
75-27-4	Bromodichloromethane	1.7	5.0	U		10061-02-6	trans-1,3-Dichloropropene	1.5	5.0	U
75-25-2	Bromoform	2.7	5.0	U		<b>79-01-6</b>	<b>Trichloroethene</b>	<b>1.7</b>	<b>5.0</b>	<b>16</b>
74-83-9	Bromomethane	2.5	5.0	U		75-69-4	Trichlorofluoromethane	1.5	5.0	U
75-15-0	Carbon Disulfide	2.1	5.0	U		<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>3.5</b>	<b>5.0</b>	<b>45</b>
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>3.4</b>	<b>5.0</b>	<b>52</b>						

Worksheet #: 569387

**Total Target Concentration 1000**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-003(5X)  
 Data File: 2M142842.D  
 Acq On : 10/07/20 19:13

Operator : RL  
 Sam Mult : 1 Vial# : 30  
 Misc : A,5ML!2

Qt Meth : 2M A0929.M  
 Qt On : 10/07/20 19:25  
 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcmsData\2020\GCMS\_2\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.099	96	331837	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.733	117	318850	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.019	152	163751	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.702	111	93847	29.52	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.40%
39) 1,2-Dichloroethane-d4	4.910	67	49934	30.42	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.40%
66) Toluene-d8	5.952	98	365346	29.28	ug/l	0.00	
Spiked Amount	30.000						Recovery = 97.60%
76) Bromofluorobenzene	7.367	174	137472	31.96	ug/l	0.00	
Spiked Amount	30.000						Recovery = 106.53%
-----							
Target Compounds							Qvalue
9) Vinyl Chloride	1.959	62	36842	8.9387	ug/l	99	
25) Methyl Acetate	3.325	43	5354	2.6583	ug/l	100	
26) Methyl-t-butyl ether	3.636	73	7393	0.8292	ug/l	93	
27) 1,1-Dichloroethane	4.007	63	3710	0.7129	ug/l	92	
28) trans-1,2-Dichloroethene	3.654	96	9396	2.9856	ug/l	97	
30) cis-1,2-Dichloroethene	4.410	61	102574	19.3923	ug/l	95	
40) 1,2-Dichloroethane	4.952	62	22873	4.7639	ug/l	100	
49) Trichloroethene	5.300	130	11121	3.1697	ug/l	98	
50) Benzene	4.952	78	88254	7.1039	ug/l	100	
67) Toluene	5.989	92	208576	24.7640	ug/l	98	
69) Chlorobenzene	6.751	112	1041743	110.8419	ug/l	100	
74) Ethylbenzene	6.787	106	12881	3.4563	ug/l	91	
75) 1,1,2,2-Tetrachloroethane	7.415	83	6553	1.4952	ug/l	97	
78) m&p-Xylenes	6.848	106	44413	7.8290	ug/l	92	
79) o-Xylene	7.068	106	13584	2.5300	ug/l	91	
84) Isopropylbenzene	7.263	105	7667	0.5854	ug/l	97	
-----							

(#) - qualifier out of range (m) = manual integration (+) = signals summed

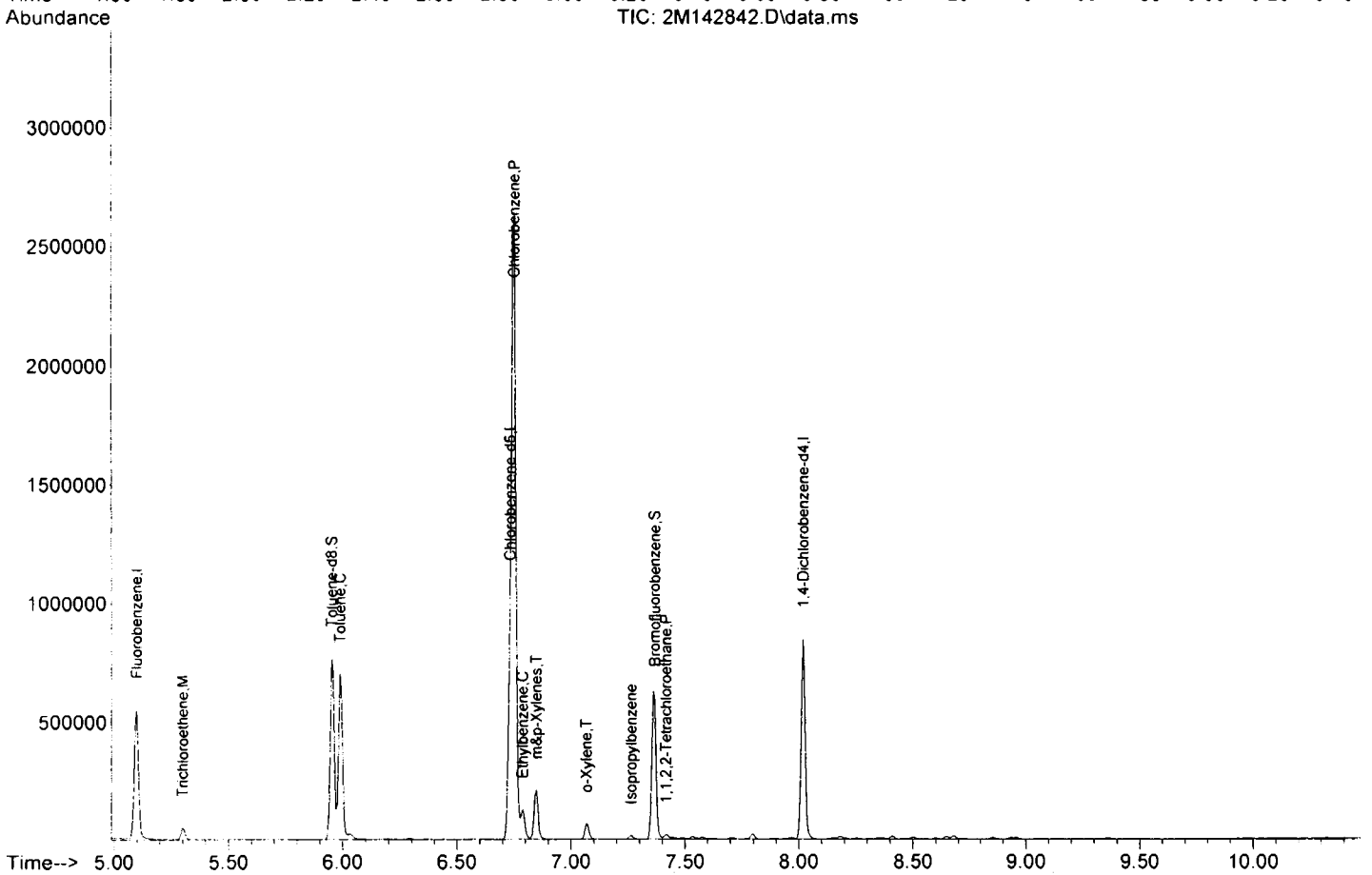
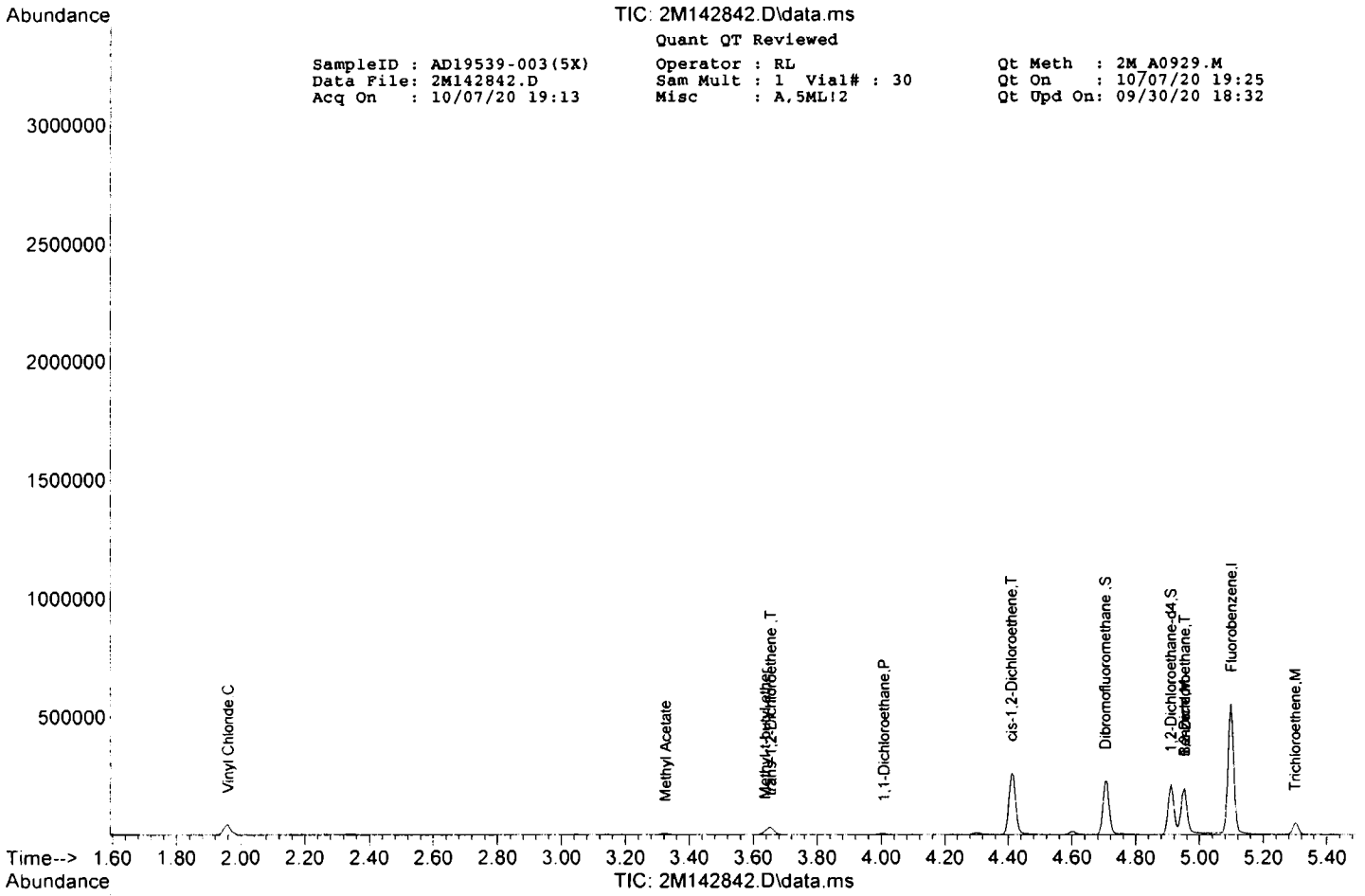
TIC: 2M142842.D\data.ms

Quant QT Reviewed

SampleID : AD19539-003 (5X)  
Data File: 2M142842.D  
Acq On : 10/07/20 19:13

Operator : RL  
Sam Mult : 1 Vial# : 30  
Misc : A.5ML12

Qt Meth : 2M\_A0929.M  
Qt On : 10/07/20 19:25  
Qt Upd On: 09/30/20 18:32





## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19539-004(5X)

Client Id: HSI-GW-03

Data File: 2M142843.D

Analysis Date: 10/07/20 19:33

Date Rec/Extracted: 09/30/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 5.00

Solids: 0

## Units: ug/L

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.8	5.0	U	56-23-5	Carbon Tetrachloride	1.6	5.0	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>2.2</b>	<b>5.0</b>	<b>2.4J</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>1.7</b>	<b>5.0</b>	<b>320</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	3.6	5.0	U	<b>75-00-3</b>	<b>Chloroethane</b>	<b>2.9</b>	<b>5.0</b>	<b>4.5J</b>
79-00-5	1,1,2-Trichloroethane	1.6	5.0	U	67-66-3	Chloroform	9.8	9.8	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>2.1</b>	<b>5.0</b>	<b>2.7J</b>	74-87-3	Chloromethane	2.6	5.0	U
75-35-4	1,1-Dichloroethene	2.7	5.0	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>3.2</b>	<b>5.0</b>	<b>4.7J</b>
87-61-6	1,2,3-Trichlorobenzene	3.9	5.0	U	10061-01-5	cis-1,3-Dichloropropene	1.6	5.0	U
120-82-1	1,2,4-Trichlorobenzene	3.6	5.0	U	110-82-7	Cyclohexane	2.4	5.0	U
96-12-8	1,2-Dibromo 3-Chloropropa	4.2	5.0	U	124-48-1	Dibromochloromethane	1.2	5.0	U
106-93-4	1,2-Dibromoethane	1.7	5.0	U	75-71-8	Dichlorodifluoromethane	3.1	5.0	U
95-50-1	1,2-Dichlorobenzene	1.6	5.0	U	100-41-4	Ethylbenzene	2.3	5.0	U
107-06-2	1,2-Dichloroethane	3.2	3.2	U	98-82-8	Isopropylbenzene	2.5	5.0	U
78-87-5	1,2-Dichloropropane	1.5	5.0	U	179601-23-1	m&p-Xylenes	4.2	5.0	U
541-73-1	1,3-Dichlorobenzene	1.9	5.0	U	<b>79-20-9</b>	<b>Methyl Acetate</b>	<b>3.5</b>	<b>5.0</b>	<b>15B</b>
106-46-7	1,4-Dichlorobenzene	1.8	5.0	U	108-87-2	Methylcyclohexane	3.1	5.0	U
123-91-1	1,4-Dioxane	200	250	U	75-09-2	Methylene Chloride	1.5	5.0	U
78-93-3	2-Butanone	3.7	5.0	U	<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>1.6</b>	<b>2.5</b>	<b>1.9J</b>
591-78-6	2-Hexanone	3.0	5.0	U	95-47-6	o-Xylene	3.4	5.0	U
108-10-1	4-Methyl-2-Pentanone	2.4	5.0	U	100-42-5	Styrene	2.7	5.0	U
67-64-1	Acetone	23	25	U	127-18-4	Tetrachloroethene	1.8	5.0	U
<b>71-43-2</b>	<b>Benzene</b>	<b>1.5</b>	<b>2.5</b>	<b>13</b>	108-88-3	Toluene	1.6	5.0	U
74-97-5	Bromochloromethane	3.9	5.0	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>1.5</b>	<b>5.0</b>	<b>1.9J</b>
75-27-4	Bromodichloromethane	1.7	5.0	U	10061-02-6	trans-1,3-Dichloropropene	1.5	5.0	U
75-25-2	Bromoform	2.7	5.0	U	79-01-6	Trichloroethene	1.7	5.0	U
74-83-9	Bromomethane	2.5	5.0	U	75-69-4	Trichlorofluoromethane	1.5	5.0	U
75-15-0	Carbon Disulfide	2.1	5.0	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>3.5</b>	<b>5.0</b>	<b>9.0</b>
1330-20-7	Xylenes (Total)	3.4	5.0	U					

Worksheet #: 569387

**Total Target Concentration 380**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-004(5X)  
 Data File: 2M142843.D  
 Acq On : 10/07/20 19:33

Operator : RL  
 Sam Mult : 1 Vial# : 31  
 Misc : A,5ML!2

Qt Meth : 2M A0929.M  
 Qt On : 10/07/20 19:45  
 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIOn	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.098	96	330541	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.732	117	320747	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.019	152	162666	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.708	111	93848	29.64	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.80%
39) 1,2-Dichloroethane-d4	4.909	67	48823	29.86	ug/l	0.00	
Spiked Amount	30.000						Recovery = 99.53%
66) Toluene-d8	5.958	98	352860	28.12	ug/l	0.00	
Spiked Amount	30.000						Recovery = 93.73%
76) Bromofluorobenzene	7.366	174	132537	31.02	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.40%
Target Compounds							
9) Vinyl Chloride	1.953	62	7413	1.8056	ug/l	90	Qvalue
10) Chloroethane	2.349	64	2439	0.8905	ug/l	90	
25) Methyl Acetate	3.324	43	6114	3.0476	ug/l	100	
26) Methyl-t-butyl ether	3.641	73	3294	0.3709	ug/l	90	
27) 1,1-Dichloroethane	4.001	63	2758	0.5321	ug/l	92	
28) trans-1,2-Dichloroethene	3.660	96	1176	0.3751	ug/l	76	
30) cis-1,2-Dichloroethene	4.416	61	4988	0.9467	ug/l	92	
50) Benzene	4.952	78	32496	2.6260	ug/l	100	
69) Chlorobenzene	6.750	112	603221	63.8034	ug/l	99	
75) 1,1,2,2-Tetrachloroethane	7.415	83	2122	0.4874	ug/l	77	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

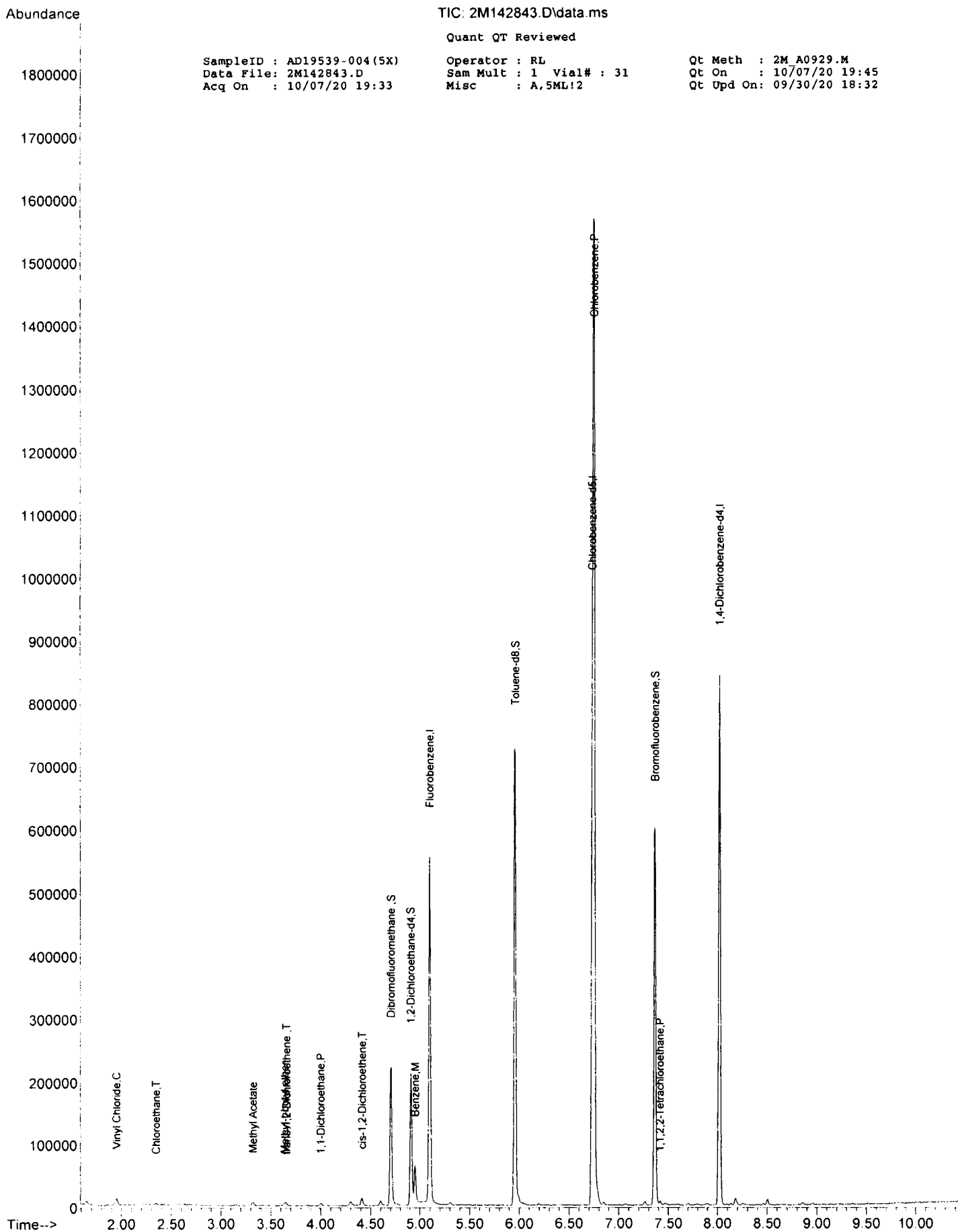
TIC: 2M142843.D\data.ms

Quant QT Reviewed

SampleID : AD19539-004(5X)  
Data File: 2M142843.D  
Acq On : 10/07/20 19:33

Operator : RL  
Sam Mult : 1 Vial# : 31  
Misc : A,5ML12

Qt Meth : 2M\_A0929.M  
Qt On : 10/07/20 19:45  
Qt Upd On: 09/30/20 18:32



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19539-005(5X)

Client Id: HSI-GW-04

Data File: 2M142844.D

Analysis Date: 10/07/20 19:53

Date Rec/Extracted: 09/30/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 5.00

Solids: 0

Units: ug/L									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.8	5.0	U	56-23-5	Carbon Tetrachloride	1.6	5.0	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>2.2</b>	<b>5.0</b>	<b>12</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>1.7</b>	<b>5.0</b>	<b>460</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	3.6	5.0	U	<b>75-00-3</b>	<b>Chloroethane</b>	<b>2.9</b>	<b>5.0</b>	<b>3.6J</b>
79-00-5	1,1,2-Trichloroethane	1.6	5.0	U	67-66-3	Chloroform	9.8	9.8	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>2.1</b>	<b>5.0</b>	<b>4.5J</b>	74-87-3	Chloromethane	2.6	5.0	U
75-35-4	1,1-Dichloroethene	2.7	5.0	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>3.2</b>	<b>5.0</b>	<b>120</b>
87-61-6	1,2,3-Trichlorobenzene	3.9	5.0	U	10061-01-5	cis-1,3-Dichloropropene	1.6	5.0	U
120-82-1	1,2,4-Trichlorobenzene	3.6	5.0	U	110-82-7	Cyclohexane	2.4	5.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	4.2	5.0	U	124-48-1	Dibromochloromethane	1.2	5.0	U
106-93-4	1,2-Dibromoethane	1.7	5.0	U	75-71-8	Dichlorodifluoromethane	3.1	5.0	U
95-50-1	1,2-Dichlorobenzene	1.6	5.0	U	100-41-4	Ethylbenzene	2.3	5.0	U
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>3.2</b>	<b>3.2</b>	<b>20</b>	98-82-8	Isopropylbenzene	2.5	5.0	U
78-87-5	1,2-Dichloropropane	1.5	5.0	U	179601-23-1	m&p-Xylenes	4.2	5.0	U
541-73-1	1,3-Dichlorobenzene	1.9	5.0	U	<b>79-20-9</b>	<b>Methyl Acetate</b>	<b>3.5</b>	<b>5.0</b>	<b>14B</b>
106-46-7	1,4-Dichlorobenzene	1.8	5.0	U	108-87-2	Methylcyclohexane	3.1	5.0	U
123-91-1	1,4-Dioxane	200	250	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>1.5</b>	<b>5.0</b>	<b>1.9J</b>
78-93-3	2-Butanone	3.7	5.0	U	<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>1.6</b>	<b>2.5</b>	<b>9.6</b>
591-78-6	2-Hexanone	3.0	5.0	U	95-47-6	o-Xylene	3.4	5.0	U
108-10-1	4-Methyl-2-Pentanone	2.4	5.0	U	100-42-5	Styrene	2.7	5.0	U
67-64-1	Acetone	23	25	U	127-18-4	Tetrachloroethene	1.8	5.0	U
<b>71-43-2</b>	<b>Benzene</b>	<b>1.5</b>	<b>2.5</b>	<b>28</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>1.6</b>	<b>5.0</b>	<b>4.3J</b>
74-97-5	Bromochloromethane	3.9	5.0	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>1.5</b>	<b>5.0</b>	<b>32</b>
75-27-4	Bromodichloromethane	1.7	5.0	U	10061-02-6	trans-1,3-Dichloropropene	1.5	5.0	U
75-25-2	Bromoform	2.7	5.0	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>1.7</b>	<b>5.0</b>	<b>26</b>
74-83-9	Bromomethane	2.5	5.0	U	75-69-4	Trichlorofluoromethane	1.5	5.0	U
75-15-0	Carbon Disulfide	2.1	5.0	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>3.5</b>	<b>5.0</b>	<b>48</b>
1330-20-7	Xylenes (Total)	3.4	5.0	U					

Worksheet #: 569387

**Total Target Concentration 780**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-005(5X)  
 Data File: 2M142844.D  
 Acq On : 10/07/20 19:53

Operator : RL  
 Sam Mult : 1 Vial# : 32  
 Misc : A,5ML!2

Qt Meth : 2M A0929.M  
 Qt On : 10/07/20 20:12  
 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.099	96	326935	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	312274	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	158682	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	91390	29.18	ug/l	0.00
Spiked Amount	30.000					Recovery = 97.27%
39) 1,2-Dichloroethane-d4	4.910	67	44046	27.24	ug/l	0.00
Spiked Amount	30.000					Recovery = 90.80%
66) Toluene-d8	5.952	98	351999	28.81	ug/l	0.00
Spiked Amount	30.000					Recovery = 96.03%
76) Bromofluorobenzene	7.367	174	133144	31.94	ug/l	0.00
Spiked Amount	30.000					Recovery = 106.47%
Target Compounds						
9) Vinyl Chloride	1.953	62	38823	9.5605	ug/l	94
10) Chloroethane	2.343	64	1948	0.7191	ug/l	78
15) Methylene Chloride	3.416	84	1202	0.3894	ug/l	89
25) Methyl Acetate	3.325	43	5608	2.8262	ug/l	100
26) Methyl-t-butyl ether	3.642	73	16856	1.9188	ug/l	96
27) 1,1-Dichloroethane	4.001	63	4628	0.9026	ug/l	100
28) trans-1,2-Dichloroethene	3.654	96	19863	6.4062	ug/l	93
30) cis-1,2-Dichloroethene	4.410	61	129889	24.9246	ug/l	93
40) 1,2-Dichloroethane	4.952	62	18964	4.0089	ug/l	100
49) Trichloroethene	5.300	130	17755	5.1363	ug/l	92
50) Benzene	4.952	78	68808	5.6217	ug/l	100
67) Toluene	5.995	92	7078	0.8581	ug/l	100
69) Chlorobenzene	6.751	112	841426	91.4134	ug/l	99
75) 1,1,2,2-Tetrachloroethane	7.421	83	10462	2.4634	ug/l	100
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

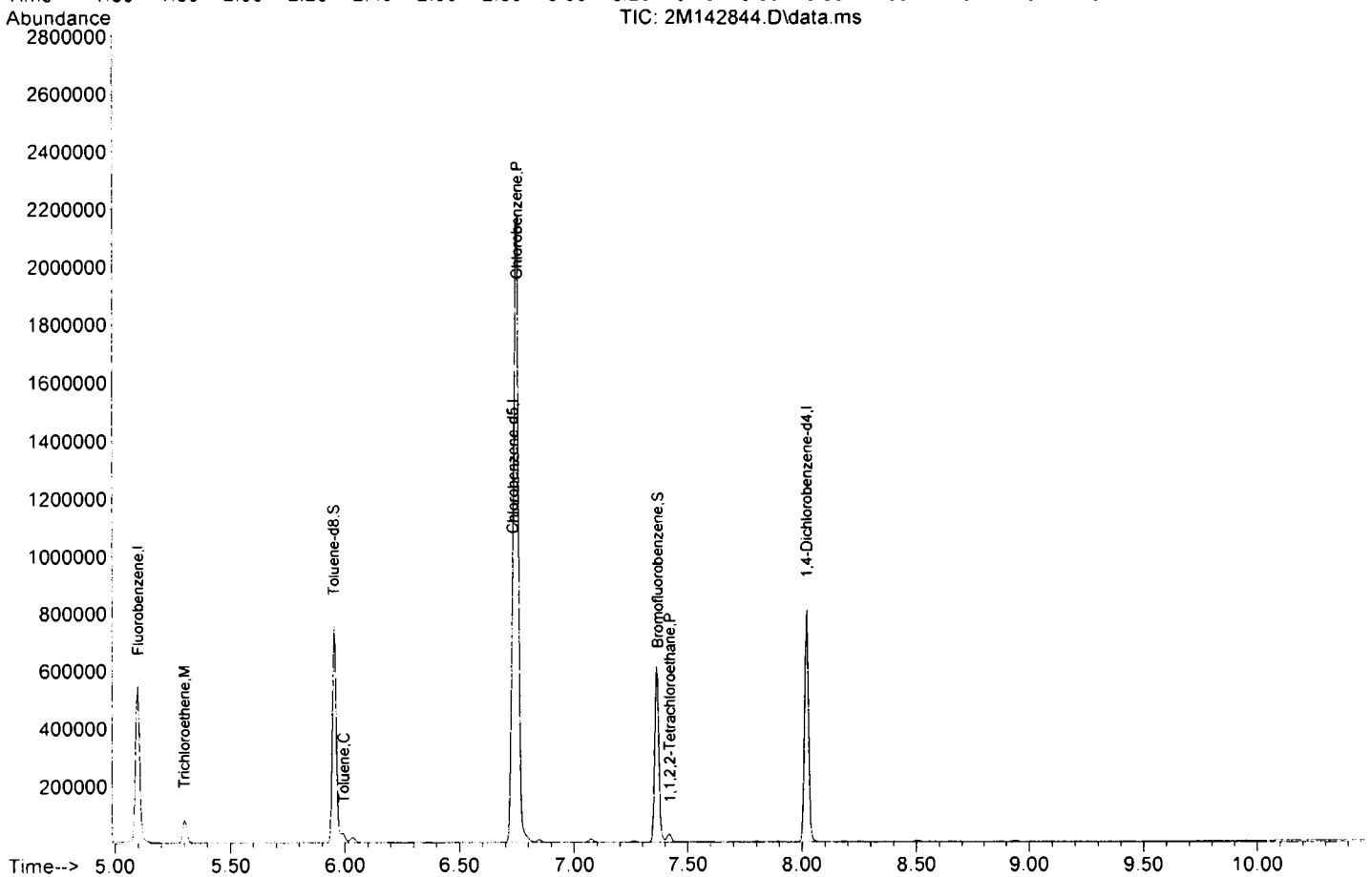
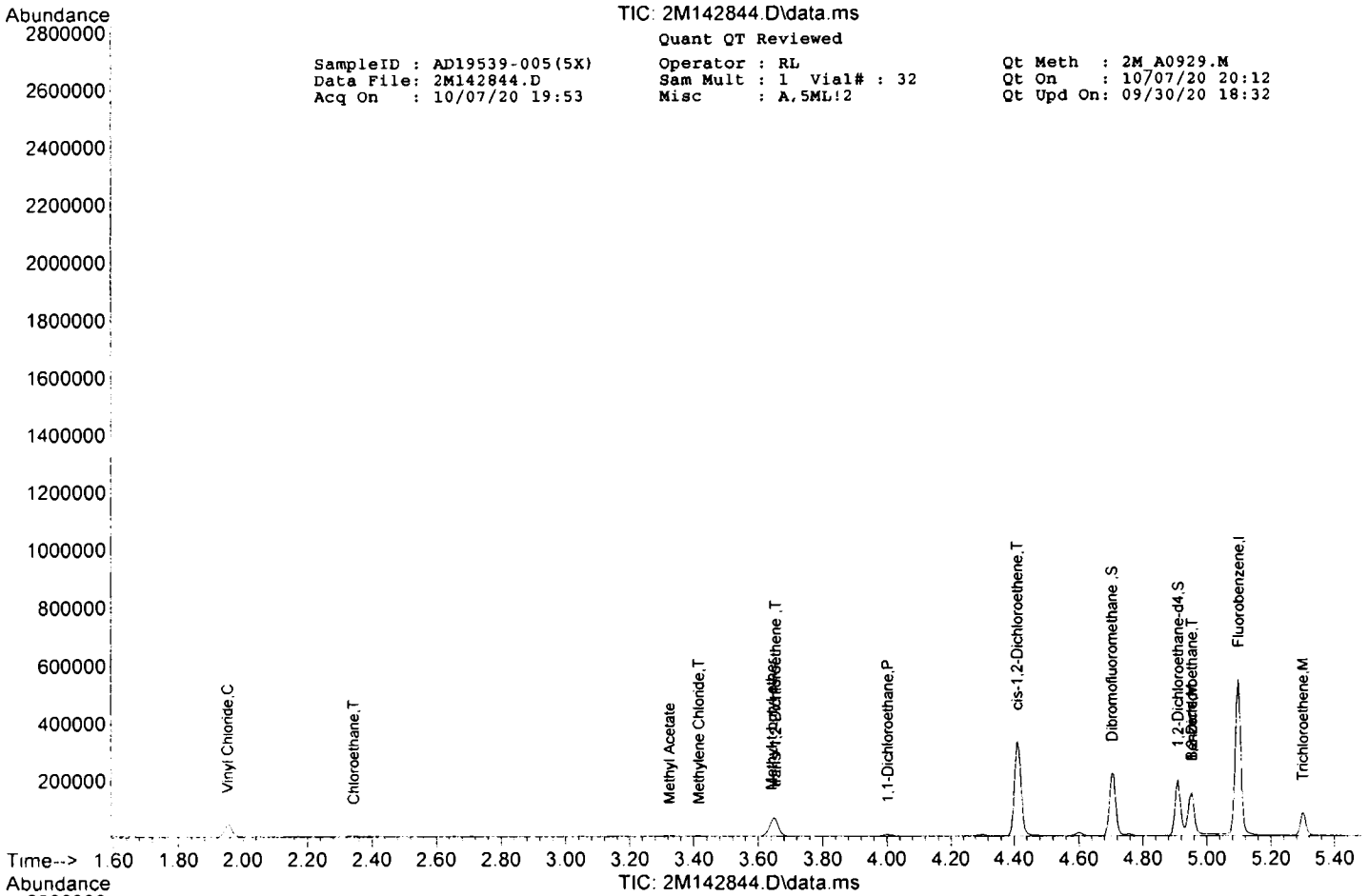
TIC: 2M142844.D\data.ms

Quant QT Reviewed

SampleID : AD19539-005(5X)  
Data File: 2M142844.D  
Acq On : 10/07/20 19:53

Operator : RL  
Sam Mult : 1 Vial# : 32  
Misc : A,5ML:2

Qt Meth : 2M\_A0929.M  
Qt On : 10/07/20 20:12  
Qt Upd On: 09/30/20 18:32



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-006      Method: EPA 8260D  
 Client Id: HSI-SB-02(3.5-4)      Matrix: Methanol  
 Data File: 1M140118.D      Extraction Ratio: 6.71g:10ml  
 Analysis Date: 10/06/20 02:11      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 74.5  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 83

				Units: mg/Kg						
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc	
71-55-6	1,1,1-Trichloroethane	0.032	0.090	U	56-23-5	Carbon Tetrachloride	0.029	0.090	U	
79-34-5	1,1,2,2-Tetrachloroethane	0.040	0.090	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.030</b>	<b>0.090</b>	<b>9.1</b>	
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.065	0.090	U	75-00-3	Chloroethane	0.052	0.090	U	
79-00-5	1,1,2-Trichloroethane	0.029	0.090	U	67-66-3	Chloroform	0.18	0.18	U	
75-34-3	1,1-Dichloroethane	0.038	0.090	U	74-87-3	Chloromethane	0.046	0.090	U	
75-35-4	1,1-Dichloroethene	0.048	0.090	U	156-59-2	cis-1,2-Dichloroethene	0.057	0.090	U	
87-61-6	1,2,3-Trichlorobenzene	0.071	0.090	U	10061-01-5	cis-1,3-Dichloropropene	0.029	0.090	U	
120-82-1	1,2,4-Trichlorobenzene	0.065	0.090	U	110-82-7	Cyclohexane	0.044	0.090	U	
96-12-8	1,2-Dibromo-3-Chloropropa	0.075	0.090	U	124-48-1	Dibromochloromethane	0.021	0.090	U	
106-93-4	1,2-Dibromoethane	0.031	0.090	U	75-71-8	Dichlorodifluoromethane	0.056	0.090	U	
95-50-1	1,2-Dichlorobenzene	0.029	0.090	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.042</b>	<b>0.090</b>	<b>0.78</b>	
107-06-2	1,2-Dichloroethane	0.057	0.057	U	98-82-8	Isopropylbenzene	0.044	0.090	U	
78-87-5	1,2-Dichloropropane	0.027	0.090	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.076</b>	<b>0.090</b>	<b>4.1</b>	
541-73-1	1,3-Dichlorobenzene	0.034	0.090	U	79-20-9	Methyl Acetate	0.063	0.090	U	
106-46-7	1,4-Dichlorobenzene	0.033	0.090	U	108-87-2	Methylcyclohexane	0.055	0.090	U	
123-91-1	1,4-Dioxane	3.5	4.5	U	75-09-2	Methylene Chloride	0.026	0.090	U	
78-93-3	2-Butanone	0.067	0.090	U	1634-04-4	Methyl-t-butyl ether	0.028	0.045	U	
591-78-6	2-Hexanone	0.054	0.090	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.061</b>	<b>0.090</b>	<b>1.3</b>	
108-10-1	4-Methyl-2-Pentanone	0.044	0.090	U	100-42-5	Styrene	0.049	0.090	U	
67-64-1	Acetone	0.41	0.45	U	127-18-4	Tetrachloroethene	0.032	0.090	U	
71-43-2	Benzene	0.027	0.045	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.029</b>	<b>0.090</b>	<b>0.31</b>	
74-97-5	Bromochloromethane	0.071	0.090	U	156-60-5	trans-1,2-Dichloroethene	0.028	0.090	U	
75-27-4	Bromodichloromethane	0.031	0.090	U	10061-02-6	trans-1,3-Dichloropropene	0.028	0.090	U	
75-25-2	Bromoform	0.049	0.090	U	79-01-6	Trichloroethene	0.031	0.090	U	
74-83-9	Bromomethane	0.045	0.090	U	75-69-4	Trichlorofluoromethane	0.028	0.090	U	
75-15-0	Carbon Disulfide	0.038	0.090	U	75-01-4	Vinyl Chloride	0.063	0.090	U	
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.061</b>	<b>0.090</b>	<b>5.4</b>						

Worksheet #: 569387

**Total Target Concentration 16**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-006 Operator : WP Qt Meth : 1M\_A0909.M  
 Data File: 1M140118.D Sam Mult : 1 Vial# : 36 Qt On : 10/06/20 05:49  
 Acq On : 10/06/20 02:11 Misc : M,MEXT!1 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	368826	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.986	117	381945	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	255540	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.937	111	103230	30.00	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.00%
39) 1,2-Dichloroethane-d4	5.146	67	56750	30.28	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.93%
66) Toluene-d8	6.198	98	414833	26.88	ug/l	0.00	
Spiked Amount	30.000						Recovery = 89.60%
76) Bromofluorobenzene	7.622	174	198896	30.89	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.97%
Target Compounds							
67) Toluene	6.230	92	25778	3.4129	ug/l	96	Qvalue
69) Chlorobenzene	7.002	112	891945	101.1885	ug/l	97	
74) Ethylbenzene	7.047	106	35472	8.7386	ug/l	100	
78) m&p-Xylenes	7.105	106	250146	45.9097	ug/l	97	
79) o Xylene	7.330	106	78999	14.1595	ug/l	85	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



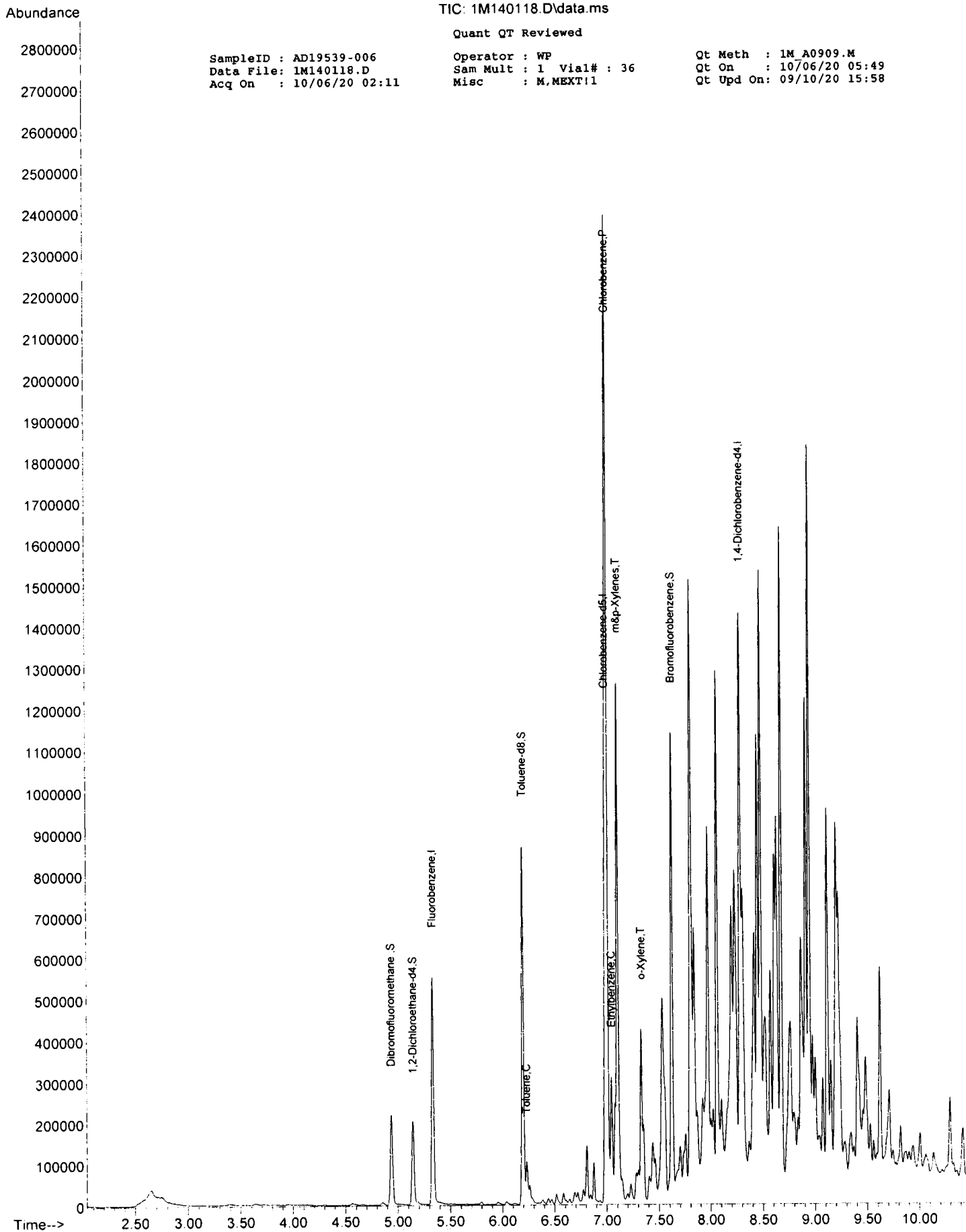
TIC: 1M140118.D\data.ms

Quant QT Reviewed

SampleID : AD19539-006  
Data File: 1M140118.D  
Acq On : 10/06/20 02:11

Operator : WP  
Sam Mult : 1 Vial# : 36  
Misc : M,MEXT:1

Qt Meth : 1M\_A0909.M  
Qt On : 10/06/20 05:49  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-007      Method: EPA 8260D  
 Client Id: HSI-SB-02(10-10.5)      Matrix: Soil  
 Data File: 11M83623.D      Initial Vol: 7.28g  
 Analysis Date: 10/06/20 18:28      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 0.687  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 80

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00079	0.0017	U	56-23-5	Carbon Tetrachloride	0.00083	0.0017	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00039</b>	<b>0.0017</b>	<b>0.0063</b>	108-90-7	Chlorobenzene	0.00053	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0012	0.0017	U	75-00-3	Chloroethane	0.0017	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.00039	0.0017	U	67-66-3	Chloroform	0.0012	0.0017	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>0.00075</b>	<b>0.0017</b>	<b>0.0011J</b>	74-87-3	Chloromethane	0.0011	0.0017	U
75-35-4	1,1-Dichloroethene	0.00099	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.00070	0.0017	U
87-61-6	1,2,3-Trichlorobenzene	0.00047	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.00046	0.0017	U
120-82-1	1,2,4-Trichlorobenzene	0.00054	0.0017	U	110-82-7	Cyclohexane	0.0010	0.0017	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00047	0.0017	U	124-48-1	Dibromochloromethane	0.00037	0.0017	U
106-93-4	1,2-Dibromoethane	0.00042	0.00043	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0017	U
<b>95-50-1</b>	<b>1,2-Dichlorobenzene</b>	<b>0.00044</b>	<b>0.0017</b>	<b>0.0016J</b>	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.00059</b>	<b>0.00086</b>	<b>0.074</b>
107-06-2	1,2-Dichloroethane	0.00035	0.0017	U	<b>98-82-8</b>	<b>Isopropylbenzene</b>	<b>0.00071</b>	<b>0.00086</b>	<b>0.035</b>
78-87-5	1,2-Dichloropropane	0.00070	0.0017	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.29</b>
541-73-1	1,3-Dichlorobenzene	0.00047	0.0017	U	79-20-9	Methyl Acetate	0.00082	0.0017	U
<b>106-46-7</b>	<b>1,4-Dichlorobenzene</b>	<b>0.00046</b>	<b>0.0017</b>	<b>0.00075J</b>	<b>108-87-2</b>	<b>Methylcyclohexane</b>	<b>0.00077</b>	<b>0.0017</b>	<b>0.0025</b>
123-91-1	1,4-Dioxane	0.042	0.086	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00064</b>	<b>0.0017</b>	<b>0.0024</b>
<b>78-93-3</b>	<b>2-Butanone</b>	<b>0.0010</b>	<b>0.0017</b>	<b>0.0093</b>	1634-04-4	Methyl-t-butyl ether	0.00046	0.00086	U
591-78-6	2-Hexanone	0.00073	0.0017	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.00061</b>	<b>0.00086</b>	<b>0.12</b>
<b>108-10-1</b>	<b>4-Methyl-2-Pentanone</b>	<b>0.00050</b>	<b>0.0017</b>	<b>0.0042</b>	100-42-5	Styrene	0.00047	0.0017	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0058</b>	<b>0.0086</b>	<b>0.034</b>	127-18-4	Tetrachloroethene	0.00084	0.0017	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.00063</b>	<b>0.00086</b>	<b>0.083</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00057</b>	<b>0.00086</b>	<b>0.17</b>
74-97-5	Bromochloromethane	0.00060	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0010	0.0017	U
75-27-4	Bromodichloromethane	0.00040	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.00040	0.0017	U
75-25-2	Bromoform	0.00028	0.0017	U	79-01-6	Trichloroethene	0.00070	0.0017	U
74-83-9	Bromomethane	0.0013	0.0017	U	75-69-4	Trichlorofluoromethane	0.0010	0.0017	U
75-15-0	Carbon Disulfide	0.0029	0.0029	U	75-01-4	Vinyl Chloride	0.0010	0.0017	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.00061</b>	<b>0.00086</b>	<b>0.41</b>					

Worksheet #: 569387

**Total Target Concentration 0.83**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-007  
 Data File: 11M83623.D  
 Acq On : 10/ 6/20 18:28

Operator : SG  
 Sam Mult : 1 Vial# : 35  
 Misc : S,SG!2

Qt Meth : 11M\_S1001.M  
 Qt On : 10/06/20 19:21  
 Qt Upd On: 10/02/20 09:54

Data Path : G:\GCMSData\2020\GCMS\_11\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.958	96	265333	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.559	117	367130	30.00	ug/l	0.01	
70) 1,4-Dichlorobenzene-d4	7.816	152	170526	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	72841	30.03	ug/l	0.00	
Spiked Amount							Recovery = 100.10%
39) 1,2-Dichloroethane-d4	4.775	67	33347	31.16	ug/l	0.00	
Spiked Amount							Recovery = 103.87%
66) Toluene-d8	5.787	98	288077	20.16	ug/l	0.00	
Spiked Amount							Recovery = 67.20%
76) Bromofluorobenzene	7.167	174	232373	52.31	ug/l	0.00	
Spiked Amount							Recovery = 174.37%
Target Compounds							
15) Methylene Chloride	3.373	84	5631	2.7477	ug/l		Qvalue 83
19) Acetone	3.006	43	18524	40.1233	ug/l		90
27) 1,1-Dichloroethane	3.923	63	3350	1.2549	ug/l		92
41) 2-Butanone	4.299	43	6681	10.8159	ug/l		96
46) Methylcyclohexane	5.270	83	6074	2.8820	ug/l		98
50) Benzene	4.820	78	652439	96.1661	ug/l		100
63) 4-Methyl-2-Pentanone	5.704	43	10702	4.8523	ug/l		95
67) Toluene	5.823	92	1342754	192.9375	ug/l		99
74) Ethylbenzene	6.604	106	241041	85.6322	ug/l		93
75) 1,1,2,2-Tetrachloroethane	7.215	83	22689	7.3177	ug/l		99
78) m&p-Xylenes	6.659	106	1351506	334.3908	ug/l		97
79) o-Xylene	6.881	106	582778	134.0927	ug/l		100
82) 1,4-Dichlorobenzene	7.832	146	4778m	0.8714	ug/l		
83) 1,2-Dichlorobenzene	8.051	146	10125	1.8581	ug/l		94
84) Isopropylbenzene	7.067	105	434571	40.8194	ug/l		98
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

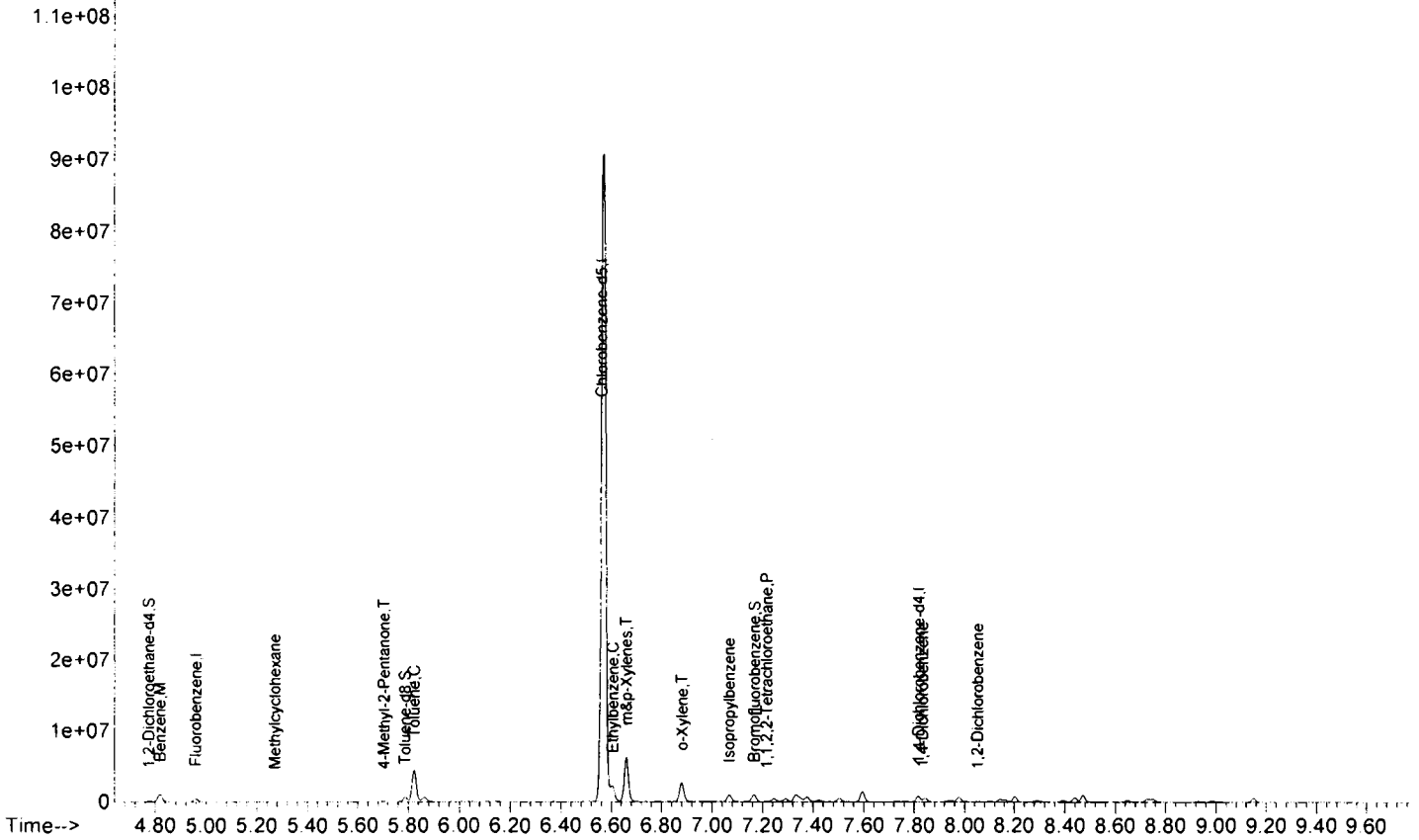
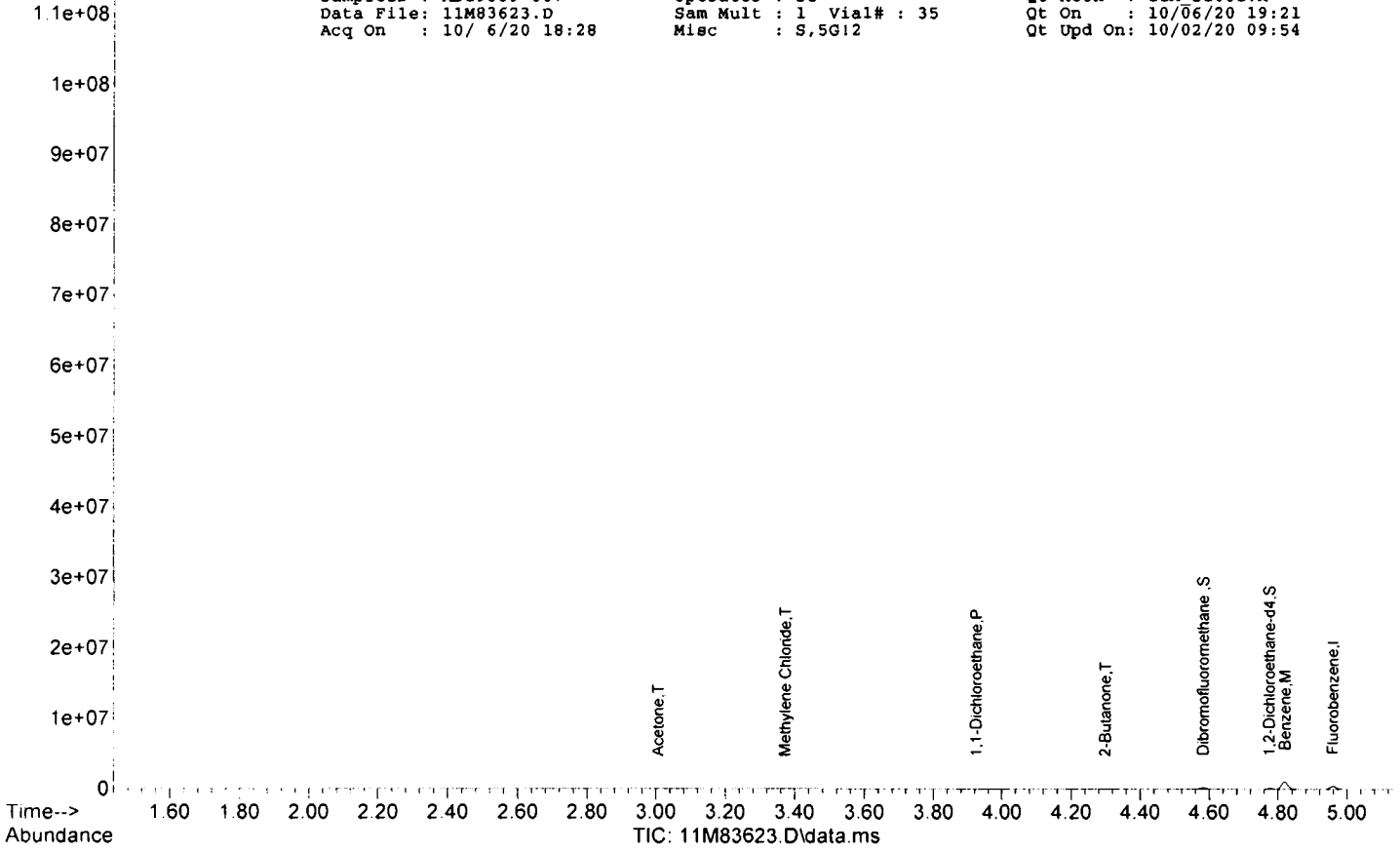
TIC: 11M83623.D\data.ms

Quant QT Reviewed

SampleID : AD19539-007  
Data File: 11M83623.D  
Acq On : 10/ 6/20 18:28

Operator : SG  
Sam Mult : 1 Vial# : 35  
Misc : S,5G12

Qt Meth : 11M\_S1001.M  
Qt On : 10/06/20 19:21  
Qt Upd On: 10/02/20 09:54



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-008      Method: EPA 8260D  
 Client Id: HSI-SB-02(11-11.5)      Matrix: Methanol  
 Data File: 1M140116.D      Extraction Ratio: 8.78g:10ml  
 Analysis Date: 10/06/20 01:29      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 56.9  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 79

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.026	0.072	U	56-23-5	Carbon Tetrachloride	0.023	0.072	U
79-34-5	1,1,2,2-Tetrachloroethane	0.032	0.072	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.024</b>	<b>0.072</b>	<b>2.7</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.052	0.072	U	75-00-3	Chloroethane	0.042	0.072	U
79-00-5	1,1,2-Trichloroethane	0.023	0.072	U	67-66-3	Chloroform	0.14	0.14	U
75-34-3	1,1-Dichloroethane	0.031	0.072	U	74-87-3	Chloromethane	0.037	0.072	U
75-35-4	1,1-Dichloroethene	0.038	0.072	U	156-59-2	cis-1,2-Dichloroethene	0.046	0.072	U
87-61-6	1,2,3-Trichlorobenzene	0.057	0.072	U	10061-01-5	cis-1,3-Dichloropropene	0.023	0.072	U
120-82-1	1,2,4-Trichlorobenzene	0.052	0.072	U	110-82-7	Cyclohexane	0.035	0.072	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.060	0.072	U	124-48-1	Dibromochloromethane	0.017	0.072	U
106-93-4	1,2-Dibromoethane	0.025	0.072	U	75-71-8	Dichlorodifluoromethane	0.045	0.072	U
95-50-1	1,2-Dichlorobenzene	0.023	0.072	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.034</b>	<b>0.072</b>	<b>0.046J</b>
107-06-2	1,2-Dichloroethane	0.046	0.046	U	98-82-8	Isopropylbenzene	0.035	0.072	U
78-87-5	1,2-Dichloropropane	0.022	0.072	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.061</b>	<b>0.072</b>	<b>0.14</b>
541 73 1	1,3-Dichlorobenzene	0.027	0.072	U	79-20-9	Methyl Acetate	0.051	0.072	U
106-46 7	1,4-Dichlorobenzene	0.026	0.072	U	108-87-2	Methylcyclohexane	0.044	0.072	U
123-91-1	1,4-Dioxane	2.8	3.6	U	75-09-2	Methylene Chloride	0.021	0.072	U
78-93-3	2-Butanone	0.054	0.072	U	1634-04-4	Methyl-t-butyl ether	0.022	0.036	U
591-78-6	2-Hexanone	0.043	0.072	U	95-47-6	o-Xylene	0.049	0.072	U
108-10-1	4-Methyl-2-Pentanone	0.035	0.072	U	100-42-5	Styrene	0.039	0.072	U
67-64-1	Acetone	0.33	0.36	U	127-18-4	Tetrachloroethene	0.026	0.072	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.021</b>	<b>0.036</b>	<b>0.098</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.023</b>	<b>0.072</b>	<b>1.2</b>
74 97-5	Bromochloromethane	0.057	0.072	U	156-60-5	trans-1,2-Dichloroethene	0.022	0.072	U
75-27-4	Bromodichloromethane	0.025	0.072	U	10061-02-6	trans-1,3-Dichloropropene	0.022	0.072	U
75-25-2	Bromoform	0.039	0.072	U	79-01-6	Trichloroethene	0.025	0.072	U
74 83-9	Bromomethane	0.036	0.072	U	75-69-4	Trichlorofluoromethane	0.022	0.072	U
75-15-0	Carbon Disulfide	0.031	0.072	U	75-01-4	Vinyl Chloride	0.051	0.072	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.049</b>	<b>0.072</b>	<b>0.14</b>					

Worksheet #: 569387

**Total Target Concentration 4.2**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-008  
 Data File: LM140116.D  
 Acq On : 10/06/20 01:29

Operator : WP  
 Sam Mult : 1 Vial# : 34  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/06/20 05:49  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	377349	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.985	117	385589	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	239502	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.937	111	103122	29.29	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	97.63%		
39) 1,2-Dichloroethane-d4	5.143	67	58223	30.37	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	101.23%		
66) Toluene-d8	6.198	98	421708	27.06	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	90.20%		
76) Bromofluorobenzene	7.622	174	187890	31.14	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	103.80%		
Target Compounds							
50) Benzene	5.185	78	13497	1.3584	ug/l	100	Qvalue
67) Toluene	6.233	92	128121	16.8026	ug/l	93	
69) Chlorobenzene	7.002	112	335339	37.6837	ug/l	96	
74) Ethylbenzene	7.043	106	2422	0.6366	ug/l	95	
78) m&p-Xylenes	7.101	106	9583	1.8766	ug/l	88	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

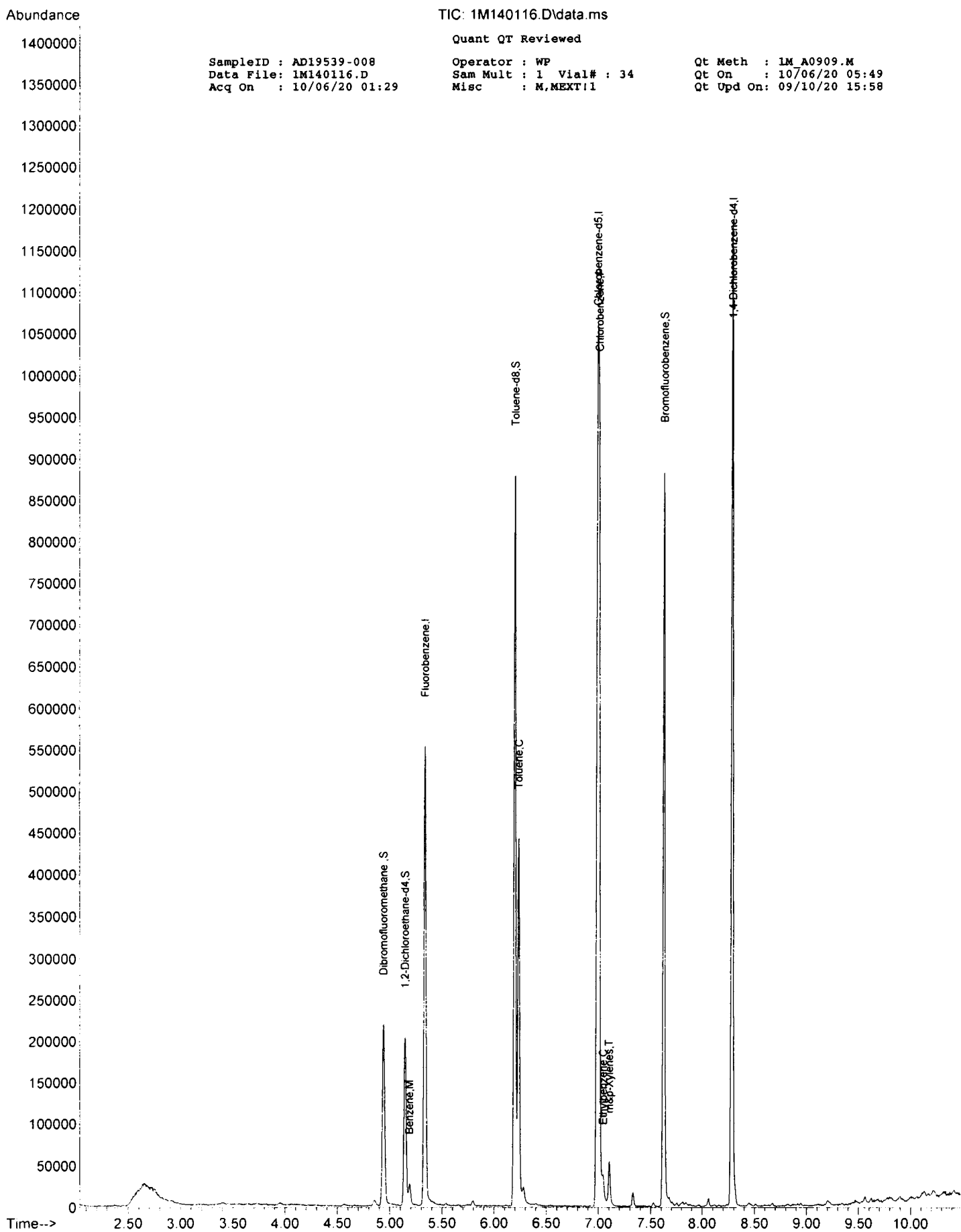
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Quant QT Reviewed

SampleID : AD19539-008  
Data File: 1M140116.D  
Acq On : 10/06/20 01:29

Operator : WP  
Sam Mult : 1 Vial# : 34  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/06/20 05:49  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-009      Method: EPA 8260D  
 Client Id: HSI-SB-04 (9.5-10)      Matrix: Soil  
 Data File: 11M83578.D      Initial Vol: 7.52g  
 Analysis Date: 10/06/20 00:57      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 0.665  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 81

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00076	0.0016	U	56-23-5	Carbon Tetrachloride	0.00080	0.0016	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00037	0.0016	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.00051</b>	<b>0.0016</b>	<b>0.097</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0011	0.0016	U	75-00-3	Chloroethane	0.0016	0.0016	U
79-00-5	1,1,2-Trichloroethane	0.00038	0.0016	U	67-66-3	Chloroform	0.0011	0.0016	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>0.00071</b>	<b>0.0016</b>	<b>0.0014J</b>	74-87-3	Chloromethane	0.0010	0.0016	U
75-35-4	1,1-Dichloroethene	0.00094	0.0016	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.00066</b>	<b>0.0016</b>	<b>0.030</b>
87-61-6	1,2,3-Trichlorobenzene	0.00045	0.0016	U	10061-01-5	cis-1,3-Dichloropropene	0.00044	0.0016	U
120-82-1	1,2,4-Trichlorobenzene	0.00052	0.0016	U	110-82-7	Cyclohexane	0.00099	0.0016	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00045	0.0016	U	124-48-1	Dibromochloromethane	0.00035	0.0016	U
106-93-4	1,2-Dibromoethane	0.00040	0.00041	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0016	U
95-50-1	1,2-Dichlorobenzene	0.00042	0.0016	U	100-41-4	Ethylbenzene	0.00057	0.00082	U
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.00034</b>	<b>0.0016</b>	<b>0.0028</b>	98-82-8	Isopropylbenzene	0.00068	0.00082	U
78-87-5	1,2-Dichloropropane	0.00067	0.0016	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.00099</b>	<b>0.00099</b>	<b>0.0010</b>
541-73-1	1,3-Dichlorobenzene	0.00045	0.0016	U	79-20-9	Methyl Acetate	0.00079	0.0016	U
106-46-7	1,4-Dichlorobenzene	0.00044	0.0016	U	108-87-2	Methylcyclohexane	0.00074	0.0016	U
123-91-1	1,4-Dioxane	0.040	0.082	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00062</b>	<b>0.0016</b>	<b>0.0022</b>
78-93-3	2-Butanone	0.00099	0.0016	U	<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>0.00044</b>	<b>0.00082</b>	<b>0.00070J</b>
591-78-6	2-Hexanone	0.00070	0.0016	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.00058</b>	<b>0.00082</b>	<b>0.0014</b>
108-10-1	4-Methyl-2-Pentanone	0.00048	0.0016	U	100-42-5	Styrene	0.00045	0.0016	U
67-64-1	Acetone	0.0056	0.0082	U	127-18-4	Tetrachloroethene	0.00080	0.0016	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.00060</b>	<b>0.00082</b>	<b>0.0072</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00054</b>	<b>0.00082</b>	<b>0.0049</b>
74-97-5	Bromochloromethane	0.00057	0.0016	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.00099</b>	<b>0.0016</b>	<b>0.0033</b>
75-27-4	Bromodichloromethane	0.00039	0.0016	U	10061-02-6	trans-1,3-Dichloropropene	0.00039	0.0016	U
75-25-2	Bromoform	0.00027	0.0016	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00067</b>	<b>0.0016</b>	<b>0.0012J</b>
74-83-9	Bromomethane	0.0013	0.0016	U	75-69-4	Trichlorofluoromethane	0.00097	0.0016	U
75-15-0	Carbon Disulfide	0.0028	0.0028	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>0.0010</b>	<b>0.0016</b>	<b>0.14</b>
1330-20-7	<b>Xylenes (Total)</b>	<b>0.00058</b>	<b>0.00082</b>	<b>0.0024</b>					

Worksheet #: 569387

**Total Target Concentration 0.29**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.



SampleID : AD19539-009  
 Data File: 11M83578.D  
 Acq On : 10/ 6/20 00:57

Operator : WP  
 Sam Mult : 1 Vial# : 30  
 Misc : S,5G:2

Qt Meth : 11M\_S1001.M  
 Qt On : 10/06/20 06:11  
 Qt Upd On: 10/02/20 09:54

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-05-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	4.961	96	261446	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.546	117	253774	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	139735	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.582	111	74769	31.28	ug/l	0.00	
Spiked Amount							Recovery = 104.27%
39) 1,2-Dichloroethane-d4	4.778	67	34341	32.56	ug/l	0.00	
Spiked Amount							Recovery = 108.53%
66) Toluene-d8	5.787	98	284817	28.83	ug/l	0.00	
Spiked Amount							Recovery = 96.10%
76) Bromofluorobenzene	7.167	174	106704	29.32	ug/l	0.00	
Spiked Amount							Recovery = 97.73%
Target Compounds							
							Qvalue
9) Vinyl Chloride	1.940	62	292318	169.6019	ug/l		97
15) Methylene Chloride	3.370	84	5456	2.7019	ug/l		90
26) Methyl-t-butyl ether	3.591	73	3657	0.8527	ug/l		82
27) 1,1-Dichloroethane	3.926	63	4514	1.7161	ug/l		88
28) trans-1,2-Dichloroethene	3.601	96	6872	4.0433	ug/l		86
30) cis-1,2-Dichloroethene	4.305	61	94470	36.2742	ug/l		88
40) 1,2-Dichloroethane	4.820	62	8099	3.4377	ug/l		97
49) Trichloroethene	5.157	130	2837	1.4255	ug/l		90
50) Benzene	4.820	78	58674	8.7768	ug/l		100
67) Toluene	5.823	92	28670	5.9596	ug/l		98
69) Chlorobenzene	6.562	112	697596	117.7082	ug/l		99
78) m&p-Xylenes	6.662	106	4208	1.2706	ug/l		80
79) o-Xylene	6.877	106	6200	1.7409	ug/l		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

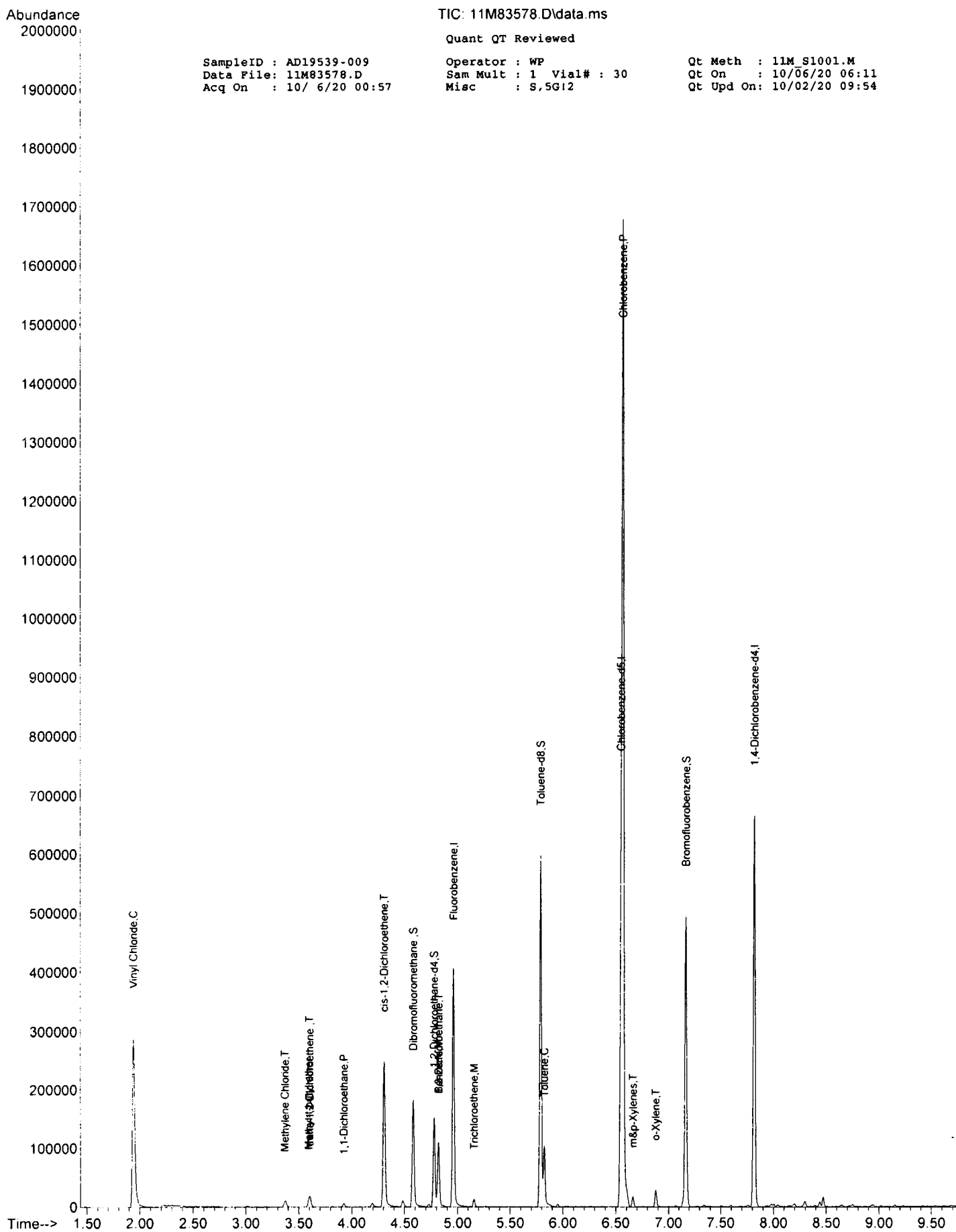
TIC: 11M83578.D\data.ms

Quant QT Reviewed

SampleID : AD19539-009  
Data File: 11M83578.D  
Acq On : 10/ 6/20 00:57

Operator : WP  
Sam Mult : 1 Vial# : 30  
Misc : S.5G12

Qt Meth : 11M\_S1001.M  
Qt On : 10/06/20 06:11  
Qt Upd On: 10/02/20 09:54



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19539-010 Method: EPA 8260D  
 Client Id: HSI-SB-03 (3.5-4) Matrix: Methanol  
 Data File: 1M140112.D Extraction Ratio: 7.67g:10ml  
 Analysis Date: 10/06/20 00:06 Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA Dilution: 65.2  
 Column: DB-624 25M 0.200mm ID 1.12um film Solids: 86

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.027	0.076	U	56-23-5	Carbon Tetrachloride	0.024	0.076	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.034</b>	<b>0.076</b>	<b>0.43</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.025</b>	<b>0.076</b>	<b>0.057J</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.055	0.076	U	75-00-3	Chloroethane	0.044	0.076	U
<b>79-00-5</b>	<b>1,1,2-Trichloroethane</b>	<b>0.024</b>	<b>0.076</b>	<b>0.025J</b>	67-66-3	Chloroform	0.15	0.15	U
75-34-3	1,1-Dichloroethane	0.032	0.076	U	74-87-3	Chloromethane	0.039	0.076	U
75-35-4	1,1-Dichloroethene	0.040	0.076	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.048</b>	<b>0.076</b>	<b>0.18</b>
87-61-6	1,2,3-Trichlorobenzene	0.060	0.076	U	10061-01-5	cis-1,3-Dichloropropene	0.024	0.076	U
120-82-1	1,2,4-Trichlorobenzene	0.055	0.076	U	110-82-7	Cyclohexane	0.037	0.076	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.063	0.076	U	124-48-1	Dibromochloromethane	0.018	0.076	U
106-93-4	1,2-Dibromoethane	0.026	0.076	U	75-71-8	Dichlorodifluoromethane	0.047	0.076	U
95-50-1	1,2-Dichlorobenzene	0.025	0.076	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.035</b>	<b>0.076</b>	<b>U</b>
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.048</b>	<b>0.048</b>	<b>0.39</b>	98-82-8	Isopropylbenzene	0.037	0.076	U
78-87-5	1,2-Dichloropropane	0.023	0.076	U	179601-23-1	m&p-Xylenes	0.064	0.076	U
541-73-1	1,3-Dichlorobenzene	0.029	0.076	U	79-20-9	Methyl Acetate	0.053	0.076	U
106-46-7	1,4-Dichlorobenzene	0.028	0.076	U	108-87-2	Methylcyclohexane	0.047	0.076	U
123-91-1	1,4-Dioxane	3.0	3.8	U	75-09-2	Methylene Chloride	0.022	0.076	U
78-93-3	2-Butanone	0.057	0.076	U	1634-04-4	Methyl-t-butyl ether	0.024	0.038	U
591-78-6	2-Hexanone	0.046	0.076	U	95-47-6	o-Xylene	0.052	0.076	U
108-10-1	4-Methyl-2-Pentanone	0.037	0.076	U	100-42-5	Styrene	0.041	0.076	U
67-64-1	Acetone	0.35	0.38	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.027</b>	<b>0.076</b>	<b>0.17</b>
71-43-2	Benzene	0.022	0.038	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.025</b>	<b>0.076</b>	<b>0.042J</b>
74-97-5	Bromochloromethane	0.060	0.076	U	156-60-5	trans-1,2-Dichloroethene	0.023	0.076	U
75-27-4	Bromodichloromethane	0.026	0.076	U	10061-02-6	trans-1,3-Dichloropropene	0.023	0.076	U
75-25-2	Bromoform	0.041	0.076	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.026</b>	<b>0.076</b>	<b>2.3</b>
74-83-9	Bromomethane	0.038	0.076	U	75-69-4	Trichlorofluoromethane	0.023	0.076	U
75-15-0	Carbon Disulfide	0.032	0.076	U	75-01-4	Vinyl Chloride	0.054	0.076	U
1330-20-7	Xylenes (Total)	0.052	0.076	U					

Worksheet #: 569387

**Total Target Concentration 3.6**

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-010  
 Data File: 1M140112.D  
 Acq On : 10/06/20 00:06

Operator : WP  
 Sam Mult : 1 Vial# : 30  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/06/20 05:48  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GCMSData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GCMSData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	357889	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.986	117	365452	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	226760	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.937	111	100360	30.05	ug/l	0.00	
Spiked Amount							Recovery = 100.17%
39) 1,2-Dichloroethane-d4	5.143	67	55116	30.31	ug/l	0.00	
Spiked Amount							Recovery = 101.03%
66) Toluene-d8	6.195	98	397245	26.90	ug/l	0.00	
Spiked Amount							Recovery = 89.67%
76) Bromofluorobenzene	7.622	174	179998	31.50	ug/l	0.00	
Spiked Amount							Recovery = 105.00%
Target Compounds							
30) cis-1,2-Dichloroethene	4.654	61	9905	2.3636	ug/l	97	Qvalue
40) 1,2-Dichloroethane	5.188	62	18389	5.1492	ug/l	100	
49) Trichloroethene	5.539	130	84405	30.6189	ug/l	98	
60) 1,1,2-Trichloroethane	6.436	97	925	0.3249	ug/l	81	
65) Tetrachloroethene	6.539	164	5893	2.2345	ug/l	87	
67) Toluene	6.236	92	3957	0.5475	ug/l	91	
69) Chlorobenzene	7.005	112	6351	0.7530	ug/l	95	
75) 1,1,2,2-Tetrachloroethane	7.670	83	25395	5.6729	ug/l	94	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

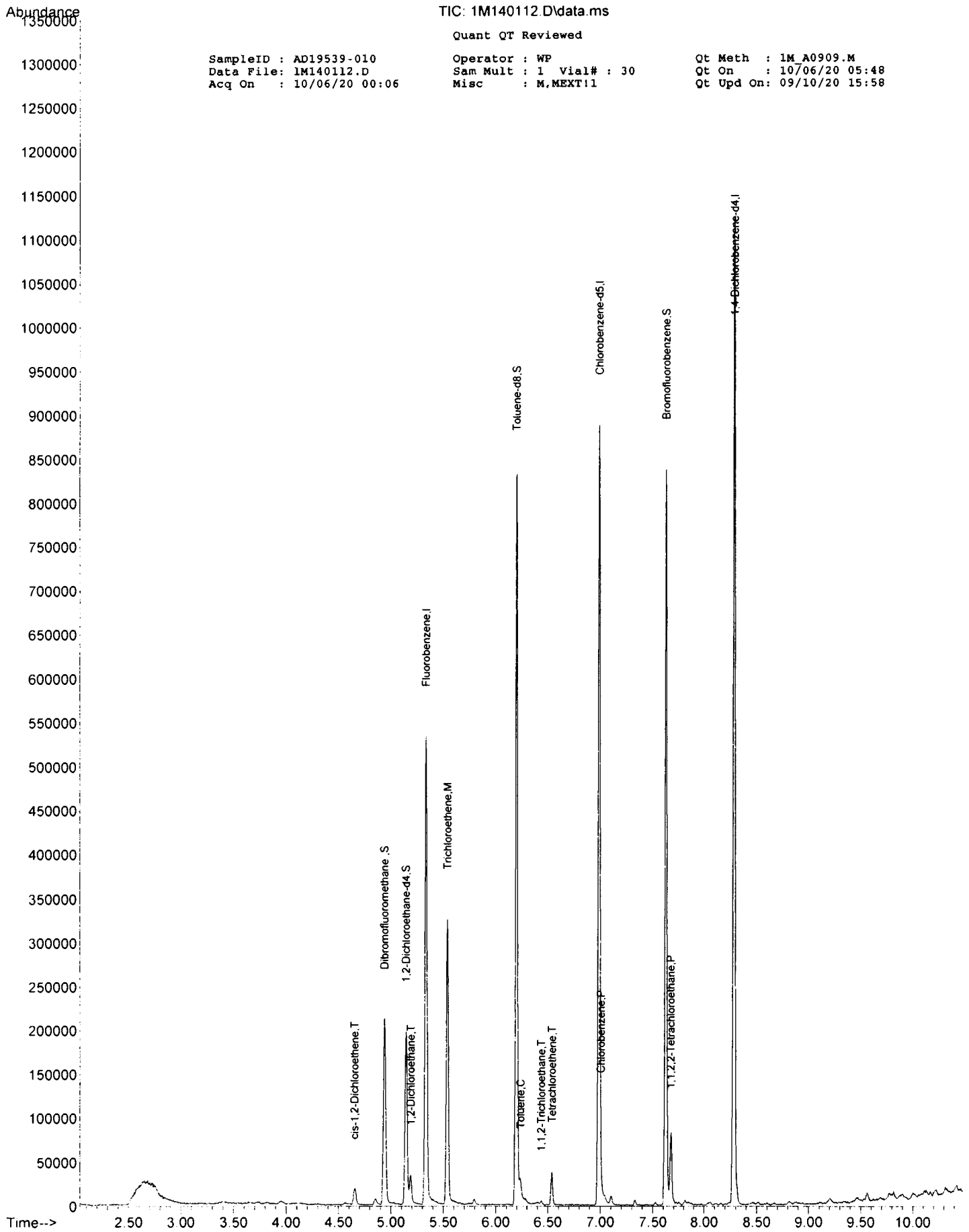
TIC: 1M140112.D\data.ms

Quant QT Reviewed

SampleID : AD19539-010  
Data File: 1M140112.D  
Acq On : 10/06/20 00:06

Operator : WP  
Sam Mult : 1 Vial# : 30  
Misc : M.MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/06/20 05:48  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-011      Method: EPA 8260D  
 Client Id: HSI-SB-03 (10-10.5)      Matrix: Methanol  
 Data File: 1M140111.D      Extraction Ratio: 7.67g:10ml  
 Analysis Date: 10/05/20 23:46      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 65.2  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 84

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71 55-6	1,1,1-Trichloroethane	0.028	0.078	U	56-23-5	Carbon Tetrachloride	0.025	0.078	U
79 34-5	1,1,2,2-Tetrachloroethane	0.035	0.078	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.026</b>	<b>0.078</b>	<b>0.33</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.056	0.078	U	75-00-3	Chloroethane	0.045	0.078	U
79-00-5	1,1,2-Trichloroethane	0.025	0.078	U	67-66-3	Chloroform	0.15	0.15	U
75-34-3	1,1-Dichloroethane	0.033	0.078	U	74-87-3	Chloromethane	0.040	0.078	U
75-35-4	1,1-Dichloroethene	0.041	0.078	U	156-59-2	cis-1,2-Dichloroethene	0.049	0.078	U
87-61-6	1,2,3-Trichlorobenzene	0.061	0.078	U	10061-01-5	cis-1,3-Dichloropropene	0.025	0.078	U
120-82-1	1,2,4-Trichlorobenzene	0.056	0.078	U	110-82-7	Cyclohexane	0.038	0.078	U
96 12-8	1,2-Dibromo-3-Chloropropa	0.065	0.078	U	124-48-1	Dibromochloromethane	0.019	0.078	U
106-93-4	1,2-Dibromoethane	0.027	0.078	U	75-71-8	Dichlorodifluoromethane	0.048	0.078	U
95 50-1	1,2-Dichlorobenzene	0.025	0.078	U	100-41-4	Ethylbenzene	0.036	0.078	U
107 06-2	1,2-Dichloroethane	0.050	0.050	U	98-82-8	Isopropylbenzene	0.038	0.078	U
78 87-5	1,2-Dichloropropane	0.023	0.078	U	179601-23-1	m&p-Xylenes	0.066	0.078	U
541 73 1	1,3-Dichlorobenzene	0.029	0.078	U	79-20-9	Methyl Acetate	0.055	0.078	U
106-46-7	1,4-Dichlorobenzene	0.028	0.078	U	108-87-2	Methylcyclohexane	0.048	0.078	U
123-91-1	1,4-Dioxane	3.1	3.9	U	75-09-2	Methylene Chloride	0.023	0.078	U
78-93-3	2-Butanone	0.058	0.078	U	1634-04-4	Methyl-t-butyl ether	0.024	0.039	U
591-78-6	2-Hexanone	0.047	0.078	U	95-47-6	o-Xylene	0.053	0.078	U
108-10-1	4-Methyl-2-Pentanone	0.038	0.078	U	100-42-5	Styrene	0.042	0.078	U
67-64-1	Acetone	0.36	0.39	U	127-18-4	Tetrachloroethene	0.028	0.078	U
71 43-2	Benzene	0.023	0.039	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.025</b>	<b>0.078</b>	<b>0.37</b>
74-97-5	Bromochloromethane	0.061	0.078	U	156-60-5	trans-1,2-Dichloroethene	0.024	0.078	U
75-27-4	Bromodichloromethane	0.027	0.078	U	10061-02-6	trans-1,3-Dichloropropene	0.024	0.078	U
75-25-2	Bromoform	0.042	0.078	U	79-01-6	Trichloroethene	0.027	0.078	U
74-83-9	Bromomethane	0.039	0.078	U	75-69-4	Trichlorofluoromethane	0.024	0.078	U
75-15-0	Carbon Disulfide	0.033	0.078	U	75-01-4	Vinyl Chloride	0.055	0.078	U
1330 20-7	Xylenes (Total)	0.053	0.078	U					

Worksheet #: 569387

**Total Target Concentration 0.7**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-011  
 Data File: 1M140111.D  
 Acq On : 10/05/20 23:46

Operator : WP  
 Sam Mult : 1 Vial# : 29  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/06/20 05:48  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	341114	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.985	117	344261	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	214777	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.941	111	96385	30.28	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.93%
39) 1,2-Dichloroethane-d4	5.143	67	53490	30.86	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.87%
66) Toluene-d8	6.198	98	383790	27.59	ug/l	0.00	
Spiked Amount	30.000						Recovery = 91.97%
76) Bromofluorobenzene	7.622	174	170733	31.55	ug/l	0.00	
Spiked Amount	30.000						Recovery = 105.17%
Target Compounds							
67) Toluene	6.233	92	32090	4.7137	ug/l	90	
69) Chlorobenzene	7.002	112	33561	4.2242	ug/l	96	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

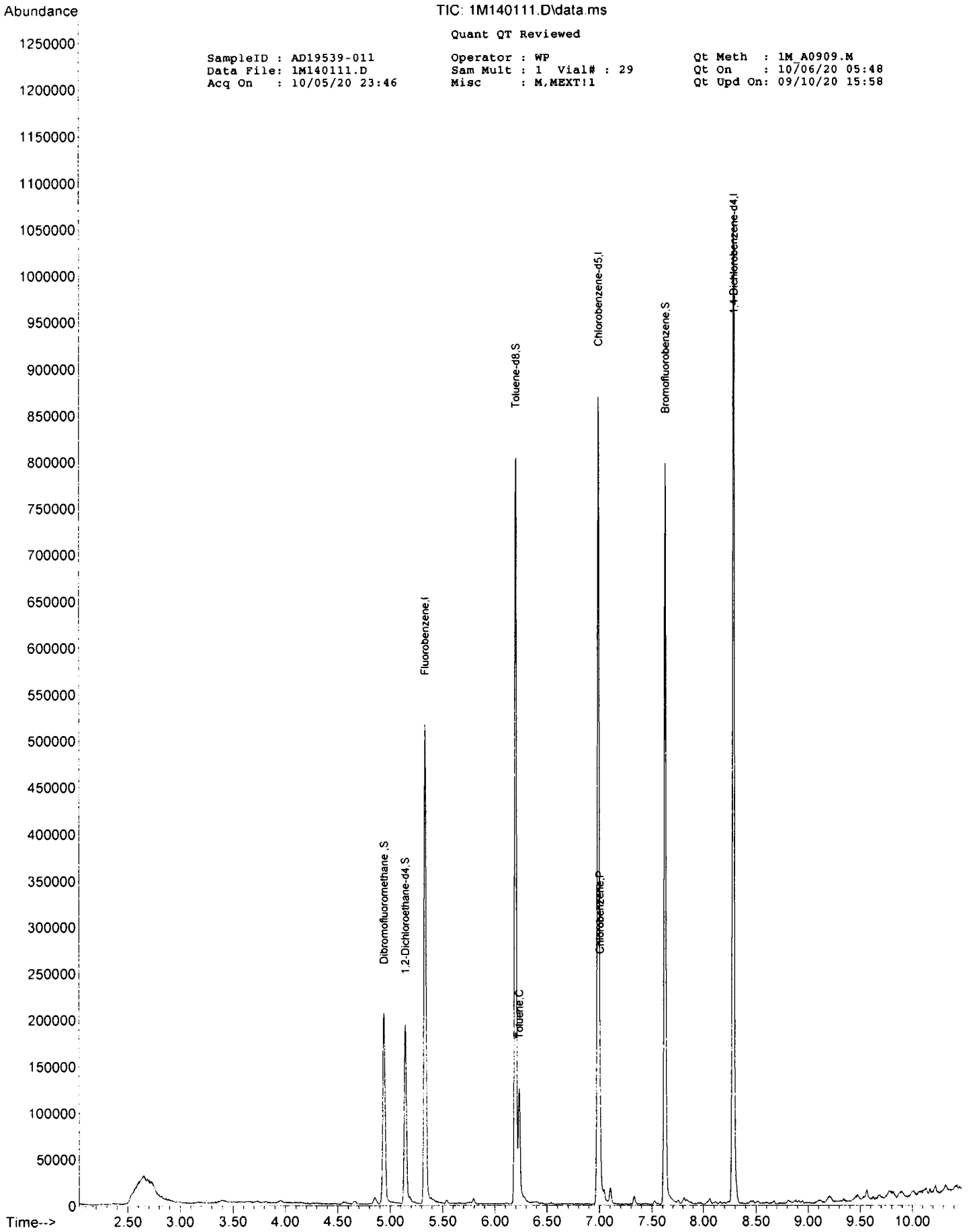
TIC: 1M140111.D\data.ms

Quant QT Reviewed

SampleID : AD19539-011  
Data File: 1M140111.D  
Acq On : 10/05/20 23:46

Operator : WP  
Sam Mult : 1 Vial# : 29  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/06/20 05:48  
Qt Upd On: 09/10/20 15:58





**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-012      Method: EPA 8260D  
 Client Id: HSI-SB-03 (11-11.5)      Matrix: Methanol  
 Data File: 1M140341.D      Extraction Ratio: 7.24g:10ml  
 Analysis Date: 10/09/20 13:20      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 69.1  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 80

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.031	0.086	U	56-23-5	Carbon Tetrachloride	0.028	0.086	U
79-34-5	1,1,2,2-Tetrachloroethane	0.039	0.086	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.029</b>	<b>0.086</b>	<b>0.19</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluoro	0.063	0.086	U	75-00-3	Chloroethane	0.050	0.086	U
79-00-5	1,1,2-Trichloroethane	0.028	0.086	U	67-66-3	Chloroform	0.17	0.17	U
75-34-3	1,1-Dichloroethane	0.037	0.086	U	74-87-3	Chloromethane	0.045	0.086	U
75-35-4	1,1-Dichloroethene	0.046	0.086	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.055</b>	<b>0.086</b>	<b>0.079J</b>
87-61-6	1,2,3-Trichlorobenzene	0.068	0.086	U	10061-01-5	cis-1,3-Dichloropropene	0.028	0.086	U
120-82-1	1,2,4-Trichlorobenzene	0.063	0.086	U	110-82-7	Cyclohexane	0.042	0.086	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.072	0.086	U	124-48-1	Dibromochloromethane	0.021	0.086	U
106-93-4	1,2-Dibromoethane	0.030	0.086	U	75-71-8	Dichlorodifluoromethane	0.053	0.086	U
95-50-1	1,2-Dichlorobenzene	0.028	0.086	U	100-41-4	Ethylbenzene	0.040	0.086	U
107-06-2	1,2-Dichloroethane	0.055	0.055	U	98-82-8	Isopropylbenzene	0.042	0.086	U
78-87-5	1,2-Dichloropropane	0.026	0.086	U	179601-23-1	m&p-Xylenes	0.073	0.086	U
541-73-1	1,3-Dichlorobenzene	0.033	0.086	U	79-20-9	Methyl Acetate	0.061	0.086	U
106-46-7	1,4-Dichlorobenzene	0.032	0.086	U	108-87-2	Methylcyclohexane	0.053	0.086	U
123-91-1	1,4-Dioxane	3.4	4.3	U	75-09-2	Methylene Chloride	0.025	0.086	U
78-93-3	2-Butanone	0.065	0.086	U	1634-04-4	Methyl-t-butyl ether	0.027	0.043	U
591-78-6	2-Hexanone	0.052	0.086	U	95-47-6	o-Xylene	0.059	0.086	U
108-10-1	4-Methyl-2-Pentanone	0.042	0.086	U	100-42-5	Styrene	0.047	0.086	U
67-64-1	Acetone	0.40	0.43	U	127-18-4	Tetrachloroethene	0.031	0.086	U
71-43-2	Benzene	0.026	0.043	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.028</b>	<b>0.086</b>	<b>0.082J</b>
74-97-5	Bromochloromethane	0.068	0.086	U	156-60-5	trans-1,2-Dichloroethene	0.027	0.086	U
75-27-4	Bromodichloromethane	0.030	0.086	U	10061-02-6	trans-1,3-Dichloropropene	0.026	0.086	U
75-25-2	Bromoform	0.047	0.086	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.030</b>	<b>0.086</b>	<b>0.032J</b>
74-83-9	Bromomethane	0.043	0.086	U	75-69-4	Trichlorofluoromethane	0.027	0.086	U
75-15-0	Carbon Disulfide	0.037	0.086	U	75-01-4	Vinyl Chloride	0.061	0.086	U
1330-20-7	Xylenes (Total)	0.059	0.086	U					

Worksheet #: 569387

**Total Target Concentration 0.38**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-012  
 Data File: 1M140341.D  
 Acq On : 10/09/20 13:20

Operator : BK  
 Sam Mult : 1 Vial# : 15  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 13:37  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	357563	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.985	117	379066	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	250948	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.937	111	100336	30.07	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	100.23%		
39) 1,2-Dichloroethane-d4	5.143	67	53290	29.33	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	97.77%		
66) Toluene-d8	6.198	98	398148	25.99	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	86.63%		
76) Bromofluorobenzene	7.622	174	194947	30.83	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	102.77%		
Target Compounds							
30) cis-1,2-Dichloroethene	4.658	61	3838	0.9167	ug/l	94	
49) Trichloroethene	5.539	130	1011	0.3671	ug/l	94	
67) Toluene	6.233	92	7143	0.9529	ug/l	88	
69) Chlorobenzene	7.002	112	18811	2.1503	ug/l	92	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

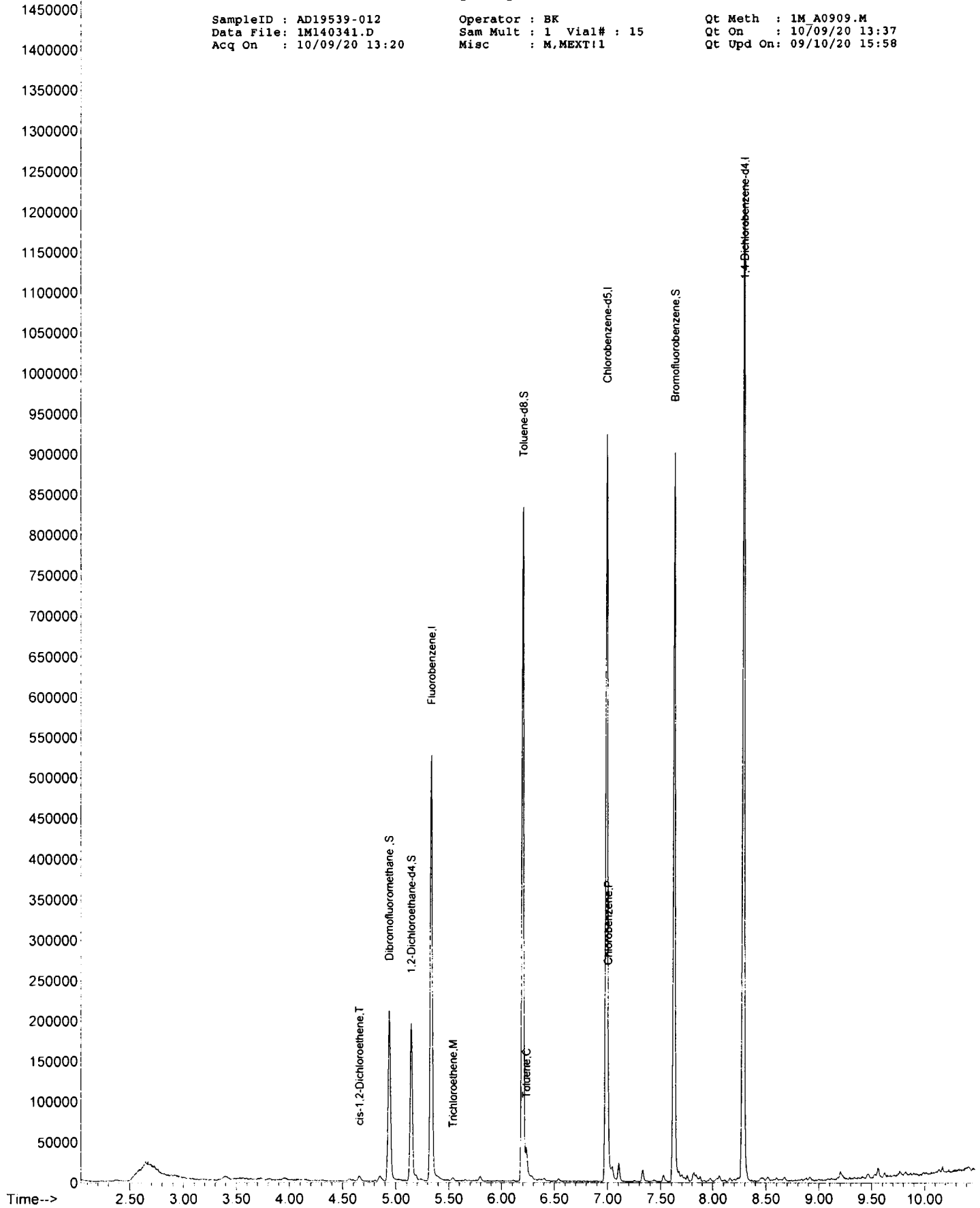
TIC: 1M140341.D\data.ms

Quant QT Reviewed

SampleID : AD19539-012  
Data File: 1M140341.D  
Acq On : 10/09/20 13:20

Operator : BK  
Sam Mult : 1 Vial# : 15  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/09/20 13:37  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-013      Method: EPA 8260D  
 Client Id: HSI-SB-01 (2.5-3)      Matrix: Methanol  
 Data File: 1M140114.D      Extraction Ratio: 7.87g:10ml  
 Analysis Date: 10/06/20 00:48      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 63.5  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 87

Units: mg/Kg										
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc	
71-55-6	1,1,1-Trichloroethane	0.026	0.073	U	56-23-5	Carbon Tetrachloride	0.024	0.073	U	
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.033</b>	<b>0.073</b>	<b>2.7</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.024</b>	<b>0.073</b>	<b>1.5</b>	
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.053	0.073	U	75-00-3	Chloroethane	0.042	0.073	U	
<b>79-00-5</b>	<b>1,1,2-Trichloroethane</b>	<b>0.023</b>	<b>0.073</b>	<b>0.031J</b>	67-66-3	Chloroform	0.14	0.14	U	
75-34-3	1,1-Dichloroethane	0.031	0.073	U	74-87-3	Chloromethane	0.038	0.073	U	
75-35-4	1,1-Dichloroethene	0.039	0.073	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.046</b>	<b>0.073</b>	<b>0.35</b>	
87-61-6	1,2,3-Trichlorobenzene	0.057	0.073	U	10061-01-5	cis-1,3-Dichloropropene	0.023	0.073	U	
120-82-1	1,2,4-Trichlorobenzene	0.053	0.073	U	110-82-7	Cyclohexane	0.036	0.073	U	
96-12-8	1,2-Dibromo-3-Chloropropa	0.061	0.073	U	124-48-1	Dibromochloromethane	0.017	0.073	U	
106-93-4	1,2-Dibromoethane	0.025	0.073	U	75-71-8	Dichlorodifluoromethane	0.045	0.073	U	
95-50-1	1,2-Dichlorobenzene	0.024	0.073	U	100-41-4	Ethylbenzene	0.034	0.073	U	
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.047</b>	<b>0.047</b>	<b>1.8</b>	98-82-8	Isopropylbenzene	0.036	0.073	U	
78-87-5	1,2-Dichloropropane	0.022	0.073	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.062</b>	<b>0.073</b>	<b>0.11</b>	
541-73-1	1,3-Dichlorobenzene	0.028	0.073	U	79-20-9	Methyl Acetate	0.051	0.073	U	
106-46-7	1,4-Dichlorobenzene	0.027	0.073	U	108-87-2	Methylcyclohexane	0.045	0.073	U	
123-91-1	1,4-Dioxane	2.9	3.7	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.021</b>	<b>0.073</b>	<b>2.3</b>	
78-93-3	2-Butanone	0.055	0.073	U	1634-04-4	Methyl-t-butyl ether	0.023	0.037	U	
591-78-6	2-Hexanone	0.044	0.073	U	95-47-6	o-Xylene	0.050	0.073	U	
<b>108-10-1</b>	<b>4-Methyl-2-Pentanone</b>	<b>0.035</b>	<b>0.073</b>	<b>0.59</b>	100-42-5	Styrene	0.040	0.073	U	
67-64-1	Acetone	0.33	0.37	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.026</b>	<b>0.073</b>	<b>0.21</b>	
<b>71-43-2</b>	<b>Benzene</b>	<b>0.022</b>	<b>0.037</b>	<b>0.034J</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.024</b>	<b>0.073</b>	<b>0.75</b>	
74-97-5	Bromochloromethane	0.057	0.073	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.023</b>	<b>0.073</b>	<b>0.088</b>	
75-27-4	Bromodichloromethane	0.025	0.073	U	10061-02-6	trans-1,3-Dichloropropene	0.022	0.073	U	
75-25-2	Bromoform	0.039	0.073	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.025</b>	<b>0.073</b>	<b>4.4</b>	
74-83-9	Bromomethane	0.037	0.073	U	75-69-4	Trichlorofluoromethane	0.022	0.073	U	
75-15-0	Carbon Disulfide	0.031	0.073	U	75-01-4	Vinyl Chloride	0.052	0.073	U	
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.050</b>	<b>0.073</b>	<b>0.11</b>						

Worksheet #: 569387

**Total Target Concentration 15**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-013  
 Data File: 1M140114.D  
 Acq On : 10/06/20 00:48

Operator : WP  
 Sam Mult : 1 Vial# : 32  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/06/20 05:49  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.336	96	374881	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.986	117	375199	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	242179	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.941	111	102546	29.32	ug/l	0.00	
Spiked Amount							Recovery = 97.73%
39) 1,2-Dichloroethane-d4	5.146	67	58656	30.79	ug/l	0.00	
Spiked Amount							Recovery = 102.63%
66) Toluene-d8	6.198	98	416756	27.49	ug/l	0.00	
Spiked Amount							Recovery = 91.63%
76) Bromofluorobenzene	7.622	174	191125	31.32	ug/l	0.00	
Spiked Amount							Recovery = 104.40%
Target Compounds							
15) Methylene Chloride	3.722	84	80408	31.8433	ug/l	93	
28) trans-1,2-Dichloroethene	3.944	96	2787	1.2095	ug/l	89	
30) cis-1,2-Dichloroethene	4.654	61	20816	4.7422	ug/l	92	
40) 1,2-Dichloroethane	5.188	62	92269	24.6657	ug/l	99	
49) Trichloroethene	5.539	130	173500	60.0863	ug/l	98	
50) Benzene	5.191	78	4585	0.4645	ug/l	100	
60) 1,1,2-Trichloroethane	6.436	97	1225	0.4191	ug/l	86	
63) 4-Methyl-2-Pentanone	6.111	43	27199	8.0550	ug/l	87	
65) Tetrachloroethene	6.539	164	7728	2.8542	ug/l	97	
67) Toluene	6.233	92	76287	10.2818	ug/l	90	
69) Chlorobenzene	7.002	112	176319	20.3625	ug/l	96	
75) 1,1,2,2-Tetrachloroethane	7.674	83	179252	37.4931	ug/l	99	
78) m&p-Xylenes	7.105	106	7911	1.5320	ug/l	91	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

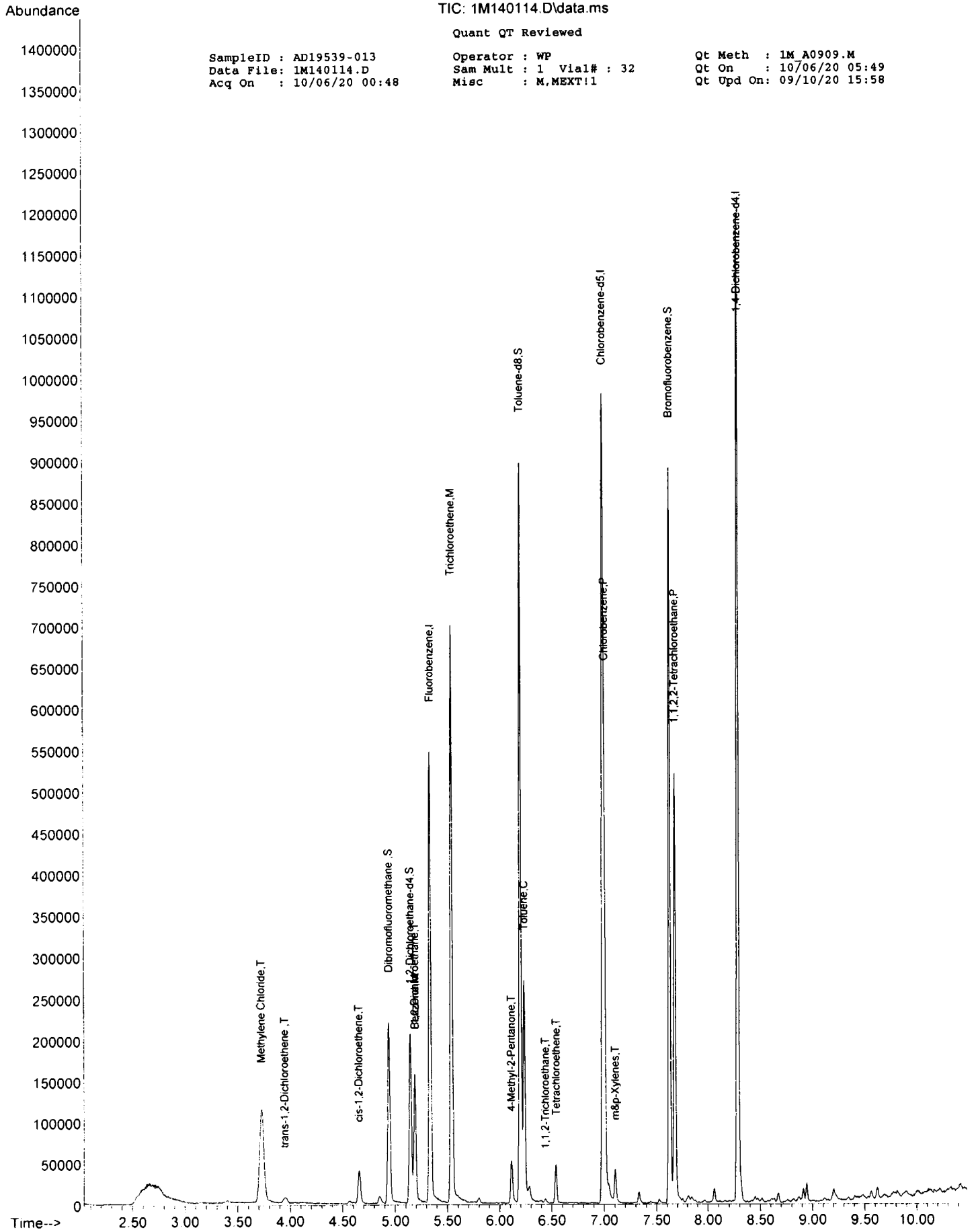
TIC: 1M140114.D\data.ms

Quant QT Reviewed

SampleID : AD19539-013  
 Data File: 1M140114.D  
 Acq On : 10/06/20 00:48

Operator : WP  
 Sam Mult : 1 Vial# : 32  
 Misc : M,MEXT:1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/06/20 05:49  
 Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-014(40uL)      Method: EPA 8260D  
 Client Id: HSI-SB-01 (6-6.5)      Matrix: Methanol  
 Data File: 1M140337.D      Extraction Ratio: 8.18g:10ml  
 Analysis Date: 10/09/20 11:57      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 1220  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 83

Units: mg/Kg										
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc	
71-55-6	1,1,1-Trichloroethane	0.53	1.5	U	56-23-5	Carbon Tetrachloride	0.48	1.5	U	
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.66</b>	<b>1.5</b>	<b>58</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.49</b>	<b>1.5</b>	<b>320</b>	
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.1	1.5	U	75-00-3	Chloroethane	0.85	1.5	U	
79-00-5	1,1,2-Trichloroethane	0.47	1.5	U	67-66-3	Chloroform	2.9	2.9	U	
75-34-3	1,1-Dichloroethane	0.63	1.5	U	74-87-3	Chloromethane	0.76	1.5	U	
75-35-4	1,1-Dichloroethene	0.78	1.5	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.94</b>	<b>1.5</b>	<b>9.9</b>	
87-61-6	1,2,3-Trichlorobenzene	1.2	1.5	U	10061-01-5	cis-1,3-Dichloropropene	0.47	1.5	U	
120-82-1	1,2,4-Trichlorobenzene	1.1	1.5	U	110-82-7	Cyclohexane	0.72	1.5	U	
96-12-8	1,2-Dibromo-3-Chloropropa	1.2	1.5	U	124-48-1	Dibromochloromethane	0.35	1.5	U	
106-93-4	1,2-Dibromoethane	0.50	1.5	U	75-71-8	Dichlorodifluoromethane	0.91	1.5	U	
95-50-1	1,2-Dichlorobenzene	0.48	1.5	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.69</b>	<b>1.5</b>	<b>12</b>	
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.94</b>	<b>0.94</b>	<b>19</b>	<b>98-82-8</b>	<b>Isopropylbenzene</b>	<b>0.72</b>	<b>1.5</b>	<b>1.2J</b>	
78-87-5	1,2-Dichloropropane	0.44	1.5	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>1.3</b>	<b>1.5</b>	<b>57</b>	
541-73-1	1,3-Dichlorobenzene	0.55	1.5	U	79-20-9	Methyl Acetate	1.0	1.5	U	
106-46-7	1,4-Dichlorobenzene	0.54	1.5	U	<b>108-87-2</b>	<b>Methylcyclohexane</b>	<b>0.90</b>	<b>1.5</b>	<b>1.8</b>	
123-91-1	1,4-Dioxane	58	74	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.43</b>	<b>1.5</b>	<b>49</b>	
78-93-3	2-Butanone	1.1	1.5	U	1634-04-4	Methyl-t-butyl ether	0.46	0.74	U	
591-78-6	2-Hexanone	0.88	1.5	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>1.0</b>	<b>1.5</b>	<b>13</b>	
<b>108-10-1</b>	<b>4-Methyl-2-Pentanone</b>	<b>0.72</b>	<b>1.5</b>	<b>14</b>	100-42-5	Styrene	0.80	1.5	U	
67-64-1	Acetone	6.7	7.4	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.53</b>	<b>1.5</b>	<b>29</b>	
<b>71-43-2</b>	<b>Benzene</b>	<b>0.44</b>	<b>0.74</b>	<b>2.4</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.48</b>	<b>1.5</b>	<b>570</b>	
74-97-5	Bromochloromethane	1.2	1.5	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.46</b>	<b>1.5</b>	<b>3.4</b>	
75-27-4	Bromodichloromethane	0.51	1.5	U	10061-02-6	trans-1,3-Dichloropropene	0.45	1.5	U	
75-25-2	Bromoform	0.80	1.5	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.51</b>	<b>1.5</b>	<b>460</b>	
74-83-9	Bromomethane	0.74	1.5	U	75-69-4	Trichlorofluoromethane	0.45	1.5	U	
75-15-0	Carbon Disulfide	0.62	1.5	U	75-01-4	Vinyl Chloride	1.0	1.5	U	
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>1.0</b>	<b>1.5</b>	<b>70</b>						

Worksheet #: 569387

**Total Target Concentration 1600**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-014 (40uL) Operator : BK Qt Meth : 1M A0909.M  
 Data File: LM140337.D Sam Mult : 1 Vial# : 11 Qt On : 10/09/20 12:44  
 Acq On : 10/09/20 11:57 Misc : M,MEXT!1 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIOn	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.339	96	378004	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	401823	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	265203	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.944	111	106318	30.14	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.47%
39) 1,2-Dichloroethane-d4	5.150	67	58500	30.46	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.53%
66) Toluene-d8	6.201	98	434524	26.76	ug/l	0.00	
Spiked Amount	30.000						Recovery = 89.20%
76) Bromofluorobenzene	7.622	174	206075	30.84	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.80%
Target Compounds							
							Qvalue
15) Methylene Chloride	3.738	84	84075	33.0204	ug/l		93
28) trans-1,2-Dichloroethene	3.966	96	5350	2.3026	ug/l		77
30) cis-1,2-Dichloroethene	4.664	61	29815	6.7362	ug/l		93
40) 1,2-Dichloroethane	5.195	62	49438	13.1068	ug/l		95
46) Methylcyclohexane	5.664	83	3514	1.2150	ug/l		92
49) Trichloroethene	5.542	130	910309	312.6524	ug/l		97
50) Benzene	5.191	78	16091	1.6166	ug/l		100
63) 4-Methyl-2-Pentanone	6.111	43	33912	9.3776	ug/l		87
65) Tetrachloroethene	6.542	164	56371	19.4404	ug/l		100
67) Toluene	6.236	92	3081429	387.7913	ug/l		96
69) Chlorobenzene	7.005	112	1996289	215.2695	ug/l		98
74) Ethylbenzene	7.047	106	34968	8.3005	ug/l		95
75) 1,1,2,2-Tetrachloroethane	7.674	83	206811	39.5020	ug/l		99
78) m&p Xylenes	7.105	106	220745	39.0375	ug/l		100
79) o Xylene	7.333	106	50031	8.6406	ug/l		87
84) Isopropylbenzene	7.526	105	11949	0.8193	ug/l		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

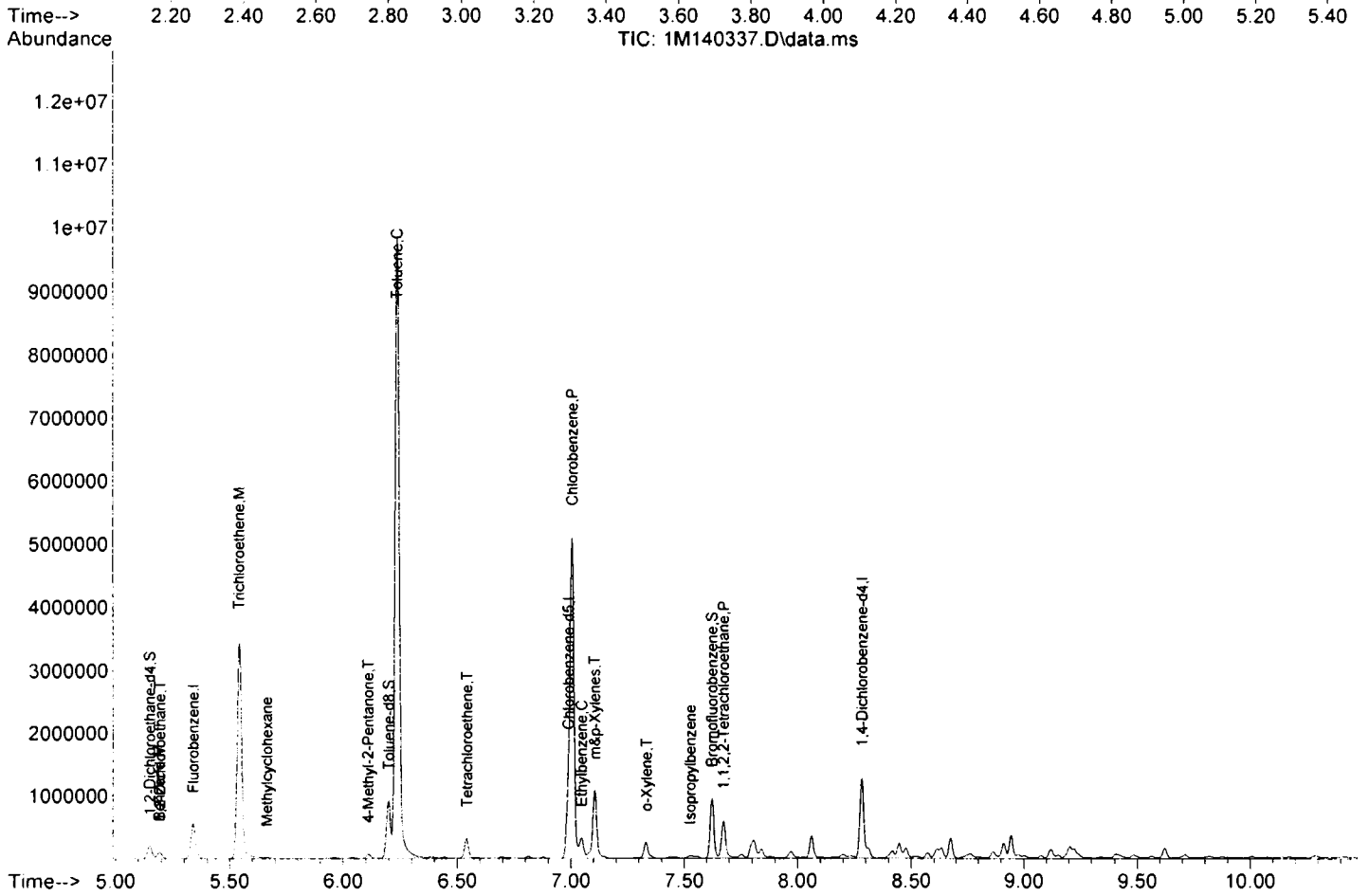
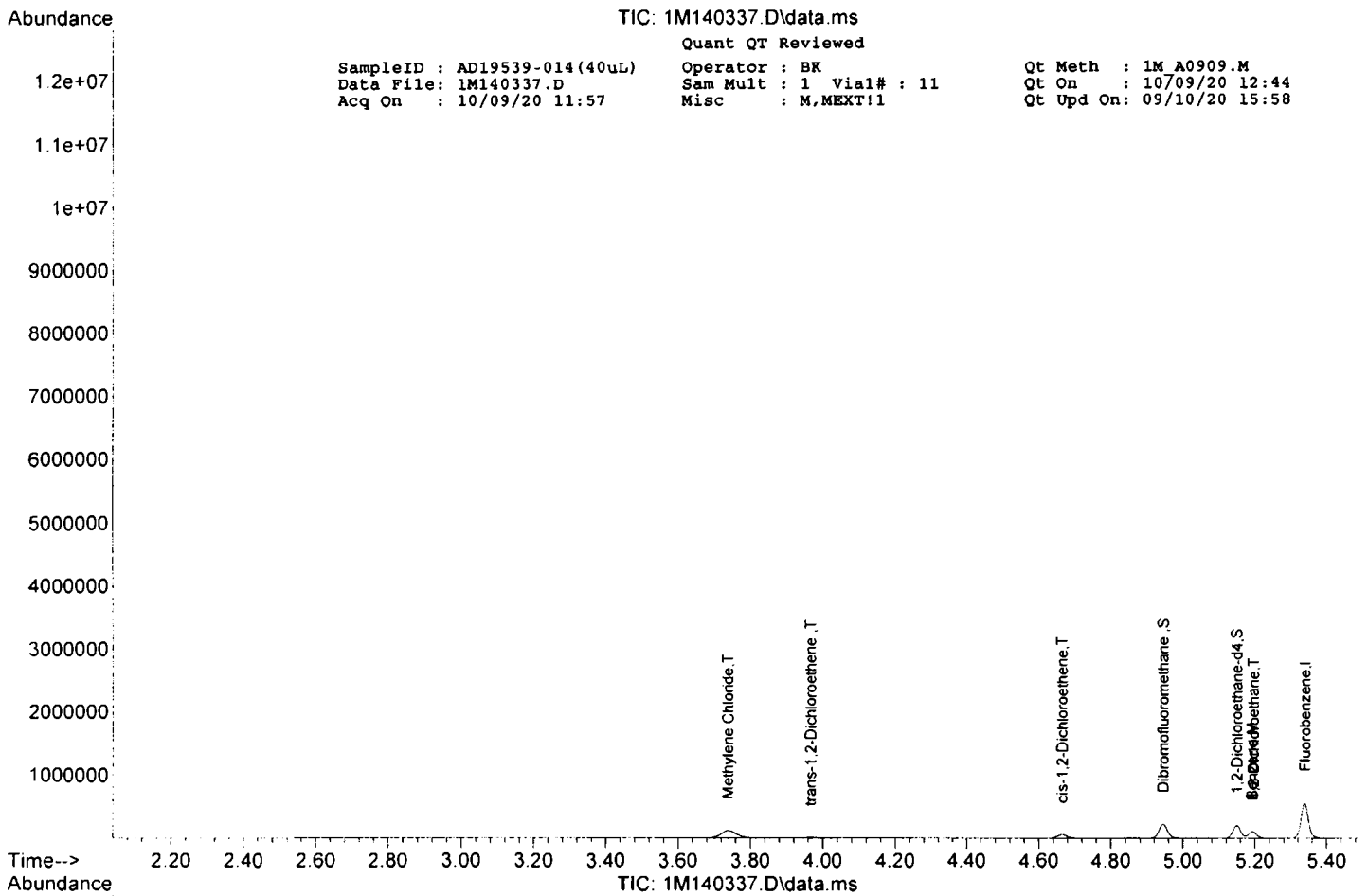


TIC: 1M140337.D\data.ms

SampleID : AD19539-014 (40uL)  
 Data File: 1M140337.D  
 Acq On : 10/09/20 11:57

Quant QT Reviewed  
 Operator : BK  
 Sam Mult : 1 Vial# : 11  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 12:44  
 Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-015      Method: EPA 8260D  
 Client Id: HSI-SB-01 (10-10.5)      Matrix: Soil  
 Data File: 11M83603.D      Initial Vol: 8.12g  
 Analysis Date: 10/06/20 11:52      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 0.616  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 82

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00069	0.0015	U	56-23-5	Carbon Tetrachloride	0.00073	0.0015	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00034</b>	<b>0.0015</b>	<b>0.0011J</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.00047</b>	<b>0.0015</b>	<b>0.18</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0010	0.0015	U	75-00-3	Chloroethane	0.0015	0.0015	U
79-00-5	1,1,2-Trichloroethane	0.00035	0.0015	U	67-66-3	Chloroform	0.0010	0.0015	U
<b>75-34-3</b>	<b>1,1-Dichloroethane</b>	<b>0.00065</b>	<b>0.0015</b>	<b>0.00097J</b>	74-87-3	Chloromethane	0.00092	0.0015	U
<b>75-35-4</b>	<b>1,1-Dichloroethene</b>	<b>0.00086</b>	<b>0.0015</b>	<b>0.0016</b>	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.00061</b>	<b>0.0015</b>	<b>0.052</b>
87-61-6	1,2,3-Trichlorobenzene	0.00041	0.0015	U	10061-01-5	cis-1,3-Dichloropropene	0.00040	0.0015	U
120-82-1	1,2,4-Trichlorobenzene	0.00047	0.0015	U	110-82-7	Cyclohexane	0.00090	0.0015	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00041	0.0015	U	124-48-1	Dibromochloromethane	0.00032	0.0015	U
106-93-4	1,2-Dibromoethane	0.00037	0.00038	U	75-71-8	Dichlorodifluoromethane	0.0011	0.0015	U
95-50-1	1,2-Dichlorobenzene	0.00038	0.0015	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.00052</b>	<b>0.00075</b>	<b>0.0028</b>
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.00031</b>	<b>0.0015</b>	<b>0.0073</b>	98-82-8	Isopropylbenzene	0.00062	0.00075	U
78-87-5	1,2-Dichloropropane	0.00062	0.0015	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.00090</b>	<b>0.00090</b>	<b>0.0024</b>
541-73-1	1,3-Dichlorobenzene	0.00041	0.0015	U	79-20-9	Methyl Acetate	0.00072	0.0015	U
106-46-7	1,4-Dichlorobenzene	0.00040	0.0015	U	<b>108-87-2</b>	<b>Methylcyclohexane</b>	<b>0.00068</b>	<b>0.0015</b>	<b>0.00093J</b>
123-91-1	1,4-Dioxane	0.036	0.075	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>0.00056</b>	<b>0.0015</b>	<b>0.0031</b>
78-93-3	2-Butanone	0.00090	0.0015	U	1634-04-4	Methyl-t-butyl ether	0.00041	0.00075	U
591-78-6	2-Hexanone	0.00064	0.0015	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.00053</b>	<b>0.00075</b>	<b>0.0019</b>
<b>108-10-1</b>	<b>4-Methyl-2-Pentanone</b>	<b>0.00044</b>	<b>0.0015</b>	<b>0.0040</b>	100-42-5	Styrene	0.00041	0.0015	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0051</b>	<b>0.0075</b>	<b>0.0080</b>	127-18-4	Tetrachloroethene	0.00074	0.0015	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.00055</b>	<b>0.00075</b>	<b>0.0086</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00050</b>	<b>0.00075</b>	<b>0.0094</b>
74-97-5	Bromochloromethane	0.00053	0.0015	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.00090</b>	<b>0.0015</b>	<b>0.0027</b>
75-27-4	Bromodichloromethane	0.00035	0.0015	U	10061-02-6	trans-1,3-Dichloropropene	0.00035	0.0015	U
75-25-2	Bromoform	0.00025	0.0015	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00062</b>	<b>0.0015</b>	<b>0.030</b>
74-83-9	Bromomethane	0.0012	0.0015	U	75-69-4	Trichlorofluoromethane	0.00089	0.0015	U
75-15-0	Carbon Disulfide	0.0026	0.0026	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>0.00092</b>	<b>0.0015</b>	<b>0.084</b>
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.00053</b>	<b>0.00075</b>	<b>0.0043</b>					

Worksheet #: 569387

**Total Target Concentration 0.4**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539 015  
 Data File: 11M83603.D  
 Acq On : 10/ 6/20 11:52

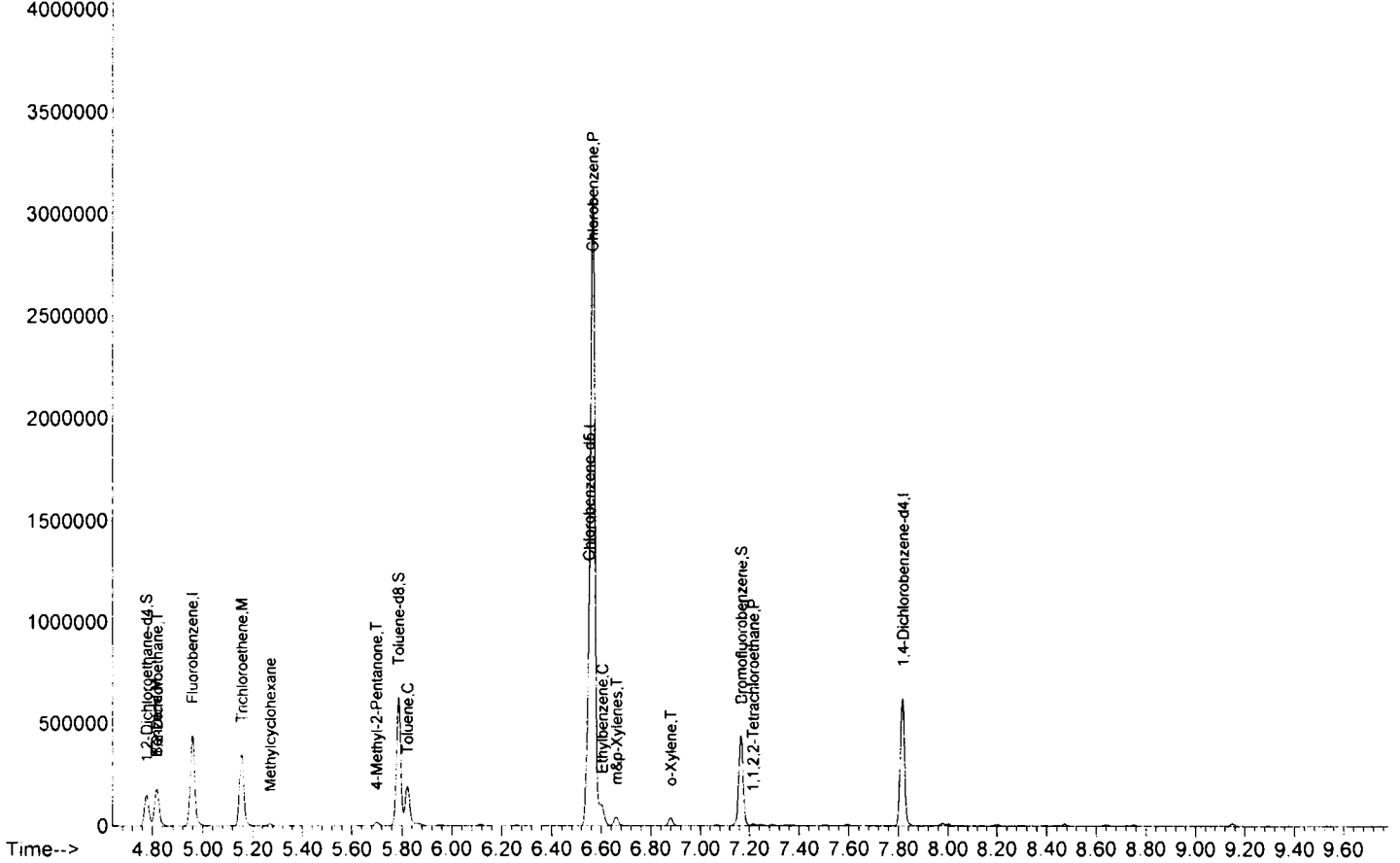
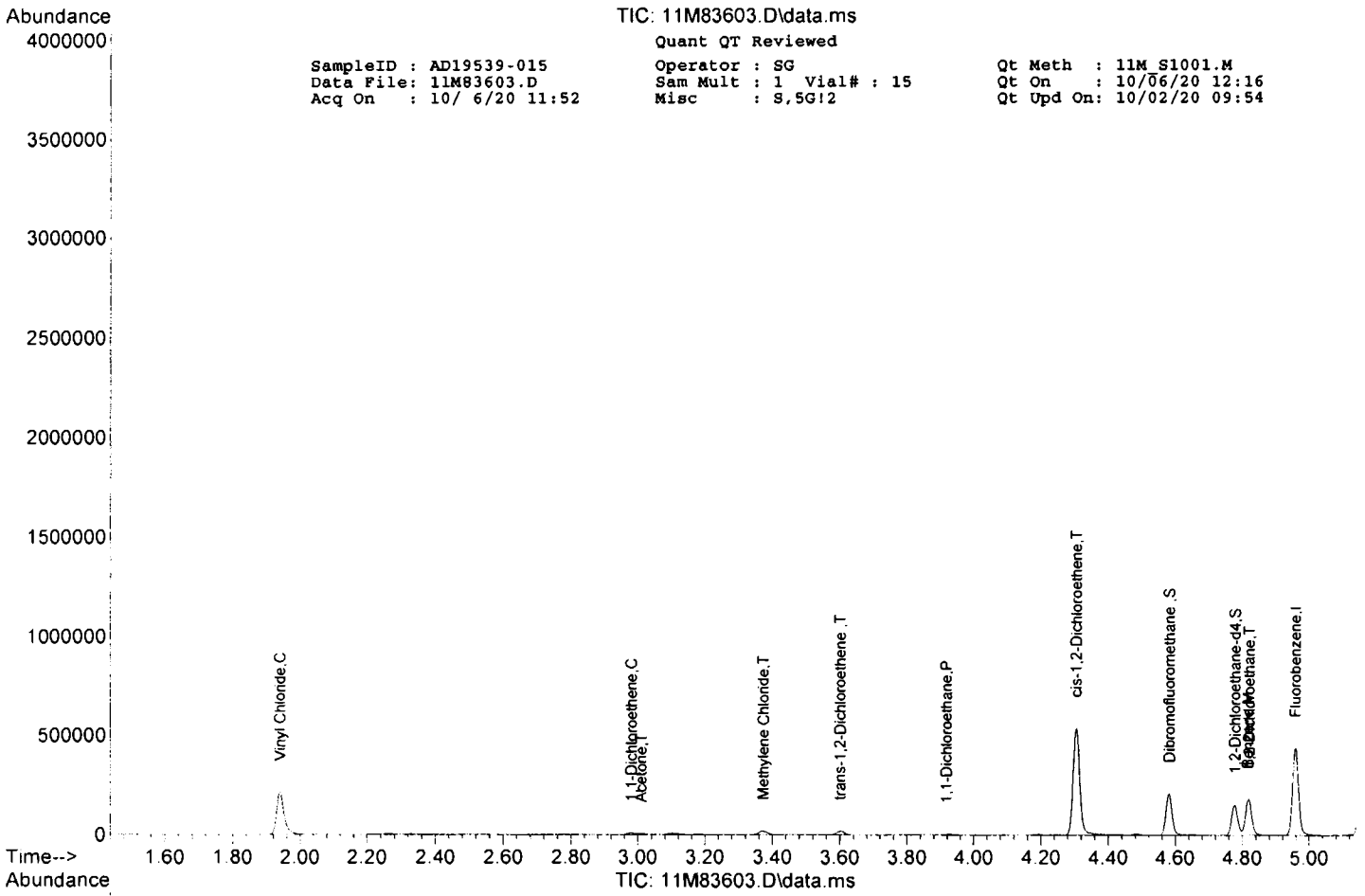
Operator : SG  
 Sam Mult : 1 Vial# : 15  
 Misc : S,SG!2

Qt Meth : 11M\_S1001.M  
 Qt On : 10/06/20 12:16  
 Qt Upd On: 10/02/20 09:54

Data Path : G:\GCMSData\2020\GCMS\_11\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.958	96	290760	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.549	117	239131	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	132671	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	84454	31.77	ug/l	0.00
Spiked Amount						Recovery = 105.90%
39) 1,2-Dichloroethane-d4	4.778	67	37332	31.83	ug/l	0.00
Spiked Amount						Recovery = 106.10%
66) Toluene-d8	5.787	98	309023	33.20	ug/l	0.00
Spiked Amount						Recovery = 110.67%
76) Bromofluorobenzene	7.167	174	101860	29.47	ug/l	0.00
Spiked Amount						Recovery = 98.23%
Target Compounds						
						Qvalue
9) Vinyl Chloride	1.940	62	213392	111.3270	ug/l	98
15) Methylene Chloride	3.373	84	9352	4.1644	ug/l	89
19) Acetone	3.009	43	5380	10.6341	ug/l	77
24) 1,1-Dichloroethene	2.980	61	4368	2.0978	ug/l	83
27) 1,1-Dichloroethane	3.916	63	3784	1.2935	ug/l	80
28) trans-1,2-Dichloroethene	3.601	96	6679	3.5335	ug/l	90
30) cis-1,2-Dichloroethene	4.305	61	202190	69.8089	ug/l	83
40) 1,2-Dichloroethane	4.820	62	25504	9.7339	ug/l	96
46) Methylcyclohexane	5.270	83	2868	1.2418	ug/l	89
49) Trichloroethene	5.157	130	88229	39.8635	ug/l	97
50) Benzene	4.816	78	84918	11.4219	ug/l	100
63) 4 Methyl-2-Pentanone	5.701	43	7616	5.3015	ug/l	98
67) Toluene	5.823	92	57027	12.5801	ug/l	91
69) Chlorobenzene	6.562	112	1352054	242.1074	ug/l	100
74) Ethylbenzene	6.604	106	8053	3.6772	ug/l	97
75) 1,1,2,2-Tetrachloroethane	7.215	83	3477	1.4414	ug/l	96
78) m&p-Xylenes	6.662	106	10094	3.2101	ug/l	73
79) o-Xylene	6.881	106	8396	2.4831	ug/l	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-016  
Client Id: HSI-SB-01 (14.5-15)  
Data File: 11M83604.D  
Analysis Date: 10/06/20 12:12  
Date Rec/Extracted: 09/30/20-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Soil  
Initial Vol: 7.04g  
Final Vol: NA  
Dilution: 0.710  
Solids: 80

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00082	0.0018	U	56-23-5	Carbon Tetrachloride	0.00086	0.0018	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00040	0.0018	0.0024	108-90-7	Chlorobenzene	0.00055	0.0018	0.065
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0012	0.0018	U	75-00-3	Chloroethane	0.0017	0.0018	U
79-00-5	1,1,2-Trichloroethane	0.00041	0.0018	U	67-86-3	Chloroform	0.0012	0.0018	U
75-34-3	1,1-Dichloroethane	0.00077	0.0018	U	74-87-3	Chloromethane	0.0011	0.0018	U
75-35-4	1,1-Dichloroethene	0.0010	0.0018	U	156-59-2	cis-1,2-Dichloroethene	0.00072	0.0018	0.014
87-61-6	1,2,3-Trichlorobenzene	0.00049	0.0018	U	10061-01-5	cis-1,3-Dichloropropene	0.00047	0.0018	U
170-82-1	1,2,4-Trichlorobenzene	0.00056	0.0018	U	110-82-7	Cyclohexane	0.0011	0.0018	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00049	0.0018	U	124-48-1	Dibromochloromethane	0.00038	0.0018	U
106-93-4	1,2-Dibromoethane	0.00044	0.00044	U	75-71-8	Dichlorodifluoromethane	0.0013	0.0018	U
95-50-1	1,2-Dichlorobenzene	0.00045	0.0018	U	100-41-4	Ethylbenzene	0.00061	0.00089	0.00070J
107-06-2	1,2-Dichloroethane	0.00036	0.0018	0.010	98-82-8	Isopropylbenzene	0.00074	0.00089	U
78-87-5	1,2-Dichloropropane	0.00073	0.0018	U	179601-23-1	m&p-Xylenes	0.0011	0.0011	0.0013
541-73-1	1,3-Dichlorobenzene	0.00049	0.0018	U	79-20-9	Methyl Acetate	0.00085	0.0018	U
106-46-7	1,4-Dichlorobenzene	0.00047	0.0018	U	108-87-2	Methylcyclohexane	0.00080	0.0018	U
123-91-1	1,4-Dioxane	0.043	0.089	U	75-09-2	Methylene Chloride	0.00067	0.0018	0.022
78-93-3	2-Butanone	0.0011	0.0018	U	1634-04-4	Methyl-t-butyl ether	0.00048	0.00089	0.0012
591-78-6	2-Hexanone	0.00075	0.0018	U	95-47-6	o-Xylene	0.00063	0.00089	U
108-10-1	4-Methyl-2-Pentanone	0.00051	0.0018	0.00081J	100-42-5	Styrene	0.00049	0.0018	U
67-64-1	Acetone	0.0060	0.0089	0.012	127-18-4	Tetrachloroethene	0.00087	0.0018	U
71-43-2	Benzene	0.00065	0.00089	0.0030	108-88-3	Toluene	0.00059	0.00089	0.035
74-97-5	Bromochloromethane	0.00062	0.0018	U	156-60-5	trans-1,2-Dichloroethene	0.0011	0.0018	0.0027
75-27-4	Bromodichloromethane	0.00042	0.0018	U	10061-02-6	trans-1,3-Dichloropropene	0.00042	0.0018	U
75-25-2	Bromoform	0.00029	0.0018	U	79-01-6	Trichloroethene	0.00073	0.0018	0.040
74-83-9	Bromomethane	0.0014	0.0018	U	75-89-4	Trichlorofluoromethane	0.0010	0.0018	U
75-15-0	Carbon Disulfide	0.0030	0.0030	U	75-01-4	Vinyl Chloride	0.0011	0.0018	0.0075
1330-20-7	Xylenes (Total)	0.00063	0.00089	0.0013					

Worksheet #: 569439

Total Target Concentration 0.22

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

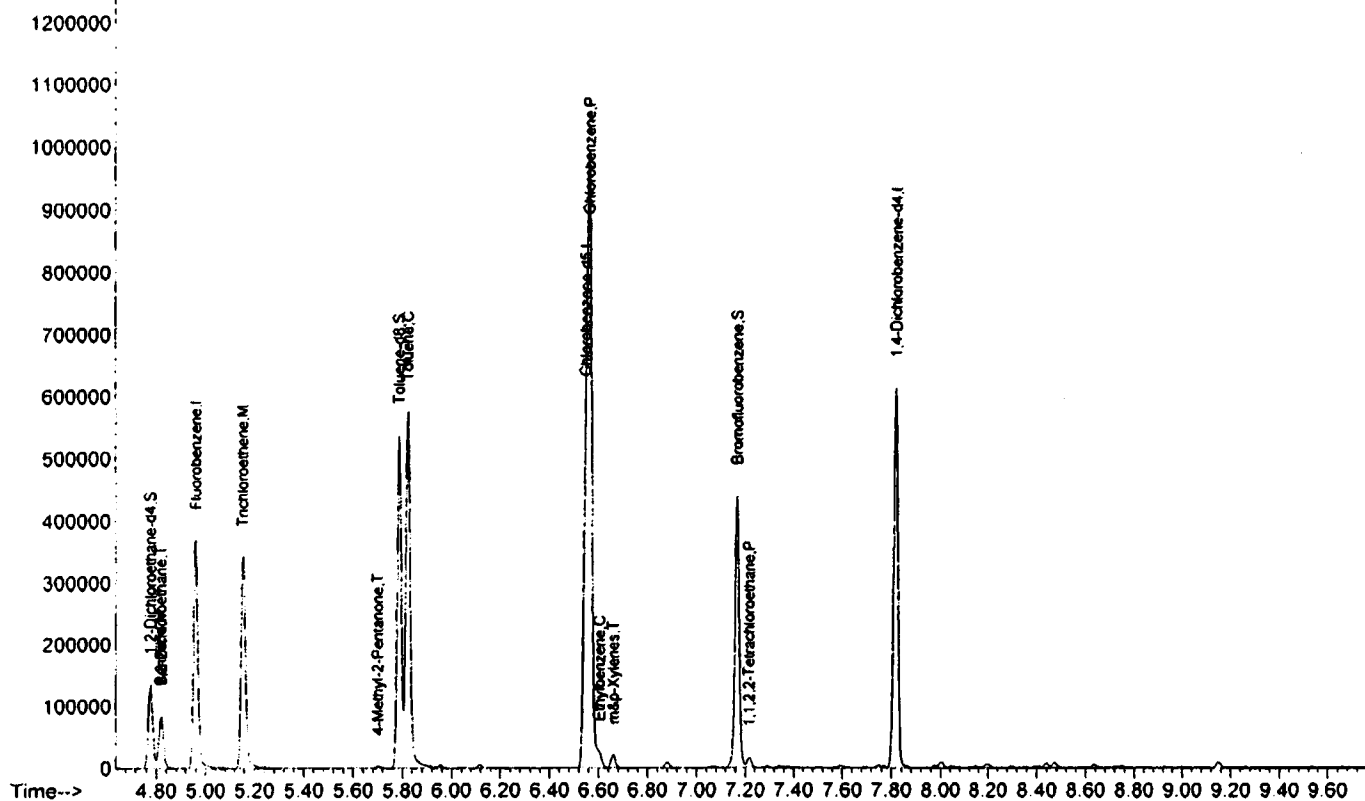
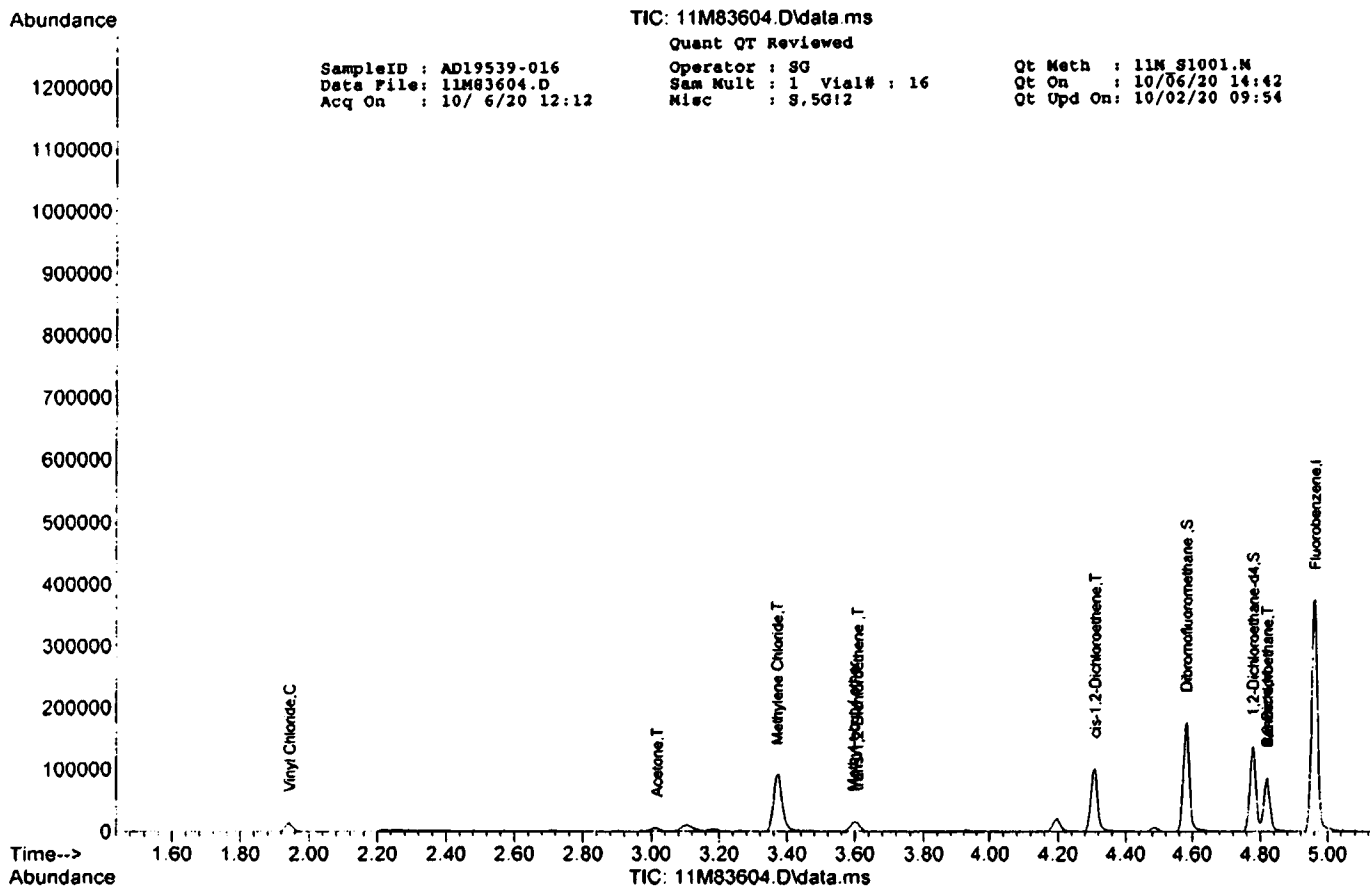
## Quantitation Report (QT Reviewed)

SampleID : AD19539-016 Operator : SG Qt Meth : 11M\_S1001.M  
 Data File: 11M83604.D Sam Mult : 1 Vial# : 16 Qt On : 10/06/20 14:42  
 Acq On : 10/ 6/20 12:12 Misc : S.5G!2 Qt Upd On: 10/02/20 09:54

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
<b>Internal Standards</b>							
4) Fluorobenzene	4.961	96	238664	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.546	117	231918	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	128450	30.00	ug/l	0.00	
<b>System Monitoring Compounds</b>							
37) Dibromofluoromethane	4.582	111	69580	31.89	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	106.30%		
39) 1,2-Dichloroethane-d4	4.778	67	32283	33.54	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	111.80%		
66) Toluene-d8	5.787	98	260353	28.84	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	96.13%		
76) Bromofluorobenzene	7.167	174	98228	29.36	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	97.87%		
<b>Target Compounds</b>							
9) Vinyl Chloride	1.943	62	13254	8.4240	ug/l	99	
15) Methylene Chloride	3.370	84	46312	25.1237	ug/l	96	
19) Acetone	3.016	43	5394	12.9890	ug/l	87	
26) Methyl-t-butyl ether	3.595	73	5507	1.4066	ug/l	92	
28) trans-1,2-Dichloroethene	3.608	96	4778	3.0796	ug/l	88	
30) cis-1,2-Dichloroethene	4.308	61	37052	15.5851	ug/l	91	
40) 1,2-Dichloroethane	4.820	62	25054	11.6494	ug/l	98	
49) Trichloroethene	5.154	130	80835	44.4950	ug/l	95	
50) Benzene	4.820	78	20827	3.4128	ug/l	100	
63) 4-Methyl-2-Pentanone	5.701	43	1267	0.9094	ug/l	83	
67) Toluene	5.823	92	172446	39.2246	ug/l	98	
69) Chlorobenzene	6.562	112	397272	73.3505	ug/l	100	
74) Ethylbenzene	6.604	106	1664	0.7848	ug/l	82	
75) 1,1,1,2-Tetrachloroethane	7.215	83	6308	2.7009	ug/l	95	
78) m&p Xylenes	6.659	106	4594	1.5090	ug/l	97	

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19539-017(8uL)      Method: EPA 8260D  
 Client Id: HSI-SB-D1      Matrix: Methanol  
 Data File: 1M140100.D      Extraction Ratio: 7.59g:10ml  
 Analysis Date: 10/05/20 19:58      Final Vol: NA  
 Date Rec/Extracted: 09/30/20-NA      Dilution: 6590  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 84

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	2.8	7.8	U	56-23-5	Carbon Tetrachloride	2.5	7.8	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>3.5</b>	<b>7.8</b>	<b>200</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>2.6</b>	<b>7.8</b>	<b>1200</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	5.7	7.8	U	75-00-3	Chloroethane	4.5	7.8	U
79-00-5	1,1,2-Trichloroethane	2.5	7.8	U	67-66-3	Chloroform	15	15	U
75-34-3	1,1-Dichloroethane	3.4	7.8	U	74-87-3	Chloromethane	4.0	7.8	U
75-35-4	1,1-Dichloroethene	4.2	7.8	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>5.0</b>	<b>7.8</b>	<b>33</b>
87-61-6	1,2,3-Trichlorobenzene	6.2	7.8	U	10061-01-5	cis-1,3-Dichloropropene	2.5	7.8	U
120-82-1	1,2,4-Trichlorobenzene	5.7	7.8	U	110-82-7	Cyclohexane	3.8	7.8	U
96-12-8	1,2-Dibromo-3-Chloropropa	6.5	7.8	U	124-48-1	Dibromochloromethane	1.9	7.8	U
106-93-4	1,2-Dibromoethane	2.7	7.8	U	75-71-8	Dichlorodifluoromethane	4.9	7.8	U
95-50-1	1,2-Dichlorobenzene	2.5	7.8	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>3.7</b>	<b>7.8</b>	<b>44</b>
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>5.0</b>	<b>5.0</b>	<b>74</b>	<b>98-82-8</b>	<b>Isopropylbenzene</b>	<b>3.9</b>	<b>7.8</b>	<b>5.0J</b>
78-87-5	1,2-Dichloropropane	2.3	7.8	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>6.7</b>	<b>7.8</b>	<b>200</b>
541-73-1	1,3-Dichlorobenzene	3.0	7.8	U	79-20-9	Methyl Acetate	5.5	7.8	U
106-46-7	1,4-Dichlorobenzene	2.9	7.8	U	108-87-2	Methylcyclohexane	4.8	7.8	U
123-91-1	1,4-Dioxane	310	390	U	<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>2.3</b>	<b>7.8</b>	<b>160</b>
78-93-3	2-Butanone	5.9	7.8	U	1634-04-4	Methyl-t-butyl ether	2.4	3.9	U
591-78-6	2-Hexanone	4.7	7.8	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>5.4</b>	<b>7.8</b>	<b>46</b>
<b>108-10-1</b>	<b>4-Methyl-2-Pentanone</b>	<b>3.8</b>	<b>7.8</b>	<b>76</b>	100-42-5	Styrene	4.3	7.8	U
67-64-1	Acetone	36	39	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>2.8</b>	<b>7.8</b>	<b>95</b>
<b>71-43-2</b>	<b>Benzene</b>	<b>2.3</b>	<b>3.9</b>	<b>9.7</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>2.6</b>	<b>7.8</b>	<b>2200</b>
74-97-5	Bromochloromethane	6.2	7.8	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>2.4</b>	<b>7.8</b>	<b>12</b>
75-27-4	Bromodichloromethane	2.7	7.8	U	10061-02-6	trans-1,3-Dichloropropene	2.4	7.8	U
75-25-2	Bromoform	4.2	7.8	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>2.7</b>	<b>7.8</b>	<b>1700</b>
74-83-9	Bromomethane	3.9	7.8	U	75-69-4	Trichlorofluoromethane	2.4	7.8	U
75-15-0	Carbon Disulfide	3.3	7.8	U	75-01-4	Vinyl Chloride	5.5	7.8	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>5.4</b>	<b>7.8</b>	<b>250</b>					

Worksheet #: 569527

**Total Target Concentration 6100**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.



SampleID : AD19539-017(8uL)  
 Data File: 1M140100.D  
 Acq On : 10/05/20 19:58

Operator : WP  
 Sam Mult : 1 Vial# : 16  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/05/20 20:48  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.339	96	436615	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	436752	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	291582	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.944	111	120944	29.69	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.97%
39) 1,2-Dichloroethane-d4	5.150	67	63708	28.72	ug/l	0.00	
Spiked Amount	30.000						Recovery = 95.73%
66) Toluene-d8	6.198	98	484245	27.44	ug/l	0.00	
Spiked Amount	30.000						Recovery = 91.47%
76) Bromofluorobenzene	7.622	174	221349	30.13	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.43%
Target Compounds							
15) Methylene Chloride	3.741	84	60568	20.5948	ug/l	91	Qvalue
28) trans-1,2-Dichloroethene	3.960	96	3938	1.4674	ug/l	85	
30) cis-1,2-Dichloroethene	4.667	61	21316	4.1695	ug/l	96	
40) 1,2-Dichloroethane	5.191	62	41154	9.4459	ug/l	99	
49) Trichloroethene	5.542	130	718315	213.5923	ug/l	97	
50) Benzene	5.195	78	14236	1.2383	ug/l	100	
63) 4-Methyl-2-Pentanone	6.114	43	38062	9.6835	ug/l	91	
65) Tetrachloroethene	6.539	164	38072	12.0796	ug/l	99	
67) Toluene	6.236	92	2385803	276.2361	ug/l	94	
69) Chlorobenzene	7.005	112	1503842	149.1974	ug/l	99	
74) Ethylbenzene	7.047	106	25774	5.5646	ug/l	95	
75) 1,1,2,2-Tetrachloroethane	7.674	83	148496	25.7975	ug/l	98	
78) m&p-Xylenes	7.105	106	157523	25.3369	ug/l	100	
79) o-Xylene	7.330	106	37208	5.8447	ug/l	86	
84) Isopropylbenzene	7.526	105	10169	0.6342	ug/l	94	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

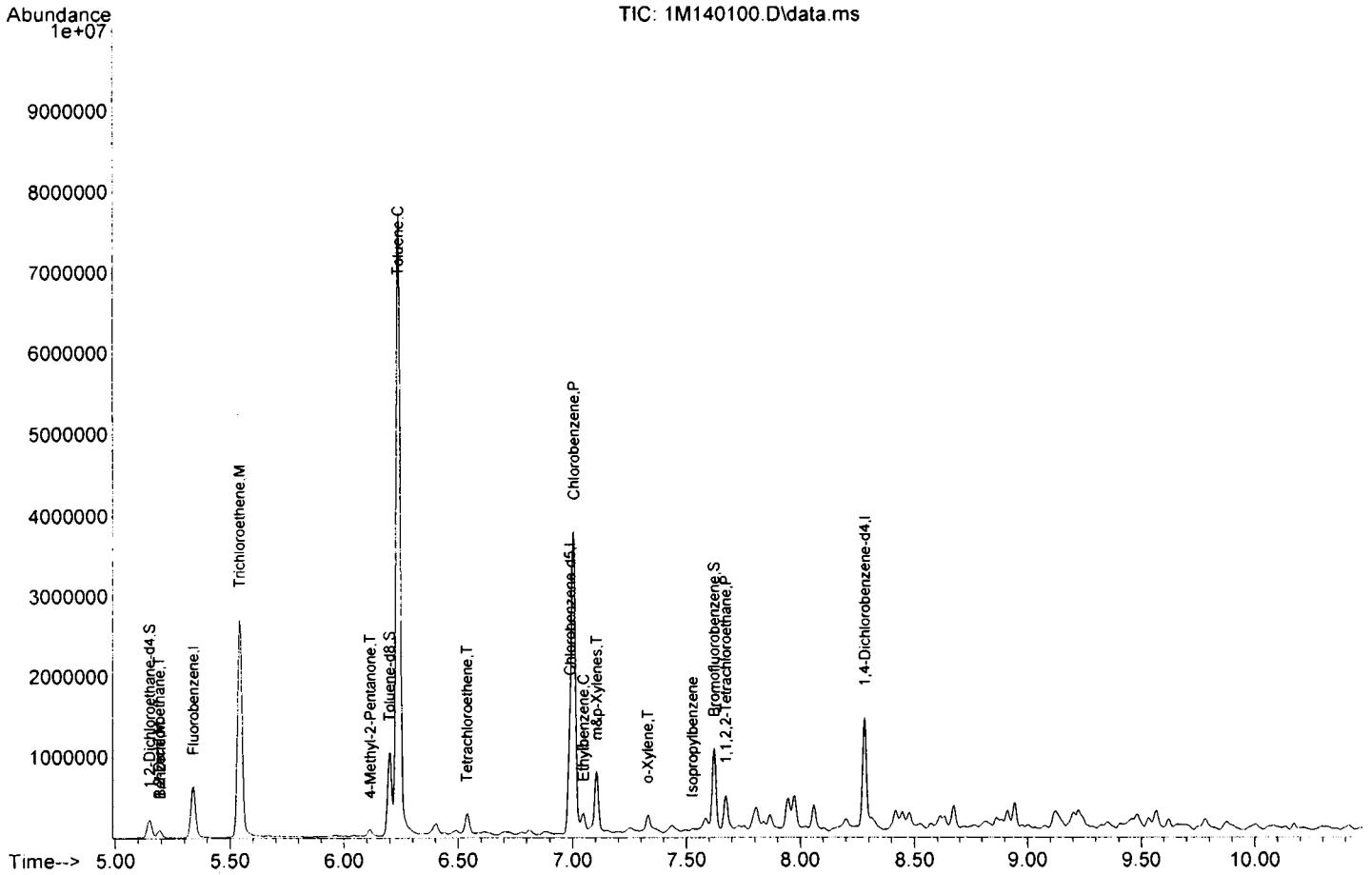
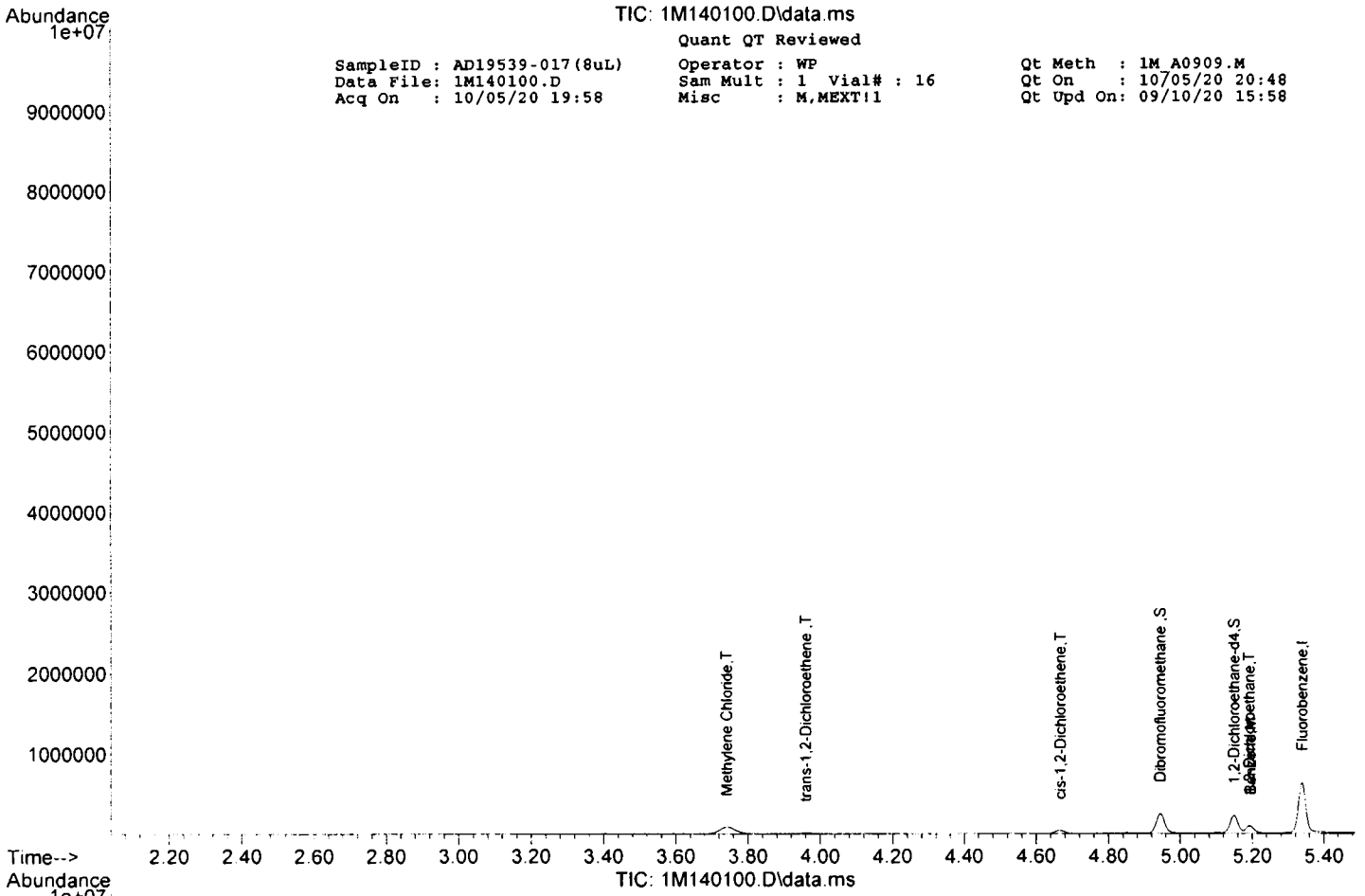
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TIC: 1M140100.D\data.ms

SampleID : AD19539-017(8uL)  
Data File: 1M140100.D  
Acq On : 10/05/20 19:58

Quant QT Reviewed  
Operator : WP  
Sam Mult : 1 Vial# : 16  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/05/20 20:48  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 11M83553.D

Analysis Date: 10/05/20 16:43

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 5g

Final Vol: NA

Dilution: 1.00

Solids: 100

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00092	0.0020	U	56-23-5	Carbon Tetrachloride	0.00097	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00045	0.0020	U	108-90-7	Chlorobenzene	0.00062	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0014	0.0020	U	75-00-3	Chloroethane	0.0020	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.00046	0.0020	U	67-66-3	Chloroform	0.0014	0.0020	U
75-34-3	1,1-Dichloroethane	0.00087	0.0020	U	74-87-3	Chloromethane	0.0012	0.0020	U
75-35-4	1,1-Dichloroethene	0.0012	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.00081	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.00055	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.00053	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.00063	0.0020	U	110-82-7	Cyclohexane	0.0012	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00055	0.0020	U	124-48-1	Dibromochloromethane	0.00043	0.0020	U
106-93-4	1,2-Dibromoethane	0.00049	0.00050	U	75-71-8	Dichlorodifluoromethane	0.0014	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.00051	0.0020	U	100-41-4	Ethylbenzene	0.00069	0.0010	U
107-06-2	1,2-Dichloroethane	0.00041	0.0020	U	98-82-8	Isopropylbenzene	0.00083	0.0010	U
78-87-5	1,2-Dichloropropane	0.00082	0.0020	U	179601-23-1	m&p-Xylenes	0.0012	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.00055	0.0020	U	79-20-9	Methyl Acetate	0.00096	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.00053	0.0020	U	108-87-2	Methylcyclohexane	0.00090	0.0020	U
123-91-1	1,4-Dioxane	0.049	0.10	U	75-09-2	Methylene Chloride	0.00075	0.0020	U
78-93-3	2-Butanone	0.0012	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.00054	0.0010	U
591-78-6	2-Hexanone	0.00085	0.0020	U	95-47-6	o-Xylene	0.00071	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.00058	0.0020	U	100-42-5	Styrene	0.00055	0.0020	U
67-64-1	Acetone	0.0068	0.010	U	127-18-4	Tetrachloroethene	0.00098	0.0020	U
71-43-2	Benzene	0.00073	0.0010	U	108-88-3	Toluene	0.00066	0.0010	U
74-97-5	Bromochloromethane	0.00070	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0012	0.0020	U
75-27-4	Bromodichloromethane	0.00047	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.00047	0.0020	U
75-25-2	Bromoform	0.00033	0.0020	U	79-01-6	Trichloroethene	0.00082	0.0020	U
74-83-9	Bromomethane	0.0016	0.0020	U	75-69-4	Trichlorofluoromethane	0.0012	0.0020	U
75-15-0	Carbon Disulfide	0.0034	0.0034	U	75-01-4	Vinyl Chloride	0.0012	0.0020	U

Worksheet #: 569387

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 11M83553.D  
 Acq On : 10/ 5/20 16:43

Operator : WP  
 Sam Mult : 1 Vial# : 10  
 Misc : S,5G

Qt Meth : 11M\_S1001.M  
 Qt On : 10/05/20 17:14  
 Qt Upd On: 10/02/20 09:54

Data Path : G:\GCMSData\2020\GCMS\_11\Data\10-05-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
-----							
Internal Standards							
4) Fluorobenzene	4.961	96	276519	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.546	117	256924	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	7.816	152	138354	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.578	111	76993	30.45	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.50%
39) 1,2-Dichloroethane-d4	4.778	67	33989	30.47	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.57%
66) Toluene-d8	5.787	98	295532	29.55	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.50%
76) Bromofluorobenzene	7.167	174	104127	28.89	ug/l	0.00	
Spiked Amount	30.000						Recovery = 96.30%
-----							
Target Compounds							Qvalue
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

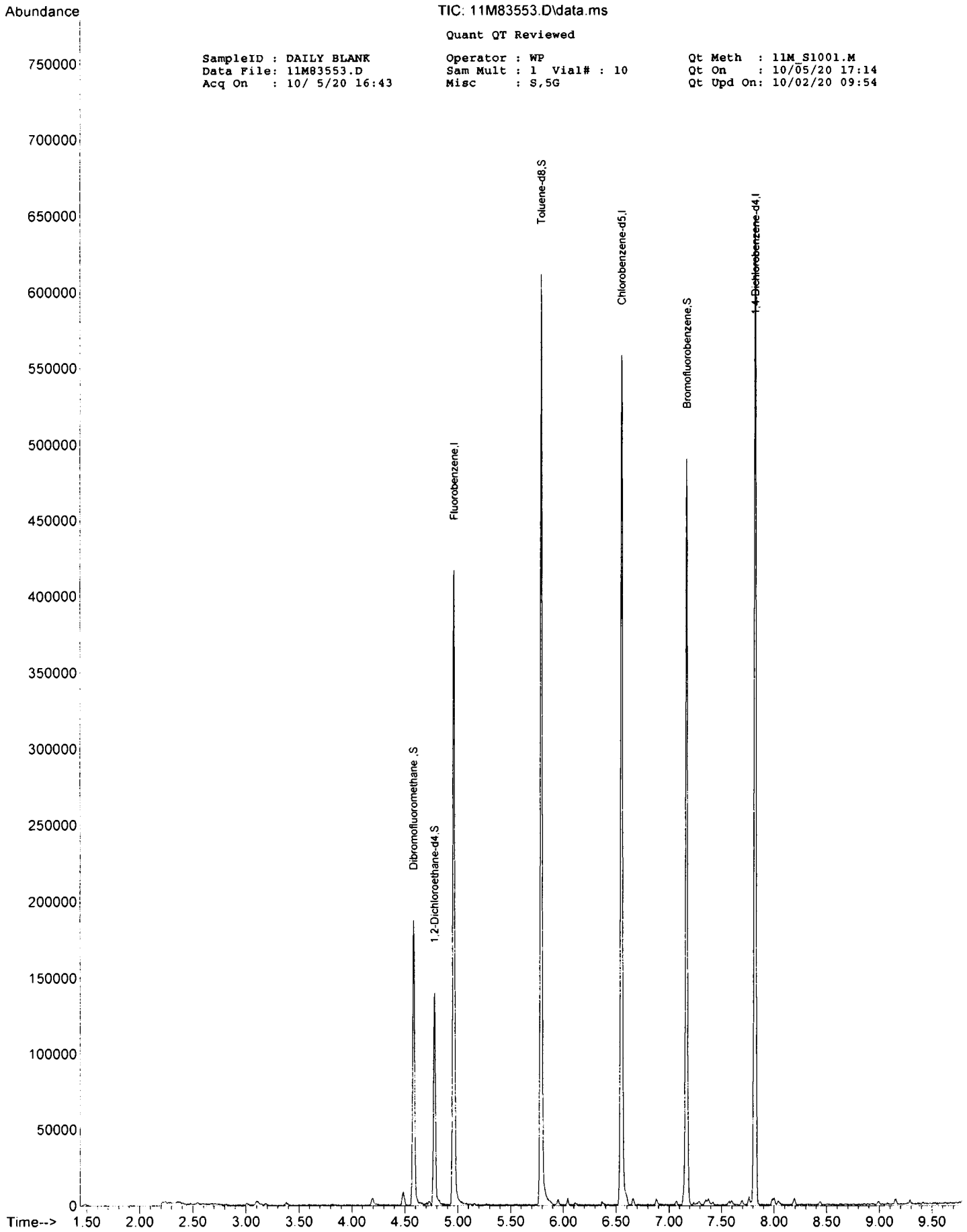
TIC: 11M83553.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 11M83553.D  
Acq On : 10/ 5/20 16:43

Operator : WP  
Sam Mult : 1 Vial# : 10  
Misc : S,5G

Qt Meth : 11M\_S1001.M  
Qt On : 10/05/20 17:14  
Qt Upd On: 10/02/20 09:54



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 11M83601.D

Analysis Date: 10/06/20 11:13

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 5g

Final Vol: NA

Dilution: 1.00

Solids: 100

Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00092	0.0020	U	56-23-5	Carbon Tetrachloride	0.00097	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00045	0.0020	U	108-90-7	Chlorobenzene	0.00062	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0014	0.0020	U	75-00-3	Chloroethane	0.0020	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.00046	0.0020	U	67-66-3	Chloroform	0.0014	0.0020	U
75-34-3	1,1-Dichloroethane	0.00087	0.0020	U	74-87-3	Chloromethane	0.0012	0.0020	U
75-35-4	1,1-Dichloroethene	0.0012	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.00081	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.00055	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.00053	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.00063	0.0020	U	110-82-7	Cyclohexane	0.0012	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00055	0.0020	U	124-48-1	Dibromochloromethane	0.00043	0.0020	U
106-93-4	1,2-Dibromoethane	0.00049	0.00050	U	75-71-8	Dichlorodifluoromethane	0.0014	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.00051	0.0020	U	100-41-4	Ethylbenzene	0.00069	0.0010	U
107-06-2	1,2-Dichloroethane	0.00041	0.0020	U	98-82-8	Isopropylbenzene	0.00083	0.0010	U
78-87-5	1,2-Dichloropropane	0.00082	0.0020	U	179601-23-1	m&p-Xylenes	0.0012	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.00055	0.0020	U	79-20-9	Methyl Acetate	0.00096	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.00053	0.0020	U	108-87-2	Methylcyclohexane	0.00090	0.0020	U
123-91-1	1,4-Dioxane	0.049	0.10	U	75-09-2	Methylene Chloride	0.00075	0.0020	U
78-93-3	2-Butanone	0.0012	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.00054	0.0010	U
591-78-6	2-Hexanone	0.00085	0.0020	U	95-47-6	o-Xylene	0.00071	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.00058	0.0020	U	100-42-5	Styrene	0.00055	0.0020	U
67-64-1	Acetone	0.0068	0.010	U	127-18-4	Tetrachloroethene	0.00098	0.0020	U
71-43-2	Benzene	0.00073	0.0010	U	108-88-3	Toluene	0.00066	0.0010	U
74-97-5	Bromochloromethane	0.00070	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0012	0.0020	U
75-27-4	Bromodichloromethane	0.00047	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.00047	0.0020	U
75-25-2	Bromoform	0.00033	0.0020	U	79-01-6	Trichloroethene	0.00082	0.0020	U
74-83-9	Bromomethane	0.0016	0.0020	U	75-69-4	Trichlorofluoromethane	0.0012	0.0020	U
75-15-0	Carbon Disulfide	0.0034	0.0034	U	75-01-4	Vinyl Chloride	0.0012	0.0020	U

Worksheet #: 569387

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 11M83601.D  
 Acq On : 10/ 6/20 11:13

Operator : SG  
 Sam Mult : 1 Vial# : 13  
 Misc : S,5G

Qt Meth : 11M\_S1001.M  
 Qt On : 10/06/20 12:15  
 Qt Upd On: 10/02/20 09:54

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_11\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.958	96	252434	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.546	117	239899	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.816	152	131022	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.582	111	72944	31.61	ug/l	0.00
Spiked Amount	30.000					Recovery = 105.37%
39) 1,2-Dichloroethane-d4	4.775	67	29922	29.39	ug/l	0.00
Spiked Amount	30.000					Recovery = 97.97%
66) Toluene-d8	5.787	98	272731	29.21	ug/l	0.00
Spiked Amount	30.000					Recovery = 97.37%
76) Bromofluorobenzene	7.167	174	99089	29.03	ug/l	0.00
Spiked Amount	30.000					Recovery = 96.77%
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

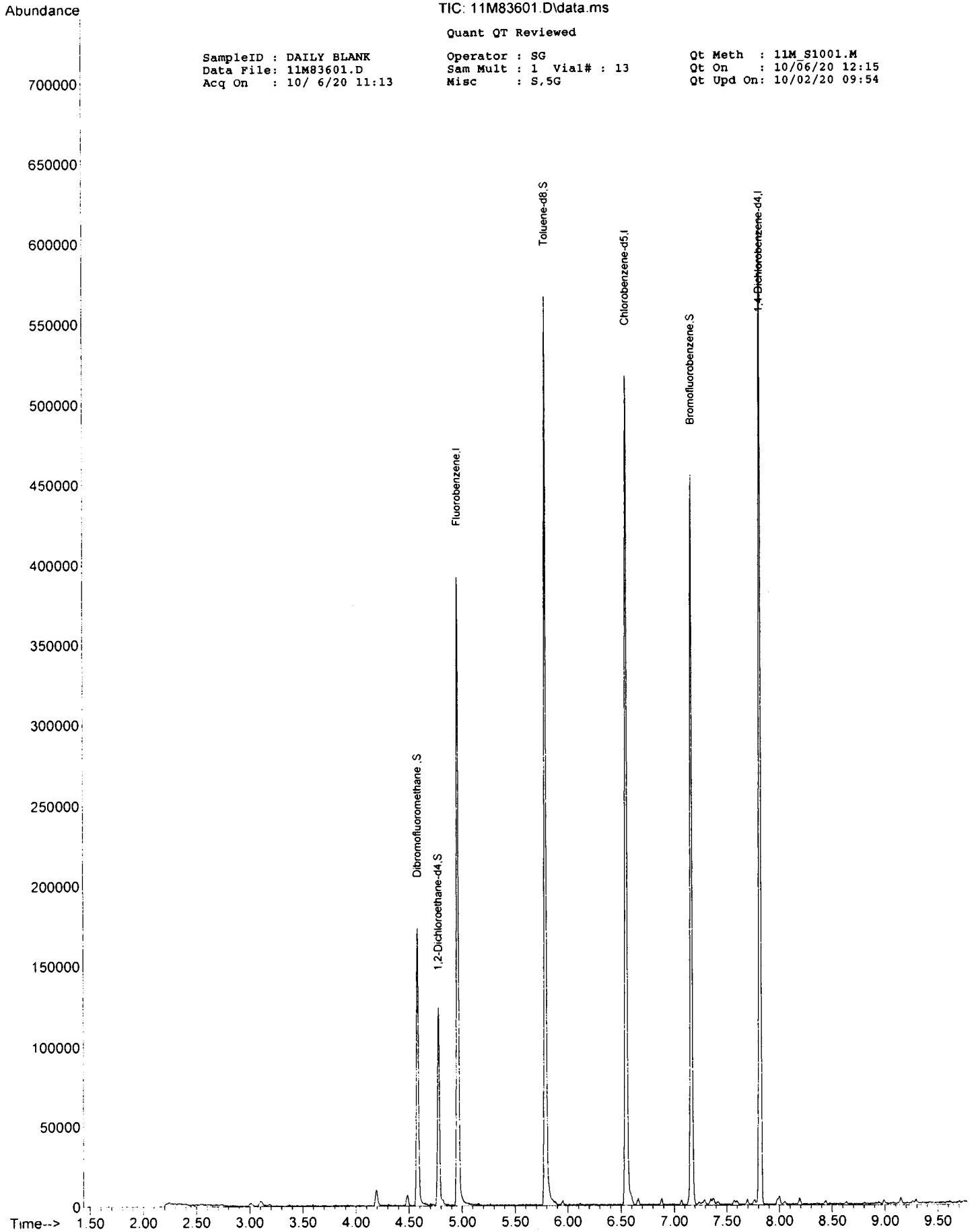
TIC: 11M83601.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 11M83601.D  
Acq On : 10/ 6/20 11:13

Operator : SG  
Sam Mult : 1 Vial# : 13  
Misc : S,5G

Qt Meth : 11M\_S1001.M  
Qt On : 10/06/20 12:15  
Qt Upd On: 10/02/20 09:54





**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK  
Client Id:  
Data File: 1M140092.D  
Analysis Date: 10/05/20 17:13  
Date Rec/Extracted:  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Aqueous  
Initial Vol: 5ml  
Final Vol: NA  
Dilution: 1.00  
Solids: 0

Units: ug/L									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.36	1.0	U	56-23-5	Carbon Tetrachloride	0.32	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.45	1.0	U	108-90-7	Chlorobenzene	0.33	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.73	1.0	U	75-00-3	Chloroethane	0.58	1.0	U
79-00-5	1,1,2-Trichloroethane	0.32	1.0	U	67-66-3	Chloroform	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.43	1.0	U	74-87-3	Chloromethane	0.52	1.0	U
75-35-4	1,1-Dichloroethene	0.53	1.0	U	156-59-2	cis-1,2-Dichloroethene	0.64	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.79	1.0	U	10061-01-5	cis-1,3-Dichloropropene	0.32	1.0	U
120-82-1	1,2,4-Trichlorobenzene	0.73	1.0	U	110-82-7	Cyclohexane	0.49	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.83	1.0	U	124-48-1	Dibromochloromethane	0.24	1.0	U
106-93-4	1,2-Dibromoethane	0.34	1.0	U	75-71-8	Dichlorodifluoromethane	0.62	1.0	U
95-50-1	1,2-Dichlorobenzene	0.32	1.0	U	100-41-4	Ethylbenzene	0.47	1.0	U
107-06-2	1,2-Dichloroethane	0.64	0.64	U	98-82-8	Isopropylbenzene	0.49	1.0	U
78-87-5	1,2-Dichloropropane	0.30	1.0	U	179601-23-1	m&p-Xylenes	0.85	1.0	U
541-73-1	1,3-Dichlorobenzene	0.38	1.0	U	79-20-9	Methyl Acetate	0.70	1.0	U
106-46-7	1,4-Dichlorobenzene	0.37	1.0	U	108-87-2	Methylcyclohexane	0.61	1.0	U
123-91-1	1,4-Dioxane	39	50	U	75-09-2	Methylene Chloride	0.29	1.0	U
78-93-3	2-Butanone	0.75	1.0	U	1634-04-4	Methyl-t-butyl ether	0.31	0.50	U
591-78-6	2-Hexanone	0.60	1.0	U	95-47-6	o-Xylene	0.68	1.0	U
108-10-1	4-Methyl-2-Pentanone	0.49	1.0	U	100-42-5	Styrene	0.54	1.0	U
67-64-1	Acetone	4.6	5.0	U	127-18-4	Tetrachloroethene	0.36	1.0	U
71-43-2	Benzene	0.30	0.50	U	108-88-3	Toluene	0.33	1.0	U
74-97-5	Bromochloromethane	0.79	1.0	U	156-60-5	trans-1,2-Dichloroethene	0.31	1.0	U
75-27-4	Bromodichloromethane	0.35	1.0	U	10061-02-6	trans-1,3-Dichloropropene	0.31	1.0	U
75-25-2	Bromoform	0.54	1.0	U	79-01-6	Trichloroethene	0.35	1.0	U
74-83-9	Bromomethane	0.50	1.0	U	75-69-4	Trichlorofluoromethane	0.31	1.0	U
75-15-0	Carbon Disulfide	0.42	1.0	U	75-01-4	Vinyl Chloride	0.71	1.0	U

Worksheet #: 569387

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 1M140092.D  
 Acq On : 10/05/20 17:13

Operator : WP  
 Sam Mult : 1 Vial# : 9  
 Misc : A,SML

Qt Meth : 1M\_A0909.M  
 Qt On : 10/05/20 18:08  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
-----							
Internal Standards							
4) Fluorobenzene	5.339	96	353375	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	351678	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	213944	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.944	111	100098	30.36	ug/l	0.00	
Spiked Amount							
							Recovery = 101.20%
39) 1,2-Dichloroethane-d4	5.150	67	53143	29.60	ug/l	0.00	
Spiked Amount							Recovery = 98.67%
66) Toluene-d8	6.201	98	384404	27.05	ug/l	0.00	
Spiked Amount							Recovery = 90.17%
76) Bromofluorobenzene	7.622	174	163197	30.27	ug/l	0.00	
Spiked Amount							Recovery = 100.90%
-----							
Target Compounds							Qvalue
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

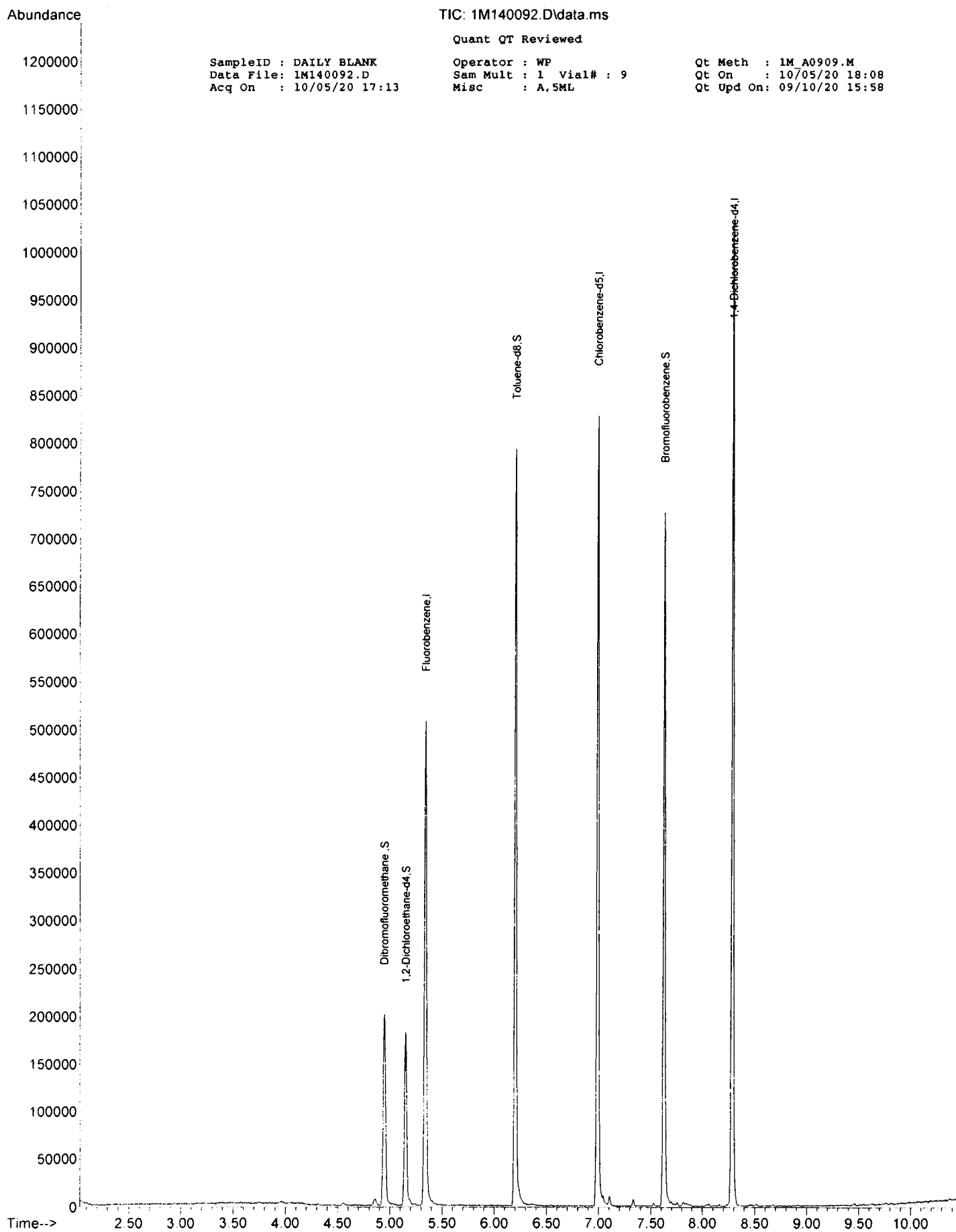
TIC: 1M140092.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 1M140092.D  
Acq On : 10/05/20 17:13

Operator : WP  
Sam Mult : 1 Vial# : 9  
Misc : A,5ML

Qt Meth : 1M\_A0909.M  
Qt On : 10/05/20 18:08  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Method: EPA 8260D

Client Id:

Matrix: Methanol

Data File: 1M140093.D

Extraction Ratio: 5g:10ml

Analysis Date: 10/05/20 17:33

Final Vol: NA

Date Rec/Extracted:

Dilution: 100

Column: DB-624 25M 0.200mm ID 1.12um film

Solids: 100

Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.036	0.10	U	56-23-5	Carbon Tetrachloride	0.032	0.10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.045	0.10	U	108-90-7	Chlorobenzene	0.033	0.10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.073	0.10	U	75-00-3	Chloroethane	0.058	0.10	U
79-00-5	1,1,2-Trichloroethane	0.032	0.10	U	67-66-3	Chloroform	0.20	0.20	U
75-34-3	1,1-Dichloroethane	0.043	0.10	U	74-87-3	Chloromethane	0.052	0.10	U
75-35-4	1,1-Dichloroethene	0.053	0.10	U	156-59-2	cis-1,2-Dichloroethene	0.064	0.10	U
87-61-6	1,2,3-Trichlorobenzene	0.079	0.10	U	10061-01-5	cis-1,3-Dichloropropene	0.032	0.10	U
120-82-1	1,2,4-Trichlorobenzene	0.073	0.10	U	110-82-7	Cyclohexane	0.049	0.10	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.083	0.10	U	124-48-1	Dibromochloromethane	0.024	0.10	U
106-93-4	1,2-Dibromoethane	0.034	0.10	U	75-71-8	Dichlorodifluoromethane	0.062	0.10	U
95-50-1	1,2-Dichlorobenzene	0.032	0.10	U	100-41-4	Ethylbenzene	0.047	0.10	U
107-06-2	1,2-Dichloroethane	0.064	0.064	U	98-82-8	Isopropylbenzene	0.049	0.10	U
78-87-5	1,2-Dichloropropane	0.030	0.10	U	179601-23-1	m&p-Xylenes	0.085	0.10	U
541-73-1	1,3-Dichlorobenzene	0.038	0.10	U	79-20-9	Methyl Acetate	0.070	0.10	U
106-46-7	1,4-Dichlorobenzene	0.037	0.10	U	108-87-2	Methylcyclohexane	0.061	0.10	U
123-91-1	1,4-Dioxane	3.9	5.0	U	75-09-2	Methylene Chloride	0.029	0.10	U
78-93-3	2-Butanone	0.075	0.10	U	1634-04-4	Methyl-t-butyl ether	0.031	0.050	U
591-78-6	2-Hexanone	0.060	0.10	U	95-47-6	o-Xylene	0.068	0.10	U
108-10-1	4-Methyl-2-Pentanone	0.049	0.10	U	100-42-5	Styrene	0.054	0.10	U
67-64-1	Acetone	0.46	0.50	U	127-18-4	Tetrachloroethene	0.036	0.10	U
71-43-2	Benzene	0.030	0.050	U	108-88-3	Toluene	0.033	0.10	U
74-97-5	Bromochloromethane	0.079	0.10	U	156-60-5	trans-1,2-Dichloroethene	0.031	0.10	U
75-27-4	Bromodichloromethane	0.035	0.10	U	10061-02-6	trans-1,3-Dichloropropene	0.031	0.10	U
75-25-2	Bromoform	0.054	0.10	U	79-01-6	Trichloroethene	0.035	0.10	U
74-83-9	Bromomethane	0.050	0.10	U	75-69-4	Trichlorofluoromethane	0.031	0.10	U
75-15-0	Carbon Disulfide	0.042	0.10	U	75-01-4	Vinyl Chloride	0.071	0.10	U

Worksheet #: 569387

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 1M140093.D  
 Acq On : 10/05/20 17:33

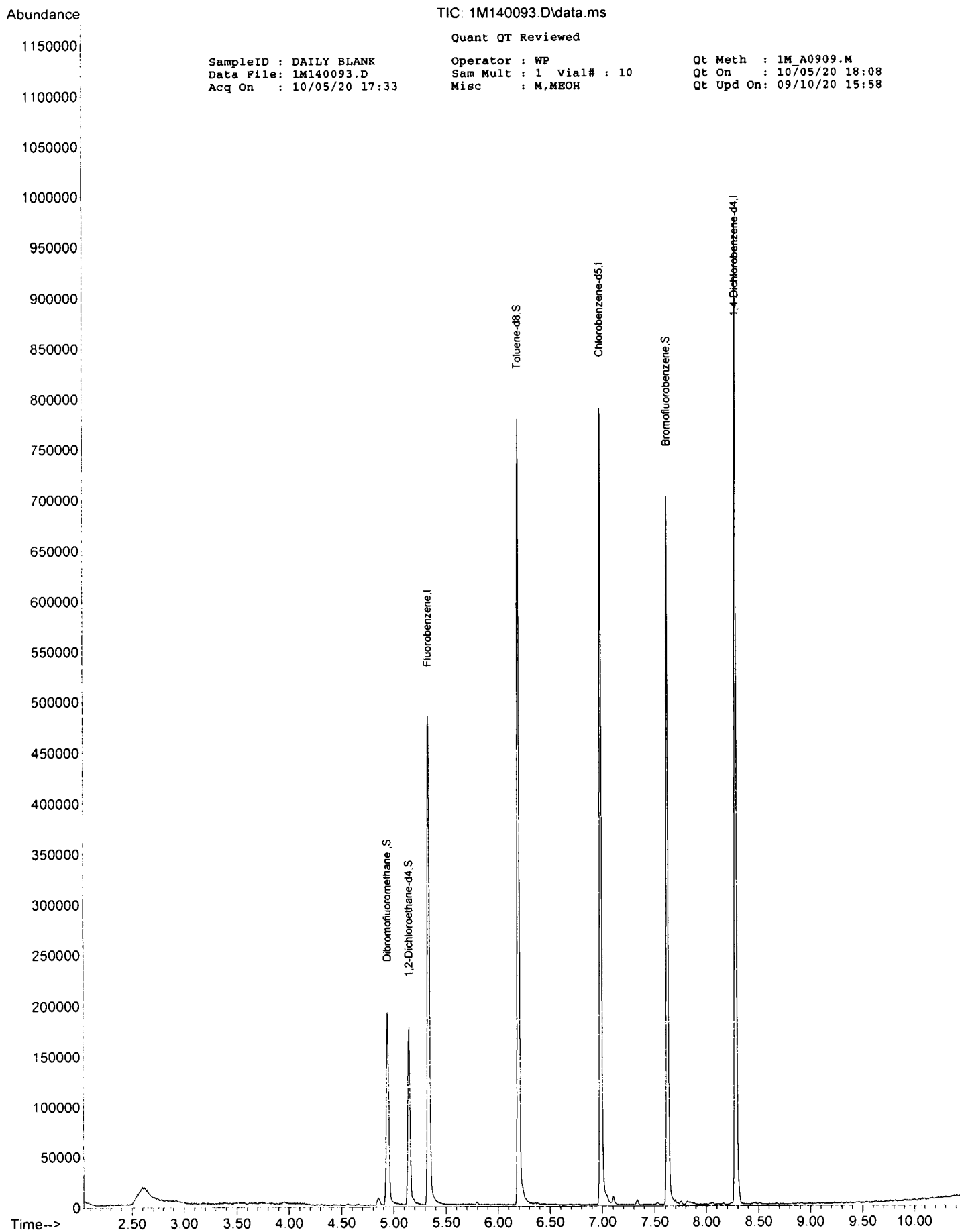
Operator : WP  
 Sam Mult : 1 Vial# : 10  
 Misc : M,MEOH

Qt Meth : 1M\_A0909.M  
 Qt On : 10/05/20 18:08  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.336	96	332905	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.986	117	338178	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.281	152	201374	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.941	111	94703	30.49	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.63%	
39) 1,2-Dichloroethane-d4	5.146	67	49953	29.53	ug/l	0.00
Spiked Amount	30.000		Recovery	=	98.43%	
66) Toluene-d8	6.198	98	368163	26.94	ug/l	0.00
Spiked Amount	30.000		Recovery	=	89.80%	
76) Bromofluorobenzene	7.622	174	156208	30.79	ug/l	0.00
Spiked Amount	30.000		Recovery	=	102.63%	
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK  
Client Id:  
Data File: 1M140333.D  
Analysis Date: 10/09/20 10:26  
Date Rec/Extracted:  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Methanol  
Extraction Ratio: 5g:10ml  
Final Vol: NA  
Dilution: 100  
Solids: 100

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.036	0.10	U	56-23-5	Carbon Tetrachloride	0.032	0.10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.045	0.10	U	108-90-7	Chlorobenzene	0.033	0.10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.073	0.10	U	75-00-3	Chloroethane	0.058	0.10	U
79-00-5	1,1,2-Trichloroethane	0.032	0.10	U	67-66-3	Chloroform	0.20	0.20	U
75-34-3	1,1-Dichloroethane	0.043	0.10	U	74-87-3	Chloromethane	0.052	0.10	U
75-35-4	1,1-Dichloroethene	0.053	0.10	U	156-59-2	cis-1,2-Dichloroethene	0.064	0.10	U
87-61-6	1,2,3-Trichlorobenzene	0.079	0.10	U	10061-01-5	cis-1,3-Dichloropropene	0.032	0.10	U
120-82-1	1,2,4-Trichlorobenzene	0.073	0.10	U	110-82-7	Cyclohexane	0.049	0.10	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.083	0.10	U	124-48-1	Dibromochloromethane	0.024	0.10	U
106-93-4	1,2-Dibromoethane	0.034	0.10	U	75-71-8	Dichlorodifluoromethane	0.062	0.10	U
95-50-1	1,2-Dichlorobenzene	0.032	0.10	U	100-41-4	Ethylbenzene	0.047	0.10	U
107-06-2	1,2-Dichloroethane	0.064	0.064	U	98-82-8	Isopropylbenzene	0.049	0.10	U
78-87-5	1,2-Dichloropropane	0.030	0.10	U	179601-23-1	m&p-Xylenes	0.085	0.10	U
541-73-1	1,3-Dichlorobenzene	0.038	0.10	U	79-20-9	Methyl Acetate	0.070	0.10	U
106-46-7	1,4-Dichlorobenzene	0.037	0.10	U	108-87-2	Methylcyclohexane	0.061	0.10	U
123-91-1	1,4-Dioxane	3.9	5.0	U	75-09-2	Methylene Chloride	0.029	0.10	U
78-93-3	2-Butanone	0.075	0.10	U	1634-04-4	Methyl-t-butyl ether	0.031	0.050	U
591-78-6	2-Hexanone	0.060	0.10	U	95-47-6	o-Xylene	0.068	0.10	U
108-10-1	4-Methyl-2-Pentanone	0.049	0.10	U	100-42-5	Styrene	0.054	0.10	U
67-64-1	Acetone	0.46	0.50	U	127-18-4	Tetrachloroethene	0.036	0.10	U
71-43-2	Benzene	0.030	0.050	U	108-88-3	Toluene	0.033	0.10	U
74-97-5	Bromochloromethane	0.079	0.10	U	156-60-5	trans-1,2-Dichloroethene	0.031	0.10	U
75-27-4	Bromodichloromethane	0.035	0.10	U	10061-02-6	trans-1,3-Dichloropropene	0.031	0.10	U
75-25-2	Bromoform	0.054	0.10	U	79-01-6	Trichloroethene	0.035	0.10	U
74-83-9	Bromomethane	0.050	0.10	U	75-69-4	Trichlorofluoromethane	0.031	0.10	U
75-15-0	Carbon Disulfide	0.042	0.10	U	75-01-4	Vinyl Chloride	0.071	0.10	U

Worksheet #: 569387

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 1M140333.D  
 Acq On : 10/09/20 10:26

Operator : BK  
 Sam Mult : 1 Vial# : 7  
 Misc : M,MEOH

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 10:37  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
-----							
Internal Standards							
4) Fluorobenzene	5.339	96	365030	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	396377	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	254182	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.944	111	106315	31.21	ug/l	0.00	
Spiked Amount							
							Recovery = 104.03%
39) 1,2-Dichloroethane-d4	5.146	67	57783	31.15	ug/l	0.00	
Spiked Amount							Recovery = 103.83%
66) Toluene-d8	6.201	98	415052	25.91	ug/l	0.00	
Spiked Amount							Recovery = 86.37%
76) Bromofluorobenzene	7.625	174	201372	31.44	ug/l	0.00	
Spiked Amount							Recovery = 104.80%
-----							
Target Compounds							Qvalue
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

W



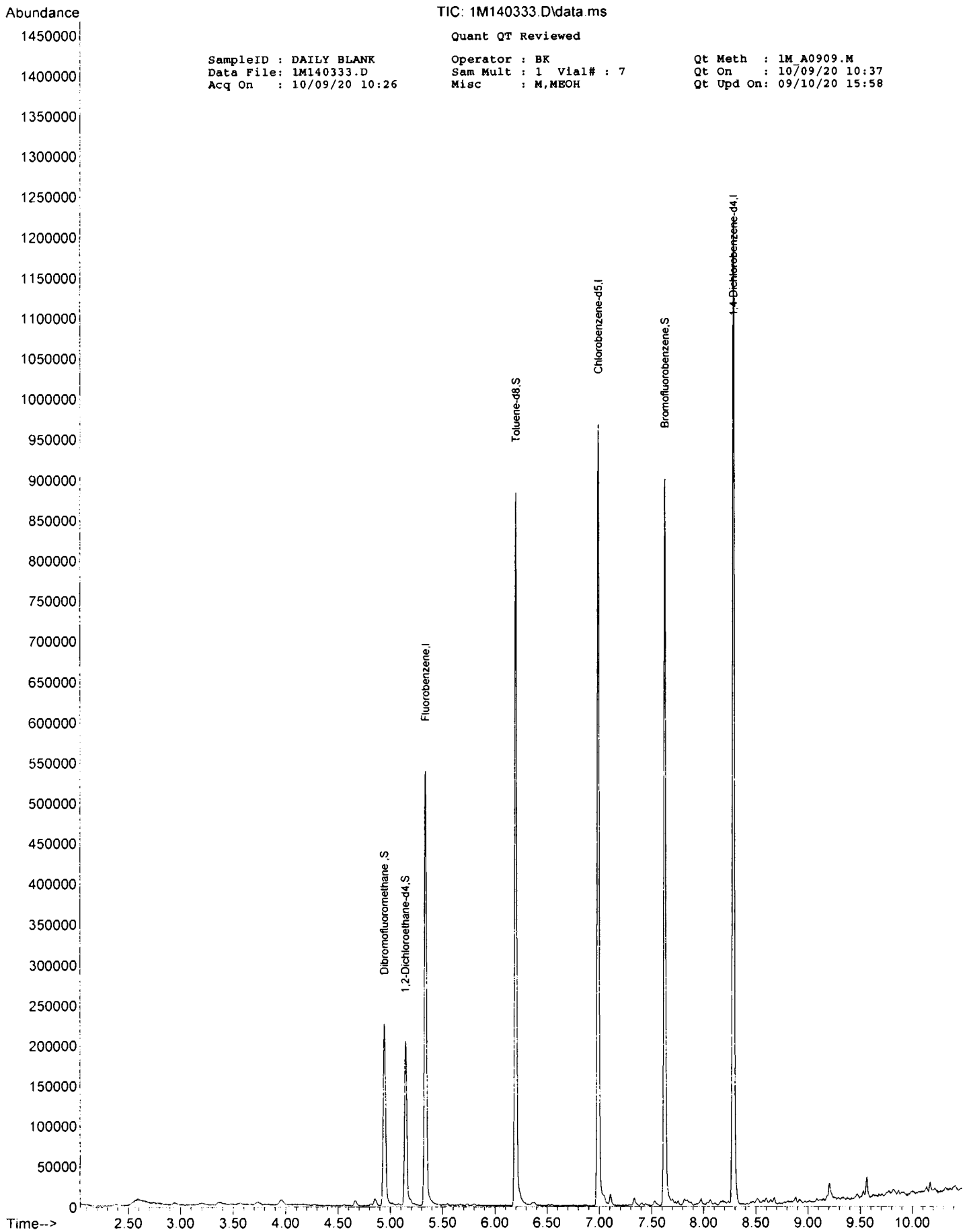
TIC: 1M140333.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 1M140333.D  
Acq On : 10/09/20 10:26

Operator : BK  
Sam Mult : 1 Vial# : 7  
Misc : M, MEOH

Qt Meth : 1M\_A0909.M  
Qt On : 10/09/20 10:37  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 2M142817.D

Analysis Date: 10/07/20 10:37

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.36	1.0	U	56-23-5	Carbon Tetrachloride	0.32	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	0.45	1.0	U	108-90-7	Chlorobenzene	0.33	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoro	0.73	1.0	U	75-00-3	Chloroethane	0.58	1.0	U
79-00-5	1,1,2-Trichloroethane	0.32	1.0	U	67-66-3	Chloroform	2.0	2.0	U
75-34-3	1,1-Dichloroethane	0.43	1.0	U	74-87-3	Chloromethane	0.52	1.0	U
75-35-4	1,1-Dichloroethene	0.53	1.0	U	156-59-2	cis-1,2-Dichloroethene	0.64	1.0	U
87-61-6	1,2,3-Trichlorobenzene	0.79	1.0	U	10061-01-5	cis-1,3-Dichloropropene	0.32	1.0	U
120-82-1	1,2,4-Trichlorobenzene	0.73	1.0	U	110-82-7	Cyclohexane	0.49	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.83	1.0	U	124-48-1	Dibromochloromethane	0.24	1.0	U
106-93-4	1,2-Dibromoethane	0.34	1.0	U	75-71-8	Dichlorodifluoromethane	0.62	1.0	U
95-50-1	1,2-Dichlorobenzene	0.32	1.0	U	100-41-4	Ethylbenzene	0.47	1.0	U
107-06-2	1,2-Dichloroethane	0.64	0.64	U	98-82-8	Isopropylbenzene	0.49	1.0	U
78-87-5	1,2-Dichloropropane	0.30	1.0	U	179601-23-1	m&p-Xylenes	0.85	1.0	U
541-73-1	1,3-Dichlorobenzene	0.38	1.0	U	<b>79-20-9</b>	<b>Methyl Acetate</b>	<b>0.70</b>	<b>1.0</b>	<b>2.0</b>
106-46-7	1,4-Dichlorobenzene	0.37	1.0	U	108-87-2	Methylcyclohexane	0.61	1.0	U
123-91-1	1,4-Dioxane	39	50	U	75-09-2	Methylene Chloride	0.29	1.0	U
78-93-3	2-Butanone	0.75	1.0	U	1634-04-4	Methyl-t-butyl ether	0.31	0.50	U
591-78-6	2-Hexanone	0.60	1.0	U	95-47-6	o-Xylene	0.68	1.0	U
108-10-1	4-Methyl-2-Pentanone	0.49	1.0	U	100-42-5	Styrene	0.54	1.0	U
67-64-1	Acetone	4.6	5.0	U	127-18-4	Tetrachloroethene	0.36	1.0	U
71-43-2	Benzene	0.30	0.50	U	108-88-3	Toluene	0.33	1.0	U
74-97-5	Bromochloromethane	0.79	1.0	U	156-60-5	trans-1,2-Dichloroethene	0.31	1.0	U
75-27-4	Bromodichloromethane	0.35	1.0	U	10061-02-6	trans-1,3-Dichloropropene	0.31	1.0	U
75-25-2	Bromoform	0.54	1.0	U	79-01-6	Trichloroethene	0.35	1.0	U
74-83-9	Bromomethane	0.50	1.0	U	75-69-4	Trichlorofluoromethane	0.31	1.0	U
75-15-0	Carbon Disulfide	0.42	1.0	U	75-01-4	Vinyl Chloride	0.71	1.0	U

Worksheet #: 569387

**Total Target Concentration 2**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 2M142817.D  
 Acq On : 10/07/20 10:37

Operator : RL  
 Sam Mult : 1 Vial# : 5  
 Misc : A,SML

Qt Meth : 2M\_A0929.M  
 Qt On : 10/07/20 11:09  
 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.099	96	368054	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	343626	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	177124	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.702	111	103511	29.36	ug/l	0.00
Spiked Amount	30.000		Recovery	=	97.87%	
39) 1,2-Dichloroethane-d4	4.910	67	51403	28.24	ug/l	0.00
Spiked Amount	30.000		Recovery	=	94.13%	
66) Toluene-d8	5.952	98	396996	29.53	ug/l	0.00
Spiked Amount	30.000		Recovery	=	98.43%	
76) Bromofluorobenzene	7.366	174	149166	32.06	ug/l	0.00
Spiked Amount	30.000		Recovery	=	106.87%	
Target Compounds						
25) Methyl Acetate	3.324	43	4406m	1.9724	ug/l	Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

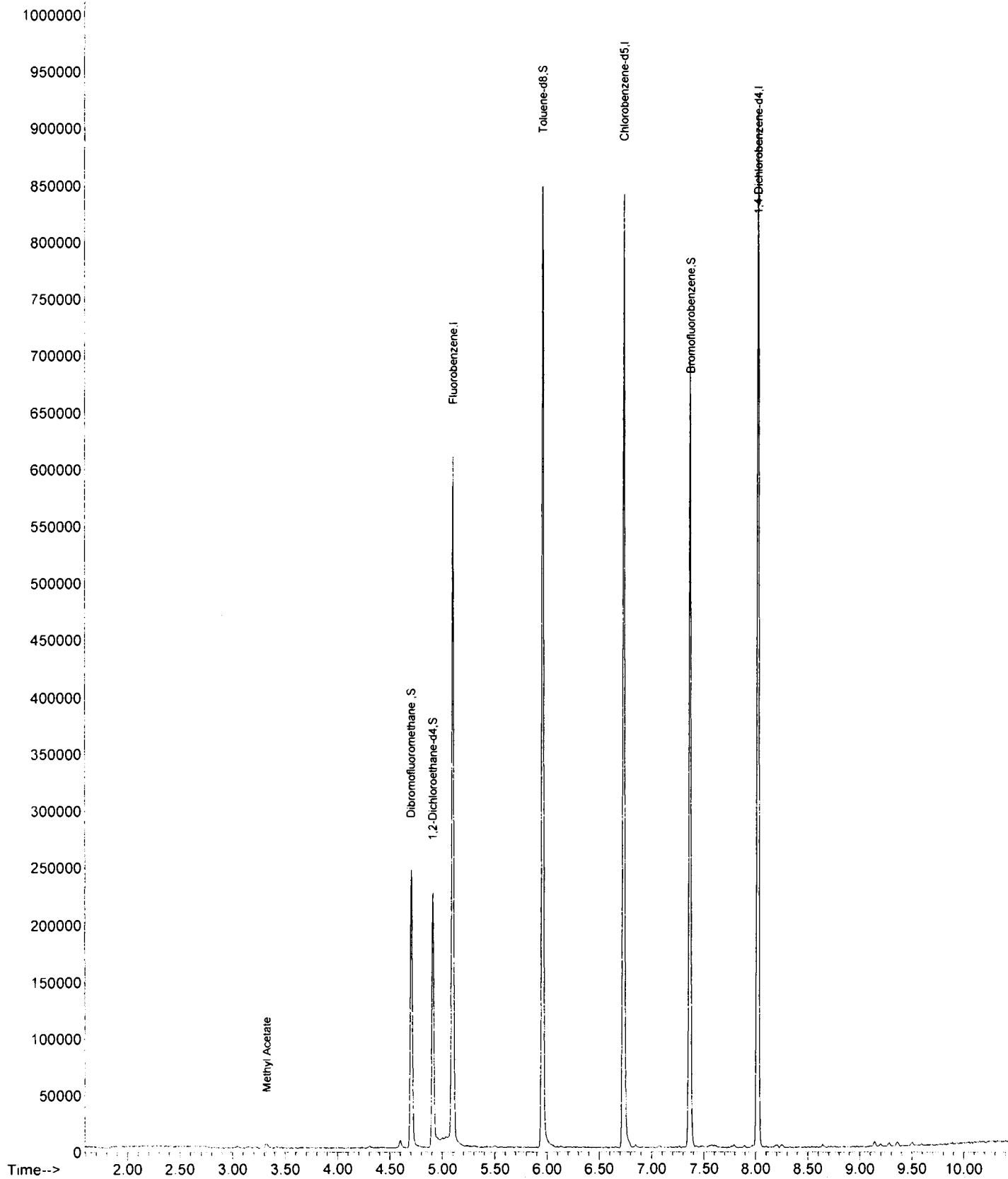
TIC: 2M142817.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 2M142817.D  
Acq On : 10/07/20 10:37

Operator : RL  
Sam Mult : 1 Vial# : 5  
Misc : A,5ML

Qt Meth : 2M\_A0929.M  
Qt On : 10/07/20 11:09  
Qt Upd On: 09/30/20 18:32



## FORM2

## Surrogate Recovery

Method: EPA 8260D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1	Column1	Column1	Column1	Column0	Column0
						S1 Recov	S2 Recov	S3 Recov	S4 Recov	S5 Recov	S6 Recov
11M83553.D	DAILY BLANK	S	10/05/20 16:43	1		102	102	99	96		
11M83601.D	DAILY BLANK	S	10/06/20 11:13	1		105	98	97	97		
1M140092.D	DAILY BLANK	A	10/05/20 17:13	1		101	99	90	101		
1M140093.D	DAILY BLANK	M	10/05/20 17:33	1		102	98	90	103		
1M140333.D	DAILY BLANK	M	10/09/20 10:26	1		104	104	86	105		
2M142817.D	DAILY BLANK	A	10/07/20 10:37	1		98	94	98	107		
1M140094.D	AD19539-001	A	10/05/20 17:54	1		104	99	90	103		
2M142841.D	AD19539-002(5X)	A	10/07/20 18:54	1		97	97	94	106		
2M142842.D	AD19539-003(5X)	A	10/07/20 19:13	1		98	101	98	107		
2M142843.D	AD19539-004(5X)	A	10/07/20 19:33	1		99	100	94	103		
2M142844.D	AD19539-005(5X)	A	10/07/20 19:53	1		97	91	96	106		
1M140118.D	AD19539-006	M	10/06/20 02:11	1		100	101	90	103		
11M83623.D	AD19539-007	S	10/06/20 18:28	1		100	104	67*	174*		
11M83672.D	AD19539-007	S	10/07/20 16:53	1		103	105	69	171*		
1M140116.D	AD19539-008	M	10/06/20 01:29	1		98	101	90	104		
11M83578.D	AD19539-009	S	10/06/20 00:57	1		104	109	96	98		
1M140112.D	AD19539-010	M	10/06/20 00:06	1		100	101	90	105		
1M140111.D	AD19539-011	M	10/05/20 23:46	1		101	103	92	105		
1M140341.D	AD19539-012	M	10/09/20 13:20	1		100	98	87	103		
1M140114.D	AD19539-013	M	10/06/20 00:48	1		98	103	92	104		
1M140337.D	AD19539-014(40uL)	M	10/09/20 11:57	1		100	102	89	103		
11M83603.D	AD19539-015	S	10/06/20 11:52	1		106	106	111	98		
11M83604.D	AD19539-016	S	10/06/20 12:12	1		106	112	96	98		
1M140100.D	AD19539-017(8uL)	M	10/05/20 19:58	1		99	96	91	100		
11M83557.D	AD19562-003(MS:AD19	S	10/05/20 18:02	1		99	93	100	102		
11M83560.D	AD19562-005(MSD:AD1	S	10/05/20 19:01	1		101	97	99	103		
11M83561.D	MBS89425	S	10/05/20 19:21	1		98	96	100	100		
11M83564.D	AD19562-001	S	10/05/20 20:20	1		103	103	101	99		
11M83605.D	MBS89437	S	10/06/20 12:32	1		102	102	101	97		
11M83606.D	AD19581-008(MS)	S	10/06/20 12:52	1		105	107	102	108		
11M83607.D	AD19581-008(MSD)	S	10/06/20 13:11	1		108	107	100	104		
11M83610.D	AD19581-008	S	10/06/20 14:11	1		104	110	99	98		
1M140097.D	AD19565-016	A	10/05/20 18:56	1		104	99	90	102		
1M140101.D	MBS89426	M	10/05/20 20:19	1		97	96	93	102		
1M140102.D	MBS89427	A	10/05/20 20:40	1		100	97	93	105		
1M140103.D	AD19539-009(MS)	M	10/05/20 21:00	1		99	98	94	106		
1M140104.D	AD19539-009(MSD)	M	10/05/20 21:21	1		100	99	93	103		
1M140105.D	AD19565-016(MS)	A	10/05/20 21:42	1		102	100	94	103		
1M140106.D	AD19565-016(MSD)	A	10/05/20 22:02	1		104	101	94	103		
1M140107.D	AD19539-009	M	10/05/20 22:23	1		102	101	90	103		
1M140334.D	AD19654-001	M	10/09/20 10:55	1		102	105	87	106		
1M140338.D	MBS89475	M	10/09/20 12:18	1		100	101	91	103		
1M140349.D	AD19654-001(MS)	M	10/09/20 16:06	1		99	99	90	104		
1M140350.D	AD19654-001(MSD)	M	10/09/20 16:26	1		98	99	90	102		
2M142828.D	AD19574-001	A	10/07/20 14:39	1		101	97	99	105		
2M142829.D	MBS89447	A	10/07/20 14:59	1		100	99	98	105		
2M142831.D	AD19574-001(MS)	A	10/07/20 15:38	1		99	98	97	105		
2M142832.D	AD19574-001(MSD)	A	10/07/20 15:58	1		100	99	99	103		

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8260D

## Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

## Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89425

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83561.D		MBS89425		10/5/2020 7:21:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	70.5184	0	50	141*	20	130
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>58.439</b>	<b>0</b>	<b>50</b>	<b>117</b>	<b>20</b>	<b>130</b>
<b>Chloromethane</b>	<b>1</b>	<b>53.5968</b>	<b>0</b>	<b>50</b>	<b>107</b>	<b>20</b>	<b>130</b>
<b>Bromomethane</b>	<b>1</b>	<b>48.2592</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>20</b>	<b>130</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>62.8067</b>	<b>0</b>	<b>50</b>	<b>126</b>	<b>20</b>	<b>130</b>
<b>Chloroethane</b>	<b>1</b>	<b>53.7478</b>	<b>0</b>	<b>50</b>	<b>107</b>	<b>20</b>	<b>130</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>55.5836</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>20</b>	<b>130</b>
Ethyl ether	1	44.3328	0	50	89	50	130
Furan	1	55.2765	0	50	111	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>60.4853</b>	<b>0</b>	<b>50</b>	<b>121</b>	<b>50</b>	<b>130</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>43.4503</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>50</b>	<b>130</b>
Acrolein	1	242.394	0	200	121	20	130
Acrylonitrile	1	42.4002	0	50	85	20	130
Iodomethane	1	47.149	0	50	94	50	130
<b>Acetone</b>	<b>1</b>	<b>200.7981</b>	<b>0</b>	<b>200</b>	<b>100</b>	<b>20</b>	<b>130</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>55.9749</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>50</b>	<b>130</b>
t-Butyl Alcohol	1	213.7577	0	200	107	20	130
n-Hexane	1	64.2748	0	50	129	50	130
Di-isopropyl-ether	1	47.0769	0	50	94	50	130
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>56.4256</b>	<b>0</b>	<b>50</b>	<b>113</b>	<b>50</b>	<b>130</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>38.0797</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>44.8264</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>50</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>50.3337</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>50</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>54.2984</b>	<b>0</b>	<b>50</b>	<b>109</b>	<b>50</b>	<b>130</b>
Ethyl-t-butyl ether	1	45.267	0	50	91	50	130
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>50.0736</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>45.351</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>50</b>	<b>130</b>
2,2-Dichloropropane	1	59.6608	0	50	119	50	130
Ethyl acetate	1	38.3329	0	50	77	50	130
<b>1,4-Dioxane</b>	<b>1</b>	<b>2221.889</b>	<b>0</b>	<b>2500</b>	<b>89</b>	<b>50</b>	<b>130</b>
1,1-Dichloropropene	1	56.3202	0	50	113	50	130
<b>Chloroform</b>	<b>1</b>	<b>49.6716</b>	<b>0</b>	<b>50</b>	<b>99</b>	<b>50</b>	<b>130</b>
<b>Cyclohexane</b>	<b>1</b>	<b>60.7033</b>	<b>0</b>	<b>50</b>	<b>121</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>42.668</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>2-Butanone</b>	<b>1</b>	<b>43.8709</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>20</b>	<b>130</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>54.3384</b>	<b>0</b>	<b>50</b>	<b>109</b>	<b>50</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>57.0283</b>	<b>0</b>	<b>50</b>	<b>114</b>	<b>50</b>	<b>130</b>
Vinyl Acetate	1	45.1285	0	50	90	50	130
<b>Bromodichloromethane</b>	<b>1</b>	<b>45.0327</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>50</b>	<b>130</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>64.2183</b>	<b>0</b>	<b>50</b>	<b>128</b>	<b>50</b>	<b>130</b>
Dibromomethane	1	47.1164	0	50	94	50	130
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>48.0918</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>50</b>	<b>130</b>
<b>Trichloroethene</b>	<b>1</b>	<b>55.8038</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>50</b>	<b>130</b>
<b>Benzene</b>	<b>1</b>	<b>50.9214</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
tert-Amyl methyl ether	1	44.5974	0	50	89	50	130
Iso-propylacetate	1	41.433	0	50	83	50	130
Methyl methacrylate	1	39.95	0	50	80	50	130
<b>Dibromochloromethane</b>	<b>1</b>	<b>44.347</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
2-Chloroethylvinylether	1	44.0101	0	50	88	50	130
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>47.7905</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>50</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>45.5931</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>50</b>	<b>130</b>
Ethyl methacrylate	1	44.5708	0	50	89	50	130
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>43.0771</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>44.0658</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
1,3-Dichloropropane	1	43.1473	0	50	86	50	130
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>42.115</b>	<b>0</b>	<b>50</b>	<b>84</b>	<b>20</b>	<b>130</b>
<b>2-Hexanone</b>	<b>1</b>	<b>40.9464</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>20</b>	<b>130</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>57.0205</b>	<b>0</b>	<b>50</b>	<b>114</b>	<b>50</b>	<b>130</b>
<b>Toluene</b>	<b>1</b>	<b>49.5335</b>	<b>0</b>	<b>50</b>	<b>99</b>	<b>50</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	45.8519	0	50	92	50	130
<b>Chlorobenzene</b>	<b>1</b>	<b>47.5839</b>	<b>0</b>	<b>50</b>	<b>95</b>	<b>50</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89425

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	42.8416	0	50	86	50	130
n-Amyl acetate	1	35.5506	0	50	71	50	130
<b>Bromoform</b>	<b>1</b>	<b>40.6219</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>50.4849</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>40.4869</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>43.7639</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>103.7184</b>	<b>0</b>	<b>100</b>	<b>104</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>46.7367</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	48.5217	0	50	97	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>46.9578</b>	<b>0</b>	<b>50</b>	<b>94</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>48.3074</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>45.3743</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>49.2124</b>	<b>0</b>	<b>50</b>	<b>98</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	217.0036	0	250	87	50	130
Camphene	1	57.8936	0	50	116	50	130
1,2,3-Trichloropropane	1	42.5741	0	50	85	50	130
2-Chlorotoluene	1	45.5255	0	50	91	50	130
p-Ethyltoluene	1	51.3516	0	50	103	50	130
4-Chlorotoluene	1	45.2101	0	50	90	50	130
n-Propylbenzene	1	52.8687	0	50	106	50	130
Bromobenzene	1	48.152	0	50	96	50	130
1,3,5-Trimethylbenzene	1	49.1907	0	50	98	50	130
Butyl methacrylate	1	41.0963	0	50	82	50	130
t-Butylbenzene	1	47.4218	0	50	95	50	130
1,2,4-Trimethylbenzene	1	46.8523	0	50	94	50	130
sec-Butylbenzene	1	49.3702	0	50	99	50	130
4-Isopropyltoluene	1	55.806	0	50	112	50	130
n-Butylbenzene	1	50.3542	0	50	101	50	130
p-Diethylbenzene	1	51.3362	0	50	103	50	130
1,2,4,5-Tetramethylbenzene	1	55.2858	0	50	111	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>40.6995</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
Camphor	1	460.0097	0	500	92	50	130
Hexachlorobutadiene	1	62.7137	0	50	125	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>54.0047</b>	<b>0</b>	<b>50</b>	<b>108</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>52.2512</b>	<b>0</b>	<b>50</b>	<b>105</b>	<b>50</b>	<b>130</b>
Naphthalene	1	46.7978	0	50	94	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89425

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83557.D		AD19562-003(MS:AD19562-001		10/5/2020 6:02:00 PM			
Non Spike(If applicable): 11M83564.D		AD19562-001		10/5/2020 8:20:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	72.5589	0	50	145*	20	130
<b><u>Dichlorodifluoromethane</u></b>	<b><u>1</u></b>	<b><u>59.4941</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>119</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Chloromethane</u></b>	<b><u>1</u></b>	<b><u>54.8283</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>110</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Bromomethane</u></b>	<b><u>1</u></b>	<b><u>49.6643</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>99</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Vinyl Chloride</u></b>	<b><u>1</u></b>	<b><u>62.2222</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>124</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Chloroethane</u></b>	<b><u>1</u></b>	<b><u>53.3907</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>107</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Trichlorofluoromethane</u></b>	<b><u>1</u></b>	<b><u>59.0881</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>118</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
Ethyl ether	1	40.3131	0	50	81	50	130
Furan	1	48.8285	0	50	98	50	130
<b><u>1,1,2-Trichloro-1,2,2-trifluoroethane</u></b>	<b><u>1</u></b>	<b><u>60.0218</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>120</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methylene Chloride</u></b>	<b><u>1</u></b>	<b><u>43.7203</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Acrolein	1	180.8405	0	200	90	20	130
Acrylonitrile	1	33.5204	0	50	67	20	130
Iodomethane	1	47.7501	0	50	96	50	130
<b><u>Acetone</u></b>	<b><u>1</u></b>	<b><u>149.281</u></b>	<b><u>0</u></b>	<b><u>200</u></b>	<b><u>75</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Carbon Disulfide</u></b>	<b><u>1</u></b>	<b><u>53.6573</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>107</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
t-Butyl Alcohol	1	132.0166	0	200	66	20	130
n-Hexane	1	61.5398	0	50	123	50	130
Di-isopropyl-ether	1	44.3463	0	50	89	50	130
<b><u>1,1-Dichloroethene</u></b>	<b><u>1</u></b>	<b><u>57.7537</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>116</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methyl Acetate</u></b>	<b><u>1</u></b>	<b><u>30.7999</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>62</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methyl-t-butyl ether</u></b>	<b><u>1</u></b>	<b><u>39.9828</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>1,1-Dichloroethane</u></b>	<b><u>1</u></b>	<b><u>49.2292</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>98</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>trans-1,2-Dichloroethene</u></b>	<b><u>1</u></b>	<b><u>52.9487</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>106</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Ethyl-t-butyl ether	1	42.4873	0	50	85	50	130
<b><u>cis-1,2-Dichloroethene</u></b>	<b><u>1</u></b>	<b><u>47.4488</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>95</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Bromochloromethane</u></b>	<b><u>1</u></b>	<b><u>42.2958</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
2,2-Dichloropropane	1	60.7436	0	50	121	50	130
Ethyl acetate	1	31.8733	0	50	64	50	130
<b><u>1,4-Dioxane</u></b>	<b><u>1</u></b>	<b><u>1494.409</u></b>	<b><u>0</u></b>	<b><u>2500</u></b>	<b><u>60</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,1-Dichloropropene	1	56.5002	0	50	113	50	130
<b><u>Chloroform</u></b>	<b><u>1</u></b>	<b><u>48.0774</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>96</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Cyclohexane</u></b>	<b><u>1</u></b>	<b><u>59.4755</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>119</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>1,2-Dichloroethane</u></b>	<b><u>1</u></b>	<b><u>40.2394</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Butanone</u></b>	<b><u>1</u></b>	<b><u>27.5578</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>55</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>1,1,1-Trichloroethane</u></b>	<b><u>1</u></b>	<b><u>53.4363</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>107</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Carbon Tetrachloride</u></b>	<b><u>1</u></b>	<b><u>56.4015</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>113</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Vinyl Acetate	1	40.7741	0	50	82	50	130
<b><u>Bromodichloromethane</u></b>	<b><u>1</u></b>	<b><u>43.3988</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methylcyclohexane</u></b>	<b><u>1</u></b>	<b><u>60.9285</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>122</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Dibromomethane	1	41.3455	0	50	83	50	130
<b><u>1,2-Dichloropropane</u></b>	<b><u>1</u></b>	<b><u>45.377</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Trichloroethene</u></b>	<b><u>1</u></b>	<b><u>52.8047</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>106</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Benzene</u></b>	<b><u>1</u></b>	<b><u>49.0363</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>98</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
tert-Amyl methyl ether	1	41.5632	0	50	83	50	130
Iso-propylacetate	1	33.638	0	50	67	50	130
Methyl methacrylate	1	32.3171	0	50	65	50	130
<b><u>Dibromochloromethane</u></b>	<b><u>1</u></b>	<b><u>40.1117</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
2-Chloroethylvinylether	1	36.9293	0	50	74	50	130
<b><u>cis-1,3-Dichloropropene</u></b>	<b><u>1</u></b>	<b><u>44.2119</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>trans-1,3-Dichloropropene</u></b>	<b><u>1</u></b>	<b><u>41.404</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Ethyl methacrylate	1	38.5526	0	50	77	50	130
<b><u>1,1,2-Trichloroethane</u></b>	<b><u>1</u></b>	<b><u>38.6246</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>1,2-Dibromoethane</u></b>	<b><u>1</u></b>	<b><u>39.1156</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,3-Dichloropropane	1	37.7773	0	50	76	50	130
<b><u>4-Methyl-2-Pentanone</u></b>	<b><u>1</u></b>	<b><u>31.1844</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>62</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>2-Hexanone</u></b>	<b><u>1</u></b>	<b><u>32.4735</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>65</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Tetrachloroethene</u></b>	<b><u>1</u></b>	<b><u>52.298</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>105</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Toluene</u></b>	<b><u>1</u></b>	<b><u>46.858</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>94</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,1,1,2-Tetrachloroethane	1	41.6403	0	50	83	50	130
<b><u>Chlorobenzene</u></b>	<b><u>1</u></b>	<b><u>43.8385</u></b>	<b><u>0</u></b>	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>50</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1



Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89425

Method: 8260D	Matrix: Soil	Units: mg/Kg		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	37.4645	0	50	75	50	130
n-Amyl acetate	1	28.084	0	50	56	50	130
<b>Bromoform</b>	<b>1</b>	<b>36.3758</b>	<b>0</b>	<b>50</b>	<b>73</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>48.7219</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>35.8571</b>	<b>0</b>	<b>50</b>	<b>72</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>40.7956</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>97.3631</b>	<b>0</b>	<b>100</b>	<b>97</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>43.4255</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	40.5436	0	50	81	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>38.9288</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>40.5736</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>38.3468</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>44.6515</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	154.2419	0	250	62	50	130
Camphene	1	48.8993	0	50	98	50	130
1,2,3-Trichloropropane	1	36.7065	0	50	73	50	130
2-Chlorotoluene	1	40.2213	0	50	80	50	130
p-Ethyltoluene	1	43.5101	0	50	87	50	130
4-Chlorotoluene	1	40.8418	0	50	82	50	130
n-Propylbenzene	1	45.6292	0	50	91	50	130
Bromobenzene	1	43.6839	0	50	87	50	130
1,3,5-Trimethylbenzene	1	41.6453	0	50	83	50	130
Butyl methacrylate	1	35.9739	0	50	72	50	130
t-Butylbenzene	1	40.3626	0	50	81	50	130
1,2,4-Trimethylbenzene	1	38.9623	0	50	78	50	130
sec-Butylbenzene	1	40.0767	0	50	80	50	130
4-Isopropyltoluene	1	44.7717	0	50	90	50	130
n-Butylbenzene	1	38.2341	0	50	76	50	130
p-Diethylbenzene	1	39.3555	0	50	79	50	130
1,2,4,5-Tetramethylbenzene	1	39.9331	0	50	80	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>31.0181</b>	<b>0</b>	<b>50</b>	<b>62</b>	<b>50</b>	<b>130</b>
Camphor	1	309.4433	0	500	62	50	130
Hexachlorobutadiene	1	34.1702	0	50	68	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>38.0368</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>34.4001</b>	<b>0</b>	<b>50</b>	<b>69</b>	<b>50</b>	<b>130</b>
Naphthalene	1	33.1608	0	50	66	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89425

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83560.D		AD19562-005(MSD:AD19562-0)		10/5/2020 7:01:00 PM			
Non Spike(If applicable): 11M83564.D		AD19562-001		10/5/2020 8:20:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.8875	0	50	156 *	20	130
<b>Dichlorodifluoromethane</b>	1	<b>54.2634</b>	0	50	109	20	130
<b>Chloromethane</b>	1	<b>48.3536</b>	0	50	97	20	130
<b>Bromomethane</b>	1	<b>42.3547</b>	0	50	85	20	130
<b>Vinyl Chloride</b>	1	<b>54.3254</b>	0	50	109	20	130
<b>Chloroethane</b>	1	<b>48.2174</b>	0	50	96	20	130
<b>Trichlorofluoromethane</b>	1	<b>52.3439</b>	0	50	105	20	130
Ethyl ether	1	36.8474	0	50	74	50	130
Furan	1	42.953	0	50	86	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>53.4584</b>	0	50	107	50	130
<b>Methylene Chloride</b>	1	<b>40.0852</b>	0	50	80	50	130
Acrolein	1	161.9108	0	200	81	20	130
Acrylonitrile	1	32.3811	0	50	65	20	130
Iodomethane	1	41.2043	0	50	82	50	130
<b>Acetone</b>	1	<b>162.8074</b>	0	200	81	20	130
<b>Carbon Disulfide</b>	1	<b>42.4743</b>	0	50	85	50	130
t-Butyl Alcohol	1	144.6289	0	200	72	20	130
n-Hexane	1	56.5158	0	50	113	50	130
Di-isopropyl-ether	1	40.5629	0	50	81	50	130
<b>1,1-Dichloroethene</b>	1	<b>49.8577</b>	0	50	100	50	130
<b>Methyl Acetate</b>	1	<b>37.271</b>	0	50	75	50	130
<b>Methyl-t-butyl ether</b>	1	<b>37.9399</b>	0	50	76	50	130
<b>1,1-Dichloroethane</b>	1	<b>44.365</b>	0	50	89	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>46.4123</b>	0	50	93	50	130
Ethyl-t-butyl ether	1	39.1798	0	50	78	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>42.2031</b>	0	50	84	50	130
<b>Bromochloromethane</b>	1	<b>39.3154</b>	0	50	79	50	130
2,2-Dichloropropane	1	52.9943	0	50	106	50	130
Ethyl acetate	1	29.2323	0	50	58	50	130
<b>1,4-Dioxane</b>	1	<b>1571.471</b>	0	2500	63	50	130
1,1-Dichloropropene	1	48.0412	0	50	96	50	130
<b>Chloroform</b>	1	<b>43.1563</b>	0	50	86	50	130
<b>Cyclohexane</b>	1	<b>51.6779</b>	0	50	103	50	130
<b>1,2-Dichloroethane</b>	1	<b>37.2932</b>	0	50	75	50	130
<b>2-Butanone</b>	1	<b>28.5428</b>	0	50	57	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>46.9803</b>	0	50	94	50	130
<b>Carbon Tetrachloride</b>	1	<b>48.4859</b>	0	50	97	50	130
Vinyl Acetate	1	31.3053	0	50	63	50	130
<b>Bromodichloromethane</b>	1	<b>37.8568</b>	0	50	76	50	130
<b>Methylcyclohexane</b>	1	<b>54.0115</b>	0	50	108	50	130
Dibromomethane	1	39.2566	0	50	79	50	130
<b>1,2-Dichloropropane</b>	1	<b>40.2208</b>	0	50	80	50	130
<b>Trichloroethene</b>	1	<b>45.2721</b>	0	50	91	50	130
<b>Benzene</b>	1	<b>43.6943</b>	0	50	87	50	130
tert-Amyl methyl ether	1	38.3507	0	50	77	50	130
Iso-propylacetate	1	31.7158	0	50	63	50	130
Methyl methacrylate	1	35.7082	0	50	71	50	130
<b>Dibromochloromethane</b>	1	<b>36.1634</b>	0	50	72	50	130
2-Chloroethylvinylether	1	35.2359	0	50	70	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>39.4917</b>	0	50	79	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>35.7276</b>	0	50	71	50	130
Ethyl methacrylate	1	35.24	0	50	70	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>34.8953</b>	0	50	70	50	130
<b>1,2-Dibromoethane</b>	1	<b>35.6951</b>	0	50	71	50	130
1,3-Dichloropropane	1	35.2843	0	50	71	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>32.9313</b>	0	50	66	20	130
<b>2-Hexanone</b>	1	<b>30.8144</b>	0	50	62	20	130
<b>Tetrachloroethene</b>	1	<b>41.846</b>	0	50	84	50	130
<b>Toluene</b>	1	<b>40.5031</b>	0	50	81	50	130
1,1,1,2-Tetrachloroethane	1	36.3568	0	50	73	50	130
<b>Chlorobenzene</b>	1	<b>35.7844</b>	0	50	72	50	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits  
Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89425

Method: 8260D	Matrix: Soil	Units: mg/Kg		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	28.9996	0	50	58	50	130
n-Amyl acetate	1	19.7779	0	50	40*	50	130
<b>Bromoform</b>	<b>1</b>	<b>33.0253</b>	<b>0</b>	<b>50</b>	<b>66</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>37.4005</b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>33.8706</b>	<b>0</b>	<b>50</b>	<b>68</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>31.9601</b>	<b>0</b>	<b>50</b>	<b>64</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>75.7805</b>	<b>0</b>	<b>100</b>	<b>76</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>34.3769</b>	<b>0</b>	<b>50</b>	<b>69</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	35.5291	0	50	71	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>26.8645</b>	<b>0</b>	<b>50</b>	<b>54</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>28.8809</b>	<b>0</b>	<b>50</b>	<b>58</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>28.3564</b>	<b>0</b>	<b>50</b>	<b>57</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>32.4123</b>	<b>0</b>	<b>50</b>	<b>65</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	162.1099	0	250	65	50	130
Camphene	1	35.471	0	50	71	50	130
1,2,3-Trichloropropane	1	33.6332	0	50	67	50	130
2-Chlorotoluene	1	29.114	0	50	58	50	130
p-Ethyltoluene	1	31.7643	0	50	64	50	130
4-Chlorotoluene	1	27.9318	0	50	56	50	130
n-Propylbenzene	1	31.233	0	50	62	50	130
Bromobenzene	1	33.8964	0	50	68	50	130
1,3,5-Trimethylbenzene	1	29.1598	0	50	58	50	130
Butyl methacrylate	1	27.6332	0	50	55	50	130
t-Butylbenzene	1	27.4135	0	50	55	50	130
1,2,4-Trimethylbenzene	1	28.1144	0	50	56	50	130
sec-Butylbenzene	1	25.5606	0	50	51	50	130
4-Isopropyltoluene	1	28.8722	0	50	58	50	130
n-Butylbenzene	1	22.5587	0	50	45*	50	130
p-Diethylbenzene	1	24.5597	0	50	49*	50	130
1,2,4,5-Tetramethylbenzene	1	25.5848	0	50	51	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>30.078</b>	<b>0</b>	<b>50</b>	<b>60</b>	<b>50</b>	<b>130</b>
Camphor	1	325.2783	0	500	65	50	130
Hexachlorobutadiene	1	19.8729	0	50	40*	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>23.5379</b>	<b>0</b>	<b>50</b>	<b>47*</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>23.2014</b>	<b>0</b>	<b>50</b>	<b>46*</b>	<b>50</b>	<b>130</b>
Naphthalene	1	26.6983	0	50	53	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**  
**QC Batch: MBS89425**

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M83560.D	AD19562-005(MSD:AD19562-0	10/5/2020 7:01:00 PM
Duplicate(If applicable): 11M83557.D	AD19562-003(MS:AD19562-001	10/5/2020 6:02:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Soil	Units: mg/Kg
QC Type: MSD		

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	77.8875	72.5589	7.1	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>54.2634</b>	<b>59.4941</b>	<b>9.2</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>48.3536</b>	<b>54.8283</b>	<b>13</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>42.3547</b>	<b>49.6643</b>	<b>16</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>54.3254</b>	<b>62.2222</b>	<b>14</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>48.2174</b>	<b>53.3907</b>	<b>10</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>52.3439</b>	<b>59.0881</b>	<b>12</b>	<b>30</b>
Ethyl ether	1	36.8474	40.3131	9	30
Furan	1	42.953	48.8285	13	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>53.4584</b>	<b>60.0218</b>	<b>12</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>40.0852</b>	<b>43.7203</b>	<b>8.7</b>	<b>30</b>
Acrolein	1	161.9108	180.8405	11	30
Acrylonitrile	1	32.3811	33.5204	3.5	30
Iodomethane	1	41.2043	47.7501	15	30
<b>Acetone</b>	<b>1</b>	<b>162.8074</b>	<b>149.281</b>	<b>8.7</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>42.4743</b>	<b>53.6573</b>	<b>23</b>	<b>30</b>
t-Butyl Alcohol	1	144.6289	132.0166	9.1	30
n-Hexane	1	56.5158	61.5398	8.5	30
Di-isopropyl-ether	1	40.5629	44.3463	8.9	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>49.8577</b>	<b>57.7537</b>	<b>15</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>37.271</b>	<b>30.7999</b>	<b>19</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>37.9399</b>	<b>39.9828</b>	<b>5.2</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>44.365</b>	<b>49.2292</b>	<b>10</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>46.4123</b>	<b>52.9487</b>	<b>13</b>	<b>30</b>
Ethyl-t-butyl ether	1	39.1798	42.4873	8.1	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>42.2031</b>	<b>47.4488</b>	<b>12</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>39.3154</b>	<b>42.2958</b>	<b>7.3</b>	<b>30</b>
2,2-Dichloropropane	1	52.9943	60.7436	14	30
Ethyl acetate	1	29.2323	31.8733	8.6	30
<b>1,4-Dioxane</b>	<b>1</b>	<b>1571.471</b>	<b>1494.409</b>	<b>5</b>	<b>30</b>
1,1-Dichloropropene	1	48.0412	56.5002	16	30
<b>Chloroform</b>	<b>1</b>	<b>43.1563</b>	<b>48.0774</b>	<b>11</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>51.6779</b>	<b>59.4755</b>	<b>14</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>37.2932</b>	<b>40.2394</b>	<b>7.6</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>28.5428</b>	<b>27.5578</b>	<b>3.5</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>46.9803</b>	<b>53.4363</b>	<b>13</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>48.4859</b>	<b>56.4015</b>	<b>15</b>	<b>40</b>
Vinyl Acetate	1	31.3053	40.7741	26	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>37.8568</b>	<b>43.3988</b>	<b>14</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>54.0115</b>	<b>60.9285</b>	<b>12</b>	<b>30</b>
Dibromomethane	1	39.2566	41.3455	5.2	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>40.2208</b>	<b>45.377</b>	<b>12</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>45.2721</b>	<b>52.8047</b>	<b>15</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>43.6943</b>	<b>49.0363</b>	<b>12</b>	<b>40</b>
tert-Amyl methyl ether	1	38.3507	41.5632	8	30
Iso-propylacetate	1	31.7158	33.638	5.9	30
Methyl methacrylate	1	35.7082	32.3171	10	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>36.1634</b>	<b>40.1117</b>	<b>10</b>	<b>30</b>
2-Chloroethylvinylether	1	35.2359	36.9293	4.7	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>39.4917</b>	<b>44.2119</b>	<b>11</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>35.7276</b>	<b>41.404</b>	<b>15</b>	<b>30</b>
Ethyl methacrylate	1	35.24	38.5526	9	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>34.8953</b>	<b>38.6246</b>	<b>10</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>35.6951</b>	<b>39.1156</b>	<b>9.1</b>	<b>30</b>
1,3-Dichloropropane	1	35.2843	37.7773	6.8	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>32.9313</b>	<b>31.1844</b>	<b>5.4</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>30.8144</b>	<b>32.4735</b>	<b>5.2</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>41.846</b>	<b>52.298</b>	<b>22</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>40.5031</b>	<b>46.858</b>	<b>15</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	36.3568	41.6403	14	30
<b>Chlorobenzene</b>	<b>1</b>	<b>35.7844</b>	<b>43.8385</b>	<b>20</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89425

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	28.9996	37.4645	25	30
n-Amyl acetate	1	19.7779	28.084	35*	30
<b>Bromoform</b>	<b>1</b>	<b>33.0253</b>	<b>36.3758</b>	<b>9.7</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>37.4005</b>	<b>48.7219</b>	<b>26</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>33.8706</b>	<b>35.8571</b>	<b>5.7</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>31.9601</b>	<b>40.7956</b>	<b>24</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>75.7805</b>	<b>97.3631</b>	<b>25</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>34.3769</b>	<b>43.4255</b>	<b>23</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	35.5291	40.5436	13	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>26.8645</b>	<b>38.9288</b>	<b>37*</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>28.8809</b>	<b>40.5736</b>	<b>34</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>28.3564</b>	<b>38.3468</b>	<b>30</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>32.4123</b>	<b>44.6515</b>	<b>32*</b>	<b>30</b>
Cyclohexanone	1	162.1099	154.2419	5	30
Camphene	1	35.471	48.8993	32*	30
1,2,3-Trichloropropane	1	33.6332	36.7065	8.7	30
2-Chlorotoluene	1	29.114	40.2213	32*	30
p-Ethyltoluene	1	31.7643	43.5101	31*	30
4-Chlorotoluene	1	27.9318	40.8418	38*	30
n-Propylbenzene	1	31.233	45.6292	37	40
Bromobenzene	1	33.8964	43.6839	25	30
1,3,5-Trimethylbenzene	1	29.1598	41.6453	35*	30
Butyl methacrylate	1	27.6332	35.9739	26	30
t-Butylbenzene	1	27.4135	40.3626	38*	30
1,2,4-Trimethylbenzene	1	28.1144	38.9623	32*	30
sec-Butylbenzene	1	25.5606	40.0767	44*	40
4-Isopropyltoluene	1	28.8722	44.7717	43*	30
n-Butylbenzene	1	22.5587	38.2341	52*	30
p-Diethylbenzene	1	24.5597	39.3555	46*	30
1,2,4,5-Tetramethylbenzene	1	25.5848	39.9331	44*	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>30.078</b>	<b>31.0181</b>	<b>3.1</b>	<b>30</b>
Camphor	1	325.2783	309.4433	5	30
Hexachlorobutadiene	1	19.8729	34.1702	53*	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>23.5379</b>	<b>38.0368</b>	<b>47*</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>23.2014</b>	<b>34.4001</b>	<b>39*</b>	<b>30</b>
Naphthalene	1	26.6983	33.1608	22	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89426

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140101.D		MBS89426		10/5/2020 8:19:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.7989	0	20	89	50	150
<b><u>Dichlorodifluoromethane</u></b>	1	<b><u>26.8961</u></b>	0	20	<b><u>134</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Chloromethane</u></b>	1	<b><u>20.2807</u></b>	0	20	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Bromomethane</u></b>	1	<b><u>16.1231</u></b>	0	20	<b><u>81</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Vinyl Chloride</u></b>	1	<b><u>22.7102</u></b>	0	20	<b><u>114</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Chloroethane</u></b>	1	<b><u>21.9816</u></b>	0	20	<b><u>110</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Trichlorofluoromethane</u></b>	1	<b><u>23.0211</u></b>	0	20	<b><u>115</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Ethyl ether	1	19.0156	0	20	95	50	150
Furan	1	18.6435	0	20	93	50	150
<b><u>1,1,2-Trichloro-1,2,2-trifluoroethane</u></b>	1	<b><u>23.0788</u></b>	0	20	<b><u>115</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Methylene Chloride</u></b>	1	<b><u>19.8618</u></b>	0	20	<b><u>99</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Acrolein	1	105.9885	0	100	106	50	150
Acrylonitrile	1	20.7859	0	20	104	50	150
Iodomethane	1	11.4264	0	20	57	50	150
<b><u>Acetone</u></b>	1	<b><u>92.3286</u></b>	0	100	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Carbon Disulfide</u></b>	1	<b><u>20.1017</u></b>	0	20	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
t-Butyl Alcohol	1	102.9656	0	100	103	50	150
n-Hexane	1	23.7472	0	20	119	70	130
Di-isopropyl-ether	1	18.625	0	20	93	70	130
<b><u>1,1-Dichloroethene</u></b>	1	<b><u>21.2018</u></b>	0	20	<b><u>106</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Methyl Acetate</u></b>	1	<b><u>20.2661</u></b>	0	20	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Methyl-t-butyl ether</u></b>	1	<b><u>20.5601</u></b>	0	20	<b><u>103</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>1,1-Dichloroethane</u></b>	1	<b><u>18.6834</u></b>	0	20	<b><u>93</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>trans-1,2-Dichloroethene</u></b>	1	<b><u>21.2872</u></b>	0	20	<b><u>106</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Ethyl-t-butyl ether	1	18.6347	0	20	93	70	130
<b><u>cis-1,2-Dichloroethene</u></b>	1	<b><u>18.998</u></b>	0	20	<b><u>95</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Bromochloromethane</u></b>	1	<b><u>15.7933</u></b>	0	20	<b><u>79</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
2,2-Dichloropropane	1	19.0159	0	20	95	70	130
Ethyl acetate	1	16.6872	0	20	83	50	150
<b><u>1,4-Dioxane</u></b>	1	<b><u>960.0303</u></b>	0	1000	<b><u>96</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
1,1-Dichloropropene	1	20.976	0	20	105	70	130
<b><u>Chloroform</u></b>	1	<b><u>19.03</u></b>	0	20	<b><u>95</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Cyclohexane</u></b>	1	<b><u>21.9395</u></b>	0	20	<b><u>110</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>1,2-Dichloroethane</u></b>	1	<b><u>18.8434</u></b>	0	20	<b><u>94</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Butanone</u></b>	1	<b><u>16.1126</u></b>	0	20	<b><u>81</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>1,1,1-Trichloroethane</u></b>	1	<b><u>19.7554</u></b>	0	20	<b><u>99</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Carbon Tetrachloride</u></b>	1	<b><u>19.9941</u></b>	0	20	<b><u>100</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Vinyl Acetate	1	17.8727	0	20	89	50	150
<b><u>Bromodichloromethane</u></b>	1	<b><u>18.0927</u></b>	0	20	<b><u>90</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Methylcyclohexane</u></b>	1	<b><u>22.6063</u></b>	0	20	<b><u>113</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Dibromomethane	1	19.9681	0	20	100	70	130
<b><u>1,2-Dichloropropane</u></b>	1	<b><u>18.2835</u></b>	0	20	<b><u>91</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Trichloroethene</u></b>	1	<b><u>22.7405</u></b>	0	20	<b><u>114</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Benzene</u></b>	1	<b><u>20.0545</u></b>	0	20	<b><u>100</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
tert-Amyl methyl ether	1	18.8864	0	20	94	70	130
Iso-propylacetate	1	15.9813	0	20	80	70	130
Methyl methacrylate	1	15.2578	0	20	76	70	130
<b><u>Dibromochloromethane</u></b>	1	<b><u>15.9792</u></b>	0	20	<b><u>80</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
2-Chloroethylvinylether	1	11.7274	0	20	59*	70	130
<b><u>cis-1,3-Dichloropropene</u></b>	1	<b><u>16.6823</u></b>	0	20	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>trans-1,3-Dichloropropene</u></b>	1	<b><u>15.4454</u></b>	0	20	<b><u>77</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Ethyl methacrylate	1	16.4354	0	20	82	70	130
<b><u>1,1,2-Trichloroethane</u></b>	1	<b><u>16.634</u></b>	0	20	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>1,2-Dibromoethane</u></b>	1	<b><u>16.3139</u></b>	0	20	<b><u>82</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,3-Dichloropropane	1	16.2677	0	20	81	70	130
<b><u>4-Methyl-2-Pentanone</u></b>	1	<b><u>16.3225</u></b>	0	20	<b><u>82</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>2-Hexanone</u></b>	1	<b><u>18.4292</u></b>	0	20	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Tetrachloroethene</u></b>	1	<b><u>20.1103</u></b>	0	20	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Toluene</u></b>	1	<b><u>28.9603</u></b>	0	20	<b><u>145*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,1,1,2-Tetrachloroethane	1	16.8215	0	20	84	70	130
<b><u>Chlorobenzene</u></b>	1	<b><u>24.9235</u></b>	0	20	<b><u>125</u></b>	<b><u>70</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89426

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.5593	0	20	73	70	130
n-Amyl acetate	1	14.1871	0	20	71	70	130
<b>Bromoform</b>	<b>1</b>	<b>14.7411</b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>17.0734</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>15.1362</b>	<b>0</b>	<b>20</b>	<b>76</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>17.6336</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>38.6373</b>	<b>0</b>	<b>40</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.7732</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	15.1007	0	20	76	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>16.5771</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>16.867</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>16.4746</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>18.1463</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	70.5548	0	100	71	50	150
Camphene	1	18.0899	0	20	90	70	130
1,2,3-Trichloropropane	1	14.3667	0	20	72	70	130
2-Chlorotoluene	1	16.6559	0	20	83	70	130
p-Ethyltoluene	1	18.1354	0	20	91	70	130
4-Chlorotoluene	1	17.1003	0	20	86	70	130
n-Propylbenzene	1	17.337	0	20	87	70	130
Bromobenzene	1	14.7775	0	20	74	70	130
1,3,5-Trimethylbenzene	1	17.1054	0	20	86	70	130
Butyl methacrylate	1	15.1231	0	20	76	70	130
t-Butylbenzene	1	18.4676	0	20	92	70	130
1,2,4-Trimethylbenzene	1	17.1971	0	20	86	70	130
sec-Butylbenzene	1	18.0288	0	20	90	70	130
4-Isopropyltoluene	1	18.3372	0	20	92	70	130
n-Butylbenzene	1	17.8484	0	20	89	70	130
p-Diethylbenzene	1	18.664	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	15.4527	0	20	77	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>14.3333</b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>50</b>	<b>150</b>
Camphor	1	136.7144	0	200	68	20	150
Hexachlorobutadiene	1	17.7447	0	20	89	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>17.4033</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>16.6546</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.5962	0	20	88	50	150

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 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89426

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140103.D		AD19539-009(MS)		10/5/2020 9:00:00 PM			
Non Spike (If applicable): 1M140107.D		AD19539-009		10/5/2020 10:23:00 PM			
Inst Blank (If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.0446	0	20	85	50	150
<b>Dichlorodifluoromethane</b>	1	<b>27.3423</b>	0	20	<b>137</b>	50	150
<b>Chloromethane</b>	1	<b>9.817</b>	0	20	<b>49*</b>	50	150
<b>Bromomethane</b>	1	<b>17.3567</b>	0	20	<b>87</b>	50	150
<b>Vinyl Chloride</b>	1	<b>24.563</b>	<b>1.3708</b>	20	<b>116</b>	50	150
<b>Chloroethane</b>	1	<b>18.2447</b>	0	20	<b>91</b>	50	150
<b>Trichlorofluoromethane</b>	1	<b>24.3814</b>	0	20	<b>122</b>	50	150
Ethyl ether	1	19.9952	0	20	100	50	150
Furan	1	20.0125	0	20	100	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>24.3855</b>	0	20	<b>122</b>	50	150
<b>Methylene Chloride</b>	1	<b>20.7622</b>	0	20	<b>104</b>	70	130
Acrolein	1	109.7816	0	100	110	50	150
Acrylonitrile	1	21.9278	0	20	110	50	150
Iodomethane	1	15.2291	0	20	76	50	150
<b>Acetone</b>	1	<b>98.4047</b>	<b>6.166</b>	100	<b>92</b>	50	150
<b>Carbon Disulfide</b>	1	<b>21.1867</b>	0	20	<b>106</b>	50	150
t-Butyl Alcohol	1	26.7088	0	100	27*	50	150
n-Hexane	1	24.1543	0	20	121	70	130
Di-isopropyl-ether	1	19.6804	0	20	98	70	130
<b>1,1-Dichloroethene</b>	1	<b>22.165</b>	0	20	<b>111</b>	70	130
<b>Methyl Acetate</b>	1	<b>20.5699</b>	0	20	<b>103</b>	50	150
<b>Methyl-t-butyl ether</b>	1	<b>21.8914</b>	0	20	<b>109</b>	70	130
<b>1,1-Dichloroethane</b>	1	<b>19.6348</b>	0	20	<b>98</b>	70	130
<b>trans-1,2-Dichloroethene</b>	1	<b>22.3901</b>	0	20	<b>112</b>	70	130
Ethyl-t-butyl ether	1	19.6807	0	20	98	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>20.344</b>	0	20	<b>102</b>	70	130
<b>Bromochloromethane</b>	1	<b>19.815</b>	0	20	<b>99</b>	70	130
2,2-Dichloropropane	1	20.8605	0	20	104	70	130
Ethyl acetate	1	18.7426	0	20	94	50	150
<b>1,4-Dioxane</b>	1	<b>1025.066</b>	0	1000	<b>103</b>	50	150
1,1-Dichloropropene	1	22.5228	0	20	113	70	130
<b>Chloroform</b>	1	<b>20.0631</b>	0	20	<b>100</b>	70	130
<b>Cyclohexane</b>	1	<b>22.7272</b>	0	20	<b>114</b>	70	130
<b>1,2-Dichloroethane</b>	1	<b>20.2558</b>	0	20	<b>101</b>	70	130
<b>2-Butanone</b>	1	<b>18.1796</b>	0	20	<b>91</b>	50	150
<b>1,1,1-Trichloroethane</b>	1	<b>21.0169</b>	0	20	<b>105</b>	70	130
<b>Carbon Tetrachloride</b>	1	<b>20.9965</b>	0	20	<b>105</b>	50	150
Vinyl Acetate	1	19.5368	0	20	98	50	150
<b>Bromodichloromethane</b>	1	<b>19.1514</b>	0	20	<b>96</b>	70	130
<b>Methylcyclohexane</b>	1	<b>23.3254</b>	0	20	<b>117</b>	70	130
Dibromomethane	1	20.7806	0	20	104	70	130
<b>1,2-Dichloropropane</b>	1	<b>18.6309</b>	0	20	<b>93</b>	70	130
<b>Trichloroethene</b>	1	<b>21.6674</b>	0	20	<b>108</b>	70	130
<b>Benzene</b>	1	<b>21.3074</b>	0	20	<b>107</b>	70	130
tert-Amyl methyl ether	1	19.9476	0	20	100	70	130
Iso-propylacetate	1	17.1608	0	20	86	70	130
Methyl methacrylate	1	16.3632	0	20	82	70	130
<b>Dibromochloromethane</b>	1	<b>17.1882</b>	0	20	<b>86</b>	70	130
2-Chloroethylvinylether	1	12.711	0	20	64*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>17.7671</b>	0	20	<b>89</b>	70	130
<b>trans-1,3-Dichloropropene</b>	1	<b>16.8451</b>	0	20	<b>84</b>	70	130
Ethyl methacrylate	1	17.3314	0	20	87	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>16.8386</b>	0	20	<b>84</b>	70	130
<b>1,2-Dibromoethane</b>	1	<b>17.0611</b>	0	20	<b>85</b>	70	130
1,3-Dichloropropane	1	17.3451	0	20	87	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>17.0654</b>	0	20	<b>85</b>	50	150
<b>2-Hexanone</b>	1	<b>16.6741</b>	0	20	<b>83</b>	50	150
<b>Tetrachloroethene</b>	1	<b>21.0609</b>	0	20	<b>105</b>	50	150
<b>Toluene</b>	1	<b>20.8138</b>	<b>1.3634</b>	20	<b>97</b>	70	130
1,1,1,2-Tetrachloroethane	1	17.749	0	20	89	70	130
<b>Chlorobenzene</b>	1	<b>22.1236</b>	<b>2.6962</b>	20	<b>97</b>	70	130

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 Bold and underline - Indicates the compounds reported on form 1



Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89426

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	15.7016	0	20	79	70	130
n-Amyl acetate	1	16.0297	0	20	80	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.7981</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>17.5954</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>14.9922</b>	<b>0</b>	<b>20</b>	<b>75</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>19.342</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>40.4444</b>	<b>2.0131</b>	<b>40</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>19.3593</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	16.5796	0	20	83	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.8241</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.8726</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.4497</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>19.672</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	87.0869	0	100	87	50	150
Camphene	1	19.8532	0	20	99	70	130
1,2,3-Trichloropropane	1	15.4687	0	20	77	70	130
2-Chlorotoluene	1	18.09	0	20	90	70	130
p-Ethyltoluene	1	18.75	0	20	94	70	130
4-Chlorotoluene	1	17.8293	0	20	89	70	130
n-Propylbenzene	1	18.6487	0	20	93	70	130
Bromobenzene	1	17.7563	0	20	89	70	130
1,3,5-Trimethylbenzene	1	18.9108	0	20	95	70	130
Butyl methacrylate	1	16.7621	0	20	84	70	130
t-Butylbenzene	1	19.534	0	20	98	70	130
1,2,4-Trimethylbenzene	1	18.26	0	20	91	70	130
sec-Butylbenzene	1	19.251	0	20	96	70	130
4-Isopropyltoluene	1	19.4968	0	20	97	70	130
n-Butylbenzene	1	18.6305	0	20	93	70	130
p-Diethylbenzene	1	19.407	0	20	97	70	130
1,2,4,5-Tetramethylbenzene	1	15.424	0	20	77	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>15.311</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>50</b>	<b>150</b>
Camphor	1	133.6388	0	200	67	20	150
Hexachlorobutadiene	1	20.0651	1.001	20	95	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>18.5272</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>17.9497</b>	<b>1.1368</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.996	0	20	90	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89426

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140104.D		AD19539-009(MSD)		10/5/2020 9:21:00 PM			
Non Spike(If applicable): 1M140107.D		AD19539-009		10/5/2020 10:23:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	15.5541	0	20	78	50	150
<b>Dichlorodifluoromethane</b>	1	<b>25.0965</b>	0	20	<b>125</b>	<b>50</b>	<b>150</b>
Chloromethane	1	18.1329	0	20	91	50	150
Bromomethane	1	15.745	0	20	79	50	150
Vinyl Chloride	1	21.587	1.3708	20	101	50	150
Chloroethane	1	15.3094	0	20	77	50	150
Trichlorofluoromethane	1	21.8311	0	20	109	50	150
Ethyl ether	1	18.2903	0	20	91	50	150
Furan	1	18.0934	0	20	90	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>21.4302</b>	0	20	<b>107</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	1	<b>18.9979</b>	0	20	<b>95</b>	<b>70</b>	<b>130</b>
Acrolein	1	98.1352	0	100	98	50	150
Acrylonitrile	1	19.2715	0	20	96	50	150
Iodomethane	1	15.176	0	20	76	50	150
<b>Acetone</b>	1	<b>89.5003</b>	<b>6.166</b>	<b>100</b>	<b>83</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	1	<b>18.2502</b>	0	20	<b>91</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	29.8954	0	100	30*	50	150
n-Hexane	1	22.7126	0	20	114	70	130
Di-isopropyl-ether	1	18.0311	0	20	90	70	130
<b>1,1-Dichloroethene</b>	1	<b>19.6599</b>	0	20	<b>98</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	1	<b>18.3307</b>	0	20	<b>92</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	1	<b>20.1591</b>	0	20	<b>101</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	1	<b>17.4942</b>	0	20	<b>87</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	1	<b>19.7259</b>	0	20	<b>99</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	18.5301	0	20	93	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>18.7572</b>	0	20	<b>94</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	1	<b>17.7758</b>	0	20	<b>89</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	18.9267	0	20	95	70	130
Ethyl acetate	1	15.0463	0	20	75	50	150
<b>1,4-Dioxane</b>	1	<b>925.5415</b>	0	<b>1000</b>	<b>93</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	20.1857	0	20	101	70	130
<b>Chloroform</b>	1	<b>18.1569</b>	0	20	<b>91</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	1	<b>21.1019</b>	0	20	<b>106</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	1	<b>18.7388</b>	0	20	<b>94</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	1	<b>17.0136</b>	0	20	<b>85</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	1	<b>19.1049</b>	0	20	<b>96</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	1	<b>19.1461</b>	0	20	<b>96</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	17.6768	0	20	88	50	150
<b>Bromodichloromethane</b>	1	<b>17.3236</b>	0	20	<b>87</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	1	<b>21.489</b>	0	20	<b>107</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	18.9994	0	20	95	70	130
<b>1,2-Dichloropropane</b>	1	<b>16.9427</b>	0	20	<b>85</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	1	<b>18.9604</b>	0	20	<b>95</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	1	<b>18.2889</b>	0	20	<b>91</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	18.0118	0	20	90	70	130
Iso-propylacetate	1	14.8621	0	20	74	70	130
Methyl methacrylate	1	13.8615	0	20	69*	70	130
<b>Dibromochloromethane</b>	1	<b>15.7601</b>	0	20	<b>79</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	11.4694	0	20	57*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>16.3396</b>	0	20	<b>82</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	1	<b>14.3779</b>	0	20	<b>72</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	15.5653	0	20	78	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>15.8109</b>	0	20	<b>79</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	1	<b>15.5877</b>	0	20	<b>78</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	15.6312	0	20	78	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>15.2624</b>	0	20	<b>76</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	1	<b>15.4623</b>	0	20	<b>77</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	1	<b>18.7395</b>	0	20	<b>94</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	1	<b>18.2555</b>	<b>1.3634</b>	20	<b>84</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	16.0842	0	20	80	70	130
<b>Chlorobenzene</b>	1	<b>19.3979</b>	<b>2.6962</b>	20	<b>84</b>	<b>70</b>	<b>130</b>

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Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89426

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	13.8866	0	20	69*	70	130
n-Amyl acetate	1	13.6134	0	20	68*	70	130
<b>Bromoform</b>	<b>1</b>	<b>13.3909</b>	<b>0</b>	<b>20</b>	<b>67*</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.6415</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>13.4206</b>	<b>0</b>	<b>20</b>	<b>67*</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>16.9986</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>35.8244</b>	<b>2.0131</b>	<b>40</b>	<b>85</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>17.3843</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	14.7522	0	20	74	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>16.3676</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>16.178</b>	<b>0</b>	<b>20</b>	<b>81</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>15.5109</b>	<b>0</b>	<b>20</b>	<b>78</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>17.6838</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	71.8118	0	100	72	50	150
Camphene	1	18.0605	0	20	90	70	130
1,2,3-Trichloropropane	1	13.5202	0	20	68*	70	130
2-Chlorotoluene	1	16.1537	0	20	81	70	130
p-Ethyltoluene	1	17.5466	0	20	88	70	130
4-Chlorotoluene	1	16.1628	0	20	81	70	130
n-Propylbenzene	1	16.8251	0	20	84	70	130
Bromobenzene	1	15.8112	0	20	79	70	130
1,3,5-Trimethylbenzene	1	16.5519	0	20	83	70	130
Butyl methacrylate	1	14.8191	0	20	74	70	130
t-Butylbenzene	1	17.4904	0	20	87	70	130
1,2,4-Trimethylbenzene	1	16.504	0	20	83	70	130
sec-Butylbenzene	1	17.3719	0	20	87	70	130
4-Isopropyltoluene	1	17.5475	0	20	88	70	130
n-Butylbenzene	1	16.8163	0	20	84	70	130
p-Diethylbenzene	1	17.442	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	13.7466	0	20	69*	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>12.8256</b>	<b>0</b>	<b>20</b>	<b>64</b>	<b>50</b>	<b>150</b>
Camphor	1	115.0728	0	200	58	20	150
Hexachlorobutadiene	1	17.1752	1.001	20	81	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.8476</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>16.3336</b>	<b>1.1368</b>	<b>20</b>	<b>76</b>	<b>70</b>	<b>130</b>
Naphthalene	1	15.781	0	20	79	50	150

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**Bold and underline** - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**  
**QC Batch: MBS89426**

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M140104.D	AD19539-009(MSD)	10/5/2020 9:21:00 PM
Duplicate(If applicable): 1M140103.D	AD19539-009(MS)	10/5/2020 9:00:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Methanol	Units: mg/Kg
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	15.5541	17.0446	9.1	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>25.0965</b>	<b>27.3423</b>	<b>8.6</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>18.1329</b>	<b>9.817</b>	<b>60*</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>15.745</b>	<b>17.3567</b>	<b>9.7</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>21.587</b>	<b>24.563</b>	<b>13</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>15.3094</b>	<b>18.2447</b>	<b>17</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>21.8311</b>	<b>24.3814</b>	<b>11</b>	<b>30</b>
Ethyl ether	1	18.2903	19.9952	8.9	30
Furan	1	18.0934	20.0125	10	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>21.4302</b>	<b>24.3855</b>	<b>13</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>18.9979</b>	<b>20.7622</b>	<b>8.9</b>	<b>30</b>
Acrolein	1	98.1352	109.7816	11	30
Acrylonitrile	1	19.2715	21.9278	13	30
Iodomethane	1	15.176	15.2291	0.35	30
<b>Acetone</b>	<b>1</b>	<b>89.5003</b>	<b>98.4047</b>	<b>9.5</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>18.2502</b>	<b>21.1867</b>	<b>15</b>	<b>30</b>
t-Butyl Alcohol	1	29.8954	26.7088	11	30
n-Hexane	1	22.7126	24.1543	6.2	30
Di-isopropyl-ether	1	18.0311	19.6804	8.7	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>19.6599</b>	<b>22.165</b>	<b>12</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>18.3307</b>	<b>20.5699</b>	<b>12</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>20.1591</b>	<b>21.8914</b>	<b>8.2</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>17.4942</b>	<b>19.6348</b>	<b>12</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>19.7259</b>	<b>22.3901</b>	<b>13</b>	<b>30</b>
Ethyl-t-butyl ether	1	18.5301	19.6807	6	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>18.7572</b>	<b>20.344</b>	<b>8.1</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>17.7758</b>	<b>19.815</b>	<b>11</b>	<b>30</b>
2,2-Dichloropropane	1	18.9267	20.8605	9.7	30
Ethyl acetate	1	15.0463	18.7426	22*	20
<b>1,4-Dioxane</b>	<b>1</b>	<b>925.5415</b>	<b>1025.066</b>	<b>10</b>	<b>30</b>
1,1-Dichloropropene	1	20.1857	22.5228	11	30
<b>Chloroform</b>	<b>1</b>	<b>18.1569</b>	<b>20.0631</b>	<b>10</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>21.1019</b>	<b>22.7272</b>	<b>7.4</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>18.7388</b>	<b>20.2558</b>	<b>7.8</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>17.0136</b>	<b>18.1796</b>	<b>6.6</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>19.1049</b>	<b>21.0169</b>	<b>9.5</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>19.1461</b>	<b>20.9965</b>	<b>9.2</b>	<b>40</b>
Vinyl Acetate	1	17.6768	19.5368	10	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>17.3236</b>	<b>19.1514</b>	<b>10</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>21.489</b>	<b>23.3254</b>	<b>8.2</b>	<b>30</b>
Dibromomethane	1	18.9994	20.7806	9	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>16.9427</b>	<b>18.6309</b>	<b>9.5</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>18.9604</b>	<b>21.6674</b>	<b>13</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>18.2889</b>	<b>21.3074</b>	<b>15</b>	<b>40</b>
tert-Amyl methyl ether	1	18.0118	19.9476	10	30
Iso-propylacetate	1	14.8621	17.1608	14	30
Methyl methacrylate	1	13.8615	16.3632	17	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>15.7601</b>	<b>17.1882</b>	<b>8.7</b>	<b>30</b>
2-Chloroethylvinylether	1	11.4694	12.711	10	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>16.3396</b>	<b>17.7671</b>	<b>8.4</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>14.3779</b>	<b>16.8451</b>	<b>16</b>	<b>30</b>
Ethyl methacrylate	1	15.5653	17.3314	11	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>15.8109</b>	<b>16.8386</b>	<b>6.3</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>15.5877</b>	<b>17.0611</b>	<b>9</b>	<b>30</b>
1,3-Dichloropropane	1	15.6312	17.3451	10	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>15.2624</b>	<b>17.0654</b>	<b>11</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>15.4623</b>	<b>16.6741</b>	<b>7.5</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>18.7395</b>	<b>21.0609</b>	<b>12</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>18.2555</b>	<b>20.8138</b>	<b>13</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	16.0842	17.749	9.8	30
<b>Chlorobenzene</b>	<b>1</b>	<b>19.3979</b>	<b>22.1236</b>	<b>13</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89426

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	13.8866	15.7016	12	30
n-Amyl acetate	1	13.6134	16.0297	16	30
<b>Bromoform</b>	<b>1</b>	<b>13.3909</b>	<b>15.7981</b>	<b>16</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.6415</b>	<b>17.5954</b>	<b>5.6</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>13.4206</b>	<b>14.9922</b>	<b>11</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>16.9986</b>	<b>19.342</b>	<b>13</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>35.8244</b>	<b>40.4444</b>	<b>12</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>17.3843</b>	<b>19.3593</b>	<b>11</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	14.7522	16.5796	12	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>16.3676</b>	<b>17.8241</b>	<b>8.5</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>16.178</b>	<b>17.8726</b>	<b>10</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>15.5109</b>	<b>17.4497</b>	<b>12</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>17.6838</b>	<b>19.672</b>	<b>11</b>	<b>30</b>
Cyclohexanone	1	71.8118	87.0869	19	30
Camphene	1	18.0605	19.8532	9.5	30
1,2,3-Trichloropropane	1	13.5202	15.4687	13	30
2-Chlorotoluene	1	16.1537	18.09	11	30
p-Ethyltoluene	1	17.5466	18.75	6.6	30
4-Chlorotoluene	1	16.1628	17.8293	9.8	30
n-Propylbenzene	1	16.8251	18.6487	10	40
Bromobenzene	1	15.8112	17.7563	12	30
1,3,5-Trimethylbenzene	1	16.5519	18.9108	13	30
Butyl methacrylate	1	14.8191	16.7621	12	30
t-Butylbenzene	1	17.4904	19.534	11	30
1,2,4-Trimethylbenzene	1	16.504	18.26	10	30
sec-Butylbenzene	1	17.3719	19.251	10	40
4-Isopropyltoluene	1	17.5475	19.4968	11	30
n-Butylbenzene	1	16.8163	18.6305	10	30
p-Diethylbenzene	1	17.442	19.407	11	30
1,2,4,5-Tetramethylbenzene	1	13.7466	15.424	12	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>12.8256</b>	<b>15.311</b>	<b>18</b>	<b>30</b>
Camphor	1	115.0728	133.6388	15	30
Hexachlorobutadiene	1	17.1752	20.0651	16	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.8476</b>	<b>18.5272</b>	<b>9.5</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>16.3336</b>	<b>17.9497</b>	<b>9.4</b>	<b>30</b>
Naphthalene	1	15.781	17.996	13	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89427

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140102.D		MBS89427		10/5/2020 8:40:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.7158	0	20	89	50	150
<b>Dichlorodifluoromethane</b>	1	<b>20.9377</b>	0	20	<b>105</b>	<b>50</b>	<b>150</b>
Chloromethane	1	16.0202	0	20	80	50	150
<b>Bromomethane</b>	1	<b>16.3237</b>	0	20	<b>82</b>	<b>50</b>	<b>150</b>
<b>Vinyl Chloride</b>	1	<b>18.4895</b>	0	20	<b>92</b>	<b>50</b>	<b>150</b>
<b>Chloroethane</b>	1	<b>19.6783</b>	0	20	<b>98</b>	<b>50</b>	<b>150</b>
<b>Trichlorofluoromethane</b>	1	<b>19.3914</b>	0	20	<b>97</b>	<b>50</b>	<b>150</b>
Ethyl ether	1	16.0661	0	20	80	50	150
Furan	1	15.8839	0	20	79	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>17.8006</b>	0	20	<b>89</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	1	<b>16.7739</b>	0	20	<b>84</b>	<b>70</b>	<b>130</b>
Acrolein	1	83.9639	0	100	84	50	150
Acrylonitrile	1	17.9237	0	20	90	50	150
Iodomethane	1	14.0189	0	20	70	50	150
<b>Acetone</b>	1	<b>85.111</b>	0	100	<b>85</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	1	<b>17.1325</b>	0	20	<b>86</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	85.2415	0	100	85	50	150
n-Hexane	1	17.6993	0	20	88	70	130
Di-isopropyl-ether	1	15.9282	0	20	80	70	130
<b>1,1-Dichloroethene</b>	1	<b>17.9545</b>	0	20	<b>90</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	1	<b>7.2015</b>	0	20	<b>36*</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	1	<b>17.7828</b>	0	20	<b>89</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	1	<b>15.5019</b>	0	20	<b>78</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	1	<b>17.754</b>	0	20	<b>89</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	15.9322	0	20	80	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>16.2596</b>	0	20	<b>81</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	1	<b>15.8353</b>	0	20	<b>79</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	15.8428	0	20	79	70	130
Ethyl acetate	1	14.3822	0	20	72	50	150
<b>1,4-Dioxane</b>	1	<b>769.5223</b>	0	1000	<b>77</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	17.0893	0	20	85	70	130
<b>Chloroform</b>	1	<b>15.9564</b>	0	20	<b>80</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	1	<b>17.0569</b>	0	20	<b>85</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	1	<b>15.8921</b>	0	20	<b>79</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	1	<b>14.6075</b>	0	20	<b>73</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	1	<b>16.6684</b>	0	20	<b>83</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	1	<b>17.0288</b>	0	20	<b>85</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	14.1298	0	20	71	50	150
<b>Bromodichloromethane</b>	1	<b>15.5101</b>	0	20	<b>78</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	1	<b>17.684</b>	0	20	<b>88</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	16.3403	0	20	82	70	130
<b>1,2-Dichloropropane</b>	1	<b>14.7115</b>	0	20	<b>74</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	1	<b>17.4581</b>	0	20	<b>87</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	1	<b>16.1708</b>	0	20	<b>81</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	15.9491	0	20	80	70	130
Iso-propylacetate	1	14.2407	0	20	71	70	130
Methyl methacrylate	1	13.6524	0	20	68*	70	130
<b>Dibromochloromethane</b>	1	<b>13.9467</b>	0	20	<b>70</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	10.3554	0	20	52*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>13.8636</b>	0	20	<b>69*</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	1	<b>12.7452</b>	0	20	<b>64*</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	14.0144	0	20	70	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>14.9496</b>	0	20	<b>75</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	1	<b>13.6427</b>	0	20	<b>68*</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	13.4524	0	20	67*	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>14.1168</b>	0	20	<b>71</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	1	<b>15.2179</b>	0	20	<b>76</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	1	<b>16.6387</b>	0	20	<b>83</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	1	<b>18.5593</b>	0	20	<b>93</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	14.4773	0	20	72	70	130
<b>Chlorobenzene</b>	1	<b>17.4181</b>	0	20	<b>87</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89427

Method: 8260D	Matrix: Aqueous	Units: ug/L		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	12.9304	0	20	65*	70	130
n-Amyl acetate	1	12.8954	0	20	64*	70	130
<b>Bromoform</b>	<b>1</b>	<b>14.3602</b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>14.7805</b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>12.278</b>	<b>0</b>	<b>20</b>	<b>61*</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>15.0177</b>	<b>0</b>	<b>20</b>	<b>75</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>32.6123</b>	<b>0</b>	<b>40</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>15.6355</b>	<b>0</b>	<b>20</b>	<b>78</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	13.2089	0	20	66	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>13.9007</b>	<b>0</b>	<b>20</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>13.905</b>	<b>0</b>	<b>20</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>13.5756</b>	<b>0</b>	<b>20</b>	<b>68*</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>15.4631</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	68.652	0	100	69	50	150
Camphene	1	14.6114	0	20	73	70	130
1,2,3-Trichloropropane	1	12.4072	0	20	62*	70	130
2-Chlorotoluene	1	14.2471	0	20	71	70	130
p-Ethyltoluene	1	15.1522	0	20	76	70	130
4-Chlorotoluene	1	14.4116	0	20	72	70	130
n-Propylbenzene	1	14.4303	0	20	72	70	130
Bromobenzene	1	13.6329	0	20	68*	70	130
1,3,5-Trimethylbenzene	1	14.3659	0	20	72	70	130
Butyl methacrylate	1	13.6831	0	20	68*	70	130
t-Butylbenzene	1	15.2805	0	20	76	70	130
1,2,4-Trimethylbenzene	1	14.2754	0	20	71	70	130
sec-Butylbenzene	1	14.8649	0	20	74	70	130
4-Isopropyltoluene	1	15.02	0	20	75	70	130
n-Butylbenzene	1	13.9636	0	20	70	70	130
p-Diethylbenzene	1	14.9465	0	20	75	70	130
1,2,4,5-Tetramethylbenzene	1	12.0476	0	20	60*	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>12.5425</b>	<b>0</b>	<b>20</b>	<b>63</b>	<b>50</b>	<b>150</b>
Camphor	1	103.2317	0	200	52	20	150
Hexachlorobutadiene	1	14.1066	0	20	71	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>14.1118</b>	<b>0</b>	<b>20</b>	<b>71</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>13.8288</b>	<b>0</b>	<b>20</b>	<b>69*</b>	<b>70</b>	<b>130</b>
Naphthalene	1	14.5019	0	20	73	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89427

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140105.D		AD19565-016(MS)		10/5/2020 9:42:00 PM			
Non Spike(If applicable): 1M140097.D		AD19565-016		10/5/2020 6:56:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.1942	0	20	91	50	150
<u>Dichlorodifluoromethane</u>	1	<u>26.9766</u>	0	20	<u>135</u>	<u>50</u>	<u>150</u>
<u>Chloromethane</u>	1	<u>20.8413</u>	0	20	<u>104</u>	<u>50</u>	<u>150</u>
<u>Bromomethane</u>	1	<u>21.1733</u>	0	20	<u>106</u>	<u>50</u>	<u>150</u>
<u>Vinyl Chloride</u>	1	<u>22.78</u>	0	20	<u>114</u>	<u>50</u>	<u>150</u>
<u>Chloroethane</u>	1	<u>24.6388</u>	0	20	<u>123</u>	<u>50</u>	<u>150</u>
<u>Trichlorofluoromethane</u>	1	<u>25.4743</u>	0	20	<u>127</u>	<u>50</u>	<u>150</u>
Ethyl ether	1	19.9845	0	20	100	50	150
Furan	1	19.7351	0	20	99	50	150
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	1	<u>23.2841</u>	0	20	<u>116</u>	<u>50</u>	<u>150</u>
<u>Methylene Chloride</u>	1	<u>20.4648</u>	0	20	<u>102</u>	<u>70</u>	<u>130</u>
Acrolein	1	111.2411	0	100	111	50	150
Acrylonitrile	1	21.3629	0	20	107	50	150
Iodomethane	1	20.4168	0	20	102	50	150
<u>Acetone</u>	1	<u>97.1453</u>	0	100	<u>97</u>	<u>50</u>	<u>150</u>
<u>Carbon Disulfide</u>	1	<u>22.2342</u>	0	20	<u>111</u>	<u>50</u>	<u>150</u>
t-Butyl Alcohol	1	56.6165	0	100	57	50	150
n-Hexane	1	23.9969	0	20	120	70	130
Di-isopropyl-ether	1	20.0641	0	20	100	70	130
<u>1,1-Dichloroethene</u>	1	<u>22.8547</u>	0	20	<u>114</u>	<u>70</u>	<u>130</u>
<u>Methyl Acetate</u>	1	<u>19.3257</u>	0	20	<u>97</u>	<u>50</u>	<u>150</u>
<u>Methyl-t-butyl ether</u>	1	<u>22.2721</u>	0	20	<u>111</u>	<u>70</u>	<u>130</u>
<u>1,1-Dichloroethane</u>	1	<u>19.5198</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>
<u>trans-1,2-Dichloroethene</u>	1	<u>22.341</u>	0	20	<u>112</u>	<u>70</u>	<u>130</u>
Ethyl-t-butyl ether	1	19.9428	0	20	100	70	130
<u>cis-1,2-Dichloroethene</u>	1	<u>20.7514</u>	0	20	<u>104</u>	<u>70</u>	<u>130</u>
<u>Bromochloromethane</u>	1	<u>19.5275</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>
2,2-Dichloropropane	1	21.1147	0	20	106	70	130
Ethyl acetate	1	18.8454	0	20	94	50	150
<u>1,4-Dioxane</u>	1	<u>996.4219</u>	0	1000	<u>100</u>	<u>50</u>	<u>150</u>
1,1-Dichloropropene	1	22.1176	0	20	111	70	130
<u>Chloroform</u>	1	<u>20.2317</u>	0	20	<u>101</u>	<u>70</u>	<u>130</u>
<u>Cyclohexane</u>	1	<u>22.2202</u>	0	20	<u>111</u>	<u>70</u>	<u>130</u>
<u>1,2-Dichloroethane</u>	1	<u>20.276</u>	0	20	<u>101</u>	<u>70</u>	<u>130</u>
<u>2-Butanone</u>	1	<u>19.8241</u>	0	20	<u>99</u>	<u>50</u>	<u>150</u>
<u>1,1,1-Trichloroethane</u>	1	<u>21.0741</u>	0	20	<u>105</u>	<u>70</u>	<u>130</u>
<u>Carbon Tetrachloride</u>	1	<u>22.0081</u>	0	20	<u>110</u>	<u>50</u>	<u>150</u>
Vinyl Acetate	1	19.1337	0	20	96	50	150
<u>Bromodichloromethane</u>	1	<u>19.2872</u>	0	20	<u>96</u>	<u>70</u>	<u>130</u>
<u>Methylcyclohexane</u>	1	<u>22.8331</u>	0	20	<u>114</u>	<u>70</u>	<u>130</u>
Dibromomethane	1	20.4726	0	20	102	70	130
<u>1,2-Dichloropropane</u>	1	<u>18.5847</u>	0	20	<u>93</u>	<u>70</u>	<u>130</u>
<u>Trichloroethene</u>	1	<u>21.3209</u>	0	20	<u>107</u>	<u>70</u>	<u>130</u>
<u>Benzene</u>	1	<u>20.6489</u>	0	20	<u>103</u>	<u>70</u>	<u>130</u>
tert-Amyl methyl ether	1	20.7559	0	20	104	70	130
Iso-propylacetate	1	17.3976	0	20	87	70	130
Methyl methacrylate	1	16.5184	0	20	83	70	130
<u>Dibromochloromethane</u>	1	<u>16.9141</u>	0	20	<u>85</u>	<u>70</u>	<u>130</u>
2-Chloroethylvinylether	1	0	0	20	0*	70	130
<u>cis-1,3-Dichloropropene</u>	1	<u>17.319</u>	0	20	<u>87</u>	<u>70</u>	<u>130</u>
<u>trans-1,3-Dichloropropene</u>	1	<u>16.0388</u>	0	20	<u>80</u>	<u>70</u>	<u>130</u>
Ethyl methacrylate	1	17.7411	0	20	89	70	130
<u>1,1,2-Trichloroethane</u>	1	<u>16.9898</u>	0	20	<u>85</u>	<u>70</u>	<u>130</u>
<u>1,2-Dibromoethane</u>	1	<u>16.752</u>	0	20	<u>84</u>	<u>70</u>	<u>130</u>
1,3-Dichloropropane	1	16.7518	0	20	84	70	130
<u>4-Methyl-2-Pentanone</u>	1	<u>17.7529</u>	0	20	<u>89</u>	<u>50</u>	<u>150</u>
<u>2-Hexanone</u>	1	<u>17.4061</u>	0	20	<u>87</u>	<u>50</u>	<u>150</u>
<u>Tetrachloroethene</u>	1	<u>22.2098</u>	3.0005	20	<u>96</u>	<u>50</u>	<u>150</u>
<u>Toluene</u>	1	<u>19.6264</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>
1,1,1,2-Tetrachloroethane	1	17.2794	0	20	86	70	130
<u>Chlorobenzene</u>	1	<u>19.4803</u>	0	20	<u>97</u>	<u>70</u>	<u>130</u>

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Bold and underline - Indicates the compounds reported on form 1



Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89427

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	15.6783	0	20	78	70	130
n-Amyl acetate	1	16.0985	0	20	80	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.5451</b>	<b>0</b>	<b>20</b>	<b>78</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>17.869</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>14.8354</b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>18.6449</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>39.471</b>	<b>0</b>	<b>40</b>	<b>99</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.7854</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	12.8102	0	20	64	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.3696</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.1505</b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>16.7473</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>19.2926</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	74.1653	0	100	74	50	150
Camphene	1	5.8485	0	20	29*	70	130
1,2,3-Trichloropropane	1	14.8412	0	20	74	70	130
2-Chlorotoluene	1	17.4967	0	20	87	70	130
p-Ethyltoluene	1	19.0354	0	20	95	70	130
4-Chlorotoluene	1	17.2172	0	20	86	70	130
n-Propylbenzene	1	18.0381	0	20	90	70	130
Bromobenzene	1	15.3382	0	20	77	70	130
1,3,5-Trimethylbenzene	1	17.9324	0	20	90	70	130
Butyl methacrylate	1	16.3538	0	20	82	70	130
t-Butylbenzene	1	18.7799	0	20	94	70	130
1,2,4-Trimethylbenzene	1	17.9536	0	20	90	70	130
sec-Butylbenzene	1	18.478	0	20	92	70	130
4-Isopropyltoluene	1	18.6868	0	20	93	70	130
n-Butylbenzene	1	18.0268	0	20	90	70	130
p-Diethylbenzene	1	18.4411	0	20	92	70	130
1,2,4,5-Tetramethylbenzene	1	14.2411	0	20	71	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>15.3289</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>50</b>	<b>150</b>
Camphor	1	125.6282	0	200	63	20	150
Hexachlorobutadiene	1	18.737	0	20	94	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>17.5302</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>17.0545</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.6604	0	20	88	50	150

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**Bold and underline** - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89427

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140106.D		AD19565-016(MSD)		10/5/2020 10:02:00 PM			
Non Spike(If applicable): 1M140097.D		AD19565-016		10/5/2020 6:56:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.1283	0	20	81	50	150
<b>Dichlorodifluoromethane</b>	1	<b>24.2863</b>	0	20	<b>121</b>	<b>50</b>	<b>150</b>
Chloromethane	1	18.1974	0	20	91	50	150
Bromomethane	1	7.9194	0	20	40*	50	150
Vinyl Chloride	1	20.2281	0	20	101	50	150
Chloroethane	1	22.3554	0	20	112	50	150
Trichlorofluoromethane	1	23.1768	0	20	116	50	150
Ethyl ether	1	18.0972	0	20	90	50	150
Furan	1	18.7955	0	20	94	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>21.4316</b>	0	20	<b>107</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	1	<b>18.9417</b>	0	20	<b>95</b>	<b>70</b>	<b>130</b>
Acrolein	1	97.4876	0	100	97	50	150
Acrylonitrile	1	19.0709	0	20	95	50	150
Iodomethane	1	18.9089	0	20	95	50	150
<b>Acetone</b>	1	<b>82.7855</b>	0	100	<b>83</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	1	<b>19.7667</b>	0	20	<b>99</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	32.0863	0	100	32*	50	150
n-Hexane	1	22.2653	0	20	111	70	130
Di-isopropyl-ether	1	18.2855	0	20	91	70	130
<b>1,1-Dichloroethene</b>	1	<b>20.5983</b>	0	20	<b>103</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	1	<b>17.3355</b>	0	20	<b>87</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	1	<b>20.6626</b>	0	20	<b>103</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	1	<b>18.2139</b>	0	20	<b>91</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	1	<b>20.2987</b>	0	20	<b>101</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	18.1546	0	20	91	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>19.0796</b>	0	20	<b>95</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	1	<b>17.9142</b>	0	20	<b>90</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	19.123	0	20	96	70	130
Ethyl acetate	1	16.4229	0	20	82	50	150
<b>1,4-Dioxane</b>	1	<b>846.0999</b>	0	1000	<b>85</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	19.4551	0	20	97	70	130
<b>Chloroform</b>	1	<b>18.6015</b>	0	20	<b>93</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	1	<b>20.3538</b>	0	20	<b>102</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	1	<b>18.8121</b>	0	20	<b>94</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	1	<b>16.3287</b>	0	20	<b>82</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	1	<b>19.6188</b>	0	20	<b>98</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	1	<b>20.0371</b>	0	20	<b>100</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	17.0932	0	20	85	50	150
<b>Bromodichloromethane</b>	1	<b>17.732</b>	0	20	<b>89</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	1	<b>21.5222</b>	0	20	<b>108</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	18.3174	0	20	92	70	130
<b>1,2-Dichloropropane</b>	1	<b>16.7163</b>	0	20	<b>84</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	1	<b>19.1903</b>	0	20	<b>96</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	1	<b>18.2021</b>	0	20	<b>91</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	18.8385	0	20	94	70	130
Iso-propylacetate	1	15.5618	0	20	78	70	130
Methyl methacrylate	1	14.2601	0	20	71	70	130
<b>Dibromochloromethane</b>	1	<b>15.5124</b>	0	20	<b>78</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	0	0	20	0*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>15.7326</b>	0	20	<b>79</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	1	<b>14.8433</b>	0	20	<b>74</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	16.082	0	20	80	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>15.2906</b>	0	20	<b>76</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	1	<b>15.1934</b>	0	20	<b>76</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	15.3677	0	20	77	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>15.5515</b>	0	20	<b>78</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	1	<b>15.0049</b>	0	20	<b>75</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	1	<b>20.7303</b>	3.0005	20	<b>89</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	1	<b>17.5186</b>	0	20	<b>88</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	15.8102	0	20	79	70	130
<b>Chlorobenzene</b>	1	<b>17.3205</b>	0	20	<b>87</b>	<b>70</b>	<b>130</b>

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Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89427

Method: 8260D	Matrix: Aqueous	Units: ug/L		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.6104	0	20	73	70	130
n-Amyl acetate	1	14.5297	0	20	73	70	130
<b>Bromofom</b>	<b>1</b>	<b>14.1114</b>	<b>0</b>	<b>20</b>	<b>71</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.4196</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>13.1042</b>	<b>0</b>	<b>20</b>	<b>66*</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>16.7462</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>36.0392</b>	<b>0</b>	<b>40</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>16.9822</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	11.0163	0	20	55	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>15.7222</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>15.7158</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>15.3583</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
<b>isopropylbenzene</b>	<b>1</b>	<b>17.7094</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	67.3504	0	100	67	50	150
Camphene	1	4.5856	0	20	23*	70	130
1,2,3-Trichloropropane	1	12.6233	0	20	63*	70	130
2-Chlorotoluene	1	16.0296	0	20	80	70	130
p-Ethyltoluene	1	16.714	0	20	84	70	130
4-Chlorotoluene	1	16.3186	0	20	82	70	130
n-Propylbenzene	1	16.8274	0	20	84	70	130
Bromobenzene	1	12.8704	0	20	64*	70	130
1,3,5-Trimethylbenzene	1	17.4823	0	20	87	70	130
Butyl methacrylate	1	15.65	0	20	78	70	130
t-Butylbenzene	1	17.5787	0	20	88	70	130
1,2,4-Trimethylbenzene	1	16.4636	0	20	82	70	130
sec-Butylbenzene	1	17.5111	0	20	88	70	130
4-Isopropyltoluene	1	17.8401	0	20	89	70	130
n-Butylbenzene	1	17.061	0	20	85	70	130
p-Diethylbenzene	1	17.435	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	13.3881	0	20	67*	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>13.5397</b>	<b>0</b>	<b>20</b>	<b>68</b>	<b>50</b>	<b>150</b>
Camphor	1	102.3951	0	200	51	20	150
Hexachlorobutadiene	1	16.5884	0	20	83	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.2181</b>	<b>0</b>	<b>20</b>	<b>81</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>15.4277</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
Naphthalene	1	15.3928	0	20	77	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**  
 QC Batch: MBS89427

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M140106.D	AD19565-016(MSD)	10/5/2020 10:02:00 PM
Duplicate(If applicable): 1M140105.D	AD19565-016(MS)	10/5/2020 9:42:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	16.1283	18.1942	12	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>24.2863</b>	<b>26.9766</b>	<b>10</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>18.1974</b>	<b>20.8413</b>	<b>14</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>7.9194</b>	<b>21.1733</b>	<b>91*</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>20.2281</b>	<b>22.78</b>	<b>12</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>22.3554</b>	<b>24.6388</b>	<b>9.7</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>23.1768</b>	<b>25.4743</b>	<b>9.4</b>	<b>30</b>
Ethyl ether	1	18.0972	19.9845	9.9	30
Furan	1	18.7955	19.7351	4.9	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>21.4316</b>	<b>23.2841</b>	<b>8.3</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>18.9417</b>	<b>20.4648</b>	<b>7.7</b>	<b>30</b>
Acrolein	1	97.4876	111.2411	13	30
Acrylonitrile	1	19.0709	21.3629	11	30
Iodomethane	1	18.9089	20.4168	7.7	30
<b>Acetone</b>	<b>1</b>	<b>82.7855</b>	<b>97.1453</b>	<b>16</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>19.7667</b>	<b>22.2342</b>	<b>12</b>	<b>30</b>
t-Butyl Alcohol	1	32.0863	56.6165	55*	30
n-Hexane	1	22.2653	23.9969	7.5	30
Di-isopropyl-ether	1	18.2855	20.0641	9.3	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>20.5983</b>	<b>22.8547</b>	<b>10</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>17.3355</b>	<b>19.3257</b>	<b>11</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>20.6626</b>	<b>22.2721</b>	<b>7.5</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>18.2139</b>	<b>19.5198</b>	<b>6.9</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>20.2987</b>	<b>22.341</b>	<b>9.6</b>	<b>30</b>
Ethyl-t-butyl ether	1	18.1546	19.9428	9.4	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>19.0796</b>	<b>20.7514</b>	<b>8.4</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>17.9142</b>	<b>19.5275</b>	<b>8.6</b>	<b>30</b>
2,2-Dichloropropane	1	19.123	21.1147	9.9	30
Ethyl acetate	1	16.4229	18.8454	14	30
<b>1,4-Dioxane</b>	<b>1</b>	<b>846.0999</b>	<b>996.4219</b>	<b>16</b>	<b>30</b>
1,1-Dichloropropene	1	19.4551	22.1176	13	30
<b>Chloroform</b>	<b>1</b>	<b>18.6015</b>	<b>20.2317</b>	<b>8.4</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>20.3538</b>	<b>22.2202</b>	<b>8.8</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>18.8121</b>	<b>20.276</b>	<b>7.5</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>16.3287</b>	<b>19.8241</b>	<b>19</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>19.6188</b>	<b>21.0741</b>	<b>7.2</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>20.0371</b>	<b>22.0081</b>	<b>9.4</b>	<b>40</b>
Vinyl Acetate	1	17.0932	19.1337	11	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>17.732</b>	<b>19.2872</b>	<b>8.4</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>21.5222</b>	<b>22.8331</b>	<b>5.9</b>	<b>30</b>
Dibromomethane	1	18.3174	20.4726	11	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>16.7163</b>	<b>18.5847</b>	<b>11</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>19.1903</b>	<b>21.3209</b>	<b>11</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>18.2021</b>	<b>20.6489</b>	<b>13</b>	<b>40</b>
tert-Amyl methyl ether	1	18.8385	20.7559	9.7	30
Iso-propylacetate	1	15.5618	17.3976	11	30
Methyl methacrylate	1	14.2601	16.5184	15	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>15.5124</b>	<b>16.9141</b>	<b>8.6</b>	<b>30</b>
2-Chloroethylvinylether	1	0	0	NA	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>15.7326</b>	<b>17.319</b>	<b>9.6</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>14.8433</b>	<b>16.0388</b>	<b>7.7</b>	<b>30</b>
Ethyl methacrylate	1	16.082	17.7411	9.8	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>15.2906</b>	<b>16.9898</b>	<b>11</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>15.1934</b>	<b>16.752</b>	<b>9.8</b>	<b>30</b>
1,3-Dichloropropane	1	15.3677	16.7518	8.6	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>15.5515</b>	<b>17.7529</b>	<b>13</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>15.0049</b>	<b>17.4061</b>	<b>15</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>20.7303</b>	<b>22.2098</b>	<b>6.9</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>17.5186</b>	<b>19.6264</b>	<b>11</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	15.8102	17.2794	8.9	30
<b>Chlorobenzene</b>	<b>1</b>	<b>17.3205</b>	<b>19.4803</b>	<b>12</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89427

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	14.6104	15.6783	7.1	30
n-Amyl acetate	1	14.5297	16.0985	10	30
<b>Bromofom</b>	<b>1</b>	<b>14.1114</b>	<b>15.5451</b>	<b>9.7</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.4196</b>	<b>17.869</b>	<b>8.5</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>13.1042</b>	<b>14.8354</b>	<b>12</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>16.7462</b>	<b>18.6449</b>	<b>11</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>36.0392</b>	<b>39.471</b>	<b>9.1</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>16.9822</b>	<b>18.7854</b>	<b>10</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	11.0163	12.8102	15	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>15.7222</b>	<b>17.3696</b>	<b>10</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>15.7158</b>	<b>17.1505</b>	<b>8.7</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>15.3583</b>	<b>16.7473</b>	<b>8.7</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>17.7094</b>	<b>19.2926</b>	<b>8.6</b>	<b>30</b>
Cyclohexanone	1	67.3504	74.1653	9.6	30
Camphene	1	4.5856	5.8485	24	30
1,2,3-Trichloropropane	1	12.6233	14.8412	16	30
2-Chlorotoluene	1	16.0296	17.4967	8.8	30
p-Ethyltoluene	1	16.714	19.0354	13	30
4-Chlorotoluene	1	16.3186	17.2172	5.4	30
n-Propylbenzene	1	16.8274	18.0381	6.9	40
Bromobenzene	1	12.8704	15.3382	17	30
1,3,5-Trimethylbenzene	1	17.4823	17.9324	2.5	30
Butyl methacrylate	1	15.65	16.3538	4.4	30
t-Butylbenzene	1	17.5787	18.7799	6.6	30
1,2,4-Trimethylbenzene	1	16.4636	17.9536	8.7	30
sec-Butylbenzene	1	17.5111	18.478	5.4	40
4-Isopropyltoluene	1	17.8401	18.6868	4.6	30
n-Butylbenzene	1	17.061	18.0268	5.5	30
p-Diethylbenzene	1	17.435	18.4411	5.6	30
1,2,4,5-Tetramethylbenzene	1	13.3881	14.2411	6.2	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>13.5397</b>	<b>15.3289</b>	<b>12</b>	<b>30</b>
Camphor	1	102.3951	125.6282	20	30
Hexachlorobutadiene	1	16.5884	18.737	12	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.2181</b>	<b>17.5302</b>	<b>7.8</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>15.4277</b>	<b>17.0545</b>	<b>10</b>	<b>30</b>
Naphthalene	1	15.3928	17.6604	14	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89437

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83605.D		MBS89437		10/6/2020 12:32:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	77.568	0	50	155*	20	130
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>53.5884</b>	<b>0</b>	<b>50</b>	<b>107</b>	<b>20</b>	<b>130</b>
<b>Chloromethane</b>	<b>1</b>	<b>51.9308</b>	<b>0</b>	<b>50</b>	<b>104</b>	<b>20</b>	<b>130</b>
<b>Bromomethane</b>	<b>1</b>	<b>48.8119</b>	<b>0</b>	<b>50</b>	<b>98</b>	<b>20</b>	<b>130</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>58.9686</b>	<b>0</b>	<b>50</b>	<b>118</b>	<b>20</b>	<b>130</b>
<b>Chloroethane</b>	<b>1</b>	<b>53.3523</b>	<b>0</b>	<b>50</b>	<b>107</b>	<b>20</b>	<b>130</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>57.3199</b>	<b>0</b>	<b>50</b>	<b>115</b>	<b>20</b>	<b>130</b>
Ethyl ether	1	41.2312	0	50	82	50	130
Furan	1	46.5452	0	50	93	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>58.8158</b>	<b>0</b>	<b>50</b>	<b>118</b>	<b>50</b>	<b>130</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>43.8301</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
Acrolein	1	209.6777	0	200	105	20	130
Acrylonitrile	1	40.8836	0	50	82	20	130
Iodomethane	1	37.6546	0	50	75	50	130
<b>Acetone</b>	<b>1</b>	<b>173.8448</b>	<b>0</b>	<b>200</b>	<b>87</b>	<b>20</b>	<b>130</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>56.6392</b>	<b>0</b>	<b>50</b>	<b>113</b>	<b>50</b>	<b>130</b>
t-Butyl Alcohol	1	172.8681	0	200	86	20	130
n-Hexane	1	65.4581	0	50	131*	50	130
Di-isopropyl-ether	1	45.2655	0	50	91	50	130
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>55.6655</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>50</b>	<b>130</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>36.9114</b>	<b>0</b>	<b>50</b>	<b>74</b>	<b>50</b>	<b>130</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>42.0828</b>	<b>0</b>	<b>50</b>	<b>84</b>	<b>50</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>48.9497</b>	<b>0</b>	<b>50</b>	<b>98</b>	<b>50</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>52.6825</b>	<b>0</b>	<b>50</b>	<b>105</b>	<b>50</b>	<b>130</b>
Ethyl-t-butyl ether	1	43.8062	0	50	88	50	130
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>50.1009</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>44.7924</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>50</b>	<b>130</b>
2,2-Dichloropropane	1	59.0836	0	50	118	50	130
Ethyl acetate	1	40.8694	0	50	82	50	130
<b>1,4-Dioxane</b>	<b>1</b>	<b>1797.668</b>	<b>0</b>	<b>2500</b>	<b>72</b>	<b>50</b>	<b>130</b>
1,1-Dichloropropene	1	57.1549	0	50	114	50	130
<b>Chloroform</b>	<b>1</b>	<b>48.7815</b>	<b>0</b>	<b>50</b>	<b>98</b>	<b>50</b>	<b>130</b>
<b>Cyclohexane</b>	<b>1</b>	<b>62.4757</b>	<b>0</b>	<b>50</b>	<b>125</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>43.3747</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>50</b>	<b>130</b>
<b>2-Butanone</b>	<b>1</b>	<b>35.2565</b>	<b>0</b>	<b>50</b>	<b>71</b>	<b>20</b>	<b>130</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>53.1388</b>	<b>0</b>	<b>50</b>	<b>106</b>	<b>50</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>56.4748</b>	<b>0</b>	<b>50</b>	<b>113</b>	<b>50</b>	<b>130</b>
Vinyl Acetate	1	46.0324	0	50	92	50	130
<b>Bromodichloromethane</b>	<b>1</b>	<b>46.2447</b>	<b>0</b>	<b>50</b>	<b>92</b>	<b>50</b>	<b>130</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>66.915</b>	<b>0</b>	<b>50</b>	<b>134*</b>	<b>50</b>	<b>130</b>
Dibromomethane	1	43.5036	0	50	87	50	130
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>47.0692</b>	<b>0</b>	<b>50</b>	<b>94</b>	<b>50</b>	<b>130</b>
<b>Trichloroethene</b>	<b>1</b>	<b>54.1602</b>	<b>0</b>	<b>50</b>	<b>108</b>	<b>50</b>	<b>130</b>
<b>Benzene</b>	<b>1</b>	<b>50.5717</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>50</b>	<b>130</b>
tert-Amyl methyl ether	1	44.603	0	50	89	50	130
Iso-propylacetate	1	39.6661	0	50	79	50	130
Methyl methacrylate	1	41.3893	0	50	83	50	130
<b>Dibromochloromethane</b>	<b>1</b>	<b>44.2055</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
2-Chloroethylvinylether	1	42.6556	0	50	85	50	130
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>47.9393</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>50</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>47.3337</b>	<b>0</b>	<b>50</b>	<b>95</b>	<b>50</b>	<b>130</b>
Ethyl methacrylate	1	43.8346	0	50	88	50	130
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>42.9238</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>44.4604</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
1,3-Dichloropropane	1	43.6017	0	50	87	50	130
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>39.9957</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>20</b>	<b>130</b>
<b>2-Hexanone</b>	<b>1</b>	<b>38.1783</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>20</b>	<b>130</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>55.4299</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>50</b>	<b>130</b>
<b>Toluene</b>	<b>1</b>	<b>51.0474</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	44.656	0	50	89	50	130
<b>Chlorobenzene</b>	<b>1</b>	<b>50.0491</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89437

Method: 8260D	Matrix: Soil	Units: mg/Kg		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	41.4245	0	50	83	50	130
n-Amyl acetate	1	34.0804	0	50	68	50	130
<b>Bromoform</b>	<b>1</b>	<b>39.931</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>51.2454</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>41.3331</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>44.4482</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>102.5564</b>	<b>0</b>	<b>100</b>	<b>103</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>45.3515</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	49.7748	0	50	100	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>47.0094</b>	<b>0</b>	<b>50</b>	<b>94</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>49.6531</b>	<b>0</b>	<b>50</b>	<b>99</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>45.5727</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>50.0973</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	180.4929	0	250	72	50	130
Camphene	1	58.8199	0	50	118	50	130
1,2,3-Trichloropropane	1	42.7615	0	50	86	50	130
2-Chlorotoluene	1	47.3065	0	50	95	50	130
p-Ethyltoluene	1	50.8223	0	50	102	50	130
4-Chlorotoluene	1	47.4267	0	50	95	50	130
n-Propylbenzene	1	54.4153	0	50	109	50	130
Bromobenzene	1	49.2042	0	50	98	50	130
1,3,5-Trimethylbenzene	1	49.5305	0	50	99	50	130
Butyl methacrylate	1	38.9679	0	50	78	50	130
t-Butylbenzene	1	47.9269	0	50	96	50	130
1,2,4-Trimethylbenzene	1	46.6171	0	50	93	50	130
sec-Butylbenzene	1	50.367	0	50	101	50	130
4-Isopropyltoluene	1	57.0881	0	50	114	50	130
n-Butylbenzene	1	53.2127	0	50	106	50	130
p-Diethylbenzene	1	51.9149	0	50	104	50	130
1,2,4,5-Tetramethylbenzene	1	55.627	0	50	111	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>38.0211</b>	<b>0</b>	<b>50</b>	<b>76</b>	<b>50</b>	<b>130</b>
Camphor	1	377.7961	0	500	76	50	130
Hexachlorobutadiene	1	62.0531	0	50	124	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>55.7168</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>51.6516</b>	<b>0</b>	<b>50</b>	<b>103</b>	<b>50</b>	<b>130</b>
Naphthalene	1	45.6051	0	50	91	50	130

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 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89437

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83606.D		AD19581-008(MS)		10/6/2020 12:52:00 PM			
Non Spike(If applicable): 11M83610.D		AD19581-008		10/6/2020 2:11:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	63.6128	0	50	127	20	130
<b>Dichlorodifluoromethane</b>	1	<b>49.804</b>	0	50	100	20	130
<b>Chloromethane</b>	1	<b>45.3081</b>	0	50	91	20	130
<b>Bromomethane</b>	1	<b>40.1196</b>	0	50	80	20	130
<b>Vinyl Chloride</b>	1	<b>51.5215</b>	0	50	103	20	130
<b>Chloroethane</b>	1	<b>45.6529</b>	0	50	91	20	130
<b>Trichlorofluoromethane</b>	1	<b>49.0757</b>	0	50	98	20	130
Ethyl ether	1	35.4424	0	50	71	50	130
Furan	1	40.8513	0	50	82	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>45.3986</b>	0	50	91	50	130
<b>Methylene Chloride</b>	1	<b>33.4968</b>	0	50	67	50	130
Acrolein	1	135.6347	0	200	68	20	130
Acrylonitrile	1	30.973	0	50	62	20	130
Iodomethane	1	34.8868	0	50	70	50	130
<b>Acetone</b>	1	<b>168.533</b>	0	200	84	20	130
<b>Carbon Disulfide</b>	1	<b>32.9356</b>	0	50	66	50	130
t-Butyl Alcohol	1	166.807	0	200	83	20	130
n-Hexane	1	30.3746	0	50	61	50	130
Di-isopropyl-ether	1	37.8674	0	50	76	50	130
<b>1,1-Dichloroethene</b>	1	<b>47.6455</b>	0	50	95	50	130
<b>Methyl Acetate</b>	1	<b>39.6238</b>	0	50	79	50	130
<b>Methyl-t-butyl ether</b>	1	<b>35.5374</b>	0	50	71	50	130
<b>1,1-Dichloroethane</b>	1	<b>41.917</b>	0	50	84	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>39.5127</b>	0	50	79	50	130
Ethyl-t-butyl ether	1	36.4899	0	50	73	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>37.6664</b>	0	50	75	50	130
<b>Bromochloromethane</b>	1	<b>33.4037</b>	0	50	67	50	130
2,2-Dichloropropane	1	49.5906	0	50	99	50	130
Ethyl acetate	1	23.1654	0	50	46*	50	130
<b>1,4-Dioxane</b>	1	<b>2056.231</b>	0	2500	82	50	130
1,1-Dichloropropene	1	42.4548	0	50	85	50	130
<b>Chloroform</b>	1	<b>38.4345</b>	0	50	77	50	130
<b>Cyclohexane</b>	1	<b>36.7569</b>	0	50	74	50	130
<b>1,2-Dichloroethane</b>	1	<b>33.1191</b>	0	50	66	50	130
<b>2-Butanone</b>	1	<b>27.6795</b>	0	50	55	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>42.5047</b>	0	50	85	50	130
<b>Carbon Tetrachloride</b>	1	<b>42.3359</b>	0	50	85	50	130
Vinyl Acetate	1	24.7653	0	50	50	50	130
<b>Bromodichloromethane</b>	1	<b>33.4904</b>	0	50	67	50	130
<b>Methylcyclohexane</b>	1	<b>28.8702</b>	0	50	58	50	130
Dibromomethane	1	31.1515	0	50	62	50	130
<b>1,2-Dichloropropane</b>	1	<b>36.7552</b>	0	50	74	50	130
<b>Trichloroethene</b>	1	<b>38.6086</b>	0	50	77	50	130
<b>Benzene</b>	1	<b>39.6857</b>	0	50	79	50	130
tert-Amyl methyl ether	1	36.5315	0	50	73	50	130
Iso-propylacetate	1	27.6892	0	50	55	50	130
Methyl methacrylate	1	34.2259	0	50	68	50	130
<b>Dibromochloromethane</b>	1	<b>29.4945</b>	0	50	59	50	130
2-Chloroethylvinylether	1	31.5338	0	50	63	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>33.5317</b>	0	50	67	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>29.4039</b>	0	50	59	50	130
Ethyl methacrylate	1	32.3995	0	50	65	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>30.5938</b>	0	50	61	50	130
<b>1,2-Dibromoethane</b>	1	<b>29.6027</b>	0	50	59	50	130
1,3-Dichloropropane	1	31.496	0	50	63	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>30.5413</b>	0	50	61	20	130
<b>2-Hexanone</b>	1	<b>30.3706</b>	0	50	61	20	130
<b>Tetrachloroethene</b>	1	<b>32.8792</b>	0	50	66	50	130
<b>Toluene</b>	1	<b>35.8936</b>	0	50	72	50	130
1,1,1,2-Tetrachloroethane	1	28.2133	0	50	56	50	130
<b>Chlorobenzene</b>	1	<b>29.2558</b>	0	50	59	50	130

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Bold and underline - Indicates the compounds reported on form1



Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89437

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	27.8252	0	50	56	50	130
n-Amyl acetate	1	15.0233	0	50	30*	50	130
<b>Bromoform</b>	1	<b>27.5533</b>	0	<b>50</b>	<b>55</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	1	<b>35.3871</b>	0	<b>50</b>	<b>71</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	1	<b>29.4239</b>	0	<b>50</b>	<b>59</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	1	<b>27.3642</b>	0	<b>50</b>	<b>55</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	1	<b>66.1421</b>	0	<b>100</b>	<b>66</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	1	<b>30.2509</b>	0	<b>50</b>	<b>61</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	29.5247	0	50	59	20	130
<b>1,3-Dichlorobenzene</b>	1	<b>20.3261</b>	0	<b>50</b>	<b>41*</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	1	<b>21.1709</b>	0	<b>50</b>	<b>42*</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	1	<b>19.1137</b>	0	<b>50</b>	<b>38*</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	1	<b>29.0838</b>	0	<b>50</b>	<b>58</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	238.1763	0	250	95	50	130
Camphene	1	23.8662	0	50	48*	50	130
1,2,3-Trichloropropane	1	28.9165	0	50	58	50	130
2-Chlorotoluene	1	24.654	0	50	49*	50	130
p-Ethyltoluene	1	26.096	0	50	52	50	130
4-Chlorotoluene	1	24.8794	0	50	50	50	130
n-Propylbenzene	1	28.3795	0	50	57	50	130
Bromobenzene	1	27.9138	0	50	56	50	130
1,3,5-Trimethylbenzene	1	25.0632	0	50	50	50	130
Butyl methacrylate	1	34.1465	0	50	68	50	130
t-Butylbenzene	1	23.2086	0	50	46*	50	130
1,2,4-Trimethylbenzene	1	22.9269	0	50	46*	50	130
sec-Butylbenzene	1	21.8548	0	50	44*	50	130
4-Isopropyltoluene	1	25.223	0	50	50	50	130
n-Butylbenzene	1	20.1028	0	50	40*	50	130
p-Diethylbenzene	1	20.2894	0	50	41*	50	130
1,2,4,5-Tetramethylbenzene	1	19.4588	0	50	39*	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	1	<b>22.2516</b>	0	<b>50</b>	<b>45*</b>	<b>50</b>	<b>130</b>
Camphor	1	330.3438	0	500	66	50	130
Hexachlorobutadiene	1	14.0105	0	50	28*	50	130
<b>1,2,4-Trichlorobenzene</b>	1	<b>14.7182</b>	0	<b>50</b>	<b>29*</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	1	<b>13.5627</b>	0	<b>50</b>	<b>27*</b>	<b>50</b>	<b>130</b>
Naphthalene	1	15.622	0	50	31*	50	130

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**Bold and underline** - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89437

Data File		Sample ID:		Analysis Date			
Spike or Dup: 11M83607.D		AD19581-008(MSD)		10/6/2020 1:11:00 PM			
Non Spike(If applicable): 11M83610.D		AD19581-008		10/6/2020 2:11:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	61.9909	0	50	124	20	130
<b><u>Dichlorodifluoromethane</u></b>	<b>1</b>	<b><u>50.8261</u></b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>20</b>	<b>130</b>
Chloromethane	1	46.2118	0	50	92	20	130
<b><u>Bromomethane</u></b>	<b>1</b>	<b><u>41.6653</u></b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>20</b>	<b>130</b>
<b><u>Vinyl Chloride</u></b>	<b>1</b>	<b><u>50.8914</u></b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>20</b>	<b>130</b>
Chloroethane	1	47.2382	0	50	94	20	130
<b><u>Trichlorofluoromethane</u></b>	<b>1</b>	<b><u>51.1415</u></b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>20</b>	<b>130</b>
Ethyl ether	1	35.8168	0	50	72	50	130
Furan	1	41.5266	0	50	83	50	130
<b><u>1,1,2-Trichloro-1,2,2-trifluoroethane</u></b>	<b>1</b>	<b><u>46.542</u></b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>50</b>	<b>130</b>
<b><u>Methylene Chloride</u></b>	<b>1</b>	<b><u>35.9595</u></b>	<b>0</b>	<b>50</b>	<b>72</b>	<b>50</b>	<b>130</b>
Acrolein	1	128.1387	0	200	64	20	130
Acrylonitrile	1	32.2049	0	50	64	20	130
Iodomethane	1	37.3528	0	50	75	50	130
<b><u>Acetone</u></b>	<b>1</b>	<b><u>166.5234</u></b>	<b>0</b>	<b>200</b>	<b>83</b>	<b>20</b>	<b>130</b>
<b><u>Carbon Disulfide</u></b>	<b>1</b>	<b><u>32.6021</u></b>	<b>0</b>	<b>50</b>	<b>65</b>	<b>50</b>	<b>130</b>
t-Butyl Alcohol	1	162.3655	0	200	81	20	130
n-Hexane	1	30.9758	0	50	62	50	130
Di-isopropyl-ether	1	40.1001	0	50	80	50	130
<b><u>1,1-Dichloroethene</u></b>	<b>1</b>	<b><u>48.3917</u></b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>50</b>	<b>130</b>
<b><u>Methyl Acetate</u></b>	<b>1</b>	<b><u>43.8993</u></b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
<b><u>Methyl-t-butyl ether</u></b>	<b>1</b>	<b><u>38.3966</u></b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b><u>1,1-Dichloroethane</u></b>	<b>1</b>	<b><u>43.0371</u></b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
<b><u>trans-1,2-Dichloroethene</u></b>	<b>1</b>	<b><u>39.4986</u></b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
Ethyl-t-butyl ether	1	38.5848	0	50	77	50	130
<b><u>cis-1,2-Dichloroethene</u></b>	<b>1</b>	<b><u>38.3614</u></b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b><u>Bromochloromethane</u></b>	<b>1</b>	<b><u>34.2171</u></b>	<b>0</b>	<b>50</b>	<b>68</b>	<b>50</b>	<b>130</b>
2,2-Dichloropropane	1	51.0784	0	50	102	50	130
Ethyl acetate	1	20.5274	0	50	41*	50	130
<b><u>1,4-Dioxane</u></b>	<b>1</b>	<b><u>2091.449</u></b>	<b>0</b>	<b>2500</b>	<b>84</b>	<b>50</b>	<b>130</b>
1,1-Dichloropropene	1	42.0036	0	50	84	50	130
<b><u>Chloroform</u></b>	<b>1</b>	<b><u>40.3512</u></b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
<b><u>Cyclohexane</u></b>	<b>1</b>	<b><u>36.6843</u></b>	<b>0</b>	<b>50</b>	<b>73</b>	<b>50</b>	<b>130</b>
<b><u>1,2-Dichloroethane</u></b>	<b>1</b>	<b><u>33.7069</u></b>	<b>0</b>	<b>50</b>	<b>67</b>	<b>50</b>	<b>130</b>
<b><u>2-Butanone</u></b>	<b>1</b>	<b><u>30.1425</u></b>	<b>0</b>	<b>50</b>	<b>60</b>	<b>20</b>	<b>130</b>
<b><u>1,1,1-Trichloroethane</u></b>	<b>1</b>	<b><u>44.6729</u></b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>50</b>	<b>130</b>
<b><u>Carbon Tetrachloride</u></b>	<b>1</b>	<b><u>42.9627</u></b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>50</b>	<b>130</b>
Vinyl Acetate	1	23.0711	0	50	46*	50	130
<b><u>Bromodichloromethane</u></b>	<b>1</b>	<b><u>34.5966</u></b>	<b>0</b>	<b>50</b>	<b>69</b>	<b>50</b>	<b>130</b>
<b><u>Methylcyclohexane</u></b>	<b>1</b>	<b><u>30.0371</u></b>	<b>0</b>	<b>50</b>	<b>60</b>	<b>50</b>	<b>130</b>
Dibromomethane	1	31.0797	0	50	62	50	130
<b><u>1,2-Dichloropropane</u></b>	<b>1</b>	<b><u>37.6126</u></b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>50</b>	<b>130</b>
<b><u>Trichloroethene</u></b>	<b>1</b>	<b><u>38.9105</u></b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>50</b>	<b>130</b>
<b><u>Benzene</u></b>	<b>1</b>	<b><u>41.0714</u></b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>50</b>	<b>130</b>
tert-Amyl methyl ether	1	38.095	0	50	76	50	130
Iso-propylacetate	1	25.1516	0	50	50	50	130
Methyl methacrylate	1	40.7145	0	50	81	50	130
<b><u>Dibromochloromethane</u></b>	<b>1</b>	<b><u>30.2015</u></b>	<b>0</b>	<b>50</b>	<b>60</b>	<b>50</b>	<b>130</b>
2-Chloroethylvinylether	1	31.8668	0	50	64	50	130
<b><u>cis-1,3-Dichloropropene</u></b>	<b>1</b>	<b><u>33.6566</u></b>	<b>0</b>	<b>50</b>	<b>67</b>	<b>50</b>	<b>130</b>
<b><u>trans-1,3-Dichloropropene</u></b>	<b>1</b>	<b><u>29.1333</u></b>	<b>0</b>	<b>50</b>	<b>58</b>	<b>50</b>	<b>130</b>
Ethyl methacrylate	1	29.9356	0	50	60	50	130
<b><u>1,1,2-Trichloroethane</u></b>	<b>1</b>	<b><u>32.0341</u></b>	<b>0</b>	<b>50</b>	<b>64</b>	<b>50</b>	<b>130</b>
<b><u>1,2-Dibromoethane</u></b>	<b>1</b>	<b><u>30.6145</u></b>	<b>0</b>	<b>50</b>	<b>61</b>	<b>50</b>	<b>130</b>
1,3-Dichloropropane	1	31.0659	0	50	62	50	130
<b><u>4-Methyl-2-Pentanone</u></b>	<b>1</b>	<b><u>32.0603</u></b>	<b>0</b>	<b>50</b>	<b>64</b>	<b>20</b>	<b>130</b>
<b><u>2-Hexanone</u></b>	<b>1</b>	<b><u>29.6946</u></b>	<b>0</b>	<b>50</b>	<b>59</b>	<b>20</b>	<b>130</b>
<b><u>Tetrachloroethene</u></b>	<b>1</b>	<b><u>32.5848</u></b>	<b>0</b>	<b>50</b>	<b>65</b>	<b>50</b>	<b>130</b>
<b><u>Toluene</u></b>	<b>1</b>	<b><u>35.3334</u></b>	<b>0</b>	<b>50</b>	<b>71</b>	<b>50</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	28.7605	0	50	58	50	130
<b><u>Chlorobenzene</u></b>	<b>1</b>	<b><u>28.8097</u></b>	<b>0</b>	<b>50</b>	<b>58</b>	<b>50</b>	<b>130</b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89437

Method: 8260D	Matrix: Soil	Units: mg/Kg		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	22.5519	0	50	45*	50	130
n-Amyl acetate	1	8.6198	0	50	17*	50	130
<b>Bromoform</b>	<b>1</b>	<b>25.9298</b>	<b>0</b>	<b>50</b>	<b>52</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>33.3743</b>	<b>0</b>	<b>50</b>	<b>67</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>27.8157</b>	<b>0</b>	<b>50</b>	<b>56</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>25.2041</b>	<b>0</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>63.7189</b>	<b>0</b>	<b>100</b>	<b>64</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>28.6366</b>	<b>0</b>	<b>50</b>	<b>57</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	29.3521	0	50	59	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>18.1708</b>	<b>0</b>	<b>50</b>	<b>36*</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>19.0139</b>	<b>0</b>	<b>50</b>	<b>38*</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>16.9975</b>	<b>0</b>	<b>50</b>	<b>34*</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>26.4737</b>	<b>0</b>	<b>50</b>	<b>53</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	192.6824	0	250	77	50	130
Camphene	1	22.42	0	50	45*	50	130
1,2,3-Trichloropropane	1	28.4396	0	50	57	50	130
2-Chlorotoluene	1	22.4572	0	50	45*	50	130
p-Ethyltoluene	1	23.8436	0	50	48*	50	130
4-Chlorotoluene	1	21.8282	0	50	44*	50	130
n-Propylbenzene	1	25.9276	0	50	52	50	130
Bromobenzene	1	25.6496	0	50	51	50	130
1,3,5-Trimethylbenzene	1	22.6276	0	50	45*	50	130
Butyl methacrylate	1	29.1625	0	50	58	50	130
t-Butylbenzene	1	21.2795	0	50	43*	50	130
1,2,4-Trimethylbenzene	1	20.6737	0	50	41*	50	130
sec-Butylbenzene	1	19.6632	0	50	39*	50	130
4-Isopropyltoluene	1	22.9714	0	50	46*	50	130
n-Butylbenzene	1	17.5518	0	50	35*	50	130
p-Diethylbenzene	1	17.9173	0	50	36*	50	130
1,2,4,5-Tetramethylbenzene	1	16.9227	0	50	34*	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>22.0251</b>	<b>0</b>	<b>50</b>	<b>44*</b>	<b>50</b>	<b>130</b>
Camphor	1	339.2293	0	500	68	50	130
Hexachlorobutadiene	1	12.998	0	50	26*	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>12.2791</b>	<b>0</b>	<b>50</b>	<b>25*</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>11.3284</b>	<b>0</b>	<b>50</b>	<b>23*</b>	<b>50</b>	<b>130</b>
Naphthalene	1	12.9344	0	50	26*	50	130

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 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**  
 QC Batch: MBS89437

Data File	Sample ID:	Analysis Date
Spike or Dup: 11M83607.D	AD19581-008(MSD)	10/6/2020 1:11:00 PM
Duplicate(If applicable): 11M83606.D	AD19581-008(MS)	10/6/2020 12:52:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Soil	Units: mg/Kg
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	61.9909	63.6128	2.6	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>50.8261</b>	<b>49.804</b>	<b>2</b>	<b>30</b>
Chloromethane	1	46.2118	45.3081	2	30
Bromomethane	1	41.6653	40.1196	3.8	30
Vinyl Chloride	1	50.8914	51.5215	1.2	40
Chloroethane	1	47.2382	45.6529	3.4	30
Trichlorofluoromethane	1	51.1415	49.0757	4.1	30
Ethyl ether	1	35.8168	35.4424	1.1	30
Furan	1	41.5266	40.8513	1.6	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>46.542</b>	<b>45.3986</b>	<b>2.5</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>35.9595</b>	<b>33.4968</b>	<b>7.1</b>	<b>30</b>
Acrolein	1	128.1387	135.6347	5.7	30
Acrylonitrile	1	32.2049	30.973	3.9	30
Iodomethane	1	37.3528	34.8868	6.8	30
<b>Acetone</b>	<b>1</b>	<b>166.5234</b>	<b>168.533</b>	<b>1.2</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>32.6021</b>	<b>32.9356</b>	<b>1</b>	<b>30</b>
t-Butyl Alcohol	1	162.3655	166.807	2.7	30
n-Hexane	1	30.9758	30.3746	2	30
Di-isopropyl-ether	1	40.1001	37.8674	5.7	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>48.3917</b>	<b>47.6455</b>	<b>1.6</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>43.8993</b>	<b>39.6238</b>	<b>10</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>38.3966</b>	<b>35.5374</b>	<b>7.7</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>43.0371</b>	<b>41.917</b>	<b>2.6</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>39.4986</b>	<b>39.5127</b>	<b>0.04</b>	<b>30</b>
Ethyl-t-butyl ether	1	38.5848	36.4899	5.6	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>38.3614</b>	<b>37.6664</b>	<b>1.8</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>34.2171</b>	<b>33.4037</b>	<b>2.4</b>	<b>30</b>
2,2-Dichloropropane	1	51.0784	49.5906	3	30
Ethyl acetate	1	20.5274	23.1654	12	30
<b>1,4-Dioxane</b>	<b>1</b>	<b>2091.449</b>	<b>2056.231</b>	<b>1.7</b>	<b>30</b>
1,1-Dichloropropene	1	42.0036	42.4548	1.1	30
<b>Chloroform</b>	<b>1</b>	<b>40.3512</b>	<b>38.4345</b>	<b>4.9</b>	<b>40</b>
Cyclohexane	1	36.6843	36.7569	0.2	30
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>33.7069</b>	<b>33.1191</b>	<b>1.8</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>30.1425</b>	<b>27.6795</b>	<b>8.5</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>44.6729</b>	<b>42.5047</b>	<b>5</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>42.9627</b>	<b>42.3359</b>	<b>1.5</b>	<b>40</b>
Vinyl Acetate	1	23.0711	24.7653	7.1	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>34.5966</b>	<b>33.4904</b>	<b>3.2</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>30.0371</b>	<b>28.8702</b>	<b>4</b>	<b>30</b>
Dibromomethane	1	31.0797	31.1515	0.23	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>37.6126</b>	<b>36.7552</b>	<b>2.3</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>38.9105</b>	<b>38.6086</b>	<b>0.78</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>41.0714</b>	<b>39.6857</b>	<b>3.4</b>	<b>40</b>
tert-Amyl methyl ether	1	38.095	36.5315	4.2	30
Iso-propylacetate	1	25.1516	27.6892	9.6	30
Methyl methacrylate	1	40.7145	34.2259	17	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>30.2015</b>	<b>29.4945</b>	<b>2.4</b>	<b>30</b>
2-Chloroethylvinylether	1	31.8668	31.5338	1.1	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>33.6566</b>	<b>33.5317</b>	<b>0.37</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>29.1333</b>	<b>29.4039</b>	<b>0.92</b>	<b>30</b>
Ethyl methacrylate	1	29.9356	32.3995	7.9	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>32.0341</b>	<b>30.5938</b>	<b>4.6</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>30.6145</b>	<b>29.6027</b>	<b>3.4</b>	<b>30</b>
1,3-Dichloropropane	1	31.0659	31.496	1.4	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>32.0603</b>	<b>30.5413</b>	<b>4.9</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>29.6946</b>	<b>30.3706</b>	<b>2.3</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>32.5848</b>	<b>32.8792</b>	<b>0.9</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>35.3334</b>	<b>35.8936</b>	<b>1.6</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	28.7605	28.2133	1.9	30
<b>Chlorobenzene</b>	<b>1</b>	<b>28.8097</b>	<b>29.2558</b>	<b>1.5</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**  
**QC Batch: MBS89437**

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	22.5519	27.8252	21	30
n-Amyl acetate	1	8.6198	15.0233	54*	30
<b>Bromoform</b>	<b>1</b>	<b><u>25.9298</u></b>	<b><u>27.5533</u></b>	<b>6.1</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b><u>33.3743</u></b>	<b><u>35.3871</u></b>	<b>5.9</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b><u>27.8157</u></b>	<b><u>29.4239</u></b>	<b>5.6</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b><u>25.2041</u></b>	<b><u>27.3642</u></b>	<b>8.2</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b><u>63.7189</u></b>	<b><u>66.1421</u></b>	<b>3.7</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b><u>28.6366</u></b>	<b><u>30.2509</u></b>	<b>5.5</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	29.3521	29.5247	0.59	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b><u>18.1708</u></b>	<b><u>20.3261</u></b>	<b>11</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b><u>19.0139</u></b>	<b><u>21.1709</u></b>	<b>11</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b><u>16.9975</u></b>	<b><u>19.1137</u></b>	<b>12</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b><u>26.4737</u></b>	<b><u>29.0838</u></b>	<b>9.4</b>	<b>30</b>
Cyclohexanone	1	192.6824	238.1763	21	30
Camphene	1	22.42	23.8662	6.2	30
1,2,3-Trichloropropane	1	28.4396	28.9165	1.7	30
2-Chlorotoluene	1	22.4572	24.654	9.3	30
p-Ethyltoluene	1	23.8436	26.096	9	30
4-Chlorotoluene	1	21.8282	24.8794	13	30
n-Propylbenzene	1	25.9276	28.3795	9	40
Bromobenzene	1	25.6496	27.9138	8.5	30
1,3,5-Trimethylbenzene	1	22.6276	25.0632	10	30
Butyl methacrylate	1	29.1625	34.1465	16	30
t-Butylbenzene	1	21.2795	23.2086	8.7	30
1,2,4-Trimethylbenzene	1	20.6737	22.9269	10	30
sec-Butylbenzene	1	19.6632	21.8548	11	40
4-Isopropyltoluene	1	22.9714	25.223	9.3	30
n-Butylbenzene	1	17.5518	20.1028	14	30
p-Diethylbenzene	1	17.9173	20.2894	12	30
1,2,4,5-Tetramethylbenzene	1	16.9227	19.4588	14	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b><u>22.0251</u></b>	<b><u>22.2516</u></b>	<b>1</b>	<b>30</b>
Camphor	1	339.2293	330.3438	2.7	30
Hexachlorobutadiene	1	12.998	14.0105	7.5	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b><u>12.2791</u></b>	<b><u>14.7182</u></b>	<b>18</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b><u>11.3284</u></b>	<b><u>13.5627</u></b>	<b>18</b>	<b>30</b>
Naphthalene	1	12.9344	15.622	19	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89447

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M142829.D		MBS89447		10/7/2020 2:59:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	19.9809	0	20	100	50	150
<u>Dichlorodifluoromethane</u>	1	<u>10.8854</u>	0	20	54	50	150
<u>Chloromethane</u>	1	<u>10.6384</u>	0	20	53	50	150
<u>Bromomethane</u>	1	<u>11.0371</u>	0	20	55	50	150
<u>Vinyl Chloride</u>	1	<u>12.4227</u>	0	20	62	50	150
<u>Chloroethane</u>	1	<u>12.8881</u>	0	20	64	50	150
<u>Trichlorofluoromethane</u>	1	<u>14.3627</u>	0	20	72	50	150
Ethyl ether	1	16.1413	0	20	81	50	150
Furan	1	16.1557	0	20	81	50	150
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	1	<u>17.8485</u>	0	20	89	50	150
<u>Methylene Chloride</u>	1	<u>16.8484</u>	0	20	84	70	130
Acrolein	1	76.1184	0	100	76	50	150
Acrylonitrile	1	17.5754	0	20	88	50	150
Iodomethane	1	15.9907	0	20	80	50	150
<u>Acetone</u>	1	<u>84.321</u>	0	100	84	50	150
<u>Carbon Disulfide</u>	1	<u>16.2046</u>	0	20	81	50	150
t-Butyl Alcohol	1	90.053	0	100	90	50	150
n-Hexane	1	17.2376	0	20	86	70	130
Di-isopropyl-ether	1	16.9425	0	20	85	70	130
<u>1,1-Dichloroethene</u>	1	<u>16.2486</u>	0	20	81	70	130
<u>Methyl Acetate</u>	1	<u>26</u>	0	20	130	50	150
<u>Methyl-t-butyl ether</u>	1	<u>15.4463</u>	0	20	77	70	130
<u>1,1-Dichloroethane</u>	1	<u>16.8706</u>	0	20	84	70	130
<u>trans-1,2-Dichloroethene</u>	1	<u>16.4398</u>	0	20	82	70	130
Ethyl-t-butyl ether	1	17.1547	0	20	86	70	130
<u>cis-1,2-Dichloroethene</u>	1	<u>16.2878</u>	0	20	81	70	130
<u>Bromochloromethane</u>	1	<u>18.1281</u>	0	20	91	70	130
2,2-Dichloropropane	1	15.8518	0	20	79	70	130
Ethyl acetate	1	18.819	0	20	94	50	150
<u>1,4-Dioxane</u>	1	<u>921.475</u>	0	1000	92	50	150
1,1-Dichloropropene	1	16.8	0	20	84	70	130
<u>Chloroform</u>	1	<u>17.4309</u>	0	20	87	70	130
<u>Cyclohexane</u>	1	<u>17.4567</u>	0	20	87	70	130
<u>1,2-Dichloroethane</u>	1	<u>16.2425</u>	0	20	81	70	130
<u>2-Butanone</u>	1	<u>17.1176</u>	0	20	86	50	150
<u>1,1,1-Trichloroethane</u>	1	<u>17.2987</u>	0	20	86	70	130
<u>Carbon Tetrachloride</u>	1	<u>17.0845</u>	0	20	85	50	150
Vinyl Acetate	1	13.3301	0	20	67	50	150
<u>Bromodichloromethane</u>	1	<u>15.8077</u>	0	20	79	70	130
<u>Methylcyclohexane</u>	1	<u>17.5649</u>	0	20	88	70	130
Dibromomethane	1	17.0509	0	20	85	70	130
<u>1,2-Dichloropropane</u>	1	<u>17.0978</u>	0	20	85	70	130
<u>Trichloroethene</u>	1	<u>17.2469</u>	0	20	86	70	130
<u>Benzene</u>	1	<u>16.7104</u>	0	20	84	70	130
tert-Amyl methyl ether	1	16.9968	0	20	85	70	130
Iso-propylacetate	1	17.1466	0	20	86	70	130
Methyl methacrylate	1	17.21	0	20	86	70	130
<u>Dibromochloromethane</u>	1	<u>17.5159</u>	0	20	88	70	130
2-Chloroethylvinylether	1	62.1178	0	20	311 *	70	130
<u>cis-1,3-Dichloropropene</u>	1	<u>16.8871</u>	0	20	84	70	130
<u>trans-1,3-Dichloropropene</u>	1	<u>16.8819</u>	0	20	84	70	130
Ethyl methacrylate	1	16.5476	0	20	83	70	130
<u>1,1,2-Trichloroethane</u>	1	<u>17.3958</u>	0	20	87	70	130
<u>1,2-Dibromoethane</u>	1	<u>17.2043</u>	0	20	86	70	130
1,3-Dichloropropane	1	16.8363	0	20	84	70	130
<u>4-Methyl-2-Pentanone</u>	1	<u>17.7188</u>	0	20	89	50	150
<u>2-Hexanone</u>	1	<u>16.613</u>	0	20	83	50	150
<u>Tetrachloroethene</u>	1	<u>16.5168</u>	0	20	83	50	150
<u>Toluene</u>	1	<u>16.8448</u>	0	20	84	70	130
1,1,1,2-Tetrachloroethane	1	17.0337	0	20	85	70	130
<u>Chlorobenzene</u>	1	<u>17.0747</u>	0	20	85	70	130

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 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89447

Method: 8260D	Matrix: Aqueous	Units: ug/L			QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	18.6409	0	20	93	70	130
n-Amyl acetate	1	18.0576	0	20	90	70	130
<b>Bromoform</b>	<b>1</b>	<b>19.1684</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>18.86</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>17.9452</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>18.7302</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>35.8283</b>	<b>0</b>	<b>40</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.3375</b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	18.8628	0	20	94	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.3029</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.1453</b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.2737</b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>18.9607</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	90.8408	0	100	91	50	150
Camphene	1	16.3891	0	20	82	70	130
1,2,3-Trichloropropane	1	16.8247	0	20	84	70	130
2-Chlorotoluene	1	18.8861	0	20	94	70	130
p-Ethyltoluene	1	18.7616	0	20	94	70	130
4-Chlorotoluene	1	18.7931	0	20	94	70	130
n-Propylbenzene	1	18.5261	0	20	93	70	130
Bromobenzene	1	17.0569	0	20	85	70	130
1,3,5-Trimethylbenzene	1	18.5075	0	20	93	70	130
Butyl methacrylate	1	17.4802	0	20	87	70	130
t-Butylbenzene	1	18.5969	0	20	93	70	130
1,2,4-Trimethylbenzene	1	18.1469	0	20	91	70	130
sec-Butylbenzene	1	18.778	0	20	94	70	130
4-Isopropyltoluene	1	18.4831	0	20	92	70	130
n-Butylbenzene	1	18.7989	0	20	94	70	130
p-Diethylbenzene	1	18.1759	0	20	91	70	130
1,2,4,5-Tetramethylbenzene	1	17.3667	0	20	87	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>18.5874</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>50</b>	<b>150</b>
Camphor	1	181.6946	0	200	91	20	150
Hexachlorobutadiene	1	17.0625	0	20	85	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.4236</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>16.7729</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
Naphthalene	1	16.3493	0	20	82	50	150

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 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89447

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M142831.D		AD19574-001(MS)		10/7/2020 3:38:00 PM			
Non Spike(If applicable): 2M142828.D		AD19574-001		10/7/2020 2:39:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.6162	0	20	93	50	150
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>9.1016</b>	<b>0</b>	<b>20</b>	<b>46*</b>	<b>50</b>	<b>150</b>
<b>Chloromethane</b>	<b>1</b>	<b>10.5017</b>	<b>0</b>	<b>20</b>	<b>53</b>	<b>50</b>	<b>150</b>
<b>Bromomethane</b>	<b>1</b>	<b>14.882</b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>50</b>	<b>150</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>12.893</b>	<b>0</b>	<b>20</b>	<b>64</b>	<b>50</b>	<b>150</b>
<b>Chloroethane</b>	<b>1</b>	<b>14.4501</b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>50</b>	<b>150</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>16.3752</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>50</b>	<b>150</b>
Ethyl ether	1	17.976	0	20	90	50	150
Furan	1	17.6659	0	20	88	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>20.2701</b>	<b>0</b>	<b>20</b>	<b>101</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>18.3422</b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
Acrolein	1	85.3592	0	100	85	50	150
Acrylonitrile	1	19.4346	0	20	97	50	150
Iodomethane	1	18.6852	0	20	93	50	150
<b>Acetone</b>	<b>1</b>	<b>92.5304</b>	<b>0</b>	<b>100</b>	<b>93</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>18.7878</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	113.5953	0	100	114	50	150
n-Hexane	1	21.1874	0	20	106	70	130
Di-isopropyl-ether	1	19.0861	0	20	95	70	130
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>18.6063</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>33.6661</b>	<b>1.4856</b>	<b>20</b>	<b>161*</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>17.5596</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>19.4272</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>19.0427</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	19.7043	0	20	99	70	130
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>19.4762</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>20.0005</b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	21.037	0	20	105	70	130
Ethyl acetate	1	29.185	0	20	146	50	150
<b>1,4-Dioxane</b>	<b>1</b>	<b>1198.785</b>	<b>0</b>	<b>1000</b>	<b>120</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	19.6764	0	20	98	70	130
<b>Chloroform</b>	<b>1</b>	<b>23.0966</b>	<b>4.6113</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	<b>1</b>	<b>20.9317</b>	<b>0</b>	<b>20</b>	<b>105</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>17.9916</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0*</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>20.6591</b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>19.6101</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	15.5419	0	20	78	50	150
<b>Bromodichloromethane</b>	<b>1</b>	<b>18.7219</b>	<b>1.0458</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>20.4686</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	19.8195	0	20	99	70	130
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>19.5234</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	<b>1</b>	<b>20.0319</b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	<b>1</b>	<b>18.963</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	19.1114	0	20	96	70	130
Iso-propylacetate	1	19.0428	0	20	95	70	130
Methyl methacrylate	1	20.2985	0	20	101	70	130
<b>Dibromochloromethane</b>	<b>1</b>	<b>20.4145</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	0	0	20	0*	70	130
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>19.814</b>	<b>0</b>	<b>20</b>	<b>99</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>19.3395</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	19.3564	0	20	97	70	130
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>19.5449</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>19.778</b>	<b>0</b>	<b>20</b>	<b>99</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	18.8304	0	20	94	70	130
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>19.8718</b>	<b>0</b>	<b>20</b>	<b>99</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	<b>1</b>	<b>18.8268</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>20.4136</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	<b>1</b>	<b>18.9723</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	19.2209	0	20	96	70	130
<b>Chlorobenzene</b>	<b>1</b>	<b>19.9761</b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>70</b>	<b>130</b>

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Bold and underline - Indicates the compounds reported on form1



Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89447

Method: 8260D	Matrix: Aqueous	Units: ug/L		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.1734	0	20	106	70	130
n-Amyl acetate	1	20.1911	0	20	101	70	130
<b>Bromoform</b>	<b>1</b>	<b><u>20.8376</u></b>	<b>0</b>	<b>20</b>	<b>104</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b><u>21.28</u></b>	<b>0</b>	<b>20</b>	<b>106</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b><u>18.9719</u></b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b><u>20.6819</u></b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b><u>40.6679</u></b>	<b>0</b>	<b>40</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b><u>20.5001</u></b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	16.6603	0	20	83	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b><u>19.8479</u></b>	<b>0</b>	<b>20</b>	<b>99</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b><u>19.203</u></b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b><u>18.8683</u></b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b><u>21.412</u></b>	<b>0</b>	<b>20</b>	<b>107</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	113.8996	0	100	114	50	150
Camphene	1	10.0277	0	20	50*	70	130
1,2,3-Trichloropropane	1	18.9059	0	20	95	70	130
2-Chlorotoluene	1	21.2648	0	20	106	70	130
p-Ethyltoluene	1	21.1561	0	20	106	70	130
4-Chlorotoluene	1	21.1979	0	20	106	70	130
n-Propylbenzene	1	20.7713	0	20	104	70	130
Bromobenzene	1	17.8118	0	20	89	70	130
1,3,5-Trimethylbenzene	1	21.2568	0	20	106	70	130
Butyl methacrylate	1	20.2203	0	20	101	70	130
t-Butylbenzene	1	21.3976	0	20	107	70	130
1,2,4-Trimethylbenzene	1	20.5053	0	20	103	70	130
sec-Butylbenzene	1	21.809	0	20	109	70	130
4-Isopropyltoluene	1	21.5366	0	20	108	70	130
n-Butylbenzene	1	21.9613	0	20	110	70	130
p-Diethylbenzene	1	21.642	0	20	108	70	130
1,2,4,5-Tetramethylbenzene	1	20.273	0	20	101	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b><u>20.3075</u></b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>50</b>	<b>150</b>
Camphor	1	233.0959	0	200	117	20	150
Hexachlorobutadiene	1	21.3847	0	20	107	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b><u>19.3332</u></b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b><u>20.5397</u></b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
Naphthalene	1	19.6972	0	20	98	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89447

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M142832.D		AD19574-001(MSD)		10/7/2020 3:58:00 PM			
Non Spike(If applicable): 2M142828.D		AD19574-001		10/7/2020 2:39:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.2935	0	20	91	50	150
<b>Dichlorodifluoromethane</b>	1	<b>8.6463</b>	0	20	<b>43*</b>	50	150
Chloromethane	1	10.6455	0	20	53	50	150
Bromomethane	1	13.9902	0	20	70	50	150
Vinyl Chloride	1	12.5611	0	20	63	50	150
Chloroethane	1	13.7047	0	20	69	50	150
Trichlorofluoromethane	1	15.3586	0	20	77	50	150
Ethyl ether	1	17.7416	0	20	89	50	150
Furan	1	16.6309	0	20	83	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>19.8547</b>	0	20	<b>99</b>	50	150
<b>Methylene Chloride</b>	1	<b>17.9662</b>	0	20	<b>90</b>	70	130
Acrolein	1	85.1325	0	100	85	50	150
Acrylonitrile	1	17.6592	0	20	88	50	150
Iodomethane	1	19.2855	0	20	96	50	150
<b>Acetone</b>	1	<b>87.2903</b>	0	100	<b>87</b>	50	150
<b>Carbon Disulfide</b>	1	<b>16.9282</b>	0	20	<b>85</b>	50	150
t-Butyl Alcohol	1	111.2917	0	100	111	50	150
n-Hexane	1	21.5123	0	20	108	70	130
Di-isopropyl-ether	1	18.8915	0	20	94	70	130
<b>1,1-Dichloroethene</b>	1	<b>17.8475</b>	0	20	<b>89</b>	70	130
<b>Methyl Acetate</b>	1	<b>26.89</b>	<b>1.4856</b>	20	<b>127</b>	50	150
<b>Methyl-t-butyl ether</b>	1	<b>16.9253</b>	0	20	<b>85</b>	70	130
<b>1,1-Dichloroethane</b>	1	<b>18.7876</b>	0	20	<b>94</b>	70	130
<b>trans-1,2-Dichloroethene</b>	1	<b>18.2007</b>	0	20	<b>91</b>	70	130
Ethyl-t-butyl ether	1	19.5043	0	20	98	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>18.3699</b>	0	20	<b>92</b>	70	130
<b>Bromochloromethane</b>	1	<b>19.8743</b>	0	20	<b>99</b>	70	130
2,2-Dichloropropane	1	19.6663	0	20	98	70	130
Ethyl acetate	1	28.7433	0	20	144	50	150
<b>1,4-Dioxane</b>	1	<b>1117.596</b>	0	1000	<b>112</b>	50	150
1,1-Dichloropropene	1	18.7284	0	20	94	70	130
<b>Chloroform</b>	1	<b>22.3981</b>	<b>4.6113</b>	20	<b>89</b>	70	130
<b>Cyclohexane</b>	1	<b>20.9147</b>	0	20	<b>105</b>	70	130
<b>1,2-Dichloroethane</b>	1	<b>17.9312</b>	0	20	<b>90</b>	70	130
<b>2-Butanone</b>	1	<b>0</b>	0	20	<b>0*</b>	50	150
<b>1,1,1-Trichloroethane</b>	1	<b>19.4275</b>	0	20	<b>97</b>	70	130
<b>Carbon Tetrachloride</b>	1	<b>19.3921</b>	0	20	<b>97</b>	50	150
Vinyl Acetate	1	14.9516	0	20	75	50	150
<b>Bromodichloromethane</b>	1	<b>18.8003</b>	<b>1.0458</b>	20	<b>89</b>	70	130
<b>Methylcyclohexane</b>	1	<b>21.3087</b>	0	20	<b>107</b>	70	130
Dibromomethane	1	19.2096	0	20	96	70	130
<b>1,2-Dichloropropane</b>	1	<b>19.3168</b>	0	20	<b>97</b>	70	130
<b>Trichloroethene</b>	1	<b>19.1334</b>	0	20	<b>96</b>	70	130
<b>Benzene</b>	1	<b>18.3095</b>	0	20	<b>92</b>	70	130
tert-Amyl methyl ether	1	19.0865	0	20	95	70	130
Iso-propylacetate	1	18.7175	0	20	94	70	130
Methyl methacrylate	1	19.7397	0	20	99	70	130
<b>Dibromochloromethane</b>	1	<b>20.4413</b>	0	20	<b>102</b>	70	130
2-Chloroethylvinylether	1	1.0669	0	20	5.3*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>19.3685</b>	0	20	<b>97</b>	70	130
<b>trans-1,3-Dichloropropene</b>	1	<b>18.9896</b>	0	20	<b>95</b>	70	130
Ethyl methacrylate	1	18.1531	0	20	91	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>19.2264</b>	0	20	<b>96</b>	70	130
<b>1,2-Dibromoethane</b>	1	<b>18.7992</b>	0	20	<b>94</b>	70	130
1,3-Dichloropropane	1	18.6281	0	20	93	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>19.2601</b>	0	20	<b>96</b>	50	150
<b>2-Hexanone</b>	1	<b>18.4956</b>	0	20	<b>92</b>	50	150
<b>Tetrachloroethene</b>	1	<b>19.2779</b>	0	20	<b>96</b>	50	150
<b>Toluene</b>	1	<b>18.7471</b>	0	20	<b>94</b>	70	130
1,1,1,2-Tetrachloroethane	1	18.715	0	20	94	70	130
<b>Chlorobenzene</b>	1	<b>19.4773</b>	0	20	<b>97</b>	70	130

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Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89447

Method: 8260D	Matrix: Aqueous	Units: ug/L		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	20.8667	0	20	104	70	130
n-Amyl acetate	1	19.4039	0	20	97	70	130
<b><u>Bromoform</u></b>	<b>1</b>	<b><u>20.3368</u></b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b><u>Ethylbenzene</u></b>	<b>1</b>	<b><u>21.275</u></b>	<b>0</b>	<b>20</b>	<b>106</b>	<b>70</b>	<b>130</b>
<b><u>1,1,2,2-Tetrachloroethane</u></b>	<b>1</b>	<b><u>18.6676</u></b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b><u>Styrene</u></b>	<b>1</b>	<b><u>20.529</u></b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
<b><u>m&amp;p-Xylenes</u></b>	<b>1</b>	<b><u>39.5269</u></b>	<b>0</b>	<b>40</b>	<b>99</b>	<b>70</b>	<b>130</b>
<b><u>o-Xylene</u></b>	<b>1</b>	<b><u>20.3916</u></b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	16.1555	0	20	81	50	150
<b><u>1,3-Dichlorobenzene</u></b>	<b>1</b>	<b><u>19.7992</u></b>	<b>0</b>	<b>20</b>	<b>99</b>	<b>70</b>	<b>130</b>
<b><u>1,4-Dichlorobenzene</u></b>	<b>1</b>	<b><u>19.2751</u></b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b><u>1,2-Dichlorobenzene</u></b>	<b>1</b>	<b><u>19.2889</u></b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b><u>Isopropylbenzene</u></b>	<b>1</b>	<b><u>21.569</u></b>	<b>0</b>	<b>20</b>	<b>108</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	102.6054	0	100	103	50	150
Camphene	1	8.2899	0	20	41*	70	130
1,2,3-Trichloropropane	1	18.6479	0	20	93	70	130
2-Chlorotoluene	1	21.5335	0	20	108	70	130
p-Ethyltoluene	1	21.7126	0	20	109	70	130
4-Chlorotoluene	1	20.5217	0	20	103	70	130
n-Propylbenzene	1	21.4245	0	20	107	70	130
Bromobenzene	1	17.263	0	20	86	70	130
1,3,5-Trimethylbenzene	1	21.5552	0	20	108	70	130
Butyl methacrylate	1	19.5807	0	20	98	70	130
t-Butylbenzene	1	22.0083	0	20	110	70	130
1,2,4-Trimethylbenzene	1	20.688	0	20	103	70	130
sec-Butylbenzene	1	22.7658	0	20	114	70	130
4-Isopropyltoluene	1	22.4553	0	20	112	70	130
n-Butylbenzene	1	23.1212	0	20	116	70	130
p-Diethylbenzene	1	22.7307	0	20	114	70	130
1,2,4,5-Tetramethylbenzene	1	21.1872	0	20	106	70	130
<b><u>1,2-Dibromo-3-Chloropropane</u></b>	<b>1</b>	<b><u>20.3737</u></b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>50</b>	<b>150</b>
Camphor	1	225.9154	0	200	113	20	150
Hexachlorobutadiene	1	20.6443	0	20	103	50	150
<b><u>1,2,4-Trichlorobenzene</u></b>	<b>1</b>	<b><u>20.4895</u></b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b><u>1,2,3-Trichlorobenzene</u></b>	<b>1</b>	<b><u>20.693</u></b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
Naphthalene	1	20.0798	0	20	100	50	150

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**Bold and underline** - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89447

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142832.D	AD19574-001(MSD)	10/7/2020 3:58:00 PM
Duplicate(If applicable): 2M142831.D	AD19574-001(MS)	10/7/2020 3:38:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
QC Type: MSD		

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	18.2935	18.6162	1.7	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>8.6463</b>	<b>9.1016</b>	<b>5.1</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>10.6455</b>	<b>10.5017</b>	<b>1.4</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>13.9902</b>	<b>14.882</b>	<b>6.2</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>12.5611</b>	<b>12.893</b>	<b>2.6</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>13.7047</b>	<b>14.4501</b>	<b>5.3</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>15.3586</b>	<b>16.3752</b>	<b>6.4</b>	<b>30</b>
Ethyl ether	1	17.7416	17.976	1.3	30
Furan	1	16.6309	17.6659	6	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>19.8547</b>	<b>20.2701</b>	<b>2.1</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>17.9662</b>	<b>18.3422</b>	<b>2.1</b>	<b>30</b>
Acrolein	1	85.1325	85.3592	0.27	30
Acrylonitrile	1	17.6592	19.4346	9.6	30
Iodomethane	1	19.2855	18.6852	3.2	30
<b>Acetone</b>	<b>1</b>	<b>87.2903</b>	<b>92.5304</b>	<b>5.8</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>16.9282</b>	<b>18.7878</b>	<b>10</b>	<b>30</b>
t-Butyl Alcohol	1	111.2917	113.5953	2	30
n-Hexane	1	21.5123	21.1874	1.5	30
Di-isopropyl-ether	1	18.8915	19.0861	1	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>17.8475</b>	<b>18.6063</b>	<b>4.2</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>26.89</b>	<b>33.6661</b>	<b>22</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>16.9253</b>	<b>17.5596</b>	<b>3.7</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>18.7876</b>	<b>19.4272</b>	<b>3.3</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>18.2007</b>	<b>19.0427</b>	<b>4.5</b>	<b>30</b>
Ethyl-t-butyl ether	1	19.5043	19.7043	1	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>18.3699</b>	<b>19.4762</b>	<b>5.8</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>19.8743</b>	<b>20.0005</b>	<b>0.63</b>	<b>30</b>
2,2-Dichloropropane	1	19.6663	21.037	6.7	30
Ethyl acetate	1	28.7433	29.185	1.5	30
<b>1,4-Dioxane</b>	<b>1</b>	<b>1117.596</b>	<b>1198.785</b>	<b>7</b>	<b>30</b>
1,1-Dichloropropene	1	18.7284	19.6764	4.9	30
<b>Chloroform</b>	<b>1</b>	<b>22.3981</b>	<b>23.0966</b>	<b>3.1</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>20.9147</b>	<b>20.9317</b>	<b>0.08</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>17.9312</b>	<b>17.9916</b>	<b>0.34</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>NA</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>19.4275</b>	<b>20.6591</b>	<b>6.1</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>19.3921</b>	<b>19.6101</b>	<b>1.1</b>	<b>40</b>
Vinyl Acetate	1	14.9516	15.5419	3.9	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>18.8003</b>	<b>18.7219</b>	<b>0.42</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>21.3087</b>	<b>20.4686</b>	<b>4</b>	<b>30</b>
Dibromomethane	1	19.2096	19.8195	3.1	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>19.3168</b>	<b>19.5234</b>	<b>1.1</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>19.1334</b>	<b>20.0319</b>	<b>4.6</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>18.3095</b>	<b>18.963</b>	<b>3.5</b>	<b>40</b>
tert-Amyl methyl ether	1	19.0865	19.1114	0.13	30
Iso-propylacetate	1	18.7175	19.0428	1.7	30
Methyl methacrylate	1	19.7397	20.2985	2.8	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>20.4413</b>	<b>20.4145</b>	<b>0.13</b>	<b>30</b>
2-Chloroethylvinylether	1	1.0669	0	200*	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>19.3685</b>	<b>19.814</b>	<b>2.3</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>18.9896</b>	<b>19.3395</b>	<b>1.8</b>	<b>30</b>
Ethyl methacrylate	1	18.1531	19.3564	6.4	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>19.2264</b>	<b>19.5449</b>	<b>1.6</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>18.7992</b>	<b>19.778</b>	<b>5.1</b>	<b>30</b>
1,3-Dichloropropane	1	18.6281	18.8304	1.1	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>19.2601</b>	<b>19.8718</b>	<b>3.1</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>18.4956</b>	<b>18.8268</b>	<b>1.8</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>19.2779</b>	<b>20.4136</b>	<b>5.7</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>18.7471</b>	<b>18.9723</b>	<b>1.2</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	18.715	19.2209	2.7	30
<b>Chlorobenzene</b>	<b>1</b>	<b>19.4773</b>	<b>19.9761</b>	<b>2.5</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89447

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	20.8667	21.1734	1.5	30
n-Amyl acetate	1	19.4039	20.1911	4	30
<b><u>Bromoform</u></b>	<b><u>1</u></b>	<b><u>20.3368</u></b>	<b><u>20.8376</u></b>	<b><u>2.4</u></b>	<b><u>30</u></b>
<b><u>Ethylbenzene</u></b>	<b><u>1</u></b>	<b><u>21.275</u></b>	<b><u>21.28</u></b>	<b><u>0.02</u></b>	<b><u>30</u></b>
<b><u>1,1,2,2-Tetrachloroethane</u></b>	<b><u>1</u></b>	<b><u>18.6676</u></b>	<b><u>18.9719</u></b>	<b><u>1.6</u></b>	<b><u>30</u></b>
<b><u>Styrene</u></b>	<b><u>1</u></b>	<b><u>20.529</u></b>	<b><u>20.6819</u></b>	<b><u>0.74</u></b>	<b><u>30</u></b>
<b><u>m&amp;p-Xylenes</u></b>	<b><u>1</u></b>	<b><u>39.5269</u></b>	<b><u>40.6679</u></b>	<b><u>2.8</u></b>	<b><u>30</u></b>
<b><u>o-Xylene</u></b>	<b><u>1</u></b>	<b><u>20.3916</u></b>	<b><u>20.5001</u></b>	<b><u>0.53</u></b>	<b><u>30</u></b>
trans-1,4-Dichloro-2-butene	1	16.1555	16.6603	3.1	30
<b><u>1,3-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>19.7992</u></b>	<b><u>19.8479</u></b>	<b><u>0.25</u></b>	<b><u>30</u></b>
<b><u>1,4-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>19.2751</u></b>	<b><u>19.203</u></b>	<b><u>0.37</u></b>	<b><u>40</u></b>
<b><u>1,2-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>19.2889</u></b>	<b><u>18.8683</u></b>	<b><u>2.2</u></b>	<b><u>40</u></b>
<b><u>Isopropylbenzene</u></b>	<b><u>1</u></b>	<b><u>21.569</u></b>	<b><u>21.412</u></b>	<b><u>0.73</u></b>	<b><u>30</u></b>
Cyclohexanone	1	102.6054	113.8996	10	30
Camphene	1	8.2899	10.0277	19	30
1,2,3-Trichloropropane	1	18.6479	18.9059	1.4	30
2-Chlorotoluene	1	21.5335	21.2648	1.3	30
p-Ethyltoluene	1	21.7126	21.1561	2.6	30
4-Chlorotoluene	1	20.5217	21.1979	3.2	30
n-Propylbenzene	1	21.4245	20.7713	3.1	40
Bromobenzene	1	17.263	17.8118	3.1	30
1,3,5-Trimethylbenzene	1	21.5552	21.2568	1.4	30
Butyl methacrylate	1	19.5807	20.2203	3.2	30
t-Butylbenzene	1	22.0083	21.3976	2.8	30
1,2,4-Trimethylbenzene	1	20.688	20.5053	0.89	30
sec-Butylbenzene	1	22.7658	21.809	4.3	40
4-Isopropyltoluene	1	22.4553	21.5366	4.2	30
n-Butylbenzene	1	23.1212	21.9613	5.1	30
p-Diethylbenzene	1	22.7307	21.642	4.9	30
1,2,4,5-Tetramethylbenzene	1	21.1872	20.273	4.4	30
<b><u>1,2-Dibromo-3-Chloropropane</u></b>	<b><u>1</u></b>	<b><u>20.3737</u></b>	<b><u>20.3075</u></b>	<b><u>0.33</u></b>	<b><u>30</u></b>
Camphor	1	225.9154	233.0959	3.1	30
Hexachlorobutadiene	1	20.6443	21.3847	3.5	30
<b><u>1,2,4-Trichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>20.4895</u></b>	<b><u>19.3332</u></b>	<b><u>5.8</u></b>	<b><u>30</u></b>
<b><u>1,2,3-Trichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>20.693</u></b>	<b><u>20.5397</u></b>	<b><u>0.74</u></b>	<b><u>30</u></b>
Naphthalene	1	20.0798	19.6972	1.9	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89475

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140338.D		MBS89475		10/9/2020 12:18:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.3437	0	20	82	50	150
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>1.6083</b>	<b>0</b>	<b>20</b>	<b>8*</b>	<b>50</b>	<b>150</b>
Chloromethane	1	6.8355	0	20	34*	50	150
<b>Bromomethane</b>	<b>1</b>	<b>12.2111</b>	<b>0</b>	<b>20</b>	<b>61</b>	<b>50</b>	<b>150</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>10.8249</b>	<b>0</b>	<b>20</b>	<b>54</b>	<b>50</b>	<b>150</b>
<b>Chloroethane</b>	<b>1</b>	<b>17.5107</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>50</b>	<b>150</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>19.1737</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>50</b>	<b>150</b>
Ethyl ether	1	20.6542	0	20	103	50	150
Furan	1	17.9763	0	20	90	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>22.8111</b>	<b>0</b>	<b>20</b>	<b>114</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>21.4514</b>	<b>0</b>	<b>20</b>	<b>107</b>	<b>70</b>	<b>130</b>
Acrolein	1	105.8326	0	100	106	50	150
Acrylonitrile	1	22.8419	0	20	114	50	150
Iodomethane	1	10.1343	0	20	51	50	150
<b>Acetone</b>	<b>1</b>	<b>98.4305</b>	<b>0</b>	<b>100</b>	<b>98</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>16.0963</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	125.4374	0	100	125	50	150
n-Hexane	1	20.1288	0	20	101	70	130
Di-isopropyl-ether	1	19.676	0	20	98	70	130
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>18.9801</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>29.312</b>	<b>0</b>	<b>20</b>	<b>147</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>24.1366</b>	<b>0</b>	<b>20</b>	<b>121</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>18.9285</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>21.603</b>	<b>0</b>	<b>20</b>	<b>108</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	21.2555	0	20	106	70	130
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>20.0092</b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>17.5262</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	20.6425	0	20	103	70	130
Ethyl acetate	1	24.0715	0	20	120	50	150
<b>1,4-Dioxane</b>	<b>1</b>	<b>1035.309</b>	<b>0</b>	<b>1000</b>	<b>104</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	20.9777	0	20	105	70	130
<b>Chloroform</b>	<b>1</b>	<b>20.8717</b>	<b>0</b>	<b>20</b>	<b>104</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	<b>1</b>	<b>20.5027</b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>21.762</b>	<b>0</b>	<b>20</b>	<b>109</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	<b>1</b>	<b>31.9944</b>	<b>0</b>	<b>20</b>	<b>160*</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>21.071</b>	<b>0</b>	<b>20</b>	<b>105</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>21.5444</b>	<b>0</b>	<b>20</b>	<b>108</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	14.2143	0	20	71	50	150
<b>Bromodichloromethane</b>	<b>1</b>	<b>20.4592</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>21.7654</b>	<b>0</b>	<b>20</b>	<b>109</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	22.4848	0	20	112	70	130
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>19.5714</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	<b>1</b>	<b>22.9514</b>	<b>0</b>	<b>20</b>	<b>115</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	<b>1</b>	<b>20.3592</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	21.8399	0	20	109	70	130
Iso-propylacetate	1	17.5629	0	20	88	70	130
Methyl methacrylate	1	16.9604	0	20	85	70	130
<b>Dibromochloromethane</b>	<b>1</b>	<b>18.0132</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	50.5661	0	20	253*	70	130
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>18.3427</b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>16.9026</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	19.5985	0	20	98	70	130
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>17.9872</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>18.0395</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	17.92	0	20	90	70	130
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>17.977</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	<b>1</b>	<b>17.3114</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>19.6433</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	<b>1</b>	<b>27.5575</b>	<b>0</b>	<b>20</b>	<b>138*</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	18.3563	0	20	92	70	130
<b>Chlorobenzene</b>	<b>1</b>	<b>25.1047</b>	<b>0</b>	<b>20</b>	<b>126</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	16.0201	0	20	80	70	130
n-Amyl acetate	1	16.1255	0	20	81	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.7257</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.8626</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>1,1,2-Tetrachloroethane</b>	<b>1</b>	<b>16.0213</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>18.1009</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>38.2612</b>	<b>0</b>	<b>40</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.2803</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	15.1538	0	20	76	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.4642</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.3872</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.3575</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>18.7332</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	78.7178	0	100	79	50	150
Camphene	1	17.0166	0	20	85	70	130
1,2,3-Trichloropropane	1	14.5972	0	20	73	70	130
2-Chlorotoluene	1	16.9228	0	20	85	70	130
p-Ethyltoluene	1	18.5859	0	20	93	70	130
4-Chlorotoluene	1	17.4444	0	20	87	70	130
n-Propylbenzene	1	17.4119	0	20	87	70	130
Bromobenzene	1	14.9998	0	20	75	70	130
1,3,5-Trimethylbenzene	1	17.4792	0	20	87	70	130
Butyl methacrylate	1	17.2062	0	20	86	70	130
t-Butylbenzene	1	18.2251	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.8257	0	20	89	70	130
sec-Butylbenzene	1	18.073	0	20	90	70	130
4-Isopropyltoluene	1	18.6287	0	20	93	70	130
n-Butylbenzene	1	17.5934	0	20	88	70	130
p-Diethylbenzene	1	18.9095	0	20	95	70	130
1,2,4,5-Tetramethylbenzene	1	14.3674	0	20	72	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>15.6931</b>	<b>0</b>	<b>20</b>	<b>78</b>	<b>50</b>	<b>150</b>
Camphor	1	120.3586	0	200	60	20	150
Hexachlorobutadiene	1	17.4462	0	20	87	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>17.6923</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>16.574</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.2641	0	20	86	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89475

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140349.D		AD19654-001(MS)		10/9/2020 4:06:00 PM			
Non Spike(If applicable): 1M140334.D		AD19654-001		10/9/2020 10:55:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.1017	0	20	106	50	150
<u>Dichlorodifluoromethane</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>20</u>	<u>0*</u>	<u>50</u>	<u>150</u>
Chloromethane	1	6.5106	0	20	33*	50	150
<u>Bromomethane</u>	<u>1</u>	<u>9.6073</u>	<u>0</u>	<u>20</u>	<u>48*</u>	<u>50</u>	<u>150</u>
<u>Vinyl Chloride</u>	<u>1</u>	<u>11.4355</u>	<u>0</u>	<u>20</u>	<u>57</u>	<u>50</u>	<u>150</u>
<u>Chloroethane</u>	<u>1</u>	<u>11.8418</u>	<u>0</u>	<u>20</u>	<u>59</u>	<u>50</u>	<u>150</u>
<u>Trichlorofluoromethane</u>	<u>1</u>	<u>17.9205</u>	<u>0</u>	<u>20</u>	<u>90</u>	<u>50</u>	<u>150</u>
Ethyl ether	1	20.7551	0	20	104	50	150
Furan	1	17.3775	0	20	87	50	150
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	<u>1</u>	<u>21.981</u>	<u>0</u>	<u>20</u>	<u>110</u>	<u>50</u>	<u>150</u>
<u>Methylene Chloride</u>	<u>1</u>	<u>21.5482</u>	<u>0</u>	<u>20</u>	<u>108</u>	<u>70</u>	<u>130</u>
Acrolein	1	110.7009	0	100	111	50	150
Acrylonitrile	1	24.9355	0	20	125	50	150
Iodomethane	1	9.5645	0	20	48*	50	150
<u>Acetone</u>	<u>1</u>	<u>110.5759</u>	<u>0</u>	<u>100</u>	<u>111</u>	<u>50</u>	<u>150</u>
<u>Carbon Disulfide</u>	<u>1</u>	<u>15.9888</u>	<u>0</u>	<u>20</u>	<u>80</u>	<u>50</u>	<u>150</u>
t-Butyl Alcohol	1	55.7934	0	100	56	50	150
n-Hexane	1	20.937	0	20	105	70	130
Di-isopropyl-ether	1	20.0127	0	20	100	70	130
<u>1,1-Dichloroethene</u>	<u>1</u>	<u>18.9949</u>	<u>0</u>	<u>20</u>	<u>95</u>	<u>70</u>	<u>130</u>
<u>Methyl Acetate</u>	<u>1</u>	<u>30.3167</u>	<u>0</u>	<u>20</u>	<u>152*</u>	<u>50</u>	<u>150</u>
<u>Methyl-t-butyl ether</u>	<u>1</u>	<u>23.6304</u>	<u>0.958</u>	<u>20</u>	<u>113</u>	<u>70</u>	<u>130</u>
<u>1,1-Dichloroethane</u>	<u>1</u>	<u>18.9154</u>	<u>0</u>	<u>20</u>	<u>95</u>	<u>70</u>	<u>130</u>
<u>trans-1,2-Dichloroethene</u>	<u>1</u>	<u>21.4017</u>	<u>0</u>	<u>20</u>	<u>107</u>	<u>70</u>	<u>130</u>
Ethyl-t-butyl ether	1	21.0541	0	20	105	70	130
<u>cis-1,2-Dichloroethene</u>	<u>1</u>	<u>20.4228</u>	<u>0</u>	<u>20</u>	<u>102</u>	<u>70</u>	<u>130</u>
<u>Bromochloromethane</u>	<u>1</u>	<u>20.1477</u>	<u>0</u>	<u>20</u>	<u>101</u>	<u>70</u>	<u>130</u>
2,2-Dichloropropane	1	18.9813	0	20	95	70	130
Ethyl acetate	1	25.9632	0	20	130	50	150
<u>1,4-Dioxane</u>	<u>1</u>	<u>474.7633</u>	<u>0</u>	<u>1000</u>	<u>47*</u>	<u>50</u>	<u>150</u>
1,1-Dichloropropene	1	21.57	0	20	108	70	130
<u>Chloroform</u>	<u>1</u>	<u>20.3488</u>	<u>0</u>	<u>20</u>	<u>102</u>	<u>70</u>	<u>130</u>
<u>Cyclohexane</u>	<u>1</u>	<u>21.4426</u>	<u>0</u>	<u>20</u>	<u>107</u>	<u>70</u>	<u>130</u>
<u>1,2-Dichloroethane</u>	<u>1</u>	<u>21.1912</u>	<u>0</u>	<u>20</u>	<u>106</u>	<u>70</u>	<u>130</u>
<u>2-Butanone</u>	<u>1</u>	<u>34.5088</u>	<u>0</u>	<u>20</u>	<u>173*</u>	<u>50</u>	<u>150</u>
<u>1,1,1-Trichloroethane</u>	<u>1</u>	<u>20.9688</u>	<u>0</u>	<u>20</u>	<u>105</u>	<u>70</u>	<u>130</u>
<u>Carbon Tetrachloride</u>	<u>1</u>	<u>20.8195</u>	<u>0</u>	<u>20</u>	<u>104</u>	<u>50</u>	<u>150</u>
Vinyl Acetate	1	13.8379	0	20	69	50	150
<u>Bromodichloromethane</u>	<u>1</u>	<u>20.3805</u>	<u>0</u>	<u>20</u>	<u>102</u>	<u>70</u>	<u>130</u>
<u>Methylcyclohexane</u>	<u>1</u>	<u>21.8967</u>	<u>0</u>	<u>20</u>	<u>109</u>	<u>70</u>	<u>130</u>
Dibromomethane	1	22.0516	0	20	110	70	130
<u>1,2-Dichloropropane</u>	<u>1</u>	<u>19.3817</u>	<u>0</u>	<u>20</u>	<u>97</u>	<u>70</u>	<u>130</u>
<u>Trichloroethene</u>	<u>1</u>	<u>21.0735</u>	<u>0</u>	<u>20</u>	<u>105</u>	<u>70</u>	<u>130</u>
<u>Benzene</u>	<u>1</u>	<u>20.1586</u>	<u>0</u>	<u>20</u>	<u>101</u>	<u>70</u>	<u>130</u>
tert-Amyl methyl ether	1	21.354	0	20	107	70	130
Iso-propylacetate	1	17.5601	0	20	88	70	130
Methyl methacrylate	1	17.6552	0	20	88	70	130
<u>Dibromochloromethane</u>	<u>1</u>	<u>17.8925</u>	<u>0</u>	<u>20</u>	<u>89</u>	<u>70</u>	<u>130</u>
2-Chloroethylvinylether	1	47.2867	0	20	236*	70	130
<u>cis-1,3-Dichloropropene</u>	<u>1</u>	<u>17.6534</u>	<u>0</u>	<u>20</u>	<u>88</u>	<u>70</u>	<u>130</u>
<u>trans-1,3-Dichloropropene</u>	<u>1</u>	<u>16.1808</u>	<u>0</u>	<u>20</u>	<u>81</u>	<u>70</u>	<u>130</u>
Ethyl methacrylate	1	20.3089	0	20	102	70	130
<u>1,1,2-Trichloroethane</u>	<u>1</u>	<u>18.5285</u>	<u>0</u>	<u>20</u>	<u>93</u>	<u>70</u>	<u>130</u>
<u>1,2-Dibromoethane</u>	<u>1</u>	<u>18.0075</u>	<u>0</u>	<u>20</u>	<u>90</u>	<u>70</u>	<u>130</u>
1,3-Dichloropropane	1	18.3382	0	20	92	70	130
<u>4-Methyl-2-Pentanone</u>	<u>1</u>	<u>19.643</u>	<u>0</u>	<u>20</u>	<u>98</u>	<u>50</u>	<u>150</u>
<u>2-Hexanone</u>	<u>1</u>	<u>19.2144</u>	<u>0</u>	<u>20</u>	<u>96</u>	<u>50</u>	<u>150</u>
<u>Tetrachloroethene</u>	<u>1</u>	<u>20.076</u>	<u>0</u>	<u>20</u>	<u>100</u>	<u>50</u>	<u>150</u>
<u>Toluene</u>	<u>1</u>	<u>18.9198</u>	<u>0</u>	<u>20</u>	<u>95</u>	<u>70</u>	<u>130</u>
1,1,1,2-Tetrachloroethane	1	18.1177	0	20	91	70	130
<u>Chlorobenzene</u>	<u>1</u>	<u>19.7747</u>	<u>0</u>	<u>20</u>	<u>99</u>	<u>70</u>	<u>130</u>

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Bold and underline - Indicates the compounds reported on form1



Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	15.876	0	20	79	70	130
n-Amyl acetate	1	16.1645	0	20	81	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.444</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>17.394</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>15.7126</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>19.1253</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>38.6043</b>	<b>0</b>	<b>40</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.572</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	15.0851	0	20	75	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.8777</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.9564</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.6245</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>19.5377</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	89.7964	0	100	90	50	150
Camphene	1	17.7531	0	20	89	70	130
1,2,3-Trichloropropane	1	15.3064	0	20	77	70	130
2-Chlorotoluene	1	17.9022	0	20	90	70	130
p-Ethyltoluene	1	18.0451	0	20	90	70	130
4-Chlorotoluene	1	18.0952	0	20	90	70	130
n-Propylbenzene	1	17.95	0	20	90	70	130
Bromobenzene	1	17.3407	0	20	87	70	130
1,3,5-Trimethylbenzene	1	18.8558	0	20	94	70	130
Butyl methacrylate	1	17.1211	0	20	86	70	130
t-Butylbenzene	1	19.1266	0	20	96	70	130
1,2,4-Trimethylbenzene	1	18.046	0	20	90	70	130
sec-Butylbenzene	1	18.8235	0	20	94	70	130
4-Isopropyltoluene	1	19.3173	0	20	97	70	130
n-Butylbenzene	1	18.39	0	20	92	70	130
p-Diethylbenzene	1	19.2631	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	14.3041	0	20	72	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>15.0525</b>	<b>0</b>	<b>20</b>	<b>75</b>	<b>50</b>	<b>150</b>
Camphor	1	129.371	0	200	65	20	150
Hexachlorobutadiene	1	19.9953	0	20	100	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>18.0395</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>17.4954</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.4715	0	20	87	50	150

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Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140350.D		AD19654-001(MSD)		10/9/2020 4:26:00 PM			
Non Spike(If applicable): 1M140334.D		AD19654-001		10/9/2020 10:55:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.8133	0	20	94	50	150
<b>Dichlorodifluoromethane</b>	1	<b>3.0755</b>	0	20	<b>15*</b>	50	150
Chloromethane	1	5.9199	0	20	30*	50	150
<b>Bromomethane</b>	1	<b>8.1158</b>	0	20	<b>41*</b>	50	150
<b>Vinyl Chloride</b>	1	<b>5.6087</b>	0	20	<b>28*</b>	50	150
<b>Chloroethane</b>	1	<b>9.9808</b>	0	20	<b>50</b>	50	150
<b>Trichlorofluoromethane</b>	1	<b>0</b>	0	20	<b>0*</b>	50	150
Ethyl ether	1	17.6997	0	20	88	50	150
Furan	1	15.6497	0	20	78	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>20.0104</b>	0	20	<b>100</b>	50	150
<b>Methylene Chloride</b>	1	<b>19.4049</b>	0	20	<b>97</b>	70	130
Acrolein	1	97.2982	0	100	97	50	150
Acrylonitrile	1	22.5835	0	20	113	50	150
Iodomethane	1	10.4425	0	20	52	50	150
<b>Acetone</b>	1	<b>96.1393</b>	0	100	<b>96</b>	50	150
<b>Carbon Disulfide</b>	1	<b>13.4225</b>	0	20	<b>67</b>	50	150
t-Butyl Alcohol	1	55.9815	0	100	56	50	150
n-Hexane	1	20.1434	0	20	101	70	130
Di-isopropyl-ether	1	18.3917	0	20	92	70	130
<b>1,1-Dichloroethene</b>	1	<b>17.1609</b>	0	20	<b>86</b>	70	130
<b>Methyl Acetate</b>	1	<b>27.3412</b>	0	20	<b>137</b>	50	150
<b>Methyl-t-butyl ether</b>	1	<b>21.4991</b>	<b>0.958</b>	20	<b>103</b>	70	130
<b>1,1-Dichloroethane</b>	1	<b>16.9959</b>	0	20	<b>85</b>	70	130
<b>trans-1,2-Dichloroethene</b>	1	<b>19.5351</b>	0	20	<b>98</b>	70	130
Ethyl-t-butyl ether	1	19.3418	0	20	97	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>18.3196</b>	0	20	<b>92</b>	70	130
<b>Bromochloromethane</b>	1	<b>18.5446</b>	0	20	<b>93</b>	70	130
2,2-Dichloropropane	1	16.756	0	20	84	70	130
Ethyl acetate	1	22.8855	0	20	114	50	150
<b>1,4-Dioxane</b>	1	<b>395.5967</b>	0	1000	<b>40*</b>	50	150
1,1-Dichloropropene	1	18.7824	0	20	94	70	130
<b>Chloroform</b>	1	<b>18.4747</b>	0	20	<b>92</b>	70	130
<b>Cyclohexane</b>	1	<b>19.4517</b>	0	20	<b>97</b>	70	130
<b>1,2-Dichloroethane</b>	1	<b>19.6661</b>	0	20	<b>98</b>	70	130
<b>2-Butanone</b>	1	<b>30.4181</b>	0	20	<b>152*</b>	50	150
<b>1,1,1-Trichloroethane</b>	1	<b>18.7995</b>	0	20	<b>94</b>	70	130
<b>Carbon Tetrachloride</b>	1	<b>18.6879</b>	0	20	<b>93</b>	50	150
Vinyl Acetate	1	12.5666	0	20	63	50	150
<b>Bromodichloromethane</b>	1	<b>17.9689</b>	0	20	<b>90</b>	70	130
<b>Methylcyclohexane</b>	1	<b>20.6754</b>	0	20	<b>103</b>	70	130
Dibromomethane	1	19.8323	0	20	99	70	130
<b>1,2-Dichloropropane</b>	1	<b>17.5897</b>	0	20	<b>88</b>	70	130
<b>Trichloroethene</b>	1	<b>19.2606</b>	0	20	<b>96</b>	70	130
<b>Benzene</b>	1	<b>18.229</b>	0	20	<b>91</b>	70	130
tert-Amyl methyl ether	1	19.6078	0	20	98	70	130
Iso-propylacetate	1	15.9341	0	20	80	70	130
Methyl methacrylate	1	16.2681	0	20	81	70	130
<b>Dibromochloromethane</b>	1	<b>16.0405</b>	0	20	<b>80</b>	70	130
2-Chloroethylvinylether	1	45.5427	0	20	228*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>15.7891</b>	0	20	<b>79</b>	70	130
<b>trans-1,3-Dichloropropene</b>	1	<b>14.8531</b>	0	20	<b>74</b>	70	130
Ethyl methacrylate	1	17.2436	0	20	86	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>16.2753</b>	0	20	<b>81</b>	70	130
<b>1,2-Dibromoethane</b>	1	<b>16.3442</b>	0	20	<b>82</b>	70	130
1,3-Dichloropropane	1	16.7281	0	20	84	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>17.1771</b>	0	20	<b>86</b>	50	150
<b>2-Hexanone</b>	1	<b>17.0154</b>	0	20	<b>85</b>	50	150
<b>Tetrachloroethene</b>	1	<b>17.4875</b>	0	20	<b>87</b>	50	150
<b>Toluene</b>	1	<b>16.9129</b>	0	20	<b>85</b>	70	130
1,1,1,2-Tetrachloroethane	1	16.5834	0	20	83	70	130
<b>Chlorobenzene</b>	1	<b>18.1011</b>	0	20	<b>91</b>	70	130

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Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.6922	0	20	73	70	130
n-Amyl acetate	1	14.4364	0	20	72	70	130
<b><u>Bromoform</u></b>	<b>1</b>	<b><u>13.5391</u></b>	<b>0</b>	<b>20</b>	<b>68*</b>	<b>70</b>	<b>130</b>
<b><u>Ethylbenzene</u></b>	<b>1</b>	<b><u>15.4948</u></b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
<b><u>1,1,2,2-Tetrachloroethane</u></b>	<b>1</b>	<b><u>14.0187</u></b>	<b>0</b>	<b>20</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b><u>Styrene</u></b>	<b>1</b>	<b><u>17.1792</u></b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
<b><u>m&amp;p-Xylenes</u></b>	<b>1</b>	<b><u>35.155</u></b>	<b>0</b>	<b>40</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b><u>o-Xylene</u></b>	<b>1</b>	<b><u>17.063</u></b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	13.4328	0	20	67	50	150
<b><u>1,3-Dichlorobenzene</u></b>	<b>1</b>	<b><u>16.441</u></b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b><u>1,4-Dichlorobenzene</u></b>	<b>1</b>	<b><u>16.4946</u></b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b><u>1,2-Dichlorobenzene</u></b>	<b>1</b>	<b><u>16.1699</u></b>	<b>0</b>	<b>20</b>	<b>81</b>	<b>70</b>	<b>130</b>
<b><u>Isopropylbenzene</u></b>	<b>1</b>	<b><u>17.8376</u></b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	82.9164	0	100	83	50	150
Camphene	1	17.0285	0	20	85	70	130
1,2,3-Trichloropropane	1	13.6922	0	20	68*	70	130
2-Chlorotoluene	1	16.1085	0	20	81	70	130
p-Ethyltoluene	1	16.8207	0	20	84	70	130
4-Chlorotoluene	1	16.1632	0	20	81	70	130
n-Propylbenzene	1	16.4798	0	20	82	70	130
Bromobenzene	1	15.8868	0	20	79	70	130
1,3,5-Trimethylbenzene	1	17.4244	0	20	87	70	130
Butyl methacrylate	1	15.2468	0	20	76	70	130
t-Butylbenzene	1	17.8232	0	20	89	70	130
1,2,4-Trimethylbenzene	1	16.6933	0	20	83	70	130
sec-Butylbenzene	1	17.5415	0	20	88	70	130
4-Isopropyltoluene	1	17.7047	0	20	89	70	130
n-Butylbenzene	1	17.1214	0	20	86	70	130
p-Diethylbenzene	1	17.9225	0	20	90	70	130
1,2,4,5-Tetramethylbenzene	1	13.2982	0	20	66*	70	130
<b><u>1,2-Dibromo-3-Chloropropane</u></b>	<b>1</b>	<b><u>13.2101</u></b>	<b>0</b>	<b>20</b>	<b>66</b>	<b>50</b>	<b>150</b>
Camphor	1	110.1634	0	200	55	20	150
Hexachlorobutadiene	1	17.1469	0	20	86	50	150
<b><u>1,2,4-Trichlorobenzene</u></b>	<b>1</b>	<b><u>16.6717</u></b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
<b><u>1,2,3-Trichlorobenzene</u></b>	<b>1</b>	<b><u>15.951</u></b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>70</b>	<b>130</b>
Naphthalene	1	15.5997	0	20	78	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**  
**QC Batch: MBS89475**

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M140350.D	AD19654-001(MSD)	10/9/2020 4:26:00 PM
Duplicate (If applicable): 1M140349.D	AD19654-001(MS)	10/9/2020 4:06:00 PM
Inst Blank (If applicable):		
Method: 8260D	Matrix: Methanol	Units: mg/Kg
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	18.8133	21.1017	11	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>3.0755</b>	<b>0</b>	<b>200*</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>5.9199</b>	<b>6.5106</b>	<b>9.5</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>8.1158</b>	<b>9.6073</b>	<b>17</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>5.6087</b>	<b>11.4355</b>	<b>68*</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>9.9808</b>	<b>11.8418</b>	<b>17</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>0</b>	<b>17.9205</b>	<b>200*</b>	<b>30</b>
Ethyl ether	1	17.6997	20.7551	16	30
Furan	1	15.6497	17.3775	10	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>20.0104</b>	<b>21.981</b>	<b>9.4</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>19.4049</b>	<b>21.5482</b>	<b>10</b>	<b>30</b>
Acrolein	1	97.2982	110.7009	13	30
Acrylonitrile	1	22.5835	24.9355	9.9	30
Iodomethane	1	10.4425	9.5645	8.8	30
<b>Acetone</b>	<b>1</b>	<b>96.1393</b>	<b>110.5759</b>	<b>14</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>13.4225</b>	<b>15.9888</b>	<b>17</b>	<b>30</b>
t-Butyl Alcohol	1	55.9815	55.7934	0.34	30
n-Hexane	1	20.1434	20.937	3.9	30
Di-isopropyl-ether	1	18.3917	20.0127	8.4	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>17.1609</b>	<b>18.9949</b>	<b>10</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>27.3412</b>	<b>30.3167</b>	<b>10</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>21.4991</b>	<b>23.6304</b>	<b>9.4</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>16.9959</b>	<b>18.9154</b>	<b>11</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>19.5351</b>	<b>21.4017</b>	<b>9.1</b>	<b>30</b>
Ethyl-t-butyl ether	1	19.3418	21.0541	8.5	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>18.3196</b>	<b>20.4228</b>	<b>11</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>18.5446</b>	<b>20.1477</b>	<b>8.3</b>	<b>30</b>
2,2-Dichloropropane	1	16.756	18.9813	12	30
Ethyl acetate	1	22.8855	25.9632	13	20
<b>1,4-Dioxane</b>	<b>1</b>	<b>395.5967</b>	<b>474.7633</b>	<b>18</b>	<b>30</b>
1,1-Dichloropropene	1	18.7824	21.57	14	30
<b>Chloroform</b>	<b>1</b>	<b>18.4747</b>	<b>20.3488</b>	<b>9.7</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>19.4517</b>	<b>21.4426</b>	<b>9.7</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>19.6661</b>	<b>21.1912</b>	<b>7.5</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>30.4181</b>	<b>34.5088</b>	<b>13</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>18.7995</b>	<b>20.9688</b>	<b>11</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>18.6879</b>	<b>20.8195</b>	<b>11</b>	<b>40</b>
Vinyl Acetate	1	12.5666	13.8379	9.6	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>17.9689</b>	<b>20.3805</b>	<b>13</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>20.6754</b>	<b>21.8967</b>	<b>5.7</b>	<b>30</b>
Dibromomethane	1	19.8323	22.0516	11	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>17.5897</b>	<b>19.3817</b>	<b>9.7</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>19.2606</b>	<b>21.0735</b>	<b>9</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>18.229</b>	<b>20.1586</b>	<b>10</b>	<b>40</b>
tert-Amyl methyl ether	1	19.6078	21.354	8.5	30
Iso-propylacetate	1	15.9341	17.5601	9.7	30
Methyl methacrylate	1	16.2681	17.6552	8.2	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>16.0405</b>	<b>17.8925</b>	<b>11</b>	<b>30</b>
2-Chloroethylvinylether	1	45.5427	47.2867	3.8	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>15.7891</b>	<b>17.6534</b>	<b>11</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>14.8531</b>	<b>16.1808</b>	<b>8.6</b>	<b>30</b>
Ethyl methacrylate	1	17.2436	20.3089	16	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>16.2753</b>	<b>18.5285</b>	<b>13</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>16.3442</b>	<b>18.0075</b>	<b>9.7</b>	<b>30</b>
1,3-Dichloropropane	1	16.7281	18.3382	9.2	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>17.1771</b>	<b>19.643</b>	<b>13</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>17.0154</b>	<b>19.2144</b>	<b>12</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>17.4875</b>	<b>20.076</b>	<b>14</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>16.9129</b>	<b>18.9198</b>	<b>11</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	16.5834	18.1177	8.8	30
<b>Chlorobenzene</b>	<b>1</b>	<b>18.1011</b>	<b>19.7747</b>	<b>8.8</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	14.6922	15.876	7.7	30
n-Amyl acetate	1	14.4364	16.1645	11	30
<b>Bromoform</b>	<b>1</b>	<b>13.5391</b>	<b>15.444</b>	<b>13</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>15.4948</b>	<b>17.394</b>	<b>12</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>14.0187</b>	<b>15.7126</b>	<b>11</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>17.1792</b>	<b>19.1253</b>	<b>11</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>35.155</b>	<b>38.6043</b>	<b>9.4</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>17.063</b>	<b>18.572</b>	<b>8.5</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	13.4328	15.0851	12	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>16.441</b>	<b>17.8777</b>	<b>8.4</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>16.4946</b>	<b>17.9564</b>	<b>8.5</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>16.1699</b>	<b>17.6245</b>	<b>8.6</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>17.8376</b>	<b>19.5377</b>	<b>9.1</b>	<b>30</b>
Cyclohexanone	1	82.9164	89.7964	8	30
Camphene	1	17.0285	17.7531	4.2	30
1,2,3-Trichloropropane	1	13.6922	15.3064	11	30
2-Chlorotoluene	1	16.1085	17.9022	11	30
p-Ethyltoluene	1	16.8207	18.0451	7	30
4-Chlorotoluene	1	16.1632	18.0952	11	30
n-Propylbenzene	1	16.4798	17.95	8.5	40
Bromobenzene	1	15.8868	17.3407	8.8	30
1,3,5-Trimethylbenzene	1	17.4244	18.8558	7.9	30
Butyl methacrylate	1	15.2468	17.1211	12	30
t-Butylbenzene	1	17.8232	19.1266	7.1	30
1,2,4-Trimethylbenzene	1	16.6933	18.046	7.8	30
sec-Butylbenzene	1	17.5415	18.8235	7.1	40
4-Isopropyltoluene	1	17.7047	19.3173	8.7	30
n-Butylbenzene	1	17.1214	18.39	7.1	30
p-Diethylbenzene	1	17.9225	19.2631	7.2	30
1,2,4,5-Tetramethylbenzene	1	13.2982	14.3041	7.3	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>13.2101</b>	<b>15.0525</b>	<b>13</b>	<b>30</b>
Camphor	1	110.1634	129.371	16	30
Hexachlorobutadiene	1	17.1469	19.9953	15	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.6717</b>	<b>18.0395</b>	<b>7.9</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>15.951</b>	<b>17.4954</b>	<b>9.2</b>	<b>30</b>
Naphthalene	1	15.5997	17.4715	11	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**FORM 4**  
Blank Summary

Blank Number: DAILY BLANK  
Blank Data File: 11M83553.D  
Matrix: Soil

Blank Analysis Date: 10/05/20 16:43  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19539-009	11M83578.D	10/06/20 00:57
AD19562-003(MS:	11M83557.D	10/05/20 18:02
AD19562-005(MSD	11M83560.D	10/05/20 19:01
MBS89425	11M83561.D	10/05/20 19:21
AD19562-001	11M83564.D	10/05/20 20:20

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 1M140092.D  
Matrix: AqueousBlank Analysis Date: 10/05/20 17:13  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19539-001	1M140094.D	10/05/20 17:54
AD19565-016(MS)	1M140105.D	10/05/20 21:42
MBS89427	1M140102.D	10/05/20 20:40
AD19565-016(MSD)	1M140106.D	10/05/20 22:02
AD19565-016	1M140097.D	10/05/20 18:56

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 1M140093.D  
Matrix: MethanolBlank Analysis Date: 10/05/20 17:33  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19539-006	1M140118.D	10/06/20 02:11
AD19539-008	1M140116.D	10/06/20 01:29
AD19539-010	1M140112.D	10/06/20 00:06
AD19539-011	1M140111.D	10/05/20 23:46
AD19539-013	1M140114.D	10/06/20 00:48
AD19539-017(8uL)	1M140100.D	10/05/20 19:58
AD19539-009(MSD)	1M140104.D	10/05/20 21:21
MBS89426	1M140101.D	10/05/20 20:19
AD19539-009(MS)	1M140103.D	10/05/20 21:00
AD19539-009	1M140107.D	10/05/20 22:23



**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 11M83601.D  
Matrix: SoilBlank Analysis Date: 10/06/20 11:13  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19539-007	11M83623.D	10/06/20 18:28
AD19539-015	11M83603.D	10/06/20 11:52
AD19539-016	11M83604.D	10/06/20 12:12
AD19581-008(MSD)	11M83607.D	10/06/20 13:11
AD19581-008	11M83610.D	10/06/20 14:11
AD19581-008(MS)	11M83606.D	10/06/20 12:52
MBS89437	11M83605.D	10/06/20 12:32

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 2M142817.D  
Matrix: AqueousBlank Analysis Date: 10/07/20 10:37  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19539-002(5X)	2M142841.D	10/07/20 18:54
AD19539-003(5X)	2M142842.D	10/07/20 19:13
AD19539-004(5X)	2M142843.D	10/07/20 19:33
AD19539-005(5X)	2M142844.D	10/07/20 19:53
AD19574-001	2M142828.D	10/07/20 14:39
AD19574-001(MSD)	2M142832.D	10/07/20 15:58
MBS89447	2M142829.D	10/07/20 14:59
AD19574-001(MS)	2M142831.D	10/07/20 15:38

**FORM 4**  
Blank Summary

Blank Number: DAILY BLANK  
Blank Data File: 1M140333.D  
Matrix: Methanol

Blank Analysis Date: 10/09/20 10:26  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19539-012	1M140341.D	10/09/20 13:20
AD19539-014(40uL)	1M140337.D	10/09/20 11:57
AD19654-001	1M140334.D	10/09/20 10:55
MBS89475	1M140338.D	10/09/20 12:18
AD19654-001(MS)	1M140349.D	10/09/20 16:06
AD19654-001(MSD)	1M140350.D	10/09/20 16:26

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 1

Data File: 1M139257.D  
Analysis Date: 09/09/20 18:32  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.599 to 7.635 min

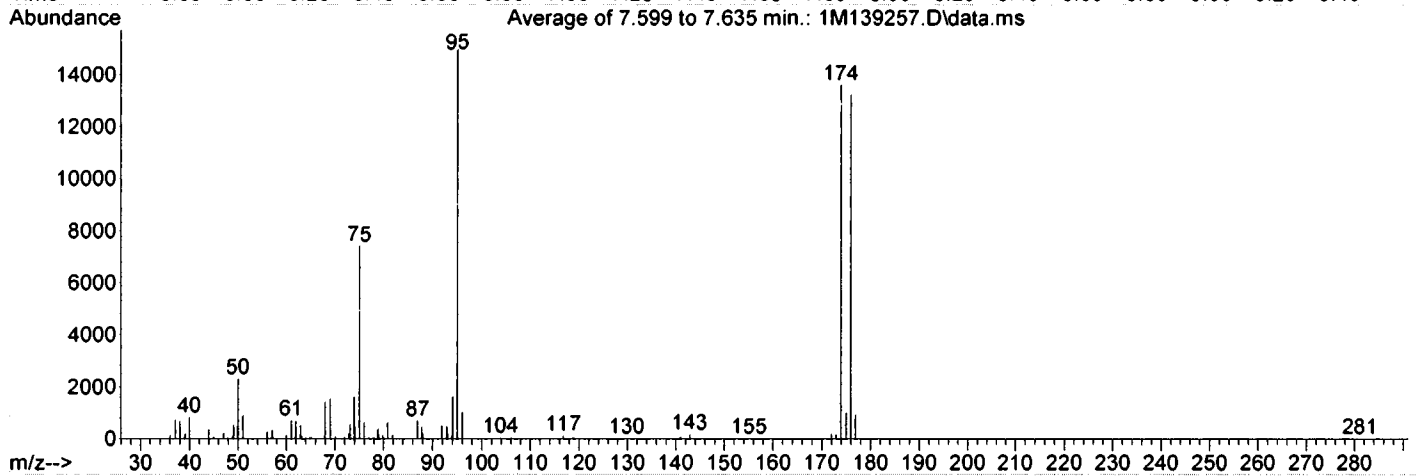
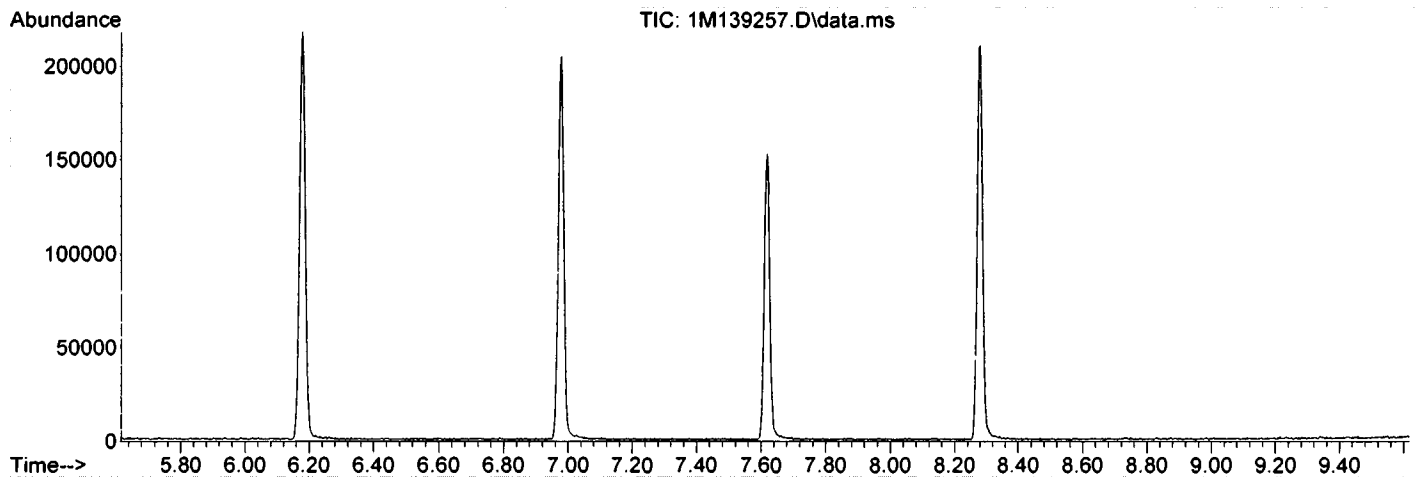
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.4	2307	PASS
75	95	30	60	49.5	7412	PASS
95	95	100	100	100.0	14974	PASS
96	95	5	9	6.9	1036	PASS
173	174	0.00	2	1.3	171	PASS
174	95	50	100	90.9	13612	PASS
175	174	5	9	7.3	996	PASS
176	174	95	101	97.3	13246	PASS
177	176	5	9	7.0	928	PASS

Data File	Sample Number	Analysis Date:
1M139258.D	BLK	09/09/20 18:46
1M139260.D	CAL @ 0.5 PPB	09/09/20 19:28
1M139261.D	CAL @ 1 PPB	09/09/20 19:48
1M139262.D	CAL @ 5 PPB	09/09/20 20:09
1M139263.D	CAL @ 10 PPB	09/09/20 20:30
1M139264.D	CAL @ 20 PPB	09/09/20 20:51
1M139266.D	CAL @ 50 PPB	09/09/20 21:33
1M139268.D	CAL @ 500 PPB	09/09/20 22:14
1M139271.D	CAL @ 250 PPB	09/09/20 23:16
1M139272.D	BLK	09/09/20 23:37
1M139274.D	CAL @ 100 PPB	09/10/20 00:19
1M139275.D	BLK	09/10/20 00:40
1M139279.D	ICV	09/10/20 02:02

Data Path : G:\GcMsData\2020\GCMS\_1\Data\09-09-20\  
 Data File : 1M139257.D  
 Acq On : 09 Sep 2020 18:32  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : A, 5ML  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS\_1\MethodQt\1M\_A0710.M  
 Title : @GCMS\_1,ug,624,8260  
 Last Update : Fri Jul 10 13:55:20 2020



Spectrum Information: Average of 7.599 to 7.635 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	2307	PASS
75	95	30	60	49.5	7412	PASS
95	95	100	100	100.0	14974	PASS
96	95	5	9	6.9	1036	PASS
173	174	0.00	2	1.3	171	PASS
174	95	50	100	90.9	13612	PASS
175	174	5	9	7.3	996	PASS
176	174	95	101	97.3	13246	PASS
177	176	5	9	7.0	928	PASS

## Form 5

Tune Name: BFB TUNE

Data File: 2M142484.D

Instrument: GCMS 2

Analysis Date: 09/29/20 14:14

Method: EPA 8260D

Tune Scan/Time Range: Average of 7.336 to 7.379 min

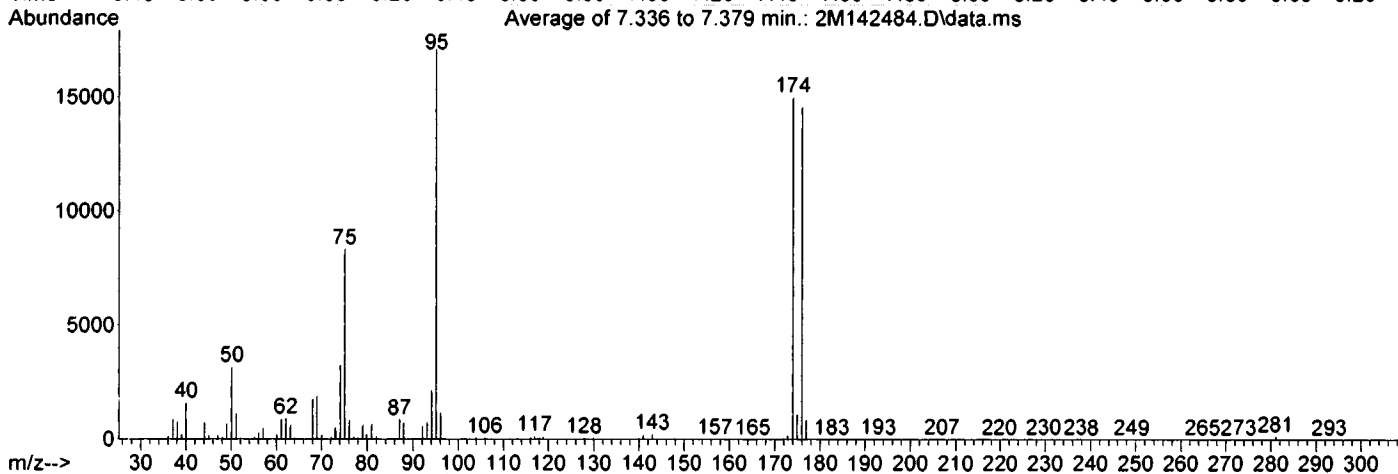
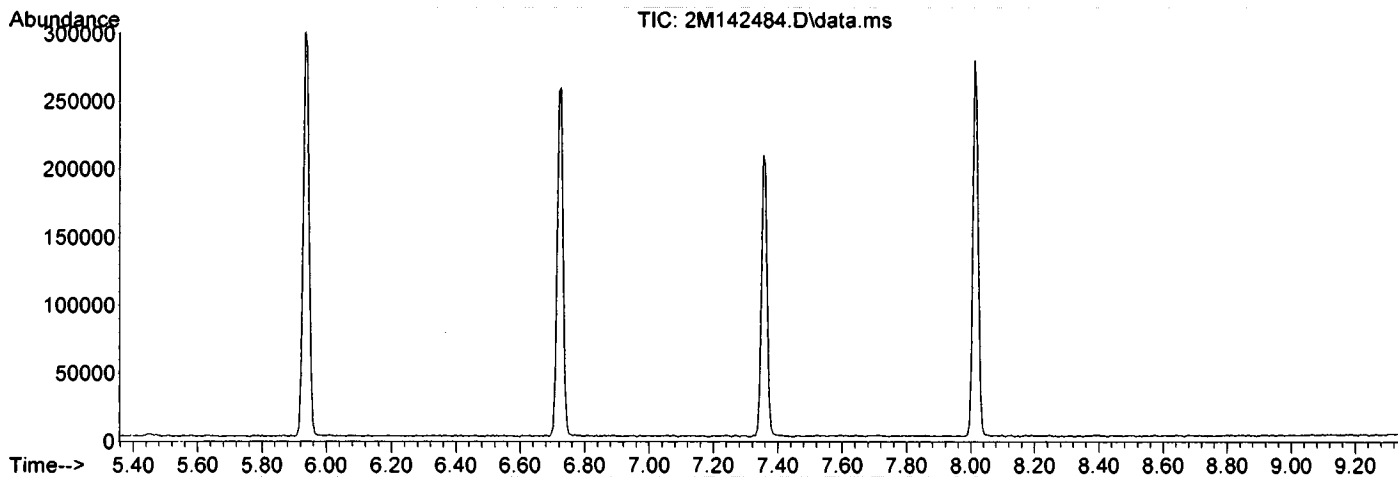
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

Data File	Sample Number	Analysis Date:
2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09
2M142488.D	CAL @ 1 PPB	09/29/20 15:28
2M142489.D	CAL @ 5 PPB	09/29/20 15:48
2M142490.D	CAL @ 10 PPB	09/29/20 16:08
2M142492.D	CAL @ 20 PPB	09/29/20 16:47
2M142494.D	CAL @ 50 PPB	09/29/20 17:26
2M142496.D	CAL @ 100 PPB	09/29/20 18:05
2M142499.D	CAL @ 250 PPB	09/29/20 19:04
2M142502.D	CAL @ 500 PPB	09/29/20 20:03
2M142508.D	ICV	09/29/20 22:00

Data Path : G:\GcMsData\2020\GCMS\_2\Data\09-29-20\  
 Data File : 2M142484.D  
 Acq On : 29 Sep 2020 14:14  
 Operator : JR  
 Sample : BFB TUNE  
 Misc : A,5ML  
 ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_2\METHODQT\2M\_A0909.M  
 Title : @GCMS\_2,ug,624,8260  
 Last Update : Thu Sep 10 14:44:02 2020



Spectrum Information: Average of 7.336 to 7.379 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 11

Data File: 11M83448.D  
Analysis Date: 10/01/20 22:49  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.151 to 7.173 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.2	9352	PASS
75	95	30	60	47.2	28956	PASS
95	95	100	100	100.0	61346	PASS
96	95	5	9	6.4	3935	PASS
173	174	0.00	2	0.9	472	PASS
174	95	50	100	83.8	51417	PASS
175	174	5	9	7.5	3867	PASS
176	174	95	101	95.6	49141	PASS
177	176	5	9	6.8	3356	PASS

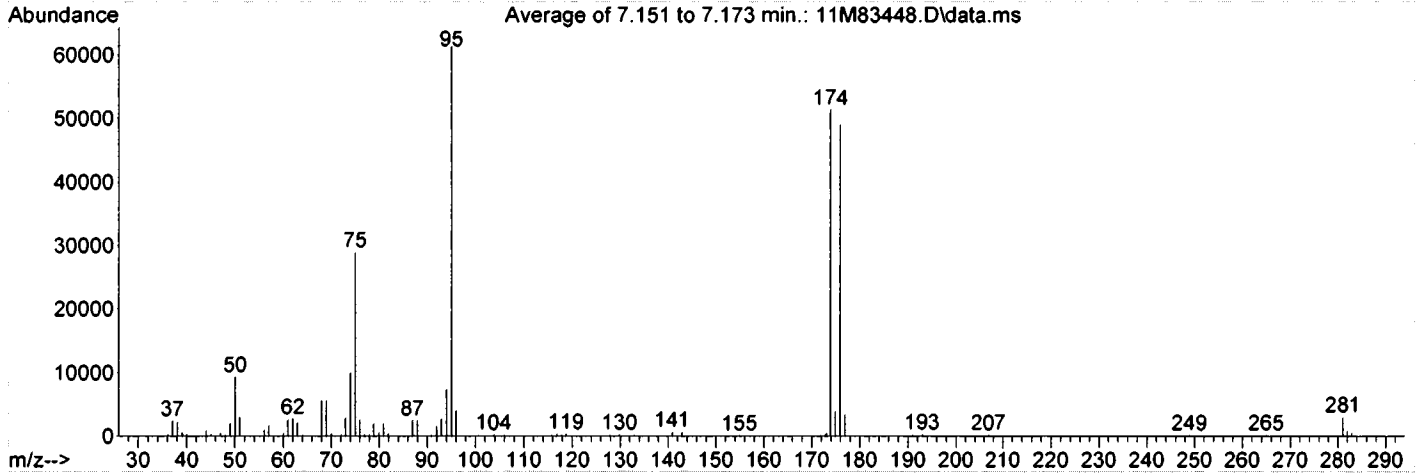
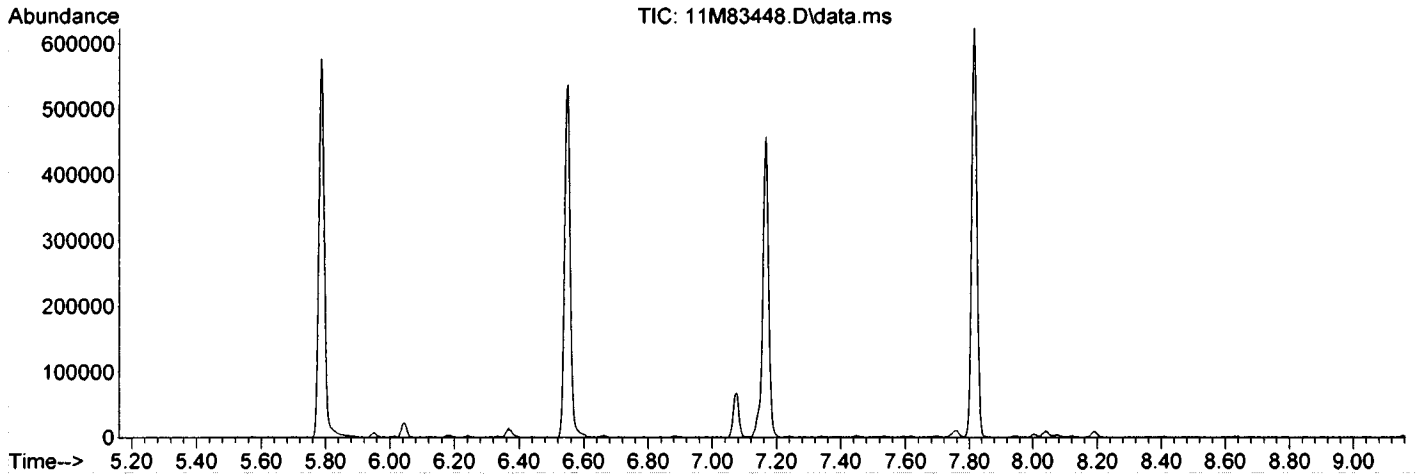
Data File	Sample Number	Analysis Date:
11M83449.D	CAL @ 0.5 PPB	10/01/20 23:09
11M83450.D	CAL @ 1 PPB	10/01/20 23:29
11M83451.D	CAL @ 2 PPB	10/01/20 23:49
11M83452.D	CAL @ 5 PPB	10/02/20 00:08
11M83453.D	CAL @ 20 PPB	10/02/20 00:28
11M83454.D	CAL @ 50 PPB	10/02/20 00:48
11M83455.D	CAL @ 500 PPB	10/02/20 01:08
11M83457.D	CAL @ 250 PPB	10/02/20 01:47
11M83459.D	CAL @ 100 PPB	10/02/20 02:27
11M83462.D	ICV	10/02/20 03:26



Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-0120\  
 Data File : 11M83448.D  
 Acq On : 1 Oct 2020 22:49  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S0805.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Thu Aug 06 07:16:09 2020



Spectrum Information: Average of 7.151 to 7.173 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	9352	PASS
75	95	30	60	47.2	28956	PASS
95	95	100	100	100.0	61346	PASS
96	95	5	9	6.4	3935	PASS
173	174	0.00	2	0.9	472	PASS
174	95	50	100	83.8	51417	PASS
175	174	5	9	7.5	3867	PASS
176	174	95	101	95.6	49141	PASS
177	176	5	9	6.8	3356	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 1

Data File: 1M140085.D  
Analysis Date: 10/05/20 14:18  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.603 to 7.622 min

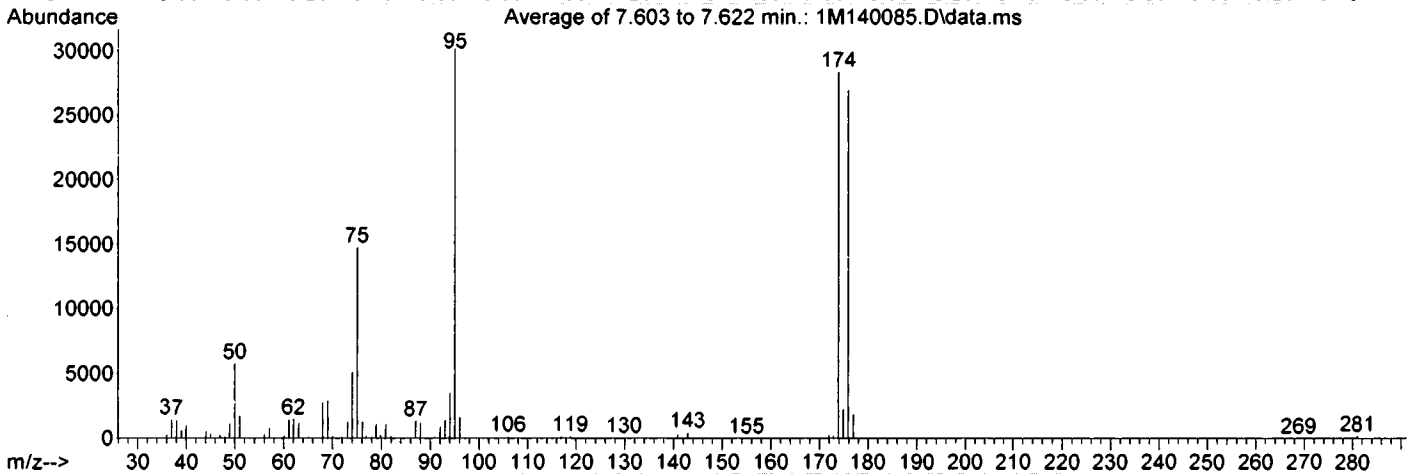
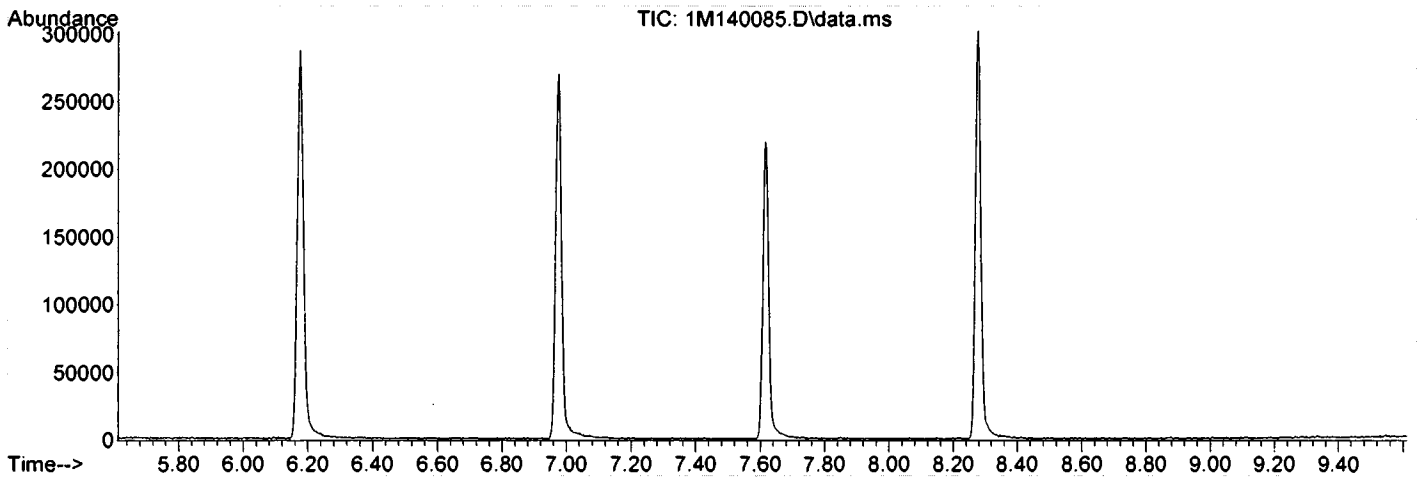
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.1	5773	PASS
75	95	30	60	49.0	14774	PASS
95	95	100	100	100.0	30179	PASS
96	95	5	9	5.5	1655	PASS
173	174	0.00	2	0.7	186	PASS
174	95	50	100	94.0	28355	PASS
175	174	5	9	7.9	2251	PASS
176	174	95	101	95.2	26992	PASS
177	176	5	9	6.8	1836	PASS

Data File	Sample Number	Analysis Date:
1M140086.D	20 PPB	10/05/20 14:33
1M140087.D	CAL @ 20 PPB	10/05/20 14:58
1M140088.D	BLK-HCL(100520)	10/05/20 15:18
1M140089.D	BLK	10/05/20 15:51
1M140090.D	BLK	10/05/20 16:12
1M140091.D	BLK	10/05/20 16:52
1M140092.D	DAILY BLANK	10/05/20 17:13
1M140093.D	DAILY BLANK	10/05/20 17:33
1M140094.D	AD19539-001	10/05/20 17:54
1M140095.D	AD19529-001	10/05/20 18:15
1M140096.D	AD19565-009	10/05/20 18:36
1M140097.D	AD19565-016	10/05/20 18:56
1M140098.D	AD19498-001	10/05/20 19:17
1M140099.D	AD19539-014(80uL)	10/05/20 19:38
1M140100.D	AD19539-017(8uL)	10/05/20 19:58
1M140101.D	MBS89426	10/05/20 20:19
1M140102.D	MBS89427	10/05/20 20:40
1M140103.D	AD19539-009(MS)	10/05/20 21:00
1M140104.D	AD19539-009(MSD)	10/05/20 21:21
1M140105.D	AD19565-016(MS)	10/05/20 21:42
1M140106.D	AD19565-016(MSD)	10/05/20 22:02
1M140107.D	AD19539-009	10/05/20 22:23
1M140108.D	BLK	10/05/20 22:43
1M140109.D	AD19580-007	10/05/20 23:04
1M140110.D	AD19566-002	10/05/20 23:25
1M140111.D	AD19539-011	10/05/20 23:46
1M140112.D	AD19539-010	10/06/20 00:06
1M140113.D	AD19539-016	10/06/20 00:27
1M140114.D	AD19539-013	10/06/20 00:48
1M140115.D	AD19539-015	10/06/20 01:08
1M140116.D	AD19539-008	10/06/20 01:29
1M140117.D	AD19539-007	10/06/20 01:50
1M140118.D	AD19539-006	10/06/20 02:11
1M140119.D	AD19581-011	10/06/20 02:31
1M140120.D	AD19596-002	10/06/20 02:52
1M140121.D	AD19581-003	10/06/20 03:13
1M140122.D	AD19587-007	10/06/20 03:33

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-05-20\  
 Data File : 1M140085.D  
 Acq On : 05 Oct 2020 14:18  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : A,5ML  
 ALS Vial : 15 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS\_1\MethodQt\1M\_A0909.M  
 Title : @GCMS\_1,ug,624,8260  
 Last Update : Thu Sep 10 15:56:53 2020



Spectrum Information: Average of 7.603 to 7.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	5773	PASS
75	95	30	60	49.0	14774	PASS
95	95	100	100	100.0	30179	PASS
96	95	5	9	5.5	1655	PASS
173	174	0.00	2	0.7	186	PASS
174	95	50	100	94.0	28355	PASS
175	174	5	9	7.9	2251	PASS
176	174	95	101	95.2	26992	PASS
177	176	5	9	6.8	1836	PASS

## Form 5

Tune Name: BFB TUNE

Data File: 11M83548.D

Instrument: GCMS 11

Analysis Date: 10/05/20 15:04

Method: EPA 8260D

Tune Scan/Time Range: Average of 7.154 to 7.163 min

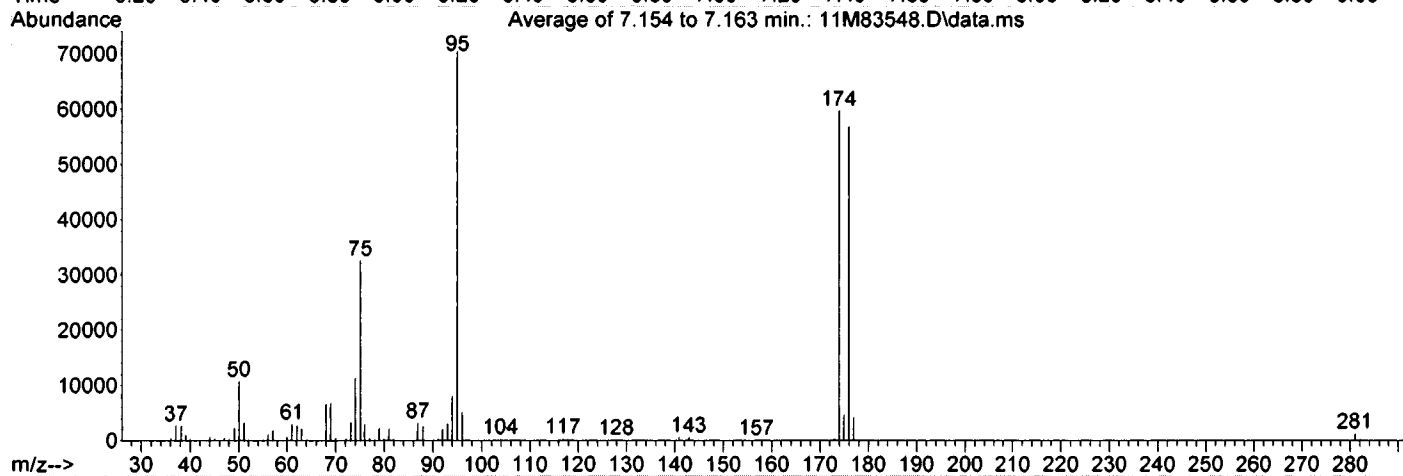
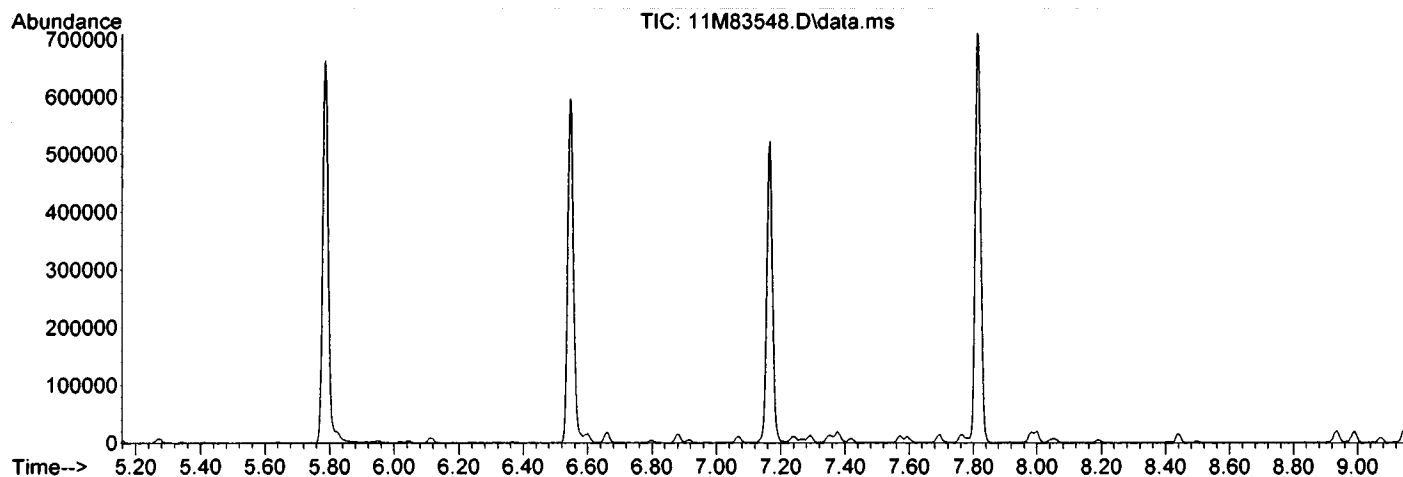
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.3	10757	PASS
75	95	30	60	46.3	32667	PASS
95	95	100	100	100.0	70502	PASS
96	95	5	9	7.3	5172	PASS
173	174	0.00	2	0.5	324	PASS
174	95	50	100	84.7	59718	PASS
175	174	5	9	7.7	4580	PASS
176	174	95	101	95.1	56776	PASS
177	176	5	9	7.4	4209	PASS

Data File	Sample Number	Analysis Date:
11M83549.D	50 PPB	10/05/20 15:24
11M83550.D	CAL @ 50 PPB	10/05/20 15:44
11M83551.D	BLK	10/05/20 16:03
11M83552.D	BLK	10/05/20 16:23
11M83553.D	DAILY BLANK	10/05/20 16:43
11M83554.D	AD19581-007	10/05/20 17:03
11M83555.D	AD19581-011(5X)	10/05/20 17:23
11M83556.D	AD19581-007(MS)	10/05/20 17:42
11M83557.D	AD19562-003(MS)	10/05/20 18:02
11M83558.D	AD19581-011(5X)	10/05/20 18:22
11M83559.D	AD19542-001	10/05/20 18:42
11M83560.D	AD19562-005(MSD)	10/05/20 19:01
11M83561.D	MBS89425	10/05/20 19:21
11M83562.D	BLK	10/05/20 19:41
11M83563.D	BLK	10/05/20 20:00
11M83564.D	AD19562-001	10/05/20 20:20
11M83565.D	AD19562-007	10/05/20 20:40
11M83566.D	AD19587-001	10/05/20 21:00
11M83567.D	AD19587-002	10/05/20 21:20
11M83568.D	AD19587-003	10/05/20 21:39
11M83569.D	AD19587-004	10/05/20 21:59
11M83570.D	AD19587-005	10/05/20 22:19
11M83571.D	AD19587-006	10/05/20 22:39
11M83572.D	AD19582-002	10/05/20 22:58
11M83573.D	AD19563-001	10/05/20 23:18
11M83574.D	AD19563-003	10/05/20 23:38
11M83575.D	AD19563-005	10/05/20 23:58
11M83576.D	AD19563-007	10/06/20 00:17
11M83577.D	AD19539-012	10/06/20 00:37
11M83578.D	AD19539-009	10/06/20 00:57
11M83579.D	AD19542-001	10/06/20 01:16
11M83580.D	AD19560-002	10/06/20 01:36
11M83581.D	AD19581-007(MSD)	10/06/20 01:56
11M83582.D	MBS89431	10/06/20 02:15
11M83583.D	BLK	10/06/20 02:35
11M83584.D	BLK	10/06/20 02:55
11M83585.D	BLK	10/06/20 03:15
11M83586.D	BLK	10/06/20 03:34
11M83587.D	BLK	10/06/20 03:54
11M83588.D	BLK	10/06/20 04:14

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-05-20\  
 Data File : 11M83548.D  
 Acq On : 5 Oct 2020 15:04  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S1001.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Fri Oct 02 09:51:09 2020



Spectrum Information: Average of 7.154 to 7.163 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.3	10757	PASS
75	95	30	60	46.3	32667	PASS
95	95	100	100	100.0	70502	PASS
96	95	5	9	7.3	5172	PASS
173	174	0.00	2	0.5	324	PASS
174	95	50	100	84.7	59718	PASS
175	174	5	9	7.7	4580	PASS
176	174	95	101	95.1	56776	PASS
177	176	5	9	7.4	4209	PASS

*WP*

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 11

Data File: 11M83596.D  
Analysis Date: 10/06/20 09:34  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.131 to 7.163 min

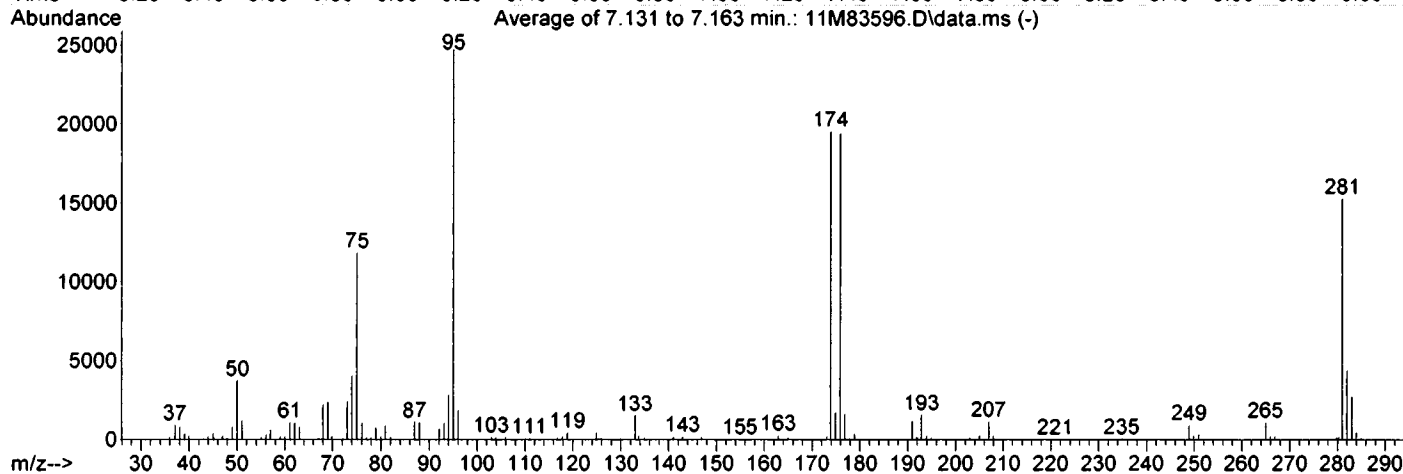
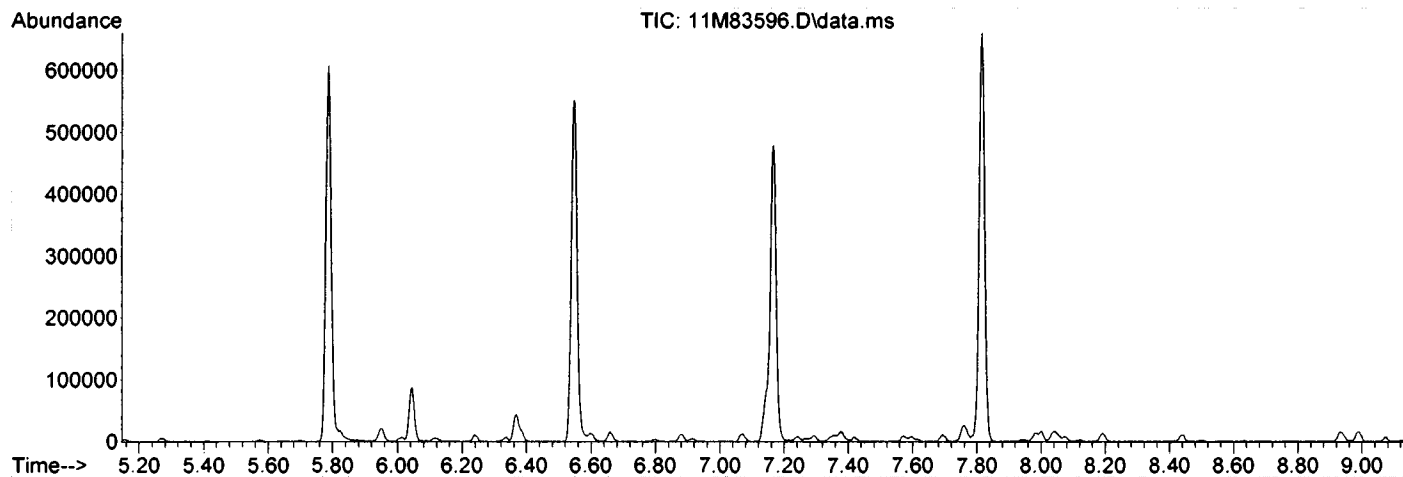
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.2	3755	PASS
75	95	30	60	48.0	11856	PASS
95	95	100	100	100.0	24702	PASS
96	95	5	9	7.5	1847	PASS
173	174	0.00	2	1.1	213	PASS
174	95	50	100	79.0	19524	PASS
175	174	5	9	8.7	1707	PASS
176	174	95	101	99.3	19385	PASS
177	176	5	9	8.4	1626	PASS

Data File	Sample Number	Analysis Date:
11M83597.D	CAL @ 50 PPB	10/06/20 09:54
11M83599.D	BLK	10/06/20 10:33
11M83600.D	BLK	10/06/20 10:53
11M83601.D	DAILY BLANK	10/06/20 11:13
11M83602.D	AD19539-011	10/06/20 11:33
11M83603.D	AD19539-015	10/06/20 11:52
11M83604.D	AD19539-016	10/06/20 12:12
11M83605.D	MBS89437	10/06/20 12:32
11M83606.D	AD19581-008(MS)	10/06/20 12:52
11M83607.D	AD19581-008(MSD)	10/06/20 13:11
11M83608.D	BLK	10/06/20 13:31
11M83609.D	AD19517-003	10/06/20 13:51
11M83610.D	AD19581-008	10/06/20 14:11
11M83611.D	AD19563-009	10/06/20 14:30
11M83612.D	AD19563-011	10/06/20 14:50
11M83613.D	AD19563-013	10/06/20 15:10
11M83614.D	AD19563-015	10/06/20 15:30
11M83615.D	AD19563-017	10/06/20 15:50
11M83616.D	AD19563-019	10/06/20 16:09
11M83617.D	AD19563-027	10/06/20 16:29
11M83618.D	AD19563-029	10/06/20 16:49
11M83619.D	AD19563-031	10/06/20 17:09
11M83620.D	AD19563-033	10/06/20 17:29
11M83621.D	AD19563-035	10/06/20 17:49
11M83622.D	AD19563-037	10/06/20 18:08
11M83623.D	AD19539-007	10/06/20 18:28

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-06-20\  
 Data File : 11M83596.D  
 Acq On : 6 Oct 2020 9:34  
 Operator : SG  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 8 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S1001.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Fri Oct 02 09:51:09 2020



Spectrum Information: Average of 7.131 to 7.163 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	3755	PASS
75	95	30	60	48.0	11856	PASS
95	95	100	100	100.0	24702	PASS
96	95	5	9	7.5	1847	PASS
173	174	0.00	2	1.1	213	PASS
174	95	50	100	79.0	19524	PASS
175	174	5	9	8.7	1707	PASS
176	174	95	101	99.3	19385	PASS
177	176	5	9	8.4	1626	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 2

Data File: 2M142813.D  
Analysis Date: 10/07/20 09:09  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.348 to 7.361 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.1	7823	PASS
75	95	30	60	52.0	21250	PASS
95	95	100	100	100.0	40857	PASS
96	95	5	9	6.8	2776	PASS
173	174	0.00	2	0.2	77	PASS
174	95	50	100	82.3	33611	PASS
175	174	5	9	7.9	2665	PASS
176	174	95	101	97.6	32815	PASS
177	176	5	9	6.8	2229	PASS

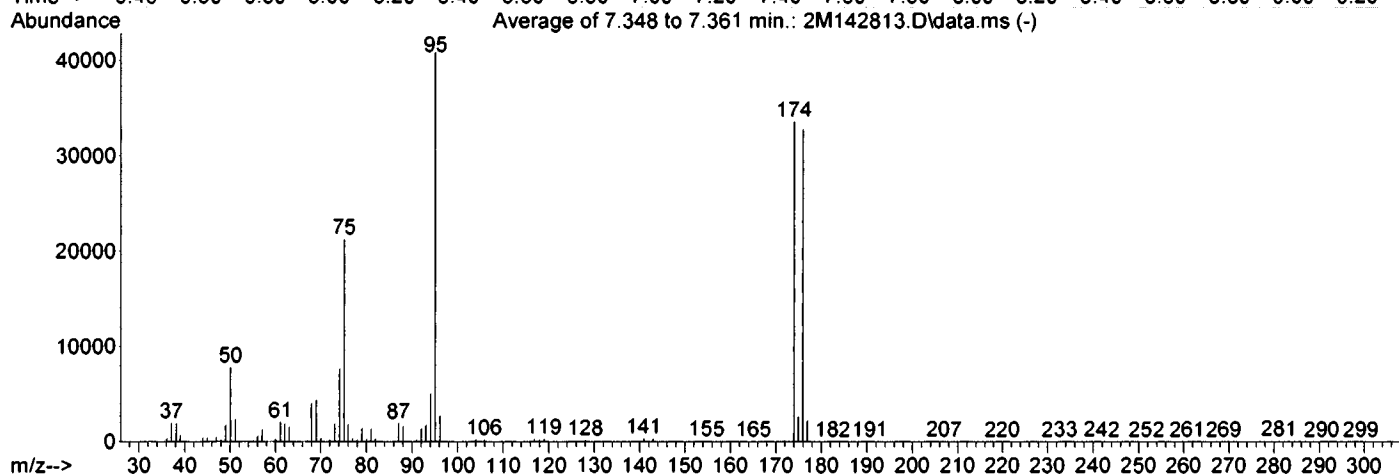
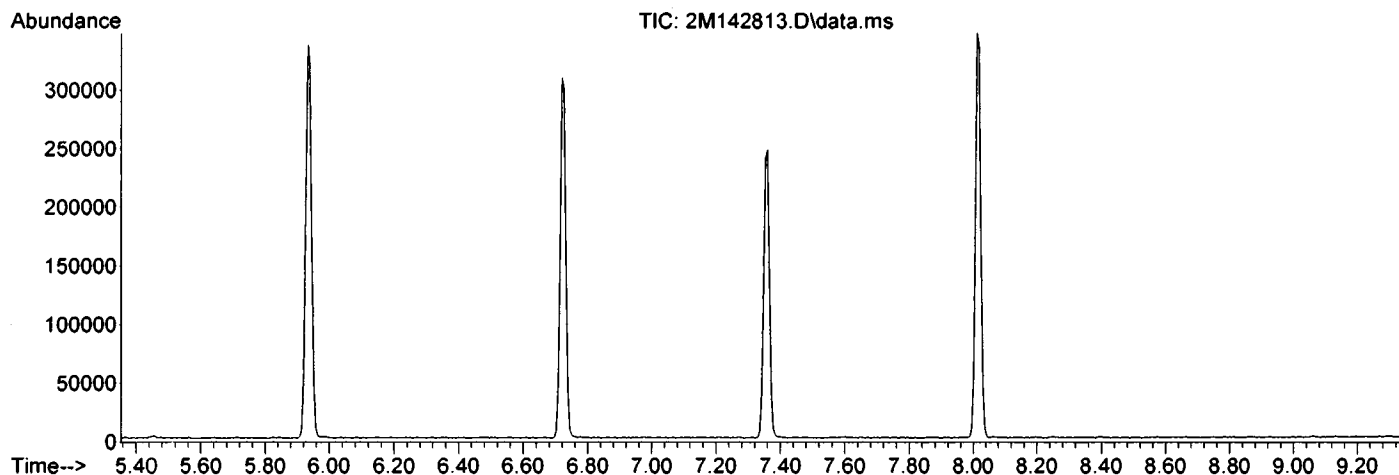
Data File	Sample Number	Analysis Date:
2M142814.D	CAL @ 20 PPB	10/07/20 09:39
2M142815.D	20 PPB	10/07/20 09:58
2M142816.D	BLK	10/07/20 10:18
2M142817.D	DAILY BLANK	10/07/20 10:37
2M142818.D	DAILY BLANK	10/07/20 10:57
2M142819.D	BLK	10/07/20 11:16
2M142820.D	AD19447-014	10/07/20 11:36
2M142821.D	AD19447-015	10/07/20 11:55
2M142822.D	AD19539-002	10/07/20 12:15
2M142823.D	AD19539-003	10/07/20 12:35
2M142824.D	STD	10/07/20 13:01
2M142825.D	BLK	10/07/20 13:21
2M142826.D	BLK	10/07/20 13:40
2M142827.D	AD19614-001	10/07/20 14:20
2M142828.D	AD19574-001	10/07/20 14:39
2M142829.D	MBS89447	10/07/20 14:59
2M142830.D	MBS89448	10/07/20 15:19
2M142831.D	AD19574-001(MS)	10/07/20 15:38
2M142832.D	AD19574-001(MSD)	10/07/20 15:58
2M142833.D	AD19587-005(MS)	10/07/20 16:17
2M142834.D	AD19587-005(MSD)	10/07/20 16:36
2M142835.D	BLK	10/07/20 16:56
2M142836.D	BLK	10/07/20 17:16
2M142837.D	AD19572-003	10/07/20 17:35
2M142838.D	AD19572-004	10/07/20 17:55
2M142839.D	AD19574-002	10/07/20 18:15
2M142840.D	AD19574-003	10/07/20 18:34
2M142841.D	AD19539-002(5X)	10/07/20 18:54
2M142842.D	AD19539-003(5X)	10/07/20 19:13
2M142843.D	AD19539-004(5X)	10/07/20 19:33
2M142844.D	AD19539-005(5X)	10/07/20 19:53
2M142845.D	AD19587-005	10/07/20 20:12
2M142846.D	AD19568-003	10/07/20 20:32
2M142847.D	AD19570-005(50X)	10/07/20 20:52
2M142848.D	AD19570-001(100X)	10/07/20 21:11
2M142849.D	19662-002(50X)	10/07/20 21:31



Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-07-20\  
 Data File : 2M142813.D  
 Acq On : 07 Oct 2020 09:09  
 Operator : RL  
 Sample : BFB TUNE  
 Misc : A,5ML  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_2\METHODQT\2M\_A0929.M  
 Title : @GCMS\_2,ug,624,8260  
 Last Update : Wed Sep 30 10:28:52 2020



Spectrum Information: Average of 7.348 to 7.361 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	7823	PASS
75	95	30	60	52.0	21250	PASS
95	95	100	100	100.0	40857	PASS
96	95	5	9	6.8	2776	PASS
173	174	0.00	2	0.2	77	PASS
174	95	50	100	82.3	33611	PASS
175	174	5	9	7.9	2665	PASS
176	174	95	101	97.6	32815	PASS
177	176	5	9	6.8	2229	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 11

Data File: 11M83664.D  
Analysis Date: 10/07/20 14:20  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.154 to 7.157 min

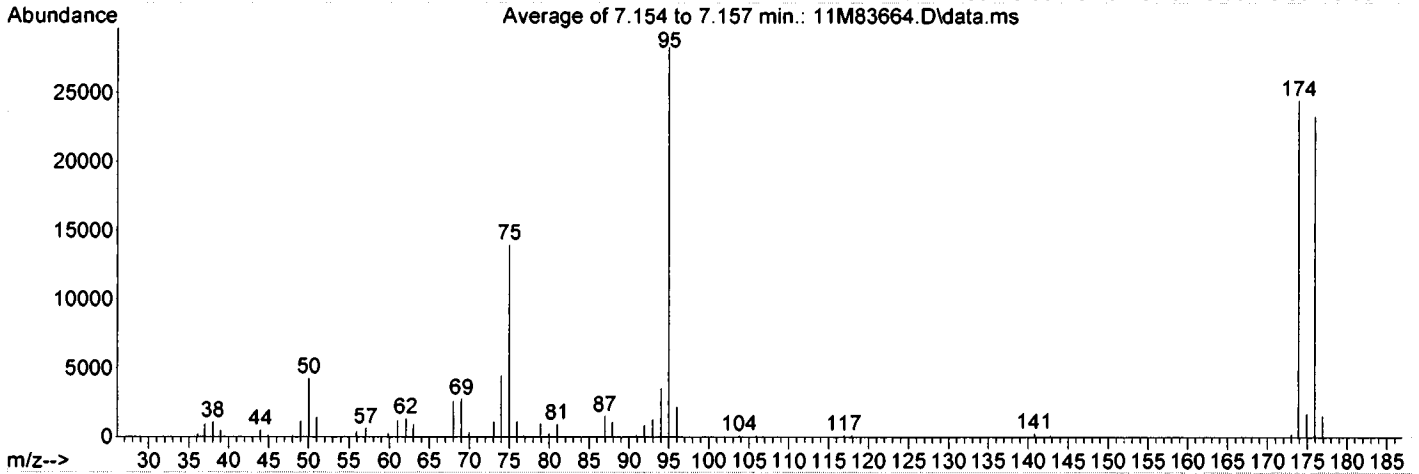
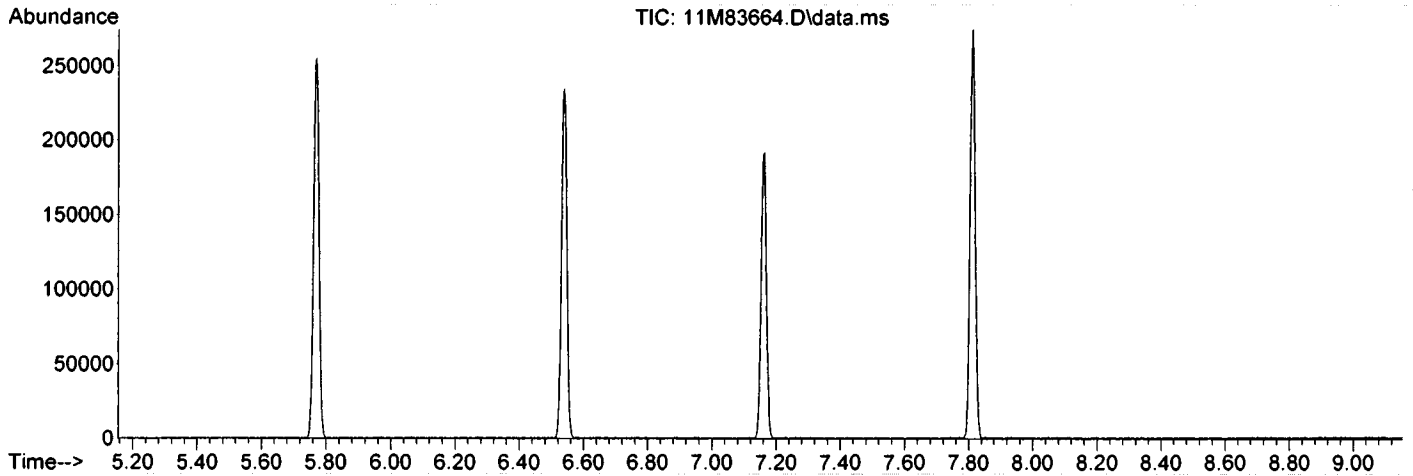
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.2	4290	PASS
75	95	30	60	49.5	13984	PASS
95	95	100	100	100.0	28276	PASS
96	95	5	9	7.8	2192	PASS
173	174	0.00	2	0.9	225	PASS
174	95	50	100	86.6	24480	PASS
175	174	5	9	7.1	1727	PASS
176	174	95	101	95.1	23284	PASS
177	176	5	9	6.7	1565	PASS

Data File	Sample Number	Analysis Date:
11M83666.D	CAL @ 50 PPB	10/07/20 14:53
11M83667.D	50 PPB	10/07/20 15:13
11M83669.D	BLK	10/07/20 15:53
11M83670.D	DAILY BLANK	10/07/20 16:13
11M83671.D	BLK	10/07/20 16:33
11M83672.D	AD19539-007	10/07/20 16:53
11M83673.D	AD19612-003(MS)	10/07/20 17:13
11M83674.D	AD19612-003(MSD)	10/07/20 17:33
11M83675.D	MBS89452	10/07/20 17:53
11M83676.D	BLK	10/07/20 18:13
11M83677.D	AD19612-001	10/07/20 18:33
11M83678.D	AD19612-002	10/07/20 18:53
11M83679.D	AD19612-003	10/07/20 19:13
11M83680.D	AD19551-002	10/07/20 19:33
11M83681.D	AD19551-001	10/07/20 19:53
11M83682.D	AD19618-002	10/07/20 20:13
11M83683.D	AD19618-004	10/07/20 20:33
11M83684.D	AD19618-006	10/07/20 20:53
11M83685.D	AD19618-008	10/07/20 21:13
11M83686.D	AD19618-010	10/07/20 21:33
11M83687.D	AD19618-012	10/07/20 21:53
11M83688.D	AD19618-014	10/07/20 22:13
11M83689.D	AD19618-016	10/07/20 22:33
11M83690.D	19595-003	10/07/20 22:53
11M83691.D	19595-009	10/07/20 23:13
11M83692.D	19595-010	10/07/20 23:33
11M83693.D	19595-001	10/07/20 23:53
11M83694.D	19595-005	10/08/20 00:13
11M83695.D	19619-001	10/08/20 00:33
11M83696.D	AD19619-002	10/08/20 00:52
11M83697.D	AD19620-001	10/08/20 01:12
11M83698.D	AD19581-003(5X)	10/08/20 01:32
11M83699.D	AD19581-001(5X)	10/08/20 01:52
11M83700.D	AD19581-001(5X)	10/08/20 02:12
11M83701.D	AD19581-003(5X)	10/08/20 02:32
11M83702.D	BLK	10/08/20 02:52
11M83703.D	BLK	10/08/20 03:12
11M83704.D	BLK	10/08/20 03:32
11M83705.D	BLK	10/08/20 03:52
11M83706.D	BLK	10/08/20 04:12
11M83707.D	BLK	10/08/20 04:32
11M83708.D	BLK	10/08/20 04:52
11M83709.D	BLK	10/08/20 05:12
11M83710.D	BLK	10/08/20 05:32
11M83711.D	BLK	10/08/20 05:52
11M83712.D	BLK	10/08/20 06:12
11M83713.D	BLK	10/08/20 06:32

Data Path : G:\GcMsData\2020\GCMS\_11\Data\10-07-20\  
 Data File : 11M83664.D  
 Acq On : 7 Oct 2020 14:20  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_11\METHODQT\11M\_S1001.M  
 Title : @GCMS\_11,ug,624,8260  
 Last Update : Fri Oct 02 09:51:09 2020



Spectrum Information: Average of 7.154 to 7.157 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	4290	PASS
75	95	30	60	49.5	13984	PASS
95	95	100	100	100.0	28276	PASS
96	95	5	9	7.8	2192	PASS
173	174	0.00	2	0.9	225	PASS
174	95	50	100	86.6	24480	PASS
175	174	5	9	7.1	1727	PASS
176	174	95	101	95.1	23284	PASS
177	176	5	9	6.7	1565	PASS

## Form 5

Tune Name: BFB TUNE

Data File: 1M140327.D

Instrument: GCMS 1

Analysis Date: 10/09/20 08:01

Method: EPA 8260D

Tune Scan/Time Range: Average of 7.612 to 7.619 min

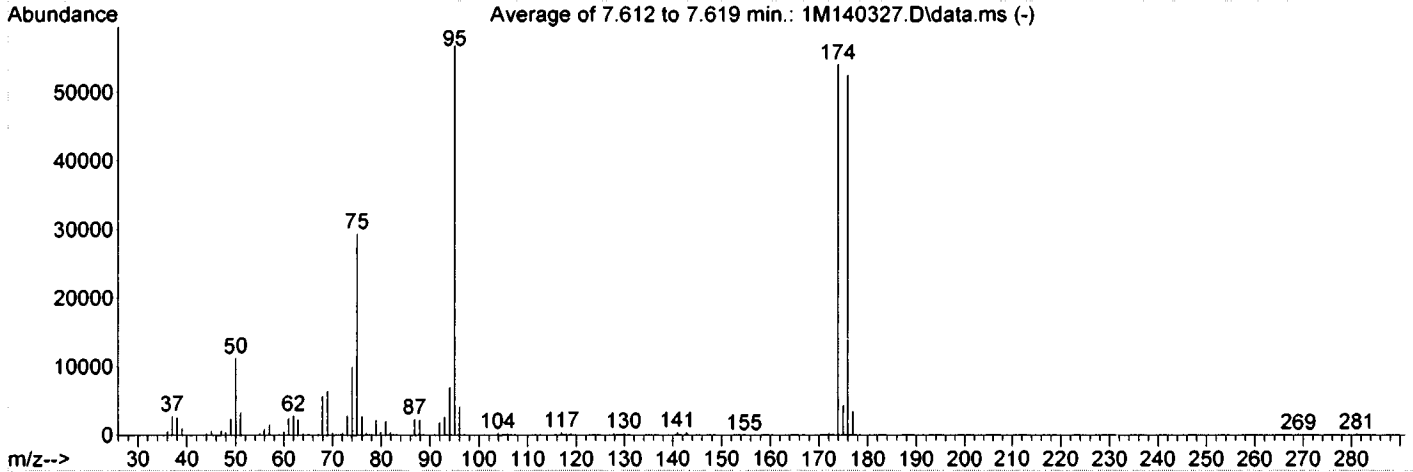
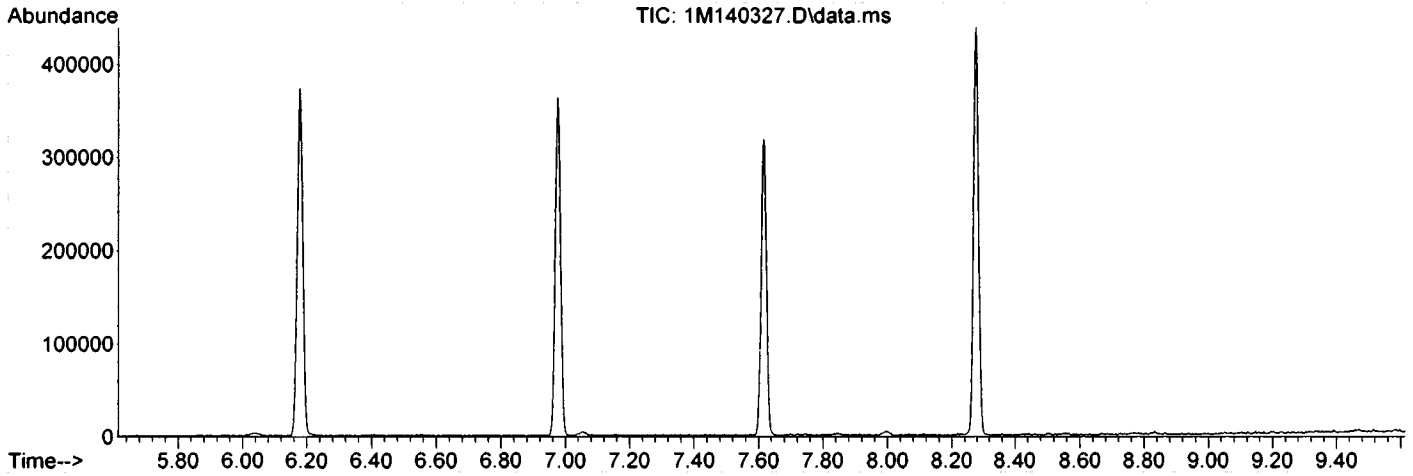
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.9	11282	PASS
75	95	30	60	51.9	29459	PASS
95	95	100	100	100.0	56771	PASS
96	95	5	9	7.3	4151	PASS
173	174	0.00	2	0.4	198	PASS
174	95	50	100	95.3	54075	PASS
175	174	5	9	8.1	4361	PASS
176	174	95	101	97.2	52539	PASS
177	176	5	9	6.6	3478	PASS

Data File	Sample Number	Analysis Date:
1M140328.D	20 PPB	10/09/20 08:15
1M140329.D	CAL @ 20 PPB	10/09/20 08:41
1M140330.D	BLK	10/09/20 09:11
1M140331.D	BLK	10/09/20 09:31
1M140332.D	DAILY BLANK	10/09/20 09:56
1M140333.D	DAILY BLANK	10/09/20 10:26
1M140334.D	AD19654-001	10/09/20 10:55
1M140335.D	AD19616-001	10/09/20 11:16
1M140336.D	AD19539-012(400u	10/09/20 11:36
1M140337.D	AD19539-014(40uL	10/09/20 11:57
1M140338.D	MBS89475	10/09/20 12:18
1M140339.D	MBS89476	10/09/20 12:39
1M140340.D	AD19598-012	10/09/20 12:59
1M140341.D	AD19539-012	10/09/20 13:20
1M140342.D	AD19595-002	10/09/20 13:41
1M140343.D	AD19595-004	10/09/20 14:01
1M140344.D	19595-007	10/09/20 14:22
1M140345.D	AD19595-006	10/09/20 14:43
1M140346.D	AD19595-012	10/09/20 15:03
1M140347.D	AD19616-002(MS:	10/09/20 15:24
1M140348.D	AD19616-003(MSD	10/09/20 15:45
1M140349.D	AD19654-001(MS)	10/09/20 16:06
1M140350.D	AD19654-001(MSD	10/09/20 16:26
1M140351.D	BLK	10/09/20 16:47
1M140352.D	BLK	10/09/20 17:07
1M140353.D	AD19592-002	10/09/20 17:28
1M140354.D	AD19592-003	10/09/20 17:49
1M140355.D	AD19591-003	10/09/20 18:10
1M140356.D	AD19591-004	10/09/20 18:30
1M140357.D	AD19616-006	10/09/20 18:51
1M140358.D	AD19592-001	10/09/20 19:12
1M140359.D	AD19593-001	10/09/20 19:33
1M140360.D	AD19593-003	10/09/20 19:54
1M140361.D	AD19616-004	10/09/20 20:14
1M140362.D	AD19616-005	10/09/20 20:35
1M140363.D	19517-004	10/09/20 20:56
1M140364.D	MBS89482	10/09/20 21:16
1M140365.D	BLK	10/09/20 21:37
1M140366.D	BLK	10/09/20 21:58
1M140367.D	BLK	10/09/20 22:18
1M140368.D	BLK	10/09/20 22:39
1M140369.D	BLK	10/09/20 23:00
1M140370.D	BLK	10/09/20 23:21
1M140371.D	BLK	10/09/20 23:41

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Data File : 1M140327.D  
 Acq On : 09 Oct 2020 08:01  
 Operator : BK  
 Sample : BFB TUNE  
 Misc : A,5ML  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS\_1\MethodQt\1M\_A0909.M  
 Title : @GCMS\_1,ug,624,8260  
 Last Update : Thu Sep 10 15:56:53 2020



Spectrum Information: Average of 7.612 to 7.619 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	11282	PASS
75	95	30	60	51.9	29459	PASS
95	95	100	100	100.0	56771	PASS
96	95	5	9	7.3	4151	PASS
173	174	0.00	2	0.4	198	PASS
174	95	50	100	95.3	54075	PASS
175	174	5	9	8.1	4361	PASS
176	174	95	101	97.2	52539	PASS
177	176	5	9	6.6	3478	PASS

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
1	1M139264.D	CAL @ 10 PPB	09/09/20 20:31	2	1M139262.D	CAL @ 5 PPB	09/09/20 20:09		LW1	LW2	LW3	LW4	LW5	LW6	LW7	LW8	LW9				
1	1M139264.D	CAL @ 10 PPB	09/09/20 20:31	2	1M139262.D	CAL @ 5 PPB	09/09/20 20:09	0.408	2.14	0.999	0.999	6.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.3873	0.3844	0.4236	0.3679	0.4144	0.4430	0.4172	0.4290					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1967	0.1757	0.1946	0.1632	0.2138	0.2260	0.2132	0.1820					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2861	0.2703	0.2873	0.2445	0.2718	0.2797	0.2580	0.2894					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1164	0.1100	0.1142	0.1120	0.1418	0.1458	0.1337	0.1352					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2196	0.2025	0.2227	0.1988	0.2280	0.2411	0.2315	0.2234					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1327	0.1250	0.1317	0.1203	0.1309	0.1314	0.1183	0.1485					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2772	0.2594	0.2930	0.2630	0.3149	0.3519	0.3382	0.2914					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1464	0.1304	0.1429	0.1293	0.1452	0.1491	0.1392	0.1537					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.3037	0.2847	0.2910	0.2762	0.3108	0.3246	0.3081	0.3354					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1166	0.1153	0.1351	0.1182	0.1307	0.1365	0.1258	0.1389					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2005	0.1889	0.2006	0.1844	0.1976	0.2011	0.1968	0.2464					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.0332	0.0295	0.0309	0.0305	0.0324	0.0345	0.0332	0.0331					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.0926	0.0939	0.0921	0.0826	0.0892	0.0909	0.0865	0.0748					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2479	0.1891	0.2236	0.2407	0.2448	0.2726	0.2630	0.1789					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.0759	0.0797	0.0785	0.0681	0.0765	0.0780	0.0714	0.1024					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.5240	0.4774	0.5176	0.4922	0.5602	0.5804	0.5592	0.5677					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.0228	0.0242	0.0217	0.0202	0.0219	0.0231	0.0212	0.0237					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1518	0.1596	0.1866	0.1577	0.1801	0.1906	0.1856	0.1725					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.5659	0.4971	0.5311	0.5274	0.5971	0.6018	0.5743	0.5315					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2526	0.2464	0.2566	0.2356	0.2621	0.2928	0.2833	0.2621					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1557	0.1862	0.1562	0.1489	0.1612	0.1685	0.1567	0.2230					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.4649	0.4430	0.4503	0.4337	0.4856	0.5095	0.4848	0.4951	0.3564				20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.3692	0.3335	0.3629	0.3393	0.3635	0.3756	0.4046	0.3515					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1877	0.1722	0.1840	0.1706	0.1843	0.1862	0.1845	0.2053					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.5106	0.4295	0.4716	0.4943	0.5666	0.5894	0.5731	0.4374					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.3525	0.3195	0.3362	0.3296	0.3657	0.3774	0.3296	0.3363					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2176	0.1953	0.1818	0.2015	0.2156	0.2199	0.2191	0.2399					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2892	0.2845	0.3004	0.2716	0.2898	0.3049	0.3099	0.2927					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2938	0.2585	0.2951	0.2876	0.3129	0.3223	0.3102	0.2503					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.0041	0.0034	0.0037	0.0031	0.0042	0.0043	0.0042	0.0030					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2655	0.2383	0.2652	0.2634	0.2963	0.3047	0.3020	0.2285					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.3808	0.3557	0.3679	0.3510	0.3823	0.3915	0.3876	0.3756					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2752	0.2822	0.2798	0.2749	0.2726	0.2713	0.2802	0.2926	0.2902				20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2227	0.2046	0.2488	0.2485	0.2957	0.3165	0.3100	0.2068					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.1538	0.1515	0.1492	0.1500	0.1468	0.1495	0.1513	0.1615	0.1579				20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2958	0.2830	0.2980	0.2749	0.2996	0.3070	0.3125	0.3154	0.3077				20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2053	0.2040	0.1926	0.2469	0.2450	0.2515	0.2157	0.1924					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.3268	0.3173	0.3322	0.3087	0.3426	0.3525	0.3537	0.3306					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2896	0.2681	0.2989	0.2835	0.3152	0.3235	0.3234	0.2862					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.6993	0.6440	0.6699	0.6659	0.7176	0.7514	0.7364	0.6836					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1	0 Avg	0.2891	0.2778	0.2817	0.2741	0.3018	0.3169	0.3265	0.2742					20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00

Flags

a - failed the min of criteria

c - failed the minimum correlation coeff criteria (if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 8.758

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations
								LV1 LV2 LV3 LV4 LV5 LV6 LV7 LV8 LV9
1	1M139264.D	CAL @ 20 PPB	09/09/20 20:51	2	1M139262.D	CAL @ 5 PPB	09/09/20 20:09	
3	1M139263.D	CAL @ 100 PPB	09/09/20 20:30	4	1M139266.D	CAL @ 50 PPB	09/09/20 21:33	
5	1M139274.D	CAL @ 100 PPB	09/10/20 00:19	6	1M139271.D	CAL @ 250 PPB	09/09/20 23:16	
7	1M139268.D	CAL @ 500 PPB	09/09/20 22:14	8	1M139261.D	CAL @ 1 PPB	09/09/20 19:48	
9	1M139260.D	CAL @ 0.5 PPB	09/09/20 19:28					

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd
Methylcyclohexane	1	0	AVG	0.1912	0.1790	0.2181	0.2191	0.2678	0.2859	0.2836	0.1912		0.2305	6.6	1.00	1.00	0.10
Dibromomethane	1	0	AVG	0.1709	0.1553	0.1636	0.1557	0.1707	0.1763	0.1796	0.1526		0.1665	5.7	1.00	1.00	6.2
1,2-Dichloropropane	1	0	AVG	0.2171	0.1998	0.2070	0.2033	0.2185	0.2291	0.2304	0.2125		0.2155	6.7	1.00	1.00	5.3
Trichloroethene	1	0	AVG	0.2285	0.2207	0.2201	0.2111	0.2359	0.2497	0.2533	0.2289		0.2315	5.4	1.00	1.00	6.3
Benzene	1	0	AVG	0.8430	0.7706	0.8042	0.7898	0.8450	0.8496	0.8306	0.7922	0.5840	0.7905	19.1	1.00	1.00	10.0
tert-Amyl methyl ether	1	0	AVG	0.4764	0.3856	0.4327	0.4839	0.5435	0.5557	0.5684	0.4341		0.4855	5.24	1.00	1.00	14.0
iso-propylacetate	1	0	AVG	0.4523	0.4180	0.4318	0.4373	0.4709	0.4620	0.4113	0.3976		0.4355	5.19	0.996	1.00	5.9
Methyl methacrylate	1	0	AVG	0.2546	0.1901	0.2147	0.2426	0.2659	0.2662	0.2332	0.2241		0.2365	6.69	0.995	1.00	11.0
Dibromochloromethane	1	0	AVG	0.2939	0.2629	0.2758	0.2740	0.2983	0.3087	0.3063	0.2409		0.2836	6.67	1.00	1.00	8.3
2-Chloroethylvinyl ether	1	0	AVG	0.0594	0.0473	0.0535	0.0597	0.0693	0.0697	0.0660	0.0362		0.0577	5.95	0.999	1.00	20.0
cis-1,3-Dichloropropene	1	0	AVG	0.3782	0.3292	0.3575	0.3672	0.3971	0.4007	0.3831	0.2978		0.3646	6.05	0.999	1.00	9.7
trans-1,3-Dichloropropene	1	0	AVG	0.3722	0.3310	0.3494	0.3628	0.3877	0.4004	0.3903	0.3468		0.3686	6.33	1.00	1.00	6.6
Ethyl methacrylate	1	0	AVG	0.2363	0.1856	0.2061	0.2277	0.2521	0.2504	0.2413	0.1938		0.2246	6.36	1.00	1.00	11.0
1,1,2-Trichloroethane	1	0	AVG	0.2401	0.2249	0.2403	0.2263	0.2362	0.2351	0.2262	0.2333		0.2346	6.44	1.00	1.00	3.2
1,2-Dibromoethane	1	0	AVG	0.2549	0.2290	0.2507	0.2405	0.2601	0.2693	0.2643	0.2467		0.2526	6.75	1.00	1.00	5.2
1,3-Dichloropropane	1	0	AVG	0.4174	0.3828	0.4056	0.3874	0.4138	0.4141	0.3943	0.3792		0.3996	6.54	0.999	1.00	3.8
4-Methyl-2-Pentanone	1	0	AVG	0.2873	0.2403	0.2558	0.2725	0.2986	0.2995	0.2795	0.2260		0.2706	1.1	0.999	1.00	10.0
2-Hexanone	1	0	AVG	0.2156	0.1803	0.1902	0.2070	0.2301	0.2317	0.2134	0.1734		0.2056	5.55	0.998	1.00	11.0
Tetrachloroethene	1	0	AVG	0.2138	0.2106	0.2267	0.2087	0.2262	0.2245	0.2123	0.2088		0.2166	6.54	0.999	1.00	3.7
Toluene-d8	1	0	AVG	1.2585	1.2420	1.2649	1.2473	1.2102	1.1654	1.1161	1.2021	1.2030	1.2161	6.20	0.999	1.00	4.0
Toluene	1	0	AVG	0.6226	0.5722	0.6160	0.5777	0.6115	0.6037	0.5659	0.5761		0.5936	6.24	0.999	1.00	3.8
1,1,1,2-Tetrachloroethene	1	0	AVG	0.2612	0.2339	0.2573	0.2417	0.2599	0.2712	0.2685	0.2605		0.2577	7.04	1.00	1.00	5.0
Chlorobenzene	1	0	AVG	0.7099	0.6515	0.7119	0.6559	0.7023	0.7175	0.7005	0.6879		0.6927	7.01	1.00	1.00	3.6
n-Butyl acrylate	1	0	AVG	0.7654	0.6133	0.6768	0.7684	0.8869	0.9466	0.9217	0.6136		0.7747	7.25	1.00	1.00	17.0
n-Amyl acetate	1	0	AVG	0.8011	0.6638	0.7252	0.7573	0.8273	0.8585	0.8298	0.5792		0.7557	7.37	1.00	1.00	13.0
Bromobenzene	1	0	AVG	0.3569	0.3440	0.3459	0.3324	0.3741	0.4110	0.4216	0.3549		0.3687	7.46	0.999	1.00	8.8
Ethylbenzene	1	0	AVG	0.4694	0.3972	0.4713	0.4501	0.4912	0.5144	0.4975	0.5210		0.4777	7.05	1.00	1.00	8.4
1,1,2,2-Tetrachloroethene	1	0	AVG	0.5926	0.5820	0.5843	0.5347	0.5733	0.5996	0.5862	0.6850		0.5927	7.68	1.00	1.00	7.1
Bromofluorobenzene	1	0	AVG	0.7353	0.7384	0.7399	0.7491	0.7568	0.7737	0.8013	0.7639	0.7444	0.7567	7.63	-1	-1	2.8
Styrene	1	0	AVG	1.2049	0.9635	1.1086	1.1444	1.2293	1.2658	1.2206	0.9782		1.1477	7.34	1.00	1.00	10.0
m,p-Xylenes	1	0	AVG	0.6832	0.5682	0.6548	0.6563	0.7010	0.7136	0.6990	0.6183	0.4602	0.6407	7.11	1.00	1.00	9.3
o-Xylene	1	0	AVG	0.6924	0.5902	0.6558	0.6555	0.6938	0.7175	0.7020	0.5325		0.6525	7.33	1.00	1.00	13.0
trans-1,4-Dichloro-2-b	1	0	AVG	0.2131	0.1997	0.2148	0.2090	0.2346	0.2577	0.2545	0.2220		0.2257	7.70	1.00	1.00	9.5
1,3-Dichlorobenzene	1	0	AVG	1.0187	0.9494	1.0109	0.9406	1.0208	1.0446	0.9888	0.9041		0.9858	8.25	0.999	1.00	4.9
1,4-Dichlorobenzene	1	0	AVG	1.0385	0.9920	1.0448	0.9688	1.0456	1.0712	1.0134	1.0830		1.0383	8.30	0.999	1.00	3.7
1,2-Dichlorobenzene	1	0	AVG	0.9899	0.9123	0.9881	0.9284	0.9994	1.0173	0.9621	0.9848		0.9738	8.52	0.999	1.00	3.7
Isopropylbenzene	1	0	AVG	1.6209	1.3926	1.5867	1.6399	1.8321	1.9393	1.8125	1.3141		1.6575	7.53	1.00	1.00	14.0
Camphene	1	0	AVG	0.0229	0.0150	0.0220	0.0203	0.0230	0.0229	0.0210	0.0169		0.0205	7.60	0.998	1.00	15.0
Biphenylene	1	0	AVG	0.4118	0.3948	0.4759	0.4454	0.5182	0.5685	0.5711	0.4618		0.4817	7.70	0.999	1.00	14.0
1,2,3-Trichloropropane	1	0	AVG	0.7382	0.7074	0.7201	0.6910	0.7463	0.7785	0.7440	0.8067		0.7427	7.72	0.999	1.00	5.1
2-Chlorotoluene	1	0	AVG	1.1665	1.0354	1.1522	1.0960	1.1791	1.2253	1.1366	1.1868		1.1577	7.82	0.999	1.00	5.2

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(fly applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Level #	Data File	Call Identifier	Analysis Date/Time	Level #	Data File	Call Identifier	Analysis Date/Time	Calibration Level Concentrations																			
1	1M139264.D	CAL @ 20 PPB	09/09/20 20:51	2	1M139262.D	CAL @ 5 PPB	09/09/20 20:09	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9																			
3	1M139263.D	CAL @ 10 PPB	09/09/20 20:30	4	1M139266.D	CAL @ 50 PPB	09/09/20 21:33																				
5	1M139274.D	CAL @ 100 PPB	09/10/20 00:19	6	1M139271.D	CAL @ 250 PPB	09/09/20 23:16																				
7	1M139268.D	CAL @ 500 PPB	09/09/20 22:14	8	1M139261.D	CAL @ 1 PPB	09/09/20 19:48																				
9	1M139260.D	CAL @ 0.5 PPB	09/09/20 19:28																								
Compound	Col	Mt	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AVGRT	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
p-Ethyltoluene	1	0	Avg	1.7532	1.5023	1.7302	1.7287	1.8820	2.0542	1.8689	1.4515	---	1.757.81	0.998	0.999	1.1	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
4-Chlorotoluene	1	0	Avg	1.1573	1.1275	1.1800	1.0949	1.1893	1.2361	1.1622	1.0712	---	1.157.88	0.999	1.00	4.6	4.6	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
n-Propylbenzene	1	0	Avg	2.0890	1.9142	2.0944	2.0200	2.2275	2.3088	2.1481	1.9328	---	2.097.75	0.999	1.00	6.5	6.5	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Bromobenzene	1	0	Avg	1.1504	1.0913	1.1763	1.0879	1.1865	1.2520	1.1489	1.1688	---	1.167.72	0.998	0.999	4.6	4.6	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,3,5-Trimethylbenzen	1	0	Avg	1.5327	1.3812	1.5427	1.4700	1.6057	1.5433	1.4780	1.2648	---	1.487.84	0.999	1.00	7.4	7.4	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Butyl methacrylate	1	0	Avg	0.6097	0.4882	0.5561	0.5600	0.6167	0.6000	0.6039	0.4915	---	0.5667.85	1.00	1.00	9.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
t-Butylbenzene	1	0	Avg	1.3485	1.1612	1.3213	1.4036	1.5745	1.6580	1.5849	1.1234	---	1.408.04	0.999	1.00	14	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,4-Trimethylbenzen	1	0	Avg	1.6021	1.3113	1.5381	1.5620	1.7149	1.7535	1.6331	1.1645	---	1.538.06	0.999	1.00	13	13	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
sec-Butylbenzene	1	0	Avg	1.7088	1.4499	1.7186	1.7469	1.9874	2.0480	1.9082	1.3809	---	1.748.16	0.999	1.00	14	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
4-Isopropyltoluene	1	0	Avg	1.5212	1.2438	1.5053	1.5690	1.7712	1.8092	1.6738	1.0820	---	1.528.23	0.998	1.00	16	16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
n-Butylbenzene	1	0	Avg	1.7386	1.4656	1.7391	1.7444	1.9201	1.9371	1.7642	1.4282	---	1.728.47	0.998	1.00	11	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
p-Diethylbenzene	1	0	Avg	0.8574	0.6848	0.8049	0.9035	1.0320	1.0606	0.9849	0.6668	---	0.874.845	0.998	1.00	17	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,4,5-Tetramethylbe	1	0	Qua	1.2716	0.8768	1.0787	1.3943	1.6251	1.6484	1.5055	0.8930	---	1.298.91	0.998	1.00	24	24	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1620	0.1512	0.1566	0.1595	0.1769	0.1794	0.1657	0.1606	---	0.164.897	0.998	1.00	5.9	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Camphor	1	0	Qua	0.0666	0.0451	0.0541	0.0715	0.0851	0.0855	0.0834	0.0447	0.0385	---	0.0639.941	1.00	1.00	29	29	20.00	50.00	100.0	500.0	1000.0	2500.0	5000.0	10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.2847	0.2671	0.3023	0.2831	0.3126	0.3067	0.2923	0.2771	---	0.291.955	0.999	1.00	5.4	5.4	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,4-Trichlorobenzen	1	0	Avg	0.6761	0.5550	0.6347	0.6448	0.6965	0.6776	0.6353	0.5276	---	0.631.946	0.999	1.00	9.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,3-Trichlorobenzen	1	0	Avg	0.5997	0.5032	0.5646	0.5762	0.6366	0.6201	0.5926	0.5602	---	0.582.976	0.999	1.00	7.1	7.1	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Naphthalene	1	0	Avg	1.7064	1.2728	1.5139	1.7305	1.9502	1.8956	1.7245	1.1797	---	1.629.62	0.997	1.00	17	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria(if applicable)

Note:  
Avg Rsd: 8.758  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.



Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations										
								Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9		
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48											
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26											
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04											
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28											
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09															
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	
Chlorodifluoromethane	1	0	AVG	0.3084	0.3044	0.2719	0.3264	0.3317	0.3264	0.3218	0.2561		0.3061	1.69	1.00	1.00	9.1	
				0.3267	0.3071	0.2716	0.3305	0.3409	0.3349	0.3272	0.2258		0.3081	1.68	1.00	1.00	13	
				0.3208	0.3455	0.3030	0.3431	0.3602	0.3483	0.3434	0.3809		0.3431	1.85	1.00	1.00	6.8	
				0.1427	0.1504	0.1402	0.1526	0.1877	0.2192	0.1737			0.1672	2.25	0.995	1.00	17	
				0.3712	0.3975	0.3370	0.3874	0.4038	0.3891	0.3690	0.3256		0.3731	1.95	0.999	1.00	7.6	
				0.2427	0.2454	0.2330	0.2520	0.2602	0.2632	0.2708	0.2210		0.2492	2.34	1.00	1.00	6.6	
				0.5649	0.5937	0.5441	0.5973	0.6141	0.6010	0.5927	0.4597		0.5712	2.57	1.00	1.00	8.8	
				0.1834	0.2015	0.1816	0.1983	0.2124	0.2081	0.2124	0.1881		0.1982	2.80	1.00	1.00	6.4	
				0.3176	0.3432	0.3104	0.3268	0.3519	0.3501	0.3537	0.3281		0.3352	2.84	1.00	1.00	5.0	
				0.1928	0.2050	0.1789	0.2064	0.2137	0.2108	0.2197	0.1739		0.2003	3.00	1.00	1.00	8.3	
				0.2692	0.2961	0.2518	0.2796	0.2975	0.2895	0.2877	0.2943		0.2833	3.42	1.00	1.00	5.6	
				0.0436	0.0448	0.0416	0.0449	0.0472	0.0477	0.0495	0.0427		0.0453	2.92	1.00	1.00	6.0	
				0.0909	0.1026	0.0899	0.0973	0.1005	0.1059	0.1059	0.0931		0.0983	3.62	1.00	1.00	6.6	
				0.1842	0.1649	0.1597	0.2148	0.2704	0.2893	0.1873			0.2103	3.15	0.985	0.996	24	
				0.0724	0.0805	0.0736	0.0819	0.0811	0.0803	0.0782	0.0973		0.0807	3.04	1.00	1.00	9.4	
				0.7173	0.8037	0.6973	0.7494	0.7799	0.7709	0.7692	0.8299		0.7653	3.21	1.00	1.00	5.7	
				0.0240	0.0260	0.0247	0.0264	0.0274	0.0284	0.0273	0.0236		0.0260	3.48	1.00	1.00	6.6	
				0.2239	0.2349	0.2319	0.2427	0.2551	0.2505	0.2547	0.2015		0.2373	3.87	1.00	1.00	7.7	
				0.6484	0.6639	0.6085	0.6783	0.7334	0.7412	0.7590	0.5936		0.6783	4.03	1.00	1.00	9.1	
				0.3732	0.3939	0.3528	0.3913	0.4108	0.4089	0.4224	0.3327		0.3863	3.01	1.00	1.00	8.0	
				0.1654	0.1951	0.1782	0.1758	0.1829	0.1831	0.1793	0.1966		0.1823	3.32	1.00	1.00	5.6	
				0.6903	0.7095	0.6580	0.7318	0.7958	0.7997	0.8090	0.6631	0.6760		0.7263	3.64	1.00	1.00	8.4
				0.4511	0.4789	0.4094	0.4701	0.4999	0.4976	0.5042	0.4522		0.4704	4.00	1.00	1.00	6.8	
				0.2717	0.2935	0.2517	0.2806	0.2979	0.3025	0.3091	0.2687		0.2853	3.65	1.00	1.00	6.9	
				0.7025	0.7205	0.6735	0.7522	0.7971	0.7992	0.8129	0.6313		0.7344	4.29	1.00	1.00	8.9	
				0.4472	0.4819	0.4211	0.4700	0.4999	0.5089	0.5261	0.4699		0.4784	4.41	1.00	1.00	7.1	
				0.2157	0.2288	0.2019	0.2157	0.2198	0.1993	0.2032	0.2145		0.2124	4.57	1.00	1.00	4.8	
				0.4060	0.4388	0.3852	0.4197	0.4452	0.4418	0.4433	0.3919		0.4224	4.42	1.00	1.00	5.8	
				0.2318	0.2533	0.2229	0.2446	0.2531	0.2523	0.2546	0.2435		0.2454	4.43	1.00	1.00	4.7	
				0.0032	0.0032	0.0034	0.0035	0.0036	0.0038	0.0039	0.0026		0.00344	4.50	1.00	1.00	12	
				0.3978	0.4031	0.3497	0.3978	0.4190	0.4300	0.4551	0.3564		0.3994	4.60	0.999	1.00	9.1	
				0.5013	0.5330	0.4704	0.5194	0.5417	0.5271	0.5376	0.4676		0.5124	4.82	1.00	1.00	5.8	
				0.2832	0.2901	0.2899	0.2896	0.2919	0.2861	0.2726	0.2918	0.2911		0.2874	4.70	-1	2.2	
				0.3426	0.3485	0.3316	0.3563	0.3747	0.3794	0.3957	0.2969		0.3544	4.77	1.00	1.00	8.6	
				0.1495	0.1453	0.1515	0.1499	0.1544	0.1467	0.1430	0.1463	0.1486		0.1484	4.91	-1	2.3	
				0.3888	0.4296	0.3712	0.4102	0.4423	0.4534	0.4858	0.3899	0.5360		0.4344	4.95	0.999	1.00	12
				0.1134	0.1161	0.1032	0.1334	0.1389	0.1533	0.1562	0.0868		0.1254	4.40	1.00	1.00	20	
				0.4457	0.4577	0.4112	0.4660	0.4860	0.4816	0.4928	0.3898		0.4544	4.73	1.00	1.00	8.2	
				0.3753	0.3704	0.3392	0.3899	0.4128	0.4227	0.4417	0.3237		0.3854	4.83	1.00	1.00	11	
				0.7428	0.7548	0.7015	0.7561	0.8298	0.7969	0.7759	0.6959		0.7614	4.02	1.00	1.00	6.1	
				0.3920	0.4190	0.3781	0.4240	0.4488	0.4432	0.4635	0.3515		0.4155	5.57	1.00	1.00	9.2	

**Flags**

*a - failed the min rf criteria*

*c - failed the minimum correlation coeff criteria( if applicable)*

**Note:**

*Corr 1 = Correlation Coefficient for linear Eq.*

*Corr 2 = Correlation Coefficient for quad Eq.*

*Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.*



Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																			
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9																			
3	2M142490.D	CAL @ 100 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26	20.0 50.0 100.0 250.0 500.0 1.00																			
5	2M142496.D	CAL @ 500 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04	20.0 50.0 100.0 250.0 500.0 1.00																			
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28	20.0 50.0 100.0 250.0 500.0 1.00																			
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09					20.0 50.0 100.0 250.0 500.0 1.00																			
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Resd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
p-Ethyltoluene	1	0	Avg	2.4062	2.6674	2.3407	2.4997	2.7248	2.7429	1.6090	2.3031	---	2.41755	0.912	0.994	15	20.0	50.0	100.0	250.0	500.0	1.00					
4-Chlorotoluene	1	0	Avg	1.4959	1.6231	1.4308	1.5804	1.7572	0.9110	---	1.4889	---	1.47762	0.885	0.992	18	20.0	50.0	100.0	250.0	500.0	1.00					
n-Propylbenzene	1	0	Avg	2.9227	3.1237	2.8066	3.0040	3.2240	2.9041	2.1478	2.9683	---	2.89749	0.972	1.00	11	20.0	50.0	100.0	250.0	500.0	1.00					
Bromobenzene	1	0	Avg	1.4792	1.6627	1.4345	1.5518	1.7064	1.4734	2.0297	1.5105	---	1.61746	0.963	0.997	12	20.0	50.0	100.0	250.0	500.0	1.00					
1,3,5-Trimethylbenzen	1	0	Avg	1.9328	2.0335	1.8301	2.0046	2.2028	1.1981	---	1.8900	---	1.87757	0.904	0.994	17	20.0	50.0	100.0	250.0	500.0	1.00					
Buyl methacrylate	1	0	Avg	0.7041	0.7555	0.6700	0.7514	0.8501	---	---	0.6534	---	0.731758	0.996	1.00	9.8	20.0	50.0	100.0	250.0	500.0	1.00					
t-Butylbenzene	1	0	Avg	1.8937	2.0928	1.8163	1.9202	2.0934	1.8489	1.0676	1.8633	---	1.82778	0.899	0.998	18	20.0	50.0	100.0	250.0	500.0	1.00					
1,2,4-Trimethylbenzen	1	0	Avg	2.0056	2.1723	1.9204	2.0775	2.2364	1.7137	---	1.9768	---	2.01780	0.986	0.999	8.6	20.0	50.0	100.0	250.0	500.0	1.00					
sec-Butylbenzene	1	0	Avg	2.3365	2.5682	2.2416	2.3901	2.5814	2.3469	1.2902	2.2855	---	2.26790	0.882	0.997	18	20.0	50.0	100.0	250.0	500.0	1.00					
4-Isopropyltoluene	1	0	Avg	1.9862	2.0940	1.8405	2.0175	2.1777	2.0361	1.3000	1.8688	---	1.92796	0.937	0.998	14	20.0	50.0	100.0	250.0	500.0	1.00					
n-Butylbenzene	1	0	Avg	2.0370	2.1798	1.9305	2.1144	2.2571	2.0506	1.2200	2.0605	---	1.98820	0.912	0.998	16	20.0	50.0	100.0	250.0	500.0	1.00					
p-Diethylbenzene	1	0	Avg	1.0661	1.1629	1.0199	1.1076	1.1892	1.0958	0.9058	1.1145	---	1.08819	0.989	1.00	8.2	20.0	50.0	100.0	250.0	500.0	1.00					
1,2,4,5-Tetramethylbe	1	0	Avg	1.5303	1.6348	1.4365	1.5927	1.7098	1.2843	2.1031	1.3747	---	1.58865	0.965	0.993	16	20.0	50.0	100.0	250.0	500.0	1.00					
1,2-Dibromo-3-Chloro	1	0	Avg	0.1708	0.1749	0.1496	0.1703	0.1822	0.1421	---	0.1520	---	0.163871	0.988	0.999	9.2	20.0	50.0	100.0	250.0	500.0	1.00					
Camphor	1	0	Avg	0.0627	0.0604	0.0591	0.0714	0.0773	0.0654	---	0.0566	0.0620	---	0.0644915	0.995	0.999	11	20.0	50.0	100.0	250.0	500.0	1.00				
Hexachlorobutadiene	1	0	Avg	0.2327	0.2736	0.2236	0.2390	0.2424	0.1645	0.3030	0.3077	---	0.248928	0.951	0.990	19	20.0	50.0	100.0	250.0	500.0	1.00					
1,2,4-Trichlorobenzen	1	0	Avg	0.5644	0.5925	0.5389	0.5732	0.6091	0.4389	0.8041	0.6075	---	0.591920	0.952	0.992	17	20.0	50.0	100.0	250.0	500.0	1.00					
1,2,3-Trichlorobenzen	1	0	Avg	0.4534	0.5003	0.4542	0.4852	0.5073	0.3617	0.6368	0.5236	---	0.490950	0.956	0.992	16	20.0	50.0	100.0	250.0	500.0	1.00					
Naphthalene	1	0	Avg	1.5393	1.5307	1.4269	1.6731	1.8176	1.3629	2.3710	1.4483	---	1.65936	0.958	0.993	20	20.0	50.0	100.0	250.0	500.0	1.00					

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria(if applicable)

Note:  
Avg Rsd: 10.08  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations
1	11M83453.D	CAL @ 20 PPB	10/02/20 00:28	2	11M83452.D	CAL @ 5 PPB	10/02/20 00:08	LV1 LV2 LV3 LV4 LV5 LV6 LV7 LV8 LV9
Chlorodifluoromethane	1 0 Avg 0.1725 0.1820 0.1116 0.1754 0.1626 0.1710 0.1784			0.1651 68 0.999 1.00	5 8 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Dichlorodifluoromethane	1 0 Avg 0.1927 0.2044 0.1782 0.2049 0.1896 0.1763 0.2118			0.1971 67 0.998 1.00	5 8 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Chloromethane	1 0 Avg 0.1883 0.1973 0.1640 0.1798 0.1711 0.1643 0.1776			0.1791 84 1.00 1.00	6 1 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Bromomethane	1 0 Avg 0.1691 0.1983 0.2025 0.1748 0.2115 0.2359			0.1992 23 0.997 0.999	12 0.10	20.00 5.00 2.00 50.00 100.0 250.0		
Vinyl Chloride	1 0 Avg 0.2018 0.2119 0.1664 0.2086 0.1878 0.1990 0.2086			0.1981 94 0.999 1.00	8 1 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Chloroethane	1 0 Avg 0.1509 0.1521 0.1467 0.1585 0.1478 0.1545 0.1724			0.1552 32 0.997 1.00	5 7 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Trichlorofluoromethane	1 0 Avg 0.3754 0.3809 0.3399 0.3714 0.3390 0.3551 0.4000			0.3662 54 0.997 1.00	6 1 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Ethyl ether	1 0 Avg 0.1587 0.1398 0.1328 0.1374 0.1412 0.1498 0.1323			0.1422 77 0.996 0.999	6 7 0.50 a	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Furan	1 0 Avg 0.1915 0.1877 0.1818 0.1761 0.1704 0.1944 0.1826			0.1842 81 0.999 0.999	4 6 0.50 a	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
1,1,2-Trichloro-1,2,2-tr	1 0 Avg 0.1185 0.1332 0.1271 0.1290 0.1204 0.1353 0.1398			0.1292 97 0.999 1.00	6 0 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Methylene Chloride	1 0 Avg 0.2550 0.2322 0.2426 0.2227 0.2095 0.2386 0.2209			0.2323 37 0.998 0.999	6 6 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Acrolein	1 0 Avg 0.0262 0.0195 0.0187 0.0269 0.0258 0.0295 0.0290			0.0251 288 0.999 0.999	17	100.0 25.00 10.00 250.0 500.0 1250. 2500.		
Acrylonitrile	1 0 Avg 0.0648 0.0628 0.0437 0.0668 0.0616 0.0661 0.0682			0.0620 3.57 1.00 1.00	14	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Acetone	1 0 Avg 0.1710 0.0996 0.0754 0.2273 0.1967 0.2755 0.2636			0.1873 3.12 0.997 0.997	41	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Carbon Disulfide	1 0 Avg 0.0533 0.0583 0.0625 0.0491 0.0436 0.0507 0.0476			0.0522 3.01 0.999 0.999	12	100.0 25.00 10.00 250.0 500.0 1250. 2500.		
t-Butyl Alcohol	1 0 Avg 0.4894 0.5171 0.4655 0.5165 0.4729 0.5671 0.5661			0.5143 3.18 0.999 0.999	8 0 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
n-Hexane	1 0 Avg 0.0225 0.0226 0.0182 0.0224 0.0204 0.0241 0.0243			0.0221 3.43 0.999 0.999	9 6	100.0 25.00 10.00 250.0 500.0 1250. 2500.		
Di-isopropyl-ether	1 0 Avg 0.1642 0.1665 0.1444 0.1626 0.1393 0.1442 0.1625			0.1553 81 0.996 1.00	7 5	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
1,1-Dichloroethane	1 0 Avg 0.3919 0.3730 0.3468 0.4002 0.4044 0.4340 0.4285			0.3973 95 1.00 1.00	7 7	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Ethyl-t-butyl ether	1 0 Avg 0.2148 0.2127 0.1931 0.2204 0.1978 0.2231 0.2336			0.2152 2.98 0.999 0.999	7 1 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Methyl Acetate	1 0 Avg 0.1170 0.1244 0.1069 0.1172 0.1080 0.1223 0.1128			0.1163 3.27 0.998 0.999	5 8 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Methyl-t-butyl ether	1 0 Avg 0.4774 0.4634 0.4511 0.4815 0.5091 0.5629 0.5408 0.4505			0.4923 3.59 0.999 0.999	8 5 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0 1.00		
1,1-Dichloroethane	1 0 Avg 0.2950 0.3053 0.2661 0.3133 0.2898 0.3140 0.3290			0.3023 3.92 0.999 1.00	6 8 0.20	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
trans-1,2-Dichloroethane	1 0 Avg 0.1819 0.1911 0.1831 0.1989 0.1900 0.2050 0.2150			0.1953 3.60 0.999 1.00	6 2 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Ethyl-t-butyl ether	1 0 Avg 0.4586 0.4382 0.4216 0.4744 0.4899 0.5337 0.5127			0.4764 4.19 0.999 1.00	8 4 0.50 a	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
cis-1,2-Dichloroethane	1 0 Avg 0.2972 0.2797 0.2662 0.3049 0.2916 0.3190 0.3331			0.2994 3.31 0.999 1.00	7 6 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Bromochloromethane	1 0 Avg 0.1349 0.1426 0.1363 0.1353 0.1318 0.1360 0.1331			0.1364 4.45 1.00 1.00	2 5	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
2,2-Dichloropropane	1 0 Avg 0.2332 0.2319 0.2022 0.2458 0.2342 0.2588 0.2829			0.2414 3.31 0.998 1.00	10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Ethyl acetate	1 0 Avg 0.1607 0.1681 0.1715 0.1708 0.1589 0.1711 0.1758			0.1684 3.32 1.00 1.00	3 7	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
1,4-Dioxane	1 0 Avg 0.0036 0.0036 0.0028 0.0038 0.0033 0.0036 0.0039			0.0035 6.33 0.998 1.00	10	100.0 25.00 10.00 250.0 500.0 1250.0 2500.0		
1,1-Dichloropropene	1 0 Avg 0.2412 0.2444 0.2089 0.2575 0.2325 0.2448 0.2719			0.2434 4.70 0.997 1.00	8 1	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Chloroform	1 0 Avg 0.3491 0.3485 0.3237 0.3597 0.3512 0.3771 0.3890			0.3574 4.49 1.00 1.00	6 0 0.20	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Dibromofluoromethane	1 0 Avg 0.2731 0.2721 0.2775 0.2707 0.2689 0.2759 0.2720 0.2775 0.2805			0.2744 5.8 -1 -1	1 4	30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00		
Cyclohexane	1 0 Avg 0.1985 0.1995 0.1773 0.2157 0.1961 0.2053 0.2314			0.2034 6.5 0.997 1.00	8 3 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
1,2-Dichloroethane-d4	1 0 Avg 0.1179 0.1218 0.1264 0.1204 0.1187 0.1180 0.1171 0.1231 0.1252			0.1214 7.8 -1 -1	2 8	30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00		
1,2-Dichloroethane	1 0 Avg 0.2668 0.2708 0.2585 0.2618 0.2618 0.2844 0.2881			0.2704 8.2 1.00 1.00	4 3 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
2-Butanone	1 0 Avg 0.0785 0.0792 0.0554 0.0674 0.0640 0.0715 0.0725			0.0698 4.30 0.999 1.00	12 0.10 a	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
1,1,1-Trichloroethane	1 0 Avg 0.2989 0.2867 0.2794 0.3084 0.2887 0.3104 0.3342			0.3014 6.1 0.998 1.00	6 2 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Carbon Tetrachloride	1 0 Avg 0.2648 0.2509 0.2242 0.2795 0.2592 0.2826 0.3167			0.2684 7.71 0.997 1.00	1 1 0.10	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Vinyl Acetate	1 0 Avg 0.4558 0.4104 0.4093 0.4742 0.4808 0.5288 0.5303			0.4703 3.94 1.00 1.00	1 1	20.00 5.00 2.00 50.00 100.0 250.0 500.0		
Bromodichloromethane	1 0 Avg 0.2916 0.2787 0.2817 0.2929 0.2898 0.3155 0.3177			0.2955 5.41 1.00 1.00	5 2 0.20	20.00 5.00 2.00 50.00 100.0 250.0 500.0		

Flags  
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Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RT, Linear, or Quadratic Curve was used for compound.

Compound	Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations
Methylcyclohexane	1	11M83453.D	CAL @ 20 PPB	10/02/20 00:28	2	11M83452.D	CAL @ 5 PPB	10/02/20 00:08	20.00 5.00 2.00 50.00 100.0 250.0 500.0
Dibromomethane	1	0 Avg	0.1508 0.1482 0.1425 0.1569 0.1706 0.1862 0.1903	0.164 5.34 1.00 1.00	12	11M83454.D	CAL @ 50 PPB	10/02/20 00:48	20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,2-Dichloropropane	1	0 Avg	0.1841 0.1831 0.1732 0.1885 0.1880 0.2040 0.2106	0.190 5.28 1.00 1.00	6,7	11M83457.D	CAL @ 250 PPB	10/02/20 01:47	20.00 5.00 2.00 50.00 100.0 250.0 500.0
Trichloroethene	1	0 Avg	0.2190 0.2117 0.1961 0.2339 0.2312 0.2430 0.2634	0.228 5.16 0.998 1.00	9,6	11M83450.D	CAL @ 1 PPB	10/01/20 23:29	20.00 5.00 2.00 50.00 100.0 250.0 500.0
Benzene	1	0 Avg	0.7540 0.7434 0.6790 0.7846 0.7478 0.8125 0.8847 0.7304	0.767 4.82 0.998 1.00	8,0				20.00 5.00 2.00 50.00 100.0 250.0 500.0 1.00
tert-Amyl methyl ether	1	0 Avg	0.4815 0.4472 0.4278 0.5091 0.5407 0.5866 0.5695	0.509 4.86 1.00 1.00	12				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Iso-propylacetate	1	0 Avg	0.2973 0.2824 0.3016 0.3015 0.3015 0.3198 0.3162	0.303 4.81 1.00 1.00	4,1				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Methyl methacrylate	1	0 Avg	0.1313 0.1386 0.1385 0.1650 0.1572 0.1664 0.1609	0.151 5.30 1.00 1.00	9,6				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Dibromochloromethan	1	0 Avg	0.2779 0.2506 0.2643 0.2874 0.2972 0.3173 0.3131	0.287 6.24 1.00 1.00	8,6				20.00 5.00 2.00 50.00 100.0 250.0 500.0
2-Chloroethylvinylthe	1	0 Avg	0.0336 0.0328 0.0215 0.0334 0.0358 0.0390 0.0379	0.033 5.54 1.00 1.00	17				20.00 5.00 2.00 50.00 100.0 250.0 500.0
cis-1,3-Dichloropropen	1	0 Avg	0.3440 0.3294 0.3081 0.3713 0.3605 0.3888 0.3907	0.356 5.64 1.00 1.00	8,6				20.00 5.00 2.00 50.00 100.0 250.0 500.0
trans-1,3-Dichloroprop	1	0 Avg	0.3208 0.3015 0.2946 0.3347 0.3405 0.3624 0.3638	0.331 5.91 1.00 1.00	8,2				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Ethyl methacrylate	1	0 Avg	0.1420 0.1288 0.1173 0.1526 0.1518 0.1609 0.1554	0.144 5.93 1.00 1.00	11				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,1,2-Trichloroethane	1	0 Avg	0.2266 0.2284 0.2314 0.2222 0.2266 0.2406 0.2343	0.230 6.32 1.00 1.00	2,6				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,2-Dibromoethane	1	0 Avg	0.2464 0.2422 0.2242 0.2504 0.2515 0.2699 0.2635 0.2220 0.2087	0.242 6.31 1.00 1.00	8,3				20.00 5.00 2.00 50.00 100.0 250.0 500.0 1.00 0.50
1,3-Dichloropropane	1	0 Avg	0.3745 0.3771 0.3542 0.3680 0.3739 0.3954 0.3956	0.377 6.11 1.00 1.00	3,9				20.00 5.00 2.00 50.00 100.0 250.0 500.0
4-Methyl-2-Pentanone	1	0 Avg	0.1908 0.1773 0.1558 0.1845 0.1802 0.1870 0.1858	0.180 5.70 1.00 1.00	6,5				20.00 5.00 2.00 50.00 100.0 250.0 500.0
2-Hexanone	1	0 Avg	0.1413 0.1314 0.1142 0.1387 0.1304 0.1386 0.1400	0.134 6.12 1.00 1.00	7,2				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Tetrachloroethene	1	0 Avg	0.1805 0.1830 0.1751 0.1980 0.1904 0.1976 0.2316	0.194 6.11 0.995 1.00	9,7				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Toluene-d8	1	0 Avg	1.1967 1.1840 1.1637 1.1813 1.1558 1.1227 1.1186 1.1965 1.1896	1.17 5.79 -1 -1	2,6				30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00
Toluene	1	0 Avg	0.5614 0.5491 0.5492 0.5834 0.5633 0.5610 0.6127 0.5791	0.569 5.82 0.998 1.00	3,9				20.00 5.00 2.00 50.00 100.0 250.0 500.0 1.00
1,1,1,2-Tetrachloroeth	1	0 Avg	0.2387 0.2333 0.2500 0.2537 0.2588 0.2746 0.3022	0.259 6.59 0.998 1.00	9,0				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Chlorobenzene	1	0 Avg	0.6815 0.6759 0.6851 0.7052 0.6886 0.7084 0.7591	0.701 6.56 0.999 1.00	4,1				20.00 5.00 2.00 50.00 100.0 250.0 500.0
n-Butyl acrylate	1	0 Avg	0.6175 0.5616 0.5435 0.6607 0.6601 0.6246 0.8291	0.642 6.80 0.986 0.999	15				20.00 5.00 2.00 50.00 100.0 250.0 500.0
n-Amyl acetate	1	0 Qua	0.4898 0.4484 0.4222 0.5011 0.5044 0.6973 0.7333	0.542 6.91 0.996 0.998	23				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Bromoform	1	0 Avg	0.3437 0.3320 0.3363 0.3633 0.3650 0.4152 0.4644	0.374 7.01 0.997 1.00	13				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Ethylbenzene	1	0 Avg	0.5096 0.5199 0.5142 0.5424 0.4930 0.3975 0.4964 0.4883	0.495 6.60 0.990 0.996	8,7				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,1,2,2-Tetrachloroeth	1	0 Avg	0.5622 0.6016 0.5968 0.5590 0.5283 0.4548 0.5153	0.545 7.22 0.996 0.998	9,4				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Bromofluorobenzene	1	0 Avg	0.7515 0.7386 0.7497 0.7581 0.7617 0.7674 0.9741 0.7642 0.7663	0.781 7.17 -1 -1	9,3				30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00
Styrene	1	0 Avg	1.3052 1.2519 1.2170 1.3634 1.2610 1.3824 1.9150	1.39 6.88 0.981 0.999	17				20.00 5.00 2.00 50.00 100.0 250.0 500.0
m,p-Xylenes	1	0 Avg	0.7230 0.7073 0.7141 0.7726 0.6899 0.5903 0.7916 0.6934 0.7167	0.711 6.66 0.985 0.997	8,0				40.00 10.00 4.00 100.0 200.0 500.0 1000. 2.00 1.00
o-Xylene	1	0 Avg	0.7452 0.7525 0.6856 0.7727 0.7035 0.7428 1.0770 0.6371	0.765 6.88 0.976 0.999	17				20.00 5.00 2.00 50.00 100.0 250.0 500.0 1.00
trans-1,4-Dichloro-2-b	1	0 Avg	0.1745 0.1801 0.1528 0.1865 0.1662 0.1503 0.1743	0.169 7.24 0.995 0.999	8,0				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,3-Dichlorobenzene	1	0 Avg	0.9538 0.9276 0.9792 0.9924 0.9236 1.0297 1.1705	0.997 7.78 0.996 1.00	8,5				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,4-Dichlorobenzene	1	0 Avg	0.9546 0.9761 1.0011 0.9960 0.9351 0.9111 0.9779	0.965 7.83 0.999 1.00	3,4				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,2-Dichlorobenzene	1	0 Avg	0.9160 0.9000 0.9476 0.9648 0.9255 0.9691 1.0870	0.959 8.05 0.997 1.00	6,5				20.00 5.00 2.00 50.00 100.0 250.0 500.0
Isopropylbenzene	1	0 Avg	1.8163 1.8283 1.6798 1.9470 1.7024 1.8430 2.5406 1.6258	1.87 7.17 0.981 0.999	15				20.00 5.00 2.00 50.00 100.0 250.0 500.0 1.00
Cyclohexanone	1	0 Avg	0.0183 0.0191 0.0144 0.0179 0.0146 0.0158 0.0225	0.017 6.74 0.977 0.999	16				100.0 25.00 10.00 250.0 500.0 1250. 2500. 5000.0
Camphene	1	0 Avg	0.5789 0.6028 0.5015 0.6335 0.5354 0.4449 0.5773	0.554 7.24 0.986 0.996	12				20.00 5.00 2.00 50.00 100.0 250.0 500.0
1,2,3-Trichloropropane	1	0 Avg	0.6691 0.6582 0.6265 0.6644 0.6203 0.5424 0.5912	0.625 7.25 0.998 0.999	7,3				20.00 5.00 2.00 50.00 100.0 250.0 500.0
2-Chlorotoluene	1	0 Avg	1.1041 1.1118 1.1363 1.1591 1.0131 1.1463 1.3404	1.14 7.36 0.994 1.00	8,6				20.00 5.00 2.00 50.00 100.0 250.0 500.0

Flags  
a - failed the min of criteria  
c - failed the minimum correlation coeff criteria(ly applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Level #	Compound	Data File	Cal Identifier	Analysis Date/Time	Level #	Compound	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations									
1	p-Ethyltoluene	11M83453.D	CAL @ 20 PPB	10/02/20 00:28	2	11M83452.D	CAL @ 5 PPB	10/02/20 00:08	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9										
3	4-Chlorotoluene	11M83451.D	CAL @ 2 PPB	10/01/20 23:49	4	11M83454.D	CAL @ 50 PPB	10/02/20 00:48											
5	n-Propylbenzene	11M83459.D	CAL @ 100 PPB	10/02/20 02:27	6	11M83457.D	CAL @ 250 PPB	10/02/20 01:47											
7	Bromobenzene	11M83455.D	CAL @ 500 PPB	10/02/20 01:08	8	11M83450.D	CAL @ 1 PPB	10/01/20 23:29											
9	1,3,5-Trimethylbenzen	11M83449.D	CAL @ 0.5 PPB	10/01/20 23:09															
1	0 Avg	1.8340	1.8055	1.7011	1.9492	1.6943	1.8536	2.2956	1.887.35	0.990	1.00	1.11	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.1001	1.1559	1.2029	1.1482	1.0373	1.2060	1.2383	1.167.42	0.999	1.00	6.0	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	2.1078	2.1089	2.0116	2.2089	1.9211	1.7522	2.0670	2.027.29	0.994	0.998	6.9	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.1504	1.1392	0.9206	1.1447	1.0440	0.8735	0.9811	1.047.27	0.996	0.998	1.1	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.5226	1.5477	1.4067	1.6047	1.4078	1.6011	1.9188	1.537.38	0.992	1.00	1.3	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	0.3961	0.3232	0.3489	0.3731	0.3979	0.4777	0.5312	0.4077.38	0.996	1.00	1.8	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.5154	1.5084	1.4642	1.6231	1.4583	1.8723	2.2855	1.647.57	0.990	1.00	1.8	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.5719	1.5448	1.5391	1.6555	1.4853	1.9804	2.3079	1.697.59	0.992	0.999	1.8	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.9195	1.8973	1.7937	2.0556	1.7997	2.3482	2.9241	2.057.69	0.988	1.00	2.0	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Qua	1.6569	1.5960	1.5365	1.7752	1.5742	2.0281	2.5778	1.777.76	0.987	1.00	2.1	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.7628	1.7442	1.6418	1.8411	1.5875	1.9600	2.5273	1.838.00	0.986	1.00	1.7	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	0.9351	0.9030	0.8558	1.0113	0.9036	1.0493	1.4103	1.017.98	0.983	1.00	1.9	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.4725	1.3934	1.3320	1.6336	1.5206	1.2803	1.448.44	0.993	1.00	9.0	20.00	5.00	2.00	50.00	100.0	250.0	500.0	
1	0 Avg	0.1517	0.1465	0.1315	0.1596	0.1531	0.1348	0.2053	0.1558.50	0.972	0.997	1.6	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	0.0680	0.0603	0.0514	0.0738	0.0680	0.0559	0.0790	0.0653.894	0.979	0.996	1.5	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	0.2667	0.2471	0.2388	0.2863	0.2715	0.2229	0.3221	0.2659.07	0.977	0.996	1.2	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	0.5556	0.5564	0.5798	0.6164	0.5937	0.4814	0.6345	0.5748.99	0.986	0.996	8.7	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	0.5205	0.5292	0.5467	0.5767	0.5685	0.4587	0.5967	0.5429.29	0.987	0.996	8.4	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1	0 Avg	1.6776	1.6230	1.6128	1.7977	1.7692	1.4172	1.8724	1.659.15	0.986	0.996	1.0	20.00	5.00	2.00	50.00	100.0	250.0	500.0

Flags  
 a - failed the min rf criteria  
 c - failed the minimum correlation coeff criteria (if applicable)

Note:  
 Corr 1 = Correlation Coefficient for linear Eq.  
 Corr 2 = Correlation Coefficient for quad Eq.  
 Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 9.652

# Form 7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/5/2020 2:58:00 P

Data File: IM140087.D  
Method: EPA 8260D

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.15	16.04	20	20	0.1	0.408	0.328	19.79	
Dichlorodifluoromethane	1	0		2.13	14.77	20	20	0.1	0.198	0.146	26.15	C1
Chloromethane	1	0		2.31	18.65	20	20	0.1	0.273	0.255	6.74	
Bromomethane	1	0		2.68	19.19	20	20	0.1	0.126	0.121	4.05	
Vinyl Chloride	1	0		2.38	19.18	20	20	0.1	0.221	0.212	4.10	
Chloroethane	1	0		2.75	22.31	20	20	0.1	0.130	0.145	11.54	
Trichlorofluoromethane	1	0		2.96	19.62	20	20	0.1	0.299	0.293	1.92	
Ethyl ether	1	0		3.18	22.60	20	20	0.5	0.142	0.161	13.01	
Furan	1	0		3.21	20.73	20	20	0.5	0.304	0.315	3.65	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.37	21.69	20	20	0.1	0.127	0.138	8.43	
Methylene Chloride	1	0		3.74	21.76	20	20	0.1	0.202	0.220	8.82	
Acrolein	1	0		3.28	98.36	100	20		0.032	0.032	1.64	
Acrylonitrile	1	0		3.92	24.48	20	20		0.088	0.108	22.38	C1
Iodomethane	1	0		3.51	17.31	20	20		0.232	0.201	13.44	
Acetone	1	0		3.39	119.00	100	20	0.1	0.079	0.094	19.00	
Carbon Disulfide	1	0		3.57	21.58	20	20	0.1	0.535	0.577	7.90	
t-Butyl Alcohol	1	0		3.80	122.39	100	20		0.022	0.027	22.39	C1
n-Hexane	1	0		4.17	21.75	20	20		0.173	0.188	8.77	
Di-isopropyl-ether	1	0		4.31	21.57	20	20		0.553	0.597	7.84	
1,1-Dichloroethene	1	0		3.37	21.09	20	20	0.1	0.261	0.276	5.46	
Methyl Acetate	1	0		3.65	22.31	20	20	0.1	0.170	0.190	11.54	
Methyl-t-butyl ether	1	0		3.96	22.91	20	20	0.1	0.458	0.525	14.53	
1,1-Dichloroethane	1	0		4.28	21.10	20	20	0.2	0.363	0.383	5.52	
trans-1,2-Dichloroethene	1	0		3.97	22.49	20	20	0.1	0.184	0.207	12.45	
Ethyl-t-butyl ether	1	0		4.56	20.74	20	20	0.5	0.509	0.528	3.69	
cis-1,2-Dichloroethene	1	0		4.67	21.31	20	20	0.1	0.351	0.374	6.53	
Bromochloromethane	1	0		4.82	21.13	20	20		0.211	0.223	5.63	
2,2-Dichloropropane	1	0		4.67	20.48	20	20		0.293	0.300	2.40	
Ethyl acetate	1	0		4.69	20.93	20	20		0.291	0.305	4.63	
1,4-Dioxane	1	0		5.73	1246.66	1000	20		0.004	0.005	24.67	C1
1,1-Dichloropropene	1	0		5.07	21.28	20	20		0.271	0.288	6.41	
Chloroform	1	0		4.85	20.81	20	20	0.2	0.374	0.389	4.07	
Dibromofluoromethane	1	0	S	4.94	29.41	30	**		0.280	0.274	1.97	
Cyclohexane	1	0		5.03	19.78	20	20	0.1	0.257	0.254	1.10	
1,2-Dichloroethane-d4	1	0	S	5.15	27.60	30	**		0.152	0.140	7.99	
1,2-Dichloroethane	1	0		5.19	20.82	20	20	0.1	0.299	0.312	4.10	
2-Butanone	1	0		4.69	21.45	20	20	0.1	0.219	0.235	7.23	
1,1,1-Trichloroethane	1	0		4.98	19.99	20	20	0.1	0.333	0.333	0.07	
Carbon Tetrachloride	1	0		5.08	20.15	20	20	0.1	0.299	0.301	0.76	
Vinyl Acetate	1	0		4.30	21.75	20	20		0.696	0.757	8.74	
Bromodichloromethane	1	0		5.81	20.58	20	20	0.2	0.293	0.301	2.92	
Methylcyclohexane	1	0		5.66	20.30	20	20	0.1	0.230	0.233	1.49	
Dibromomethane	1	0		5.73	22.43	20	20		0.166	0.186	12.13	
1,2-Dichloropropane	1	0		5.67	20.96	20	20	0.1	0.215	0.225	4.81	
Trichloroethene	1	0		5.54	21.65	20	20	0.2	0.231	0.250	8.24	
Benzene	1	0		5.19	22.04	20	20	0.5	0.790	0.871	10.20	
tert-Amyl methyl ether	1	0		5.24	22.13	20	20		0.485	0.537	10.64	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.19	18.86	20	20	0.5	0.435	0.410	5.69	
Methyl methacrylate	1	0		5.70	18.26	20	20	0.5	0.236	0.216	8.70	
Dibromochloromethane	1	0		6.67	19.55	20	20	0.1	0.283	0.276	2.23	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/5/2020 2:58:00 P

Data File: IM140087.D  
Method: EPA 8260D

Instrument: GCMS I

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.94	21.30	20	20	0.058	0.061	0.061	6.50	
cis-1,3-Dichloropropene	1	0		6.04	19.55	20	20	0.2	0.364	0.356	2.23	
trans-1,3-Dichloropropene	1	0		6.33	19.05	20	20	0.1	0.368	0.350	4.73	
Ethyl methacrylate	1	0		6.36	19.85	20	20	0.5	0.224	0.223	0.74	
1,1,2-Trichloroethane	1	0		6.44	20.46	20	20	0.1	0.234	0.239	2.32	
1,2-Dibromoethane	1	0		6.74	19.90	20	20	0.1	0.252	0.251	0.51	
1,3-Dichloropropane	1	0		6.54	19.88	20	20		0.399	0.397	0.61	
4-Methyl-2-Pentanone	1	0		6.11	20.40	20	20	0.1	0.270	0.275	2.00	
2-Hexanone	1	0		6.55	20.09	20	20	0.1	0.205	0.206	0.45	
Tetrachloroethene	1	0		6.54	21.34	20	20	0.2	0.216	0.231	6.70	
Toluene-d8	1	0	S	6.20	28.61	30	**		1.212	1.156	4.63	
Toluene	1	0		6.24	20.55	20	20	0.4	0.593	0.610	2.76	
1,1,1,2-Tetrachloroethane	1	0		7.04	19.60	20	20		0.257	0.252	2.03	
Chlorobenzene	1	0		7.00	20.62	20	20	0.5	0.692	0.714	3.11	
1,4-Dichlorobenzene-d4	1	0	I	8.28	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	17.68	20	20	0.5	0.774	0.684	11.62	
n-Amyl acetate	1	0		7.37	18.37	20	20	0.5	0.755	0.694	8.13	
Bromoform	1	0		7.46	18.12	20	20	0.1	0.368	0.333	9.42	
Ethylbenzene	1	0		7.05	19.26	20	20	0.1	0.477	0.459	3.72	
1,1,1,2-Tetrachloroethane	1	0		7.67	18.56	20	20	0.1	0.592	0.550	7.19	
Bromofluorobenzene	1	0	S	7.62	30.10	30	**		0.756	0.758	0.32	
Styrene	1	0		7.33	20.49	20	20	0.3	1.139	1.168	2.46	
m&p-Xylenes	1	0		7.11	41.15	40	20	0.1	0.640	0.658	2.87	
o-Xylene	1	0		7.33	19.98	20	20	0.3	0.655	0.654	0.12	
trans-1,4-Dichloro-2-butene	1	0		7.70	17.84	20	20		0.225	0.201	10.82	
1,3-Dichlorobenzene	1	0		8.25	19.57	20	20	0.6	0.985	0.964	2.13	
1,4-Dichlorobenzene	1	0		8.30	19.13	20	20	0.5	1.032	0.987	4.34	
1,2-Dichlorobenzene	1	0		8.52	19.28	20	20	0.4	0.973	0.938	3.60	
Isopropylbenzene	1	0		7.53	19.58	20	20	0.1	1.650	1.615	2.12	
Cyclohexanone	1	0		7.60	120.07	100	20		0.021	0.025	20.07	
Camphene	1	0		7.70	17.84	20	20		0.481	0.429	10.79	
1,2,3-Trichloropropane	1	0		7.72	18.14	20	20		0.742	0.673	9.30	
2-Chlorotoluene	1	0		7.82	19.22	20	20		1.147	1.102	3.91	
p-Ethyltoluene	1	0		7.81	20.50	20	20		1.746	1.790	2.50	
4-Chlorotoluene	1	0		7.88	18.92	20	20		1.152	1.090	5.42	
n-Propylbenzene	1	0		7.75	19.21	20	20		2.092	2.010	3.93	
Bromobenzene	1	0		7.72	18.72	20	20		1.158	1.084	6.41	
1,3,5-Trimethylbenzene	1	0		7.84	18.88	20	20		1.477	1.395	5.60	
Butyl methacrylate	1	0		7.85	18.04	20	20	0.5	0.566	0.510	9.81	
t-Butylbenzene	1	0		8.04	19.16	20	20		1.397	1.338	4.22	
1,2,4-Trimethylbenzene	1	0		8.06	19.38	20	20		1.535	1.487	3.11	
sec-Butylbenzene	1	0		8.16	19.30	20	20		1.744	1.683	3.48	
4-Isopropyltoluene	1	0		8.23	19.88	20	20		1.522	1.513	0.61	
n-Butylbenzene	1	0		8.47	19.54	20	20		1.717	1.678	2.31	
p-Diethylbenzene	1	0		8.45	19.92	20	20		0.874	0.871	0.39	
1,2,4,5-Tetramethylbenzene	1	0		8.91	14.67	20	20		1.287	1.248	26.64	C1
1,2-Dibromo-3-Chloropropane	1	0		8.97	18.33	20	20	0.05	0.164	0.150	8.37	
Camphor	1	0		9.41	126.87	200	20		0.064	0.054	36.57	C1
Hexachlorobutadiene	1	0		9.55	19.94	20	20		0.291	0.290	0.32	
1,2,4-Trichlorobenzene	1	0		9.46	19.89	20	20	0.2	0.631	0.627	0.57	
1,2,3-Trichlorobenzene	1	0		9.76	18.91	20	20		0.582	0.550	5.44	
Naphthalene	1	0		9.62	19.52	20	20		1.622	1.583	2.39	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF



# Form 7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/5/2020 3:44:00 P

Data File: 11M83550.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	73.65	50	20	0.1	0.165	0.243	47.29	C1
Dichlorodifluoromethane	1	0		1.67	59.99	50	20	0.1	0.197	0.236	19.98	
Chloromethane	1	0		1.84	54.62	50	20	0.1	0.179	0.196	9.25	
Bromomethane	1	0		2.24	46.85	50	20	0.1	0.199	0.186	6.29	
Vinyl Chloride	1	0		1.94	62.55	50	20	0.1	0.198	0.247	25.09	C1
Chloroethane	1	0		2.32	52.69	50	20	0.1	0.155	0.163	5.38	
Trichlorofluoromethane	1	0		2.54	58.79	50	20	0.1	0.366	0.430	17.59	
Ethyl ether	1	0		2.77	40.25	50	20	0.5	0.142	0.114	19.50	
Furan	1	0		2.81	48.86	50	20	0.5	0.184	0.179	2.29	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	60.24	50	20	0.1	0.129	0.156	20.47	
Methylene Chloride	1	0		3.37	41.45	50	20	0.1	0.232	0.192	17.09	
Acrolein	1	0		2.88	219.81	250	20		0.025	0.022	12.08	
Acrylonitrile	1	0		3.56	40.35	50	20		0.062	0.050	19.31	
Iodomethane	1	0		3.12	45.06	50	20		0.187	0.227	9.88	
Acetone	1	0		3.01	186.29	250	20	0.1	0.052	0.039	25.48	C1
Carbon Disulfide	1	0		3.18	56.87	50	20	0.1	0.514	0.584	13.75	
t-Butyl Alcohol	1	0		3.43	185.62	250	20		0.022	0.016	25.75	C1
n-Hexane	1	0		3.81	66.66	50	20		0.155	0.206	33.32	C1
Di-isopropyl-ether	1	0		3.95	45.06	50	20		0.397	0.358	9.88	
1,1-Dichloroethene	1	0		2.98	57.13	50	20	0.1	0.215	0.245	14.26	
Methyl Acetate	1	0		3.27	38.05	50	20	0.1	0.116	0.088	23.90	C1
Methyl-t-butyl ether	1	0		3.59	41.54	50	20	0.1	0.492	0.409	16.93	
1,1-Dichloroethane	1	0		3.92	49.87	50	20	0.2	0.302	0.301	0.25	
trans-1,2-Dichloroethene	1	0		3.60	54.60	50	20	0.1	0.195	0.213	9.19	
Ethyl-t-butyl ether	1	0		4.19	42.68	50	20	0.5	0.476	0.406	14.64	
cis-1,2-Dichloroethene	1	0		4.31	49.91	50	20	0.1	0.299	0.298	0.18	
Bromochloromethane	1	0		4.45	44.35	50	20		0.136	0.120	11.30	
2,2-Dichloropropane	1	0		4.31	60.09	50	20		0.241	0.290	20.17	
Ethyl acetate	1	0		4.33	40.17	50	20		0.168	0.135	19.67	
1,4-Dioxane	1	0		5.34	1859.37	2500	20		0.004	0.003	25.63	C1
1,1-Dichloropropene	1	0		4.70	57.62	50	20		0.243	0.280	15.25	
Chloroform	1	0		4.49	48.10	50	20	0.2	0.357	0.343	3.81	
Dibromofluoromethane	1	0	S	4.58	29.60	75	**		0.274	0.271	1.33	
Cyclohexane	1	0		4.65	63.05	50	20	0.1	0.203	0.257	26.10	C1
1,2-Dichloroethane-d4	1	0	S	4.78	29.97	75	**		0.121	0.121	0.11	
1,2-Dichloroethane	1	0		4.82	41.74	50	20	0.1	0.270	0.226	16.52	
2-Butanone	1	0		4.30	36.56	50	20	0.1	0.070	0.051	26.87	C1
1,1,1-Trichloroethane	1	0		4.61	53.81	50	20	0.1	0.301	0.324	7.62	
Carbon Tetrachloride	1	0		4.71	56.51	50	20	0.1	0.268	0.303	13.02	
Vinyl Acetate	1	0		3.94	44.42	50	20		0.470	0.418	11.15	
Bromodichloromethane	1	0		5.41	43.90	50	20	0.2	0.295	0.259	12.20	
Methylcyclohexane	1	0		5.27	66.24	50	20	0.1	0.238	0.316	32.49	C1
Dibromomethane	1	0		5.34	42.97	50	20		0.164	0.141	14.07	
1,2-Dichloropropane	1	0		5.28	45.30	50	20	0.1	0.190	0.172	9.40	
Trichloroethene	1	0		5.16	54.78	50	20	0.2	0.228	0.250	9.56	
Benzene	1	0		4.82	50.15	50	20	0.5	0.767	0.769	0.29	
tert-Amyl methyl ether	1	0		4.86	42.47	50	20		0.509	0.432	15.05	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	38.45	50	20	0.5	0.303	0.233	23.10	C1
Methyl methacrylate	1	0		5.30	38.95	50	20	0.5	0.151	0.118	22.09	C1
Dibromochloromethane	1	0		6.24	42.46	50	20	0.1	0.287	0.244	15.09	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/5/2020 3:44:00 P

Data File: 11M83550.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Cof#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.55	42.47	50	20	0.033	0.028	15.05		
cis-1,3-Dichloropropene	1	0		5.64	46.42	50	20	0.2	0.356	0.331	7.16	
trans-1,3-Dichloropropene	1	0		5.92	44.86	50	20	0.1	0.331	0.297	10.29	
Ethyl methacrylate	1	0		5.93	41.37	50	20	0.5	0.144	0.119	17.27	
1,1,2-Trichloroethane	1	0		6.02	41.10	50	20	0.1	0.230	0.189	17.80	
1,2-Dibromoethane	1	0		6.31	42.00	50	20	0.1	0.242	0.203	16.00	
1,3-Dichloropropane	1	0		6.11	41.70	50	20		0.377	0.314	16.60	
4-Methyl-2-Pentanone	1	0		5.70	38.55	50	20	0.1	0.180	0.139	22.91	C1
2-Hexanone	1	0		6.12	39.74	50	20	0.1	0.134	0.106	20.52	C1
Tetrachloroethene	1	0		6.12	56.86	50	20	0.2	0.194	0.220	13.72	
Toluene-d8	1	0	S	5.79	29.96	75	**		1.168	1.166	0.14	
Toluene	1	0		5.82	49.56	50	20	0.4	0.569	0.564	0.89	
1,1,1,2-Tetrachloroethane	1	0		6.59	43.38	50	20		0.259	0.225	13.24	
Chlorobenzene	1	0		6.56	47.77	50	20	0.5	0.701	0.669	4.46	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	42.18	50	20	0.5	0.642	0.542	15.65	
n-Amyl acetate	1	0		6.91	34.92	50	20	0.5	0.542	0.416	30.15	C1
Bromoform	1	0		7.01	40.08	50	20	0.1	0.374	0.300	19.84	
Ethylbenzene	1	0		6.60	52.52	50	20	0.1	0.495	0.520	5.04	
1,1,2,2-Tetrachloroethane	1	0		7.22	41.28	50	20	0.1	0.545	0.450	17.45	
Bromofluorobenzene	1	0	S	7.17	29.89	75	**		0.781	0.779	0.37	
Styrene	1	0		6.88	45.20	50	20	0.3	1.385	1.252	9.59	
m&p-Xylenes	1	0		6.66	105.99	100	20	0.1	0.711	0.754	5.99	
o-Xylene	1	0		6.88	47.53	50	20	0.3	0.765	0.727	4.94	
trans-1,4-Dichloro-2-butene	1	0		7.24	50.80	50	20		0.169	0.172	1.60	
1,3-Dichlorobenzene	1	0		7.78	48.54	50	20	0.6	0.997	0.968	2.91	
1,4-Dichlorobenzene	1	0		7.83	50.60	50	20	0.5	0.965	0.976	1.20	
1,2-Dichlorobenzene	1	0		8.05	46.68	50	20	0.4	0.959	0.895	6.65	
Isopropylbenzene	1	0		7.07	51.45	50	20	0.1	1.873	1.927	2.91	
Cyclohexanone	1	0		7.14	192.66	250	20		0.018	0.014	22.94	C1
Camphene	1	0		7.24	60.84	50	20		0.554	0.673	21.67	C1
1,2,3-Trichloropropane	1	0		7.26	43.03	50	20		0.625	0.538	13.95	
2-Chlorotoluene	1	0		7.36	48.56	50	20		1.144	1.111	2.89	
p-Ethyltoluene	1	0		7.35	53.03	50	20		1.876	1.990	6.06	
4-Chlorotoluene	1	0		7.42	48.69	50	20		1.156	1.125	2.62	
n-Propylbenzene	1	0		7.29	55.64	50	20		2.025	2.253	11.29	
Bromobenzene	1	0		7.27	50.22	50	20		1.036	1.041	0.43	
1,3,5-Trimethylbenzene	1	0		7.38	50.04	50	20		1.533	1.535	0.09	
Butyl methacrylate	1	0		7.38	41.18	50	20	0.5	0.407	0.335	17.64	
t-Butylbenzene	1	0		7.57	49.53	50	20		1.642	1.626	0.94	
1,2,4-Trimethylbenzene	1	0		7.59	47.68	50	20		1.688	1.610	4.63	
sec-Butylbenzene	1	0		7.69	52.35	50	20		2.050	2.147	4.71	
4-Isopropyltoluene	1	0		7.76	58.34	50	20		1.772	1.853	16.68	
n-Butylbenzene	1	0		8.00	54.56	50	20		1.833	2.000	9.13	
p-Diethylbenzene	1	0		7.98	52.97	50	20		1.010	1.070	5.94	
1,2,4,5-Tetramethylbenzene	1	0		8.44	56.92	50	20		1.439	1.638	13.85	
1,2-Dibromo-3-Chloropropane	1	0		8.50	39.11	50	20	0.05	0.155	0.121	21.78	C1
Camphor	1	0		8.94	418.27	500	20		0.065	0.055	16.35	
Hexachlorobutadiene	1	0		9.07	64.15	50	20		0.265	0.340	28.30	C1
1,2,4-Trichlorobenzene	1	0		8.99	57.96	50	20	0.2	0.574	0.665	15.92	
1,2,3-Trichlorobenzene	1	0		9.29	54.43	50	20		0.542	0.591	8.86	
Naphthalene	1	0		9.15	48.43	50	20		1.648	1.597	3.14	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/6/2020 9:54:00 A

Data File: I1M83597.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	89.34	50	20	0.1	0.165	0.295	78.69	C1
Dichlorodifluoromethane	1	0		1.67	61.00	50	20	0.1	0.197	0.240	22.00	C1
Chloromethane	1	0		1.84	54.76	50	20	0.1	0.179	0.196	9.52	
Bromomethane	1	0		2.23	49.82	50	20	0.1	0.199	0.198	0.36	
Vinyl Chloride	1	0		1.94	61.95	50	20	0.1	0.198	0.245	23.89	C1
Chloroethane	1	0		2.32	53.63	50	20	0.1	0.155	0.166	7.25	
Trichlorofluoromethane	1	0		2.54	59.78	50	20	0.1	0.366	0.438	19.57	
Ethyl ether	1	0		2.77	41.93	50	20	0.5	0.142	0.119	16.15	
Furan	1	0		2.81	49.65	50	20	0.5	0.184	0.182	0.70	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	61.66	50	20	0.1	0.129	0.159	23.33	C1
Methylene Chloride	1	0		3.37	42.52	50	20	0.1	0.232	0.197	14.96	
Acrolein	1	0		2.89	215.19	250	20		0.025	0.022	13.93	
Acrylonitrile	1	0		3.57	38.59	50	20		0.062	0.048	22.82	C1
Iodomethane	1	0		3.12	44.55	50	20		0.187	0.225	10.90	
Acetone	1	0		3.01	173.51	250	20	0.1	0.052	0.036	30.59	C1
Carbon Disulfide	1	0		3.18	58.80	50	20	0.1	0.514	0.604	17.60	
t-Butyl Alcohol	1	0		3.43	183.41	250	20		0.022	0.016	26.64	C1
n-Hexane	1	0		3.81	67.47	50	20		0.155	0.209	34.95	C1
Di-isopropyl-ether	1	0		3.95	44.97	50	20		0.397	0.357	10.06	
1,1-Dichloroethene	1	0		2.98	56.05	50	20	0.1	0.215	0.241	12.10	
Methyl Acetate	1	0		3.28	36.11	50	20	0.1	0.116	0.083	27.78	C1
Methyl-t-butyl ether	1	0		3.59	43.16	50	20	0.1	0.492	0.425	13.67	
1,1-Dichloroethane	1	0		3.92	50.10	50	20	0.2	0.302	0.302	0.19	
trans-1,2-Dichloroethene	1	0		3.60	54.38	50	20	0.1	0.195	0.212	8.75	
Ethyl-t-butyl ether	1	0		4.19	43.70	50	20	0.5	0.476	0.416	12.60	
cis-1,2-Dichloroethene	1	0		4.31	49.90	50	20	0.1	0.299	0.298	0.20	
Bromochloromethane	1	0		4.45	44.51	50	20		0.136	0.121	10.98	
2,2-Dichloropropane	1	0		4.31	60.43	50	20		0.241	0.292	20.85	C1
Ethyl acetate	1	0		4.32	40.03	50	20		0.168	0.135	19.93	
1,4-Dioxane	1	0		5.33	1873.54	2500	20		0.004	0.003	25.06	C1
1,1-Dichloropropene	1	0		4.70	58.55	50	20		0.243	0.285	17.10	
Chloroform	1	0		4.49	49.28	50	20	0.2	0.357	0.352	1.44	
Dibromofluoromethane	1	0	S	4.58	30.07	75	**		0.274	0.275	0.24	
Cyclohexane	1	0		4.65	63.14	50	20	0.1	0.203	0.257	26.28	C1
1,2-Dichloroethane-d4	1	0	S	4.78	29.46	75	**		0.121	0.119	1.80	
1,2-Dichloroethane	1	0		4.82	43.08	50	20	0.1	0.270	0.233	13.83	
2-Butanone	1	0		4.30	45.02	50	20	0.1	0.070	0.063	9.95	
1,1,1-Trichloroethane	1	0		4.61	54.60	50	20	0.1	0.301	0.329	9.20	
Carbon Tetrachloride	1	0		4.71	58.33	50	20	0.1	0.268	0.313	16.66	
Vinyl Acetate	1	0		3.94	46.53	50	20		0.470	0.437	6.94	
Bromodichloromethane	1	0		5.41	47.02	50	20	0.2	0.295	0.278	5.96	
Methylcyclohexane	1	0		5.27	67.96	50	20	0.1	0.238	0.324	35.92	C1
Dibromomethane	1	0		5.34	44.18	50	20		0.164	0.145	11.64	
1,2-Dichloropropane	1	0		5.28	47.24	50	20	0.1	0.190	0.180	5.53	
Trichloroethene	1	0		5.16	55.67	50	20	0.2	0.228	0.254	11.34	
Benzene	1	0		4.82	51.70	50	20	0.5	0.767	0.793	3.40	
tert-Amyl methyl ether	1	0		4.86	44.84	50	20		0.509	0.456	10.32	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	39.91	50	20	0.5	0.303	0.242	20.18	
Methyl methacrylate	1	0		5.30	44.00	50	20	0.5	0.151	0.133	12.00	
Dibromochloromethane	1	0		6.24	43.33	50	20	0.1	0.287	0.249	13.34	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/6/2020 9:54:00 A

Data File: IIM83597.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	42.93	50	20	0.033	0.029	14.14		
cis-1,3-Dichloropropene	1	0		5.64	47.43	50	20	0.2	0.356	0.338	5.14	
trans-1,3-Dichloropropene	1	0		5.91	45.55	50	20	0.1	0.331	0.302	8.90	
Ethyl methacrylate	1	0		5.93	42.59	50	20	0.5	0.144	0.123	14.83	
1,1,2-Trichloroethane	1	0		6.02	41.87	50	20	0.1	0.230	0.193	16.26	
1,2-Dibromoethane	1	0		6.31	43.24	50	20	0.1	0.242	0.209	13.52	
1,3-Dichloropropane	1	0		6.11	42.42	50	20		0.377	0.320	15.16	
4-Methyl-2-Pentanone	1	0		5.70	38.84	50	20	0.1	0.180	0.140	22.32	C1
2-Hexanone	1	0		6.13	39.06	50	20	0.1	0.134	0.104	21.88	C1
Tetrachloroethene	1	0		6.11	56.28	50	20	0.2	0.194	0.218	12.56	
Toluene-d8	1	0	S	5.79	29.75	75	**	1.168	1.158	0.84		
Toluene	1	0		5.82	49.85	50	20	0.4	0.569	0.567	0.30	
1,1,1,2-Tetrachloroethane	1	0		6.59	44.15	50	20		0.259	0.228	11.71	
Chlorobenzene	1	0		6.56	47.97	50	20	0.5	0.701	0.672	4.06	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	42.12	50	20	0.5	0.642	0.541	15.76	
n-Amyl acetate	1	0		6.91	35.67	50	20	0.5	0.542	0.425	28.66	C1
Bromoform	1	0		7.01	41.31	50	20	0.1	0.374	0.309	17.38	
Ethylbenzene	1	0		6.60	52.61	50	20	0.1	0.495	0.521	5.23	
1,1,2,2-Tetrachloroethane	1	0		7.22	42.27	50	20	0.1	0.545	0.461	15.46	
Bromofluorobenzene	1	0	S	7.17	29.10	75	**	0.781	0.758	2.99		
Styrene	1	0		6.88	45.20	50	20	0.3	1.385	1.252	9.60	
m&p-Xylenes	1	0		6.66	105.21	100	20	0.1	0.711	0.748	5.21	
o-Xylene	1	0		6.88	46.97	50	20	0.3	0.765	0.718	6.06	
trans-1,4-Dichloro-2-butene	1	0		7.24	51.91	50	20		0.169	0.176	3.83	
1,3-Dichlorobenzene	1	0		7.78	47.95	50	20	0.6	0.997	0.956	4.09	
1,4-Dichlorobenzene	1	0		7.83	50.69	50	20	0.5	0.965	0.978	1.38	
1,2-Dichlorobenzene	1	0		8.05	47.23	50	20	0.4	0.959	0.906	5.53	
Isopropylbenzene	1	0		7.07	50.75	50	20	0.1	1.873	1.901	1.50	
Cyclohexanone	1	0		7.14	194.32	250	20		0.018	0.014	22.27	C1
Camphene	1	0		7.24	59.71	50	20		0.554	0.661	19.43	
1,2,3-Trichloropropane	1	0		7.26	43.27	50	20		0.625	0.541	13.46	
2-Chlorotoluene	1	0		7.36	47.60	50	20		1.144	1.090	4.79	
p-Ethyltoluene	1	0		7.35	51.70	50	20		1.876	1.940	3.39	
4-Chlorotoluene	1	0		7.42	49.24	50	20		1.156	1.138	1.52	
n-Propylbenzene	1	0		7.29	55.69	50	20		2.025	2.255	11.39	
Bromobenzene	1	0		7.27	50.03	50	20		1.036	1.037	0.05	
1,3,5-Trimethylbenzene	1	0		7.38	50.12	50	20		1.533	1.537	0.25	
Butyl methacrylate	1	0		7.38	39.96	50	20	0.5	0.407	0.325	20.07	
t-Butylbenzene	1	0		7.57	48.84	50	20		1.642	1.604	2.31	
1,2,4-Trimethylbenzene	1	0		7.59	47.65	50	20		1.688	1.609	4.70	
sec-Butylbenzene	1	0		7.69	51.52	50	20		2.050	2.113	3.04	
4-Isopropyltoluene	1	0		7.76	58.41	50	20		1.772	1.855	16.81	
n-Butylbenzene	1	0		8.00	54.47	50	20		1.833	1.997	8.94	
p-Diethylbenzene	1	0		7.98	53.43	50	20		1.010	1.079	6.85	
1,2,4,5-Tetramethylbenzene	1	0		8.44	56.96	50	20		1.439	1.639	13.91	
1,2-Dibromo-3-Chloropropane	1	0		8.50	39.66	50	20	0.05	0.155	0.123	20.67	C1
Camphor	1	0		8.94	406.02	500	20		0.065	0.053	18.80	
Hexachlorobutadiene	1	0		9.07	64.70	50	20		0.265	0.343	29.40	C1
1,2,4-Trichlorobenzene	1	0		8.99	58.29	50	20	0.2	0.574	0.669	16.58	
1,2,3-Trichlorobenzene	1	0		9.29	53.53	50	20		0.542	0.581	7.06	
Naphthalene	1	0		9.15	47.74	50	20		1.648	1.574	4.52	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/7/2020 9:39:00 A

Data File: 2M142814.D  
Method: EPA 8260D

Instrument: GCMS 2

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	15.52	20	20	0.1	0.306	0.237	22.41	C1
Dichlorodifluoromethane	1	0		1.68	16.67	20	20	0.1	0.308	0.257	16.63	
Chloromethane	1	0		1.86	15.69	20	20	0.1	0.343	0.269	21.54	C1
Bromomethane	1	0		2.26	14.98	20	20	0.1	0.167	0.125	25.11	C1
Vinyl Chloride	1	0		1.95	16.53	20	20	0.1	0.373	0.308	17.36	
Chloroethane	1	0		2.34	15.32	20	20	0.1	0.249	0.190	23.38	C1
Trichlorofluoromethane	1	0		2.57	17.26	20	20	0.1	0.571	0.493	13.70	
Ethyl ether	1	0		2.80	18.62	20	20	0.5	0.198	0.185	6.88	
Furan	1	0		2.84	18.47	20	20	0.5	0.335	0.310	7.67	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	20.45	20	20	0.1	0.200	0.205	2.23	
Methylene Chloride	1	0		3.42	19.04	20	20	0.1	0.283	0.270	4.82	
Acrolein	1	0		2.92	86.48	100	20		0.045	0.039	13.52	
Acrylonitrile	1	0		3.62	19.18	20	20		0.098	0.094	4.12	
Iodomethane	1	0		3.15	19.00	20	20		0.210	0.204	4.98	
Acetone	1	0		3.04	88.40	100	20	0.1	0.081	0.071	11.60	
Carbon Disulfide	1	0		3.21	19.28	20	20	0.1	0.765	0.737	3.59	
t-Butyl Alcohol	1	0		3.48	94.58	100	20		0.026	0.025	5.42	
n-Hexane	1	0		3.87	20.71	20	20		0.237	0.245	3.56	
Di-isopropyl-ether	1	0		4.03	19.43	20	20		0.678	0.659	2.83	
1,1-Dichloroethene	1	0		3.01	18.44	20	20	0.1	0.386	0.356	7.78	
Methyl Acetate	1	0		3.32	21.49	20	20	0.1	0.182	0.196	7.43	
Methyl-t-butyl ether	1	0		3.64	17.42	20	20	0.1	0.726	0.702	12.89	
1,1-Dichloroethane	1	0		4.00	19.59	20	20	0.2	0.470	0.461	2.05	
trans-1,2-Dichloroethene	1	0		3.65	19.15	20	20	0.1	0.285	0.272	4.24	
Ethyl-t-butyl ether	1	0		4.29	19.54	20	20	0.5	0.734	0.717	2.31	
cis-1,2-Dichloroethene	1	0		4.41	19.02	20	20	0.1	0.478	0.455	4.92	
Bromochloromethane	1	0		4.57	20.92	20	20		0.212	0.222	4.62	
2,2-Dichloropropane	1	0		4.42	21.17	20	20		0.422	0.446	5.84	
Ethyl acetate	1	0		4.43	19.00	20	20		0.245	0.232	5.02	
1,4-Dioxane	1	0		5.49	1018.25	1000	20		0.003	0.004	1.82	
1,1-Dichloropropene	1	0		4.82	19.17	20	20		0.399	0.382	4.13	
Chloroform	1	0		4.60	19.67	20	20	0.2	0.512	0.504	1.66	
Dibromofluoromethane	1	0	S	4.70	29.39	30	**		0.287	0.282	2.03	
Cyclohexane	1	0		4.77	20.19	20	20	0.1	0.354	0.357	0.95	
1,2-Dichloroethane-d4	1	0	S	4.91	28.95	30	**		0.148	0.143	3.50	
1,2-Dichloroethane	1	0		4.95	18.19	20	20	0.1	0.434	0.395	9.05	
2-Butanone	1	0		4.41	19.70	20	20	0.1	0.125	0.123	1.50	
1,1,1-Trichloroethane	1	0		4.73	20.02	20	20	0.1	0.454	0.455	0.08	
Carbon Tetrachloride	1	0		4.83	19.37	20	20	0.1	0.385	0.372	3.16	
Vinyl Acetate	1	0		4.02	20.74	20	20		0.761	0.789	3.68	
Bromodichloromethane	1	0		5.57	18.15	20	20	0.2	0.415	0.416	9.23	
Methylcyclohexane	1	0		5.42	20.10	20	20	0.1	0.343	0.344	0.49	
Dibromomethane	1	0		5.49	20.49	20	20		0.206	0.211	2.47	
1,2-Dichloropropane	1	0		5.43	19.64	20	20	0.1	0.282	0.277	1.80	
Trichloroethene	1	0		5.30	20.04	20	20	0.2	0.317	0.318	0.18	
Benzene	1	0		4.95	19.16	20	20	0.5	1.123	1.076	4.18	
tert-Amyl methyl ether	1	0		4.99	19.24	20	20		0.790	0.760	3.78	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	19.41	20	20	0.5	0.522	0.507	2.95	
Methyl methacrylate	1	0		5.45	18.64	20	20	0.5	0.252	0.235	6.78	
Dibromochloromethane	1	0		6.42	20.31	20	20	0.1	0.352	0.357	1.57	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/7/2020 9:39:00 A

Data File: 2M142814.D  
Method: EPA 8260D

Instrument: GCMS 2

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	20.36	20	20	0.038	0.039	1.80		
cis-1,3-Dichloropropene	1	0		5.81	20.35	20	20	0.2	0.481	0.489	1.73	
trans-1,3-Dichloropropene	1	0		6.09	19.51	20	20	0.1	0.458	0.446	2.46	
Ethyl methacrylate	1	0		6.10	18.79	20	20	0.5	0.265	0.249	6.03	
1,1,2-Trichloroethane	1	0		6.20	19.53	20	20	0.1	0.297	0.290	2.36	
1,2-Dibromoethane	1	0		6.49	19.65	20	20	0.1	0.313	0.308	1.74	
1,3-Dichloropropane	1	0		6.29	19.48	20	20		0.519	0.506	2.60	
4-Methyl-2-Pentanone	1	0		5.87	18.82	20	20	0.1	0.280	0.264	5.90	
2-Hexanone	1	0		6.30	17.70	20	20	0.1	0.208	0.185	11.50	
Tetrachloroethene	1	0		6.29	19.98	20	20	0.2	0.270	0.270	0.09	
Toluene-d8	1	0	S	5.95	29.87	30	**		1.174	1.169	0.44	
Toluene	1	0		5.99	19.55	20	20	0.4	0.792	0.774	2.27	
1,1,1,2-Tetrachloroethane	1	0		6.78	18.00	20	20		0.318	0.286	10.01	
Chlorobenzene	1	0		6.75	19.12	20	20	0.5	0.884	0.845	4.42	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	19.80	20	20	0.5	1.012	1.002	1.01	
n-Amyl acetate	1	0		7.11	18.94	20	20	0.5	0.891	0.844	5.29	
Bromoform	1	0		7.20	20.08	20	20	0.1	0.448	0.449	0.39	
Ethylbenzene	1	0		6.79	19.02	20	20	0.1	0.683	0.649	4.92	
1,1,2,2-Tetrachloroethane	1	0		7.42	18.09	20	20	0.1	0.803	0.726	9.57	
Bromofluorobenzene	1	0	S	7.37	30.49	30	**		0.788	0.801	1.65	
Styrene	1	0		7.07	19.84	20	20	0.3	1.714	1.700	0.80	
m&p-Xylenes	1	0		6.85	37.95	40	20	0.1	1.039	0.986	5.12	
o-Xylene	1	0		7.07	19.61	20	20	0.3	0.984	0.964	1.96	
trans-1,4-Dichloro-2-butene	1	0		7.44	23.07	20	20		0.190	0.219	15.34	
1,3-Dichlorobenzene	1	0		7.99	18.38	20	20	0.6	1.220	1.122	8.08	
1,4-Dichlorobenzene	1	0		8.03	18.10	20	20	0.5	1.249	1.130	9.48	
1,2-Dichlorobenzene	1	0		8.26	18.06	20	20	0.4	1.151	1.039	9.69	
Isopropylbenzene	1	0		7.26	20.04	20	20	0.1	2.399	2.404	0.19	
Cyclohexanone	1	0		7.34	109.02	100	20		0.021	0.023	9.02	
Camphene	1	0		7.43	18.44	20	20		0.708	0.653	7.82	
1,2,3-Trichloropropane	1	0		7.46	18.94	20	20		0.870	0.824	5.31	
2-Chlorotoluene	1	0		7.56	19.91	20	20		1.443	1.437	0.43	
p-Ethyltoluene	1	0		7.55	19.50	20	20		2.414	2.354	2.48	
4-Chlorotoluene	1	0		7.62	20.22	20	20		1.470	1.486	1.12	
n-Propylbenzene	1	0		7.49	19.70	20	20		2.888	2.845	1.48	
Bromobenzene	1	0		7.46	18.44	20	20		1.606	1.481	7.81	
1,3,5-Trimethylbenzene	1	0		7.57	19.66	20	20		1.870	1.838	1.70	
Butyl methacrylate	1	0		7.58	18.91	20	20	0.5	0.731	0.691	5.47	
t-Butylbenzene	1	0		7.78	19.72	20	20		1.825	1.799	1.39	
1,2,4-Trimethylbenzene	1	0		7.79	18.98	20	20		2.015	1.912	5.08	
sec-Butylbenzene	1	0		7.90	20.07	20	20		2.255	2.263	0.37	
4-Isopropyltoluene	1	0		7.96	19.84	20	20		1.915	1.900	0.80	
n-Butylbenzene	1	0		8.20	20.12	20	20		1.981	1.993	0.61	
p-Diethylbenzene	1	0		8.19	19.45	20	20		1.083	1.053	2.75	
1,2,4,5-Tetramethylbenzene	1	0		8.65	18.76	20	20		1.583	1.485	6.21	
1,2-Dibromo-3-Chloropropane	1	0		8.71	18.93	20	20	0.05	0.163	0.154	5.34	
Camphor	1	0		9.14	184.69	200	20		0.064	0.059	7.66	
Hexachlorobutadiene	1	0		9.28	19.15	20	20		0.248	0.238	4.26	
1,2,4-Trichlorobenzene	1	0		9.20	17.96	20	20	0.2	0.591	0.531	10.21	
1,2,3-Trichlorobenzene	1	0		9.50	17.48	20	20		0.490	0.429	12.59	
Naphthalene	1	0		9.36	16.21	20	20		1.646	1.334	18.97	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form 7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/7/2020 2:53:00 PData File: IIM83666.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.96	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.69	77.40	50	20	0.1	0.165	0.255	54.80	C1
Dichlorodifluoromethane	1	0		1.67	51.86	50	20	0.1	0.197	0.204	3.71	
Chloromethane	1	0		1.84	53.10	50	20	0.1	0.179	0.190	6.20	
Bromomethane	1	0		2.24	47.79	50	20	0.1	0.199	0.190	4.43	
Vinyl Chloride	1	0		1.94	60.00	50	20	0.1	0.198	0.237	20.01	
Chloroethane	1	0		2.33	56.13	50	20	0.1	0.155	0.174	12.25	
Trichlorofluoromethane	1	0		2.55	59.56	50	20	0.1	0.366	0.436	19.13	
Ethyl ether	1	0		2.77	41.38	50	20	0.5	0.142	0.117	17.24	
Furan	1	0		2.81	48.58	50	20	0.5	0.184	0.178	2.84	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.97	59.35	50	20	0.1	0.129	0.153	18.70	
Methylene Chloride	1	0		3.37	43.89	50	20	0.1	0.232	0.203	12.22	
Acrolein	1	0		2.89	222.42	250	20		0.025	0.022	11.03	
Acrylonitrile	1	0		3.57	43.52	50	20		0.062	0.054	12.97	
Iodomethane	1	0		3.12	45.12	50	20		0.187	0.228	9.75	
Acetone	1	0		3.01	199.01	250	20	0.1	0.052	0.042	20.40	
Carbon Disulfide	1	0		3.18	58.50	50	20	0.1	0.514	0.601	17.00	
t-Butyl Alcohol	1	0		3.43	192.00	250	20		0.022	0.017	23.20	C1
n-Hexane	1	0		3.81	65.72	50	20		0.155	0.204	31.44	C1
Di-isopropyl-ether	1	0		3.95	46.66	50	20		0.397	0.370	6.68	
1,1-Dichloroethene	1	0		2.98	57.65	50	20	0.1	0.215	0.248	15.30	
Methyl Acetate	1	0		3.28	41.23	50	20	0.1	0.116	0.095	17.53	
Methyl-t-butyl ether	1	0		3.59	42.84	50	20	0.1	0.492	0.422	14.32	
1,1-Dichloroethane	1	0		3.92	51.60	50	20	0.2	0.302	0.312	3.21	
trans-1,2-Dichloroethene	1	0		3.60	56.07	50	20	0.1	0.195	0.219	12.13	
Ethyl-t-butyl ether	1	0		4.19	43.73	50	20	0.5	0.476	0.416	12.55	
cis-1,2-Dichloroethene	1	0		4.31	51.36	50	20	0.1	0.299	0.307	2.72	
Bromochloromethane	1	0		4.45	46.46	50	20		0.136	0.126	7.08	
2,2-Dichloropropane	1	0		4.31	61.76	50	20		0.241	0.298	23.51	C1
Ethyl acetate	1	0		4.32	42.85	50	20		0.168	0.144	14.30	
1,4-Dioxane	1	0		5.33	2103.96	2500	20		0.004	0.003	15.84	
1,1-Dichloropropene	1	0		4.70	59.86	50	20		0.243	0.291	19.72	
Chloroform	1	0		4.49	50.78	50	20	0.2	0.357	0.362	1.56	
Dibromofluoromethane	1	0	S	4.58	30.94	75	**		0.274	0.283	3.12	
Cyclohexane	1	0		4.65	62.08	50	20	0.1	0.203	0.253	24.16	C1
1,2-Dichloroethane-d4	1	0	S	4.77	29.99	75	**		0.121	0.121	0.02	
1,2-Dichloroethane	1	0		4.82	44.76	50	20	0.1	0.270	0.242	10.49	
2-Butanone	1	0		4.30	43.33	50	20	0.1	0.070	0.061	13.33	
1,1,1-Trichloroethane	1	0		4.61	55.32	50	20	0.1	0.301	0.333	10.65	
Carbon Tetrachloride	1	0		4.71	59.71	50	20	0.1	0.268	0.320	19.42	
Vinyl Acetate	1	0		3.94	45.93	50	20		0.470	0.432	8.14	
Bromodichloromethane	1	0		5.41	46.92	50	20	0.2	0.295	0.277	6.15	
Methylcyclohexane	1	0		5.27	68.18	50	20	0.1	0.238	0.325	36.36	C1
Dibromomethane	1	0		5.34	47.23	50	20		0.164	0.155	5.54	
1,2-Dichloropropane	1	0		5.28	48.41	50	20	0.1	0.190	0.184	3.18	
Trichloroethene	1	0		5.15	57.19	50	20	0.2	0.228	0.261	14.37	
Benzene	1	0		4.82	53.33	50	20	0.5	0.767	0.818	6.66	
tert-Amyl methyl ether	1	0		4.85	43.48	50	20		0.509	0.443	13.05	
Chlorobenzene-d5	1	0	I	6.55	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.81	40.28	50	20	0.5	0.303	0.244	19.45	
Methyl methacrylate	1	0		5.30	37.22	50	20	0.5	0.151	0.113	25.55	C1
Dibromochloromethane	1	0		6.24	44.98	50	20	0.1	0.287	0.258	10.05	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/7/2020 2:53:00 P

Data File: IIM83666.D  
Method: EPA 8260D

Instrument: GCMS 11

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.54	41.11	50	20	0.033	0.028		17.78	
cis-1,3-Dichloropropene	1	0		5.64	47.03	50	20	0.2	0.356	0.335	5.94	
trans-1,3-Dichloropropene	1	0		5.92	45.70	50	20	0.1	0.331	0.303	8.59	
Ethyl methacrylate	1	0		5.94	42.87	50	20	0.5	0.144	0.124	14.26	
1,1,2-Trichloroethane	1	0		6.02	43.25	50	20	0.1	0.230	0.199	13.50	
1,2-Dibromoethane	1	0		6.31	45.38	50	20	0.1	0.242	0.220	9.23	
1,3-Dichloropropane	1	0		6.11	42.32	50	20		0.377	0.319	15.36	
4-Methyl-2-Pentanone	1	0		5.70	41.38	50	20	0.1	0.180	0.149	17.24	
2-Hexanone	1	0		6.12	40.78	50	20	0.1	0.134	0.109	18.45	
Tetrachloroethene	1	0		6.12	57.36	50	20	0.2	0.194	0.222	14.71	
Toluene-d8	1	0	S	5.79	29.68	75	**		1.168	1.155	1.05	
Toluene	1	0		5.82	50.59	50	20	0.4	0.569	0.575	1.19	
1,1,1,2-Tetrachloroethane	1	0		6.60	44.94	50	20		0.259	0.233	10.13	
Chlorobenzene	1	0		6.56	49.39	50	20	0.5	0.701	0.692	1.22	
1,4-Dichlorobenzene-d4	1	0	I	7.82	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.80	41.46	50	20	0.5	0.642	0.533	17.08	
n-Amyl acetate	1	0		6.91	34.56	50	20	0.5	0.542	0.411	30.87	C1
Bromoform	1	0		7.01	41.06	50	20	0.1	0.374	0.307	17.88	
Ethylbenzene	1	0		6.60	53.51	50	20	0.1	0.495	0.530	7.02	
1,1,2,2-Tetrachloroethane	1	0		7.22	42.25	50	20	0.1	0.545	0.461	15.51	
Bromofluorobenzene	1	0	S	7.17	28.83	75	**		0.781	0.751	3.92	
Styrene	1	0		6.88	45.64	50	20	0.3	1.385	1.264	8.73	
m&p-Xylenes	1	0		6.66	103.75	100	20	0.1	0.711	0.738	3.75	
o-Xylene	1	0		6.88	47.81	50	20	0.3	0.765	0.731	4.38	
trans-1,4-Dichloro-2-butene	1	0		7.24	52.08	50	20		0.169	0.176	4.16	
1,3-Dichlorobenzene	1	0		7.78	48.78	50	20	0.6	0.997	0.972	2.44	
1,4-Dichlorobenzene	1	0		7.83	50.11	50	20	0.5	0.965	0.967	0.22	
1,2-Dichlorobenzene	1	0		8.05	46.49	50	20	0.4	0.959	0.891	7.03	
Isopropylbenzene	1	0		7.07	51.70	50	20	0.1	1.873	1.937	3.41	
Cyclohexanone	1	0		7.14	209.93	250	20		0.018	0.015	16.03	
Camphene	1	0		7.24	61.57	50	20		0.554	0.682	23.14	C1
1,2,3-Trichloropropane	1	0		7.25	44.00	50	20		0.625	0.550	12.01	
2-Chlorotoluene	1	0		7.36	48.25	50	20		1.144	1.104	3.50	
p-Ethyltoluene	1	0		7.35	51.80	50	20		1.876	1.944	3.61	
4-Chlorotoluene	1	0		7.42	47.89	50	20		1.156	1.107	4.21	
n-Propylbenzene	1	0		7.29	55.64	50	20		2.025	2.253	11.27	
Bromobenzene	1	0		7.27	50.69	50	20		1.036	1.050	1.38	
1,3,5-Trimethylbenzene	1	0		7.38	50.70	50	20		1.533	1.555	1.39	
Butyl methacrylate	1	0		7.38	37.73	50	20	0.5	0.407	0.307	24.54	C1
t-Butylbenzene	1	0		7.57	49.37	50	20		1.642	1.621	1.26	
1,2,4-Trimethylbenzene	1	0		7.59	47.37	50	20		1.688	1.600	5.26	
sec-Butylbenzene	1	0		7.69	51.70	50	20		2.050	2.120	3.40	
4-Isopropyltoluene	1	0		7.76	57.83	50	20		1.772	1.835	15.66	
n-Butylbenzene	1	0		8.00	54.06	50	20		1.833	1.982	8.12	
p-Diethylbenzene	1	0		7.98	52.85	50	20		1.010	1.067	5.69	
1,2,4,5-Tetramethylbenzene	1	0		8.44	55.60	50	20		1.439	1.600	11.19	
1,2-Dibromo-3-Chloropropane	1	0		8.50	41.91	50	20	0.05	0.155	0.130	16.18	
Camphor	1	0		8.93	415.71	500	20		0.065	0.054	16.86	
Hexachlorobutadiene	1	0		9.07	63.68	50	20		0.265	0.338	27.35	C1
1,2,4-Trichlorobenzene	1	0		8.99	56.06	50	20	0.2	0.574	0.644	12.12	
1,2,3-Trichlorobenzene	1	0		9.29	52.29	50	20		0.542	0.567	4.58	
Naphthalene	1	0		9.15	47.09	50	20		1.648	1.552	5.82	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF



# Form 7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/9/2020 8:41:00 A

Data File: IM140329.D  
Method: EPA 8260D

Instrument: GCMS I

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.15	15.35	20	20	0.1	0.408	0.313	23.26	C1
Dichlorodifluoromethane	1	0		2.13	10.83	20	20	0.1	0.198	0.107	45.84	C1
Chloromethane	1	0		2.30	15.32	20	20	0.1	0.273	0.209	23.38	C1
Bromomethane	1	0		2.67	17.26	20	20	0.1	0.126	0.109	13.70	
Vinyl Chloride	1	0		2.39	17.35	20	20	0.1	0.221	0.192	13.27	
Chloroethane	1	0		2.74	22.44	20	20	0.1	0.130	0.146	12.22	
Trichlorofluoromethane	1	0		2.95	21.39	20	20	0.1	0.299	0.319	6.93	
Ethyl ether	1	0		3.17	20.98	20	20	0.5	0.142	0.149	4.90	
Furan	1	0		3.21	18.99	20	20	0.5	0.304	0.289	5.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.36	22.39	20	20	0.1	0.127	0.142	11.95	
Methylene Chloride	1	0		3.73	21.53	20	20	0.1	0.202	0.218	7.64	
Acrolein	1	0		3.28	109.29	100	20		0.032	0.035	9.29	
Acrylonitrile	1	0		3.93	22.69	20	20		0.088	0.100	13.43	
Iodomethane	1	0		3.50	17.05	20	20		0.232	0.198	14.76	
Acetone	1	0		3.39	103.61	100	20	0.1	0.079	0.082	3.61	
Carbon Disulfide	1	0		3.57	18.78	20	20	0.1	0.535	0.502	6.11	
t-Butyl Alcohol	1	0		3.80	124.57	100	20		0.022	0.028	24.57	C1
n-Hexane	1	0		4.17	21.67	20	20		0.173	0.188	8.36	
Di-isopropyl-ether	1	0		4.31	20.35	20	20		0.553	0.563	1.75	
1,1-Dichloroethene	1	0		3.37	20.26	20	20	0.1	0.261	0.265	1.32	
Methyl Acetate	1	0		3.64	22.46	20	20	0.1	0.170	0.191	12.28	
Methyl-t-butyl ether	1	0		3.96	24.30	20	20	0.1	0.458	0.557	21.52	C1
1,1-Dichloroethane	1	0		4.28	18.88	20	20	0.2	0.363	0.342	5.61	
trans-1,2-Dichloroethene	1	0		3.96	22.11	20	20	0.1	0.184	0.204	10.57	
Ethyl-t-butyl ether	1	0		4.56	20.85	20	20	0.5	0.509	0.531	4.24	
cis-1,2-Dichloroethene	1	0		4.66	20.12	20	20	0.1	0.351	0.353	0.58	
Bromochloromethane	1	0		4.81	17.61	20	20		0.211	0.186	11.96	
2,2-Dichloropropane	1	0		4.68	20.72	20	20		0.293	0.303	3.58	
Ethyl acetate	1	0		4.69	19.02	20	20		0.291	0.277	4.88	
1,4-Dioxane	1	0		5.73	1100.64	1000	20		0.004	0.004	10.06	
1,1-Dichloropropene	1	0		5.07	20.79	20	20		0.271	0.281	3.95	
Chloroform	1	0		4.85	20.12	20	20	0.2	0.374	0.376	0.59	
Dibromofluoromethane	1	0	S	4.94	30.53	30	**		0.280	0.285	1.78	
Cyclohexane	1	0		5.02	19.69	20	20	0.1	0.257	0.253	1.54	
1,2-Dichloroethane-d4	1	0	S	5.15	29.78	30	**		0.152	0.151	0.73	
1,2-Dichloroethane	1	0		5.19	20.88	20	20	0.1	0.299	0.313	4.40	
2-Butanone	1	0		4.69	20.33	20	20	0.1	0.219	0.223	1.64	
1,1,1-Trichloroethane	1	0		4.98	20.49	20	20	0.1	0.333	0.341	2.45	
Carbon Tetrachloride	1	0		5.08	20.40	20	20	0.1	0.299	0.305	2.02	
Vinyl Acetate	1	0		4.30	20.11	20	20		0.696	0.700	0.54	
Bromodichloromethane	1	0		5.81	20.21	20	20	0.2	0.293	0.296	1.07	
Methylcyclohexane	1	0		5.66	21.15	20	20	0.1	0.230	0.243	5.74	
Dibromomethane	1	0		5.73	21.42	20	20		0.166	0.177	7.12	
1,2-Dichloropropane	1	0		5.67	18.94	20	20	0.1	0.215	0.203	5.30	
Trichloroethene	1	0		5.54	20.37	20	20	0.2	0.231	0.235	1.86	
Benzene	1	0		5.19	19.71	20	20	0.5	0.790	0.779	1.45	
tert-Amyl methyl ether	1	0		5.24	21.74	20	20		0.485	0.527	8.69	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.19	17.69	20	20	0.5	0.435	0.385	11.53	
Methyl methacrylate	1	0		5.69	17.79	20	20	0.5	0.236	0.210	11.06	
Dibromochloromethane	1	0		6.67	17.55	20	20	0.1	0.283	0.248	12.23	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/9/2020 8:41:00 A

Data File: IM140329.D  
Method: EPA 8260D

Instrument: GCMS I

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.95	12.99	20	20	0.058	0.037	0.037	35.03	C1
cis-1,3-Dichloropropene	1	0		6.04	17.83	20	20	0.2	0.364	0.324	10.84	
trans-1,3-Dichloropropene	1	0		6.33	16.53	20	20	0.1	0.368	0.304	17.33	
Ethyl methacrylate	1	0		6.36	20.04	20	20	0.5	0.224	0.225	0.21	
1,1,2-Trichloroethane	1	0		6.44	17.86	20	20	0.1	0.234	0.209	10.71	
1,2-Dibromoethane	1	0		6.74	17.67	20	20	0.1	0.252	0.223	11.66	
1,3-Dichloropropane	1	0		6.54	17.45	20	20		0.399	0.348	12.76	
4-Methyl-2-Pentanone	1	0		6.11	18.22	20	20	0.1	0.270	0.246	8.89	
2-Hexanone	1	0		6.55	18.03	20	20	0.1	0.205	0.185	9.83	
Tetrachloroethene	1	0		6.54	19.38	20	20	0.2	0.216	0.210	3.08	
Toluene-d8	1	0	S	6.20	27.28	30	**		1.212	1.102	9.06	
Toluene	1	0		6.24	17.93	20	20	0.4	0.593	0.532	10.34	
1,1,1,2-Tetrachloroethane	1	0		7.04	17.65	20	20		0.257	0.227	11.75	
Chlorobenzene	1	0		7.00	18.78	20	20	0.5	0.692	0.650	6.10	
1,4-Dichlorobenzene-d4	1	0	I	8.28	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	16.49	20	20	0.5	0.774	0.638	17.54	
n-Amyl acetate	1	0		7.37	16.37	20	20	0.5	0.755	0.618	18.14	
Bromoform	1	0		7.46	16.00	20	20	0.1	0.368	0.294	20.02	
Ethylbenzene	1	0		7.05	16.98	20	20	0.1	0.477	0.405	15.10	
1,1,2,2-Tetrachloroethane	1	0		7.67	15.53	20	20	0.1	0.592	0.460	22.33	C1
Bromofluorobenzene	1	0	S	7.62	31.36	30	**		0.756	0.790	4.52	
Styrene	1	0		7.33	18.56	20	20	0.3	1.139	1.057	7.20	
m&p-Xylenes	1	0		7.11	38.62	40	20	0.1	0.640	0.618	3.44	
o-Xylene	1	0		7.33	18.55	20	20	0.3	0.655	0.608	7.24	
trans-1,4-Dichloro-2-butene	1	0		7.70	15.89	20	20		0.225	0.179	20.53	C1
1,3-Dichlorobenzene	1	0		8.25	17.40	20	20	0.6	0.985	0.857	13.00	
1,4-Dichlorobenzene	1	0		8.30	17.48	20	20	0.5	1.032	0.902	12.62	
1,2-Dichlorobenzene	1	0		8.52	17.14	20	20	0.4	0.973	0.834	14.30	
Isopropylbenzene	1	0		7.53	18.73	20	20	0.1	1.650	1.545	6.37	
Cyclohexanone	1	0		7.60	94.33	100	20		0.021	0.019	5.67	
Camphene	1	0		7.70	17.77	20	20		0.481	0.427	11.15	
1,2,3-Trichloropropane	1	0		7.71	15.29	20	20		0.742	0.567	23.56	C1
2-Chlorotoluene	1	0		7.82	17.10	20	20		1.147	0.980	14.50	
p-Ethyltoluene	1	0		7.81	18.51	20	20		1.746	1.617	7.43	
4-Chlorotoluene	1	0		7.88	17.00	20	20		1.152	0.979	15.01	
n-Propylbenzene	1	0		7.75	17.54	20	20		2.092	1.834	12.31	
Bromobenzene	1	0		7.73	17.00	20	20		1.158	0.984	15.00	
1,3,5-Trimethylbenzene	1	0		7.84	17.58	20	20		1.477	1.299	12.10	
Butyl methacrylate	1	0		7.85	16.98	20	20	0.5	0.566	0.480	15.10	
t-Butylbenzene	1	0		8.04	18.22	20	20		1.397	1.272	8.92	
1,2,4-Trimethylbenzene	1	0		8.06	17.88	20	20		1.535	1.372	10.62	
sec-Butylbenzene	1	0		8.16	17.97	20	20		1.744	1.566	10.17	
4-Isopropyltoluene	1	0		8.23	18.71	20	20		1.522	1.424	6.47	
n-Butylbenzene	1	0		8.47	17.52	20	20		1.717	1.505	12.38	
p-Diethylbenzene	1	0		8.45	18.33	20	20		0.874	0.801	8.35	
1,2,4,5-Tetramethylbenzene	1	0		8.91	14.86	20	20		1.287	1.264	25.71	C1
1,2-Dibromo-3-Chloropropane	1	0		8.97	15.76	20	20	0.05	0.164	0.129	21.21	C1
Camphor	1	0		9.41	133.20	200	20		0.064	0.057	33.40	C1
Hexachlorobutadiene	1	0		9.55	18.36	20	20		0.291	0.267	8.21	
1,2,4-Trichlorobenzene	1	0		9.46	18.39	20	20	0.2	0.631	0.580	8.03	
1,2,3-Trichlorobenzene	1	0		9.76	17.58	20	20		0.582	0.511	12.09	
Naphthalene	1	0		9.62	18.52	20	20		1.622	1.502	7.40	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 1M139264.D

Analysis Date/Time: 09/09/20 20:51

Method: EPA 8260D

Lab File ID: CAL @ 20 PPB

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	340053	5.34	291274	6.99	188560	8.28								
Eval File Area Limit:	170026-680106		145637-582548		94280-377120									
Eval File RI Limit:	4.84-5.84		6.49-7.49		7.78-8.78									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M139258.D	BLK	305672	5.34	266592	6.99	149667	8.28						
1M139260.D	CAL @ 0.5 PPB	308077	5.34	265447	6.99	151034	8.28						
1M139261.D	CAL @ 1 PPB	306556	5.34	272359	6.99	154590	8.28						
1M139262.D	CAL @ 5 PPB	326134	5.34	278828	6.99	174032	8.28						
1M139263.D	CAL @ 10 PPB	333407	5.34	281542	6.99	179860	8.28						
1M139264.D	CAL @ 20 PPB	340053	5.34	291274	6.99	188560	8.28						
1M139266.D	CAL @ 50 PPB	344963	5.34	296582	6.99	195857	8.28						
1M139268.D	CAL @ 500 PPB	338072	5.34	353086	6.99	227068	8.28						
1M139271.D	CAL @ 250 PPB	350686	5.34	335254	6.99	221713	8.28						
1M139272.D	BLK	377940	5.34	320880	6.99	196577	8.28						
1M139274.D	CAL @ 100 PPB	352301	5.34	314499	6.99	208956	8.28						
1M139275.D	BLK	356564	5.34	308564	6.99	186298	8.28						
1M139279.D	ICV	314855	5.34	270761	6.99	174786	8.28						

11 =	Fluorobenzene	14 =		17 =	
12 =	Chlorobenzene-d5	15 =			
13 =	1,4-Dichlorobenzene-d4	16 =			

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
624/8260 Internal Standard concentration = 30ug/L  
524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.      A - Indicates the compound failed the internal standard area criteria  
Lower Limit = - 50% of internal standard area from daily cal or mid pt.      R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Sid Data File: 2M142492.D

Method: EPA 8260D

Analysis Date/Time: 09/29/20 16:47

Lab File ID: CAL @ 20 PPB

	11	12	13	14	15	16	17
Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	359594 5.10	324303 6.73	173285 8.02				
Eval File Area Limit:	179797-719188	162152-648606	86642-346570				
Eval File RT Limit:	4.6-5.6	6.23-7.23	7.52-8.52				

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
2M142487.D	CAL @ 0.5 PPB	346417	5.10	307168	6.73	160675	8.02						
2M142488.D	CAL @ 1 PPB	387579	5.10	349135	6.73	180533	8.02						
2M142489.D	CAL @ 5 PPB	340498	5.10	303983	6.73	159994	8.02						
2M142490.D	CAL @ 10 PPB	387191	5.10	348044	6.73	187417	8.02						
2M142492.D	CAL @ 20 PPB	359594	5.10	324303	6.73	173285	8.02						
2M142494.D	CAL @ 50 PPB	341318	5.10	313870	6.73	172876	8.02						
2M142496.D	CAL @ 100 PPB	347100	5.10	321317	6.73	178964	8.02						
2M142499.D	CAL @ 250 PPB	354579	5.10	343475	6.73	250266	8.02						
2M142502.D	CAL @ 500 PPB	378988	5.10	368525	6.73	177011	8.03						
2M142508.D	ICV	379486	5.10	341026	6.73	179492	8.02						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.      A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.      R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

# FORM 8

## Internal Standard Areas

Evaluation Std Data File: 11M83453.D

Method: EPA 8260D

Analysis Date/Time: 10/02/20 00:28

Lab File ID: CAL @ 20 PPB

Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
241698	4.96	214415	6.55	121290	7.82									
Eval File Area Limit:	120849-483396	107208-428830	60645-242580											
Eval File RT Limit:	4.46-5.46	6.05-7.05	7.32-8.32											

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83449.D	CAL @ 0.5 PPB	225010	4.96	202665	6.55	106100	7.82						
11M83450.D	CAL @ 1 PPB	227670	4.96	204456	6.55	109900	7.82						
11M83451.D	CAL @ 2 PPB	264716	4.96	236604	6.55	128178	7.82						
11M83452.D	CAL @ 5 PPB	230105	4.96	201576	6.55	110869	7.82						
11M83453.D	CAL @ 20 PPB	241698	4.96	214415	6.55	121290	7.82						
11M83454.D	CAL @ 50 PPB	251381	4.96	220421	6.55	126683	7.82						
11M83455.D	CAL @ 500 PPB	275116	4.96	260652	6.55	202580	7.82						
11M83457.D	CAL @ 250 PPB	314104	4.96	293440	6.55	233465	7.82						
11M83459.D	CAL @ 100 PPB	312064	4.96	282451	6.55	171215	7.82						
11M83462.D	ICV	254865	4.96	228436	6.55	133657	7.82						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

### Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

### Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

### Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M83550.D

Analysis Date/Time: 10/05/20 15:44

Lab File ID: CAL @ 50 PPB

Method: EPA 8260D

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	11	12	13	14	15	16	17
Area	RT	Area	RT	Area	RT	Area	RT
288431	4.96	261680	6.55	152295	7.82		
Eval File Area Limit: 144216-576862 130840-523360 76148-304590							
Eval File RT Limit: 4.46-5.46 6.05-7.05 7.32-8.32							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83549.D	50 PPB	307952	4.96	279502	6.55	168515	7.82						
11M83551.D	BLK	297479	4.96	273504	6.55	153365	7.82						
11M83552.D	BLK	285931	4.96	258440	6.55	142918	7.82						
11M83553.D	DAILY BLANK	276519	4.96	256924	6.55	138354	7.82						
11M83554.D	AD19581-007	276421	4.96	252657	6.55	129324	7.82						
11M83555.D	AD19581-011(5X)	261963	4.96	245173	6.55	314729	7.82						
11M83556.D	AD19581-007(MS)	315917	4.96	289205	6.55	167104	7.82						
11M83557.D	AD19562-003(MS:AD)	299710	4.96	271756	6.55	153834	7.82						
11M83558.D	AD19581-011(5X)	270001	4.96	257839	6.55	275456	7.82						
11M83559.D	AD19542-001	197745	4.96	182359	6.55	60369	7.82						
11M83560.D	AD19562-005(MSD:A)	312196	4.96	285172	6.55	162653	7.82						
11M83561.D	MBS89425	315315	4.96	288487	6.55	171108	7.82						
11M83562.D	BLK	304935	4.96	284172	6.55	165016	7.82						
11M83563.D	BLK	292847	4.96	273043	6.55	152060	7.82						
11M83564.D	AD19562-001	284656	4.96	264460	6.55	143559	7.82						
11M83565.D	AD19562-007	270382	4.96	248178	6.55	129957	7.82						
11M83566.D	AD19587-001	248139	4.96	204925	6.55	82035	7.82						
11M83567.D	AD19587-002	256197	4.96	208266	6.55	93038	7.82						
11M83568.D	AD19587-003	253022	4.96	219886	6.55	101443	7.82						
11M83569.D	AD19587-004	238721	4.96	217161	6.55	111924	7.82						
11M83570.D	AD19587-005	271423	4.96	252769	6.55	135507	7.82						
11M83571.D	AD19587-006	250199	4.96	204432	6.55	81526	7.82						
11M83572.D	AD19582-002	241452	4.96	209979	6.55	92504	7.82						
11M83573.D	AD19563-001	263895	4.96	250970	6.55	132801	7.81						
11M83574.D	AD19563-003	263292	4.96	248823	6.55	133905	7.82						
11M83575.D	AD19563-005	262499	4.96	248223	6.55	134014	7.82						
11M83576.D	AD19563-007	246509	4.96	207519	6.55	87142	7.82						
11M83577.D	AD19539-012	268922	4.96	262789	6.55	145874	7.82						
11M83578.D	AD19539-009	261446	4.96	253774	6.55	139735	7.82						
11M83579.D	AD19542-001	241663	4.96	198113	6.55	81097	7.82						
11M83580.D	AD19560-002	253608	4.96	235791	6.55	129363	7.82						
11M83581.D	AD19581-007(MSD)	258778	4.96	234070	6.55	124170	7.82						

11 =	Fluorobenzene	14 =	629/8270 Internal Standard concentration = 40 µg/L (in final extract)
12 =	Chlorobenzene-d5	15 =	624/8260 Internal Standard concentration = 30µg/L
13 =	1,4-Dichlorobenzene-d4	16 =	524 Internal Standard concentration =5µg/L
		17 =	

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria  
R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 11M83550.D

Analysis Date/Time: 10/05/20 15:44

Method: EPA 8260D

Lab File ID: CAL @ 50 PPB

Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
288431	4.96	261680	6.55	152295	7.82									
Eval File Area Limit:	144216-576862	130840-523360	76148-304590											
Eval File Rt Limit:	4.46-5.46	6.05-7.05	7.32-8.32											

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83582.D	MBS89431	244203	4.96	218970	6.55	127236	7.82						
11M83583.D	BLK	265453	4.96	248665	6.55	135439	7.82						
11M83584.D	BLK	255466	4.96	242308	6.55	131383	7.82						
11M83585.D	BLK	259216	4.96	240667	6.55	132058	7.82						
11M83586.D	BLK	250914	4.96	236313	6.55	130026	7.82						
11M83587.D	BLK	250121	4.96	240216	6.55	130585	7.82						
11M83588.D	BLK	243444	4.96	229125	6.55	126705	7.82						

11 =	Fluorobenzene	14 =	17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30mg/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration = 5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.      A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.      R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria  
 R - Indicates the compound failed the internal standard retention time criteria.

# FORM8

Internal Standard Areas

Evaluation Std Data File: 1M140087.D

Analysis Date/Time: 10/05/20 14:58

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

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Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
379941	5.34	360349	6.99	247858	8.28									
189970-759882		180174-720698		123929-495716										
Eval File Area Limit:	4.84-5.84	6.49-7.49	7.78-8.78											
Eval File RI Limit:														

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140086.D	20 PPB	371762	5.33	354936	6.99	241965	8.28						
1M140088.D	BLK-HCL(100520)	371437	5.34	373935	6.99	235485	8.28						
1M140089.D	BLK	361216	5.34	356381	6.99	234676	8.28						
1M140090.D	BLK	459348	5.34	452011	6.99	279037	8.28						
1M140091.D	BLK	390131	5.34	396094	6.99	257297	8.28						
1M140092.D	DAILY BLANK	353375	5.34	351678	6.99	213944	8.28						
1M140093.D	DAILY BLANK	332905	5.34	338178	6.99	201374	8.28						
1M140094.D	AD19539-001	349770	5.34	358749	6.99	214156	8.28						
1M140095.D	AD19529-001	353099	5.34	360707	6.99	222424	8.28						
1M140096.D	AD19565-009	360235	5.34	373973	6.99	229398	8.28						
1M140097.D	AD19565-016	356515	5.34	367947	6.99	224160	8.28						
1M140098.D	AD19498-001	349818	5.34	368362	6.99	258592	8.28						
1M140099.D	AD19539-014(80uL)	409571	5.34	394482	6.99	274479	8.28						
1M140100.D	AD19539-017(8uL)	436615	5.34	436752	6.99	291582	8.28						
1M140101.D	MBS89426	391629	5.34	382201	6.99	255418	8.28						
1M140102.D	MBS89427	409583	5.34	398532	6.99	263454	8.28						
1M140103.D	AD19539-009(MS)	363233	5.33	354304	6.99	236277	8.28						
1M140104.D	AD19539-009(MSD)	399146	5.34	394652	6.99	267918	8.28						
1M140105.D	AD19565-016(MS)	378094	5.34	368794	6.99	247766	8.28						
1M140106.D	AD19565-016(MSD)	397116	5.34	387688	6.99	261784	8.28						
1M140107.D	AD19539-009	360979	5.33	366601	6.99	236328	8.28						
1M140108.D	BLK	374438	5.34	380893	6.99	238275	8.28						
1M140109.D	AD19580-007	360403	5.34	367502	6.99	233091	8.28						
1M140110.D	AD19566-002	364334	5.34	369289	6.99	233016	8.28						
1M140111.D	AD19539-011	341114	5.33	344261	6.99	214777	8.28						
1M140112.D	AD19539-010	357889	5.33	365452	6.99	226760	8.28						
1M140113.D	AD19539-016	366634	5.34	376528	6.99	235266	8.28						
1M140114.D	AD19539-013	374881	5.34	375199	6.99	242179	8.28						
1M140115.D	AD19539-015	364536	5.33	373886	6.99	234446	8.28						
1M140116.D	AD19539-008	377349	5.33	385589	6.99	239502	8.28						
1M140117.D	AD19539-007	366836	5.33	388012	6.99	242667	8.28						
1M140118.D	AD19539-006	368826	5.33	381945	6.99	255540	8.28						

11 = Fluorobenzene  
 12 = Chlorobenzene-d5  
 13 = 1,4-Dichlorobenzene-d4  
 14 =  
 15 =  
 16 =  
 17 =  
 625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
 624/8260 Internal Standard concentration = 30ug/L  
 524 Internal Standard concentration = 5ug/L

### Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt. A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt. R - Indicates the compound failed the internal standard retention time criteria.

### Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 1M140087.D

Method: EPA 8260D

Analysis Date/Time: 10/05/20 14:58

Lab File ID: CAL @ 20 PPB

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
379941	5.34	360349	6.99	247858	8.28									
Eval File Area Limit:	189970-759882	180174-720698	123929-495716											
Eval File RT Limit:	4.84-5.84	6.49-7.49	7.78-8.78											

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140119.D	AD19581-011	376889	5.33	385799	6.99	265302	8.28						
1M140120.D	AD19596-002	393638	5.33	390484	6.99	262948	8.28						
1M140121.D	AD19581-003	379297	5.34	385786	6.99	296836	8.28						
1M140122.D	AD19587-007	384503	5.33	378394	6.99	258299	8.28						

11 =	Fluorobenzene	14 =		17 =	6258270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			6248260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria  
 R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 11M83597.D

Analysis Date/Time: 10/06/20 09:54

Method: EPA 8260D

Lab File ID: CAL @ 50 PPB

	11	12	13	14	15	16	17
Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	274668	4.96	256039	6.55	149814	7.82	
Eval File Area Limit:	137334-549336		128020-512078		74907-299628		
Eval File RT Limit:	4.46-5.46		6.05-7.05		7.32-8.32		

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83599.D	BLK	264297	4.96	249887	6.55	139567	7.82						
11M83600.D	BLK	259663	4.96	250106	6.55	138737	7.82						
11M83601.D	DAILY BLANK	252434	4.96	239899	6.55	131022	7.82						
11M83602.D	AD19539-011	208366	4.96	205409	6.55	111535	7.82						
11M83603.D	AD19539-015	290760	4.96	239131	6.55	132671	7.82						
11M83604.D	AD19539-016	238664	4.96	231918	6.55	128450	7.82						
11M83605.D	MBS89437	269316	4.96	246135	6.55	147526	7.82						
11M83606.D	AD19581-008(MS)	263925	4.96	234051	6.55	118878	7.82						
11M83607.D	AD19581-008(MSD)	267583	4.96	243444	6.55	131072	7.82						
11M83608.D	BLK	265949	4.96	252299	6.55	138917	7.82						
11M83609.D	AD19517-003	259549	4.96	239609	6.55	128671	7.81						
11M83610.D	AD19581-008	246141	4.96	231371	6.55	127311	7.82						
11M83611.D	AD19563-009	249857	4.96	236047	6.55	130277	7.82						
11M83612.D	AD19563-011	257779	4.96	246286	6.55	136374	7.82						
11M83613.D	AD19563-013	251043	4.96	238526	6.55	130253	7.82						
11M83614.D	AD19563-015	248269	4.96	232789	6.55	126943	7.82						
11M83615.D	AD19563-017	241260	4.96	217158	6.55	104705	7.82						
11M83616.D	AD19563-019	255105	4.96	241275	6.55	131568	7.82						
11M83617.D	AD19563-027	241743	4.96	203994	6.55	88947	7.82						
11M83618.D	AD19563-029	269858	4.96	216924	6.55	113462	7.82						
11M83619.D	AD19563-031	238333	4.96	223593	6.55	109488	7.82						
11M83620.D	AD19563-033	250087	4.96	241367	6.55	133038	7.82						
11M83621.D	AD19563-035	252896	4.96	241104	6.55	131558	7.82						
11M83622.D	AD19563-037	254731	4.96	242719	6.55	135064	7.82						
11M83623.D	AD19539-007	265333	4.96	367130	6.56	170526	7.82						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 2M142814.D

Method: EPA 8260D

Analysis Date/Time: 10/07/20 09:39

Lab File ID: CAL @ 20 PPB

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Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
305260	5.10	282161	6.73	161033	8.02								
Eval File Area Limit: 152630-610520		141080-564322		80516-322066									
Eval File RI Limit: 4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
2M142815.D	20 PPB	325262	5.10	303747	6.73	162826	8.02						
2M142816.D	BLK	319931	5.10	296377	6.73	151166	8.02						
2M142817.D	DAILY BLANK	368054	5.10	343626	6.73	177124	8.02						
2M142818.D	DAILY BLANK	313133	5.10	299213	6.73	153563	8.02						
2M142819.D	BLK	319240	5.10	307175	6.73	159368	8.02						
2M142820.D	AD19447-014	342482	5.10	326738	6.73	171184	8.02						
2M142821.D	AD19447-015	355675	5.10	339963	6.73	176616	8.02						
2M142822.D	AD19539-002	322516	5.10	333602	6.73	155373	8.02						
2M142823.D	AD19539-003	323833	5.10	339926	6.73	162807	8.02						
2M142824.D	STD	316589	5.10	299401	6.73	167552	8.02						
2M142825.D	BLK	301374	5.10	282639	6.73	148428	8.02						
2M142826.D	BLK	316742	5.10	300197	6.73	153700	8.02						
2M142827.D	AD19614-001	304578	5.10	290782	6.73	150036	8.02						
2M142828.D	AD19574-001	305441	5.10	291683	6.73	150153	8.02						
2M142829.D	MBS89447	321013	5.10	303561	6.73	160243	8.02						
2M142830.D	MBS89448	325919	5.10	308522	6.73	169403	8.02						
2M142831.D	AD19574-001(MS)	320689	5.10	302649	6.73	165420	8.02						
2M142832.D	AD19574-001(MSD)	334750	5.10	313234	6.73	170785	8.02						
2M142833.D	AD19587-005(MS)	306379	5.09	289065	6.73	160119	8.02						
2M142834.D	AD19587-005(MSD)	335972	5.09	314449	6.73	175000	8.02						
2M142835.D	BLK	355372	5.10	335075	6.73	169886	8.02						
2M142836.D	BLK	350008	5.10	337111	6.73	175339	8.02						
2M142837.D	AD19572-003	355696	5.10	333947	6.73	178196	8.02						
2M142838.D	AD19572-004	330631	5.10	313597	6.73	161251	8.02						
2M142839.D	AD19574-002	334465	5.10	318290	6.73	164125	8.02						
2M142840.D	AD19574-003	325830	5.10	307859	6.73	160010	8.02						
2M142841.D	AD19539-002(SX)	331281	5.10	317809	6.73	159324	8.02						
2M142842.D	AD19539-003(SX)	331837	5.10	318850	6.73	163751	8.02						
2M142843.D	AD19539-004(SX)	330541	5.10	320747	6.73	162666	8.02						
2M142844.D	AD19539-005(SX)	326935	5.10	312274	6.73	158682	8.02						
2M142845.D	AD19587-005	311807	5.09	296955	6.73	156465	8.02						
2M142846.D	AD19568-003	326052	5.10	304737	6.73	163290	8.02						

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	
13 =	1,4-Dichlorobenzene-d4	16 =	
			625/8270 Internal Standard concentration = 40 mg/L (in final extract)
			624/8260 Internal Standard concentration = 30ug/L
			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

**Flags:**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

A - Indicates the compound failed the internal standard area criteria

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 2M142814.D

Analysis Date/Time: 10/07/20 09:39

Method: EPA 8260D

Lab File ID: CAL @ 20 PPB

	11	12	13	14	15	16	17
Area	RT	Area	RT	Area	RT	Area	RT
305260	5.10	282161	6.73	161033	8.02		
Eval File Area Limit:	152630-610520	141080-564322	80516-322066				
Eval File RI Limit:	4.6-5.6	6.23-7.23	7.52-8.52				

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
2M142847.D	AD19570-005(50X)	372691	5.10	353034	6.73	188367	8.02				
2M142848.D	AD19570-001(100X)	338415	5.10	316238	6.73	169898	8.02				
2M142849.D	19662-002(50X)	353952	5.10	331046	6.73	172840	8.02				

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M83666.D

Analysis Date/Time: 10/07/20 14:53

Lab File ID: CAL @ 50 PPB

Method: EPA 8260D

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
256403	4.96	240316	6.55	141403	7.82									
Eval File Area Limit:	128202-512806	120158-480632	70702-282806											
Eval File RT Limit:	4.46-5.46	6.05-7.05	7.32-8.32											

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83667.D	50 PPB	273669	4.96	251687	6.55	148954	7.82								
11M83669.D	BLK	267828	4.96	252384	6.55	142075	7.82								
11M83670.D	DAILY BLANK	264550	4.96	248803	6.55	139211	7.82								
11M83671.D	BLK	254824	4.96	238901	6.55	134470	7.82								
11M83672.D	AD19539-007	246624	4.96	332045	6.56	163515	7.82								
11M83673.D	AD19612-003(MS)	286293	4.96	270414	6.55	162257	7.82								
11M83674.D	AD19612-003(MSD)	326742	4.96	269333	6.55	163163	7.82								
11M83675.D	MBS89452	288441	4.96	265471	6.55	159521	7.82								
11M83676.D	BLK	264746	4.96	255133	6.55	144963	7.82								
11M83677.D	AD19612-001	265194	4.96	255722	6.55	145282	7.82								
11M83678.D	AD19612-002	260942	4.96	249648	6.55	141763	7.82								
11M83679.D	AD19612-003	256707	4.96	240582	6.55	136246	7.82								
11M83680.D	AD19551-002	251761	4.96	238943	6.55	129597	7.82								
11M83681.D	AD19551-001	227539	4.96	199697	6.55	88127	7.82								
11M83682.D	AD19618-002	237276	4.96	222664	6.55	117017	7.82								
11M83683.D	AD19618-004	231968	4.96	215359	6.55	111252	7.82								
11M83684.D	AD19618-006	224946	4.96	199073	6.55	86544	7.82								
11M83685.D	AD19618-008	218746	4.96	196090	6.55	102705	7.82								
11M83686.D	AD19618-010	277994	4.96	232201	6.55	85393	7.82								
11M83687.D	AD19618-012	236269	4.96	220894	6.55	115822	7.82								
11M83688.D	AD19618-014	235756	4.96	221836	6.55	123628	7.82								
11M83689.D	AD19618-016	198932	4.96	183150	6.55	91276	7.82								
11M83690.D	19595-003	227079	4.96	215215	6.55	117395	7.82								
11M83691.D	19595-009	219855	4.96	208682	6.55	117134	7.82								
11M83692.D	19595-010	243044	4.96	234193	6.55	131295	7.82								
11M83693.D	19695-001	244282	4.96	227059	6.55	127433	7.82								
11M83694.D	19595-005	259096	4.96	250879	6.55	136261	7.82								
11M83695.D	19619-001	236335	4.96	227745	6.55	127635	7.82								
11M83696.D	AD19619-002	245467	4.96	230332	6.55	125498	7.82								
11M83697.D	AD19620-001	220685	4.96	204978	6.55	98656	7.82								
11M83698.D	AD19581-003(5X)	249115	4.96	247263	6.55	274212	7.82								
11M83699.D	AD19581-001(5X)	269928	4.96	443536	6.55	172913	7.80								

11 = Fluorobenzene	14 =	17 =
12 = Chlorobenzene-d5	15 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
13 = 1,4-Dichlorobenzene-d4	16 =	624/8260 Internal Standard concentration = 30ug/L
		524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 11M83666.D

Analysis Date/Time: 10/07/20 14:53

Method: EPA 8260D

Lab File ID: CAL @ 50 PPB

	11	12	13	14	15	16	17
Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	256403 4.96	240316 6.55	141403 7.82				
Eval File Area Limit:	128202-512806	120158-480632	70702-282806				
Eval File RT Limit:	4.46-5.46	6.05-7.05	7.32-8.32				

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11M83700.D	AD19581-001(5X)	282786	4.96	463380	6.55	152703	7.80						
11M83701.D	AD19581-003(5X)	488744	4.96	514286	6.55	52941	7.81						
11M83702.D	BLK	493767	4.96	451709	6.55	280807	7.82						
11M83703.D	BLK	391473	4.96	379217	6.55	239111	7.82						
11M83704.D	BLK	382089	4.96	372721	6.55	227474	7.82						
11M83705.D	BLK	366285	4.96	359600	6.55	218976	7.82						
11M83706.D	BLK	362568	4.96	346462	6.55	213175	7.82						
11M83707.D	BLK	344867	4.96	331811	6.55	202162	7.82						
11M83708.D	BLK	346400	4.96	334769	6.55	202995	7.82						
11M83709.D	BLK	332792	4.96	320863	6.55	194704	7.82						
11M83710.D	BLK	342535	4.96	331178	6.55	202028	7.82						
11M83711.D	BLK	329583	4.96	321879	6.55	195030	7.82						
11M83712.D	BLK	324643	4.96	313290	6.55	187923	7.82						
11M83713.D	BLK	330463	4.96	318612	6.55	193322	7.82						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.      A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.      R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 1M140329.D

Analysis Date/Time: 10/09/20 08:41

Method: EPA 8260D

Lab File ID: CAL @ 20 PPB

	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	
382262	5.34	387438	6.99	263399	8.28									
Eval File Area Limit: 191131-764524 193719-774876 131700-526798														
Eval File RI Limit: 4.84-5.84 6.49-7.49 7.78-8.78														

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140328.D	20 PPB	412075	5.34	447412	6.99	305725	8.28						
1M140330.D	BLK	371150	5.34	399836	6.99	258045	8.28						
1M140331.D	BLK	374870	5.34	393036	6.99	254771	8.28						
1M140332.D	DAILY BLANK	374548	5.34	398073	6.99	259481	8.28						
1M140333.D	DAILY BLANK	365030	5.34	396377	6.99	254182	8.28						
1M140334.D	AD19654-001	365186	5.34	398400	6.99	254222	8.28						
1M140335.D	AD19616-001	401236	5.34	418046	6.99	265313	8.28						
1M140336.D	AD19539-012(400uL)	364335	5.34	383680	6.99	244935	8.28						
1M140337.D	AD19539-014(40uL)	378004	5.34	401823	6.99	265203	8.28						
1M140338.D	MBS89475	379647	5.34	385156	6.99	270019	8.28						
1M140339.D	MBS89476	393888	5.34	396711	6.99	274785	8.28						
1M140340.D	AD19598-012	381486	5.34	389506	6.99	261826	8.28						
1M140341.D	AD19539-012	357563	5.33	379066	6.99	250948	8.28						
1M140342.D	AD19595-002	349551	5.33	374999	6.99	258756	8.28						
1M140343.D	AD19595-004	378849	5.33	407191	6.99	275813	8.28						
1M140344.D	19595-007	352612	5.34	376087	6.99	250133	8.28						
1M140345.D	AD19595-006	374082	5.34	397321	6.99	257473	8.28						
1M140346.D	AD19595-012	373395	5.34	392590	6.99	258244	8.28						
1M140347.D	AD19616-002(MS:AD)	407471	5.34	409067	6.99	278279	8.28						
1M140348.D	AD19616-003(MSD:A)	388621	5.34	397424	6.99	271295	8.28						
1M140349.D	AD19654-001(MS)	341378	5.33	349474	6.99	247612	8.28						
1M140350.D	AD19654-001(MSD)	372473	5.33	380560	6.99	271819	8.28						
1M140351.D	BLK	365607	5.34	389861	6.99	253733	8.28						
1M140352.D	BLK	377406	5.34	401212	6.99	260557	8.28						
1M140353.D	AD19592-002	399962	5.34	423279	6.99	274224	8.28						
1M140354.D	AD19592-003	366475	5.34	390483	6.99	251481	8.28						
1M140355.D	AD19591-003	366099	5.34	389312	6.99	251903	8.28						
1M140356.D	AD19591-004	369116	5.34	394417	6.99	253559	8.28						
1M140357.D	AD19616-006	368403	5.34	388890	6.99	249538	8.28						
1M140358.D	AD19592-001	363436	5.34	386666	6.99	251611	8.28						
1M140359.D	AD19593-001	55851	5.34	149121	6.99	112729	8.28						
1M140360.D	AD19593-003	391204	5.34	401863	6.99	279600	8.28						

11 =	Fluorobenzene	14 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =	624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =	524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt. A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt. R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 1M140329.D

Method: EPA 8260D

Analysis Date/Time: 10/09/20 08:41

Lab File ID: CAL @ 20 PPB

2225  
2224  
2223  
2222  
2221  
2220

Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
11		12		13		14		15		16		17	
382262	5.34	387438	6.99	263399	8.28								
Eval File Area Limit:		191131-764524		193719-774876		131700-526798							
Eval File RT Limit:		4.84-5.84		6.49-7.49		7.78-8.78							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140361.D	AD19616-004	374919	5.34	391436	6.99	264870	8.28						
1M140362.D	AD19616-005	365605	5.34	386611	6.99	251362	8.28						
1M140363.D	19517-004	352171	5.34	397837	6.99	153009	8.28						
1M140364.D	MBS89482	418210	5.34	416938	6.99	306562	8.28						
1M140365.D	BLK	396585	5.34	414870	6.99	283250	8.28						
1M140366.D	BLK	397222	5.34	421405	6.99	285106	8.28						
1M140367.D	BLK	392750	5.34	419086	6.99	283002	8.28						
1M140368.D	BLK	405384	5.34	434109	6.99	285332	8.28						
1M140369.D	BLK	397998	5.34	423241	6.99	282317	8.28						
1M140370.D	BLK	395626	5.34	421638	6.99	279458	8.28						
1M140371.D	BLK	390264	5.34	417453	6.99	276180	8.28						

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	624/8260 Internal Standard concentration = 40 mg/L (in final extract)
13 =	1,4-Dichlorobenzene-44	16 =	624/8260 Internal Standard concentration = 30ug/L
			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.      A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.      R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



## **Base Neutral/Acid Extractable Data**

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19539-007

Client Id: HSI-SB-02(10-10.5)

Data File: 7M109905.D

Analysis Date: 10/06/20 17:57

Date Rec/Extracted: 09/30/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 80

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.012	0.042	U	50-32-8	Benzo[a]pyrene	0.014	0.042	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.014	0.042	U	205-99-2	Benzo[b]fluoranthene	0.015	0.042	U
123-91-1	1,4-Dioxane	0.021	0.021	U	191-24-2	Benzo[g,h,i]perylene	0.00029	0.042	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.016	0.042	U	207-08-9	Benzo[k]fluoranthene	0.015	0.042	U
95-95-4	2,4,5-Trichlorophenol	0.012	0.042	U	111-91-1	bis(2-Chloroethoxy)methan	0.012	0.042	U
88-06-2	2,4,6-Trichlorophenol	0.032	0.042	U	111-44-4	bis(2-Chloroethyl)ether	0.010	0.010	U
120-83-2	2,4-Dichlorophenol	0.016	0.016	U	108-60-1	bis(2-chloroisopropyl)ether	0.017	0.042	U
105-67-9	2,4-Dimethylphenol	0.020	0.020	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.037</b>	<b>0.042</b>	<b>0.34</b>
51-28-5	2,4-Dinitrophenol	0.18	0.21	U	85-68-7	Butylbenzylphthalate	0.032	0.042	U
121-14-2	2,4-Dinitrotoluene	0.013	0.042	U	105-60-2	Caprolactam	0.033	0.042	U
606-20-2	2,6-Dinitrotoluene	0.021	0.042	U	86-74-8	Carbazole	0.013	0.042	U
91-58-7	2-Chloronaphthalene	0.019	0.042	U	218-01-9	Chrysene	0.014	0.042	U
95-57-8	2-Chlorophenol	0.014	0.042	U	53-70-3	Dibenzo[a,h]anthracene	0.015	0.042	U
91-57-6	2-Methylnaphthalene	0.013	0.042	U	132-64-9	Dibenzofuran	0.011	0.011	U
95-48-7	2-Methylphenol	0.012	0.012	U	84-66-2	Diethylphthalate	0.027	0.042	U
88-74-4	2-Nitroaniline	0.020	0.042	U	131-11-3	Dimethylphthalate	0.012	0.042	U
88-75-5	2-Nitrophenol	0.019	0.042	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.048</b>	<b>0.048</b>	<b>1.6</b>
106-44-5	3&4-Methylphenol	0.012	0.012	U	117-84-0	Di-n-octylphthalate	0.028	0.042	U
91-94-1	3,3'-Dichlorobenzidine	0.034	0.042	U	206-44-0	Fluoranthene	0.016	0.042	U
99-09-2	3-Nitroaniline	0.016	0.042	U	86-73-7	Fluorene	0.011	0.042	U
534-52-1	4,6-Dinitro-2-methylphenol	0.15	0.21	U	118-74-1	Hexachlorobenzene	0.017	0.042	U
101-55-3	4-Bromophenyl-phenylether	0.012	0.042	U	87-68-3	Hexachlorobutadiene	0.019	0.042	U
59-50-7	4-Chloro-3-methylphenol	0.010	0.042	U	77-47-4	Hexachlorocyclopentadiene	0.14	0.14	U
106-47-8	4-Chloroaniline	0.018	0.018	U	67-72-1	Hexachloroethane	0.018	0.042	U
7095-72-3	4-Chlorophenyl-phenylether	0.013	0.042	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.019	0.042	U
100-01-6	4-Nitroaniline	0.016	0.042	U	78-59-1	Isophorone	0.013	0.042	U
100-02-7	4-Nitrophenol	0.032	0.042	U	<b>91-20-3</b>	<b>Naphthalene</b>	<b>0.012</b>	<b>0.012</b>	<b>0.058</b>
83-32-9	Acenaphthene	0.012	0.042	U	98-95-3	Nitrobenzene	0.0017	0.042	U
208-96-8	Acenaphthylene	0.012	0.042	U	621-64-7	N-Nitroso-di-n-propylamine	0.016	0.016	U
98-86-2	Acetophenone	0.015	0.042	U	86-30-6	n-Nitrosodiphenylamine	0.14	0.14	U
120-12-7	Anthracene	0.011	0.042	U	87-86-5	Pentachlorophenol	0.20	0.21	U
1912-24-9	Atrazine	0.017	0.042	U	85-01-8	Phenanthrene	0.013	0.042	U
100-52-7	Benzaldehyde	0.45	0.45	U	108-95-2	Phenol	0.012	0.042	U
56-55-3	Benzo[a]anthracene	0.014	0.042	U	129-00-0	Pyrene	0.014	0.042	U

Worksheet #: 571285

**Total Target Concentration 2**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19539-007  
 Data File: 7M109905.D  
 Acq On : 10/ 6/20 17:57

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 19  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/09/20 10:10  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.681	96	76553	40.00	ng	-0.02	
21) 1,4-Dichlorobenzene-d4	5.895	152	167480	40.00	ng	0.00	
31) Naphthalene-d8	6.900	136	626910	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	322446	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	588763	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	541619	40.00	ng	0.00	
103) Perylene-d12	14.544	264	535684	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.726	112	301581	66.90	ng	0.01	
Spiked Amount			Recovery	=	66.90%		
16) Phenol-d5	5.590	99	416427	76.88	ng	0.01	
Spiked Amount			Recovery	=	76.88%		
32) Nitrobenzene-d5	6.342	128	83722	33.62	ng	0.00	
Spiked Amount			Recovery	=	67.24%		
55) 2-Fluorobiphenyl	7.740	172	387792	36.06	ng	0.00	
Spiked Amount			Recovery	=	72.12%		
80) 2,4,6-Tribromophenol	9.091	330	116790	76.99	ng	0.00	
Spiked Amount			Recovery	=	76.99%		
94) Terphenyl-d14	11.641	244	353000	40.93	ng	0.00	
Spiked Amount			Recovery	=	81.86%		
Target Compounds							
41) Naphthalene	6.912	128	45620m	2.7981	ng		Qvalue
89) Di-n-butylphthalate	10.455	149	1387802	77.7904	ng		98
102) bis(2-Ethylhexyl)phtha...	12.922	149	165255m	16.1319	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

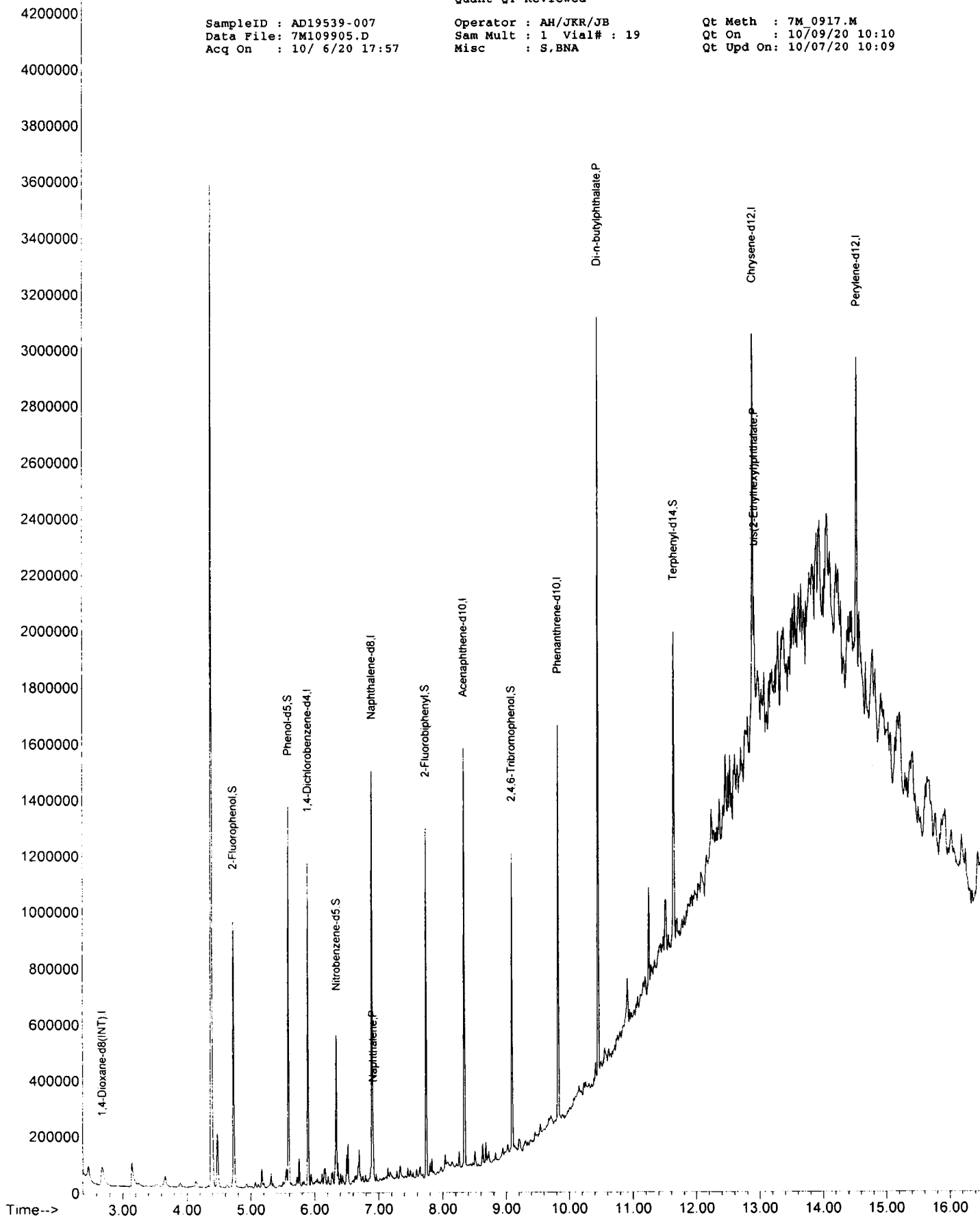
TIC: 7M109905.D\data.ms

Quant QT Reviewed

SampleID : AD19539-007  
Data File: 7M109905.D  
Acq On : 10/ 6/20 17:57

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 19  
Misc : S.BNA

Qt Meth : 7M\_0917.M  
Qt On : 10/09/20 10:10  
Qt Upd On: 10/07/20 10:09



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19539-011

Client Id: HSI-SB-03 (10-10.5)

Data File: 9M101550.D

Analysis Date: 10/06/20 12:59

Date Rec/Extracted: 09/30/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 84

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.040	U	50-32-8	Benzo[a]pyrene	0.014	0.040	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.013	0.040	U	205-99-2	Benzo[b]fluoranthene	0.014	0.040	U
123-91-1	1,4-Dioxane	0.020	0.020	U	191-24-2	Benzo[g,h,i]perylene	0.00027	0.040	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.015	0.040	U	207-08-9	Benzo[k]fluoranthene	0.015	0.040	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.040	U	111-91-1	bis(2-Chloroethoxy)methan	0.011	0.040	U
88-06-2	2,4,6-Trichlorophenol	0.031	0.040	U	111-44-4	bis(2-Chloroethyl)ether	0.0096	0.0099	U
120-83-2	2,4-Dichlorophenol	0.015	0.015	U	108-60-1	bis(2-chloroisopropyl)ether	0.016	0.040	U
105-67-9	2,4-Dimethylphenol	0.019	0.019	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.035	0.040	U
51-28-5	2,4-Dinitrophenol	0.17	0.20	U	85-68-7	Butylbenzylphthalate	0.030	0.040	U
121-14-2	2,4-Dinitrotoluene	0.012	0.040	U	105-60-2	Caprolactam	0.032	0.040	U
606-20-2	2,6-Dinitrotoluene	0.020	0.040	U	86-74-8	Carbazole	0.012	0.040	U
91-58-7	2-Chloronaphthalene	0.018	0.040	U	218-01-9	Chrysene	0.013	0.040	U
95-57-8	2-Chlorophenol	0.013	0.040	U	53-70-3	Dibenzo[a,h]anthracene	0.015	0.040	U
91-57-6	2-Methylnaphthalene	0.012	0.040	U	132-64-9	Dibenzofuran	0.010	0.010	U
95-48-7	2-Methylphenol	0.011	0.011	U	84-66-2	Diethylphthalate	0.026	0.040	U
88-74-4	2-Nitroaniline	0.019	0.040	U	131-11-3	Dimethylphthalate	0.011	0.040	U
88-75-5	2-Nitrophenol	0.018	0.040	U	84-74-2	Di-n-butylphthalate	0.046	0.046	U
106-44-5	3&4-Methylphenol	0.012	0.012	U	117-84-0	Di-n-octylphthalate	0.026	0.040	U
91-94-1	3,3'-Dichlorobenzidine	0.032	0.040	U	206-44-0	Fluoranthene	0.015	0.040	U
99-09-2	3-Nitroaniline	0.015	0.040	U	86-73-7	Fluorene	0.011	0.040	U
534-52-1	4,6-Dinitro-2-methylphenol	0.14	0.20	U	118-74-1	Hexachlorobenzene	0.017	0.040	U
101-55-3	4-Bromophenyl-phenylether	0.011	0.040	U	87-68-3	Hexachlorobutadiene	0.018	0.040	U
59-50-7	4-Chloro-3-methylphenol	0.0096	0.040	U	77-47-4	Hexachlorocyclopentadiene	0.13	0.13	U
106-47-8	4-Chloroaniline	0.017	0.017	U	67-72-1	Hexachloroethane	0.018	0.040	U
7005-72-3	4-Chlorophenyl-phenylether	0.012	0.040	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.018	0.040	U
100-01-6	4-Nitroaniline	0.015	0.040	U	78-59-1	Isophorone	0.013	0.040	U
100-02-7	4-Nitrophenol	0.030	0.040	U	91-20-3	Naphthalene	0.011	0.011	U
83-32-9	Acenaphthene	0.011	0.040	U	98-95-3	Nitrobenzene	0.0016	0.040	U
208-96-8	Acenaphthylene	0.012	0.040	U	621-64-7	N-Nitroso-di-n-propylamine	0.015	0.015	U
98-86-2	Acetophenone	0.014	0.040	U	86-30-6	n-Nitrosodiphenylamine	0.13	0.13	U
120-12-7	Anthracene	0.011	0.040	U	87-86-5	Pentachlorophenol	0.19	0.20	U
1912-24-9	Atrazine	0.016	0.040	U	85-01-8	Phenanthrene	0.013	0.040	U
100-52-7	Benzaldehyde	0.43	0.43	U	108-95-2	Phenol	0.011	0.040	U
56-55-3	Benzo[a]anthracene	0.013	0.040	U	129-00-0	Pyrene	0.014	0.040	U

Worksheet #: 571285

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19539-011  
 Data File: 9M101550.D  
 Acq On : 10/ 6/20 12:59

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 7  
 Misc : S,BNA

Qt Meth : 9M\_0917.M  
 Qt On : 10/06/20 14:00  
 Qt Upd On: 09/29/20 13:20

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.696	96	67682	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.901	152	125964	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	485597	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	263417	40.00	ng	0.00
77) Phenanthrene-d10	9.819	188	512963	40.00	ng	0.00
91) Chrysene-d12	12.877	240	505973	40.00	ng	-0.01
103) Perylene-d12	14.513	264	505452	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.713	112	215804	60.95	ng	0.00
Spiked Amount 100.000			Recovery =	60.95%		
16) Phenol-d5	5.578	99	274811	64.17	ng	0.00
Spiked Amount 100.000			Recovery =	64.17%		
32) Nitrobenzene-d5	6.348	128	53289	30.51	ng	0.00
Spiked Amount 50.000			Recovery =	61.02%		
55) 2-Fluorobiphenyl	7.748	172	272150	30.19	ng	0.00
Spiked Amount 50.000			Recovery =	60.38%		
80) 2,4,6-Tribromophenol	9.089	330	75002	63.49	ng	0.00
Spiked Amount 100.000			Recovery =	63.49%		
94) Terphenyl-d14	11.625	244	249650	33.90	ng	-0.01
Spiked Amount 50.000			Recovery =	67.80%		

Target Compounds Qvalue

-----  
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

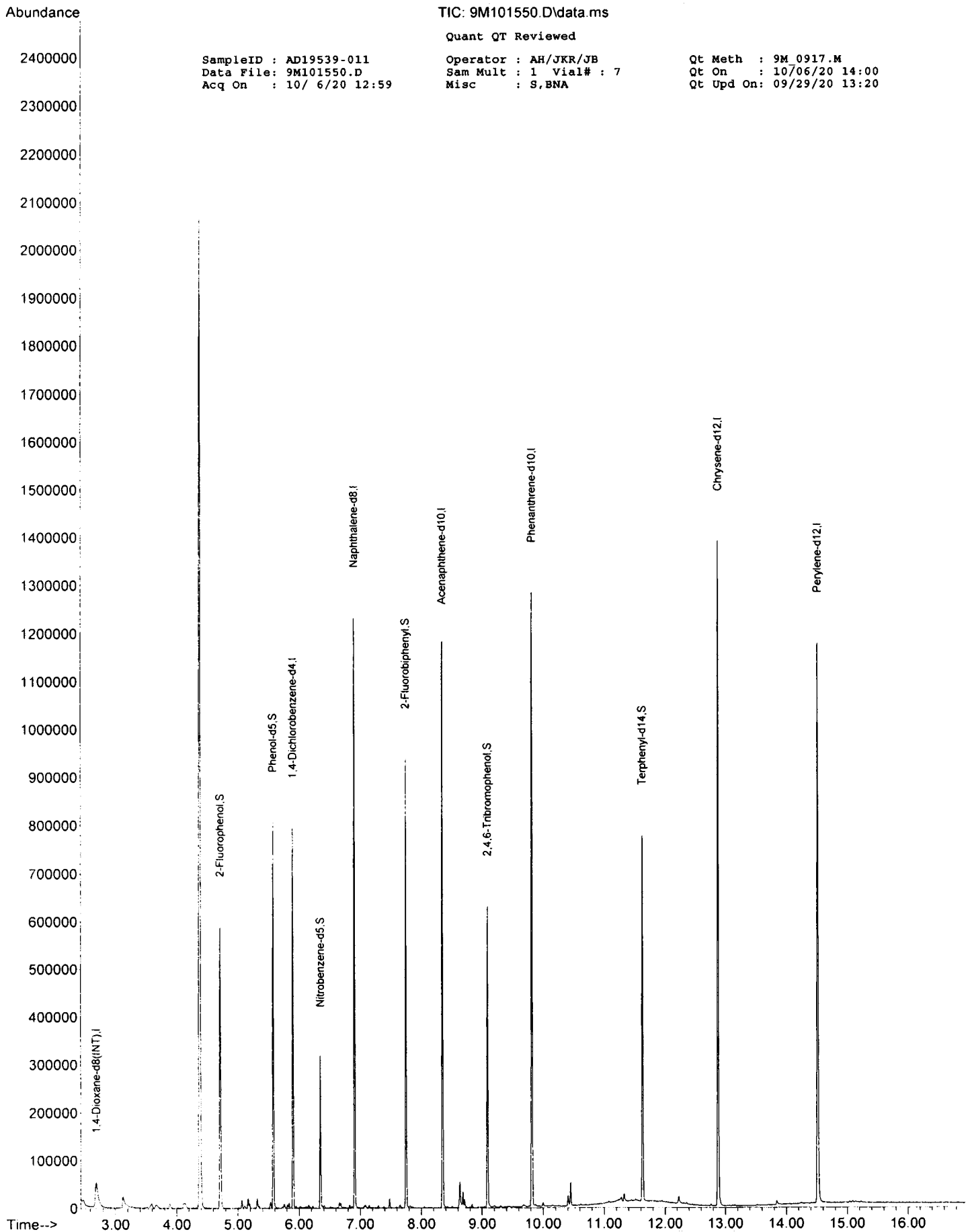
TIC: 9M101550.D\data.ms

Quant QT Reviewed

SampleID : AD19539-011  
Data File: 9M101550.D  
Acq On : 10/ 6/20 12:59

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 7  
Misc : S,BNA

Qt Meth : 9M\_0917.M  
Qt On : 10/06/20 14:00  
Qt Upd On: 09/29/20 13:20



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19539-013

Client Id: HSI-SB-01 (2.5-3)

Data File: 7M109906.D

Analysis Date: 10/06/20 18:20

Date Rec/Extracted: 09/30/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 87

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.038	U	50-32-8	Benzo[a]pyrene	0.013	0.038	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.013	0.038	U	205-99-2	Benzo[b]fluoranthene	0.014	0.038	U
123-91-1	1,4-Dioxane	0.019	0.019	U	191-24-2	Benzo[g,h,i]perylene	0.00026	0.038	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.038	U	207-08-9	Benzo[k]fluoranthene	0.014	0.038	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.038	U	111-91-1	bis(2-Chloroethoxy)methan	0.011	0.038	U
88-06-2	2,4,6-Trichlorophenol	0.030	0.038	U	111-44-4	bis(2-Chloroethyl)ether	0.0093	0.0096	U
120-83-2	2,4-Dichlorophenol	0.014	0.014	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.038	U
105-67-9	2,4-Dimethylphenol	0.019	0.019	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.034</b>	<b>0.038</b>	<b>0.25</b>
51-28-5	2,4-Dinitrophenol	0.17	0.19	U	85-68-7	Butylbenzylphthalate	0.029	0.038	U
121-14-2	2,4-Dinitrotoluene	0.012	0.038	U	105-60-2	Caprolactam	0.031	0.038	U
606-20-2	2,6-Dinitrotoluene	0.020	0.038	U	86-74-8	Carbazole	0.012	0.038	U
91-58-7	2-Chloronaphthalene	0.017	0.038	U	218-01-9	Chrysene	0.013	0.038	U
<b>95-57-8</b>	<b>2-Chlorophenol</b>	<b>0.013</b>	<b>0.038</b>	<b>0.35</b>	53-70-3	Dibenzo[a,h]anthracene	0.014	0.038	U
91-57-6	2-Methylnaphthalene	0.012	0.038	U	132-64-9	Dibenzofuran	0.0097	0.0097	U
<b>95-48-7</b>	<b>2-Methylphenol</b>	<b>0.011</b>	<b>0.011</b>	<b>0.013</b>	84-66-2	Diethylphthalate	0.025	0.038	U
88-74-4	2-Nitroaniline	0.018	0.038	U	131-11-3	Dimethylphthalate	0.011	0.038	U
88-75-5	2-Nitrophenol	0.017	0.038	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.044</b>	<b>0.044</b>	<b>0.25</b>
106-44-5	3&4-Methylphenol	0.011	0.011	U	117-84-0	Di-n-octylphthalate	0.025	0.038	U
91-94-1	3,3'-Dichlorobenzidine	0.031	0.038	U	206-44-0	Fluoranthene	0.015	0.038	U
99-09-2	3-Nitroaniline	0.015	0.038	U	86-73-7	Fluorene	0.010	0.038	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.19	U	118-74-1	Hexachlorobenzene	0.016	0.038	U
101-55-3	4-Bromophenyl-phenylether	0.011	0.038	U	87-68-3	Hexachlorobutadiene	0.017	0.038	U
59-50-7	4-Chloro-3-methylphenol	0.0092	0.038	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.12	U
106-47-8	4-Chloroaniline	0.017	0.017	U	67-72-1	Hexachloroethane	0.017	0.038	U
7005-72-3	4-Chlorophenyl-phenylether	0.012	0.038	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.038	U
100-01-6	4-Nitroaniline	0.015	0.038	U	78-59-1	Isophorone	0.012	0.038	U
100-02-7	4-Nitrophenol	0.029	0.038	U	<b>91-20-3</b>	<b>Naphthalene</b>	<b>0.011</b>	<b>0.011</b>	<b>0.063</b>
83-32-9	Acenaphthene	0.011	0.038	U	98-95-3	Nitrobenzene	0.0016	0.038	U
208-96-8	Acenaphthylene	0.011	0.038	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.014	U
98-86-2	Acetophenone	0.014	0.038	U	86-30-6	n-Nitrosodiphenylamine	0.13	0.13	U
120-12-7	Anthracene	0.011	0.038	U	87-86-5	Pentachlorophenol	0.18	0.19	U
1912-24-9	Atrazine	0.015	0.038	U	85-01-8	Phenanthrene	0.012	0.038	U
100-52-7	Benzaldehyde	0.42	0.42	U	108-95-2	Phenol	0.011	0.038	U
56-55-3	Benzo[a]anthracene	0.013	0.038	U	129-00-0	Pyrene	0.013	0.038	U

Worksheet #: 571285

**Total Target Concentration 0.93**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*N*-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.



SampleID : AD19539-013  
 Data File: 7M109906.D  
 Acq On : 10/ 6/20 18:20

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 20  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/09/20 10:10  
 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.687	96	83622	40.00	ng	-0.01	
21) 1,4-Dichlorobenzene-d4	5.895	152	183905	40.00	ng	0.00	
31) Naphthalene-d8	6.900	136	693603	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	359590	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	643444	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	551971	40.00	ng	0.00	
103) Perylene-d12	14.544	264	521804	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.732	112	343392	69.74	ng	0.02	
Spiked Amount							Recovery = 69.74%
16) Phenol-d5	5.590	99	463218	78.28	ng	0.01	
Spiked Amount							Recovery = 78.28%
32) Nitrobenzene-d5	6.342	128	92753	33.66	ng	0.00	
Spiked Amount							Recovery = 67.32%
55) 2-Fluorobiphenyl	7.740	172	426261	35.54	ng	0.00	
Spiked Amount							Recovery = 71.08%
80) 2,4,6-Tribromophenol	9.091	330	127065	76.64	ng	0.00	
Spiked Amount							Recovery = 76.64%
94) Terphenyl-d14	11.636	244	353293	40.19	ng	0.00	
Spiked Amount							Recovery = 80.38%
Target Compounds							
18) 2-Chlorophenol	5.719	128	104448	18.1729	ng		Qvalue 79
26) 2-Methylphenol	6.101	108	3601m	0.6683	ng		
41) Naphthalene	6.912	128	59571m	3.3024	ng		
89) Di-n-butylphthalate	10.455	149	256946m	13.1786	ng		
102) bis(2-Ethylhexyl)phtha...	12.922	149	134935m	12.9251	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

TIC: 7M109906.D\data.ms

Quant QT Reviewed

460000

SampleID : AD19539-013  
Data File: 7M109906.D  
Acq On : 10/ 6/20 18:20Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 20  
Misc : S,BNAQt Meth : 7M\_0917.M  
Qt On : 10/09/20 10:10  
Qt Upd On: 10/07/20 10:09

440000

420000

400000

380000

360000

340000

320000

300000

280000

260000

240000

220000

200000

180000

160000

140000

120000

100000

80000

60000

40000

20000

0

Time--&gt;

1,4-Dioxane-d8(NT).I

2-Fluorophenol.S

Phenol-d5.S

1,4-Dichlorobenzene-d4.I

2-Chlorophenol.P

2-Methylphenol.P

Nitrobenzene-d5.S

Naphthalene.P

Naphthalene-d8.I

2-Fluorobiphenyl.S

Acenaphthene-d10.I

2,4,6-Tribromophenol.S

Phenanthrene-d10.I

Di-n-butylphthalate.P

Terphenyl-d14.S

Chrysene-d12.I

bis(2-Ethylhexyl)phthalate.P

Perylene-d12.I

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19539-014(200X)

Client Id: HSI-SB-01 (6-6.5)

Data File: 7M109936.D

Analysis Date: 10/07/20 16:06

Date Rec/Extracted: 09/30/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 200

Solids: 83

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	2.3	8.0	U	50-32-8	Benzo[a]pyrene	2.7	8.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	2.7	8.0	U	205-99-2	Benzo[b]fluoranthene	2.9	8.0	U
123-91-1	1,4-Dioxane	4.0	4.0	U	191-24-2	Benzo[g,h,i]perylene	0.055	8.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	3.0	8.0	U	207-08-9	Benzo[k]fluoranthene	3.0	8.0	U
95-95-4	2,4,5-Trichlorophenol	2.3	8.0	U	111-91-1	bis(2-Chloroethoxy)methan	2.3	8.0	U
88-06-2	2,4,6-Trichlorophenol	6.2	8.0	U	111-44-4	bis(2-Chloroethyl)ether	1.9	2.0	U
120-83-2	2,4-Dichlorophenol	3.0	3.0	U	108-60-1	bis(2-chloroisopropyl)ether	3.2	8.0	U
105-67-9	2,4-Dimethylphenol	3.9	3.9	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>7.1</b>	<b>8.0</b>	<b>50</b>
51-28-5	2,4-Dinitrophenol	35	40	U	85-68-7	Butylbenzylphthalate	6.2	8.0	U
121-14-2	2,4-Dinitrotoluene	2.5	8.0	U	105-60-2	Caprolactam	6.4	8.0	U
606-20-2	2,6-Dinitrotoluene	4.1	8.0	U	86-74-8	Carbazole	2.5	8.0	U
91-58-7	2-Chloronaphthalene	3.6	8.0	U	218-01-9	Chrysene	2.7	8.0	U
<b>95-57-8</b>	<b>2-Chlorophenol</b>	<b>2.6</b>	<b>8.0</b>	<b>13</b>	53-70-3	Dibenzo[a,h]anthracene	2.9	8.0	U
91-57-6	2-Methylnaphthalene	2.5	8.0	U	132-64-9	Dibenzofuran	2.0	2.0	U
95-48-7	2-Methylphenol	2.3	2.3	U	84-86-2	Diethylphthalate	5.2	8.0	U
88-74-4	2-Nitroaniline	3.8	8.0	U	131-11-3	Dimethylphthalate	2.3	8.0	U
88-75-5	2-Nitrophenol	3.6	8.0	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>9.2</b>	<b>9.2</b>	<b>720</b>
106-44-5	3&4-Methylphenol	2.3	2.3	U	117-84-0	Di-n-octylphthalate	5.3	8.0	U
91-94-1	3,3'-Dichlorobenzidine	6.5	8.0	U	206-44-0	Fluoranthene	3.1	8.0	U
99-09-2	3-Nitroaniline	3.1	8.0	U	86-73-7	Fluorene	2.2	8.0	U
534-52-1	4,6-Dinitro-2-methylphenol	28	40	U	118-74-1	Hexachlorobenzene	3.4	8.0	U
101-55-3	4-Bromophenyl-phenylether	2.2	8.0	U	87-68-3	Hexachlorobutadiene	3.6	8.0	U
59-50-7	4-Chloro-3-methylphenol	1.9	8.0	U	77-47-4	Hexachlorocyclopentadiene	26	26	U
106-47-8	4-Chloroaniline	3.5	3.5	U	67-72-1	Hexachloroethane	3.5	8.0	U
7005-72-3	4-Chlorophenyl-phenylether	2.5	8.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	3.6	8.0	U
100-01-6	4-Nitroaniline	3.1	8.0	U	78-59-1	Isophorone	2.6	8.0	U
100-02-7	4-Nitrophenol	6.1	8.0	U	<b>91-20-3</b>	<b>Naphthalene</b>	<b>2.3</b>	<b>2.3</b>	<b>16</b>
83-32-9	Acenaphthene	2.3	8.0	U	98-95-3	Nitrobenzene	0.33	8.0	U
208-96-8	Acenaphthylene	2.4	8.0	U	621-64-7	N-Nitroso-di-n-propylamine	3.0	3.0	U
98-86-2	Acetophenone	2.9	8.0	U	86-30-6	n-Nitrosodiphenylamine	27	27	U
120-12-7	Anthracene	2.2	8.0	U	87-86-5	Pentachlorophenol	39	40	U
1912-24-9	Atrazine	3.2	8.0	U	85-01-8	Phenanthrene	2.6	8.0	U
100-52-7	Benzaldehyde	87	87	U	108-95-2	Phenol	2.2	8.0	U
56-55-3	Benzo[a]anthracene	2.7	8.0	U	129-00-0	Pyrene	2.7	8.0	U

Worksheet #: 571285

**Total Target Concentration 800**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

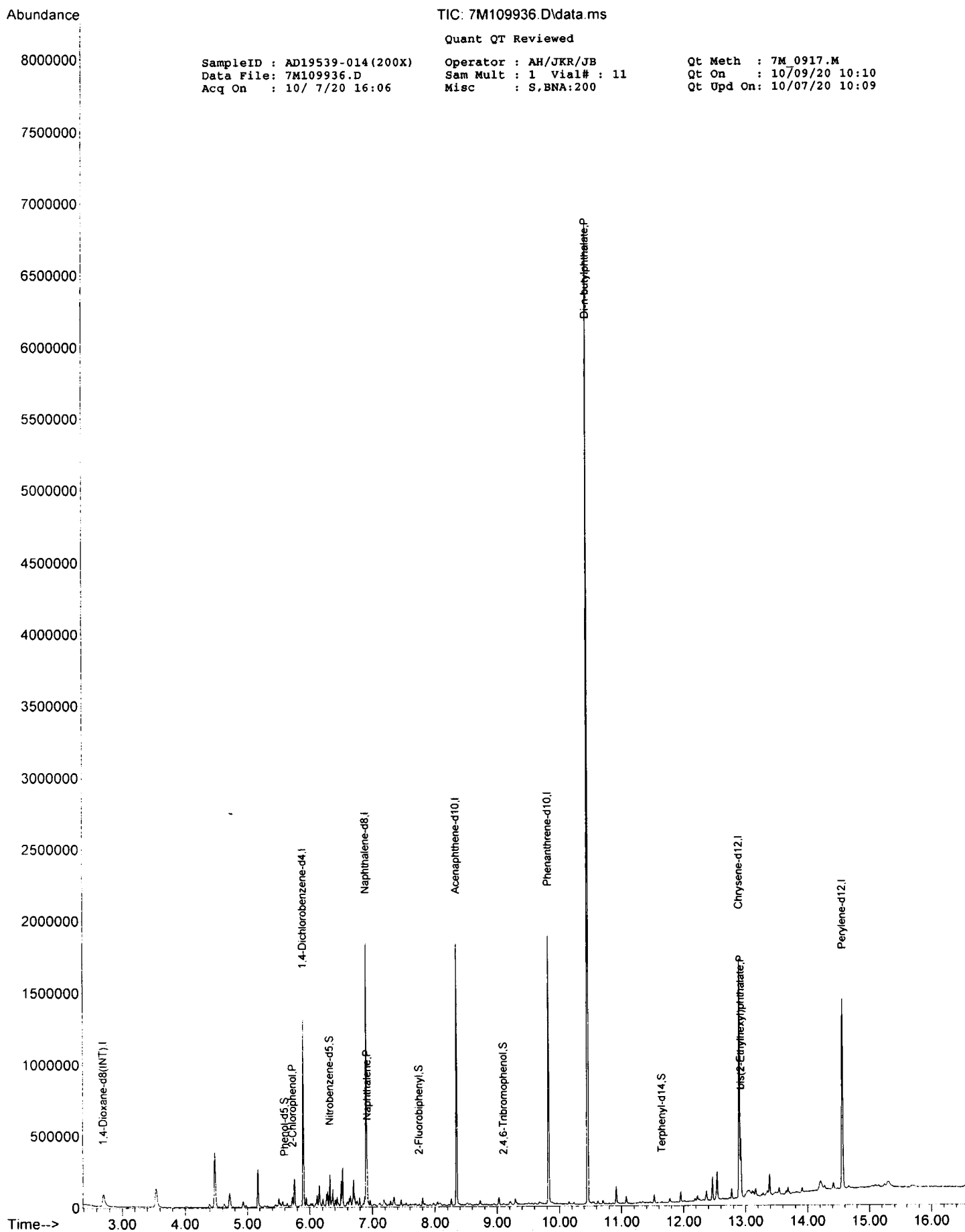
d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-014(200X) Operator : AH/JKR/JB Qt Meth : 7M\_0917.M  
 Data File: 7M109936.D Sam Mult : 1 Vial# : 11 Qt On : 10/09/20 10:10  
 Acq On : 10/ 7/20 16:06 Misc : S,BNA:200 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0720\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.705	96	92815	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.895	152	187136	40.00	ng	0.00	
31) Naphthalene-d8	6.900	136	697465	40.00	ng	0.00	
50) Acenaphthene-d10	8.345	164	368225	40.00	ng	0.00	
77) Phenanthrene-d10	9.826	188	697366	40.00	ng	0.00	
91) Chrysene-d12	12.899	240	620884	40.00	ng	0.00	
103) Perylene-d12	14.561	264	626037	40.00	ng	0.02	
System Monitoring Compounds							
11) 2-Fluorophenol	0.000	112	0	0.00	ng		
Spiked Amount 100.000			Recovery =	0.00%			
16) Phenol-d5	5.595	99	2389	0.36	ng	0.02	
Spiked Amount 100.000			Recovery =	0.36%			
32) Nitrobenzene-d5	6.318	128	1395	0.50	ng	-0.02	
Spiked Amount 50.000			Recovery =	1.00%			
55) 2-Fluorobiphenyl	7.746	172	2555m	0.21	ng	0.00	
Spiked Amount 50.000			Recovery =	0.42%			
80) 2,4,6-Tribromophenol	9.103	330	654	0.36	ng	0.01	
Spiked Amount 100.000			Recovery =	0.36%			
94) Terphenyl-d14	11.641	244	2054	0.21	ng	0.00	
Spiked Amount 50.000			Recovery =	0.42%			
Target Compounds							
18) 2-Chlorophenol	5.725	128	19924m	3.1232	ng		Qvalue
41) Naphthalene	6.917	128	74053	4.0826	ng		99
89) Di-n-butylphthalate	10.460	149	3810943	180.3477	ng		97
102) bis(2-Ethylhexyl)phtha...	12.922	149	146593m	12.4832	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19539-017(400X)

Client Id: HSI-SB-D1

Data File: 7M109937.D

Analysis Date: 10/07/20 16:29

Date Rec/Extracted: 09/30/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 400

Solids: 84

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	4.6	16	U	50-32-8	Benzo[a]pyrene	5.4	16	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.3	16	U	205-99-2	Benzo[b]fluoranthene	5.7	16	U
123-91-1	1,4-Dioxane	8.0	8.0	U	191-24-2	Benzo[g,h,i]perylene	0.11	16	U
58-90-2	2,3,4,6-Tetrachlorophenol	6.0	16	U	207-08-9	Benzo[k]fluoranthene	5.8	16	U
95-95-4	2,4,5-Trichlorophenol	4.5	16	U	111-91-1	bis(2-Chloroethoxy)methan	4.5	16	U
88-06-2	2,4,6-Trichlorophenol	12	16	U	111-44-4	bis(2-Chloroethyl)ether	3.9	4.0	U
120-83-2	2,4-Dichlorophenol	6.0	6.0	U	108-60-1	bis(2-chloroisopropyl)ether	6.3	16	U
105-67-9	2,4-Dimethylphenol	7.7	7.7	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>14</b>	<b>16</b>	<b>58</b>
51-28-5	2,4-Dinitrophenol	69	79	U	85-68-7	Butylbenzylphthalate	12	16	U
121-14-2	2,4-Dinitrotoluene	4.9	16	U	105-60-2	Caprolactam	13	16	U
606-20-2	2,6-Dinitrotoluene	8.1	16	U	86-74-8	Carbazole	4.9	16	U
91-58-7	2-Chloronaphthalene	7.1	16	U	218-01-9	Chrysene	5.4	16	U
<b>95-57-8</b>	<b>2-Chlorophenol</b>	<b>5.2</b>	<b>16</b>	<b>24</b>	53-70-3	Dibenzo[a,h]anthracene	5.8	16	U
91-57-6	2-Methylnaphthalene	4.9	16	U	132-64-9	Dibenzofuran	4.0	4.0	U
95-48-7	2-Methylphenol	4.6	4.6	U	84-66-2	Diethylphthalate	10	16	U
88-74-4	2-Nitroaniline	7.5	16	U	131-11-3	Dimethylphthalate	4.5	16	U
88-75-5	2-Nitrophenol	7.2	16	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>18</b>	<b>18</b>	<b>1200</b>
106-44-5	3&4-Methylphenol	4.6	4.6	U	117-84-0	Di-n-octylphthalate	11	16	U
91-94-1	3,3'-Dichlorobenzidine	13	16	U	206-44-0	Fluoranthene	6.1	16	U
99-09-2	3-Nitroaniline	6.2	16	U	86-73-7	Fluorene	4.3	16	U
534-52-1	4,6-Dinitro-2-methylphenol	55	79	U	118-74-1	Hexachlorobenzene	6.6	16	U
101-55-3	4-Bromophenyl-phenylether	4.4	16	U	87-68-3	Hexachlorobutadiene	7.1	16	U
59-50-7	4-Chloro-3-methylphenol	3.8	16	U	77-47-4	Hexachlorocyclopentadiene	52	52	U
106-47-8	4-Chloroaniline	7.0	7.0	U	67-72-1	Hexachloroethane	7.0	16	U
7005-72-3	4-Chlorophenyl-phenylether	4.9	16	U	193-39-5	Indeno[1,2,3-cd]pyrene	7.2	16	U
100-01-6	4-Nitroaniline	6.1	16	U	78-59-1	Isophorone	5.1	16	U
100-02-7	4-Nitrophenol	12	16	U	<b>91-20-3</b>	<b>Naphthalene</b>	<b>4.6</b>	<b>4.6</b>	<b>26</b>
83-32-9	Acenaphthene	4.5	16	U	98-95-3	Nitrobenzene	0.64	16	U
208-96-8	Acenaphthylene	4.7	16	U	621-64-7	N-Nitroso-di-n-propylamine	6.0	6.0	U
98-86-2	Acetophenone	5.7	16	U	86-30-6	n-Nitrosodiphenylamine	54	54	U
120-12-7	Anthracene	4.4	16	U	87-86-5	Pentachlorophenol	76	79	U
1912-24-9	Atrazine	6.4	16	U	85-01-8	Phenanthrene	5.1	16	U
100-52-7	Benzaldehyde	170	170	U	108-95-2	Phenol	4.4	16	U
56-55-3	Benzo[a]anthracene	5.3	16	U	129-00-0	Pyrene	5.4	16	U

Worksheet #: 571285

**Total Target Concentration 1300**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19539-017(400X) Operator : AH/JKR/JB Qt Meth : 7M\_0917.M  
 Data File: 7M109937.D Sam Mult : 1 Vial# : 12 Qt On : 10/09/20 10:10  
 Acq On : 10/ 7/20 16:29 Misc : S,BNA:400 Qt Upd On: 10/07/20 10:09

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0720\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.699	96	93735	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.895	152	184990	40.00	ng	0.00	
31) Naphthalene-d8	6.894	136	690916	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	370452	40.00	ng	0.00	
77) Phenanthrene-d10	9.820	188	699880	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	634297	40.00	ng	0.00	
103) Perylene-d12	14.544	264	617336	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	0.000	112	0	0.00	ng		
Spiked Amount	100.000		Recovery	=	0.00%		
16) Phenol d5	5.590	99	983	0.15	ng	0.01	
Spiked Amount	100.000		Recovery	=	0.15%		
32) Nitrobenzene-d5	6.318	128	1002	0.37	ng	-0.02	
Spiked Amount	50.000		Recovery	=	0.74%		
55) 2-Fluorobiphenyl	7.740	172	1111	0.09	ng	0.00	
Spiked Amount	50.000		Recovery	=	0.18%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng		
Spiked Amount	100.000		Recovery	=	0.00%		
94) Terphenyl-d14	11.636	244	1032	0.10	ng	0.00	
Spiked Amount	50.000		Recovery	=	0.20%		
Target Compounds							
18) 2-Chlorophenol	5.719	128	19154	2.9730	ng	79	
41) Naphthalene	6.912	128	58237	3.2410	ng	98	
89) Di-n-butylphthalate	10.455	149	3262929	153.8590	ng	97	
102) bis(2-Ethylhexyl)phtha...	12.922	149	87747m	7.3141	ng		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

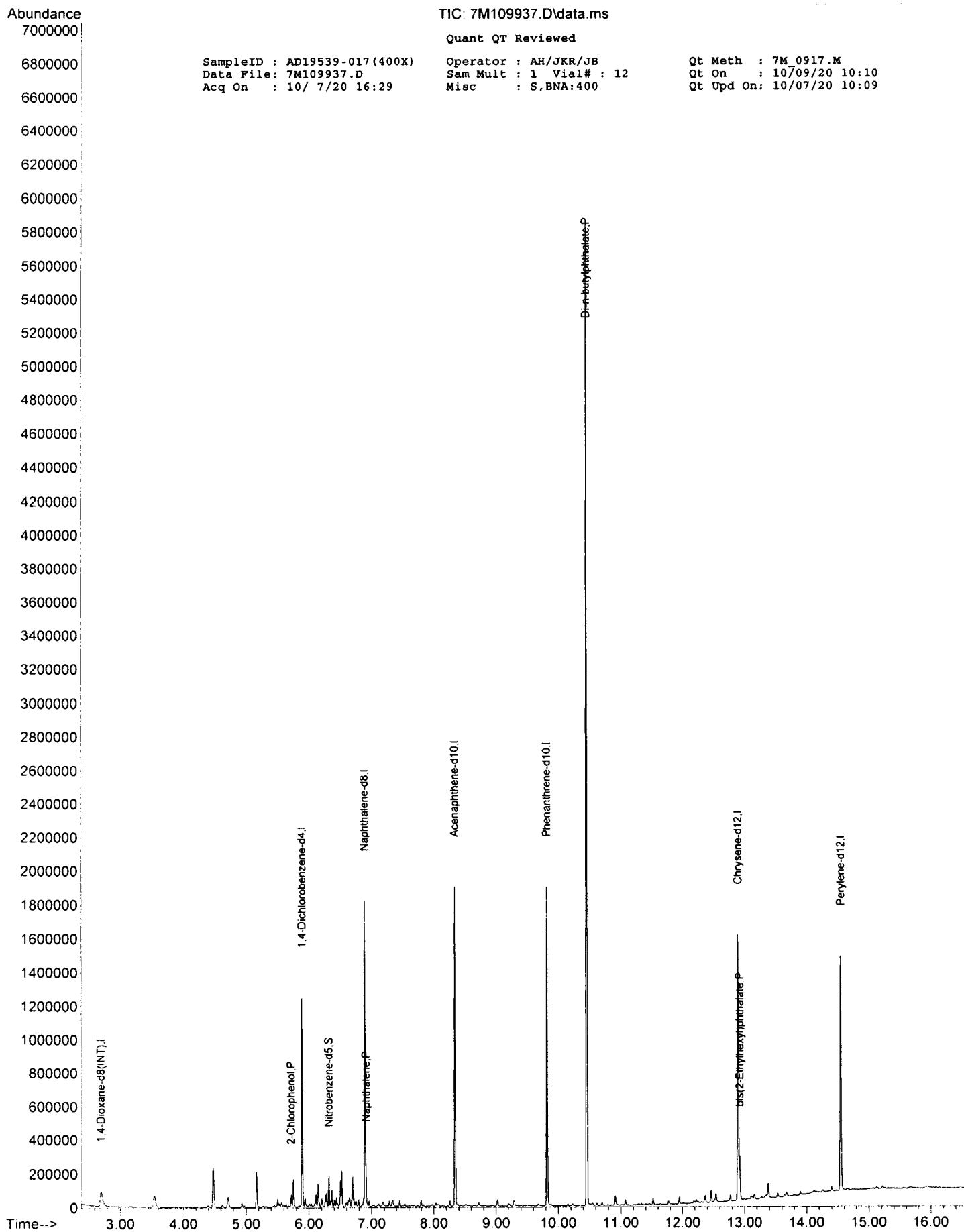
TIC: 7M109937.D\data.ms

Quant QT Reviewed

SampleID : AD19539-017 (400X)  
Data File: 7M109937.D  
Acq On : 10/ 7/20 16:29

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 12  
Misc : S,BNA:400

Qt Meth : 7M\_0917.M  
Qt On : 10/09/20 10:10  
Qt Upd On: 10/07/20 10:09





## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB88132

Client Id:

Data File: 9M101549.D

Analysis Date: 10/06/20 12:34

Date Rec/Extracted: NA-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 100

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.0096	0.033	U	50-32-8	Benzo[a]pyrene	0.011	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.011	0.033	U	205-99-2	Benzo[b]fluoranthene	0.012	0.033	U
123-91-1	1,4-Dioxane	0.017	0.017	U	191-24-2	Benzo[g,h,i]perylene	0.00023	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.013	0.033	U	207-08-9	Benzo[k]fluoranthene	0.012	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.0095	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.0094	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.026	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0081	0.0083	U
120-83-2	2,4-Dichlorophenol	0.013	0.013	U	108-60-1	bis(2-chloroisopropyl)ether	0.013	0.033	U
105-67-9	2,4-Dimethylphenol	0.016	0.016	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.029	0.033	U
51-28-5	2,4-Dinitrophenol	0.14	0.17	U	85-68-7	Butylbenzylphthalate	0.026	0.033	U
121-14-2	2,4-Dinitrotoluene	0.010	0.033	U	105-60-2	Caprolactam	0.027	0.033	U
606-20-2	2,6-Dinitrotoluene	0.017	0.033	U	86-74-8	Carbazole	0.010	0.033	U
91-58-7	2-Chloronaphthalene	0.015	0.033	U	218-01-9	Chrysene	0.011	0.033	U
95-57-8	2-Chlorophenol	0.011	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.012	0.033	U
91-57-6	2-Methylnaphthalene	0.010	0.033	U	132-64-9	Dibenzofuran	0.0084	0.0084	U
95-48-7	2-Methylphenol	0.0096	0.0096	U	84-66-2	Diethylphthalate	0.021	0.033	U
88-74-4	2-Nitroaniline	0.016	0.033	U	131-11-3	Dimethylphthalate	0.0094	0.033	U
88-75-5	2-Nitrophenol	0.015	0.033	U	84-74-2	Di-n-butylphthalate	0.038	0.038	U
106-44-5	3&4-Methylphenol	0.0097	0.0097	U	117-84-0	Di-n-octylphthalate	0.022	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.027	0.033	U	206-44-0	Fluoranthene	0.013	0.033	U
99-09-2	3-Nitroaniline	0.013	0.033	U	86-73-7	Fluorene	0.0091	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.12	0.17	U	118-74-1	Hexachlorobenzene	0.014	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.0093	0.033	U	87-68-3	Hexachlorobutadiene	0.015	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.0080	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.11	0.11	U
106-47-8	4-Chloroaniline	0.015	0.015	U	67-72-1	Hexachloroethane	0.015	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.010	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.015	0.033	U
100-01-6	4-Nitroaniline	0.013	0.033	U	78-59-1	Isophorone	0.011	0.033	U
100-02-7	4-Nitrophenol	0.025	0.033	U	91-20-3	Naphthalene	0.0096	0.0096	U
83-32-9	Acenaphthene	0.0095	0.033	U	98-95-3	Nitrobenzene	0.0013	0.033	U
208-96-8	Acenaphthylene	0.010	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.013	0.013	U
98-86-2	Acetophenone	0.012	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.11	0.11	U
120-12-7	Anthracene	0.0092	0.033	U	87-86-5	Pentachlorophenol	0.16	0.17	U
1912-24-9	Atrazine	0.013	0.033	U	85-01-8	Phenanthrene	0.011	0.033	U
100-52-7	Benzaldehyde	0.36	0.36	U	108-95-2	Phenol	0.0092	0.033	U
56-55-3	Benzo[a]anthracene	0.011	0.033	U	129-00-0	Pyrene	0.011	0.033	U

Worksheet #: 571285

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : SMB88132  
 Data File: 9M101549.D  
 Acq On : 10/ 6/20 12:34

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 6  
 Misc : S,BNA

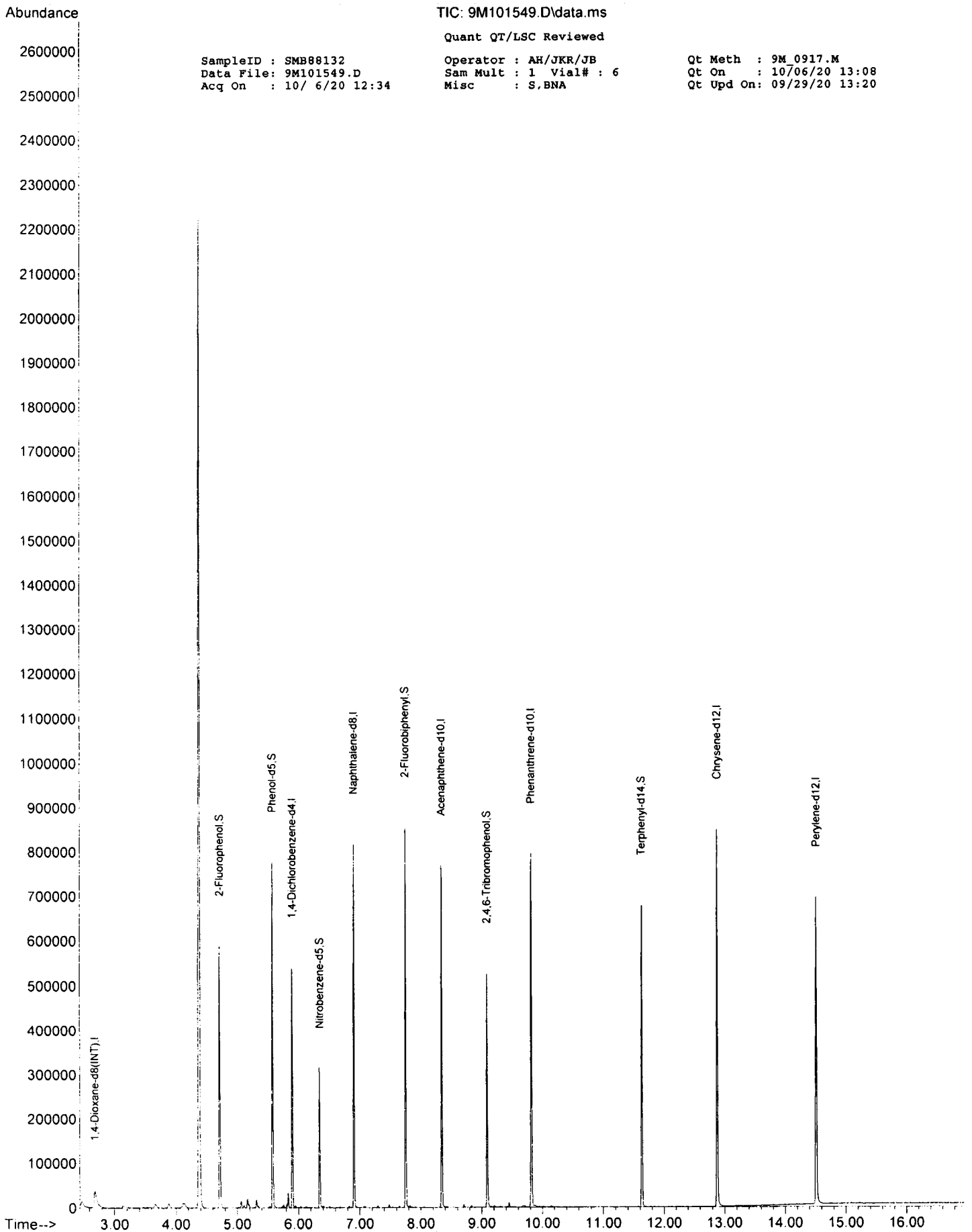
Qt Meth : 9M\_0917.M  
 Qt On : 10/06/20 13:08  
 Qt Upd On: 09/29/20 13:20

Data Path : G:\GcmsData\2020\GCMS\_9\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.684	96	48355	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.901	152	86785	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	328473	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	168631	40.00	ng	0.00
77) Phenanthrene-d10	9.819	188	326648	40.00	ng	0.00
91) Chrysene-d12	12.877	240	304927	40.00	ng	-0.01
103) Perylene-d12	14.512	264	304884	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.713	112	206548	81.66	ng	0.00
Spiked Amount	100.000		Recovery	=	81.66%	
16) Phenol-d5	5.578	99	257161	84.05	ng	0.00
Spiked Amount	100.000		Recovery	=	84.05%	
32) Nitrobenzene-d5	6.348	128	50199	42.49	ng	0.00
Spiked Amount	50.000		Recovery	=	84.98%	
55) 2-Fluorobiphenyl	7.748	172	257444	44.61	ng	0.00
Spiked Amount	50.000		Recovery	=	89.22%	
80) 2,4,6-Tribromophenol	9.089	330	61496	81.75	ng	0.00
Spiked Amount	100.000		Recovery	=	81.75%	
94) Terphenyl-d14	11.624	244	224147	50.50	ng	-0.01
Spiked Amount	50.000		Recovery	=	101.00%	

Target Compounds Qvalue

-----  
 (#) = qualifier out of range (m) = manual integration (+) = signals summed



## FORM2

Surrogate Recovery

Method: EPA 8270E

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
9M101549.D	SMB88132	S	10/06/20 12:34	1		82	84	85	89	82	101
7M109905.D	DAD19539-007	S	10/06/20 17:57	1		67	77	67	72	77	82
9M101550.D	DAD19539-011	S	10/06/20 12:59	1		61	64	61	60	63	68
7M109906.D	DAD19539-013	S	10/06/20 18:20	1		70	78	67	71	77	80
7M109936.D	DAD19539-014(200X)	S	10/07/20 16:06	200	SD	0*	73	201*	83	73	83
7M109937.D	DAD19539-017(400X)	S	10/07/20 16:29	400	SD	0*	59	292*	72	0*	82
7M109910.D	DAD19562-002	S	10/06/20 19:55	1		71	77	69	73	69	80
7M109911.D	DAD19562-004(MS:AD19	S	10/06/20 20:18	1		73	78	70	72	76	86
7M109912.D	DAD19562-006(MSD:AD1	S	10/06/20 20:42	1		69	77	70	74	77	86
9M101548.D	SMB88132(MS)	S	10/06/20 12:11	1		80	87	91	95	103	104

---

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8270E

**Soil Laboratory Limits**

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101548.D		SMB88132(MS)		10/6/2020 12:11:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<u>Pyridine</u>	1	<u>25.2364</u>	0	50	50	1	150
<u>N-Nitrosodimethylamine</u>	1	<u>40.8154</u>	0	50	82	50	130
Benzaldehyde	1	40.7399	0	50	81	20	220
<u>Aniline</u>	1	<u>25.9014</u>	0	50	52	20	150
Pentachloroethane	1	36.7234	0	50	73	50	130
<u>bis(2-Chloroethyl)ether</u>	1	<u>45.9948</u>	0	50	92	50	130
<u>Phenol</u>	1	<u>78.1802</u>	0	100	78	20	150
<u>2-Chlorophenol</u>	1	<u>82.2506</u>	0	100	82	50	130
N-Decane	1	31.2811	0	50	63	20	130
<u>1,3-Dichlorobenzene</u>	1	<u>40.98</u>	0	50	82	60	130
<u>1,4-Dichlorobenzene</u>	1	<u>46.3334</u>	0	50	93	60	130
<u>1,2-Dichlorobenzene</u>	1	<u>46.142</u>	0	50	92	50	130
<u>Benzyl alcohol</u>	1	<u>48.725</u>	0	50	97	20	130
<u>bis(2-chloroisopropyl)ether</u>	1	<u>45.5304</u>	0	50	91	40	130
<u>2-Methylphenol</u>	1	<u>94.0137</u>	0	100	94	50	130
<u>Acetophenone</u>	1	<u>45.4438</u>	0	50	91	50	130
<u>Hexachloroethane</u>	1	<u>45.9821</u>	0	50	92	50	130
<u>N-Nitroso-di-n-propylamine</u>	1	<u>52.1323</u>	0	50	104	40	130
<u>3&amp;4-Methylphenol</u>	1	<u>98.8253</u>	0	100	99	70	130
<u>Nitrobenzene</u>	1	<u>52.343</u>	0	50	105	70	130
<u>Isophorone</u>	1	<u>51.4584</u>	0	50	103	60	130
<u>2-Nitrophenol</u>	1	<u>92.9534</u>	0	100	93	70	130
<u>2,4-Dimethylphenol</u>	1	<u>103.2401</u>	0	100	103	40	130
<u>Benzoic Acid</u>	1	<u>28.3762</u>	0	100	28	20	130
<u>bis(2-Chloroethoxy)methane</u>	1	<u>53.244</u>	0	50	106	60	130
<u>2,4-Dichlorophenol</u>	1	<u>95.0002</u>	0	100	95	70	130
<u>1,2,4-Trichlorobenzene</u>	1	<u>50.3274</u>	0	50	101	50	130
<u>Naphthalene</u>	1	<u>49.5156</u>	0	50	99	50	130
<u>4-Chloroaniline</u>	1	<u>28.3205</u>	0	50	57	10	150
<u>Hexachlorobutadiene</u>	1	<u>48.0823</u>	0	50	96	60	130
Caprolactam	1	52.9506	0	50	106	50	130
<u>4-Chloro-3-methylphenol</u>	1	<u>95.0676</u>	0	100	95	50	130
<u>2-Methylnaphthalene</u>	1	<u>48.3377</u>	0	50	97	70	130
1-Methylnaphthalene	1	49.5763	0	50	99	70	130
<u>1,1'-Biphenyl</u>	1	<u>42.0938</u>	0	50	84	60	130
<u>1,2,4,5-Tetrachlorobenzene</u>	1	<u>45.24</u>	0	50	90	70	130
<u>Hexachlorocyclopentadiene</u>	1	<u>52.3968</u>	0	50	105	20	160
<u>2,4,6-Trichlorophenol</u>	1	<u>93.4661</u>	0	100	93	70	130
<u>2,4,5-Trichlorophenol</u>	1	<u>95.3092</u>	0	100	95	70	130
<u>2-Chloronaphthalene</u>	1	<u>54.8822</u>	0	50	110	70	130
1,4-Dimethylnaphthalene	1	42.5953	0	50	85	70	130
Diphenyl Ether	1	49.4685	0	50	99	70	130
<u>2-Nitroaniline</u>	1	<u>53.9294</u>	0	50	108	50	130
Coumarin	1	47.1065	0	50	94	70	130
<u>Acenaphthylene</u>	1	<u>57.7765</u>	0	50	116	70	130
<u>Dimethylphthalate</u>	1	<u>55.06</u>	0	50	110	70	130
<u>2,6-Dinitrotoluene</u>	1	<u>56.5044</u>	0	50	113	70	130
<u>Acenaphthene</u>	1	<u>54.555</u>	0	50	109	50	130
<u>3-Nitroaniline</u>	1	<u>42.4376</u>	0	50	85	10	130
<u>2,4-Dinitrophenol</u>	1	<u>26.1825</u>	0	100	26	20	150
<u>Dibenzofuran</u>	1	<u>52.0037</u>	0	50	104	70	130
<u>2,4-Dinitrotoluene</u>	1	<u>56.8677</u>	0	50	114	40	130
<u>4-Nitrophenol</u>	1	<u>84.8796</u>	0	100	85	20	150
2,3,4,6-Tetrachlorophenol	1	87.1629	0	100	87	70	130
<u>Fluorene</u>	1	<u>54.7413</u>	0	50	109	50	130
<u>4-Chlorophenyl-phenylether</u>	1	<u>55.3846</u>	0	50	111	70	130
<u>Diethylphthalate</u>	1	<u>55.5981</u>	0	50	111	70	130
<u>4-Nitroaniline</u>	1	<u>55.0749</u>	0	50	110	50	130
Atrazine	1	53.152	0	50	106	50	130
<u>4,6-Dinitro-2-methylphenol</u>	1	<u>49.7756</u>	0	100	50	40	130
<u>n-Nitrosodiphenylamine</u>	1	<u>46.8118</u>	0	50	94	50	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88132

Method: 8270E	Matrix: Soil	Units: mg/Kg		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b>1,2-Diphenylhydrazine</b>	<b>1</b>	<b>55.7864</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>70</b>	<b>130</b>
<b>4-Bromophenyl-phenylether</b>	<b>1</b>	<b>56.1557</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>70</b>	<b>130</b>
<b>Hexachlorobenzene</b>	<b>1</b>	<b>51.3841</b>	<b>0</b>	<b>50</b>	<b>103</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	56.8282	0	50	114	70	130
<b>Pentachlorophenol</b>	<b>1</b>	<b>89.9256</b>	<b>0</b>	<b>100</b>	<b>90</b>	<b>40</b>	<b>130</b>
<b>Phenanthrene</b>	<b>1</b>	<b>55.8146</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>70</b>	<b>130</b>
<b>Anthracene</b>	<b>1</b>	<b>55.9455</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>70</b>	<b>130</b>
<b>Carbazole</b>	<b>1</b>	<b>48.2992</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>Di-n-butylphthalate</b>	<b>1</b>	<b>55.3138</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>70</b>	<b>130</b>
<b>Fluoranthene</b>	<b>1</b>	<b>57.5641</b>	<b>0</b>	<b>50</b>	<b>115</b>	<b>70</b>	<b>130</b>
<b>Pyrene</b>	<b>1</b>	<b>56.1276</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>50</b>	<b>130</b>
<b>Benzidine</b>	<b>1</b>	<b>7.6824</b>	<b>0</b>	<b>50</b>	<b>15</b>	<b>1</b>	<b>130</b>
<b>Butylbenzylphthalate</b>	<b>1</b>	<b>54.6642</b>	<b>0</b>	<b>50</b>	<b>109</b>	<b>50</b>	<b>130</b>
<b>3,3'-Dichlorobenzidine</b>	<b>1</b>	<b>34.9351</b>	<b>0</b>	<b>50</b>	<b>70</b>	<b>10</b>	<b>130</b>
<b>Benzo[a]anthracene</b>	<b>1</b>	<b>51.9931</b>	<b>0</b>	<b>50</b>	<b>104</b>	<b>70</b>	<b>130</b>
<b>Chrysene</b>	<b>1</b>	<b>47.4162</b>	<b>0</b>	<b>50</b>	<b>95</b>	<b>60</b>	<b>130</b>
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>55.8205</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>70</b>	<b>130</b>
<b>Di-n-octylphthalate</b>	<b>1</b>	<b>55.3487</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>70</b>	<b>130</b>
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b>65.0384</b>	<b>0</b>	<b>50</b>	<b>130</b>	<b>70</b>	<b>130</b>
<b>Benzo[k]fluoranthene</b>	<b>1</b>	<b>58.6368</b>	<b>0</b>	<b>50</b>	<b>117</b>	<b>70</b>	<b>130</b>
<b>Benzo[a]pyrene</b>	<b>1</b>	<b>61.6032</b>	<b>0</b>	<b>50</b>	<b>123</b>	<b>70</b>	<b>130</b>
<b>Indeno[1,2,3-cd]pyrene</b>	<b>1</b>	<b>60.395</b>	<b>0</b>	<b>50</b>	<b>121</b>	<b>70</b>	<b>130</b>
<b>Dibenzo[a,h]anthracene</b>	<b>1</b>	<b>60.2045</b>	<b>0</b>	<b>50</b>	<b>120</b>	<b>60</b>	<b>130</b>
<b>Benzo[g,h,i]perylene</b>	<b>1</b>	<b>59.7774</b>	<b>0</b>	<b>50</b>	<b>120</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M109911.D		AD19562-004(MS:AD19562-002)		10/6/2020 8:18:00 PM			
Non Spike(If applicable): 7M109910.D		AD19562-002		10/6/2020 7:55:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<u>Pyridine</u>	1	<u>22.8741</u>	0	50	46	1	150
<u>N-Nitrosodimethylamine</u>	1	<u>36.875</u>	0	50	74	50	130
Benzaldehyde	1	40.8931	0	50	82	20	220
<u>Aniline</u>	1	<u>1.5219</u>	0	50	3*	20	150
Pentachloroethane	1	35.5288	0	50	71	50	130
<u>bis(2-Chloroethyl)ether</u>	1	<u>43.0896</u>	0	50	86	50	130
<u>Phenol</u>	1	<u>73.6316</u>	0	100	74	20	150
<u>2-Chlorophenol</u>	1	<u>75.0948</u>	0	100	75	50	130
N-Decane	1	30.461	0	50	61	20	130
<u>1,3-Dichlorobenzene</u>	1	<u>35.4379</u>	0	50	71	60	130
<u>1,4-Dichlorobenzene</u>	1	<u>35.2333</u>	0	50	70	60	130
<u>1,2-Dichlorobenzene</u>	1	<u>35.4288</u>	0	50	71	50	130
<u>Benzyl alcohol</u>	1	<u>35.0915</u>	0	50	70	20	130
<u>bis(2-chloroisopropyl)ether</u>	1	<u>40.9178</u>	0	50	82	40	130
<u>2-Methylphenol</u>	1	<u>73.3382</u>	0	100	73	50	130
<u>Acetophenone</u>	1	<u>39.9659</u>	0	50	80	50	130
<u>Hexachloroethane</u>	1	<u>31.8803</u>	0	50	64	50	130
<u>N-Nitroso-di-n-propylamine</u>	1	<u>41.6008</u>	0	50	83	40	130
<u>3&amp;4-Methylphenol</u>	1	<u>75.2684</u>	0	100	75	70	130
<u>Nitrobenzene</u>	1	<u>42.6034</u>	0	50	85	70	130
<u>Isophorone</u>	1	<u>40.4114</u>	0	50	81	60	130
<u>2-Nitrophenol</u>	1	<u>71.9668</u>	0	100	72	70	130
<u>2,4-Dimethylphenol</u>	1	<u>78.575</u>	0	100	79	40	130
<u>Benzoic Acid</u>	1	<u>50.8458</u>	0	100	51	20	130
<u>bis(2-Chloroethoxy)methane</u>	1	<u>42.7739</u>	0	50	86	60	130
<u>2,4-Dichlorophenol</u>	1	<u>70.7819</u>	0	100	71	70	130
<u>1,2,4-Trichlorobenzene</u>	1	<u>38.4523</u>	0	50	77	50	130
<u>Naphthalene</u>	1	<u>37.9852</u>	0	50	76	50	130
<u>4-Chloroaniline</u>	1	<u>18.6172</u>	0	50	37	10	150
<u>Hexachlorobutadiene</u>	1	<u>35.1499</u>	0	50	70	60	130
Caprolactam	1	42.049	0	50	84	50	130
<u>4-Chloro-3-methylphenol</u>	1	<u>70.1841</u>	0	100	70	50	130
<u>2-Methylnaphthalene</u>	1	<u>36.1122</u>	0	50	72	70	130
1-Methylnaphthalene	1	41.5176	0	50	83	70	130
<u>1,1'-Biphenyl</u>	1	<u>33.1605</u>	0	50	66	60	130
<u>1,2,4,5-Tetrachlorobenzene</u>	1	<u>38.9158</u>	0	50	78	70	130
<u>Hexachlorocyclopentadiene</u>	1	0	0	50	0*	20	160
<u>2,4,6-Trichlorophenol</u>	1	<u>72.5256</u>	0	100	73	70	130
<u>2,4,5-Trichlorophenol</u>	1	<u>75.8462</u>	0	100	76	70	130
<u>2-Chloronaphthalene</u>	1	<u>42.0134</u>	0	50	84	70	130
1,4-Dimethylnaphthalene	1	36.2316	0	50	72	70	130
Diphenyl Ether	1	41.0301	0	50	82	70	130
<u>2-Nitroaniline</u>	1	<u>44.5786</u>	0	50	89	50	130
Coumarin	1	38.0624	0	50	76	70	130
<u>Acenaphthylene</u>	1	<u>43.1541</u>	0	50	86	70	130
<u>Dimethylphthalate</u>	1	<u>41.7784</u>	0	50	84	70	130
<u>2,6-Dinitrotoluene</u>	1	<u>42.8226</u>	0	50	86	70	130
<u>Acenaphthene</u>	1	<u>42.1443</u>	0	50	84	50	130
<u>3-Nitroaniline</u>	1	<u>31.7996</u>	0	50	64*	70	130
<u>2,4-Dinitrophenol</u>	1	<u>19.8407</u>	0	100	20	20	150
<u>Dibenzofuran</u>	1	<u>39.0638</u>	0	50	78	70	130
<u>2,4-Dinitrotoluene</u>	1	<u>41.9356</u>	0	50	84	40	130
<u>4-Nitrophenol</u>	1	<u>72.1157</u>	0	100	72	20	150
2,3,4,6-Tetrachlorophenol	1	66.4552	0	100	66*	70	130
<u>Fluorene</u>	1	<u>42.8903</u>	0	50	86	50	130
<u>4-Chlorophenyl-phenylether</u>	1	<u>42.2303</u>	0	50	84	70	130
<u>Diethylphthalate</u>	1	<u>42.7186</u>	0	50	85	70	130
<u>4-Nitroaniline</u>	1	<u>38.5286</u>	0	50	77	50	130
Atrazine	1	38.0617	0	50	76	50	130
<u>4,6-Dinitro-2-methylphenol</u>	1	<u>31.3089</u>	0	100	31*	40	130
<u>n-Nitrosodiphenylamine</u>	1	<u>37.0389</u>	0	50	74	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88132

Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b>1,2-Diphenylhydrazine</b>	<b>1</b>	<b>50.2523</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>70</b>	<b>130</b>
<b>4-Bromophenyl-phenylether</b>	<b>1</b>	<b>42.4892</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>70</b>	<b>130</b>
<b>Hexachlorobenzene</b>	<b>1</b>	<b>40.1565</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	49.3111	0	50	99	70	130
<b>Pentachlorophenol</b>	<b>1</b>	<b>71.3457</b>	<b>0</b>	<b>100</b>	<b>71</b>	<b>40</b>	<b>130</b>
<b>Phenanthrene</b>	<b>1</b>	<b>47.5828</b>	<b>0</b>	<b>50</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>Anthracene</b>	<b>1</b>	<b>43.9529</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>Carbazole</b>	<b>1</b>	<b>36.4639</b>	<b>0</b>	<b>50</b>	<b>73</b>	<b>70</b>	<b>130</b>
<b>Di-n-butylphthalate</b>	<b>1</b>	<b>45.8245</b>	<b>0</b>	<b>50</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b>Fluoranthene</b>	<b>1</b>	<b>49.7557</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>70</b>	<b>130</b>
<b>Pyrene</b>	<b>1</b>	<b>55.3869</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>50</b>	<b>130</b>
<b>Benzidine</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>0*</b>	<b>1</b>	<b>130</b>
<b>Butylbenzylphthalate</b>	<b>1</b>	<b>51.0076</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>50</b>	<b>130</b>
<b>3,3'-Dichlorobenzidine</b>	<b>1</b>	<b>31.7695</b>	<b>0</b>	<b>50</b>	<b>64</b>	<b>10</b>	<b>130</b>
<b>Benzof[anthracene</b>	<b>1</b>	<b>45.8941</b>	<b>0</b>	<b>50</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b>Chrysene</b>	<b>1</b>	<b>42.2928</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>60</b>	<b>130</b>
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>51.2163</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>Di-n-octylphthalate</b>	<b>1</b>	<b>52.9673</b>	<b>0</b>	<b>50</b>	<b>106</b>	<b>70</b>	<b>130</b>
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b>55.5178</b>	<b>0</b>	<b>50</b>	<b>111</b>	<b>70</b>	<b>130</b>
<b>Benzo[k]fluoranthene</b>	<b>1</b>	<b>59.2585</b>	<b>0</b>	<b>50</b>	<b>119</b>	<b>70</b>	<b>130</b>
<b>Benzo[a]pyrene</b>	<b>1</b>	<b>49.6008</b>	<b>0</b>	<b>50</b>	<b>99</b>	<b>70</b>	<b>130</b>
<b>Indeno[1,2,3-cd]pyrene</b>	<b>1</b>	<b>48.0288</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>Dibenzo[a,h]anthracene</b>	<b>1</b>	<b>47.7943</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>60</b>	<b>130</b>
<b>Benzo[g,h,i]perylene</b>	<b>1</b>	<b>46.399</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>70</b>	<b>130</b>

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 Bold and underline - Indicates the compounds reported on form1



**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M109912.D		AD19562-006(MSD:AD19562-0)		10/6/2020 8:42:00 PM			
Non Spike(If applicable): 7M109910.D		AD19562-002		10/6/2020 7:55:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b>Pyridine</b>	<b>1</b>	<b>21.1594</b>	<b>0</b>	<b>50</b>	<b>42</b>	<b>1</b>	<b>150</b>
<b>N-Nitrosodimethylamine</b>	<b>1</b>	<b>36.7461</b>	<b>0</b>	<b>50</b>	<b>73</b>	<b>50</b>	<b>130</b>
Benzaldehyde	1	38.4919	0	50	77	20	220
<b>Aniline</b>	<b>1</b>	<b>19.6779</b>	<b>0</b>	<b>50</b>	<b>39</b>	<b>20</b>	<b>150</b>
Pentachloroethane	1	32.5201	0	50	65	50	130
<b>bis(2-Chloroethyl)ether</b>	<b>1</b>	<b>42.571</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>50</b>	<b>130</b>
<b>Phenol</b>	<b>1</b>	<b>71.2754</b>	<b>0</b>	<b>100</b>	<b>71</b>	<b>20</b>	<b>150</b>
<b>2-Chlorophenol</b>	<b>1</b>	<b>72.1208</b>	<b>0</b>	<b>100</b>	<b>72</b>	<b>50</b>	<b>130</b>
N-Decane	1	27.9422	0	50	56	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>34.0505</b>	<b>0</b>	<b>50</b>	<b>68</b>	<b>60</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>35.5674</b>	<b>0</b>	<b>50</b>	<b>71</b>	<b>60</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>35.729</b>	<b>0</b>	<b>50</b>	<b>71</b>	<b>50</b>	<b>130</b>
<b>Benzyl alcohol</b>	<b>1</b>	<b>36.3293</b>	<b>0</b>	<b>50</b>	<b>73</b>	<b>20</b>	<b>130</b>
<b>bis(2-chloroisopropyl)ether</b>	<b>1</b>	<b>41.4884</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>40</b>	<b>130</b>
<b>2-Methylphenol</b>	<b>1</b>	<b>73.634</b>	<b>0</b>	<b>100</b>	<b>74</b>	<b>50</b>	<b>130</b>
<b>Acetophenone</b>	<b>1</b>	<b>39.7427</b>	<b>0</b>	<b>50</b>	<b>79</b>	<b>50</b>	<b>130</b>
<b>Hexachloroethane</b>	<b>1</b>	<b>31.5209</b>	<b>0</b>	<b>50</b>	<b>63</b>	<b>50</b>	<b>130</b>
<b>N-Nitroso-di-n-propylamine</b>	<b>1</b>	<b>42.1098</b>	<b>0</b>	<b>50</b>	<b>84</b>	<b>40</b>	<b>130</b>
<b>3&amp;4-Methylphenol</b>	<b>1</b>	<b>76.6268</b>	<b>0</b>	<b>100</b>	<b>77</b>	<b>70</b>	<b>130</b>
<b>Nitrobenzene</b>	<b>1</b>	<b>42.4423</b>	<b>0</b>	<b>50</b>	<b>85</b>	<b>70</b>	<b>130</b>
<b>Isophorone</b>	<b>1</b>	<b>41.1362</b>	<b>0</b>	<b>50</b>	<b>82</b>	<b>60</b>	<b>130</b>
<b>2-Nitrophenol</b>	<b>1</b>	<b>71.5407</b>	<b>0</b>	<b>100</b>	<b>72</b>	<b>70</b>	<b>130</b>
<b>2,4-Dimethylphenol</b>	<b>1</b>	<b>77.4908</b>	<b>0</b>	<b>100</b>	<b>77</b>	<b>40</b>	<b>130</b>
<b>Benzoic Acid</b>	<b>1</b>	<b>61.5026</b>	<b>0</b>	<b>100</b>	<b>62</b>	<b>20</b>	<b>130</b>
<b>bis(2-Chloroethoxy)methane</b>	<b>1</b>	<b>43.8515</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>60</b>	<b>130</b>
<b>2,4-Dichlorophenol</b>	<b>1</b>	<b>70.359</b>	<b>0</b>	<b>100</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>38.6323</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>Naphthalene</b>	<b>1</b>	<b>38.4442</b>	<b>0</b>	<b>50</b>	<b>77</b>	<b>50</b>	<b>130</b>
<b>4-Chloroaniline</b>	<b>1</b>	<b>23.8718</b>	<b>0</b>	<b>50</b>	<b>48</b>	<b>10</b>	<b>150</b>
<b>Hexachlorobutadiene</b>	<b>1</b>	<b>35.4718</b>	<b>0</b>	<b>50</b>	<b>71</b>	<b>60</b>	<b>130</b>
Caprolactam	1	40.3373	0	50	81	50	130
<b>4-Chloro-3-methylphenol</b>	<b>1</b>	<b>71.0551</b>	<b>0</b>	<b>100</b>	<b>71</b>	<b>50</b>	<b>130</b>
<b>2-Methylnaphthalene</b>	<b>1</b>	<b>37.5402</b>	<b>0</b>	<b>50</b>	<b>75</b>	<b>70</b>	<b>130</b>
1-Methylnaphthalene	1	41.7299	0	50	83	70	130
<b>1,1'-Biphenyl</b>	<b>1</b>	<b>33.7939</b>	<b>0</b>	<b>50</b>	<b>68</b>	<b>60</b>	<b>130</b>
<b>1,2,4,5-Tetrachlorobenzene</b>	<b>1</b>	<b>39.0931</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>70</b>	<b>130</b>
<b>Hexachlorocyclopentadiene</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>0*</b>	<b>20</b>	<b>160</b>
<b>2,4,6-Trichlorophenol</b>	<b>1</b>	<b>73.1778</b>	<b>0</b>	<b>100</b>	<b>73</b>	<b>70</b>	<b>130</b>
<b>2,4,5-Trichlorophenol</b>	<b>1</b>	<b>76.1086</b>	<b>0</b>	<b>100</b>	<b>76</b>	<b>70</b>	<b>130</b>
<b>2-Chloronaphthalene</b>	<b>1</b>	<b>43.8318</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>70</b>	<b>130</b>
1,4-Dimethylnaphthalene	1	36.086	0	50	72	70	130
Diphenyl Ether	1	41.4878	0	50	83	70	130
<b>2-Nitroaniline</b>	<b>1</b>	<b>45.1187</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>50</b>	<b>130</b>
Coumarin	1	37.9448	0	50	76	70	130
<b>Acenaphthylene</b>	<b>1</b>	<b>45.1583</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>Dimethylphthalate</b>	<b>1</b>	<b>43.1968</b>	<b>0</b>	<b>50</b>	<b>86</b>	<b>70</b>	<b>130</b>
<b>2,6-Dinitrotoluene</b>	<b>1</b>	<b>44.6917</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>Acenaphthene</b>	<b>1</b>	<b>43.3758</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>50</b>	<b>130</b>
<b>3-Nitroaniline</b>	<b>1</b>	<b>35.0681</b>	<b>0</b>	<b>50</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b>2,4-Dinitrophenol</b>	<b>1</b>	<b>23.0472</b>	<b>0</b>	<b>100</b>	<b>23</b>	<b>20</b>	<b>150</b>
<b>Dibenzofuran</b>	<b>1</b>	<b>40.1191</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>70</b>	<b>130</b>
<b>2,4-Dinitrotoluene</b>	<b>1</b>	<b>43.9625</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>40</b>	<b>130</b>
<b>4-Nitrophenol</b>	<b>1</b>	<b>71.3957</b>	<b>0</b>	<b>100</b>	<b>71</b>	<b>20</b>	<b>150</b>
2,3,4,6-Tetrachlorophenol	1	67.9045	0	100	68*	70	130
<b>Fluorene</b>	<b>1</b>	<b>44.0296</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
<b>4-Chlorophenyl-phenylether</b>	<b>1</b>	<b>44.1141</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>Diethylphthalate</b>	<b>1</b>	<b>44.3062</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>4-Nitroaniline</b>	<b>1</b>	<b>40.3658</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
Atrazine	1	37.6435	0	50	75	50	130
<b>4,6-Dinitro-2-methylphenol</b>	<b>1</b>	<b>35.1408</b>	<b>0</b>	<b>100</b>	<b>35*</b>	<b>40</b>	<b>130</b>
<b>n-Nitrosodiphenylamine</b>	<b>1</b>	<b>37.2313</b>	<b>0</b>	<b>50</b>	<b>74</b>	<b>50</b>	<b>130</b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Method: 8270E	Matrix: Soil		Units: mg/Kg		QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b>1,2-Diphenylhydrazine</b>	<b>1</b>	<b>51.1776</b>	<b>0</b>	<b>50</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>4-Bromophenyl-phenylether</b>	<b>1</b>	<b>43.6632</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>Hexachlorobenzene</b>	<b>1</b>	<b>41.3089</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	48.0089	0	50	96	70	130
<b>Pentachlorophenol</b>	<b>1</b>	<b>71.3338</b>	<b>0</b>	<b>100</b>	<b>71</b>	<b>40</b>	<b>130</b>
<b>Phenanthrene</b>	<b>1</b>	<b>44.6643</b>	<b>0</b>	<b>50</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>Anthracene</b>	<b>1</b>	<b>43.5229</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>Carbazole</b>	<b>1</b>	<b>35.7121</b>	<b>0</b>	<b>50</b>	<b>71</b>	<b>70</b>	<b>130</b>
<b>Di-n-butylphthalate</b>	<b>1</b>	<b>45.6275</b>	<b>0</b>	<b>50</b>	<b>91</b>	<b>70</b>	<b>130</b>
<b>Fluoranthene</b>	<b>1</b>	<b>43.331</b>	<b>0</b>	<b>50</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>Pyrene</b>	<b>1</b>	<b>49.0554</b>	<b>0</b>	<b>50</b>	<b>98</b>	<b>50</b>	<b>130</b>
<b>Benzidine</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>0*</b>	<b>1</b>	<b>130</b>
<b>Butylbenzylphthalate</b>	<b>1</b>	<b>52.1399</b>	<b>0</b>	<b>50</b>	<b>104</b>	<b>50</b>	<b>130</b>
<b>3,3'-Dichlorobenzidine</b>	<b>1</b>	<b>36.026</b>	<b>0</b>	<b>50</b>	<b>72</b>	<b>10</b>	<b>130</b>
<b>Benzof[anthracene</b>	<b>1</b>	<b>41.4821</b>	<b>0</b>	<b>50</b>	<b>83</b>	<b>70</b>	<b>130</b>
<b>Chrysene</b>	<b>1</b>	<b>39.0371</b>	<b>0</b>	<b>50</b>	<b>78</b>	<b>60</b>	<b>130</b>
<b>bis(2-Ethylhexyl)phthalate</b>	<b>1</b>	<b>52.0217</b>	<b>0</b>	<b>50</b>	<b>104</b>	<b>70</b>	<b>130</b>
<b>Di-n-octylphthalate</b>	<b>1</b>	<b>52.9278</b>	<b>0</b>	<b>50</b>	<b>106</b>	<b>70</b>	<b>130</b>
<b>Benzo[b]fluoranthene</b>	<b>1</b>	<b>50.3211</b>	<b>0</b>	<b>50</b>	<b>101</b>	<b>70</b>	<b>130</b>
<b>Benzo[k]fluoranthene</b>	<b>1</b>	<b>45.23</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>Benzo[a]pyrene</b>	<b>1</b>	<b>46.5094</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>Indeno[1,2,3-cd]pyrene</b>	<b>1</b>	<b>46.6381</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>Dibenzo[a,h]anthracene</b>	<b>1</b>	<b>46.3343</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>60</b>	<b>130</b>
<b>Benzo[g,h,i]perylene</b>	<b>1</b>	<b>44.7993</b>	<b>0</b>	<b>50</b>	<b>90</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

### Form3 RPD Data Laboratory Limits

QC Batch: SMB88132

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M109912.D	AD19562-006(MSD:AD19562-0	10/6/2020 8:42:00 PM
Duplicate(If applicable): 7M109911.D	AD19562-004(MS:AD19562-002	10/6/2020 8:18:00 PM
Inst Blank(If applicable):		
Method: 8270E	Matrix: Soil	Units: mg/Kg
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
<u>Pyridine</u>	1	<u>21.1594</u>	<u>22.8741</u>	7.8	<u>30</u>
<u>N-Nitrosodimethylamine</u>	1	<u>36.7461</u>	<u>36.875</u>	0.35	<u>30</u>
Benzaldehyde	1	38.4919	40.8931	6	30
<u>Aniline</u>	1	<u>19.6779</u>	<u>1.5219</u>	171*	<u>30</u>
Pentachloroethane	1	32.5201	35.5288	8.8	30
<u>bis(2-Chloroethyl)ether</u>	1	<u>42.571</u>	<u>43.0896</u>	1.2	<u>30</u>
<u>Phenol</u>	1	<u>71.2754</u>	<u>73.6316</u>	3.3	<u>40</u>
<u>2-Chlorophenol</u>	1	<u>72.1208</u>	<u>75.0948</u>	4	<u>40</u>
N-Decane	1	27.9422	30.461	8.6	30
<u>1,3-Dichlorobenzene</u>	1	<u>34.0505</u>	<u>35.4379</u>	4	<u>30</u>
<u>1,4-Dichlorobenzene</u>	1	<u>35.5674</u>	<u>35.2333</u>	0.94	<u>40</u>
<u>1,2-Dichlorobenzene</u>	1	<u>35.729</u>	<u>35.4288</u>	0.84	<u>30</u>
<u>Benzyl alcohol</u>	1	<u>36.3293</u>	<u>35.0915</u>	3.5	<u>30</u>
<u>bis(2-chloroisopropyl)ether</u>	1	<u>41.4884</u>	<u>40.9178</u>	1.4	<u>30</u>
<u>2-Methylphenol</u>	1	<u>73.634</u>	<u>73.3382</u>	0.4	<u>40</u>
<u>Acetophenone</u>	1	<u>39.7427</u>	<u>39.9659</u>	0.56	<u>30</u>
<u>Hexachloroethane</u>	1	<u>31.5209</u>	<u>31.8803</u>	1.1	<u>30</u>
<u>N-Nitroso-di-n-propylamine</u>	1	<u>42.1098</u>	<u>41.6008</u>	1.2	<u>40</u>
<u>3&amp;4-Methylphenol</u>	1	<u>76.6268</u>	<u>75.2684</u>	1.8	<u>30</u>
<u>Nitrobenzene</u>	1	<u>42.4423</u>	<u>42.6034</u>	0.38	<u>30</u>
<u>Isophorone</u>	1	<u>41.1362</u>	<u>40.4114</u>	1.8	<u>30</u>
<u>2-Nitrophenol</u>	1	<u>71.5407</u>	<u>71.9668</u>	0.59	<u>30</u>
<u>2,4-Dimethylphenol</u>	1	<u>77.4908</u>	<u>78.575</u>	1.4	<u>40</u>
<u>Benzoic Acid</u>	1	<u>61.5026</u>	<u>50.8458</u>	19	<u>30</u>
<u>bis(2-Chloroethoxy)methane</u>	1	<u>43.8515</u>	<u>42.7739</u>	2.5	<u>30</u>
<u>2,4-Dichlorophenol</u>	1	<u>70.359</u>	<u>70.7819</u>	0.6	<u>30</u>
<u>1,2,4-Trichlorobenzene</u>	1	<u>38.6323</u>	<u>38.4523</u>	0.47	<u>40</u>
<u>Naphthalene</u>	1	<u>38.4442</u>	<u>37.9852</u>	1.2	<u>40</u>
<u>4-Chloroaniline</u>	1	<u>23.8718</u>	<u>18.6172</u>	25	<u>30</u>
<u>Hexachlorobutadiene</u>	1	<u>35.4718</u>	<u>35.1499</u>	0.91	<u>30</u>
Caprolactam	1	40.3373	42.049	4.2	30
<u>4-Chloro-3-methylphenol</u>	1	<u>71.0551</u>	<u>70.1841</u>	1.2	<u>40</u>
<u>2-Methylnaphthalene</u>	1	<u>37.5402</u>	<u>36.1122</u>	3.9	<u>30</u>
1-Methylnaphthalene	1	41.7299	41.5176	0.51	30
<u>1,1'-Biphenyl</u>	1	<u>33.7939</u>	<u>33.1605</u>	1.9	<u>30</u>
<u>1,2,4,5-Tetrachlorobenzene</u>	1	<u>39.0931</u>	<u>38.9158</u>	0.45	<u>30</u>
<u>Hexachlorocyclopentadiene</u>	1	<u>0</u>	<u>0</u>	NA	<u>30</u>
<u>2,4,6-Trichlorophenol</u>	1	<u>73.1778</u>	<u>72.5256</u>	0.9	<u>30</u>
<u>2,4,5-Trichlorophenol</u>	1	<u>76.1086</u>	<u>75.8462</u>	0.35	<u>30</u>
<u>2-Chloronaphthalene</u>	1	<u>43.8318</u>	<u>42.0134</u>	4.2	<u>30</u>
1,4-Dimethylnaphthalene	1	36.086	36.2316	0.4	30
Diphenyl Ether	1	41.4878	41.0301	1.1	30
<u>2-Nitroaniline</u>	1	<u>45.1187</u>	<u>44.5786</u>	1.2	<u>30</u>
Coumarin	1	37.9448	38.0624	0.31	30
<u>Acenaphthylene</u>	1	<u>45.1583</u>	<u>43.1541</u>	4.5	<u>30</u>
<u>Dimethylphthalate</u>	1	<u>43.1968</u>	<u>41.7784</u>	3.3	<u>30</u>
<u>2,6-Dinitrotoluene</u>	1	<u>44.6917</u>	<u>42.8226</u>	4.3	<u>30</u>
<u>Acenaphthene</u>	1	<u>43.3758</u>	<u>42.1443</u>	2.9	<u>40</u>
<u>3-Nitroaniline</u>	1	<u>35.0681</u>	<u>31.7996</u>	9.8	<u>30</u>
<u>2,4-Dinitrophenol</u>	1	<u>23.0472</u>	<u>19.8407</u>	15	<u>30</u>
<u>Dibenzofuran</u>	1	<u>40.1191</u>	<u>39.0638</u>	2.7	<u>30</u>
<u>2,4-Dinitrotoluene</u>	1	<u>43.9625</u>	<u>41.9356</u>	4.7	<u>40</u>
<u>4-Nitrophenol</u>	1	<u>71.3957</u>	<u>72.1157</u>	1	<u>40</u>
2,3,4,6-Tetrachlorophenol	1	67.9045	66.4552	2.2	30
<u>Fluorene</u>	1	<u>44.0296</u>	<u>42.8903</u>	2.6	<u>40</u>
<u>4-Chlorophenyl-phenylether</u>	1	<u>44.1141</u>	<u>42.2303</u>	4.4	<u>30</u>
<u>Diethylphthalate</u>	1	<u>44.3062</u>	<u>42.7186</u>	3.6	<u>30</u>
<u>4-Nitroaniline</u>	1	<u>40.3658</u>	<u>38.5286</u>	4.7	<u>30</u>
Atrazine	1	37.6435	38.0617	1.1	30
<u>4,6-Dinitro-2-methylphenol</u>	1	<u>35.1408</u>	<u>31.3089</u>	12	<u>30</u>
<u>n-Nitrosodiphenylamine</u>	1	<u>37.2313</u>	<u>37.0389</u>	0.52	<u>30</u>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: SMB88132

Method: 8270E	Matrix: Soil	Units: mg/Kg	QC Type: MSD
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Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
<u>1,2-Diphenylhydrazine</u>	1	<u>51.1776</u>	<u>50.2523</u>	1.8	30
<u>4-Bromophenyl-phenylether</u>	1	<u>43.6632</u>	<u>42.4892</u>	2.7	30
<u>Hexachlorobenzene</u>	1	<u>41.3089</u>	<u>40.1565</u>	2.8	30
N-Octadecane	1	48.0089	49.3111	2.7	30
<u>Pentachlorophenol</u>	1	<u>71.3338</u>	<u>71.3457</u>	0.02	40
<u>Phenanthrene</u>	1	<u>44.6643</u>	<u>47.5828</u>	6.3	30
<u>Anthracene</u>	1	<u>43.5229</u>	<u>43.9529</u>	0.98	30
<u>Carbazole</u>	1	<u>35.7121</u>	<u>36.4639</u>	2.1	30
<u>Di-n-butylphthalate</u>	1	<u>45.6275</u>	<u>45.8245</u>	0.43	30
<u>Fluoranthene</u>	1	<u>43.331</u>	<u>49.7557</u>	14	30
<u>Pyrene</u>	1	<u>49.0554</u>	<u>55.3869</u>	12	40
<u>Benzidine</u>	1	0	0	NA	30
<u>Butylbenzylphthalate</u>	1	<u>52.1399</u>	<u>51.0076</u>	2.2	40
<u>3,3'-Dichlorobenzidine</u>	1	<u>36.026</u>	<u>31.7695</u>	13	30
<u>Benzo[a]anthracene</u>	1	<u>41.4821</u>	<u>45.8941</u>	10	30
<u>Chrysene</u>	1	<u>39.0371</u>	<u>42.2928</u>	8	30
<u>bis(2-Ethylhexyl)phthalate</u>	1	<u>52.0217</u>	<u>51.2163</u>	1.6	30
<u>Di-n-octylphthalate</u>	1	<u>52.9278</u>	<u>52.9673</u>	0.07	30
<u>Benzo[b]fluoranthene</u>	1	<u>50.3211</u>	<u>55.5178</u>	9.8	30
<u>Benzo[k]fluoranthene</u>	1	<u>45.23</u>	<u>59.2585</u>	27	30
<u>Benzo[a]pyrene</u>	1	<u>46.5094</u>	<u>49.6008</u>	6.4	30
<u>Indeno[1,2,3-cd]pyrene</u>	1	<u>46.6381</u>	<u>48.0288</u>	2.9	30
<u>Dibenzo[a,h]anthracene</u>	1	<u>46.3343</u>	<u>47.7943</u>	3.1	30
<u>Benzo[g,h,i]perylene</u>	1	<u>44.7993</u>	<u>46.399</u>	3.5	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**FORM 4**  
Blank SummaryBlank Number: SMB88132  
Blank Data File: 9M101549.D  
Matrix: SoilBlank Analysis Date: 10/06/20 12:34  
Blank Extraction Date: 10/06/20  
(If Applicable)  
Method: EPA 8270E

Sample Number	Data File	Analysis Date
AD19539-007	7M109905.D	10/06/20 17:57
AD19539-011	9M101550.D	10/06/20 12:59
AD19539-013	7M109906.D	10/06/20 18:20
AD19539-014(200X	7M109936.D	10/07/20 16:06
AD19539-017(400X	7M109937.D	10/07/20 16:29
SMB88132(MS)	9M101548.D	10/06/20 12:11
AD19562-006(MSD	7M109912.D	10/06/20 20:42
AD19562-004(MS:	7M109911.D	10/06/20 20:18
AD19562-002	7M109910.D	10/06/20 19:55

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 7

Data File: 7M109431.D  
Analysis Date: 09/17/20 09:43  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.108 min

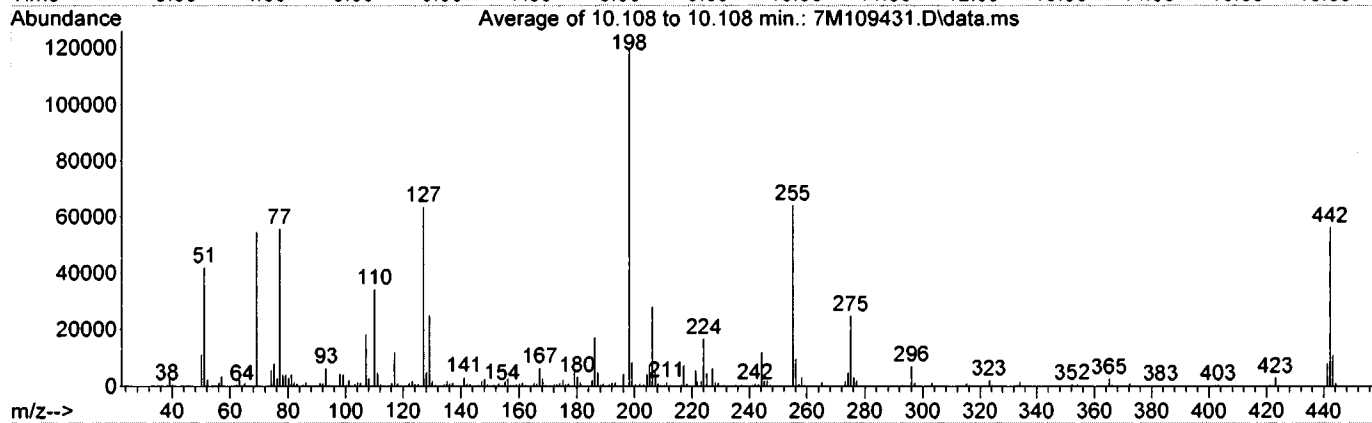
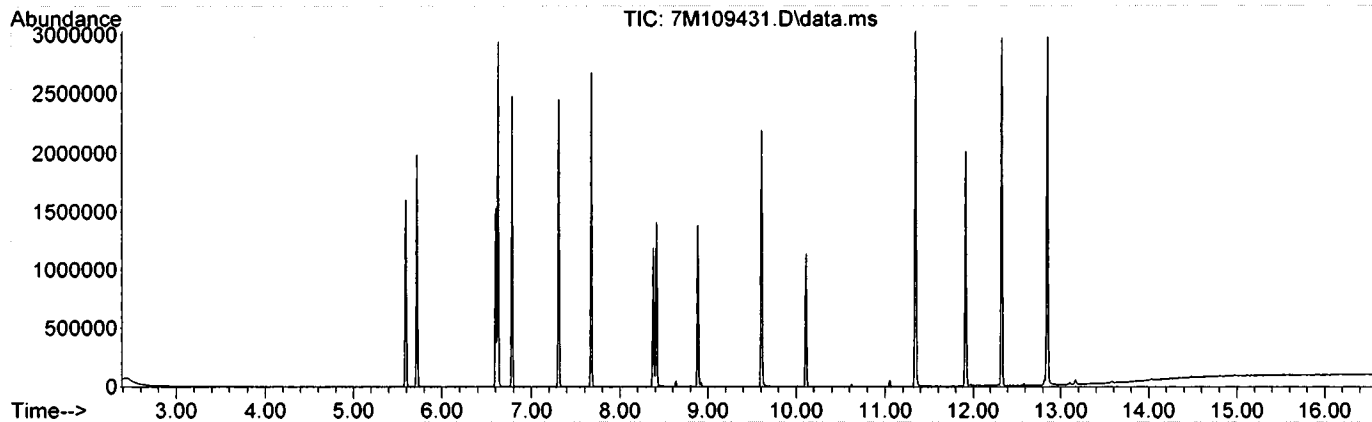
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60	35.1	42072	PASS	
68	69	0.00	2	0.0	0	PASS	
69	198	0.00	100	45.6	54704	PASS	
70	69	0.00	2	0.7	373	PASS	
127	198	40	60	53.1	63672	PASS	
197	198	0.00	1	0.0	0	PASS	
198	198	100	100	100.0	120000	PASS	
199	198	5	9	6.8	8197	PASS	
275	198	10	30	20.8	24936	PASS	
365	198	1	100	2.2	2683	PASS	
441	443	0.01	100	72.0	7872	PASS	
442	198	40	100	47.1	56488	PASS	
443	442	17	23	19.3	10930	PASS	

Data File	Sample Number	Analysis Date:
7M109432.D	CAL BNA@2PPM	09/17/20 10:08
7M109433.D	CAL BNA@10PPM	09/17/20 10:32
7M109434.D	CAL BNA@196PP	09/17/20 10:55
7M109435.D	CAL BNA@160PP	09/17/20 11:22
7M109436.D	CAL BNA@120PP	09/17/20 11:46
7M109437.D	CAL BNA@80PPM	09/17/20 12:09
7M109438.D	CAL BNA@20PPM	09/17/20 12:33
7M109439.D	CAL BNA@0.5PP	09/17/20 12:57
7M109440.D	CAL BNA@50PPM	09/17/20 13:20
7M109441.D	ICV BNA@50PPM	09/17/20 13:44

Data Path : G:\GcMsData\2020\GCMS\_7\Data\09-17-20\  
 Data File : 7M109431.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.108 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.1	42072	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.6	54704	PASS
70	69	0.00	2	0.7	373	PASS
127	198	40	60	53.1	63672	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	120000	PASS
199	198	5	9	6.8	8197	PASS
275	198	10	30	20.8	24936	PASS
365	198	1	100	2.2	2683	PASS
441	443	0.01	100	72.0	7872	PASS
442	198	40	100	47.1	56488	PASS
443	442	17	23	19.3	10930	PASS

RR

## Form 5

Tune Name: CAL DFTPP

Data File: 9M101312.D

Instrument: GCMS 9

Analysis Date: 09/17/20 09:43

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.107 to 10.107 min

Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60		34.3	42992	PASS
68	69	0.00	2		0.0	0	PASS
69	198	0.00	100		38.1	47736	PASS
70	69	0.00	2		0.4	213	PASS
127	198	40	60		50.6	63424	PASS
197	198	0.00	1		0.0	0	PASS
198	198	100	100		100.0	125368	PASS
199	198	5	9		6.6	8281	PASS
275	198	10	30		23.1	28904	PASS
365	198	1	100		2.9	3594	PASS
441	443	0.01	100		85.2	12575	PASS
442	198	40	100		59.7	74840	PASS
443	442	17	23		19.7	14757	PASS

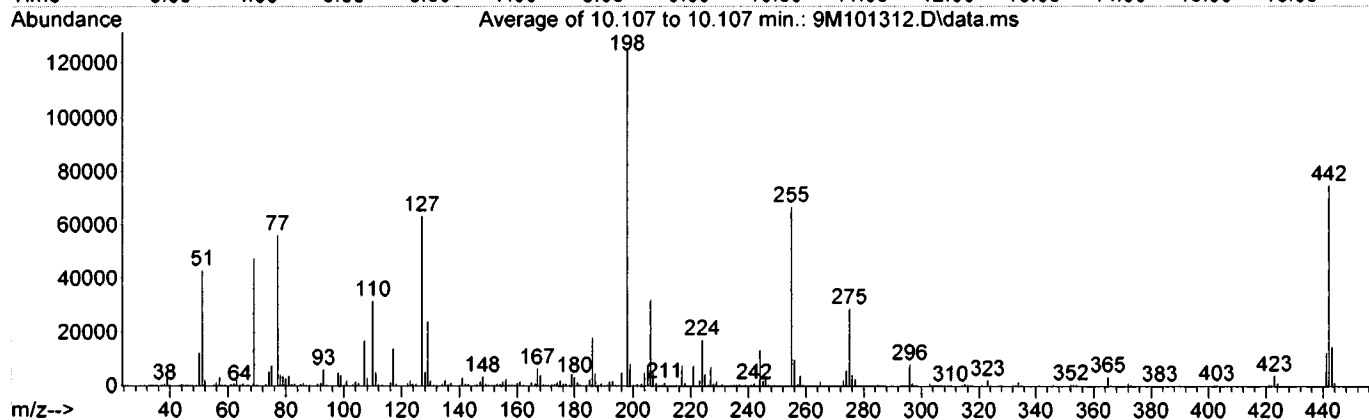
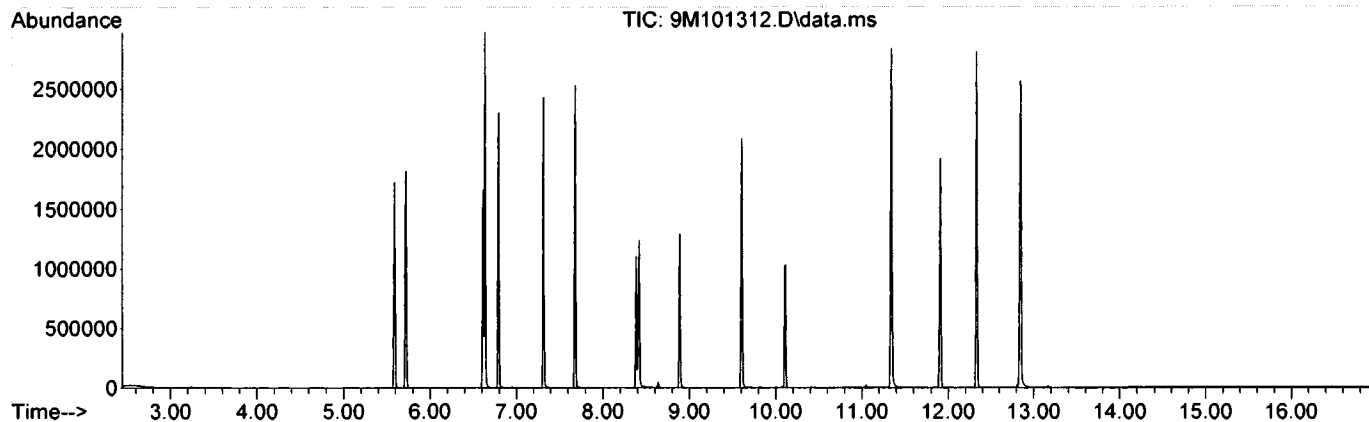
Data File	Sample Number	Analysis Date:
9M101313.D	CAL BNA@10PPM	09/17/20 10:10
9M101314.D	CAL BNA@2PPM	09/17/20 10:34
9M101315.D	CAL BNA@196PP	09/17/20 11:00
9M101316.D	CAL BNA@160PP	09/17/20 11:24
9M101317.D	CAL BNA@120PP	09/17/20 11:47
9M101318.D	CAL BNA@80PPM	09/17/20 12:12
9M101319.D	CAL BNA@20PPM	09/17/20 12:35
9M101320.D	CAL BNA@0.5PP	09/17/20 12:58
9M101321.D	CAL BNA@50PPM	09/17/20 13:22
9M101322.D	ICV BNA@50PPM	09/17/20 13:47
9M101323.D	SMB88017	09/17/20 14:11
9M101324.D	SMB88018	09/17/20 14:34
9M101326.D	88018	09/17/20 15:48



Data Path : G:\GcMsData\2020\GCMS\_9\Data\09-17-20\  
 Data File : 9M101312.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.107 to 10.107 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.3	42992	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.1	47736	PASS
70	69	0.00	2	0.4	213	PASS
127	198	40	60	50.6	63424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	125368	PASS
199	198	5	9	6.6	8281	PASS
275	198	10	30	23.1	28904	PASS
365	198	1	100	2.9	3594	PASS
441	443	0.01	100	85.2	12575	PASS
442	198	40	100	59.7	74840	PASS
443	442	17	23	19.7	14757	PASS

RR

## Form 5

Tune Name: CAL DFTPP

Data File: 9M101544.D

Instrument: GCMS 9

Analysis Date: 10/06/20 08:03

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.095 to 10.113 min

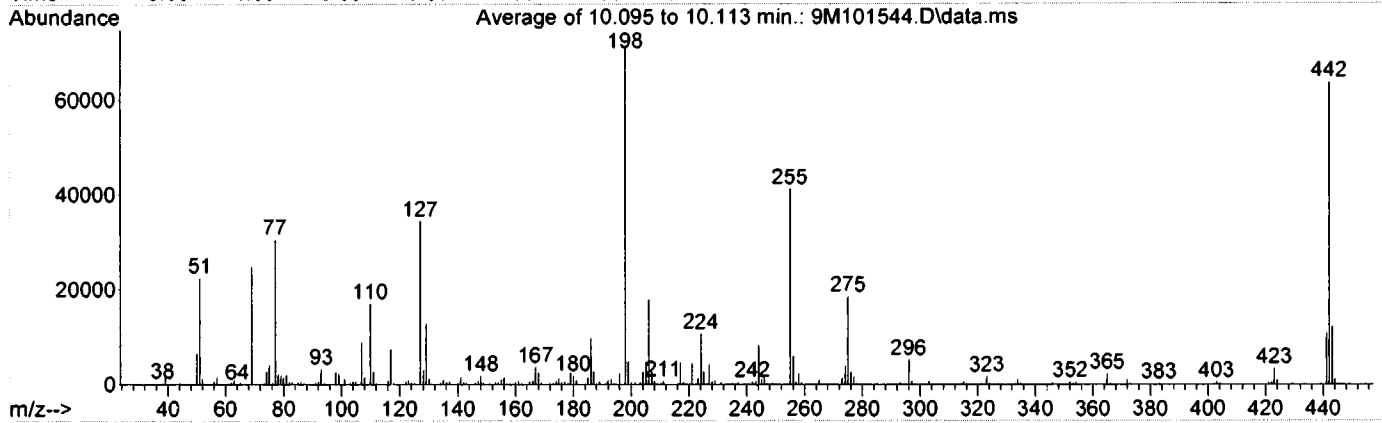
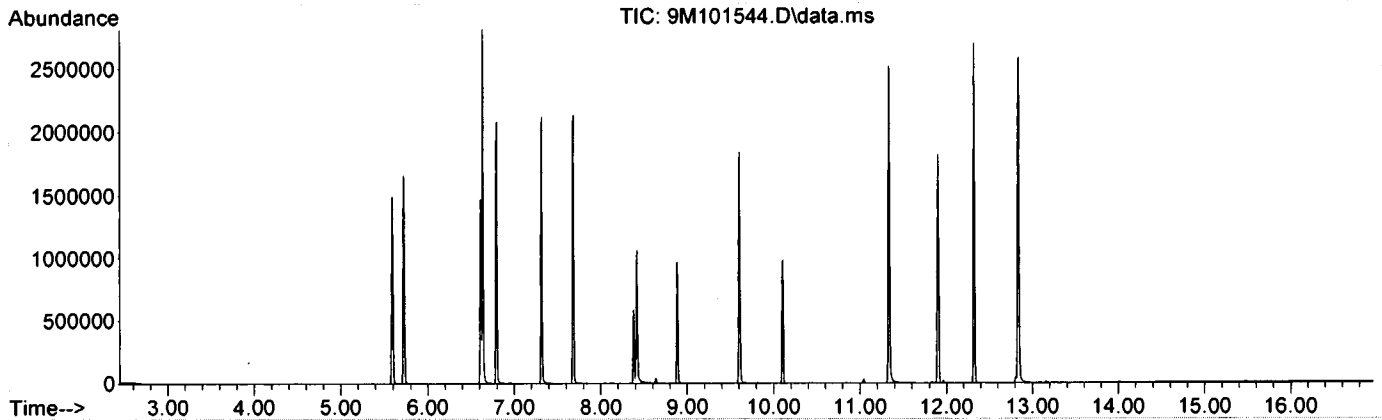
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	31.6	22462		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	34.9	24835		PASS
70	69	0.00	2	0.4	95		PASS
127	198	40	60	48.4	34436		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	71194		PASS
199	198	5	9	6.7	4781		PASS
275	198	10	30	26.1	18549		PASS
365	198	1	100	3.1	2237		PASS
441	443	0.01	100	87.5	10723		PASS
442	198	40	100	89.2	63514		PASS
443	442	17	23	19.3	12261		PASS

Data File	Sample Number	Analysis Date:
9M101545.D	CAL BNA@50PPM	10/06/20 08:27
9M101546.D	OMB88168(MS)	10/06/20 11:24
9M101547.D	OMB88168	10/06/20 11:47
9M101548.D	SMB88132(MS)	10/06/20 12:11
9M101549.D	SMB88132	10/06/20 12:34
9M101550.D	AD19539-011	10/06/20 12:59
9M101551.D	AD19595-009	10/06/20 13:22
9M101552.D	SMB88133	10/06/20 13:45
9M101553.D	SMB88133(MS)	10/06/20 14:09
9M101554.D	SMB88095(MS)	10/06/20 14:32
9M101555.D	SMB88095	10/06/20 14:56
9M101556.D	AD19501-003(MS)	10/06/20 15:19
9M101557.D	AD19501-003(MSD)	10/06/20 15:42

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-06-20\  
 Data File : 9M101544.D  
 Acq On : 6 Oct 2020 8:03  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.095 to 10.113 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.6	22462	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.9	24835	PASS
70	69	0.00	2	0.4	95	PASS
127	198	40	60	48.4	34436	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	71194	PASS
199	198	5	9	6.7	4781	PASS
275	198	10	30	26.1	18549	PASS
365	198	1	100	3.1	2237	PASS
441	443	0.01	100	87.5	10723	PASS
442	198	40	100	89.2	63514	PASS
443	442	17	23	19.3	12261	PASS

RR

## Form 5

Tune Name: CAL DFTPP

Data File: 7M109897.D

Instrument: GCMS 7

Analysis Date: 10/06/20 14:33

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.114 min

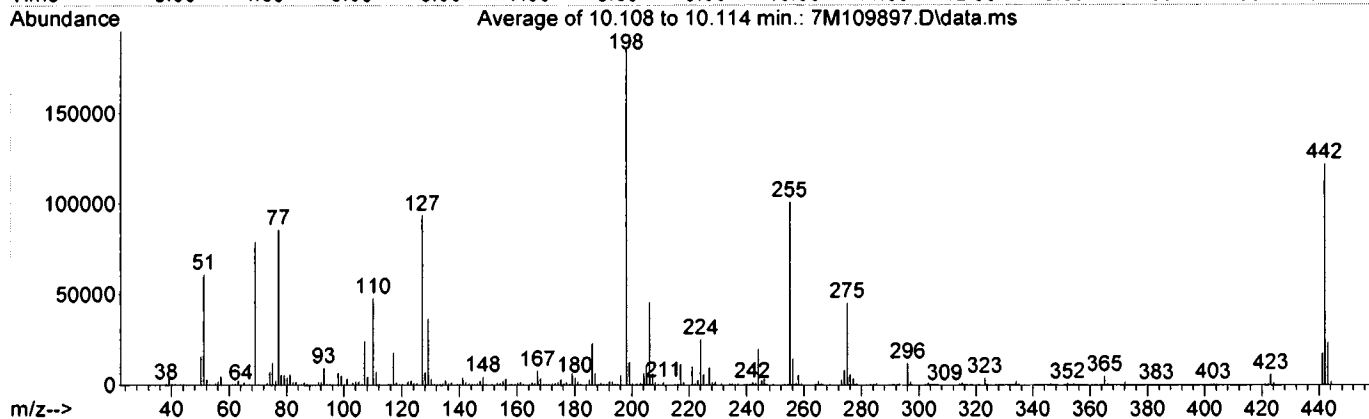
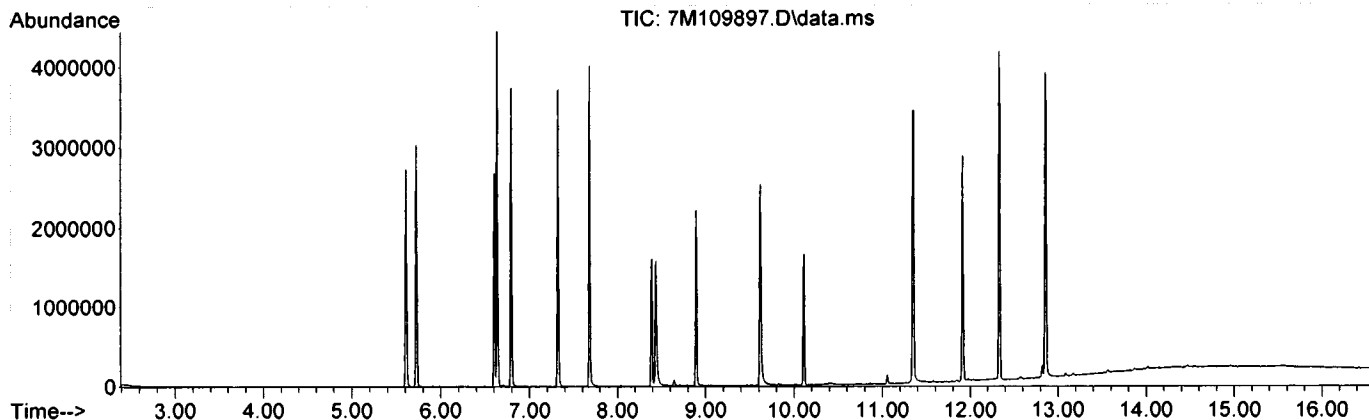
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	32.9	61300		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	42.4	78872		PASS
70	69	0.00	2	0.7	527		PASS
127	198	40	60	50.4	93736		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	186048		PASS
199	198	5	9	6.9	12813		PASS
275	198	10	30	24.5	45612		PASS
365	198	1	100	2.8	5185		PASS
441	443	0.01	100	73.4	17511		PASS
442	198	40	100	65.7	122176		PASS
443	442	17	23	19.5	23847		PASS

Data File	Sample Number	Analysis Date:
7M109898.D	CAL BNA@50PPM	10/06/20 14:57
7M109899.D	SMB88132	10/06/20 15:37
7M109900.D	OMB88168	10/06/20 16:00
7M109901.D	AD19542-001	10/06/20 16:24
7M109902.D	AD19542-001(MS)	10/06/20 16:47
7M109903.D	AD19542-001(MSD)	10/06/20 17:10
7M109904.D	AD19587-007(5X)	10/06/20 17:34
7M109905.D	AD19539-007	10/06/20 17:57
7M109906.D	AD19539-013	10/06/20 18:20
7M109907.D	AD19539-014	10/06/20 18:44
7M109908.D	AD19539-017	10/06/20 19:08
7M109909.D	AD19595-004	10/06/20 19:31
7M109910.D	AD19562-002	10/06/20 19:55
7M109911.D	AD19562-004(MS)	10/06/20 20:18
7M109912.D	AD19562-006(MSD)	10/06/20 20:42
7M109913.D	AD19562-008	10/06/20 21:05
7M109914.D	AD19551-001	10/06/20 21:29
7M109915.D	AD19599-001	10/06/20 21:52
7M109916.D	AD19599-002	10/06/20 22:16
7M109917.D	AD19582-001(3X)	10/06/20 22:39
7M109918.D	AD19482-005(3X)	10/06/20 23:03
7M109919.D	AD19517-002(5X)	10/06/20 23:26
7M109920.D	AD19517-004(5X)	10/06/20 23:50
7M109921.D	AD19517-001(5X)	10/07/20 00:13
7M109922.D	AD19517-003(10X)	10/07/20 00:37
7M109923.D	AD19551-002(5X)	10/07/20 01:01

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0620\  
 Data File : 7M109897.D  
 Acq On : 6 Oct 2020 14:33  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.114 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.9	61300	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.4	78872	PASS
70	69	0.00	2	0.7	527	PASS
127	198	40	60	50.4	93736	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	186048	PASS
199	198	5	9	6.9	12813	PASS
275	198	10	30	24.5	45612	PASS
365	198	1	100	2.8	5185	PASS
441	443	0.01	100	73.4	17511	PASS
442	198	40	100	65.7	122176	PASS
443	442	17	23	19.5	23847	PASS

RR

## Form 5

Tune Name: CAL DFTPP

Data File: 7M109934.D

Instrument: GCMS 7

Analysis Date: 10/07/20 15:17

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.108 min

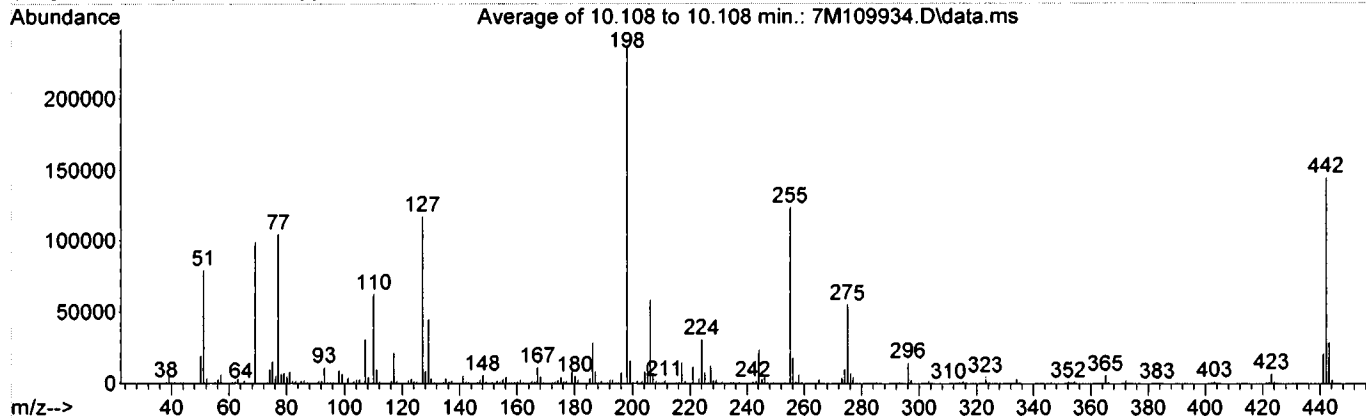
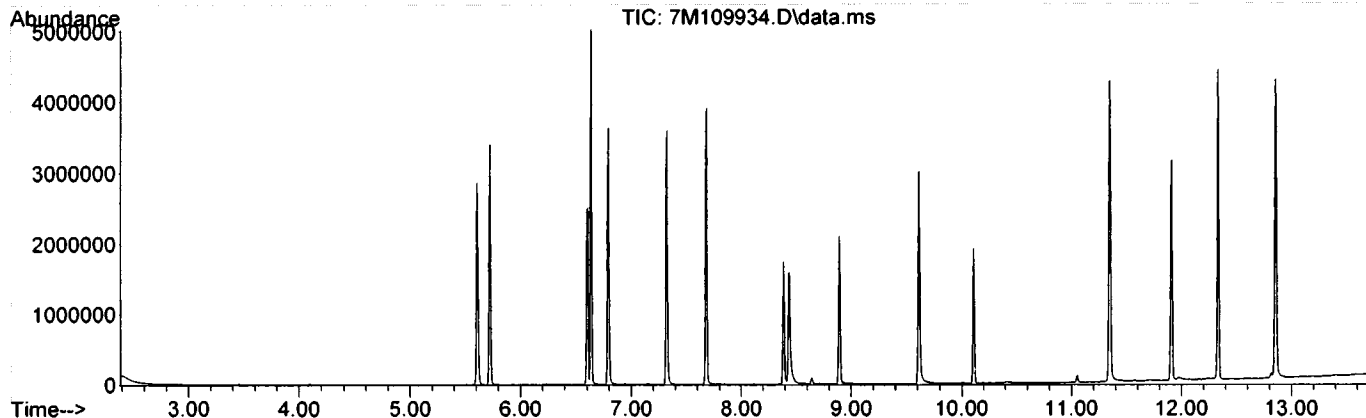
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	33.6	79424		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	42.0	99312		PASS
70	69	0.00	2	0.6	571		PASS
127	198	40	60	49.8	117576		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	236224		PASS
199	198	5	9	6.8	16055		PASS
275	198	10	30	23.5	55520		PASS
365	198	1	100	2.5	5902		PASS
441	443	0.01	100	73.9	21320		PASS
442	198	40	100	61.2	144512		PASS
443	442	17	23	20.0	28840		PASS

Data File	Sample Number	Analysis Date:
7M109935.D	CAL BNA@50PPM	10/07/20 15:38
7M109936.D	AD19539-014(200X)	10/07/20 16:06
7M109937.D	AD19539-017(400X)	10/07/20 16:29
7M109938.D	AD19589-002(10X)	10/07/20 16:53
7M109939.D	AD19589-003(10X)	10/07/20 17:16
7M109940.D	AD19563-024(MS)	10/07/20 17:40
7M109941.D	AD19563-026(MSD)	10/07/20 18:03
7M109942.D	AD19563-028	10/07/20 18:27
7M109943.D	AD19563-004	10/07/20 18:50
7M109944.D	AD19563-006	10/07/20 19:14
7M109945.D	AD19563-008	10/07/20 19:38
7M109946.D	AD19563-010	10/07/20 20:01
7M109947.D	AD19563-012	10/07/20 20:24
7M109948.D	AD19563-014	10/07/20 20:48
7M109949.D	AD19563-016	10/07/20 21:11
7M109950.D	AD19563-018	10/07/20 21:34
7M109951.D	AD19563-020	10/07/20 21:58
7M109952.D	AD19563-022	10/07/20 22:22
7M109953.D	AD19563-030	10/07/20 22:45
7M109954.D	AD19563-032	10/07/20 23:08
7M109955.D	AD19563-034	10/07/20 23:32
7M109956.D	AD19563-036	10/07/20 23:55
7M109957.D	AD19563-038	10/08/20 00:19
7M109958.D	AD19589-004	10/08/20 00:42
7M109959.D	AD19589-005	10/08/20 01:06
7M109960.D	AD19629-001(3X)	10/08/20 01:29
7M109961.D	AD19629-002(3X)	10/08/20 01:53
7M109962.D	AD19589-006(5X)	10/08/20 02:16
7M109963.D	AD19496-001(5X)	10/08/20 02:39
7M109964.D	AD19636-001(5X)	10/08/20 03:03

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0720\  
 Data File : 7M109934.D  
 Acq On : 7 Oct 2020 15:17  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.108 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.6	79424	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.0	99312	PASS
70	69	0.00	2	0.6	571	PASS
127	198	40	60	49.8	117576	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	236224	PASS
199	198	5	9	6.8	16055	PASS
275	198	10	30	23.5	55520	PASS
365	198	1	100	2.5	5902	PASS
441	443	0.01	100	73.9	21320	PASS
442	198	40	100	61.2	144512	PASS
443	442	17	23	20.0	28840	PASS

RR







Level #	Data File	Cal Identifier	Analysis Date/Time									Level #	Data File	Cal Identifier	Analysis Date/Time										
			RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9				AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6
1	7M109440.D	CAL BNA@50PPM	0.3503	0.3655	0.3774	0.3341	0.3460	0.3571	0.3595	0.3678	---	0.357	11.57	0.999	1.00	3.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3	7M109433.D	CAL BNA@10PPM	0.5173	0.5040	0.5516	0.4863	0.5081	0.5152	0.5081	0.5278	---	0.515	11.97	0.999	1.00	3.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
5	7M109437.D	CAL BNA@80PPM	0.5670	0.5750	0.6106	0.5386	0.5454	0.5565	0.5463	0.5709	---	0.564	12.23	0.999	0.999	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
7	7M109435.D	CAL BNA@160PPM	0.5993	0.5393	0.6429	0.5529	0.5709	0.5754	0.5760	0.5874	---	0.581	12.33	0.999	0.999	5.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
9	7M109439.D	CAL BNA@0.5PPM	0.4587	0.4820	0.4897	0.4247	0.4479	0.4540	0.4440	0.4567	---	0.457	12.85	1.00	1.00	4.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
1	1.1813	1.2500	1.2776	1.1055	1.1167	1.1531	1.1306	1.1707	---	---	1.17	12.88	0.999	0.999	5.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	1.0967	1.1295	1.2176	1.0668	1.0498	1.0409	1.0250	1.0596	---	---	1.09	12.92	0.999	0.999	5.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0.7615	0.8450	0.8447	0.7274	0.7265	0.7171	0.7088	0.7210	---	---	0.757	12.92	1.00	1.00	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	1.2794	1.3745	1.4455	1.2328	1.2345	1.2196	1.1919	1.2391	---	---	1.28	13.68	0.999	0.999	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	1.1394	1.2007	1.2147	1.1224	1.0944	1.0793	1.0414	1.1490	---	---	1.13	14.11	0.998	0.998	5.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	1.0417	1.1169	1.1984	0.9900	1.0351	1.0321	1.0449	1.0116	---	---	1.06	14.14	0.999	1.00	6.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	1.0102	1.0406	1.0815	0.9527	0.9757	0.9811	0.9730	1.0095	---	---	1.00	14.48	0.999	1.00	4.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	1.1141	1.1817	1.2143	1.0361	1.0844	1.0993	1.0993	1.1488	---	---	1.12	15.94	0.999	0.999	5.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0.9343	0.9522	1.0181	0.8771	0.9158	0.9263	0.9176	0.9561	---	---	0.937	15.96	0.999	1.00	4.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0.9171	1.0021	1.0080	0.8577	0.8974	0.9121	0.9112	0.9585	---	---	0.933	16.33	0.998	0.999	5.6	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coefft criteria(if applicable)

Note:  
Avg Rsd: 6.036  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.





Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																		
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@2PPM	09/17/20 10:34	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9										
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@2PPM	09/17/20 10:34	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
3	9M101313.D	CAL BNA@10PPM	09/17/20 10:10	4	9M101319.D	CAL BNA@20PPM	09/17/20 12:35	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
5	9M101318.D	CAL BNA@80PPM	09/17/20 12:12	6	9M101317.D	CAL BNA@120PPM	09/17/20 11:47	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
7	9M101316.D	CAL BNA@160PPM	09/17/20 11:24	8	9M101315.D	CAL BNA@196PPM	09/17/20 11:00	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
9	9M101320.D	CAL BNA@0.5PPM	09/17/20 12:58					50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0											
Compound	Col	Mf	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9
4,4'-DDE	1	0	Avg	0.3164	0.3085	0.3251	0.2870	0.3181	0.3368	0.3355	0.3357	---	0.320	11.57	0.999	1.00	5.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4676	0.3298	0.4118	0.4039	0.4696	0.4943	0.4859	0.4842	---	0.443	11.97	0.999	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.4710	0.2384	0.3600	0.3840	0.4937	0.5153	0.5030	0.5012	---	0.453	12.23	0.999	0.999	23	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Qua	0.5607	0.4100	0.6178	0.5043	0.5646	0.5801	0.5774	0.5756	---	0.549	12.33	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3898	0.2240	0.4113	0.3352	0.4035	0.4225	0.4142	0.3995	---	0.375	12.85	0.999	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzoflanthracene	1	0	Avg	1.1262	1.1259	1.1404	1.0406	1.1448	1.1645	1.1679	1.1421	---	1.13	12.88	1.00	1.00	3.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1020	1.2634	1.1943	1.0445	1.0556	1.0822	1.0400	1.0496	---	1.10	12.92	1.00	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6559	0.3313	0.5540	0.5664	0.6633	0.6739	0.6511	0.6267	---	0.580	12.92	0.998	0.999	19	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
D,h-octylphthalate	1	0	Qua	1.0321	0.3373	0.6180	0.8050	1.0983	1.1633	1.1157	1.0860	---	0.907	13.68	0.998	0.999	33	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.0627	0.8442	0.9841	0.9332	1.0674	1.1317	1.1321	1.1712	---	1.04	14.10	0.999	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.1059	1.0441	1.1654	1.0308	1.0850	1.0826	1.0345	0.9585	---	1.06	14.13	0.994	0.999	5.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	0.9862	0.7020	0.9358	0.8535	0.9952	1.0171	1.0027	0.9943	---	0.936	14.47	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl,2,3-cd]piren	1	0	Avg	1.1882	0.9198	1.0889	1.0476	1.2176	1.2755	1.2625	1.2526	---	1.16	15.89	1.00	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofla,hanthracen	1	0	Avg	1.0042	0.7706	0.9347	0.8922	1.0083	1.0517	1.0405	1.0286	---	0.966	15.92	1.00	1.00	9.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofl,q,h,liberylene	1	0	Avg	0.9795	0.8174	0.9208	0.8688	0.9875	1.0324	1.0163	1.0094	---	0.954	16.29	1.00	1.00	8.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

Note:  
Avg Rsd: 8.313  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 8:27:00 AData File: 9M101545.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.71	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.74	47.74	50	**	1.057	1.009		4.52	
Pyridine	1	0		3.21	50.45	50	**	2.196	2.216		0.90	
N-Nitrosodimethylamine	1	0		3.14	51.95	50	**	1.391	1.445		3.91	
2-Fluorophenol	1	0	S	4.71	50.91	50	**	2.092	2.130		1.81	
Benzaldehyde	1	0		5.52	49.15	50	20	0.01	2.004	1.970	1.70	
Aniline	1	0		5.62	50.58	50	**		3.460	3.500	1.17	
Pentachloroethane	1	0		5.67	49.29	50	**	0.05	0.724	0.714	1.42	
bis(2-Chloroethyl)ether	1	0		5.68	51.97	50	20	0.7	2.274	2.364	3.94	
Phenol-d5	1	0	S	5.58	51.68	50	**		2.531	2.616	3.37	
Phenol	1	0		5.59	50.76	50	20	0.8	3.242	3.291	1.52	
2-Chlorophenol	1	0		5.72	50.18	50	20	0.8	2.529	2.538	0.35	
N-Decane	1	0		5.77	51.28	50	**	0.05	1.907	1.956	2.56	
1,3-Dichlorobenzene	1	0		5.85	50.04	50	**		2.771	2.773	0.09	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.92	50.71	50	20		1.496	1.517	1.42	
1,2-Dichlorobenzene	1	0		6.04	50.63	50	**		1.415	1.433	1.27	
Benzyl alcohol	1	0		6.01	50.81	50	**		0.812	0.825	1.62	
bis(2-chloroisopropyl)ether	1	0		6.12	52.96	50	20	0.01	1.260	1.334	5.92	
2-Methylphenol	1	0		6.10	52.60	50	20	0.7	1.157	1.217	5.21	
Acetophenone	1	0		6.22	51.72	50	20	0.01	1.702	1.761	3.44	
Hexachloroethane	1	0		6.32	51.22	50	20	0.3	0.526	0.539	2.44	
N-Nitroso-di-n-propylamine	1	0		6.22	53.55	50	20	0.5	0.741	0.793	7.09	
3&4-Methylphenol	1	0		6.22	53.11	50	20		1.136	1.206	6.22	
Naphthalene-d8	1	0	I	6.91	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.35	26.62	25	**		0.144	0.153	6.48	
Nitrobenzene	1	0		6.37	51.60	50	20	0.2	0.314	0.324	3.20	
Isophorone	1	0		6.55	52.75	50	20	0.4	0.574	0.606	5.50	
2-Nitrophenol	1	0		6.61	52.91	50	20	0.1	0.177	0.187	5.82	
2,4-Dimethylphenol	1	0		6.64	51.46	50	20	0.2	0.294	0.302	2.92	
Benzoic Acid	1	0		6.69	37.57	50	**		0.206	0.143	24.87	
bis(2-Chloroethoxy)methane	1	0		6.71	51.46	50	20	0.3	0.365	0.375	2.91	
2,4-Dichlorophenol	1	0		6.80	52.73	50	20	0.2	0.270	0.285	5.45	
1,2,4-Trichlorobenzene	1	0		6.86	49.96	50	**		0.312	0.312	0.07	
Naphthalene	1	0		6.92	50.52	50	20	0.7	1.062	1.073	1.04	
4-Chloroaniline	1	0		6.95	51.16	50	20	0.01	0.390	0.399	2.32	
Hexachlorobutadiene	1	0		7.01	49.66	50	20	0.01	0.175	0.174	0.68	
Caprolactam	1	0		7.22	54.01	50	20	0.01	0.105	0.113	8.02	
4-Chloro-3-methylphenol	1	0		7.32	50.23	50	20	0.2	0.276	0.277	0.46	
2-Methylnaphthalene	1	0		7.47	50.94	50	**	0.4	0.697	0.710	1.88	
1-Methylnaphthalene	1	0		7.54	50.37	50	**		0.666	0.671	0.74	
Methylnaphthalenes	1	0		7.54	101.44	50	**			1.382	102.88	
1,1'-Biphenyl	1	0		7.84	50.44	50	20	0.01	0.805	0.812	0.89	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.60	50.09	50	20	0.01	0.629	0.630	0.18	
Hexachlorocyclopentadiene	1	0		7.59	47.77	50	20	0.05	0.339	0.324	4.45	
2,4,6-Trichlorophenol	1	0		7.68	49.38	50	20	0.2	0.381	0.376	1.25	
2,4,5-Trichlorophenol	1	0		7.71	50.46	50	20	0.2	0.392	0.396	0.92	
2-Fluorobiphenyl	1	0	S	7.75	25.55	25	**		1.369	1.399	2.21	
2-Chloronaphthalene	1	0		7.87	51.16	50	20	0.8	1.192	1.220	2.32	
1,4-Dimethylnaphthalene	1	0		8.15	50.91	50	**		0.906	0.923	1.82	
Dimethylnaphthalenes	1	0		8.15	50.91	50	20			0.923	1.82	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

Form7  
Continuing CalibrationCalibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 8:27:00 AData File: 9M101545.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	50.84	50	**		0.884	0.899	1.69	
2-Nitroaniline	1	0		7.94	54.42	50	20	0.01	0.330	0.359	8.85	
Coumarin	1	0		8.12	52.31		**		0.444			
Acenaphthylene	1	0		8.22	51.89	50	20	0.9	1.789	1.856	3.77	
Dimethylphthalate	1	0		8.08	51.28	50	20	0.01	1.339	1.373	2.56	
2,6-Dinitrotoluene	1	0		8.14	53.83	50	20	0.2	0.284	0.305	7.66	
Acenaphthene	1	0		8.38	50.84	50	20	0.9	1.239	1.260	1.69	
3-Nitroaniline	1	0		8.29	54.15	50	20	0.01	0.327	0.354	8.29	
2,4-Dinitrophenol	1	0		8.38	43.96	50	20	0.2	0.157	0.134	12.08	
Dibenzofuran	1	0		8.53	50.59	50	20	0.8	1.727	1.747	1.17	
2,4-Dinitrotoluene	1	0		8.50	54.33	50	20	0.2	0.381	0.414	8.65	
4-Nitrophenol	1	0		8.41	48.53	50	20	0.01	0.209	0.221	2.94	
2,3,4,6-Tetrachlorophenol	1	0		8.64	51.65	50	20	0.01	0.349	0.360	3.29	
Fluorene	1	0		8.86	50.71	50	20	0.9	1.363	1.382	1.41	
4-Chlorophenyl-phenylether	1	0		8.85	50.43	50	20	0.4	0.672	0.678	0.86	
Diethylphthalate	1	0		8.72	51.72	50	20	0.01	1.277	1.321	3.44	
4-Nitroaniline	1	0		8.86	55.29	50	20	0.01	0.342	0.378	10.58	
Atrazine	1	0		9.49	52.24	50	20	0.01	0.397	0.414	4.47	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	47.37	50	20	0.01	0.126	0.120	5.25	
n-Nitrosodiphenylamine	1	0		8.96	51.47	50	20	0.01	0.622	0.640	2.94	
2,4,6-Tribromophenol	1	0	S	9.09	51.86	50	**		0.092	0.096	3.72	
1,2-Diphenylhydrazine	1	0		9.00	51.21	50	**		0.641	0.656	2.42	
4-Bromophenyl-phenylether	1	0		9.34	50.54	50	20	0.1	0.206	0.208	1.09	
Hexachlorobenzene	1	0		9.41	48.46	50	20	0.1	0.229	0.222	3.08	
N-Octadecane	1	0		9.68	55.34	50	**	0.05	0.287	0.318	10.68	
Pentachlorophenol	1	0		9.61	48.97	50	20	0.05	0.146	0.143	2.06	
Phenanthrene	1	0		9.85	49.90	50	20	0.7	1.063	1.061	0.20	
Anthracene	1	0		9.90	50.88	50	20	0.7	1.063	1.081	1.76	
Carbazole	1	0		10.07	52.47	50	20	0.01	0.962	1.010	4.93	
Di-n-butylphthalate	1	0		10.45	49.45	50	20	0.01	0.987	1.130	1.11	
Fluoranthene	1	0		11.18	52.88	50	20	0.6	1.134	1.200	5.76	
Chrysene-d12	1	0	I	12.88	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.45	52.12	50	20	0.6	1.179	1.229	4.24	
Benidine	1	0		11.33	45.72	50	**		0.577	0.564	8.56	
Terphenyl-d14	1	0	S	11.62	26.22	25	**		0.582	0.611	4.89	
4,4'-DDE	1	0		11.57	50.17		**		0.320			
4,4'-DDD	1	0		11.96	53.69		**		0.443			
Butylbenzylphthalate	1	0		12.22	49.60	50	20	0.01	0.433	0.489	0.81	
4,4'-DDT	1	0		12.32	52.53		**		0.549			
3,3'-Dichlorobenzidine	1	0		12.84	48.20	50	20	0.01	0.375	0.399	3.59	
Benzo[a]anthracene	1	0		12.87	52.03	50	20	0.8	1.132	1.177	4.06	
Chrysene	1	0		12.91	50.14	50	20	0.7	1.104	1.107	0.27	
bis(2-Ethylhexyl)phthalate	1	0		12.91	49.86	50	20	0.01	0.590	0.677	0.28	
Perylene-d12	1	0	I	14.51	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.66	48.58	50	20	0.01	0.907	1.082	2.85	
Benzo[b]fluoranthene	1	0		14.08	54.07	50	20	0.7	1.041	1.126	8.15	
Benzo[k]fluoranthene	1	0		14.12	51.57	50	20	0.7	1.063	1.097	3.15	
Benzo[a]pyrene	1	0		14.45	54.51	50	20	0.7	0.936	1.020	9.02	
Indeno[1,2,3-cd]pyrene	1	0		15.87	54.01	50	20	0.5	1.157	1.249	8.02	
Dibenzo[a,h]anthracene	1	0		15.89	53.77	50	20	0.4	0.966	1.039	7.54	
Benzo[g,h,i]perylene	1	0		16.27	53.56	50	20	0.5	0.954	1.022	7.12	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 2 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
 Cont Calibration Date/Time 10/6/2020 8:27:00 A

Data File: 9M101545.D  
 Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.906		0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.681		0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound  
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
 CI-Compound %Diff exceeds limits

Page 3 of 3  
 \*\* - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
 524.2 limits are compared against the %DIFF



## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 2:57:00 PData File: 7M109898.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.70	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.75	47.35	50	**	1.035		0.980	5.30	
Pyridine	1	0		3.23	50.92	50	**	2.335		2.378	1.84	
N-Nitrosodimethylamine	1	0		3.16	56.84	50	**	1.466		1.667	13.68	
2-Fluorophenol	1	0	S	4.73	51.07	50	**	2.355		2.406	2.14	
Benzaldehyde	1	0		5.52	51.88	50	20	0.01	2.298	2.385	3.76	
Aniline	1	0		5.62	50.77	50	**	3.788		3.846	1.54	
Pentachloroethane	1	0		5.66	49.88	50	**	0.05	0.836	0.834	0.23	
bis(2-Chloroethyl)ether	1	0		5.67	54.14	50	20	0.7	2.509	2.654	8.28	
Phenol-d5	1	0	S	5.59	54.29	50	**	2.830		3.073	8.59	
Phenol	1	0		5.60	54.00	50	20	0.8	3.460	3.737	8.00	
2-Chlorophenol	1	0		5.72	50.77	50	20	0.8	2.749	2.792	1.54	
N-Decane	1	0		5.76	57.56	50	**	0.05	1.917	2.207	15.11	
1,3-Dichlorobenzene	1	0		5.85	48.88	50	**	2.994		2.927	2.25	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	51.31	50	20		1.484	1.523	2.62	
1,2-Dichlorobenzene	1	0		6.04	50.70	50	**		1.410	1.429	1.40	
Benzyl alcohol	1	0		6.01	46.64	50	**		0.837	0.781	6.72	
bis(2-chloroisopropyl)ether	1	0		6.12	63.85	50	20	0.01	1.103	1.409	27.69	C1
2-Methylphenol	1	0		6.10	55.80	50	20	0.7	1.172	1.308	11.61	
Acetophenone	1	0		6.22	55.06	50	20	0.01	1.786	1.967	10.12	
Hexachloroethane	1	0		6.31	51.37	50	20	0.3	0.571	0.587	2.73	
N-Nitroso-di-n-propylamine	1	0		6.22	58.08	50	20	0.5	0.843	0.979	16.16	
3&4-Methylphenol	1	0		6.22	54.50	50	20		1.200	1.308	8.99	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.64	25	**		0.159	0.163	2.54	
Nitrobenzene	1	0		6.36	53.32	50	20	0.2	0.343	0.365	6.64	
Isophorone	1	0		6.54	54.29	50	20	0.4	0.627	0.681	8.58	
2-Nitrophenol	1	0		6.61	51.69	50	20	0.1	0.195	0.202	3.38	
2,4-Dimethylphenol	1	0		6.63	49.52	50	20	0.2	0.320	0.317	0.95	
Benzoic Acid	1	0		6.69	28.00	50	**		0.233	0.120	44.00	
bis(2-Chloroethoxy)methane	1	0		6.70	53.75	50	20	0.3	0.383	0.412	7.49	
2,4-Dichlorophenol	1	0		6.79	48.30	50	20	0.2	0.306	0.295	3.40	
1,2,4-Trichlorobenzene	1	0		6.85	47.17	50	**		0.334	0.315	5.66	
Naphthalene	1	0		6.92	50.19	50	20	0.7	1.040	1.044	0.39	
4-Chloroaniline	1	0		6.95	49.95	50	20	0.01	0.418	0.418	0.11	
Hexachlorobutadiene	1	0		7.01	46.28	50	20	0.01	0.188	0.174	7.45	
Caprolactam	1	0		7.22	53.13	50	20	0.01	0.118	0.126	6.25	
4-Chloro-3-methylphenol	1	0		7.32	49.67	50	20	0.2	0.308	0.306	0.66	
2-Methylnaphthalene	1	0		7.45	50.74	50	**	0.4	0.702	0.712	1.48	
1-Methylnaphthalene	1	0		7.53	50.89	50	**	0.4	0.662	0.674	1.77	
Methylnaphthalenes	1	0		7.53	101.67	50	**			1.387	103.33	
1,1'-Biphenyl	1	0		7.83	50.24	50	20	0.01	0.825	0.829	0.47	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.59	49.30	50	20	0.01	0.627	0.619	1.39	
Hexachlorocyclopentadiene	1	0		7.58	32.70	50	20	0.05	0.351	0.230	34.60	C1
2,4,6-Trichlorophenol	1	0		7.68	48.79	50	20	0.2	0.417	0.407	2.42	
2,4,5-Trichlorophenol	1	0		7.72	49.99	50	20	0.2	0.434	0.434	0.03	
2-Fluorobiphenyl	1	0	S	7.75	24.80	25	**		1.334	1.323	0.81	
2-Chloronaphthalene	1	0		7.86	50.95	50	20	0.8	1.201	1.223	1.91	
1,4-Dimethylnaphthalene	1	0		8.14	52.31	50	**		0.879	0.920	4.63	
Dimethylnaphthalenes	1	0		8.14	52.31	50	20			0.920	4.63	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 2:57:00 PData File: 7M109898.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	51.30	50	**	0.859	0.881		2.60	
2-Nitroaniline	1	0		7.93	57.17	50	20	0.01	0.367	0.419	14.35	
Coumarin	1	0		8.12	53.29		**	0.454				
Acenaphthylene	1	0		8.22	51.69	50	20	0.9	1.762	1.821	3.37	
Dimethylphthalate	1	0		8.08	51.23	50	20	0.01	1.380	1.414	2.47	
2,6-Dinitrotoluene	1	0		8.14	53.43	50	20	0.2	0.313	0.334	6.86	
Acenaphthene	1	0		8.37	51.78	50	20	0.9	1.171	1.213	3.56	
3-Nitroaniline	1	0		8.29	53.18	50	20	0.01	0.349	0.372	6.36	
2,4-Dinitrophenol	1	0		8.39	50.83	50	20	0.2	0.184	0.187	1.65	
Dibenzofuran	1	0		8.53	50.63	50	20	0.8	1.723	1.745	1.27	
2,4-Dinitrotoluene	1	0		8.50	52.93	50	20	0.2	0.433	0.458	5.86	
4-Nitrophenol	1	0		8.43	44.42	50	20	0.01	0.248	0.220	11.16	
2,3,4,6-Tetrachlorophenol	1	0		8.64	49.74	50	20	0.01	0.376	0.374	0.52	
Fluorene	1	0		8.86	52.55	50	20	0.9	1.381	1.451	5.10	
4-Chlorophenyl-phenylether	1	0		8.84	50.22	50	20	0.4	0.694	0.697	0.43	
Diethylphthalate	1	0		8.72	51.76	50	20	0.01	1.375	1.423	3.51	
4-Nitroaniline	1	0		8.87	54.33	50	20	0.01	0.371	0.403	8.66	
Atrazine	1	0		9.50	49.65	50	20	0.01	0.455	0.452	0.70	
Phenanthrene-d10	1	0	I	9.83	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.90	52.83	50	20	0.01	0.133	0.141	5.66	
n-Nitrosodiphenylamine	1	0		8.96	51.79	50	20	0.01	0.622	0.644	3.58	
2,4,6-Tribromophenol	1	0	S	9.10	48.77	50	**	0.103	0.101		2.46	
1,2-Diphenylhydrazine	1	0		9.00	55.89	50	**	0.652	0.729		11.77	
4-Bromophenyl-phenylether	1	0		9.34	49.37	50	20	0.1	0.219	0.217	1.26	
Hexachlorobenzene	1	0		9.41	48.89	50	20	0.1	0.234	0.229	2.22	
N-Octadecane	1	0		9.68	62.13	50	**	0.05	0.299	0.372	24.27	
Pentachlorophenol	1	0		9.61	40.03	50	20	0.05	0.154	0.124	19.94	
Phenanthrene	1	0		9.85	51.01	50	20	0.7	1.051	1.072	2.01	
Anthracene	1	0		9.91	51.24	50	20	0.7	1.079	1.106	2.48	
Carbazole	1	0		10.08	52.38	50	20	0.01	0.990	1.037	4.77	
Di-n-butylphthalate	1	0		10.45	52.47	50	20	0.01	1.212	1.272	4.95	
Fluoranthene	1	0		11.19	50.54	50	20	0.6	1.193	1.205	1.07	
Chrysene-d12	1	0	I	12.90	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.46	52.49	50	20	0.6	1.247	1.309	4.98	
Benzidine	1	0		11.34	37.81	50	**	0.737	0.558		24.38	
Terphenyl-d14	1	0	S	11.64	25.60	25	**	0.637	0.652		2.38	
4,4'-DDE	1	0		11.58	50.43		**	0.357				
4,4'-DDD	1	0		11.98	52.32		**	0.515				
Butylbenzylphthalate	1	0		12.23	53.83	50	20	0.01	0.564	0.607	7.66	
4,4'-DDT	1	0		12.33	54.21		**	0.581				
3,3'-Dichlorobenzidine	1	0		12.86	50.72	50	20	0.01	0.457	0.464	1.45	
Benzo[a]anthracene	1	0		12.89	51.12	50	20	0.8	1.173	1.200	2.25	
Chrysene	1	0		12.93	52.82	50	20	0.7	1.086	1.147	5.65	
bis(2-Ethylhexyl)phthalate	1	0		12.92	55.06	50	20	0.01	0.757	0.833	10.13	
Perylene-d12	1	0	I	14.55	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.67	54.24	50	20	0.01	1.277	1.386	8.48	
Benzo[b]fluoranthene	1	0		14.11	50.94	50	20	0.7	1.130	1.151	1.87	
Benzo[k]fluoranthene	1	0		14.14	50.90	50	20	0.7	1.059	1.078	1.80	
Benzo[a]pyrene	1	0		14.49	51.04	50	20	0.7	1.003	1.024	2.07	
Indeno[1,2,3-cd]pyrene	1	0		15.95	51.99	50	20	0.5	1.122	1.167	3.97	
Dibenzo[a,h]anthracene	1	0		15.97	53.27	50	20	0.4	0.937	0.999	6.54	
Benzo[g,h,i]perylene	1	0		16.35	52.29	50	20	0.5	0.933	0.976	4.58	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 2:57:00 P

Data File: 7M109898.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.682		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.879		0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
C1-Compound %Diff exceeds limits

Page 3 of 3  
\*\* - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 3:38:00 P

Data File: 7M109935.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.70	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.74	49.48	50	**	1.035	1.024		1.03	
Pyridine	1	0		3.22	52.53	50	**	2.335	2.453		5.06	
N-Nitrosodimethylamine	1	0		3.16	57.83	50	**	1.466	1.696		15.66	
2-Fluorophenol	1	0	S	4.73	52.92	50	**	2.355	2.493		5.85	
Benzaldehyde	1	0		5.52	53.46	50	20	0.01	2.298	2.457	6.92	
Aniline	1	0		5.62	51.03	50	**	3.788	3.866		2.07	
Pentachloroethane	1	0		5.66	51.86	50	**	0.05	0.836	0.867	3.72	
bis(2-Chloroethyl)ether	1	0		5.67	54.90	50	20	0.7	2.509	2.755	9.80	
Phenol-d5	1	0	S	5.59	55.74	50	**	2.830	3.156		11.49	
Phenol	1	0		5.60	55.03	50	20	0.8	3.460	3.808	10.07	
2-Chlorophenol	1	0		5.72	52.20	50	20	0.8	2.749	2.870	4.41	
N-Decane	1	0		5.76	59.70	50	**	0.05	1.917	2.289	19.41	
1,3-Dichlorobenzene	1	0		5.85	51.13	50	**	2.994	3.062		2.27	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	51.99	50	20	1.484	1.543		3.99	
1,2-Dichlorobenzene	1	0		6.03	52.57	50	**	1.410	1.482		5.15	
Benzyl alcohol	1	0		6.01	48.80	50	**	0.837	0.817		2.40	
bis(2-chloroisopropyl)ether	1	0		6.11	64.16	50	20	0.01	1.103	1.416	28.33	C1
2-Methylphenol	1	0		6.10	54.77	50	20	0.7	1.172	1.284	9.54	
Acetophenone	1	0		6.22	54.70	50	20	0.01	1.786	1.954	9.40	
Hexachloroethane	1	0		6.31	51.50	50	20	0.3	0.571	0.588	2.99	
N-Nitroso-di-n-propylamine	1	0		6.22	57.20	50	20	0.5	0.843	0.964	14.40	
3&4-Methylphenol	1	0		6.22	54.69	50	20	1.200	1.313		9.39	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.65	25	**	0.159	0.163		2.60	
Nitrobenzene	1	0		6.35	54.84	50	20	0.2	0.343	0.376	9.67	
Isophorone	1	0		6.54	56.06	50	20	0.4	0.627	0.703	12.11	
2-Nitrophenol	1	0		6.60	54.37	50	20	0.1	0.195	0.212	8.73	
2,4-Dimethylphenol	1	0		6.63	50.74	50	20	0.2	0.320	0.325	1.48	
Benzoic Acid	1	0		6.69	39.15	50	**	0.233	0.172		21.69	
bis(2-Chloroethoxy)methane	1	0		6.70	55.76	50	20	0.3	0.383	0.427	11.53	
2,4-Dichlorophenol	1	0		6.79	50.88	50	20	0.2	0.306	0.311	1.76	
1,2,4-Trichlorobenzene	1	0		6.85	50.12	50	**	0.334	0.335		0.23	
Naphthalene	1	0		6.91	50.83	50	20	0.7	1.040	1.057	1.65	
4-Chloroaniline	1	0		6.95	51.04	50	20	0.01	0.418	0.427	2.07	
Hexachlorobutadiene	1	0		7.00	48.33	50	20	0.01	0.188	0.182	3.34	
Caprolactam	1	0		7.23	53.54	50	20	0.01	0.118	0.127	7.07	
4-Chloro-3-methylphenol	1	0		7.32	51.14	50	20	0.2	0.308	0.315	2.27	
2-Methylnaphthalene	1	0		7.45	53.06	50	**	0.4	0.702	0.745	6.13	
1-Methylnaphthalene	1	0		7.53	53.32	50	**	0.4	0.662	0.706	6.65	
Methylnaphthalenes	1	0		7.45	106.43	50	**			1.452	112.86	
1,1'-Biphenyl	1	0		7.83	52.26	50	20	0.01	0.825	0.862	4.53	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.59	50.68	50	20	0.01	0.627	0.636	1.36	
Hexachlorocyclopentadiene	1	0		7.58	31.53	50	20	0.05	0.351	0.221	36.94	C1
2,4,6-Trichlorophenol	1	0		7.68	50.62	50	20	0.2	0.417	0.422	1.25	
2,4,5-Trichlorophenol	1	0		7.72	51.32	50	20	0.2	0.434	0.446	2.64	
2-Fluorobiphenyl	1	0	S	7.74	25.68	25	**	1.334	1.370		2.72	
2-Chloronaphthalene	1	0		7.86	52.94	50	20	0.8	1.201	1.271	5.89	
1,4-Dimethylnaphthalene	1	0		8.14	54.45	50	**	0.879	0.957		8.89	
Dimethylnaphthalenes	1	0		8.14	54.45	50	20			0.957	8.89	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method  
Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 3:38:00 PData File: 7M109935.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	52.67	50	**		0.859	0.905	5.35	
2-Nitroaniline	1	0		7.93	57.40	50	20	0.01	0.367	0.421	14.80	
Coumarin	1	0		8.12	54.90		**		0.454			
Acenaphthylene	1	0		8.22	53.60	50	20	0.9	1.762	1.889	7.20	
Dimethylphthalate	1	0		8.08	53.36	50	20	0.01	1.380	1.473	6.72	
2,6-Dinitrotoluene	1	0		8.14	54.58	50	20	0.2	0.313	0.342	9.16	
Acenaphthene	1	0		8.37	54.11	50	20	0.9	1.171	1.267	8.22	
3-Nitroaniline	1	0		8.29	54.06	50	20	0.01	0.349	0.378	8.12	
2,4-Dinitrophenol	1	0		8.39	55.75	50	20	0.2	0.184	0.205	11.50	
Dibenzofuran	1	0		8.53	52.10	50	20	0.8	1.723	1.796	4.20	
2,4-Dinitrotoluene	1	0		8.50	55.17	50	20	0.2	0.433	0.478	10.35	
4-Nitrophenol	1	0		8.43	46.78	50	20	0.01	0.248	0.232	6.44	
2,3,4,6-Tetrachlorophenol	1	0		8.64	51.56	50	20	0.01	0.376	0.388	3.11	
Fluorene	1	0		8.86	53.98	50	20	0.9	1.381	1.490	7.95	
4-Chlorophenyl-phenylether	1	0		8.84	52.74	50	20	0.4	0.694	0.732	5.47	
Diethylphthalate	1	0		8.72	53.52	50	20	0.01	1.375	1.471	7.04	
4-Nitroaniline	1	0		8.86	56.03	50	20	0.01	0.371	0.416	12.06	
Atrazine	1	0		9.50	50.32	50	20	0.01	0.455	0.458	0.64	
Phenanthrene-d10	1	0	I	9.83	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.90	55.37	50	20	0.01	0.133	0.147	10.74	
n-Nitrosodiphenylamine	1	0		8.96	54.49	50	20	0.01	0.622	0.677	8.98	
2,4,6-Tribromophenol	1	0	S	9.09	52.15	50	**		0.103	0.108	4.31	
1,2-Diphenylhydrazine	1	0		9.00	61.91	50	**		0.652	0.807	23.81	
4-Bromophenyl-phenylether	1	0		9.34	53.05	50	20	0.1	0.219	0.233	6.09	
Hexachlorobenzene	1	0		9.41	51.88	50	20	0.1	0.234	0.243	3.76	
N-Octadecane	1	0		9.67	63.99	50	**	0.05	0.299	0.383	27.97	
Pentachlorophenol	1	0		9.61	45.02	50	20	0.05	0.154	0.139	9.95	
Phenanthrene	1	0		9.85	53.59	50	20	0.7	1.051	1.126	7.18	
Anthracene	1	0		9.91	53.80	50	20	0.7	1.079	1.161	7.61	
Carbazole	1	0		10.07	54.64	50	20	0.01	0.990	1.081	9.28	
Di-n-butylphthalate	1	0		10.45	54.98	50	20	0.01	1.212	1.333	9.96	
Fluoranthene	1	0		11.19	53.09	50	20	0.6	1.193	1.266	6.18	
Chrysene-d12	1	0	I	12.90	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.46	55.02	50	20	0.6	1.247	1.372	10.04	
Benzidine	1	0		11.34	43.16	50	**		0.737	0.637	13.68	
Terphenyl-d14	1	0	S	11.64	26.68	25	**		0.637	0.680	6.70	
4,4'-DDE	1	0		11.57	53.96		**		0.357			
4,4'-DDD	1	0		11.98	55.14		**		0.515			
Butylbenzylphthalate	1	0		12.23	55.56	50	20	0.01	0.564	0.627	11.13	
4,4'-DDT	1	0		12.33	56.71		**		0.581			
3,3'-Dichlorobenzidine	1	0		12.86	52.65	50	20	0.01	0.457	0.481	5.30	
Benzo[a]anthracene	1	0		12.89	52.99	50	20	0.8	1.173	1.243	5.98	
Chrysene	1	0		12.93	55.32	50	20	0.7	1.086	1.201	10.63	
bis(2-Ethylhexyl)phthalate	1	0		12.92	56.41	50	20	0.01	0.757	0.854	12.82	
Perylene-d12	1	0	I	14.55	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.67	56.11	50	20	0.01	1.277	1.433	12.22	
Benzo[b]fluoranthene	1	0		14.12	51.09	50	20	0.7	1.130	1.155	2.18	
Benzo[k]fluoranthene	1	0		14.14	54.31	50	20	0.7	1.059	1.150	8.61	
Benzo[a]pyrene	1	0		14.49	53.68	50	20	0.7	1.003	1.077	7.36	
Indeno[1,2,3-cd]pyrene	1	0		15.95	55.85	50	20	0.5	1.122	1.254	11.70	
Dibenzo[a,h]anthracene	1	0		15.97	56.33	50	20	0.4	0.937	1.056	12.65	
Benzo[g,h,i]perylene	1	0		16.35	55.20	50	20	0.5	0.933	1.030	10.41	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
 Cont Calibration Date/Time 10/7/2020 3:38:00 P

Data File: 7M109935.D  
 Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.682		0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.879		0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound  
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
 C1-Compound %Diff exceeds limits

Page 3 of 3  
 \*\* - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
 524.2 limits are compared against the %DIFF

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 7M109440.D

Analysis Date/Time: 09/17/20 13:20

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

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Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
73342	2.70	143111	5.90	535871	6.90	299982	8.35	591079	9.83	566863	12.89	606663	14.54	
Eval File Area Limit:	36671-146684		71556-286222		267936-1071742		149991-599964		295540-1182158		283432-1133726		303332-1213326	
Eval File Rt Limit:	2.2-3.2		5.4-6.4		6.4-7.4		7.85-8.85		9.33-10.33		12.39-13.39		14.04-15.04	

Data File	Sample#	7M109432 D	7M109433 D	7M109434 D	7M109435 D	7M109436 D	7M109437 D	7M109438 D	7M109439 D	7M109440 D	7M109441 D
		CAL BNA@2PPM	CAL BNA@10PPM	CAL BNA@196PPM	CAL BNA@160PPM	CAL BNA@120PPM	CAL BNA@80PPM	CAL BNA@20PPM	CAL BNA@0.5PPM	CAL BNA@50PPM	ICV BNA@50PPM
		69531	64785	67077	67760	69964	70857	72238	76478	73342	67053
		2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
		148428	134629	128427	136063	139227	145864	147645	159729	143111	134202
		5.90	5.89	5.90	5.90	5.90	5.90	5.90	5.89	5.90	5.90
		561422	507069	488036	515749	527795	544080	554057	603591	536871	503057
		6.90	6.90	6.91	6.91	6.90	6.91	6.90	6.91	6.90	6.90
		316478	279139	277961	291779	296088	297856	303248	332270	299982	276686
		8.35	8.35	8.35	8.35	8.35	8.36	8.35	8.35	8.35	8.35
		606550	539654	551065	586013	589714	591364	586639	642708	591079	543669
		9.82	9.82	9.83	9.83	9.83	9.83	9.82	9.83	9.83	9.83
		573487	514810	511721	545173	559462	573376	574202	623159	566863	533914
		12.89	12.89	12.90	12.90	12.90	12.89	12.89	12.89	12.89	12.89
		547194	506378	549912	587760	599997	606957	588787	617986	606663	555170
		14.53	14.53	14.54	14.54	14.54	14.54	14.54	14.56	14.54	14.54

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/870	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 9M101321.D

Analysis Date/Time: 09/17/20 13:22

Lab File ID: CAL BNA@50PPM

Method: EPA 8270E

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53
Eval File Area Limit:	26070-104282		48526-194106		184986-739944		96780-387120		187272-749086		187988-751954		193707-774828	
Eval File Rt Limit:	2-2-3-2		5-4-6-4		6-41-7-41		7-85-8-85		9-32-10-32		12-39-13-39		14-03-15-03	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101313.D	CAL BNA@10PPM	51565	2.70	94603	5.90	357644	6.91	186206	8.35	356949	9.82	362365	12.89	363176	14.52
9M101314.D	CAL BNA@2PPM	57993	2.71	109516	5.90	415864	6.91	224715	8.35	427849	9.82	428070	12.89	441726	14.52
9M101315.D	CAL BNA@196PPM	54800	2.71	98295	5.91	370914	6.91	198313	8.35	385348	9.83	372874	12.90	404382	14.54
9M101316.D	CAL BNA@160PPM	54281	2.70	99671	5.91	380119	6.91	201097	8.35	386668	9.82	376869	12.90	404156	14.54
9M101317.D	CAL BNA@120PPM	53716	2.70	100690	5.90	388633	6.91	204304	8.35	396990	9.82	389040	12.90	411181	14.53
9M101318.D	CAL BNA@80PPM	50413	2.70	96900	5.90	367645	6.91	189022	8.35	364874	9.82	368614	12.89	384858	14.53
9M101319.D	CAL BNA@20PPM	50283	2.70	98086	5.90	373409	6.91	195446	8.35	372145	9.82	381268	12.89	390149	14.53
9M101320.D	CAL BNA@0.5PPM	54868	2.70	105764	5.90	401840	6.91	207520	8.35	400507	9.82	398325	12.89	412513	14.52
9M101321.D	CAL BNA@50PPM	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53
9M101322.D	ICV BNA@50PPM	46870	2.70	89922	5.90	342712	6.91	179589	8.35	348639	9.82	350075	12.89	359279	14.54
9M101323.D	SMB88017	49284	2.68	94546	5.90	357728	6.91	185930	8.35	361831	9.82	347985	12.89	341541	14.52
9M101324.D	SMB88018	45386	2.68	84733	5.90	321859	6.91	165009	8.35	323960	9.82	309160	12.88	301351	14.54
9M101326.D	88018	51046	2.68	92137	5.91	348476	6.93	179935	8.38	346012	9.84	345538	12.91	349749	14.58

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration =5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORM8**

Internal Standard Areas

Evaluation Std Data File: 9M101545.D

Analysis Date/Time: 10/06/20 08:27

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

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	11		12		13		14		15		16		17	
Eval File Area/RT:	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
64846	2.71	120477	5.90	462914	6.91	240589	8.35	465052	9.82	461393	12.88	480646	14.51	
Eval File Area Limit:	32423-129692		60238-240954		231457-925828		120294-481178		232526-930104		230696-922786		240323-961292	
Eval File Rt Limit:	2.21-3.21		5.4-6.4		6.41-7.41		7.85-8.85		9.32-10.32		12.38-13.38		14.01-15.01	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101546.D	OMB88168(MS)	49839	2.71	87981	5.90	333569	6.91	170902	8.35	325322	9.82	32612	12.88
9M101547.D	OMB88168	52355	2.71	95122	5.90	362991	6.91	189970	8.34	366869	9.82	339498	12.88
9M101548.D	SMB88132(MS)	45157	2.69	78129	5.90	297200	6.91	152191	8.35	292441	9.82	288810	12.88
9M101549.D	SMB88132	48385	2.68	86785	5.90	328473	6.91	168631	8.34	326648	9.82	304927	12.88
9M101550.D	AD19539-011	67682	2.70	125964	5.90	485597	6.91	263417	8.34	512963	9.82	505973	12.88
9M101551.D	AD19595-009	57576	2.69	105065	5.90	405724	6.91	212977	8.34	414463	9.82	415843	12.88
9M101552.D	SMB88133	54457	2.69	99988	5.90	382461	6.91	202399	8.34	389770	9.82	369510	12.88
9M101553.D	SMB88133(MS)	55325	2.69	100977	5.90	384336	6.91	201449	8.35	383763	9.82	383435	12.88
9M101554.D	SMB88095(MS)	51114	2.69	96671	5.90	368059	6.91	191656	8.35	363406	9.82	363417	12.88
9M101555.D	SMB88095	46322	2.69	87814	5.90	336070	6.91	174862	8.34	338431	9.82	318746	12.88
9M101556.D	AD19501-003(MS)	52179	2.70	96966	5.90	367910	6.91	192298	8.35	365232	9.82	364927	12.88
9M101557.D	AD19501-003(MSD)	45686	2.69	84569	5.90	321373	6.91	167660	8.34	318901	9.82	318522	12.88

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 7M109898.D

Analysis Date/Time: 10/06/20 14:57

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

Data File	Sample#	11		12		13		14		15		16		17	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M109899.D	SMB88132	68220	2.68	130338	5.90	499541	6.90	265133	8.35	504806	9.83	441795	12.90	417396	14.54
7M109900.D	OMEB88168	76887	2.70	143883	5.89	560845	6.90	300163	8.34	570525	9.82	497748	12.89	470539	14.54
7M109901.D	AD19542-001	79592	2.70	152722	5.89	564596	6.90	278229	8.34	479970	9.82	336510	12.93	236863	14.67
7M109902.D	AD19542-001(MS)	67252	2.71	135682	5.90	504512	6.90	258765	8.34	457625	9.83	310347	12.93	202357	14.67
7M109903.D	AD19542-001(MSD)	64249	2.71	132842	5.90	489846	6.90	246785	8.35	456176	9.83	319636	12.93	206875	14.67
7M109904.D	AD19587-007(5X)	82517	2.70	172473	5.89	650086	6.90	328272	8.34	604189	9.83	590381	12.91	626947	14.58
7M109905.D	AD19539-007	76553	2.68	167480	5.90	626910	6.90	322446	8.34	588763	9.82	541619	12.89	535684	14.54
7M109906.D	AD19539-013	83622	2.69	183905	5.90	693603	6.90	339590	8.34	643444	9.82	551971	12.89	521804	14.54
7M109907.D	AD19539-014	105751	2.69	151028	5.90	532285	6.91	303559	8.35	570386	9.83	507738	12.92	503912	14.56
7M109908.D	AD19539-017	101191	2.69	149707	5.90	508898	6.91	302802	8.35	548776	9.83	496028	12.92	487309	14.57
7M109909.D	AD19595-004	81461	2.69	179484	5.89	665487	6.90	337148	8.34	620533	9.83	508677	12.89	506697	14.54
7M109910.D	AD19562-002	93013	2.69	198969	5.90	765551	6.90	380815	8.34	717810	9.83	574873	12.90	557951	14.54
7M109911.D	AD19562-004(MS,AD)	80852	2.69	171699	5.89	641716	6.90	330943	8.35	629478	9.83	518455	12.90	497161	14.54
7M109912.D	AD19562-006(MSD,A)	96287	2.69	196004	5.89	746660	6.90	386184	8.35	741528	9.83	598713	12.90	586228	14.54
7M109913.D	AD19562-008	88043	2.69	186620	5.89	705132	6.90	350030	8.34	664610	9.82	532877	12.89	510346	14.54
7M109914.D	AD19551-001	98497	2.69	200865	5.89	769915	6.90	400901	8.34	742896	9.82	612338	12.90	596303	14.54
7M109915.D	AD19589-001	84276	2.70	173873	5.89	668725	6.90	340109	8.34	601547	9.82	513702	12.90	511323	14.55
7M109916.D	AD19589-002	87073	2.69	183732	5.90	699488	6.90	360055	8.34	632224	9.82	534689	12.90	539286	14.55
7M109917.D	AD19582-001(3X)	85485	2.71	176667	5.90	672928	6.90	338161	8.34	597833	9.82	489224	12.90	505912	14.54
7M109918.D	AD19482-005(3X)	88055	2.70	172991	5.90	585503	6.90	360825	8.35	603105	9.84	542161	12.90	516488	14.54
7M109919.D	AD19517-002(5X)	95739	2.71	200667	5.89	756987	6.90	369609	8.34	684098	9.83	563268	12.90	569454	14.55
7M109920.D	AD19517-004(5X)	92014	2.70	184927	5.90	656254	6.90	355450	8.35	673960	9.83	573464	12.90	570404	14.55
7M109921.D	AD19517-001(5X)	93446	2.70	201572	5.89	772949	6.90	339353	8.34	666469	9.83	545084	12.90	553081	14.54
7M109922.D	AD19517-003(10X)	85767	2.72	186558	5.90	689756	6.90	350574	8.34	602068	9.82	499148	12.90	496695	14.55
7M109923.D	AD19551-002(5X)	91790	2.71	202054	5.90	771652	6.90	388928	8.34	675041	9.83	552723	12.90	549175	14.55

11 =	1,4-Dioxane-d8(TNT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 7M109935.D

Analysis Date/Time: 10/07/20 15:38

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area
104668	2.70	208874	5.90	792097	6.90	431706	8.35	830843	9.83	754632	12.90	800356	14.55	
52334-209336		104437-417748		396048-1584194		215853-863412		415422-1661686		377316-1509264		400178-1600712		
Eval File Rt Limit:	2.2-3.2	5.4-6.4	6.4-7.4	7.85-8.85	9.33-10.33	12.4-13.4	14.05-15.05							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M109936.D	AD19539-014(200X)	92815	2.70	187136	5.89	697465	6.90	368225	8.35	697366	9.83	620884	12.90	626037	14.56
7M109937.D	AD19539-017(400X)	93735	2.70	184990	5.90	690916	6.89	370452	8.34	699880	9.82	634297	12.89	617336	14.54
7M109938.D	AD19589-002(10X)(M)	95752	2.70	192842	5.90	719745	6.89	371763	8.34	684151	9.82	583777	12.89	576636	14.54
7M109939.D	AD19589-003(10X)(M)	92400	2.71	190614	5.90	715206	6.90	367652	8.34	683611	9.82	577685	12.89	580661	14.54
7M109940.D	AD19563-024(MS;AD)	99966	2.69	190134	5.90	676196	6.90	358423	8.35	702334	9.83	616104	12.90	625415	14.55
7M109941.D	AD19563-026(MSD;A)	97479	2.69	188278	5.89	675480	6.90	364794	8.35	694889	9.83	599756	12.90	605613	14.54
7M109942.D	AD19563-028	100808	2.69	196871	5.90	719552	6.89	355706	8.34	700139	9.82	606938	12.90	614576	14.54
7M109943.D	AD19563-004	97174	2.69	194100	5.89	711775	6.89	349451	8.35	671219	9.82	589403	12.90	594443	14.55
7M109944.D	AD19563-006	91706	2.69	182489	5.89	647471	6.89	328008	8.34	631912	9.82	544834	12.90	554260	14.55
7M109945.D	AD19563-008	96355	2.70	193202	5.90	699693	6.89	343149	8.34	664212	9.82	564110	12.89	576630	14.54
7M109946.D	AD19563-010	100239	2.70	201480	5.90	734678	6.89	363237	8.34	695971	9.82	601477	12.90	622201	14.55
7M109947.D	AD19563-012	97351	2.69	193323	5.89	709346	6.89	353860	8.34	678303	9.82	573763	12.89	592771	14.54
7M109948.D	AD19563-014	104996	2.70	208653	5.89	753525	6.90	381643	8.35	731549	9.82	629939	12.90	646453	14.55
7M109949.D	AD19563-016	96693	2.69	190664	5.89	694491	6.89	344648	8.34	663733	9.82	559471	12.90	578754	14.55
7M109950.D	AD19563-018	97034	2.70	191426	5.90	681772	6.90	349256	8.35	676346	9.82	569339	12.90	586292	14.55
7M109951.D	AD19563-020	92882	2.69	186578	5.89	674185	6.89	339522	8.34	653611	9.82	556020	12.90	565207	14.55
7M109952.D	AD19563-022	100342	2.70	196956	5.89	691356	6.90	359241	8.35	697994	9.82	586198	12.90	597598	14.55
7M109953.D	AD19563-030	91195	2.70	185973	5.90	655996	6.89	337889	8.34	649509	9.82	551364	12.90	560780	14.55
7M109954.D	AD19563-032	100733	2.70	199790	5.90	709304	6.89	364333	8.35	700072	9.82	595138	12.90	608114	14.55
7M109955.D	AD19563-034	99327	2.70	202953	5.89	718038	6.90	367823	8.35	709491	9.82	599952	12.90	613464	14.55
7M109956.D	AD19563-036	105826	2.70	211756	5.89	756061	6.90	379854	8.34	736231	9.82	615391	12.90	628266	14.55
7M109957.D	AD19563-038	89801	2.69	180736	5.89	675338	6.89	330597	8.34	637158	9.82	526447	12.89	541958	14.54
7M109958.D	AD19589-004	93230	2.69	191722	5.89	728888	6.90	367512	8.34	671036	9.82	555939	12.90	575767	14.55
7M109959.D	AD19589-005	87819	2.70	177126	5.90	672223	6.90	340880	8.34	618948	9.82	511852	12.90	523462	14.54
7M109960.D	AD19629-001(3X)	96526	2.70	180653	5.89	694097	6.90	335048	8.35	654573	9.83	562857	12.90	579972	14.55
7M109961.D	AD19629-002(3X)	92783	2.71	186342	5.90	653453	6.90	329987	8.34	643998	9.82	535770	12.90	559541	14.54
7M109962.D	AD19589-006(5X)	96416	2.71	197173	5.89	748628	6.89	382973	8.34	689987	9.82	550272	12.90	577222	14.55
7M109963.D	AD19496-001(5X)	94686	2.71	193453	5.89	678079	6.90	338501	8.35	648665	9.83	583915	12.90	578182	14.55
7M109964.D	AD19636-001(5X)	98308	2.71	192291	5.89	726382	6.90	368427	8.34	685641	9.83	589938	12.90	606848	14.55

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration =5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.  
 Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.  
 A - Indicates the compound failed the internal standard area criteria  
 R - Indicates the compound failed the internal standard retention time criteria.

**Flags:**

## **Metal Data**

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-007	% Solid: 80	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-02(10-10.5)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	21	250	2200	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7440-39-3	Barium	0.84	12	15	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7440-70-2	Calcium	130	1200	200J	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7440-47-3	Chromium	0.84	6.2	21	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7440-48-4	Cobalt	0.89	3.1	ND	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7440-50-8	Copper	0.77	6.2	8.0	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7439-89-6	Iron	16	250	5300	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7439-92-1	Lead	0.77	6.2	13	1	0.5	50	10/06/20	85372i312B3MDL	15	P	PEICP3A	
7439-95-4	Magnesium	24	620	160J	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7439-96-5	Manganese	0.80	12	12J	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7439-97-6	Mercury	0.016	0.10	ND	1	0.15	25	10/06/20	85372i6312SMDL	27	CV	HGCV3A	
7440-02-0	Nickel	1.4	6.2	2.5J	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	
7440-09-7	Potassium	120	620	ND	1	0.5	50	10/06/20	85372i312A4MDL	26	P	PEICPRAD4A	
7440-23-5	Sodium	160	310	ND	1	0.5	50	10/06/20	85372i312A4MDL	26	P	PEICPRAD4A	
7440-66-6	Zinc	1.9	12	23	1	0.5	50	10/06/20	85372i312A3MDL	37	P	PEICP3A	

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-007	% Solid: 80	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-02(10-10.5)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.028	1.0	0.053J	1	0.5	100	10/07/20	853730720ANEW		18		MSMS3_7700SWA
7440-38-2	Arsenic	0.022	0.25	1.9	1	0.5	100	10/07/20	853730720ANEW		18		MSMS3_7700SWA
7440-41-7	Beryllium	0.059	0.75	0.12J	3	0.5	100	10/07/20	853730720ANEW		23		MSMS3_7700SWA
7440-43-9	Cadmium	0.018	0.50	0.24J	1	0.5	100	10/07/20	853730720ANEW		18		MSMS3_7700SWA
7782-49-2	Selenium	0.079	2.5	3.1	1	0.5	100	10/07/20	853730720ANEW		18		MSMS3_7700SWA
7440-22-4	Silver	0.033	0.25	0.12J	1	0.5	100	10/07/20	853730720ANEW		18		MSMS3_7700SWA
7440-28-0	Thallium	0.066	1.5	ND	3	0.5	100	10/07/20	853730720ANEW		23		MSMS3_7700SWA
7440-62-2	Vanadium	0.014	0.25	32	1	0.5	100	10/07/20	853730720ANEW		18		MSMS3_7700SWA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-011	% Solid: 84	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-03 (10-10.5)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	20	240	570	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7440-39-3	Barium	0.80	12	ND	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7440-70-2	Calcium	120	1200	ND	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7440-47-3	Chromium	0.80	6.0	1.0J	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7440-48-4	Cobalt	0.85	3.0	ND	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7440-50-8	Copper	0.73	6.0	1.0J	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7439-89-6	Iron	16	240	1400	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7439-92-1	Lead	0.73	6.0	1.2J	1	0.5	50	10/06/20	85372i312B3MDL	16	P	PEICP3A	
7439-95-4	Magnesium	23	600	ND	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7439-96-5	Manganese	0.76	12	1.4J	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7439-97-6	Mercury	0.015	0.099	ND	1	0.15	25	10/06/20	85372i6312SMDL	28	CV	HGCV3A	
7440-02-0	Nickel	1.3	6.0	ND	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	
7440-09-7	Potassium	120	600	ND	1	0.5	50	10/06/20	85372i312A4MDL	27	P	PEICPRAD4A	
7440-23-5	Sodium	150	300	ND	1	0.5	50	10/06/20	85372i312A4MDL	27	P	PEICPRAD4A	
7440-66-6	Zinc	1.8	12	ND	1	0.5	50	10/06/20	85372i312A3MDL	38	P	PEICP3A	

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-011	% Solid: 84	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-03 (10-10.5)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.027	0.95	ND	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7440-38-2	Arsenic	0.021	0.24	0.30	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7440-41-7	Beryllium	0.019	0.24	0.040J	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7440-43-9	Cadmium	0.017	0.48	ND	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7782-49-2	Selenium	0.076	2.4	1.1J	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7440-22-4	Silver	0.031	0.24	0.077J	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7440-28-0	Thallium	0.021	0.48	ND	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	
7440-62-2	Vanadium	0.013	0.24	7.5	1	0.5	100	10/07/20	853730720ANEW		19	MSMS3_7700SWA	

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS



**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-013	% Solid: 87	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-01 (2.5-3)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	19	230	4200	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7440-39-3	Barium	0.78	11	9.1J	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7440-70-2	Calcium	120	1100	ND	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7440-47-3	Chromium	0.77	5.7	20	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7440-48-4	Cobalt	0.82	2.9	ND	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7440-50-8	Copper	0.71	5.7	7.0	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7439-89-6	Iron	15	230	7600	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7439-92-1	Lead	0.71	5.7	9.8	1	0.5	50	10/06/20	85372	312B3MDL	17	P	PEICP3A
7439-95-4	Magnesium	22	570	350J	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7439-96-5	Manganese	0.74	11	13	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7439-97-6	Mercury	0.015	0.096	ND	1	0.15	25	10/06/20	85372	6312SMDL	29	CV	HGCV3A
7440-02-0	Nickel	1.3	5.7	3.5J	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A
7440-09-7	Potassium	110	570	160J	1	0.5	50	10/06/20	85372	312A4MDL	28	P	PEICPRAD4A
7440-23-5	Sodium	140	290	ND	1	0.5	50	10/06/20	85372	312A4MDL	28	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	9.0J	1	0.5	50	10/06/20	85372	312A3MDL	39	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-013	% Solid: 87	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-01 (2.5-3)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.026	0.92	0.045J	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7440-38-2	Arsenic	0.020	0.23	1.8	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7440-41-7	Beryllium	0.018	0.23	0.059J	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7440-43-9	Cadmium	0.016	0.46	0.40J	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7782-49-2	Selenium	0.073	2.3	0.80J	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7440-22-4	Silver	0.030	0.23	0.054J	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7440-28-0	Thallium	0.020	0.46	ND	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	
7440-62-2	Vanadium	0.012	0.23	14	1	0.5	100	10/07/20	853730720ANEW		20	MSMS3_7700SWA	

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form 1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-014	% Solid: 83	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-01 (6-6.5)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	20	240	4200	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7440-39-3	Barium	0.81	12	75	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7440-70-2	Calcium	120	1200	290	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7440-47-3	Chromium	0.81	6.0	60	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7440-48-4	Cobalt	0.86	3.0	1.3	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7440-50-8	Copper	0.74	6.0	12	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7439-89-6	Iron	16	240	8200	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7439-92-1	Lead	0.74	6.0	160	1	0.5	50	10/06/20	85372	312B3MDL	18	P	PEICP3A
7439-95-4	Magnesium	23	600	420	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7439-96-5	Manganese	0.77	12	27	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7439-97-6	Mercury	0.015	0.10	0.063	1	0.15	25	10/06/20	85372	6312SMDL	30	CV	HGCV3A
7440-02-0	Nickel	1.3	6.0	8.1	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A
7440-09-7	Potassium	120	600	160	1	0.5	50	10/06/20	85372	312A4MDL	29	P	PEICPRAD4A
7440-23-5	Sodium	150	300	ND	1	0.5	50	10/06/20	85372	312A4MDL	29	P	PEICPRAD4A
7440-66-6	Zinc	1.8	12	33	1	0.5	50	10/06/20	85372	312A3MDL	40	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-014	% Solid: 83	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-01 (6-6.5)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/1/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7440-36-0	Antimony	0.027	0.96	0.84J	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7440-38-2	Arsenic	0.021	0.24	2.3	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7440-41-7	Beryllium	0.019	0.24	0.20J	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7440-43-9	Cadmium	0.017	0.48	11	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7782-49-2	Selenium	0.077	2.4	3.3	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7440-22-4	Silver	0.031	0.24	0.062J	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7440-28-0	Thallium	0.021	0.48	ND	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	
7440-62-2	Vanadium	0.013	0.24	18	1	0.5	100	10/07/20	853730720ANEW		21	MSMS3_7700SWA	

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-017  
Client Id: HSI-SB-D1  
Matrix: SOIL  
Level: LOW

% Solid: 84  
Units: MG/KG  
Date Rec: 10/1/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	20	240	5000	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7440-39-3	Barium	0.80	12	37	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7440-70-2	Calcium	120	1200	1300	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7440-47-3	Chromium	0.80	6.0	49	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7440-48-4	Cobalt	0.85	3.0	1.4J	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7440-50-8	Copper	0.73	6.0	12	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7439-89-6	Iron	16	240	9700	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7439-92-1	Lead	0.73	6.0	140	1	0.5	50	10/06/20	85372	312B3MDL	19	P	PEICP3A
7439-95-4	Magnesium	23	600	440J	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7439-96-5	Manganese	0.76	12	27	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7439-97-6	Mercury	0.015	0.099	0.14	1	0.15	25	10/06/20	85372	6312SMDL	31	CV	HGCV3A
7440-02-0	Nickel	1.3	6.0	9.0	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A
7440-09-7	Potassium	120	600	190J	1	0.5	50	10/06/20	85372	312A4MDL	30	P	PEICPRAD4A
7440-23-5	Sodium	150	300	ND	1	0.5	50	10/06/20	85372	312A4MDL	30	P	PEICPRAD4A
7440-66-6	Zinc	1.8	12	31	1	0.5	50	10/06/20	85372	312A3MDL	41	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19539-017  
Client Id: HSI-SB-D1  
Matrix: SOIL  
Level: LOW

% Solid: 84  
Units: MG/KG  
Date Rec: 10/1/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.027	0.95	1.3	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7440-38-2	Arsenic	0.021	0.24	2.3	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7440-41-7	Beryllium	0.019	0.24	0.17J	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7440-43-9	Cadmium	0.017	0.48	6.2	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7782-49-2	Selenium	0.076	2.4	2.8	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7440-22-4	Silver	0.031	0.24	0.064J	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7440-28-0	Thallium	0.021	0.48	ND	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA
7440-62-2	Vanadium	0.013	0.24	19	1	0.5	100	10/07/20	853730720ANEW		22		MSMS3_7700SWA

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85372 (100)  
Client Id: MB 85372 (100)  
Matrix: SOIL  
Level: LOW

% Solid: 0  
Units: MG/KG

Lab Name: Veritech  
Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	8.4	200	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-39-3	Barium	0.34	10	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-70-2	Calcium	50	1000	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-47-3	Chromium	0.33	5.0	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-48-4	Cobalt	0.36	2.5	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-50-8	Copper	0.31	5.0	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7439-89-6	Iron	6.6	200	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7439-92-1	Lead	2.5	-10000	ND	1	0.5	50	10/06/20	85372 S26312A3		14	P	PEICP3A
7439-95-4	Magnesium	9.8	500	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7439-96-5	Manganese	0.32	10	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-02-0	Nickel	0.55	5.0	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-09-7	Potassium	49	500	ND	1	0.5	50	10/06/20	853726312A4MDL		14	P	PEICPRAD4A
7440-23-5	Sodium	63	250	ND	1	0.5	50	10/06/20	853726312A4MDL		14	P	PEICPRAD4A
7440-62-2	Vanadium	0.48	10	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A
7440-66-6	Zinc	0.75	10	ND	1	0.5	50	10/06/20	853726312A3MDL		14	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85372 (167)      % Solid: 0      Lab Name: Veritech  
 Client Id: MB 85372 (167)      Units: MG/KG      Lab Code:  
 Matrix: SOIL  
 Level: LOW

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7439-97-6	Mercury	0.013	0.083	ND	1	0.15	25	10/06/20	85372	26312SMDL	11	CV	HGCV3A

Comments: \_\_\_\_\_  
 \_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
 P - ICP-AES  
 CV -ColdVapor  
 MS - ICP-MS



Form1  
Inorganic Analysis Data Sheet

Sample ID: MB 85373  
Client Id: MB 85373  
Matrix: SOIL  
Level: LOW

% Solid: 0  
Units: MG/KG

Lab Name: Veritech  
Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	0.79	100	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-36-0	Antimony	0.011	0.80	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-38-2	Arsenic	0.0087	0.20	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-39-3	Barium	0.028	1.0	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-41-7	Beryllium	0.0078	0.20	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-43-9	Cadmium	0.0071	0.40	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-70-2	Calcium	9.5	100	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-47-3	Chromium	0.043	0.40	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-48-4	Cobalt	0.0054	0.40	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-50-8	Copper	0.097	2.0	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7439-89-6	Iron	2.1	100	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7439-92-1	Lead	0.019	0.40	0.33J	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7439-95-4	Magnesium	1.2	100	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7439-96-5	Manganese	0.12	1.2	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7439-98-7	Tolybdenum	0.027	0.20	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-02-0	Nickel	0.026	0.60	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-09-7	Potassium	2.9	100	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7782-49-2	Selenium	0.032	2.0	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-22-4	Silver	0.013	0.20	0.025J	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-23-5	Sodium	8.9	100	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-28-0	Thallium	0.0088	0.40	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-62-2	Vanadium	0.0054	0.20	0.013J	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	
7440-66-6	Zinc	0.73	4.0	ND	1	0.5	100	10/06/20	85373	0620ANEW	18	MSMS3_7700SWA	

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A3MDL  
 Prep Batch: 85372  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 333673-5		CCV V- 333673-12		CCV V- 333673- 23		CCV V- 333673- 35		CCV V- 333673- 43		Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec						
Aluminum	10/5	5.05564	101	5.17951	104	4.99762	100	4.95421	99	4.92674	99				
Barium	1/5	0.49588	99	0.49000	98	0.48948	98	0.48642	97	0.48363	97				
Calcium	100/50	51.91990	104	50.05090	100	49.96790	100	49.29700	99	49.18230	98				
Chromium	1/5	0.52045	104	0.51507	103	0.51594	103	0.51272	103	0.50940	102				
Cobalt	1/5	0.49215	98	0.50982	102	0.48591	97	0.50178	100	0.50033	100				
Copper	1/5	0.51691	103	0.51096	102	0.51359	103	0.50942	102	0.50957	102				
Iron	10/5	5.02134	100	5.04844	101	4.98848	100	4.96259	99	4.93112	99				
Magnesium	100/50	51.83890	104	50.36080	101	50.13610	100	49.44050	99	49.19310	98				
Manganese	1/5	0.51014	102	0.50482	101	0.50546	101	0.50220	100	0.49931	100				
Nickel	1/5	0.50052	100	0.49500	99	0.49444	99	0.49217	98	0.48817	98				
Zinc	1/5	0.51188	102	0.50536	101	0.50367	101	0.50193	100	0.49522	99				

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV - 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A3MDL  
 Prep Batch: 85372  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount			Recovery	Low Limit	High Limit	LRS Spike Amount			Recovery	Low Limit	High Limit
	LLQCS Spike Amount	LLICV V- 333871					LRS Spike Amount	LRS V- 335934				
Magnesium	5.0	5.10950	102		80	120	500	494.982	99	90	110	
Silver	0.015	0.0162091	108		80	120	1	1.28279	128 a	90	110	
Aluminum	2.0	2.00586	100		80	120	500	521.565	104	90	110	
Arsenic	0.04	0.0385007	96		80	120	10	10.8290	108	90	110	
Boron	0.2	0.187917	94		80	120	5	5.96491	119 a	90	110	
Barium	0.1	0.102475	102		80	120	10	10.1528	102	90	110	
Beryllium	0.012	0.0113478	95		80	120	5	5.00946	100	90	110	
Calcium	10	10.1891	102		80	120	500	468.327	94	90	110	
Cadmium	0.012	0.0160250	134 a		80	120	5	5.16439	103	90	110	
Cobalt	0.025	0.0221149	88		80	120	5	4.76437	95	90	110	
Chromium	0.05	0.0523551	105		80	120	10	10.0320	100	90	110	
Copper	0.05	0.0489648	98		80	120	10	10.6100	106	90	110	
Silicon	0.1	0.170439	170 a		80	120	25	26.2416	105	90	110	
Potassium	NA	-91.5073			80	120	200	-1952.73	-980 a	90	110	
Zinc	0.1	0.100436	100		80	120	10	9.79983	98	90	110	
Manganese	0.1	0.101036	101		80	120	10	10.0997	101	90	110	
Molybdenum	0.025	0.0242054	97		80	120	10	9.74625	97	90	110	
Sodium	NA	2.82393			80	120	1000	1194.54	119 a	90	110	
Nickel	0.05	0.0535588	107		80	120	10	9.50364	95	90	110	
Lead	0.05	0.0502176	100		80	120	10	10.1138	101	90	110	
Antimony	0.04	0.0460602	115		80	120	5	5.61022	112 a	90	110	
Selenium	0.05	0.0501388	100		80	120	5	5.17169	103	90	110	
Tin	0.2	0.206022	103		80	120	10	10.8082	108	90	110	
Titanium	0.1	0.0994510	99		80	120	10	10.3799	104	90	110	
Thallium	0.05	0.0516208	103		80	120	5	5.02029	100	90	110	
Vanadium	0.1	0.0963681	96		80	120	10	10.1006	101	90	110	
Iron	2.0	2.02395	101		80	120	400	390.343	98	90	110	

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A4MDL  
 Prep Batch: 85372  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-	CCV V-	CCV V-	CCV V-							
		335864-5	335864-12	335864-23	335864-31	Rec	Rec	Rec	Rec	Rec	Rec	
Potassium	100/50	50.26410	101	49.61190	99	49.24350	98	48.79750	98			
Sodium	100/50	51.92440	104	51.73270	103	51.84940	104	51.47580	103			

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV - 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A4MDL  
 Prep Batch: 85372  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0247425	99	80	120	10	9.79100	98	90	110
Boron	0.2	0.201058	101	80	120	5	4.47272	89 a	90	110
Barium	0.1	0.0909789	91	80	120	10	9.48268	95	90	110
Calcium	10.00	9.55155	96	80	120	500	456.060	91	90	110
Copper	0.05	0.0411633	82	80	120	10	9.96097	100	90	110
Iron	2.00	1.89280	95	80	120	400	377.955	94	90	110
Potassium	5.00	5.03899	101	80	120	200	213.641	107	90	110
Aluminum	2.00	1.88728	94	80	120	500	516.859	103	90	110
Manganese	0.10	0.0951392	95	80	120	10	9.32927	93	90	110
Zinc	0.1	0.0979652	98	80	120	10	9.59032	96	90	110
Sodium	2.50	2.84303	114	80	120	1000	930.198	93	90	110
Nickel	0.05	0.0540028	108	80	120	10	9.90720	99	90	110
Selenium	0.05	0.0501860	100	80	120	5	4.38156	88 a	90	110
Silicon	0.1	0.169466	169 a	80	120	25	24.6536	99	90	110
Tin	0.2	0.224233	112	80	120	10	11.3622	114 a	90	110
Titanium	0.1	0.0951476	95	80	120	10	9.62470	96	90	110
Vanadium	0.1	0.0911253	91	80	120	10	9.07124	91	90	110
Magnesium	5.00	4.74694	95	80	120	500	495.850	99	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/06/20  
 Data File: S26312B3MDL  
 Prep Batch: 85372  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV	ICV V- 333673-5		CCV V- 333673- 12		CCV V- 333673- 20		CCV V- 333673- 27		CCV V- 333673- 36		Rec	Rec	Rec	Rec
		Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec						
Aluminum	5/5	5.04536	101	5.04641	101	5.01106	100	5.02299	100	4.99285	100				
Antimony	5/5	0.52411	105	0.52178	104	0.52641	105	0.53468	107	0.52569	105				
Arsenic	5/5	0.49821	100	0.50133	100	0.50715	101	0.50935	102	0.49819	100				
Barium	5/5	0.49551	99	0.49258	99	0.49067	98	0.49077	98	0.48947	98				
Beryllium	5/5	0.50765	102	0.50916	102	0.51240	102	0.51431	103	0.50527	101				
Boron	5/5	0.44850	90	0.42220	84 c	0.41559	83 c	0.41856	84 c	0.41719	83 c				
Cadmium	5/5	0.48915	98	0.48811	98	0.48702	97	0.48816	98	0.48542	97				
Calcium	50/50	50.77610	102	50.99040	102	51.20640	102	51.34330	103	50.41390	101				
Chromium	5/5	0.51985	104	0.51790	104	0.51680	103	0.51679	103	0.51433	103				
Cobalt	5/5	0.51360	103	0.51243	102	0.51699	103	0.51786	104	0.51516	103				
Copper	5/5	0.51966	104	0.51653	103	0.51514	103	0.51649	103	0.51450	103				
Iron	5/5	5.01309	100	5.00532	100	4.98558	100	5.01450	100	4.99541	100				
Lead	5/5	0.50757	102	0.50482	101	0.50045	100	0.50328	101	0.49331	99				
Magnesium	50/50	50.99780	102	48.83930	98	50.61870	101	49.42980	99	50.52580	101				
Manganese	5/5	0.50987	102	0.50737	101	0.50648	101	0.50687	101	0.50473	101				
Molybdenum	5/5	0.50490	101	0.50507	101	0.50846	102	0.50899	102	0.50669	101				
Nickel	5/5	0.50469	101	0.49943	100	0.53135	106	0.50026	100	0.52929	106				
Selenium	5/5	0.50941	102	0.50401	101	0.50870	102	0.51528	103	0.50720	101				
Silver	0.1/0.1	0.11725	117 a	0.11688	117 c	0.11697	117 c	0.11708	117 c	0.11552	116 c				
Thallium	5/5	0.52529	105	0.52755	106	0.53431	107	0.52946	106	0.53087	106				
Tin	5/5	0.51884	104	0.51833	104	0.51914	104	0.51613	103	0.51522	103				
Titanium	5/5	0.51358	102	0.51165	102	0.51197	102	0.51099	102	0.50875	102				
Vanadium	5/5	0.50787	102	0.50638	101	0.50418	101	0.50355	101	0.50389	101				
Zinc	5/5	0.51260	103	0.50919	102	0.50819	102	0.51080	102	0.51032	102				

**Notes:** a-indicates analyte failed the ICV limits for 6010D, 6020B  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B  
 d-indicates analyte failed the CCV limits Hg 7470A/7471B

**Qc Limits:** ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)  
 CCV - 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/06/20  
 Data File: S26312B3MDL  
 Prep Batch: 85372  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-335934	Recovery	Low Limit	High Limit
Manganese	0.1	0.104134	104	80	120	10	9.92915	99	90	110
Aluminum	2.0	2.06387	103	80	120	500	510.957	102	90	110
Arsenic	0.04	0.0386501	97	80	120	10	10.6820	107	90	110
Boron	0.2	0.134138	67 a	80	120	5	6.36588	127 a	90	110
Barium	0.1	0.104637	105	80	120	10	10.0698	101	90	110
Beryllium	0.012	0.0131756	110	80	120	5	5.01865	100	90	110
Calcium	10	10.5266	105	80	120	500	462.358	92	90	110
Cadmium	0.012	0.0171461	143 a	80	120	5	5.15048	103	90	110
Cobalt	0.025	0.0245449	98	80	120	5	4.76339	95	90	110
Chromium	0.05	0.0538951	108	80	120	10	9.95429	100	90	110
Copper	0.05	0.0515210	103	80	120	10	10.5594	106	90	110
Iron	2.0	2.06661	103	80	120	400	384.777	96	90	110
Silver	0.015	0.0173528	116	80	120	1	1.28151	128 a	90	110
Magnesium	5.0	5.23201	105	80	120	500	465.854	93	90	110
Zinc	0.1	0.104187	104	80	120	10	9.73672	97	90	110
Molybdenum	0.025	0.0253058	101	80	120	10	9.67250	97	90	110
Sodium	NA	3.23226		80	120	1000	1199.05	120 a	90	110
Nickel	0.05	0.0557502	112	80	120	10	9.49253	95	90	110
Lead	0.05	0.0474338	95	80	120	10	10.0940	101	90	110
Antimony	0.04	0.0430396	108	80	120	5	5.54286	111 a	90	110
Selenium	0.05	0.0506248	101	80	120	5	5.12946	103	90	110
Silicon	0.1	0.197518	198 a	80	120	25	26.0514	104	90	110
Tin	0.2	0.210439	105	80	120	10	10.6796	107	90	110
Titanium	0.1	0.101562	102	80	120	10	10.1997	102	90	110
Thallium	0.05	0.0506222	101	80	120	5	5.01398	100	90	110
Vanadium	0.1	0.101702	102	80	120	10	10.0120	100	90	110
Potassium	NA	-20.3283		80	120	200	-2415.62	- a	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/06/20  
 Data File: H26312SMDL  
 Prep Batch: 85372  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-21		CCV-32		Rec	Rec	Rec	Rec	Rec
	Amt	Rec	Rec	Rec	Rec	Rec					
Mercury	20/10	20.23000	101	10.11000	101	10.21000	102				

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120



## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/06/20  
 Data File: S100620ANEW  
 Prep Batch: 85373  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-336038-8		CCV V-336042-16		CCV V-336042-28		CCV V-336042-40		CCV V-336042-43		Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec					
Antimony	50/30	48.67300	97	49.41100	99	48.60900	97	49.31600	99	48.35200	97			
Arsenic	50/30	51.37800	103	50.05400	100	49.06400	98	50.00100	100	49.73100	99			
Beryllium	50/30	50.76200	102	51.41000	103	50.99800	102	49.89500	100	49.68100	99			
Cadmium	50/30	51.20400	102	50.76200	102	49.59800	99	49.97000	100	49.03500	98			
Selenium	50/30	51.59200	103	246.73300	99	243.31200	97	245.34600	98	243.98800	98			
Silver	10/6	9.88200	99	49.31900	99	48.59100	97	48.41500	97	47.72900	95			
Thallium	50/30	49.86200	100	50.64800	101	50.27100	101	50.21000	100	49.19400	98			
Vanadium	50/30	50.53600	101	49.74100	99	48.80100	98	50.28400	101	50.57800	101			

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV - 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/06/20  
 Data File: S100620ANEW  
 Prep Batch: 85373  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-336043	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-336041	Recovery	Low Limit	High Limit
Magnesium	500	495.931	99	80	120	50000	51910.574	104	90	110
Aluminum	500	507.018	101	80	120	15000	15863.425	106	90	110
Chromium	2	2.067	103	80	120	500	535.399	107	90	110
Copper	10	10.332	103	80	120	500	518.389	104	90	110
Iron	500	519.403	104	80	120	50000	51753.317	104	90	110
Arsenic	1	0.984	98	80	120	500	521.633	104	90	110
Barium	5	4.936	99	80	120	500	532.705	107	90	110
Beryllium	1	1.020	102	80	120	500	489.039	98	90	110
Calcium	500	513.221	103	80	120	50000	53448.789	107	90	110
Cadmium	2	1.993	100	80	120	500	532.738	107	90	110
Silver	1	0.946	95	80	120	500	842.993	169 a	90	110
Potassium	500	497.211	99	80	120	50000	52735.394	105	90	110
Zinc	20	20.857	104	80	120	500	495.922	99	90	110
Manganese	6	5.982	100	80	120	500	545.010	109	90	110
Molybdenum	1	1.092	109	80	120	500	542.329	108	90	110
Sodium	500	479.961	96	80	120	50000	52895.810	106	90	110
Nickel	3	3.041	101	80	120	500	501.973	100	90	110
Lead	2	1.912	96	80	120	500	484.217	97	90	110
Antimony	4	3.881	97	80	120	500	511.667	102	90	110
Selenium	10	10.338	103	80	120	2500	2532.893	101	90	110
Thallium	2	1.822	91	80	120	500	479.411	96	90	110
Vanadium	1	0.974	97	80	120	500	545.796	109	90	110
Cobalt	2	2.002	100	80	120	500	529.135	106	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/07/20  
 Data File: S100720ANEW  
 Prep Batch: 85373  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 336038-8		CCV V- 336042-16		CCV V- 336042- 28		CCV V- 336042- 40		CCV V- 336042- 51		Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec						
Antimony	50/30	48.11300	96	47.00900	94	46.96200	94	45.89500	92	45.75700	92				
Arsenic	50/30	50.36700	101	49.12200	98	48.63100	97	49.22300	98	48.44700	97				
Beryllium	50/30	50.77200	102	51.07200	102	49.05900	98	49.64400	99	41.37300	83 c				
Cadmium	50/30	50.04800	100	47.57800	95	47.12600	94	45.53800	91	44.20600	88 c				
Selenium	50/30	51.96600	104	243.56900	97	239.83600	96	240.97000	96	229.16600	92				
Silver	10/6	9.75500	98	46.61700	93	46.04800	92	46.84300	94	44.50300	89 c				
Thallium	50/30	49.26700	99	49.66000	99	49.26800	99	48.80500	98	47.75000	96				
Vanadium	50/30	49.93100	100	49.01100	98	48.13100	96	48.83400	98	47.90100	96				

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/07/20  
 Data File: S100720ANEW  
 Prep Batch: 85373  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-336043	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-336041	Recovery	Low Limit	High Limit
Magnesium	500	484.376	97	80	120	50000	50508.392	101	90	110
Aluminum	500	486.298	97	80	120	15000	15306.461	102	90	110
Chromium	2	2.025	101	80	120	500	517.157	103	90	110
Copper	10	10.032	100	80	120	500	510.431	102	90	110
Iron	500	509.019	102	80	120	50000	51033.964	102	90	110
Arsenic	1	1.035	104	80	120	500	513.763	103	90	110
Barium	5	4.920	98	80	120	500	522.878	105	90	110
Beryllium	1	0.990	99	80	120	500	482.700	97	90	110
Calcium	500	510.508	102	80	120	50000	54407.330	109	90	110
Cadmium	2	1.868	93	80	120	500	510.113	102	90	110
Silver	1	0.903	90	80	120	500	1554.927	311 a	90	110
Potassium	500	498.037	100	80	120	50000	52742.800	105	90	110
Zinc	20	19.501	98	80	120	500	485.019	97	90	110
Manganese	6	5.888	98	80	120	500	526.632	105	90	110
Molybdenum	1	0.997	100	80	120	500	519.409	104	90	110
Sodium	500	465.079	93	80	120	50000	50938.140	102	90	110
Nickel	3	2.896	97	80	120	500	521.841	104	90	110
Lead	2	0.964	48 a	80	120	500	480.225	96	90	110
Antimony	4	3.513	88	80	120	500	496.986	99	90	110
Selenium	10	10.336	103	80	120	2500	2522.581	101	90	110
Thallium	2	1.798	90	80	120	500	477.957	96	90	110
Vanadium	1	1.000	100	80	120	500	536.405	107	90	110
Cobalt	2	1.977	99	80	120	500	514.167	103	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/08/20  
 Data File: S26317C3MDL  
 Prep Batch: 85372  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-336236-5		CCV V-336236-12		CCV V-336236-24		CCV V-336236-32		CCV V-336236-43		Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec						
Aluminum	5/5	5.00974	100	4.92796	99	4.90876	98	4.94932	99	4.88332	98				
Antimony	5/5	0.50879	102	0.49608	99	0.50695	101	0.51078	102	0.50740	101				
Arsenic	5/5	0.49530	99	0.47427	95	0.48409	97	0.49124	98	0.49955	100				
Barium	5/5	0.47938	96	0.46659	93	0.46822	94	0.47972	96	0.47356	95				
Beryllium	5/5	0.49006	98	0.47590	95	0.48044	96	0.49022	98	0.48772	98				
Boron	5/5	0.50530	101	0.48186	96	0.48368	97	0.52150	104	0.52510	105				
Cadmium	5/5	0.47319	95	0.45874	92	0.46192	92	0.48508	97	0.48579	97				
Calcium	50/50	49.99470	100	47.93710	96	48.29730	97	49.23540	98	48.98300	98				
Chromium	5/5	0.49698	99	0.48355	97	0.48470	97	0.51555	103	0.51450	103				
Cobalt	5/5	0.50519	101	0.49002	98	0.49743	99	0.49535	99	0.49623	99				
Copper	5/5	0.50086	100	0.49057	98	0.49073	98	0.50070	100	0.49286	99				
Iron	5/5	5.04397	101	4.91518	98	4.92896	99	5.06475	101	5.01814	100				
Lead	5/5	0.50440	101	0.48750	97	0.49144	98	0.49722	99	0.49798	100				
Magnesium	50/50	49.93190	100	48.19080	96	50.75330	102	51.91220	104	51.40070	103				
Manganese	5/5	0.49994	100	0.48679	97	0.48841	98	0.49728	99	0.49074	98				
Molybdenum	5/5	0.49694	99	0.48547	97	0.48971	98	0.48533	97	0.48315	97				
Nickel	5/5	0.48317	97	0.46828	94	0.47316	95	0.50132	100	0.50209	100				
Selenium	5/5	0.49135	98	0.48377	97	0.49109	98	0.49488	99	0.50639	101				
Silver	0.1/0.1	0.11221	112 a	0.10995	110	0.11041	110	0.11666	117 c	0.11628	116 c				
Thallium	5/5	0.51930	104	0.50820	102	0.51298	103	0.51638	103	0.51960	104				
Tin	5/5	0.51743	103	0.49773	100	0.50102	100	0.51310	103	0.51730	103				
Titanium	5/5	0.50479	101	0.49358	99	0.49342	99	0.49655	99	0.48863	98				
Vanadium	5/5	0.49144	98	0.47818	96	0.47798	96	0.48827	98	0.47951	96				
Zinc	5/5	0.49533	99	0.47579	95	0.48266	97	0.51689	103	0.52127	104				

**Notes:** a-indicates analyte failed the ICV limits for 6010D, 6020B  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B  
 d-indicates analyte failed the CCV limits Hg 7470A/7471B

**Qc Limits:** ICV - 200.7 (95-105)      6010D/6020B/200.8 (90-110)  
 CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/08/20  
 Data File: S26317C3MDL  
 Prep Batch: 85377  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-336304	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-335934	Recovery	Low Limit	High Limit
Magnesium	5.0	4.83471	97	80	120	500	482.586	97	90	110
Silver	0.015	0.0150094	100	80	120	1	1.24812	125 a	90	110
Aluminum	2.0	2.02377	101	80	120	500	499.167	100	90	110
Arsenic	0.04	0.0432891	108	80	120	10	10.3612	104	90	110
Boron	0.2	0.196345	98	80	120	5	6.02373	120 a	90	110
Barium	0.1	0.100941	101	80	120	10	9.84526	98	90	110
Beryllium	0.012	0.0103276	86	80	120	5	4.91720	98	90	110
Calcium	10	9.83792	98	80	120	500	468.693	94	90	110
Cadmium	0.012	0.0128496	107	80	120	5	5.07466	101	90	110
Cobalt	0.025	0.0238427	95	80	120	5	4.70270	94	90	110
Chromium	0.05	0.0469199	94	80	120	10	9.67339	97	90	110
Copper	0.05	0.0492852	99	80	120	10	10.3152	103	90	110
Silicon	0.1	0.100773	101	80	120	25	26.7349	107	90	110
Potassium	NA	-13.7968		80	120	200	-2893.64	- a	90	110
Zinc	0.1	0.0985752	99	80	120	10	9.46706	1400 95	90	110
Manganese	0.1	0.100766	101	80	120	10	9.70055	97	90	110
Molybdenum	0.025	0.0246093	98	80	120	10	9.46816	95	90	110
Sodium	NA	2.23015		80	120	1000	1195.27	120 a	90	110
Nickel	0.05	0.0511094	102	80	120	10	9.29265	93	90	110
Lead	0.05	0.0504763	101	80	120	10	9.68715	97	90	110
Antimony	0.04	0.0392143	98	80	120	5	5.42053	108	90	110
Selenium	0.05	0.0610799	122 a	80	120	5	4.96734	99	90	110
Tin	0.2	0.210827	105	80	120	10	10.2325	102	90	110
Titanium	0.1	0.0988116	99	80	120	10	9.96209	100	90	110
Thallium	0.05	0.0468704	94	80	120	5	4.90788	98	90	110
Vanadium	0.1	0.0972023	97	80	120	10	9.80195	98	90	110
Iron	2.0	1.96465	98	80	120	400	373.038	93	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A3MDL  
 Prep Batch: 85372  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-36	CCB V-333667-44	MB 85372 (100)-14
Aluminum	-.101 a	.167 U	.167 U	.167 U	.167 U	8.4U
Barium	-.00482 a	.00676 U	.00676 U	.00676 U	.00676 U	.34U
Calcium	.505 U	1.01 U	1.01 U	1.01 U	1.01 U	51U
Chromium	-.00452 a	.0067 U	.0067 U	.0067 U	.0067 U	.34U
Cobalt	-.0043 a	.00713 U	.00713 U	.00713 U	.00713 U	.36U
Copper	.00308 U	.00616 U	.00616 U	.00616 U	.00616 U	.31U
Iron	.066 U	.132 U	.132 U	.132 U	.132 U	6.6U
Magnesium	-.24 a	-.203 a	-.224 a	-.256 a	-.261 a	9.8U
Manganese	-.00349 a	.00642 U	.00642 U	.00642 U	.00642 U	.32U
Nickel	.0055 U	.011 U	.011 U	.011 U	.011 U	.55U
Zinc	.00755 U	.0151 U	.0151 U	.0151 U	.0151 U	.76U

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
 u-indicates result below reporting limit

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A4MDL  
 Prep Batch: 85372  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-32	MB 85372 (100)-14
Potassium	.493 U	.987 U	.987 U	.987 U	49 U
Sodium	.628 U	1.26 U	1.26 U	1.26 U	63 U

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
 u-indicates result below reporting limit



### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/06/20  
 Data File: S26312B3MDL  
 Prep Batch: 85372  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB V-333667- 6	CCB V-333667- 13	CCB V-333667- 21	CCB V-333667- 28	CCB V-333667- 37
Aluminum	.0835 U	.167 U	.167 U	.167 U	.167 U
Antimony	.0052 U	.0104 U	.0104 U	.0104 U	.0104 U
Arsenic	.00685 U	.0137 U	.0137 U	.0137 U	.0137 U
Barium	-.00353 a	.00676 U	.00676 U	.00676 U	.00676 U
Beryllium	.00357 U	.00714 U	.00714 U	.00714 U	.00714 U
Boron	-.048 a	.0593 U	-.0609 a	-.0602 a	-.0619 a
Cadmium	.00412 a	.00523 U	.00523 U	.00523 U	.00523 U
Calcium	.505 U	1.01 U	1.01 U	1.01 U	1.01 U
Chromium	.00335 U	.0067 U	.0067 U	.0067 U	.0067 U
Cobalt	.00356 U	.00713 U	.00713 U	.00713 U	.00713 U
Copper	.00308 U	.00616 U	.00616 U	.00616 U	.00616 U
Iron	.066 U	.132 U	.132 U	.132 U	.132 U
Lead	.00308 U	-.0111 a	-.0183 a	-.0158 a	-.0268 a
Magnesium	.0975 U	.195 U	.195 U	.195 U	.195 U
Manganese	.00321 U	.00642 U	.00642 U	.00642 U	.00642 U
Molybdenum	.0745 U	.149 U	.149 U	.149 U	.149 U
Nickel	.0055 U	.011 U	.011 U	.011 U	.011 U
Selenium	.00865 U	.0173 U	.0173 U	.0173 U	.0173 U
Silver	.00122 U	.00244 U	.00244 U	.00244 U	.00244 U
Thallium	.083 U	.166 U	.166 U	.166 U	.166 U
Tin	.00935 U	.0187 U	.0187 U	.0187 U	.0187 U
Titanium	.00318 U	.00636 U	.00636 U	.00636 U	.00636 U
Vanadium	.00479 U	.00958 U	.00958 U	.00958 U	.00958 U
Zinc	.00755 U	.0151 U	.0151 U	.0151 U	.0151 U

**Notes:** a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.  
 for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/06/20  
 Data File: H26312SMDL  
 Prep Batch: 85372  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB-10	CCB-22	CCB-33	MB 85372 (167)-11
Mercury	-098 a	-106 a	-108 a	13 U

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
 u-indicates result below reporting limit

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/06/20

Data File: S100620ANEW

Prep Batch: 85373

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: MS3\_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0093024

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-336039- 10	CCB V-336039- 17	CCB V-336039- 29	CCB V-336039- 41	CCB V-336039- 44	MB 85373-18
Antimony	.0562 U	.112 U	.112 U	.112 U	.112 U	11U
Arsenic	.0437 U	.0874 U	.0874 U	.0874 U	.0874 U	8.7U
Beryllium	.0391 U	.0783 U	.0783 U	.0783 U	.0783 U	7.8U
Cadmium	.0353 U	.0706 U	.0706 U	.0706 U	.0706 U	7.1U
Selenium	.159 U	.318 U	.318 U	.318 U	.322 a	32U
Silver	.208 a	.345 a	.31 a	.306 a	.304 a	25a
Thallium	.0441 U	.0882 U	.0882 U	.0882 U	.0882 U	8.8U
Vanadium	.0271 U	.0542 U	.0542 U	.0542 U	.0542 U	13a

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/07/20

Data File: S100720ANEW

Prep Batch: 85373

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: MS3\_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0093024

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-336039-10	CCB V-336039-17	CCB V-336039-29	CCB V-336039-41	CCB V-336039-52
Antimony	.111 a	.112 U	.112 U	.112 U	.112 U
Arsenic	.0437 U	.0874 U	.0874 U	.0874 U	.0874 U
Beryllium	.0391 U	.0783 U	.0783 U	.0783 U	.0783 U
Cadmium	.0353 U	.0706 U	.0706 U	.0706 U	.0706 U
Selenium	.159 U	.318 U	.318 U	.318 U	.318 U
Silver	.0652 U	.13 U	.148 a	.13 U	.13 U
Thallium	.0441 U	.0882 U	.0882 U	.0882 U	.0882 U
Vanadium	.0271 U	.0542 U	.0542 U	.0542 U	.0542 U

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/08/20  
 Data File: S26317C3MDL  
 Prep Batch: 85372  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB V-333667- 6	CCB V-333667- 13	CCB V-333667- 25	CCB V-333667- 33	CCB V-333667- 44
Aluminum	.0835 U	.167 U	.167 U	.167 U	.167 U
Antimony	.0052 U	.0104 U	.0104 U	.0104 U	.0104 U
Arsenic	.00685 U	.0137 U	.0137 U	.0137 U	.0137 U
Barium	-.0048 a	.00676 U	.00676 U	.00676 U	.00676 U
Beryllium	.00357 U	.00714 U	.00714 U	.00714 U	.00714 U
Boron	.0297 U	.0593 U	.0593 U	.0593 U	.0593 U
Cadmium	.00261 U	.00523 U	.00523 U	.00523 U	.00523 U
Calcium	-.698 a	1.01 U	1.01 U	1.01 U	1.01 U
Chromium	-.00908 a	-.00898 a	-.00876 a	-.0091 a	-.00938 a
Cobalt	.00356 U	.00713 U	.00713 U	.00713 U	.00713 U
Copper	.00308 U	.00616 U	.00616 U	.00616 U	.00616 U
Iron	-.0872 a	.132 U	.132 U	.132 U	.132 U
Lead	-.00626 a	.00616 U	-.00703 a	-.00806 a	-.00959 a
Magnesium	-.572 a	-.562 a	-.567 a	-.56 a	-.569 a
Manganese	.00321 U	.00642 U	.00642 U	.00642 U	.00642 U
Molybdenum	.0745 U	.149 U	.149 U	.149 U	.149 U
Nickel	.0055 U	.011 U	.011 U	.011 U	.011 U
Selenium	.00865 U	.0173 U	.0173 U	.0173 U	.0173 U
Silver	-.00346 a	-.00343 a	.00244 U	-.00277 a	-.00254 a
Thallium	.083 U	.166 U	.166 U	.166 U	.166 U
Tin	.00935 U	.0187 U	.0187 U	.0187 U	.0187 U
Titanium	.00318 U	.00636 U	.00636 U	.00636 U	.00636 U
Vanadium	.00479 U	.00958 U	.00958 U	.00958 U	.00958 U
Zinc	.00755 U	.0151 U	.0151 U	.0151 U	.0151 U

**Notes:** a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.  
 for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A3MDL  
 Prep Batch: 85372  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	539.376	108							
Barium	0	U								
Calcium	500	488.903	98							
Chromium	0	.0104956t								
Cobalt	0	U								
Copper	0	.0304269a								
Iron	200	195.106	98							
Magnesium	500	510.644	102							
Manganese	0	.007026t								
Nickel	0	U								
Zinc	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/06/20  
 Data File: S26312A4MDL  
 Prep Batch: 85372  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	527.101	105							
Calcium	500	504.861	101							
Iron	200	189.806	95							
Magnesium	500	506.301	101							
Potassium	0	U								
Sodium	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/06/20  
 Data File: S26312B3MDL  
 Prep Batch: 85372  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-333668-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	562.383	112						
Antimony	0	U							
Arsenic	0	-0163961b							
Barium	0	U							
Beryllium	0	U							
Boron	0	.634881a							
Cadmium	0	U							
Calcium	500	506.156	101						
Chromium	0	-0094665b							
Cobalt	0	U							
Copper	0	-0297a							
Iron	200	202.389	101						
Lead	0	.0410695a							
Magnesium	500	509.098	102						
Manganese	0	.0083526b							
Molybdenum	0	U							
Nickel	0	U							
Selenium	0	-0186657b							
Silver	0	-0060178a							
Thallium	0	U							
Tin	0	U							
Titanium	0	U							
Vanadium	0	-0615287a							
Zinc	0	U							

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits in the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

**Qc Limits:** 200.7, 6020B < 2 \* Reporting Limit  
 6010D < Reporting Limit



## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/06/20  
 Data File: S100620ANEW  
 Prep Batch: 85373  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 336040-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	50401.2g	101						
Antimony	0	.334e							
Arsenic	0	.252e							
Beryllium	0	U							
Cadmium	0	1.311e							
Calcium	150000	160530.9	107						
Iron	125000	124903.4	100						
Magnesium	50000	49694.1e	99						
Selenium	0	U							
Silver	0	.138t							
Thallium	0	U							
Vanadium	0	.073t							

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/07/20  
 Data File: S100720ANEW  
 Prep Batch: 85373  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0093024

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 336040-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	49672.03	99							
Antimony	0	.231a								
Arsenic	0	.239a								
Beryllium	0	U								
Cadmium	0	1.444a								
Calcium	150000	159895.4	107							
Iron	125000	125787.8	101							
Magnesium	50000	50000.71	100							
Selenium	0	U								
Silver	0	.132t								
Thallium	0	U								
Vanadium	0	.069t								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/08/20  
 Data File: S26317C3MDL  
 Prep Batch: 85372  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-336303-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	520.374	104							
Antimony	0	U								
Arsenic	0	U								
Barium	0	U								
Beryllium	0	U								
Boron	0	631528a								
Cadmium	0	U								
Calcium	500	476.726	95							
Chromium	0	-.0147516a								
Cobalt	0	U								
Copper	0	-.0293948a								
Iron	200	185.832	93							
Lead	0	U								
Magnesium	500	501.179	100							
Manganese	0	.0075832b								
Molybdenum	0	U								
Nickel	0	U								
Selenium	0	U								
Silver	0	-.0063676a								
Thallium	0	U								
Tin	0	U								
Titanium	0	-.007446b								
Vanadium	0	-.0693229a								
Zinc	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits in the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

**Qc Limits:** 200.7, 6020B < 2 \* Reporting Limit  
 6010D < Reporting Limit

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85372

**0093024 0325**

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85372								
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim		
Aluminum	85372	1	S26312A3	16	81.4411	110	74		55	152		
Barium	85372	1	S26312A3	16	6.8481	8.92	77		65	110		
Calcium	85372	1	S26312A3	16	166.4770	207.00	80		69	110		
Chromium	85372	1	S26312A3	16	1.7709	2.27	78		61	114		
Cobalt	85372	1	S26312A3	16	2.1474	2.87	75		64	110		
Copper	85372	1	S26312A3	16	1.6825	2.09	81		66	110		
Iron	85372	1	S26312A3	16	127.1390	192.00	66		34	138		
Lead	85372	1	S26312A3	16	1.2609	1.63	77		62	110		
Magnesium	85372	1	S26312A3	16	57.7825	74.60	77		26	114		
Manganese	85372	1	S26312A3	16	4.7264	6.03	78		68	110		
Mercury	85372	4	H26312SM	15	6.3240	41.64	61		39	110		
Nickel	85372	1	S26312A3	16	0.4441	.553	80		61	114		
Potassium	85372	1	S26312A4	16	15.4725	22.60	68		61	140		
Sodium	85372	1	S26312A4	16	6.8589	8.67	79		57	125		
Zinc	85372	1	S26312A3	16	5.3836	7.13	76		60	112		

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 85372								
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim		
Aluminum	85372	1	S26312A3	15	91.4337	110	83		55	152		
Barium	85372	1	S26312A3	15	7.8689	8.92	88		65	110		
Calcium	85372	1	S26312A3	15	185.4560	207.00	90		69	110		
Chromium	85372	1	S26312A3	15	1.9482	2.27	86		61	114		
Cobalt	85372	1	S26312A3	15	2.3567	2.87	82		64	110		
Copper	85372	1	S26312A3	15	1.8470	2.09	88		66	110		
Iron	85372	1	S26312A3	15	139.9070	192.00	73		34	138		
Lead	85372	1	S26312A3	15	1.4146	1.63	87		62	110		
Magnesium	85372	1	S26312A3	15	63.7138	74.60	85		26	114		
Manganese	85372	1	S26312A3	15	5.1846	6.03	86		68	110		
Mercury	85372	4	H26312SM	14	5.0720	41.64	49		39	110		
Nickel	85372	1	S26312A3	15	0.4843	.553	88		61	114		
Potassium	85372	1	S26312A4	15	17.5016	22.60	77		61	140		
Sodium	85372	1	S26312A4	15	7.5531	8.67	87		57	125		
Zinc	85372	1	S26312A3	15	5.9232	7.13	83		60	112		

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19599-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85372	1	S26312A3	20	S26312A3	17	52.7226	35.0794	5.0	353	b	75	125
Barium	85372	1	S26312A3	20	S26312A3	17	0.8150	0.3880	0.5	85		75	125
Calcium	85372	1	S26312A3	20	S26312A3	17	56.8781	10.3010	50	93		75	125
Chromium	85372	4	S26317C3	40	S26317C3	37	0.1828	0.0951	0.5	70	a	75	125
Cobalt	85372	1	S26312A3	20	S26312A3	17	0.5251	0.0600	0.5	93		75	125
Copper	85372	1	S26312A3	20	S26312A3	17	3.8132	4.8181	0.5	-200	b	75	125
Iron	85372	1	S26312A3	20	S26312A3	17	69.6051	65.2427	5.0	87		75	125
Lead	85372	1	S26312A3	20	S26312A3	17	1.4972	1.1811	0.5	63	a	75	125
Magnesium	85372	1	S26312A3	20	S26312A3	17	79.8152	31.9608	50	96		75	125
Manganese	85372	1	S26312A3	20	S26312A3	17	1.6147	1.5020	0.5	23	a	75	125
Mercury	85372	1	H26312SM	19	H26312SM	16	11.1900	1.1530	10	100		75	125
Nickel	85372	20	S26312B3	32	S26312B3	29	0.2590	0.3168	0.5	-230	b	75	125
Potassium	85372	1	S26312A4	20	S26312A4	17	48.5022	2.3752	50	92		75	125
Sodium	85372	1	S26312A4	20	S26312A4	17	48.7851	1.255852743U	50	98		75	125
Zinc	85372	1	S26312A3	20	S26312A3	17	4.5416	4.6700	0.5	-26	b	75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85372

**0093024 0326**

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS		Matrix: SOIL			SampleID: AD19599-001								
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85372	1	S26312A3	19	S26312A3	17	45.1244	35.0794	5.0	201	b	75	125
Barium	85372	1	S26312A3	19	S26312A3	17	0.8384	0.3880	0.5	90		75	125
Calcium	85372	1	S26312A3	19	S26312A3	17	57.8361	10.3010	50	95		75	125
Chromium	85372	4	S26317C3	39	S26317C3	37	6.5162	0.0951	0.5	5140	a	75	125
Cobalt	85372	1	S26312A3	19	S26312A3	17	0.6047	0.0600	0.5	109		75	125
Copper	85372	1	S26312A3	19	S26312A3	17	4.1360	4.8181	0.5	-140	b	75	125
Iron	85372	1	S26312A3	19	S26312A3	17	102.6680	65.2427	5.0	749	b	75	125
Lead	85372	1	S26312A3	19	S26312A3	17	1.4888	1.1811	0.5	62	a	75	125
Magnesium	85372	1	S26312A3	19	S26312A3	17	81.0576	31.9608	50	98		75	125
Manganese	85372	1	S26312A3	19	S26312A3	17	1.9508	1.5020	0.5	90		75	125
Mercury	85372	1	H26312SM	18	H26312SM	16	13.1600	1.1530	10	120		75	125
Nickel	85372	20	S26312B3	31	S26312B3	29	5.1442	0.3168	0.5	19300	b	75	125
Potassium	85372	1	S26312A4	19	S26312A4	17	48.1449	2.3752	50	92		75	125
Sodium	85372	1	S26312A4	19	S26312A4	17	48.3146	1.255852743U	50	97		75	125
Zinc	85372	1	S26312A3	19	S26312A3	17	4.0057	4.6700	0.5	-130	b	75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

FORM5/FORM7  
SPIKE RECOVERY DATA  
PREP BATCH: 85372

0093024 0327

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD19599-001								
Analyte	DF	Data File	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S26312A3	21	S26312A3	17	39.3287	35.0794	5.0	85		75	125
Barium	1	S26312A3	21	S26312A3	17	0.8685	0.3880	0.50	96		75	125
Calcium	1	S26312A3	21	S26312A3	17	58.1351	10.3010	50	96		75	125
Chromium	1	S26317C3	41	S26317C3	37	0.5928	0.0951	0.50	100		75	125
Cobalt	1	S26312A3	21	S26312A3	17	0.5518	0.0600	0.50	98		75	125
Copper	1	S26312A3	21	S26312A3	17	5.1605	4.8181	0.50	68	b	75	125
Iron	1	S26312A3	21	S26312A3	17	69.4398	65.2427	5.0	84		75	125
Lead	1	S26312A3	21	S26312A3	17	1.5770	1.1811	0.50	79		75	125
Magnesium	1	S26312A3	21	S26312A3	17	80.8722	31.9608	50	98		75	125
Manganese	1	S26312A3	21	S26312A3	17	1.9579	1.5020	0.50	91		75	125
Nickel	1	S26312B3	33	S26312B3	29	0.8447	0.3168	0.50	106		75	125
Potassium	1	S26312A4	21	S26312A4	17	49.1371	2.3752	50	94		75	125
Sodium	1	S26312A4	21	S26312A4	17	48.5632	1.255852743U	50	97		75	125
Zinc	1	S26312A3	21	S26312A3	17	5.1255	4.6700	0.50	91		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85373

**0093024 0328**

Instrument Type: ICPMS

Analytical Method(s): 6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85373							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Antimony	85373	1	S100620A	20	50.3880	117	43	10	110		
Arsenic	85373	1	S100620A	20	44.4660	49.4	90	61	113		
Beryllium	85373	1	S100620A	20	150.3740	187	80	66	110		
Cadmium	85373	1	S100620A	20	179.0720	197	91	64	110		
Selenium	85373	1	S100620A	20	327.2530	364	90	60	112		
Silver	85373	1	S100620A	20	88.3010	94.0	94	61	111		
Thallium	85373	1	S100620A	20	190.8280	229	83	61	110		
Vanadium	85373	1	S100620A	20	267.1310	300	89	66	110		

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 85373							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Antimony	85373	1	S100620A	19	50.9180	117	44	10	110		
Arsenic	85373	1	S100620A	19	44.9540	49.4	91	61	113		
Beryllium	85373	1	S100620A	19	153.7010	187	82	66	110		
Cadmium	85373	1	S100620A	19	182.6240	197	93	64	110		
Selenium	85373	1	S100620A	19	327.9440	364	90	60	112		
Silver	85373	1	S100620A	19	90.9370	94.0	97	61	111		
Thallium	85373	1	S100620A	19	190.7870	229	83	61	110		
Vanadium	85373	1	S100620A	19	271.3740	300	90	66	110		

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19599-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85373	1	S100620A	25	S100620A	21	163.2870	2.7270	250	64	a	75	125
Arsenic	85373	1	S100620A	25	S100620A	21	224.7200	9.0880	250	86		75	125
Beryllium	85373	1	S100620A	25	S100620A	21	202.9630	0.7980	250	81		75	125
Cadmium	85373	1	S100620A	25	S100620A	21	235.7310	19.1870	250	87		75	125
Selenium	85373	1	S100620A	25	S100620A	21	215.8370	7.2890	250	83		75	125
Silver	85373	1	S100620A	25	S100620A	21	42.5060	1.2950	50	82		75	125
Thallium	85373	1	S100620A	25	S100620A	21	201.0840	0.4800	250	80		75	125
Vanadium	85373	1	S100620A	25	S100620A	21	260.4290	42.7770	250	87		75	125

TxtQcType: MS		Matrix: SOIL		SampleID: AD19599-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85373	1	S100620A	24	S100620A	21	175.3730	2.7270	250	69	a	75	125
Arsenic	85373	1	S100620A	24	S100620A	21	227.4540	9.0880	250	87		75	125
Beryllium	85373	1	S100620A	24	S100620A	21	213.7140	0.7980	250	85		75	125
Cadmium	85373	1	S100620A	24	S100620A	21	241.9780	19.1870	250	89		75	125
Selenium	85373	1	S100620A	24	S100620A	21	212.9280	7.2890	250	82		75	125
Silver	85373	1	S100620A	24	S100620A	21	43.9900	1.2950	50	85		75	125
Thallium	85373	1	S100620A	24	S100620A	21	208.7490	0.4800	250	83		75	125
Vanadium	85373	1	S100620A	24	S100620A	21	268.7310	42.7770	250	90		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85373

**0093024 0329**

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD19599-001								
Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S100620A	26	S100620A	21	49.6800	2.7270	50	94	75	125	
Arsenic	1	S100620A	26	S100620A	21	56.9840	9.0880	50	96	75	125	
Beryllium	1	S100620A	26	S100620A	21	44.1760	0.7980	50	87	75	125	
Cadmium	1	S100620A	26	S100620A	21	67.0280	19.1870	50	96	75	125	
Selenium	1	S100620A	26	S100620A	21	237.8090	7.2890	250	92	75	125	
Silver	1	S100620A	26	S100620A	21	47.7940	1.2950	50	93	75	125	
Thallium	1	S100620A	26	S100620A	21	46.1060	0.4800	50	91	75	125	
Vanadium	1	S100620A	26	S100620A	21	91.0120	42.7770	50	96	75	125	

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount



**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 85372

0093024 0330

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85372					
Analyte	BatchId	Data File	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85372	S26312A3	16	S26312A3	15	81.4411	91.4337	12	20
Barium	85372	S26312A3	16	S26312A3	15	6.8481	7.8689	14	20
Calcium	85372	S26312A3	16	S26312A3	15	166.4770	185.4560	11	20
Chromium	85372	S26312A3	16	S26312A3	15	1.7709	1.9482	9.5	20
Cobalt	85372	S26312A3	16	S26312A3	15	2.1474	2.3567	9.3	20
Copper	85372	S26312A3	16	S26312A3	15	1.6825	1.8470	9.3	20
Iron	85372	S26312A3	16	S26312A3	15	127.1390	139.9070	9.6	20
Lead	85372	S26312A3	16	S26312A3	15	1.2609	1.4146	11	20
Magnesium	85372	S26312A3	16	S26312A3	15	57.7825	63.7138	9.8	20
Manganese	85372	S26312A3	16	S26312A3	15	4.7264	5.1846	9.2	20
Mercury	85372	H26312SM	15	H26312SM	14	6.3240	5.0720	22 a	20
Nickel	85372	S26312A3	16	S26312A3	15	0.4441	0.4843	8.7	20
Potassium	85372	S26312A4	16	S26312A4	15	15.4725	17.5016	12	20
Sodium	85372	S26312A4	16	S26312A4	15	6.8589	7.5531	9.6	20
Zinc	85372	S26312A3	16	S26312A3	15	5.3836	5.9232	9.5	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD19599-001					
Analyte	BatchId	Data File	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85372	S26312A3	18	S26312A3	17	90.7629	35.0794	88 a	20
Barium	85372	S26312A3	18	S26312A3	17	0.3727	0.3880	4	20
Calcium	85372	S26312A3	18	S26312A3	17	9.2963	10.3010	10	20
Chromium	85372	S26317C3	38	S26317C3	37	0.2251	0.0951	81 a	20
Cobalt	85372	S26312A3	18	S26312A3	17	0.0514	0.0600	16	20
Copper	85372	S26312A3	18	S26312A3	17	5.7767	4.8181	18	20
Iron	85372	S26312A3	18	S26312A3	17	102.8680	65.2427	45 a	20
Lead	85372	S26312A3	18	S26312A3	17	2.8357	1.1811	82 a	20
Magnesium	85372	S26312A3	18	S26312A3	17	34.8339	31.9608	8.6	20
Manganese	85372	S26312A3	18	S26312A3	17	1.5057	1.5020	0.25	20
Mercury	85372	H26312SM	17	H26312SM	16	0.9350	1.1530	21 a	20
Nickel	85372	S26312B3	30	S26312B3	29	0.4038	0.3168	24 a	20
Potassium	85372	S26312A4	18	S26312A4	17	2.1982	2.3752	7.7	20
Sodium	85372	S26312A4	18	S26312A4	17	1.255852743U	1.255852743U	---	20
Zinc	85372	S26312A3	18	S26312A3	17	4.7846	4.6700	2.4	20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19599-001					
Analyte	BatchId	Data File	Seq#	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85372	S26312A3	20	S26312A3	19	52.7226	45.1244	16	20
Barium	85372	S26312A3	20	S26312A3	19	0.8150	0.8384	2.8	20
Calcium	85372	S26312A3	20	S26312A3	19	56.8781	57.8361	1.7	20
Chromium	85372	S26317C3	40	S26317C3	39	0.1828	6.5162	189 a	20
Cobalt	85372	S26312A3	20	S26312A3	19	0.5251	0.6047	14	20
Copper	85372	S26312A3	20	S26312A3	19	3.8132	4.1360	8.1	20
Iron	85372	S26312A3	20	S26312A3	19	69.6051	102.6680	38 a	20
Lead	85372	S26312A3	20	S26312A3	19	1.4972	1.4888	.56	20
Magnesium	85372	S26312A3	20	S26312A3	19	79.8152	81.0576	1.5	20
Manganese	85372	S26312A3	20	S26312A3	19	1.6147	1.9508	19	20
Mercury	85372	H26312SM	19	H26312SM	18	11.1900	13.1600	16	20
Nickel	85372	S26312B3	32	S26312B3	31	0.2590	5.1442	181 a	20
Potassium	85372	S26312A4	20	S26312A4	19	48.5022	48.1449	.74	20
Sodium	85372	S26312A4	20	S26312A4	19	48.7851	48.3146	.97	20
Zinc	85372	S26312A3	20	S26312A3	19	4.5416	4.0057	13	20

a-Indicates Rpd Failed the criteria  
 b-Method Rep Out but concentrations < 5\*RL  
 c-Serial dilution Out but conc < 10 \* IDL

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 85372

**0093024 0331**

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD		Matrix: SOIL		SampleID: AD19599-001						
Analyte	BatchId	Data File	Seq#	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Aluminum	85372	S26312A3	22	S26312A3	17	5	6.9723	35.0794	0.62	10
Barium	85372	S26312A3	22	S26312A3	17	5	0.0766	0.3880	1.2	10
Calcium	85372	S26312A3	22	S26312A3	17	5	1.9474	10.3010	5.5	10
Chromium	85372	S26317C3	42	S26317C3	37	5	0.0126	0.0951	34	a 10
Cobalt	85372	S26312A3	22	S26312A3	17	5	0.0085	0.0600	29	c 10
Copper	85372	S26312A3	22	S26312A3	17	5	0.9591	4.8181	0.47	10
Iron	85372	S26312A3	22	S26312A3	17	5	13.1387	65.2427	0.69	10
Lead	85372	S26312A3	22	S26312A3	17	5	0.2322	1.1811	1.7	10
Magnesium	85372	S26312A3	22	S26312A3	17	5	6.3278	31.9608	1	10
Manganese	85372	S26312A3	22	S26312A3	17	5	0.2999	1.5020	0.16	10
Nickel	85372	S26312B3	34	S26312B3	29	5	0.0651	0.3168	2.7	10
Potassium	85372	S26312A4	22	S26312A4	17	5	0.6491	2.3752	37	c 10
Sodium	85372	S26312A4	22	S26312A4	17	5	0.1865	0.5823	60	c 10
Zinc	85372	S26312A3	22	S26312A3	17	5	0.9278	4.6700	0.66	10

a-Indicates Rpd Failed the criteria  
 b-Method Rep Out but concentrations < 5\*RL  
 c-Serial dilution Out but conc < 10 \* IDL

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 85373

0093024 0332

Instrument Type: ICPMS

Analytical Method(s): 6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85373					
Analyte	BatchId	Data File	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85373	S100620A	20	S100620A	19	50.3880	50.9180	1	20
Arsenic	85373	S100620A	20	S100620A	19	44.4660	44.9540	1.1	20
Beryllium	85373	S100620A	20	S100620A	19	150.3740	153.7010	2.2	20
Cadmium	85373	S100620A	20	S100620A	19	179.0720	182.6240	2	20
Selenium	85373	S100620A	20	S100620A	19	327.2530	327.9440	.21	20
Silver	85373	S100620A	20	S100620A	19	88.3010	90.9370	2.9	20
Thallium	85373	S100620A	20	S100620A	19	190.8280	190.7870	.021	20
Vanadium	85373	S100620A	20	S100620A	19	267.1310	271.3740	1.6	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD19599-001					
Analyte	BatchId	Data File	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85373	S100620A	22	S100620A	21	2.9060	2.7270	6.4	20
Arsenic	85373	S100620A	22	S100620A	21	9.5900	9.0880	5.4	20
Beryllium	85373	S100620A	22	S100620A	21	0.6540	0.7980	20	20
Cadmium	85373	S100620A	22	S100620A	21	20.5600	19.1870	6.9	20
Selenium	85373	S100620A	22	S100620A	21	10.4520	7.2890	36 a	20
Silver	85373	S100620A	22	S100620A	21	1.2460	1.2950	3.9	20
Thallium	85373	S100620A	22	S100620A	21	0.1420	0.4800	110 b	20
Vanadium	85373	S100620A	22	S100620A	21	39.5120	42.7770	7.9	20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19599-001					
Analyte	BatchId	Data File	Seq#	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85373	S100620A	25	S100620A	24	163.2870	175.3730	7.1	20
Arsenic	85373	S100620A	25	S100620A	24	224.7200	227.4540	1.2	20
Beryllium	85373	S100620A	25	S100620A	24	202.9630	213.7140	5.2	20
Cadmium	85373	S100620A	25	S100620A	24	235.7310	241.9780	2.6	20
Selenium	85373	S100620A	25	S100620A	24	215.8370	212.9280	1.4	20
Silver	85373	S100620A	25	S100620A	24	42.5060	43.9900	3.4	20
Thallium	85373	S100620A	25	S100620A	24	201.0840	208.7490	3.7	20
Vanadium	85373	S100620A	25	S100620A	24	260.4290	268.7310	3.1	20

TxtQcType: SD		Matrix: SOIL		SampleID: AD19599-001						
Analyte	BatchId	Data File	Seq#	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	85373	S100620A	23	S100620A	21	5	0.5600	2.7270	2.7	20
Arsenic	85373	S100620A	23	S100620A	21	5	1.9690	9.0880	8.3	20
Beryllium	85373	S100620A	23	S100620A	21	5	0.2110	0.7980	32 c	20
Cadmium	85373	S100620A	23	S100620A	21	5	3.9730	19.1870	3.5	20
Selenium	85373	S100620A	23	S100620A	21	5	1.4320	7.2890	1.8	20
Silver	85373	S100620A	23	S100620A	21	5	0.2640	1.2950	1.9	20
Thallium	85373	S100620A	23	S100620A	21	5	0.0350	0.4800	64 c	20
Vanadium	85373	S100620A	23	S100620A	21	5	8.8210	42.7770	3.1	20

a-Indicates Rpd Failed the criteria  
 b-Method Rep Out but concentrations < 5\*RL  
 c-Serial dilution Out but conc < 10 \* IDL

Hampton-Clarke

**ICP SAMPLE PREPARATION LOG**

**ANALYTICAL METHOD:** 3010A 3005A 3050B 200.7/200.8 OTHER \_\_\_\_\_

Batch No.: 26312  
 QC Number: 85372  
 Matrix: sal 6010

Analyst: ANS  
 Prep Date: 10/6/20  
 Reviewed By: [Signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD						--	
1. A019599-001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -001							Balance used: 032
MSD -001							Pipettes used: 199, 155
2. 19601-001							
3. -002							Hot Block used: 4
4. -003							
5. 19604-001							
6. 19599-002							
7. 19539-007							
8. -011							
9. -013							
10. -014							
11. -017							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 99.2 C (90-95°C) Start Time: 8:00am End Time: 11:00am

	Volume mL	Lot #
LCS, LCSD	0.5g	V-13005
LLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178
ELMS, LLMSD		V- 335926

Acid	Vol mL	Lot#
HNO <sub>3</sub>	2.5	V-13457
HCl	5.0	V-13392
H <sub>2</sub> O <sub>2</sub>	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>	5.0	V-33602
1:1 HCl		V-

Relinquished By ANS Date 10/6/20  
 Received By [Signature] Date 10/6/2020

Hampton-Clarke

**ICP SAMPLE PREPARATION LOG**

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER \_\_\_\_\_

Batch No.: 26313 Analyst: ANS  
 QC Number: 85373 Prep Date: 10/6/20  
 Matrix: soil 6020 Reviewed By: h

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. A019599-001	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR -001							
MS -001							Balance used: 032
MSD -001							Pipettes used: 149, 155
2. 19601-001							
3. -002							Hot Block used: 4
4. -003							
5. 19599-002							
6. 19539-007							
7. -011							
8. -013							
9. -014							
10. -017							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94.2 C (90-95° C) Start Time: 8:00am End Time: 10:30am

	Volume mL	Lot #
LCS, LCSD	0.1g	V- 13005
LLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO <sub>3</sub>	2.5	V-13457
HCl		V-
H <sub>2</sub> O <sub>2</sub>	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>	5.0	V-336092
1:1 HCl		V-

Relinquished By ANS Date 10/6/20  
 Received By h Date 10/6/20

HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER \_\_\_\_\_

Batch No.: 26312  
 QC Number: 85372  
 Matrix: Soil

Analyst: ANS  
 Prep Date: 10/6/20  
 Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 336166
LCS	0.15g			
LCS				STD 0.2 ppb V- 336167
1 A019599-001				STD 0.5 ppb V- 336168
MR ↓ -001				STD 1.0 ppb V- 336169
MS ↓ -001				STD 2.0 ppb V- 336170
MSD ↓ -001				STD 5.0 ppb V- 336171
2 19601-001				STD 10.0 ppb V- 336172
3 ↓ -002				STD 25.0 ppb V- 336173
4 ↓ -003				ICV 10.0 ppb V- 336169
5 19604-001				CCV 20.0 ppb V- 336165
6 19599-002				
7 19539-007				
8 ↓ -011				Balance used: 032
9 ↓ -013				Pipettes used: 143, 159, 155
10 ↓ -014				
11 ↓ -017				Hot Block used: 7
12				
13				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
KMnO <sub>4</sub> : V- 335298	3.71	HNO3		V-
K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> : V-		HCl		V-
H <sub>2</sub> SO <sub>4</sub> : V- 334567	1.5	H <sub>2</sub> SO <sub>4</sub>		V-
		Aqua Regia	1.25	V- 336163

\*\*Block Temp: 93.7 °C  
 Time In Block: 8:30am  
 Time Out of Block: 9:00am

Take Volume & Lot #  
 LCS v. 13005 @ 0.15/0.25ml  
 MS v. 336162 @ 0.250ml  
 Standards/Control Batch B- 29797

Start time: 8:00am End Time: 9:30am

\*\*Temperature  
 245.1 / 7470A: 90-95C  
 7471B: 92-98C

Relinquished By: ANS

\*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriproq using the standard batch number and the corresponding V #s.

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\IS26312A3MDL.txt

Analysis Date: 10/06/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	12:09	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	12:13	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	12:17	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	12:21	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	12:25	5							V-333673(CCV)
ICB V-333667	1	ICB	12:29	6							V-333667(ICB/CCB)
LRS V-335934	1	LRS	12:33	7		SOIL	SOIL	SW846	85372		V-335934(LRS)
ICS3 V-333666	1	ICS	12:37	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	12:41	9		SOIL	SOIL	SW846	85372		0
LLICV V-333671	1	LLICV	12:45	10		SOIL	SOIL	SW846	85372		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	12:49	11							V-333668(ICSA)
CCV V-333673	1	CCV	12:54	12							V-333673(CCV)
CCB V-333667	1	CCB	12:58	13							V-333667(ICB/CCB)
MB 85372 (100)	1	MB	13:02	14		SOIL	SOIL	SW846	85372		0
LCS 85372	1	LCS	13:06	15		SOIL	SOIL	SW846	85372		0
LCS MR 85372	1	LCS	13:11	16		SOIL	SOIL	SW846	85372		0
AD19599-001	1	SMP	13:16	17	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr, Ni NOT reported	0
AD19599-001	1	MR	13:20	18	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr, Ni NOT reported	0
AD19599-001	1	MS	13:25	19	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr, Ni NOT reported (Cr, Ni over LR)	0
AD19599-001	1	MSD	13:29	20	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr, Ni NOT reported	0
AD19599-001	1	PS	13:34	21	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr, Ni NOT reported	0
AD19599-001	5	SD	13:39	22	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr, Ni NOT reported	0
CCV V-333673	1	CCV	13:43	23							V-333673(CCV)
CCB V-333667	1	CCB	13:47	24							V-333667(ICB/CCB)
AD19601-001	1	SMP	13:51	25	MET-RCRA-S	SOIL	SOIL	SW846	85372	Pb NOT reported (Pb> LR)	0
AD19601-002	1	SMP	13:55	26	MET-RCRA-S	SOIL	SOIL	SW846	85372	Pb (CCV failed), Cr (Cr> LR) NOT reported	0
AD19601-003	1	SMP	14:00	27	MET-RCRA-S	SOIL	SOIL	SW846	85372	Cr, Pb (Cr, Pb over LR) NOT reported	0
AD19599-002	1	NA	14:05	28	MET-TAL6010S	SOIL	SOIL	SW846	85372	possible carry-over from AD19601-003 (see seq. 32)	0
RINSE	1	NA	14:09	29		SOIL	SOIL	SW846	85372		0
RINSE	1	NA	14:13	30		SOIL	SOIL	SW846	85372		0
RINSE	1	NA	14:16	31		SOIL	SOIL	SW846	85372		0
AD19599-002	1	SMP	14:20	32	MET-TAL6010S	SOIL	SOIL	SW846	85372	Pb NOT reported	0
RINSE	1	NA	14:24	33		SOIL	SOIL	SW846	85372		0
RINSE	1	NA	14:28	34		SOIL	SOIL	SW846	85372		0
CCV V-333673	1	CCV	14:32	35						Pb failed	V-333673(CCV)
CCB V-333667	1	CCB	14:36	36							V-333667(ICB/CCB)
AD19539-007	1	SMP	14:40	37	MET-TAL6010S	SOIL	SOIL	SW846	85372	Pb NOT reported	0
AD19539-011	1	SMP	14:43	38	MET-TAL6010S	SOIL	SOIL	SW846	85372	Pb NOT reported	0
AD19539-013	1	SMP	14:47	39	MET-TAL6010S	SOIL	SOIL	SW846	85372	Pb NOT reported	0
AD19539-014	1	SMP	14:51	40	MET-TAL6010S	SOIL	SOIL	SW846	85372	Pb NOT reported	0
AD19539-017	1	SMP	14:55	41	MET-TAL6010S	SOIL	SOIL	SW846	85372	Pb NOT reported	0
AD19587-007	2	SMP	14:59	42	MET-TAL6010S	SOIL	SOIL	SW846	85368	Co reported	0
CCV V-333673	1	CCV	15:03	43							V-333673(CCV)
CCB V-333667	1	CCB	15:07	44							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 1:04:50 PM

RUN IS OK  
All elements reported, except

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

10/12/20

# Run Log

0093024 of 0337

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\IS26312A4MDL.txt

Analysis Date: 10/06/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	11:57	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	12:01	2							V-333671(LLICV/LLCCV soil)
CALST3 V-335982	1	CAL	12:06	3							V-335982(ICS3 - Middle Std)
CALST4 V-335863	1	CAL	12:11	4							V-335863(ICS4 High std)
ICV V-335864	1	ICV	12:15	5							V-335864(CCV)
ICB V-333667	1	ICB	12:20	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	12:24	7		SOIL	SOIL	SW846	85372		V-333662(LRS)
ICS3 V-335982	1	ICS	12:29	8							V-335982(ICS3 - Middle Std)
RINSE	1	NA	12:34	9		SOIL	SOIL	SW846	85372		0
LLICV V-333671	1	LLICV	12:38	10		SOIL	SOIL	SW846	85372		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	12:42	11							V-333668(ICSA)
CCV V-335864	1	CCV	12:46	12							V-335864(CCV)
CCB V-333667	1	CCB	12:51	13							V-333667(ICB/CCB)
MB 85372 (100)	1	MB	12:56	14		SOIL	SOIL	SW846	85372		0
LCS 85372	1	LCS	13:00	15		SOIL	SOIL	SW846	85372		0
LCS MR 85372	1	LCS	13:04	16		SOIL	SOIL	SW846	85372		0
AD19599-001	1	SMP	13:07	17	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19599-001	1	MR	13:11	18	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19599-001	1	MS	13:16	19	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19599-001	1	MSD	13:21	20	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19599-001	1	PS	13:26	21	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19599-001	5	SD	13:31	22	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
CCV V-335864	1	CCV	13:35	23							V-335864(CCV)
CCB V-333667	1	CCB	13:40	24							V-333667(ICB/CCB)
AD19599-002	1	SMP	13:44	25	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-007	1	SMP	13:49	26	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-011	1	SMP	13:53	27	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-013	1	SMP	13:57	28	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-014	1	SMP	14:02	29	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-017	1	SMP	14:06	30	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
CCV V-335864	1	CCV	14:10	31							V-335864(CCV)
CCB V-333667	1	CCB	14:14	32							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 1:50:17 PM

RUN IS OK  
Na, K reported

*olufemi* 10/12/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:



# Run Log

0093024 of 0338

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S26312B3MDL.txt

Analysis Date: 10/06/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	18:01	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	18:05	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	18:09	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	18:13	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	18:17	5							V-333673(CCV)
ICB V-333667	1	ICB	18:21	6							V-333667(ICB/CCB)
LRS V-335934	1	LRS	18:25	7		SOIL	SOIL	SW846	85372		V-335934(LRS)
ICS3 V-333666	1	ICS	18:29	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	18:33	9		SOIL	SOIL	SW846	85372		0
LLICV V-333671	1	LLICV	18:37	10		SOIL	SOIL	SW846	85372		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	18:41	11							V-333668(ICSA)
CCV V-333673	1	CCV	18:46	12							V-333673(CCV)
CCB V-333667	1	CCB	18:50	13							V-333667(ICB/CCB)
AD19599-002	1	SMP	18:54	14	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-007	1	SMP	18:57	15	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-011	1	SMP	19:01	16	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-013	1	SMP	19:05	17	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-014	1	SMP	19:09	18	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
AD19539-017	1	SMP	19:13	19	MET-TAL6010S	SOIL	SOIL	SW846	85372		0
CCV V-333673	1	CCV	19:16	20							V-333673(CCV)
CCB V-333667	1	CCB	19:21	21							V-333667(ICB/CCB)
AD19601-002	1	SMP	19:24	22	MET-RCRA-S	SOIL	SOIL	SW846	85372		0
AD19601-001	5	SMP	19:29	23	MET-RCRA-S	SOIL	SOIL	SW846	85372		0
AD19601-002	5	SMP	19:33	24	MET-RCRA-S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19601-003	20	SMP	19:37	25	MET-RCRA-S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19601-003	1000	NA	19:42	26	MET-RCRA-S	SOIL	SOIL	SW846	85372	empty spot	0
CCV V-333673	1	CCV	19:46	27							V-333673(CCV)
CCB V-333667	1	CCB	19:50	28							V-333667(ICB/CCB)
AD19599-001	20	SMP	19:53	29	MET-TAL6010S	SOIL	SOIL	SW846	85372	Ni reported	0
AD19599-001	20	MR	19:57	30	MET-TAL6010S	SOIL	SOIL	SW846	85372	Ni reported	0
AD19599-001	20	MS	20:01	31	MET-TAL6010S	SOIL	SOIL	SW846	85372	Ni reported	0
AD19599-001	20	MSD	20:05	32	MET-TAL6010S	SOIL	SOIL	SW846	85372	Ni reported	0
AD19599-001	1	PS	20:09	33	MET-TAL6010S	SOIL	SOIL	SW846	85372	Ni reported	0
AD19599-001	100	SD	20:13	34	MET-TAL6010S	SOIL	SOIL	SW846	85372	Ni reported	0
AD19601-003	1000	SMP	20:17	35	MET-RCRA-S	SOIL	SOIL	SW846	85372		0
CCV V-333673	1	CCV	20:20	36							V-333673(CCV)
CCB V-333667	1	CCB	20:24	37							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 1:26:28 PM

RUN IS OK  
Pb reported, unless otherwise reported

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

*10/12/20*

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\IS26317C3MDL.txt

Analysis Date: 10/08/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	09:45	1							V-333667(ICB/CCB)
CALST2 V-336304	1	CAL	09:49	2							V-336304(LLICV/LLCCV soil)
CALST3 V-336234	1	CAL	09:53	3							V-336234(ICS3 - Middle Std)
CALST4 V-336235	1	CAL	09:57	4							V-336235(ICS4 High std)
ICV V-336236	1	ICV	10:01	5							V-336236(CCV)
ICB V-333667	1	ICB	10:05	6							V-333667(ICB/CCB)
LRS V-335934	1	LRS	10:09	7		SOIL	SOIL	SW846	85377		V-335934(LRS)
ICS3 V-336234	1	ICS	10:13	8							V-336234(ICS3 - Middle Std)
RINSE	1	NA	10:17	9		SOIL	SOIL	SW846	85377		0
LLICV V-336304	1	LLICV	10:21	10		SOIL	SOIL	SW846	85377		V-336304(LLICV/LLCCV soil)
ICSA V-336303	1	ICSA	10:25	11							V-336303(ICSA)
CCV V-336236	1	CCV	10:30	12							V-336236(CCV)
CCB V-333667	1	CCB	10:34	13							V-333667(ICB/CCB)
MB 85377 (100)	1	NA	10:37	14		SOIL	SOIL	SW846	85377		0
MB 85377 (100)	1	MB	10:41	15		SOIL	SOIL	SW846	85377		0
LCS 85377	1	LCS	10:45	16		SOIL	SOIL	SW846	85377		0
LCS MR 85377	1	LCS	10:50	17		SOIL	SOIL	SW846	85377		0
AD19618-003	1	SMP	10:55	18	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-003	1	MR	10:59	19	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-003	1	MS	11:04	20	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-003	1	MSD	11:09	21	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-003	1	PS	11:14	22	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-003	5	SD	11:19	23	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
CCV V-336236	1	CCV	11:22	24							V-336236(CCV)
CCB V-333667	1	CCB	11:26	25							V-333667(ICB/CCB)
AD19619-001	1	SMP	11:30	26	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19619-002	1	SMP	11:35	27	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-001	1	SMP	11:40	28	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-005	1	SMP	11:45	29	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-007	1	SMP	11:49	30	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-009	1	SMP	11:54	31	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
CCV V-336236	1	CCV	11:59	32							V-336236(CCV)
CCB V-333667	1	CCB	12:03	33							V-333667(ICB/CCB)
AD19618-011	1	SMP	12:07	34	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-013	1	SMP	12:11	35	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19618-015	1	SMP	12:16	36	MET-TAL6010S	SOIL	SOIL	SW846	85377		0
AD19599-001	4	SMP	12:21	37	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19599-001	4	MR	12:25	38	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19599-001	4	MS	12:29	39	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19599-001	4	MSD	12:33	40	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19599-001	1	PS	12:36	41	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr reported	0
AD19599-001	20	SD	12:41	42	MET-TAL6010S	SOIL	SOIL	SW846	85372	Cr reported	0
CCV V-336236	1	CCV	12:44	43							V-336236(CCV)
CCB V-333667	1	CCB	12:48	44							V-333667(ICB/CCB)

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 2:54:51 PM

RUN IS OK  
Pb reported, unless otherwise reported

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

10/12/20

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26312SMDL.txt

Analysis Date: 10/06/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:24	1							0
2 PPB	1	CAL	11:25	2							0
5 PPB	1	CAL	11:26	3							0
1 PPB	1	CAL	11:28	4							0
2 PPB	1	CAL	11:29	5							0
5 PPB	1	CAL	11:30	6							0
10 PPB	1	CAL	11:32	7							0
25 PPB	1	CAL	11:33	8							0
ICV (2)	1	ICV	11:35	9							0
ICB	1	ICB	11:37	10							0
MB 85372 (167)	1	MB	11:38	11		SOIL	SOIL	SW846	85372		0
LCS 85372	1	NA	11:40	12		SOIL	SOIL	SW846	85372	over calibration limit	0
LCS 85372 MR	1	NA	11:41	13		SOIL	SOIL	SW846	85372	over calibration limit	0
LCS 4D	4	LCS	11:43	14		SOIL	SOIL	SW846	85372		0
LCS 4D MR	4	LCS	11:44	15		SOIL	SOIL	SW846	85372		0
AD19599-001	1	SMP	11:46	16	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19599-001	1	MR	11:47	17	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19599-001	1	MS	11:48	18	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19599-001	1	MSD	11:50	19	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19601-001	1	SMP	11:52	20	HG-SOIL	SOIL	SOIL	SW846	85372		0
CCV	1	CCV	11:53	21							0
CCB	1	CCB	11:55	22							0
AD19601-002	1	SMP	11:56	23	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19601-003	1	SMP	11:57	24	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19604-001	1	SMP	11:59	25	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19599-002	1	SMP	12:00	26	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19539-007	1	SMP	12:01	27	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19539-011	1	SMP	12:03	28	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19539-013	1	SMP	12:04	29	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19539-014	1	SMP	12:05	30	HG-SOIL	SOIL	SOIL	SW846	85372		0
AD19539-017	1	SMP	12:07	31	HG-SOIL	SOIL	SOIL	SW846	85372		0
CCV	1	CCV	12:08	32							0
CCB	1	CCB	12:10	33							0

Comments/Reviewedby:

olufemi  
192.168.1.89 10/12/2020 12:50:56 PM

RUN IS OK

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCI2 Lot #:

*10/12/20*

# Run Log

Data File: W\METALS.FRM\ICPDATA\New\MS3\_7700SWA\100620ANEW.txt

Analysis Date: 10/06/20

Instrument: MS3\_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	12:40	1		SOIL	SOIL	SW846	85373		0
CalBlk V-336032	1	ISBLK	12:45	2		SOIL	SOIL				V-336032(Cal Blk WARNING)
CalStd1 V-336033	1	CAL	12:49	3							V-336033(Cal Std-1 WARNING)
CalStd2 V-336034	1	CAL	12:54	4							V-336034(Cal Std-2 WARNING)
CalStd3 V-336035	1	CAL	12:58	5							V-336035(Cal Std-3 WARNING)
CalStd4 V-336036	1	CAL	13:03	6							V-336036(Cal Std-4 WARNING)
CalStd5 V-336037	1	CAL	13:07	7							V-336037(Cal Std-5 WARNING)
ICV V-336038	1	ICV	13:12	8							V-336038(ICV WARNING)
LLICV V-336043	1	LLICV	13:16	9		SOIL	SOIL	SW846	85373		V-336043(LL-ICV/CCV SOIL WARNING)
ICB V-336039	1	ICB	13:21	10							V-336039(ICB/CCB WARNING)
ICSA V-336040	1	ICSA	13:25	11							V-336040(ICSA WARNING)
RINSE	1	NA	13:30	12		SOIL	SOIL	SW846	85373		0
LRS V-336041	1	LRS	13:34	13		SOIL	SOIL	SW846	85373		V-336041(LRS WARNING)
RINSE	1	NA	13:39	14		SOIL	SOIL	SW846	85373		0
RINSE	1	NA	13:43	15		SOIL	SOIL	SW846	85373		0
CCV V-336042	1	CCV	13:48	16							V-336042(CCV WARNING)
CCB V-336039	1	CCB	13:52	17							V-336039(ICB/CCB WARNING)
MB 85373	1	MB	13:57	18		SOIL	SOIL	SW846	85373		0
LCS 85373	1	LCS	14:01	19		SOIL	SOIL	SW846	85373		0
LCS MR 85373	1	LCS	14:05	20		SOIL	SOIL	SW846	85373		0
AD19599-001	1	SMP	14:10	21	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19599-001	1	MR	14:14	22	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19599-001	5	SD	14:19	23	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19599-001	1	MS	14:23	24	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19599-001	1	MSD	14:27	25	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19599-001	1	PS	14:32	26	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
RINSE	1	NA	14:36	27		SOIL	SOIL	SW846	85373		0
CCV V-336042	1	CCV	14:41	28							V-336042(CCV WARNING)
CCB V-336039	1	CCB	14:45	29							V-336039(ICB/CCB WARNING)
AD19601-001	1	SMP	14:49	30	MET-RCRA-MS	SOIL	SOIL	SW846	85373		0
AD19601-002	1	SMP	14:54	31	MET-RCRA-MS	SOIL	SOIL	SW846	85373		0
AD19601-003	1	SMP	14:58	32	MET-RCRA-MS	SOIL	SOIL	SW846	85373		0
AD19599-002	1	SMP	15:03	33	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19539-007	1	NA	15:07	34	MET-TAL6020S	SOIL	SOIL	SW846	85373	Rerun.	0
AD19539-011	1	NA	15:12	35	MET-TAL6020S	SOIL	SOIL	SW846	85373	Rerun.	0
AD19539-013	1	NA	15:16	36	MET-TAL6020S	SOIL	SOIL	SW846	85373	Rerun.	0
AD19539-014	1	NA	15:21	37	MET-TAL6020S	SOIL	SOIL	SW846	85373	Rerun.	0
AD19539-017	1	NA	15:25	38	MET-TAL6020S	SOIL	SOIL	SW846	85373	Rerun.	0
RINSE	1	NA	15:29	39		SOIL	SOIL	SW846	85373		0
CCV V-336042	1	CCV	15:34	40							V-336042(CCV WARNING)
CCB V-336039	1	CCB	15:38	41							V-336039(ICB/CCB WARNING)
RINSE	1	NA	15:43	42		SOIL	SOIL	SW846	85373		0
CCV V-336042	1	CCV	15:47	43							V-336042(CCV WARNING)
CCB V-336039	1	CCB	15:52	44							V-336039(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau  
192 168.1.87 10/7/2020 11:20:50 AM

Run ok Report Ag, As, Be, Cd, Sb, Se, Tl, V. LRS fail for Ag. Ag LR = 100ppb.  
Rerun all elements for 19539-007, 011, 013, 014, 017 (int. stds). PC

*10/12/20*

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: *20 10/6/20*

Standard/Batch/SnCl2 Lot #:

# Run Log

Data File: W\METALS\FRM\ICPDATA\New\MS3\_7700SWAIS100720ANEW.txt

Analysis Date: 10/07/20

Instrument: MS3\_7700SWA

Sample Id	Qc DF	Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	09:47	1	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
CalBlk V-336032	1	ISBLK	09:52	2		SOIL	SOIL				V-336032(Cal Blk WARNING)
CalStd1 V-336033	1	CAL	09:56	3							V-336033(Cal Std-1 WARNING)
CalStd2 V-336034	1	CAL	10:01	4							V-336034(Cal Std-2 WARNING)
CalStd3 V-336035	1	CAL	10:05	5							V-336035(Cal Std-3 WARNING)
CalStd4 V-336036	1	CAL	10:10	6							V-336036(Cal Std-4 WARNING)
CalStd5 V-336037	1	CAL	10:14	7							V-336037(Cal Std-5 WARNING)
ICV V-336038	1	ICV	10:19	8							V-336038(ICV WARNING)
LLICV V-336043	1	LLICV	10:23	9	MET-TAL6020S	SOIL	SOIL	SW846	85373		V-336043(LL-ICV/CCV SOIL WARNING)
ICB V-336039	1	ICB	10:28	10							V-336039(ICB/CCB WARNING)
ICSA V-336040	1	ICSA	10:32	11							V-336040(ICSA WARNING)
RINSE	1	NA	10:37	12	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
LRS V-336041	1	LRS	10:41	13	MET-TAL6020S	SOIL	SOIL	SW846	85373		V-336041(LRS WARNING)
RINSE	1	NA	10:45	14	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
RINSE	1	NA	10:50	15	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
CCV V-336042	1	CCV	10:54	16							V-336042(CCV WARNING)
CCB V-336039	1	CCB	10:59	17							V-336039(ICB/CCB WARNING)
AD19539-007	1	SMP	11:03	18	MET-TAL6020S	SOIL	SOIL	SW846	85373	Be and Tl not reported	0
AD19539-011	1	SMP	11:08	19	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19539-013	1	SMP	11:12	20	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19539-014	1	SMP	11:17	21	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19539-017	1	SMP	11:21	22	MET-TAL6020S	SOIL	SOIL	SW846	85373		0
AD19539-007	3	SMP	11:26	23	MET-TAL6020S	SOIL	SOIL	SW846	85373	Be and Tl reported.	0
MB 85378	1	MB	11:30	24	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
LCS 85378	1	LCS	11:35	25	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
LCS MR 85378	1	LCS	11:39	26	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
RINSE	1	NA	11:43	27	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
CCV V-336042	1	CCV	11:48	28							V-336042(CCV WARNING)
CCB V-336039	1	CCB	11:52	29							V-336039(ICB/CCB WARNING)
AD19618-003	1	SMP	11:57	30	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19618-003	1	MR	12:01	31	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19618-003	5	SD	12:06	32	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19618-003	1	MS	12:10	33	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19618-003	1	MSD	12:14	34	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19618-003	1	PS	12:18	35	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19619-001	1	SMP	12:23	36	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19619-002	1	SMP	12:27	37	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
AD19618-001	1	SMP	12:32	38	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
RINSE	1	NA	12:36	39	MET-TAL6020S	SOIL	SOIL	SW846	85378		0
CCV V-336042	1	CCV	12:41	40							V-336042(CCV WARNING)
CCB V-336039	1	CCB	12:45	41							V-336039(ICB/CCB WARNING)
AD19618-005	1	SMP	12:49	42	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19618-007	1	SMP	12:54	43	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19618-009	1	SMP	12:58	44	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19618-011	1	SMP	13:03	45	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19618-013	1	SMP	13:07	46	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19618-015	1	SMP	13:12	47	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19636-001	1	SMP	13:16	48	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
AD19636-002	1	NA	13:20	49	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
RINSE	1	NA	13:25	50	MET-TAL6020S	SOIL	SOIL	SW846	85378	Ag, Cd and Be not reported	0
CCV V-336042	1	CCV	13:29	51						Ag, Cd and Be failed.	V-336042(CCV WARNING)
CCB V-336039	1	CCB	13:33	52							V-336039(ICB/CCB WARNING)

Comments/Reviewedby:

dluca  
192.168.1.87 10/8/2020 2:00:38 PM

Run is OK. Ag failed in LRS. Ag LRS=100 ppb. Ag, Cd and Be failed in last CCV. Ag, Cd and Be not reported for AD 19618-005 to AD19636-002.

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: *20 10/12/20*

Standard/Batch/SnCl2 Lot #:

*10/12/20*

# ICPMS Internal Standard Summary Report

0093024 0343

TuneID: 1

Batch/FileID: S100620AN Sample ID: CalBlk V-336032 Sample Date 10/06/20 Sample Time: 12:45

IS ID:	Area	Area Limit	
Ho-1	1745822.23	1222075.561	- 2269568.899
In-1	1134783.53	794348.471	- 1475218.589
Sc-1	837948.22	586563.754	- 1089332.686
Tb-1	1808869.45	1266208.615	- 2351530.285

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-336032	2	1745822.	1134783.	837948.2	1808869.				
SMP	RINSE	1	1750364.	1135925.	840652.9	1813886.				
CAL	CalStd1 V-33603	3	1764100.	1147023.	850940.4	1823295.				
CAL	CalStd2 V-33603	4	1751758.	1136017.	841371.7	1802605.				
CAL	CalStd3 V-33603	5	1750202.	1147636.	846688.1	1839022.				
CAL	CalStd4 V-33603	6	1742527.	1135751.	841942.5	1769193.				
CAL	CalStd5 V-33603	7	1773948.	1142100.	849819.3	1831954.				
ICV	ICV V-336038	8	1799765.	1172447.	865941.5	1850113.				
LLICV	LLICV V-336043	9	1820204.	1182388.	871547.6	1858415.				
ICB	ICB V-336039	10	1780593.	1173115.	862351.0	1855077.				
ICSA	ICSA V-336040	11	1892363.	1163531.	915029.2	1951244.				
SMP	RINSE	12	1937611.	1294814.	939289.7	2008062.				
LRS	LRS V-336041	13	1855178.	1166430.	907697.7	1909810.				
SMP	RINSE	14	1919524.	1270755.	939878.0	1985431.				
SMP	RINSE	15	1872392.	1232973.	900668.9	1923395.				
CCV	CCV V-336042	16	1862851.	1202342.	897221.0	1921143.				
CCB	CCB V-336039	17	1846388.	1206490.	883269.6	1916844.				
MB	MB 85373	18	1880561.	1214854.	867260.3	1942653.				
LCS	LCS 85373	19	1943042.	1219067.	946721.3	1999932.				
MR	LCS MR 85373	20	1920624.	1221132.	933658.2	1988203.				
SMP	AD19599-001	21	1916305.	1207183.	963457.5	1986665.				
MR	AD19599-001	22	1907286.	1195642.	960234.0	1955666.				
SD	AD19599-001	23	1836801.	1181054.	879178.3	1887102.				
MS	AD19599-001	24	1896942.	1233224.	981869.0	1966244.				
MSD	AD19599-001	25	1939895.	1260259.	1010627.	2000425.				
PS	AD19599-001	26	1964323.	1245053.	1017081.	2028986.				
SMP	RINSE	27	1830986.	1196520.	869711.3	1894897.				
CCV	CCV V-336042	28	1802670.	1176661.	871157.7	1856836.				
CCB	CCB V-336039	29	1811569.	1187319.	871300.5	1881091.				
SMP	AD19601-001	30	2056268.	1212022.	1507330. *	2130366.				
SMP	AD19601-002	31	1702934.	1041975.	949735.6	1758493.				
SMP	AD19601-003	32	1674018.	1101587.	1032619.	1717352.				
SMP	AD19599-002	33	2054986.	1452733.	1203518. *	2121492.				
SMP	AD19539-007	34	2466475. *	1479433. *	1825510. *	2447110. *				
SMP	AD19539-011	35	2192135.	1485632. *	1421328. *	2251666.				
SMP	AD19539-013	36	2161078.	1482728. *	1377884. *	2237833.				
SMP	AD19539-014	37	2304236. *	1459320.	1588254. *	2354453. *				
SMP	AD19539-017	38	2305128. *	1481456. *	1598383. *	2334202.				
SMP	RINSE	39	1898758.	1268116.	934222.5	1968517.				
CCV	CCV V-336042	40	1865348.	1236367.	911641.7	1928653.				
CCB	CCB V-336039	41	1869522.	1240638.	911670.5	1937968.				
SMP	RINSE	42	1859746.	1231502.	897363.3	1914783.				
CCV	CCV V-336042	43	1853936.	1222382.	907438.6	1928454.				
CCB	CCB V-336039	44	1859179.	1238153.	903976.2	1925420.				

\* Indicates Internal Standard Area outside of limits

# ICPMS Internal Standard Summary Report

0093024 0344

TuneID: 2

Batch/FileID: S100620AN Sample ID: CalBlk V-336032 Sample Date 10/06/20 Sample Time: 12:45

IS ID: Area	Area Limit
Ho-2 777304.57	544113.199 - 1010495.941
In-2 244995.23	171496.661 - 318493.799
Sc-2 41802.81	29261.967 - 54343.653
Tb-2 783839.63	548687.741 - 1018991.519

QcType	txtSamId:	Pos	Ho-2	In-2	Sc-2	Tb-2	Area	Area	Area	Area
			Area	Area	Area	Area				
ISBLK	CalBlk V-336032	2	777304.5	244995.2	41802.81	783839.6				
SMP	RINSE	1	781758.0	245412.9	41123.22	782359.7				
CAL	CalStd1 V-33603	3	775325.9	246533.3	42086.49	782788.7				
CAL	CalStd2 V-33603	4	785505.1	247781.1	42212.29	791005.9				
CAL	CalStd3 V-33603	5	786753.4	247064.2	41844.04	789771.6				
CAL	CalStd4 V-33603	6	781441.1	244904.3	41164.60	788595.1				
CAL	CalStd5 V-33603	7	789994.6	246066.1	41604.47	794745.9				
ICV	ICV V-336038	8	808765.6	253458.7	43482.04	813986.0				
LLICV	LLICV V-336043	9	806854.6	252896.9	43251.40	808069.2				
ICB	ICB V-336039	10	787987.1	251493.2	42759.37	795233.4				
ICSA	ICSA V-336040	11	842374.7	255649.2	46958.30	843049.6				
SMP	RINSE	12	852354.9	271649.8	46688.27	854995.3				
LRS	LRS V-336041	13	824092.9	254752.9	45827.69	829912.9				
SMP	RINSE	14	843212.8	273446.3	46829.94	852145.3				
SMP	RINSE	15	830483.8	262363.6	44957.76	835195.2				
CCV	CCV V-336042	16	823940.9	260827.9	44677.08	829973.7				
CCB	CCB V-336039	17	823515.0	262145.5	44311.50	830706.6				
MB	MB 85373	18	815759.3	253755.4	42168.11	817855.9				
LCS	LCS 85373	19	834433.1	248958.2	44185.86	830428.7				
MR	LCS MR 85373	20	832051.0	248220.2	43243.48	836486.6				
SMP	AD19599-001	21	833099.6	246742.4	44547.89	834989.4				
MR	AD19599-001	22	824028.4	244998.0	44032.13	826967.9				
SD	AD19599-001	23	805651.1	249404.0	42374.01	814774.2				
MS	AD19599-001	24	825340.7	257311.7	46582.56	831512.1				
MSD	AD19599-001	25	832126.7	256031.4	48270.38	839492.1				
PS	AD19599-001	26	835054.4	252644.6	46573.65	845659.3				
SMP	RINSE	27	808905.0	254629.5	43498.70	813446.6				
CCV	CCV V-336042	28	810891.7	256017.1	43158.95	815885.0				
CCB	CCB V-336039	29	811865.7	258012.0	43049.84	820880.5				
SMP	AD19601-001	30	907474.3	248966.5	70603.27 *	912544.7				
SMP	AD19601-002	31	726138.5	219161.0	43627.78	729604.3				
SMP	AD19601-003	32	745201.5	242266.4	45960.31	738830.3				
SMP	AD19599-002	33	891664.2	281141.4	53456.45	900274.6				
SMP	AD19539-007	34	1112989. *	288478.5	87190.46 *	1059246. *				
SMP	AD19539-011	35	949325.5	284607.1	64086.79 *	946373.3				
SMP	AD19539-013	36	945786.1	283529.3	62863.10 *	946677.0				
SMP	AD19539-014	37	1006896.	282337.3	73693.80 *	1002228.				
SMP	AD19539-017	38	1018076. *	284284.4	73957.18 *	1003120.				
SMP	RINSE	39	828110.8	261260.1	43960.93	834327.7				
CCV	CCV V-336042	40	834875.9	259227.3	44720.43	840043.7				
CCB	CCB V-336039	41	824914.5	260612.5	44204.63	826467.9				
SMP	RINSE	42	822783.0	258472.5	44183.62	823364.9				
CCV	CCV V-336042	43	831546.5	258202.7	44597.84	842208.1				
CCB	CCB V-336039	44	827297.9	260443.5	44471.96	831304.9				

\* Indicates Internal Standard Area outside of limits

## ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S100720AN Sample ID: CalBlk V-336032 Sample Date 10/07/20 Sample Time: 09:52

IS ID:	Area	Area Limit
Ho-1	1972172.75	1380520.925 - 2563824.575
In-1	1291714.79	904200.353 - 1679229.227
Sc-1	1063662.30	744563.61 - 1382760.99
Tb-1	2019248.72	1413474.104 - 2625023.336

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-336032	2	1972172.	1291714.	1063662.	2019248.				
SMP	RINSE	1	1920793.	1252566.	1010258.	1989239.				
CAL	CalStd1 V-33603	3	1960879.	1358925.	1064198.	2045965.				
CAL	CalStd2 V-33603	4	1972600.	1317441.	1085918.	2052996.				
CAL	CalStd3 V-33603	5	1971504.	1301514.	1070201.	2024749.				
CAL	CalStd4 V-33603	6	1940441.	1279769.	1075422.	2010844.				
CAL	CalStd5 V-33603	7	1916208.	1238281.	1015719.	1955228.				
ICV	ICV V-336038	8	1902846.	1257048.	1026358.	1974036.				
LLICV	LLICV V-336043	9	1945346.	1345329.	1072583.	1995523.				
ICB	ICB V-336039	10	1953733.	1327303.	1093745.	2024503.				
ICSA	ICSA V-336040	11	2051413.	1277367.	1183081.	2091338.				
SMP	RINSE	12	2126562.	1515535.	1225989.	2184077.				
LRS	LRS V-336041	13	2050759.	1339782.	1180837.	2128681.				
SMP	RINSE	14	2002985.	1393665.	1127602.	2085935.				
SMP	RINSE	15	1994832.	1383691.	1096547.	2075071.				
CCV	CCV V-336042	16	2018385.	1373356.	1150976.	2068361.				
CCB	CCB V-336039	17	1971650.	1335306.	1045889.	2056658.				
SMP	AD19539-007	18	2684608. *	1536487.	2123606. *	2618706.				
SMP	AD19539-011	19	2314395.	1516097.	1578818. *	2351787.				
SMP	AD19539-013	20	2285536.	1522068.	1566835. *	2360061.				
SMP	AD19539-014	21	2507838.	1543048.	1871451. *	2538398.				
SMP	AD19539-017	22	2484235.	1513127.	1846029. *	2509851.				
SMP	AD19539-007	23	2332870.	1487512.	1456632. *	2346979.				
MB	MB 85378	24	2077938.	1441383.	1134818.	2149331.				
LCS	LCS 85378	25	2183506.	1506852.	1347747.	2257618.				
MR	LCS MR 85378	26	2213545.	1516995.	1313987.	2283852.				
SMP	RINSE	27	2049413.	1419730.	1048040.	2105267.				
CCV	CCV V-336042	28	2041082.	1374850.	1063366.	2104876.				
CCB	CCB V-336039	29	2040288.	1432643.	1145495.	2114282.				
SMP	AD19618-003	30	2343161.	1542630.	2134120. *	2401136.				
MR	AD19618-003	31	2329818.	1556821.	2057797. *	2398029.				
SD	AD19618-003	32	2192239.	1515942.	1406033. *	2272481.				
MS	AD19618-003	33	2314246.	1511815.	2252892. *	2387311.				
MSD	AD19618-003	34	2375287.	1530357.	2134675. *	2444319.				
PS	AD19618-003	35	2323068.	1533834.	2074792. *	2377551.				
SMP	AD19619-001	36	2375231.	1558193.	1828487. *	2464997.				
SMP	AD19619-002	37	2392066.	1552654.	2024367. *	2434648.				
SMP	AD19618-001	38	2377973.	1553175.	2167712. *	2438391.				
SMP	RINSE	39	2127123.	1528601.	1215495.	2197071.				
CCV	CCV V-336042	40	2124400.	1500471.	1223071.	2194780.				
CCB	CCB V-336039	41	2071956.	1468814.	1162876.	2133424.				
SMP	AD19618-005	42	2397374.	1558246.	1983090. *	2468222.				
SMP	AD19618-007	43	2395805.	1561647.	2140321. *	2466533.				
SMP	AD19618-009	44	2441242.	1576234.	1960511. *	2492529.				
SMP	AD19618-011	45	2378344.	1591799.	1948696. *	2440477.				
SMP	AD19618-013	46	2358523.	1575668.	2316197. *	2418890.				
SMP	AD19618-015	47	2418685.	1576353.	1953717. *	2494677.				
SMP	AD19636-001	48	2349882.	1590527.	1664024. *	2430653.				

\* Indicates Internal Standard Area outside of limits



# ICPMS Internal Standard Summary Report

0093024 0346

TuneID: 1

SMP	AD19636-002	49	2317343.	1582341.	1553792.	* 2365603.
SMP	RINSE	50	2144302.	1458927.	1000341.	2205731.
CCV	CCV V-336042	51	2195509.	1491691.	1089846.	2248886.
CCB	CCB V-336039	52	2206603.	1528761.	1181414.	2269936.

\* Indicates Internal Standard Area outside of limits

## ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S100720AN Sample ID: CalBik V-336032 Sample Date 10/07/20 Sample Time: 09:52

IS ID:	Area	Area Limit
Ho-2	864862.10	605403.47 - 1124320.73
In-2	281504.17	197052.919 - 365955.421
Sc-2	54952.85	38466.995 - 71438.705
Tb-2	887414.63	621190.241 - 1153639.019

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBik V-336032	2	864862.1	281504.1	54952.85	887414.6				
SMP	RINSE	1	852003.9	275483.5	53527.46	871713.5				
CAL	CalStd1 V-33603	3	872210.4	284499.0	55553.26	896692.4				
CAL	CalStd2 V-33603	4	877151.0	285552.4	55816.53	903163.0				
CAL	CalStd3 V-33603	5	889889.3	293857.5	57001.11	915724.4				
CAL	CalStd4 V-33603	6	876392.9	283417.7	55789.59	899447.5				
CAL	CalStd5 V-33603	7	866502.8	278159.3	54568.37	885192.4				
ICV	ICV V-336038	8	878412.6	286369.0	56458.50	896800.3				
LLICV	LLICV V-336043	9	896118.2	296957.4	58020.76	921061.5				
ICB	ICB V-336039	10	888895.7	299023.9	58390.87	913951.1				
ICSA	ICSA V-336040	11	900944.4	281546.4	59924.36	915240.1				
SMP	RINSE	12	919087.0	304329.2	59782.85	941587.4				
LRS	LRS V-336041	13	900584.1	291158.4	59392.75	918451.5				
SMP	RINSE	14	899662.7	303304.1	57959.43	921388.1				
SMP	RINSE	15	896291.8	297676.9	57832.33	914329.4				
CCV	CCV V-336042	16	899376.9	295329.5	57895.96	913539.2				
CCB	CCB V-336039	17	877470.1	291886.4	56632.18	901874.7				
SMP	AD19539-007	18	1163693. *	295184.2	102555.0 *	1115497.				
SMP	AD19539-011	19	993864.9	295658.0	75327.02 *	999902.4				
SMP	AD19539-013	20	978411.6	296107.4	73446.06 *	1001716.				
SMP	AD19539-014	21	1051741.	293481.2	87456.06 *	1057947.				
SMP	AD19539-017	22	1060252.	292567.8	86163.83 *	1056173.				
SMP	AD19539-007	23	988400.3	286482.5	69200.32	984085.8				
MB	MB 85378	24	893325.8	287621.9	54700.92	916351.9				
LCS	LCS 85378	25	936082.8	292533.8	60993.71	953274.5				
MR	LCS MR 85378	26	923041.7	290490.8	59621.29	944654.1				
SMP	RINSE	27	888024.3	284833.5	53791.68	914757.9				
CCV	CCV V-336042	28	902675.2	287012.2	54918.08	915598.6				
CCB	CCB V-336039	29	898974.5	292871.9	55394.07	915149.7				
SMP	AD19618-003	30	994253.5	293924.0	104351.9 *	1005219.				
MR	AD19618-003	31	994471.2	298423.8	100221.2 *	1011184.				
SD	AD19618-003	32	942474.3	300835.8	67087.16	965433.1				
MS	AD19618-003	33	985855.8	296867.2	109663.5 *	1003309.				
MSD	AD19618-003	34	1011485.	297207.5	103079.2 *	1022200.				
PS	AD19618-003	35	1002434.	295304.0	103032.2 *	1017286.				
SMP	AD19619-001	36	999625.5	298390.3	87034.41 *	1028232.				
SMP	AD19619-002	37	1004144.	298879.3	96783.19 *	1021441.				
SMP	AD19618-001	38	999654.2	295418.6	104712.5 *	1012028.				
SMP	RINSE	39	913754.0	302134.4	57752.19	938676.3				
CCV	CCV V-336042	40	930491.6	300742.7	57883.50	945432.4				
CCB	CCB V-336039	41	898700.9	297798.5	56701.22	923891.7				
SMP	AD19618-005	42	1027887.	302586.7	94736.55 *	1047442.				
SMP	AD19618-007	43	1019914.	297550.4	102003.7 *	1029600.				
SMP	AD19618-009	44	1027407.	302064.1	92653.39 *	1036551.				
SMP	AD19618-011	45	1005016.	302926.0	91526.31 *	1023736.				
SMP	AD19618-013	46	1001322.	302822.4	111859.6 *	1009512.				
SMP	AD19618-015	47	1009727.	297184.2	91694.82 *	1029922.				
SMP	AD19636-001	48	965618.1	293365.3	76247.99 *	988563.8				

\* Indicates Internal Standard Area outside of limits

# ICPMS Internal Standard Summary Report

0093024 0348

TuneID: 2

SMP	AD19636-002	49	934322.8	284155.7	69454.58	943950.7
SMP	RINSE	50	862288.3	265199.1	48164.51	878732.3
CCV	CCV V-336042	51	900366.5	276945.5	51719.64	912595.8
CCB	CCB V-336039	52	902131.5	289123.7	54399.28	915267.1

\* Indicates Internal Standard Area outside of limits

## **Wet Chemistry Data**

**VERITECH Wet Chem Form1 Analysis Summary**  
**% Solids****TestGroupName: % Solids SM2540G****Project #: 0093024****TestGroup: %SOLIDS**

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19539-006	HSI-SB-02(3.5-4)	Soil/Terracore	1	83	Percent			10/02/20	09/30/20	09/28/20
AD19539-007	HSI-SB-02(10-10)	Soil/Terracore	1	80	Percent			10/02/20	09/30/20	09/28/20
AD19539-008	HSI-SB-02(11-11)	Soil/Terracore	1	79	Percent			10/02/20	09/30/20	09/28/20
AD19539-009	HSI-SB-04 (9.5-10)	Soil/Terracore	1	81	Percent			10/02/20	09/30/20	09/29/20
AD19539-010	HSI-SB-03 (3.5-4)	Soil/Terracore	1	86	Percent			10/02/20	09/30/20	09/29/20
AD19539-011	HSI-SB-03 (10-10)	Soil/Terracore	1	84	Percent			10/02/20	09/30/20	09/29/20
AD19539-012	HSI-SB-03 (11-11)	Soil/Terracore	1	80	Percent			10/02/20	09/30/20	09/29/20
AD19539-013	HSI-SB-01 (2.5-3)	Soil/Terracore	1	87	Percent			10/02/20	09/30/20	09/29/20
AD19539-014	HSI-SB-01 (6-6.5)	Soil/Terracore	1	83	Percent			10/02/20	09/30/20	09/29/20
AD19539-015	HSI-SB-01 (10-10)	Soil/Terracore	1	82	Percent			10/02/20	09/30/20	09/29/20
AD19539-017	HSI-SB-D1	Soil/Terracore	1	84	Percent			10/02/20	09/30/20	09/29/20

## % Solids Report

Analysis Type: SOLIDS-SS  
BatchID: SOLIDS-SS-11031

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19545-004	81	80.76616	Percent	1.38	13.91	11.49	10/02/20	BEENA	0.23	5
Sample	AD19539-006	83	82.77457	Percent	1.38	10.03	8.55	10/02/20	BEENA		
Sample	AD19539-007	80	80.06329	Percent	1.36	10.84	8.95	10/02/20	BEENA		
Sample	AD19539-008	79	79.43696	Percent	1.38	9.55	7.87	10/02/20	BEENA		
Sample	AD19539-009	81	81.26126	Percent	1.37	12.47	10.39	10/02/20	BEENA		
Sample	AD19539-010	86	85.84071	Percent	1.37	11.54	10.10	10/02/20	BEENA		
Sample	AD19539-011	84	84.41704	Percent	1.38	10.30	8.91	10/02/20	BEENA		
Sample	AD19545-004	81	80.58252	Percent	1.36	13.72	11.32	10/02/20	BEENA		
Sample	AD19545-005	82	81.57390	Percent	1.35	11.77	9.85	10/02/20	BEENA		
Sample	AD19548-002	84	84.24797	Percent	1.36	11.20	9.65	10/02/20	BEENA		
Sample	AD19552-001	27	26.56250	Percent	1.37	7.13	2.91	10/02/20	BEENA		
Sample	AD19552-002	1.2	1.22905	Percent	1.37	19.27	1.59	10/02/20	BEENA		
Sample	AD19553-001	29	29.27807	Percent	1.38	8.86	3.57	10/02/20	BEENA		
Sample	AD19553-002	1.2	1.16602	Percent	1.37	19.38	1.58	10/02/20	BEENA		
Sample	AD19557-001	86	86.01399	Percent	1.36	9.94	8.74	10/02/20	BEENA		
Sample	AD19561-001	96	95.73691	Percent	1.33	9.54	9.20	10/02/20	BEENA		
Sample	AD19561-002	96	95.71938	Percent	1.35	9.76	9.42	10/02/20	BEENA		
Sample	AD19561-003	94	94.32314	Percent	1.35	8.22	7.83	10/02/20	BEENA		
Sample	AD19561-004	94	94.27184	Percent	1.37	11.67	11.08	10/02/20	BEENA		
Sample	AD19561-005	96	95.83333	Percent	1.38	14.34	13.80	10/02/20	BEENA		
Sample	AD19561-006	94	93.73882	Percent	1.38	12.56	11.86	10/02/20	BEENA		

\* - Indicates Failed Rpd Criteria

## % Solids Report

Analysis Type: SOLIDS-SS  
BatchID: SOLIDS-SS-11032

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19539-015	82	82.37052	Percent	1.40	11.44	9.67	10/02/20	BEENA	0.03	5
Sample	AD19539-012	80	80.09009	Percent	1.38	12.48	10.27	10/02/20	BEENA		
Sample	AD19539-013	87	87.40340	Percent	1.37	14.31	12.68	10/02/20	BEENA		
Sample	AD19539-014	83	82.92201	Percent	1.38	11.51	9.78	10/02/20	BEENA		
Sample	AD19539-015	82	82.39509	Percent	1.39	11.16	9.44	10/02/20	BEENA		
Sample	AD19539-017	84	83.83838	Percent	1.40	9.32	8.04	10/02/20	BEENA		
Sample	AD19551-001	66	66.47287	Percent	1.39	11.71	8.25	10/02/20	BEENA		
Sample	AD19551-002	86	86.46789	Percent	1.41	10.13	8.96	10/02/20	BEENA		
Sample	AD19558-001	89	89.30373	Percent	1.39	11.30	10.24	10/02/20	BEENA		
Sample	AD19558-002	89	89.09487	Percent	1.39	10.56	9.56	10/02/20	BEENA		
Sample	AD19558-003	89	88.83495	Percent	1.39	13.75	12.37	10/02/20	BEENA		
Sample	AD19558-004	93	93.33333	Percent	1.38	9.93	9.36	10/02/20	BEENA		
Sample	AD19558-005	87	86.80556	Percent	1.37	8.57	7.61	10/02/20	BEENA		
Sample	AD19559-001	85	84.57831	Percent	1.39	9.69	8.41	10/02/20	BEENA		
Sample	AD19559-002	81	80.76063	Percent	1.37	10.31	8.59	10/02/20	BEENA		
Sample	AD19559-003	66	65.93137	Percent	1.37	9.53	6.75	10/02/20	BEENA		
Sample	AD19559-004	89	88.86738	Percent	1.38	11.71	10.56	10/02/20	BEENA		
Sample	AD19559-005	80	79.97870	Percent	1.37	10.76	8.88	10/02/20	BEENA		
Sample	AD19562-001	91	91.37255	Percent	1.36	11.56	10.68	10/02/20	BEENA		
Sample	AD19562-002	92	91.78967	Percent	1.36	12.20	11.32	10/02/20	BEENA		
Sample	AD19562-003	88	87.78443	Percent	1.37	9.72	8.70	10/02/20	BEENA		

\* - Indicates Failed Rpd Criteria



**Hampton-Clarke**

Analytical & Field Services

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Last Page of Report



## Project: Hot Spot Investigation

**Client PO:** CG09042310MS

**Report To:** Chesapeake Geosciences Inc  
5405 Twin Knolls Rd.  
Suite 1  
Columbia, MD 21045  
Attn: Nancy Love

**Received Date:** 10/2/2020

**Report Date:** 10/22/2020

**Deliverables:** MDE-R

**Lab ID:** AD19595

**Lab Project No:** 0100230

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This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

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**Sean Berls - Quality Assurance Officer**

OR

  
**Jean Revolus - Laboratory Director**

NJ (07071)  
PA (68-00463)

NY (ELAP11408)  
KY (90124)

CT (PH-0671)





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# Sample Summary

**Client:** Chesapeake Geosciences Inc

**HC Project #:** 0100230

**Project:** Hot Spot Investigation

<b>Lab#</b>	<b>SampleID</b>	<b>Matrix</b>	<b>Collection Date</b>	<b>Receipt Date</b>
AD19595-001	HSI-SB-05(4.5-5)	Soil/Terracore	9/30/2020	10/2/2020
AD19595-002	HSI-SB-06(4.5-5)	Soil/Terracore	9/30/2020	10/2/2020
AD19595-003	HSI-SB-07(4.5-5)	Soil/Terracore	9/30/2020	10/2/2020
AD19595-004	HSI-SB-08(3.5-4)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-005	HSI-SB-08(8-8.5)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-006	HSI-SB-08(12-13)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-007	HSI-SB-08(13-13.5)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-008	HSI-SB-09(14-14.5)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-009	HSI-SB-10(5.5-6)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-010	HSI-SB-10(7-7.5)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-011	HSI-SB-10(8-8.5)	Soil/Terracore	10/1/2020	10/2/2020
AD19595-012	HSI-SB-D2	Soil/Terracore	10/1/2020	10/2/2020
AD19595-013	HSI-WC-NH	Soil	10/1/2020	10/2/2020
AD19595-014	HSI-WC-H	Soil	10/1/2020	10/2/2020

# HC Case Narrative

**Client:** Chesapeake Geosciences Inc.  
**Project:** Hot Spot Investigation

**HC Project:** 0100230

*This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.*

## **Volatile Organic Analysis:**

The Method Blank Spike for batches 89449, 89464, 89475 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 89449, 89464, 89475 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

## **TCLP Volatile Organic Analysis:**

The Method Blank Spike for batch 89438 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 89438 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

## **Base Neutral/Acid Extractable Analysis:**

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 88132 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

## **TCLP Base Neutral/Acid Extractable Analysis:**

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 88180 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

## **PCB Analysis:**

Data conforms to method requirements.

## **Diesel Range Organics Analysis:**

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 88159 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

There is no surrogate recovery data for samples AD19542-001, -001(MS), -001(MSD) due to high sample dilution. Please refer to the applicable Form 2 for the recoveries.

## **Gasoline Range Organics Analysis:**

Data conforms to method requirements.

## **Metals Analysis:**

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batch 85369 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batches 85368, 85369. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 85368 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Reported to MDL per client request. When reporting to the MDL, detections are typically found in the blanks. Acceptance criteria for blanks are based on the RL.

**TCLP Metals Analysis:**

The serial dilution for batch 85367 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

**Wet Chemistry Analysis:**

Data conforms to method requirements.

\_\_\_\_\_  
Sean Berls  
Quality Assurance Officer

Or

  
\_\_\_\_\_  
Jean Revolus  
Laboratory Director

10/23/2020  
Date

# HC Executive Summary

0100230 0004

Client: Chesapeake Geosciences Inc

HC Project #: 0100230

Project: Hot Spot Investigation

Lab#: AD19595-001

Sample ID: HSI-SB-05(4.5-5)

Analyte	Units	RL/MDL	Result	Analytical Method
1,2-Dichloroethane	mg/kg	0.051	0.10	EPA 8260D
Chlorobenzene	mg/kg	0.026	0.050J	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.051	0.34	EPA 8260D
Tetrachloroethene	mg/kg	0.029	0.059J	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.025	0.076J	EPA 8260D
Trichloroethene	mg/kg	0.028	0.85	EPA 8260D

Lab#: AD19595-002

Sample ID: HSI-SB-06(4.5-5)

Analyte	Units	RL/MDL	Result	Analytical Method
Chlorobenzene	mg/kg	0.026	1.4	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.050	0.17	EPA 8260D
Ethylbenzene	mg/kg	0.037	0.044J	EPA 8260D
m&p-Xylenes	mg/kg	0.067	0.16	EPA 8260D
o-Xylene	mg/kg	0.054	0.067J	EPA 8260D
Tetrachloroethene	mg/kg	0.028	0.028J	EPA 8260D
Toluene	mg/kg	0.026	0.39	EPA 8260D
Trichloroethene	mg/kg	0.027	0.54	EPA 8260D
Xylenes (Total)	mg/kg	0.054	0.23	EPA 8260D

Lab#: AD19595-003

Sample ID: HSI-SB-07(4.5-5)

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.037	0.17	EPA 8260D
1,2-Dichloroethane	mg/kg	0.053	0.087	EPA 8260D
Trichloroethene	mg/kg	0.028	0.11	EPA 8260D



# HC Executive Summary

0100230 0005

Client: Chesapeake Geosciences Inc

HC Project #: 0100230

Project: Hot Spot Investigation

Lab#: AD19595-004

Sample ID: HSI-SB-08(3.5-4)

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	19	4000	EPA 6010D
Barium	mg/kg	0.78	20	EPA 6010D
Chromium	mg/kg	0.77	19	EPA 6010D
Copper	mg/kg	0.71	10	EPA 6010D
Iron	mg/kg	15	8200	EPA 6010D
Lead	mg/kg	0.71	7.1	EPA 6010D
Magnesium	mg/kg	22	390JB	EPA 6010D
Manganese	mg/kg	0.74	16	EPA 6010D
Nickel	mg/kg	1.3	3.3J	EPA 6010D
Potassium	mg/kg	110	150J	EPA 6010D
Zinc	mg/kg	1.7	7.7J	EPA 6010D
Arsenic	mg/kg	0.020	3.7	EPA 6020B
Beryllium	mg/kg	0.018	0.18J	EPA 6020B
Cadmium	mg/kg	0.016	0.21J	EPA 6020B
Selenium	mg/kg	0.073	2.6	EPA 6020B
Silver	mg/kg	0.030	0.045JB	EPA 6020B
Thallium	mg/kg	0.020	0.021J	EPA 6020B
Vanadium	mg/kg	0.012	20B	EPA 6020B
1,2-Dichlorobenzene	mg/kg	0.024	0.029J	EPA 8260D
Chlorobenzene	mg/kg	0.025	1.3	EPA 8260D
Ethylbenzene	mg/kg	0.035	0.11	EPA 8260D
m&p-Xylenes	mg/kg	0.063	0.47	EPA 8260D
o-Xylene	mg/kg	0.051	0.14	EPA 8260D
Toluene	mg/kg	0.024	0.49	EPA 8260D
Trichloroethene	mg/kg	0.026	0.030J	EPA 8260D
Xylenes (Total)	mg/kg	0.051	0.61	EPA 8260D
1,1'-Biphenyl	mg/kg	0.011	0.10	EPA 8270E
2-Methylnaphthalene	mg/kg	0.012	0.12	EPA 8270E
3&4-Methylphenol	mg/kg	0.011	0.021	EPA 8270E
bis(2-Ethylhexyl)phthalate	mg/kg	0.034	0.38	EPA 8270E
Di-n-butylphthalate	mg/kg	0.044	0.064	EPA 8270E
Naphthalene	mg/kg	0.011	0.10	EPA 8270E
Phenanthrene	mg/kg	0.012	0.019J	EPA 8270E

Lab#: AD19595-005

Sample ID: HSI-SB-08(8-8.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Benzene	mg/kg	0.024	0.040J	EPA 8260D
Chlorobenzene	mg/kg	0.027	1.0	EPA 8260D
Ethylbenzene	mg/kg	0.038	0.15	EPA 8260D
m&p-Xylenes	mg/kg	0.069	0.56	EPA 8260D
o-Xylene	mg/kg	0.055	0.18	EPA 8260D
Toluene	mg/kg	0.026	0.053J	EPA 8260D
Xylenes (Total)	mg/kg	0.055	0.74	EPA 8260D

# HC Executive Summary

0100230 0006

Client: Chesapeake Geosciences Inc

HC Project #: 0100230

Project: Hot Spot Investigation

Lab#: AD19595-006

Sample ID: HSI-SB-08(12-13)

Analyte	Units	RL/MDL	Result	Analytical Method
Benzene	mg/kg	0.027	0.13	EPA 8260D
Chlorobenzene	mg/kg	0.030	3.7	EPA 8260D
Ethylbenzene	mg/kg	0.043	0.065J	EPA 8260D
m&p-Xylenes	mg/kg	0.078	0.27	EPA 8260D
o-Xylene	mg/kg	0.062	0.068J	EPA 8260D
Toluene	mg/kg	0.030	1.1	EPA 8260D
Xylenes (Total)	mg/kg	0.062	0.34	EPA 8260D

Lab#: AD19595-007

Sample ID: HSI-SB-08(13-13.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Benzene	mg/kg	0.00065	0.0086	EPA 8260D
Chlorobenzene	mg/kg	0.00055	0.20	EPA 8260D
Ethylbenzene	mg/kg	0.00061	0.0019	EPA 8260D
m&p-Xylenes	mg/kg	0.0011	0.0071	EPA 8260D
Methyl-t-butyl ether	mg/kg	0.00048	0.0016	EPA 8260D
o-Xylene	mg/kg	0.00063	0.0019	EPA 8260D
Toluene	mg/kg	0.00058	0.0035	EPA 8260D
Trichloroethene	mg/kg	0.00073	0.0033	EPA 8260D
Xylenes (Total)	mg/kg	0.00063	0.0090	EPA 8260D

Lab#: AD19595-008

Sample ID: HSI-SB-09(14-14.5)

Analyte	Units	RL/MDL	Result	Analytical Method
1,2-Dichloroethane	mg/kg	0.00036	0.0047	EPA 8260D
Benzene	mg/kg	0.00064	0.0039	EPA 8260D
Chlorobenzene	mg/kg	0.00054	0.064	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.00071	0.040	EPA 8260D
Methyl-t-butyl ether	mg/kg	0.00047	0.0022	EPA 8260D
Toluene	mg/kg	0.00058	0.0038	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.0010	0.010	EPA 8260D
Trichloroethene	mg/kg	0.00071	0.0062	EPA 8260D
Vinyl chloride	mg/kg	0.0011	0.0057	EPA 8260D

# HC Executive Summary

0100230 0007

Client: Chesapeake Geosciences Inc

HC Project #: 0100230

Project: Hot Spot Investigation

Lab#: AD19595-009

Sample ID: HSI-SB-10(5.5-6)

Analyte	Units	RL/MDL	Result	Analytical Method
Aluminum	mg/kg	19	5900	EPA 6010D
Barium	mg/kg	0.76	28	EPA 6010D
Calcium	mg/kg	110	120J	EPA 6010D
Chromium	mg/kg	0.75	21	EPA 6010D
Cobalt	mg/kg	0.80	2.1J	EPA 6010D
Copper	mg/kg	0.69	8.1	EPA 6010D
Iron	mg/kg	15	6900	EPA 6010D
Lead	mg/kg	0.69	4.4J	EPA 6010D
Magnesium	mg/kg	22	940B	EPA 6010D
Manganese	mg/kg	0.72	36	EPA 6010D
Nickel	mg/kg	1.2	7.6	EPA 6010D
Potassium	mg/kg	110	280J	EPA 6010D
Zinc	mg/kg	1.7	12	EPA 6010D
Arsenic	mg/kg	0.020	1.5	EPA 6020B
Beryllium	mg/kg	0.018	0.22J	EPA 6020B
Cadmium	mg/kg	0.016	0.020J	EPA 6020B
Selenium	mg/kg	0.071	1.3J	EPA 6020B
Silver	mg/kg	0.029	0.042JB	EPA 6020B
Thallium	mg/kg	0.020	0.021J	EPA 6020B
Vanadium	mg/kg	0.012	20B	EPA 6020B
1,1,2,2-Tetrachloroethane	mg/kg	0.032	0.052J	EPA 8260D
1,2-Dichloroethane	mg/kg	0.045	0.070	EPA 8260D
Chlorobenzene	mg/kg	0.023	0.17	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.045	0.40	EPA 8260D
Ethylbenzene	mg/kg	0.033	0.053J	EPA 8260D
m&p-Xylenes	mg/kg	0.060	0.099	EPA 8260D
o-Xylene	mg/kg	0.049	0.054J	EPA 8260D
Tetrachloroethene	mg/kg	0.025	0.028J	EPA 8260D
Toluene	mg/kg	0.023	0.040J	EPA 8260D
Trichloroethene	mg/kg	0.025	0.24	EPA 8260D
Xylenes (Total)	mg/kg	0.049	0.15	EPA 8260D

Lab#: AD19595-010

Sample ID: HSI-SB-10(7-7.5)

Analyte	Units	RL/MDL	Result	Analytical Method
Benzene	mg/kg	0.022	0.031J	EPA 8260D
Chlorobenzene	mg/kg	0.025	0.81	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.047	0.81	EPA 8260D
Ethylbenzene	mg/kg	0.035	0.045J	EPA 8260D
Toluene	mg/kg	0.024	0.063J	EPA 8260D
Vinyl chloride	mg/kg	0.053	0.75	EPA 8260D

# HC Executive Summary

0100230 0008

Client: Chesapeake Geosciences Inc

HC Project #: 0100230

Project: Hot Spot Investigation

Lab#: AD19595-011

Sample ID: HSI-SB-10(8-8.5)

Analyte	Units	RL/MDL	Result	Analytical Method
1,1,2,2-Tetrachloroethane	mg/kg	0.00037	0.028	EPA 8260D
1,1,2-Trichloroethane	mg/kg	0.00038	0.0043	EPA 8260D
1,2-Dichloroethane	mg/kg	0.00034	0.018	EPA 8260D
Acetone	mg/kg	0.0056	0.019	EPA 8260D
Benzene	mg/kg	0.00060	0.0018	EPA 8260D
Chlorobenzene	mg/kg	0.00051	0.052	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.00067	0.059	EPA 8260D
Tetrachloroethene	mg/kg	0.00081	0.0035	EPA 8260D
Toluene	mg/kg	0.00055	0.0030	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.00099	0.0019	EPA 8260D
Trichloroethene	mg/kg	0.00068	0.061	EPA 8260D
Vinyl chloride	mg/kg	0.0010	0.010	EPA 8260D

Lab#: AD19595-012

Sample ID: HSI-SB-D2

Analyte	Units	RL/MDL	Result	Analytical Method
4-Methyl-2-pentanone	mg/kg	0.045	4.1	EPA 8260D
Benzene	mg/kg	0.028	0.12	EPA 8260D
Chlorobenzene	mg/kg	0.031	3.7	EPA 8260D
cis-1,2-Dichloroethene	mg/kg	0.059	0.40	EPA 8260D
Ethylbenzene	mg/kg	0.043	0.069J	EPA 8260D
m&p-Xylenes	mg/kg	0.079	0.25	EPA 8260D
o-Xylene	mg/kg	0.064	0.076J	EPA 8260D
Toluene	mg/kg	0.030	5.4	EPA 8260D
trans-1,2-Dichloroethene	mg/kg	0.029	0.068J	EPA 8260D
Vinyl chloride	mg/kg	0.066	1.1	EPA 8260D
Xylenes (Total)	mg/kg	0.064	0.33	EPA 8260D

Lab#: AD19595-013

Sample ID: HSI-WC-NH

Analyte	Units	RL/MDL	Result	Analytical Method
Lead	mg/l	0.050	0.10	EPA 6010D
Chlorobenzene	mg/l	0.0010	0.0031	EPA 8260D

Lab#: AD19595-014

Sample ID: HSI-WC-H

Analyte	Units	RL/MDL	Result	Analytical Method
Lead	mg/l	0.050	0.21	EPA 6010D
Gasoline Range Organics	mg/kg	30	94	EPA 8015D
1,2-Dichloroethane	mg/l	0.0064	0.033	EPA 8260D
Chlorobenzene	mg/l	0.010	0.83	EPA 8260D
Tetrachloroethene	mg/l	0.010	0.039	EPA 8260D
Trichloroethene	mg/l	0.010	0.51	EPA 8260D
2-Methylphenol	mg/l	0.0020	0.0069	EPA 8270E
3&4-Methylphenol	mg/l	0.0020	0.012	EPA 8270E

# HC Report of Analysis

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0100230

Sample ID: HSI-SB-05(4.5-5)  
Lab#: AD19595-001  
Matrix: Soil/Terracore

Collection Date: 9/30/2020  
Receipt Date: 10/2/2020

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	68.8	mg/kg	0.029	0.080	ND
1,1,2,2-Tetrachloroethane	68.8	mg/kg	0.036	0.080	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	68.8	mg/kg	0.058	0.080	ND
1,1,2-Trichloroethane	68.8	mg/kg	0.026	0.080	ND
1,1-Dichloroethane	68.8	mg/kg	0.034	0.080	ND
1,1-Dichloroethene	68.8	mg/kg	0.043	0.080	ND
1,2,3-Trichlorobenzene	68.8	mg/kg	0.063	0.080	ND
1,2,4-Trichlorobenzene	68.8	mg/kg	0.058	0.080	ND
1,2-Dibromo-3-chloropropane	68.8	mg/kg	0.067	0.080	ND
1,2-Dibromoethane	68.8	mg/kg	0.027	0.080	ND
1,2-Dichlorobenzene	68.8	mg/kg	0.026	0.080	ND
<b>1,2-Dichloroethane</b>	<b>68.8</b>	<b>mg/kg</b>	<b>0.051</b>	<b>0.051</b>	<b>0.10</b>
1,2-Dichloropropane	68.8	mg/kg	0.024	0.080	ND
1,3-Dichlorobenzene	68.8	mg/kg	0.030	0.080	ND
1,4-Dichlorobenzene	68.8	mg/kg	0.029	0.080	ND
1,4-Dioxane	68.8	mg/kg	3.1	4.0	ND
2-Butanone	68.8	mg/kg	0.060	0.080	ND
2-Hexanone	68.8	mg/kg	0.048	0.080	ND
4-Methyl-2-pentanone	68.8	mg/kg	0.039	0.080	ND
Acetone	68.8	mg/kg	0.37	0.40	ND
Benzene	68.8	mg/kg	0.024	0.040	ND
Bromochloromethane	68.8	mg/kg	0.063	0.080	ND
Bromodichloromethane	68.8	mg/kg	0.028	0.080	ND
Bromofom	68.8	mg/kg	0.043	0.080	ND
Bromomethane	68.8	mg/kg	0.040	0.080	ND
Carbon disulfide	68.8	mg/kg	0.034	0.080	ND
Carbon tetrachloride	68.8	mg/kg	0.026	0.080	ND
<b>Chlorobenzene</b>	<b>68.8</b>	<b>mg/kg</b>	<b>0.026</b>	<b>0.080</b>	<b>0.050J</b>
Chloroethane	68.8	mg/kg	0.046	0.080	ND
Chloroform	68.8	mg/kg	0.16	0.16	ND
Chloromethane	68.8	mg/kg	0.041	0.080	ND
<b>cis-1,2-Dichloroethene</b>	<b>68.8</b>	<b>mg/kg</b>	<b>0.051</b>	<b>0.080</b>	<b>0.34</b>
cis-1,3-Dichloropropene	68.8	mg/kg	0.026	0.080	ND
Cyclohexane	68.8	mg/kg	0.039	0.080	ND
Dibromochloromethane	68.8	mg/kg	0.019	0.080	ND
Dichlorodifluoromethane	68.8	mg/kg	0.050	0.080	ND
Ethylbenzene	68.8	mg/kg	0.037	0.080	ND
Isopropylbenzene	68.8	mg/kg	0.039	0.080	ND
m&p-Xylenes	68.8	mg/kg	0.068	0.080	ND
Methyl Acetate	68.8	mg/kg	0.056	0.080	ND
Methylcyclohexane	68.8	mg/kg	0.049	0.080	ND
Methylene chloride	68.8	mg/kg	0.024	0.080	ND
Methyl-t-butyl ether	68.8	mg/kg	0.025	0.040	ND
o-Xylene	68.8	mg/kg	0.055	0.080	ND
Styrene	68.8	mg/kg	0.043	0.080	ND
<b>Tetrachloroethene</b>	<b>68.8</b>	<b>mg/kg</b>	<b>0.029</b>	<b>0.080</b>	<b>0.059J</b>
Toluene	68.8	mg/kg	0.026	0.080	ND
<b>trans-1,2-Dichloroethene</b>	<b>68.8</b>	<b>mg/kg</b>	<b>0.025</b>	<b>0.080</b>	<b>0.076J</b>
trans-1,3-Dichloropropene	68.8	mg/kg	0.025	0.080	ND
<b>Trichloroethene</b>	<b>68.8</b>	<b>mg/kg</b>	<b>0.028</b>	<b>0.080</b>	<b>0.85</b>
Trichlorofluoromethane	68.8	mg/kg	0.025	0.080	ND
Vinyl chloride	68.8	mg/kg	0.056	0.080	ND
Xylenes (Total)	68.8	mg/kg	0.055	0.080	ND

Sample ID: HSI-SB-06(4.5-5)

Collection Date: 9/30/2020

Lab#: AD19595-002

Receipt Date: 10/2/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	67.5	mg/kg	0.028	0.079	ND
1,1,2,2-Tetrachloroethane	67.5	mg/kg	0.036	0.079	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	67.5	mg/kg	0.058	0.079	ND
1,1,2-Trichloroethane	67.5	mg/kg	0.025	0.079	ND
1,1-Dichloroethane	67.5	mg/kg	0.034	0.079	ND
1,1-Dichloroethene	67.5	mg/kg	0.042	0.079	ND
1,2,3-Trichlorobenzene	67.5	mg/kg	0.062	0.079	ND
1,2,4-Trichlorobenzene	67.5	mg/kg	0.058	0.079	ND
1,2-Dibromo-3-chloropropane	67.5	mg/kg	0.066	0.079	ND
1,2-Dibromoethane	67.5	mg/kg	0.027	0.079	ND
1,2-Dichlorobenzene	67.5	mg/kg	0.026	0.079	ND
1,2-Dichloroethane	67.5	mg/kg	0.051	0.051	ND
1,2-Dichloropropane	67.5	mg/kg	0.024	0.079	ND
1,3-Dichlorobenzene	67.5	mg/kg	0.030	0.079	ND
1,4-Dichlorobenzene	67.5	mg/kg	0.029	0.079	ND
1,4-Dioxane	67.5	mg/kg	3.1	4.0	ND
2-Butanone	67.5	mg/kg	0.059	0.079	ND
2-Hexanone	67.5	mg/kg	0.048	0.079	ND
4-Methyl-2-pentanone	67.5	mg/kg	0.039	0.079	ND
Acetone	67.5	mg/kg	0.36	0.40	ND
Benzene	67.5	mg/kg	0.023	0.040	ND
Bromochloromethane	67.5	mg/kg	0.062	0.079	ND
Bromodichloromethane	67.5	mg/kg	0.027	0.079	ND
Bromoform	67.5	mg/kg	0.043	0.079	ND
Bromomethane	67.5	mg/kg	0.040	0.079	ND
Carbon disulfide	67.5	mg/kg	0.034	0.079	ND
Carbon tetrachloride	67.5	mg/kg	0.026	0.079	ND
Chlorobenzene	67.5	mg/kg	0.026	0.079	1.4
Chloroethane	67.5	mg/kg	0.046	0.079	ND
Chloroform	67.5	mg/kg	0.16	0.16	ND
Chloromethane	67.5	mg/kg	0.041	0.079	ND
cis-1,2-Dichloroethene	67.5	mg/kg	0.050	0.079	0.17
cis-1,3-Dichloropropene	67.5	mg/kg	0.025	0.079	ND
Cyclohexane	67.5	mg/kg	0.039	0.079	ND
Dibromochloromethane	67.5	mg/kg	0.019	0.079	ND
Dichlorodifluoromethane	67.5	mg/kg	0.049	0.079	ND
Ethylbenzene	67.5	mg/kg	0.037	0.079	0.044J
Isopropylbenzene	67.5	mg/kg	0.039	0.079	ND
m&p-Xylenes	67.5	mg/kg	0.067	0.079	0.16
Methyl Acetate	67.5	mg/kg	0.056	0.079	ND
Methylcyclohexane	67.5	mg/kg	0.049	0.079	ND
Methylene chloride	67.5	mg/kg	0.023	0.079	ND
Methyl-t-butyl ether	67.5	mg/kg	0.025	0.040	ND
o-Xylene	67.5	mg/kg	0.054	0.079	0.067J
Styrene	67.5	mg/kg	0.043	0.079	ND
Tetrachloroethene	67.5	mg/kg	0.028	0.079	0.028J
Toluene	67.5	mg/kg	0.026	0.079	0.39
trans-1,2-Dichloroethene	67.5	mg/kg	0.025	0.079	ND
trans-1,3-Dichloropropene	67.5	mg/kg	0.024	0.079	ND
Trichloroethene	67.5	mg/kg	0.027	0.079	0.54
Trichlorofluoromethane	67.5	mg/kg	0.024	0.079	ND
Vinyl chloride	67.5	mg/kg	0.056	0.079	ND
Xylenes (Total)	67.5	mg/kg	0.054	0.079	0.23

Sample ID: HSI-SB-07(4.5-5)

Collection Date: 9/30/2020

Lab#: AD19595-003

Receipt Date: 10/2/2020

Matrix: Soil/Terracore

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	70.8	mg/kg	0.029	0.082	ND
1,1,2,2-Tetrachloroethane	70.8	mg/kg	0.037	0.082	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane	70.8	mg/kg	0.060	0.082	ND
1,1,2-Trichloroethane	70.8	mg/kg	0.026	0.082	ND
1,1-Dichloroethane	70.8	mg/kg	0.035	0.082	ND
1,1-Dichloroethene	70.8	mg/kg	0.044	0.082	ND
1,2,3-Trichlorobenzene	70.8	mg/kg	0.065	0.082	ND
1,2,4-Trichlorobenzene	70.8	mg/kg	0.060	0.082	ND
1,2-Dibromo-3-chloropropane	70.8	mg/kg	0.069	0.082	ND
1,2-Dibromoethane	70.8	mg/kg	0.028	0.082	ND
1,2-Dichlorobenzene	70.8	mg/kg	0.027	0.082	ND
1,2-Dichloroethane	70.8	mg/kg	0.053	0.053	0.087
1,2-Dichloropropane	70.8	mg/kg	0.025	0.082	ND
1,3-Dichlorobenzene	70.8	mg/kg	0.031	0.082	ND
1,4-Dichlorobenzene	70.8	mg/kg	0.030	0.082	ND
1,4-Dioxane	70.8	mg/kg	3.2	4.1	ND
2-Butanone	70.8	mg/kg	0.062	0.082	ND
2-Hexanone	70.8	mg/kg	0.049	0.082	ND
4-Methyl-2-pentanone	70.8	mg/kg	0.040	0.082	ND
Acetone	70.8	mg/kg	0.38	0.41	ND
Benzene	70.8	mg/kg	0.024	0.041	ND
Bromochloromethane	70.8	mg/kg	0.065	0.082	ND
Bromodichloromethane	70.8	mg/kg	0.028	0.082	ND
Bromoform	70.8	mg/kg	0.045	0.082	ND
Bromomethane	70.8	mg/kg	0.041	0.082	ND
Carbon disulfide	70.8	mg/kg	0.035	0.082	ND
Carbon tetrachloride	70.8	mg/kg	0.027	0.082	ND
Chlorobenzene	70.8	mg/kg	0.027	0.082	ND
Chloroethane	70.8	mg/kg	0.048	0.082	ND
Chloroform	70.8	mg/kg	0.16	0.16	ND
Chloromethane	70.8	mg/kg	0.042	0.082	ND
cis-1,2-Dichloroethene	70.8	mg/kg	0.052	0.082	ND
cis-1,3-Dichloropropene	70.8	mg/kg	0.026	0.082	ND
Cyclohexane	70.8	mg/kg	0.040	0.082	ND
Dibromochloromethane	70.8	mg/kg	0.020	0.082	ND
Dichlorodifluoromethane	70.8	mg/kg	0.051	0.082	ND
Ethylbenzene	70.8	mg/kg	0.038	0.082	ND
Isopropylbenzene	70.8	mg/kg	0.041	0.082	ND
m&p-Xylenes	70.8	mg/kg	0.070	0.082	ND
Methyl Acetate	70.8	mg/kg	0.058	0.082	ND
Methylcyclohexane	70.8	mg/kg	0.051	0.082	ND
Methylene chloride	70.8	mg/kg	0.024	0.082	ND
Methyl-t-butyl ether	70.8	mg/kg	0.026	0.041	ND
o-Xylene	70.8	mg/kg	0.056	0.082	ND
Styrene	70.8	mg/kg	0.045	0.082	ND
Tetrachloroethene	70.8	mg/kg	0.029	0.082	ND
Toluene	70.8	mg/kg	0.027	0.082	ND
trans-1,2-Dichloroethene	70.8	mg/kg	0.025	0.082	ND
trans-1,3-Dichloropropene	70.8	mg/kg	0.025	0.082	ND
Trichloroethene	70.8	mg/kg	0.028	0.082	0.11
Trichlorofluoromethane	70.8	mg/kg	0.025	0.082	ND
Vinyl chloride	70.8	mg/kg	0.058	0.082	ND
Xylenes (Total)	70.8	mg/kg	0.056	0.082	ND

Sample ID: HSI-SB-08(3.5-4)  
 Lab#: AD19595-004  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		87

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.015	0.096	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.038	0.10
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.013	0.038	ND
1,4-Dioxane	1	mg/kg	0.019	0.0096	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.038	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.038	ND
2,4,6-Trichlorophenol	1	mg/kg	0.030	0.038	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0096	ND
2,4-Dimethylphenol	1	mg/kg	0.019	0.0096	ND
2,4-Dinitrophenol	1	mg/kg	0.17	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.038	ND
2,6-Dinitrotoluene	1	mg/kg	0.020	0.038	ND
2-Chloronaphthalene	1	mg/kg	0.017	0.038	ND
2-Chlorophenol	1	mg/kg	0.013	0.038	ND
2-Methylnaphthalene	1	mg/kg	0.012	0.038	0.12
2-Methylphenol	1	mg/kg	0.011	0.0096	ND
2-Nitroaniline	1	mg/kg	0.018	0.038	ND
2-Nitrophenol	1	mg/kg	0.017	0.038	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0096	0.021
3,3'-Dichlorobenzidine	1	mg/kg	0.031	0.038	ND
3-Nitroaniline	1	mg/kg	0.015	0.038	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.011	0.038	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0092	0.038	ND
4-Chloroaniline	1	mg/kg	0.017	0.0096	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.012	0.038	ND
4-Nitroaniline	1	mg/kg	0.015	0.038	ND
4-Nitrophenol	1	mg/kg	0.029	0.038	ND
Acenaphthene	1	mg/kg	0.011	0.038	ND
Acenaphthylene	1	mg/kg	0.011	0.038	ND
Acetophenone	1	mg/kg	0.014	0.038	ND
Anthracene	1	mg/kg	0.011	0.038	ND
Atrazine	1	mg/kg	0.015	0.038	ND
Benzaldehyde	1	mg/kg	0.42	0.038	ND
Benzo[a]anthracene	1	mg/kg	0.013	0.038	ND
Benzo[a]pyrene	1	mg/kg	0.013	0.038	ND
Benzo[b]fluoranthene	1	mg/kg	0.014	0.038	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00026	0.038	ND
Benzo[k]fluoranthene	1	mg/kg	0.014	0.038	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.011	0.038	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0093	0.038	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.038	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.034	0.038	0.38
Butylbenzylphthalate	1	mg/kg	0.029	0.038	ND
Caprolactam	1	mg/kg	0.031	0.038	ND
Carbazole	1	mg/kg	0.012	0.038	ND
Chrysene	1	mg/kg	0.013	0.038	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.014	0.038	ND
Dibenzofuran	1	mg/kg	0.0097	0.0096	ND
Diethylphthalate	1	mg/kg	0.025	0.038	ND
Dimethylphthalate	1	mg/kg	0.011	0.038	ND
Di-n-butylphthalate	1	mg/kg	0.044	0.0096	0.064
Di-n-octylphthalate	1	mg/kg	0.025	0.038	ND
Fluoranthene	1	mg/kg	0.015	0.038	ND
Fluorene	1	mg/kg	0.010	0.038	ND
Hexachlorobenzene	1	mg/kg	0.016	0.038	ND
Hexachlorobutadiene	1	mg/kg	0.017	0.038	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.038	ND
Hexachloroethane	1	mg/kg	0.017	0.038	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0100230

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Sample ID: HSI-SB-08(3.5-4)

Lab#: AD19595-004

Matrix: Soil/Terracore

Collection Date: 10/1/2020

Receipt Date: 10/2/2020

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.038	ND
Isophorone	1	mg/kg	0.012	0.038	ND
Naphthalene	1	mg/kg	0.011	0.0096	0.10
Nitrobenzene	1	mg/kg	0.0016	0.038	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0096	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.038	ND
Pentachlorophenol	1	mg/kg	0.18	0.19	ND
Phenanthrene	1	mg/kg	0.012	0.038	0.019J
Phenol	1	mg/kg	0.011	0.038	ND
Pyrene	1	mg/kg	0.013	0.038	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	19	230	4000
Barium	1	mg/kg	0.78	11	20
Calcium	1	mg/kg	120	1100	ND
Chromium	1	mg/kg	0.77	5.7	19
Cobalt	1	mg/kg	0.82	2.9	ND
Copper	1	mg/kg	0.71	5.7	10
Iron	1	mg/kg	15	230	8200
Lead	1	mg/kg	0.71	5.7	7.1
Magnesium	1	mg/kg	22	570	390JB
Manganese	1	mg/kg	0.74	11	16
Nickel	1	mg/kg	1.3	5.7	3.3J
Potassium	1	mg/kg	110	570	150J
Sodium	1	mg/kg	140	290	ND
Zinc	1	mg/kg	1.7	11	7.7J

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.026	0.92	ND
Arsenic	1	mg/kg	0.020	0.23	3.7
Beryllium	1	mg/kg	0.018	0.23	0.18J
Cadmium	1	mg/kg	0.016	0.46	0.21J
Selenium	1	mg/kg	0.073	2.3	2.8
Silver	1	mg/kg	0.030	0.23	0.045JB
Thallium	1	mg/kg	0.020	0.46	0.021J
Vanadium	1	mg/kg	0.012	0.23	20B

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	64.7	mg/kg	0.027	0.074	ND
1,1,1,2-Tetrachloroethane	64.7	mg/kg	0.033	0.074	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	64.7	mg/kg	0.054	0.074	ND
1,1,2-Trichloroethane	64.7	mg/kg	0.024	0.074	ND
1,1-Dichloroethane	64.7	mg/kg	0.032	0.074	ND
1,1-Dichloroethene	64.7	mg/kg	0.040	0.074	ND
1,2,3-Trichlorobenzene	64.7	mg/kg	0.058	0.074	ND
1,2,4-Trichlorobenzene	64.7	mg/kg	0.054	0.074	ND
1,2-Dibromo-3-chloropropane	64.7	mg/kg	0.062	0.074	ND
1,2-Dibromoethane	64.7	mg/kg	0.025	0.074	ND
1,2-Dichlorobenzene	64.7	mg/kg	0.024	0.074	0.029J
1,2-Dichloroethane	64.7	mg/kg	0.047	0.047	ND
1,2-Dichloropropane	64.7	mg/kg	0.022	0.074	ND
1,3-Dichlorobenzene	64.7	mg/kg	0.028	0.074	ND
1,4-Dichlorobenzene	64.7	mg/kg	0.027	0.074	ND
1,4-Dioxane	64.7	mg/kg	2.9	3.7	ND
2-Butanone	64.7	mg/kg	0.056	0.074	ND
2-Hexanone	64.7	mg/kg	0.045	0.074	ND
4-Methyl-2-pentanone	64.7	mg/kg	0.036	0.074	ND
Acetone	64.7	mg/kg	0.34	0.37	ND
Benzene	64.7	mg/kg	0.022	0.037	ND
Bromochloromethane	64.7	mg/kg	0.058	0.074	ND
Bromodichloromethane	64.7	mg/kg	0.026	0.074	ND
Bromoform	64.7	mg/kg	0.040	0.074	ND
Bromomethane	64.7	mg/kg	0.037	0.074	ND
Carbon disulfide	64.7	mg/kg	0.031	0.074	ND
Carbon tetrachloride	64.7	mg/kg	0.024	0.074	ND
Chlorobenzene	64.7	mg/kg	0.025	0.074	1.3

NOTE: Soil Results are reported to Dry Weigh

Project #: 0100230

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Sample ID: HSI-SB-08(3.5-4)

Collection Date: 10/1/2020

Lab#: AD19595-004

Receipt Date: 10/2/2020

Matrix: Soil/Terracore

Chloroethane	64.7	mg/kg	0.043	0.074	ND
Chloroform	64.7	mg/kg	0.15	0.15	ND
Chloromethane	64.7	mg/kg	0.038	0.074	ND
cis-1,2-Dichloroethene	64.7	mg/kg	0.047	0.074	ND
cis-1,3-Dichloropropene	64.7	mg/kg	0.024	0.074	ND
Cyclohexane	64.7	mg/kg	0.036	0.074	ND
Dibromochloromethane	64.7	mg/kg	0.018	0.074	ND
Dichlorodifluoromethane	64.7	mg/kg	0.046	0.074	ND
<b>Ethylbenzene</b>	<b>64.7</b>	<b>mg/kg</b>	<b>0.035</b>	<b>0.074</b>	<b>0.11</b>
Isopropylbenzene	64.7	mg/kg	0.037	0.074	ND
<b>m&amp;p-Xylenes</b>	<b>64.7</b>	<b>mg/kg</b>	<b>0.063</b>	<b>0.074</b>	<b>0.47</b>
Methyl Acetate	64.7	mg/kg	0.052	0.074	ND
Methylcyclohexane	64.7	mg/kg	0.046	0.074	ND
Methylene chloride	64.7	mg/kg	0.022	0.074	ND
Methyl-t-butyl ether	64.7	mg/kg	0.023	0.037	ND
<b>o-Xylene</b>	<b>64.7</b>	<b>mg/kg</b>	<b>0.051</b>	<b>0.074</b>	<b>0.14</b>
Styrene	64.7	mg/kg	0.040	0.074	ND
Tetrachloroethene	64.7	mg/kg	0.027	0.074	ND
<b>Toluene</b>	<b>64.7</b>	<b>mg/kg</b>	<b>0.024</b>	<b>0.074</b>	<b>0.49</b>
trans-1,2-Dichloroethene	64.7	mg/kg	0.023	0.074	ND
trans-1,3-Dichloropropene	64.7	mg/kg	0.023	0.074	ND
<b>Trichloroethene</b>	<b>64.7</b>	<b>mg/kg</b>	<b>0.026</b>	<b>0.074</b>	<b>0.030J</b>
Trichlorofluoromethane	64.7	mg/kg	0.023	0.074	ND
Vinyl chloride	64.7	mg/kg	0.053	0.074	ND
<b>Xylenes (Total)</b>	<b>64.7</b>	<b>mg/kg</b>	<b>0.051</b>	<b>0.074</b>	<b>0.61</b>

Sample ID: HSI-SB-08(8-8.5)

Lab#: AD19595-005

Matrix: Soil/Terracore

Collection Date: 10/1/2020

Receipt Date: 10/2/2020

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	66.2	mg/kg	0.029	0.081	ND
1,1,2,2-Tetrachloroethane	66.2	mg/kg	0.036	0.081	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	66.2	mg/kg	0.059	0.081	ND
1,1,2-Trichloroethane	66.2	mg/kg	0.026	0.081	ND
1,1-Dichloroethane	66.2	mg/kg	0.035	0.081	ND
1,1-Dichloroethene	66.2	mg/kg	0.043	0.081	ND
1,2,3-Trichlorobenzene	66.2	mg/kg	0.064	0.081	ND
1,2,4-Trichlorobenzene	66.2	mg/kg	0.059	0.081	ND
1,2-Dibromo-3-chloropropane	66.2	mg/kg	0.067	0.081	ND
1,2-Dibromoethane	66.2	mg/kg	0.028	0.081	ND
1,2-Dichlorobenzene	66.2	mg/kg	0.026	0.081	ND
1,2-Dichloroethane	66.2	mg/kg	0.052	0.052	ND
1,2-Dichloropropane	66.2	mg/kg	0.024	0.081	ND
1,3-Dichlorobenzene	66.2	mg/kg	0.030	0.081	ND
1,4-Dichlorobenzene	66.2	mg/kg	0.030	0.081	ND
1,4-Dioxane	66.2	mg/kg	3.2	4.0	ND
2-Butanone	66.2	mg/kg	0.060	0.081	ND
2-Hexanone	66.2	mg/kg	0.048	0.081	ND
4-Methyl-2-pentanone	66.2	mg/kg	0.039	0.081	ND
Acetone	66.2	mg/kg	0.37	0.40	ND
<b>Benzene</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.024</b>	0.040	<b>0.040J</b>
Bromochloromethane	66.2	mg/kg	0.063	0.081	ND
Bromodichloromethane	66.2	mg/kg	0.028	0.081	ND
Bromoform	66.2	mg/kg	0.044	0.081	ND
Bromomethane	66.2	mg/kg	0.041	0.081	ND
Carbon disulfide	66.2	mg/kg	0.034	0.081	ND
Carbon tetrachloride	66.2	mg/kg	0.026	0.081	ND
<b>Chlorobenzene</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.027</b>	0.081	<b>1.0</b>
Chloroethane	66.2	mg/kg	0.047	0.081	ND
Chloroform	66.2	mg/kg	0.16	0.16	ND
Chloromethane	66.2	mg/kg	0.042	0.081	ND
cis-1,2-Dichloroethene	66.2	mg/kg	0.051	0.081	ND
cis-1,3-Dichloropropene	66.2	mg/kg	0.026	0.081	ND
Cyclohexane	66.2	mg/kg	0.039	0.081	ND
Dibromochloromethane	66.2	mg/kg	0.019	0.081	ND
Dichlorodifluoromethane	66.2	mg/kg	0.050	0.081	ND
<b>Ethylbenzene</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.038</b>	0.081	<b>0.15</b>
Isopropylbenzene	66.2	mg/kg	0.040	0.081	ND
<b>m&amp;p-Xylenes</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.069</b>	0.081	<b>0.56</b>
Methyl Acetate	66.2	mg/kg	0.057	0.081	ND
Methylcyclohexane	66.2	mg/kg	0.050	0.081	ND
Methylene chloride	66.2	mg/kg	0.024	0.081	ND
Methyl-t-butyl ether	66.2	mg/kg	0.025	0.040	ND
<b>o-Xylene</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.055</b>	0.081	<b>0.18</b>
Styrene	66.2	mg/kg	0.044	0.081	ND
Tetrachloroethene	66.2	mg/kg	0.029	0.081	ND
<b>Toluene</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.026</b>	0.081	<b>0.053J</b>
trans-1,2-Dichloroethene	66.2	mg/kg	0.025	0.081	ND
trans-1,3-Dichloropropene	66.2	mg/kg	0.025	0.081	ND
Trichloroethene	66.2	mg/kg	0.028	0.081	ND
Trichlorofluoromethane	66.2	mg/kg	0.025	0.081	ND
Vinyl chloride	66.2	mg/kg	0.057	0.081	ND
<b>Xylenes (Total)</b>	<b>66.2</b>	<b>mg/kg</b>	<b>0.055</b>	0.081	<b>0.74</b>

Sample ID: HSI-SB-08(12-13)  
 Lab#: AD19595-006  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		76

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	69.4	mg/kg	0.033	0.091	ND
1,1,2,2-Tetrachloroethane	69.4	mg/kg	0.041	0.091	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	69.4	mg/kg	0.066	0.091	ND
1,1,2-Trichloroethane	69.4	mg/kg	0.029	0.091	ND
1,1-Dichloroethane	69.4	mg/kg	0.039	0.091	ND
1,1-Dichloroethene	69.4	mg/kg	0.049	0.091	ND
1,2,3-Trichlorobenzene	69.4	mg/kg	0.072	0.091	ND
1,2,4-Trichlorobenzene	69.4	mg/kg	0.067	0.091	ND
1,2-Dibromo-3-chloropropane	69.4	mg/kg	0.076	0.091	ND
1,2-Dibromoethane	69.4	mg/kg	0.031	0.091	ND
1,2-Dichlorobenzene	69.4	mg/kg	0.030	0.091	ND
1,2-Dichloroethane	69.4	mg/kg	0.058	0.058	ND
1,2-Dichloropropane	69.4	mg/kg	0.027	0.091	ND
1,3-Dichlorobenzene	69.4	mg/kg	0.034	0.091	ND
1,4-Dichlorobenzene	69.4	mg/kg	0.033	0.091	ND
1,4-Dioxane	69.4	mg/kg	3.6	4.6	ND
2-Butanone	69.4	mg/kg	0.068	0.091	ND
2-Hexanone	69.4	mg/kg	0.055	0.091	ND
4-Methyl-2-pentanone	69.4	mg/kg	0.044	0.091	ND
Acetone	69.4	mg/kg	0.42	0.46	ND
<b>Benzene</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.027</b>	<b>0.046</b>	<b>0.13</b>
Bromochloromethane	69.4	mg/kg	0.072	0.091	ND
Bromodichloromethane	69.4	mg/kg	0.032	0.091	ND
Bromofom	69.4	mg/kg	0.049	0.091	ND
Bromomethane	69.4	mg/kg	0.046	0.091	ND
Carbon disulfide	69.4	mg/kg	0.039	0.091	ND
Carbon tetrachloride	69.4	mg/kg	0.029	0.091	ND
<b>Chlorobenzene</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.030</b>	<b>0.091</b>	<b>3.7</b>
Chloroethane	69.4	mg/kg	0.053	0.091	ND
Chloroform	69.4	mg/kg	0.18	0.18	ND
Chloromethane	69.4	mg/kg	0.047	0.091	ND
cis-1,2-Dichloroethene	69.4	mg/kg	0.058	0.091	ND
cis-1,3-Dichloropropene	69.4	mg/kg	0.029	0.091	ND
Cyclohexane	69.4	mg/kg	0.044	0.091	ND
Dibromochloromethane	69.4	mg/kg	0.022	0.091	ND
Dichlorodifluoromethane	69.4	mg/kg	0.057	0.091	ND
<b>Ethylbenzene</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.043</b>	<b>0.091</b>	<b>0.065J</b>
Isopropylbenzene	69.4	mg/kg	0.045	0.091	ND
<b>m&amp;p-Xylenes</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.078</b>	<b>0.091</b>	<b>0.27</b>
Methyl Acetate	69.4	mg/kg	0.064	0.091	ND
Methylcyclohexane	69.4	mg/kg	0.056	0.091	ND
Methylene chloride	69.4	mg/kg	0.027	0.091	ND
Methyl-t-butyl ether	69.4	mg/kg	0.029	0.046	ND
<b>o-Xylene</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.062</b>	<b>0.091</b>	<b>0.068J</b>
Styrene	69.4	mg/kg	0.050	0.091	ND
Tetrachloroethene	69.4	mg/kg	0.033	0.091	ND
<b>Toluene</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.030</b>	<b>0.091</b>	<b>1.1</b>
trans-1,2-Dichloroethene	69.4	mg/kg	0.028	0.091	ND
trans-1,3-Dichloropropene	69.4	mg/kg	0.028	0.091	ND
Trichloroethene	69.4	mg/kg	0.032	0.091	ND
Trichlorofluoromethane	69.4	mg/kg	0.028	0.091	ND
Vinyl chloride	69.4	mg/kg	0.065	0.091	ND
<b>Xylenes (Total)</b>	<b>69.4</b>	<b>mg/kg</b>	<b>0.062</b>	<b>0.091</b>	<b>0.34</b>

Sample ID: HSI-SB-08(13-13.5)  
 Lab#: AD19595-007  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.681	mg/kg	0.00081	0.0018	ND
1,1,2,2-Tetrachloroethane	0.681	mg/kg	0.00040	0.0018	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.681	mg/kg	0.0012	0.0018	ND
1,1,2-Trichloroethane	0.681	mg/kg	0.00041	0.0018	ND
1,1-Dichloroethane	0.681	mg/kg	0.00077	0.0018	ND
1,1-Dichloroethene	0.681	mg/kg	0.0010	0.0018	ND
1,2,3-Trichlorobenzene	0.681	mg/kg	0.00049	0.0018	ND
1,2,4-Trichlorobenzene	0.681	mg/kg	0.00056	0.0018	ND
1,2-Dibromo-3-chloropropane	0.681	mg/kg	0.00049	0.0018	ND
1,2-Dibromoethane	0.681	mg/kg	0.00043	0.00088	ND
1,2-Dichlorobenzene	0.681	mg/kg	0.00045	0.0018	ND
1,2-Dichloroethane	0.681	mg/kg	0.00036	0.0018	ND
1,2-Dichloropropane	0.681	mg/kg	0.00073	0.0018	ND
1,3-Dichlorobenzene	0.681	mg/kg	0.00049	0.0018	ND
1,4-Dichlorobenzene	0.681	mg/kg	0.00047	0.0018	ND
1,4-Dioxane	0.681	mg/kg	0.043	0.088	ND
2-Butanone	0.681	mg/kg	0.0011	0.0018	ND
2-Hexanone	0.681	mg/kg	0.00075	0.0018	ND
4-Methyl-2-pentanone	0.681	mg/kg	0.00051	0.0018	ND
Acetone	0.681	mg/kg	0.0060	0.0088	ND
<b>Benzene</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00065</b>	<b>0.00088</b>	<b>0.0086</b>
Bromochloromethane	0.681	mg/kg	0.00062	0.0018	ND
Bromodichloromethane	0.681	mg/kg	0.00042	0.0018	ND
Bromoform	0.681	mg/kg	0.00029	0.0018	ND
Bromomethane	0.681	mg/kg	0.0014	0.0018	ND
Carbon disulfide	0.681	mg/kg	0.0030	0.0030	ND
Carbon tetrachloride	0.681	mg/kg	0.00086	0.0018	ND
<b>Chlorobenzene</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00055</b>	<b>0.0018</b>	<b>0.20</b>
Chloroethane	0.681	mg/kg	0.0017	0.0018	ND
Chloroform	0.681	mg/kg	0.0012	0.0018	ND
Chloromethane	0.681	mg/kg	0.0011	0.0018	ND
cis-1,2-Dichloroethene	0.681	mg/kg	0.00072	0.0018	ND
cis-1,3-Dichloropropene	0.681	mg/kg	0.00047	0.0018	ND
Cyclohexane	0.681	mg/kg	0.0011	0.0018	ND
Dibromochloromethane	0.681	mg/kg	0.00038	0.0018	ND
Dichlorodifluoromethane	0.681	mg/kg	0.0012	0.0018	ND
<b>Ethylbenzene</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00061</b>	<b>0.00088</b>	<b>0.0019</b>
Isopropylbenzene	0.681	mg/kg	0.00073	0.00088	ND
<b>m&amp;p-Xylenes</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.0011</b>	<b>0.0011</b>	<b>0.0071</b>
Methyl Acetate	0.681	mg/kg	0.00085	0.0018	ND
Methylcyclohexane	0.681	mg/kg	0.00080	0.0018	ND
Methylene chloride	0.681	mg/kg	0.00066	0.0018	ND
<b>Methyl-t-butyl ether</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00048</b>	<b>0.00088</b>	<b>0.0016</b>
<b>o-Xylene</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00063</b>	<b>0.00088</b>	<b>0.0019</b>
Styrene	0.681	mg/kg	0.00049	0.0018	ND
Tetrachloroethene	0.681	mg/kg	0.00087	0.0018	ND
<b>Toluene</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00058</b>	<b>0.00088</b>	<b>0.0035</b>
trans-1,2-Dichloroethene	0.681	mg/kg	0.0011	0.0018	ND
trans-1,3-Dichloropropene	0.681	mg/kg	0.00042	0.0018	ND
<b>Trichloroethene</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00073</b>	<b>0.0018</b>	<b>0.0033</b>
Trichlorofluoromethane	0.681	mg/kg	0.0010	0.0018	ND
Vinyl chloride	0.681	mg/kg	0.0011	0.0018	ND
<b>Xylenes (Total)</b>	<b>0.681</b>	<b>mg/kg</b>	<b>0.00063</b>	<b>0.00088</b>	<b>0.0090</b>

Sample ID: HSI-SB-09(14-14.5)  
 Lab#: AD19595-008  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.697	mg/kg	0.00080	0.0017	ND
1,1,2,2-Tetrachloroethane	0.697	mg/kg	0.00039	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.697	mg/kg	0.0012	0.0017	ND
1,1,2-Trichloroethane	0.697	mg/kg	0.00040	0.0017	ND
1,1-Dichloroethane	0.697	mg/kg	0.00076	0.0017	ND
1,1-Dichloroethene	0.697	mg/kg	0.0010	0.0017	ND
1,2,3-Trichlorobenzene	0.697	mg/kg	0.00048	0.0017	ND
1,2,4-Trichlorobenzene	0.697	mg/kg	0.00055	0.0017	ND
1,2-Dibromo-3-chloropropane	0.697	mg/kg	0.00048	0.0017	ND
1,2-Dibromoethane	0.697	mg/kg	0.00043	0.00087	ND
1,2-Dichlorobenzene	0.697	mg/kg	0.00044	0.0017	ND
<b>1,2-Dichloroethane</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.00036</b>	0.0017	<b>0.0047</b>
1,2-Dichloropropane	0.697	mg/kg	0.00071	0.0017	ND
1,3-Dichlorobenzene	0.697	mg/kg	0.00048	0.0017	ND
1,4-Dichlorobenzene	0.697	mg/kg	0.00046	0.0017	ND
1,4-Dioxane	0.697	mg/kg	0.042	0.087	ND
2-Butanone	0.697	mg/kg	0.0010	0.0017	ND
2-Hexanone	0.697	mg/kg	0.00074	0.0017	ND
4-Methyl-2-pentanone	0.697	mg/kg	0.00051	0.0017	ND
Acetone	0.697	mg/kg	0.0059	0.0087	ND
<b>Benzene</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.00064</b>	0.00087	<b>0.0039</b>
Bromochloromethane	0.697	mg/kg	0.00061	0.0017	ND
Bromodichloromethane	0.697	mg/kg	0.00041	0.0017	ND
Bromoform	0.697	mg/kg	0.00029	0.0017	ND
Bromomethane	0.697	mg/kg	0.0014	0.0017	ND
Carbon disulfide	0.697	mg/kg	0.0030	0.0030	ND
Carbon tetrachloride	0.697	mg/kg	0.00085	0.0017	ND
<b>Chlorobenzene</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.00054</b>	0.0017	<b>0.064</b>
Chloroethane	0.697	mg/kg	0.0017	0.0017	ND
Chloroform	0.697	mg/kg	0.0012	0.0017	ND
Chloromethane	0.697	mg/kg	0.0011	0.0017	ND
<b>cis-1,2-Dichloroethene</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.00071</b>	0.0017	<b>0.040</b>
cis-1,3-Dichloropropene	0.697	mg/kg	0.00046	0.0017	ND
Cyclohexane	0.697	mg/kg	0.0010	0.0017	ND
Dibromochloromethane	0.697	mg/kg	0.00037	0.0017	ND
Dichlorodifluoromethane	0.697	mg/kg	0.0012	0.0017	ND
Ethylbenzene	0.697	mg/kg	0.00060	0.00087	ND
Isopropylbenzene	0.697	mg/kg	0.00072	0.00087	ND
m&p-Xylenes	0.697	mg/kg	0.0010	0.0010	ND
Methyl Acetate	0.697	mg/kg	0.00084	0.0017	ND
Methylcyclohexane	0.697	mg/kg	0.00078	0.0017	ND
Methylene chloride	0.697	mg/kg	0.00065	0.0017	ND
<b>Methyl-t-butyl ether</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.00047</b>	0.00087	<b>0.0022</b>
o-Xylene	0.697	mg/kg	0.00062	0.00087	ND
Styrene	0.697	mg/kg	0.00048	0.0017	ND
Tetrachloroethene	0.697	mg/kg	0.00085	0.0017	ND
<b>Toluene</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.00058</b>	0.00087	<b>0.0038</b>
<b>trans-1,2-Dichloroethene</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.0010</b>	0.0017	<b>0.010</b>
trans-1,3-Dichloropropene	0.697	mg/kg	0.00041	0.0017	ND
Trichloroethene	0.697	mg/kg	0.00071	0.0017	0.0062
Trichlorofluoromethane	0.697	mg/kg	0.0010	0.0017	ND
<b>Vinyl chloride</b>	<b>0.697</b>	<b>mg/kg</b>	<b>0.0011</b>	0.0017	<b>0.0057</b>
Xylenes (Total)	0.697	mg/kg	0.00062	0.00087	ND

Sample ID: HSI-SB-10(5.5-6)  
 Lab#: AD19595-009  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

**Mercury (Soil/Waste) 7471B**

Analyte	DF	Units	MDL	RL	Result
Mercury	1	mg/kg	0.014	0.094	ND

**Semivolatile Organics (no search) 8270**

Analyte	DF	Units	MDL	RL	Result
1,1'-Biphenyl	1	mg/kg	0.011	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.013	0.037	ND
1,4-Dioxane	1	mg/kg	0.019	0.0094	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.014	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.011	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.029	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.014	0.0094	ND
2,4-Dimethylphenol	1	mg/kg	0.018	0.0094	ND
2,4-Dinitrophenol	1	mg/kg	0.16	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.012	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.019	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.017	0.037	ND
2-Chlorophenol	1	mg/kg	0.012	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.012	0.037	ND
2-Methylphenol	1	mg/kg	0.011	0.0094	ND
2-Nitroaniline	1	mg/kg	0.018	0.037	ND
2-Nitrophenol	1	mg/kg	0.017	0.037	ND
3&4-Methylphenol	1	mg/kg	0.011	0.0094	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.030	0.037	ND
3-Nitroaniline	1	mg/kg	0.015	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.13	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.010	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.0090	0.037	ND
4-Chloroaniline	1	mg/kg	0.016	0.0094	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.011	0.037	ND
4-Nitroaniline	1	mg/kg	0.014	0.037	ND
4-Nitrophenol	1	mg/kg	0.028	0.037	ND
Acenaphthene	1	mg/kg	0.011	0.037	ND
Acenaphthylene	1	mg/kg	0.011	0.037	ND
Acetophenone	1	mg/kg	0.013	0.037	ND
Anthracene	1	mg/kg	0.010	0.037	ND
Atrazine	1	mg/kg	0.015	0.037	ND
Benzaldehyde	1	mg/kg	0.41	0.037	ND
Benzo[a]anthracene	1	mg/kg	0.012	0.037	ND
Benzo[a]pyrene	1	mg/kg	0.013	0.037	ND
Benzo[b]fluoranthene	1	mg/kg	0.013	0.037	ND
Benzo[g,h,i]perylene	1	mg/kg	0.00026	0.037	ND
Benzo[k]fluoranthene	1	mg/kg	0.014	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.011	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0091	0.0094	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.015	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.033	0.037	ND
Butylbenzylphthalate	1	mg/kg	0.029	0.037	ND
Caprolactam	1	mg/kg	0.030	0.037	ND
Carbazole	1	mg/kg	0.012	0.037	ND
Chrysene	1	mg/kg	0.013	0.037	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.014	0.037	ND
Dibenzofuran	1	mg/kg	0.0095	0.0094	ND
Diethylphthalate	1	mg/kg	0.024	0.037	ND
Dimethylphthalate	1	mg/kg	0.011	0.037	ND
Di-n-butylphthalate	1	mg/kg	0.043	0.0094	ND
Di-n-octylphthalate	1	mg/kg	0.025	0.037	ND
Fluoranthene	1	mg/kg	0.014	0.037	ND
Fluorene	1	mg/kg	0.010	0.037	ND
Hexachlorobenzene	1	mg/kg	0.016	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.017	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.12	0.037	ND
Hexachloroethane	1	mg/kg	0.017	0.037	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 0100230

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Sample ID: HSI-SB-10(5.5-6)

Collection Date: 10/1/2020

Lab#: AD19595-009

Receipt Date: 10/2/2020

Matrix: Soil/Terracore

Indeno[1,2,3-cd]pyrene	1	mg/kg	0.017	0.037	ND
Isophorone	1	mg/kg	0.012	0.037	ND
Naphthalene	1	mg/kg	0.011	0.0094	ND
Nitrobenzene	1	mg/kg	0.0015	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.014	0.0094	ND
N-Nitrosodiphenylamine	1	mg/kg	0.13	0.037	ND
Pentachlorophenol	1	mg/kg	0.18	0.19	ND
Phenanthrene	1	mg/kg	0.012	0.037	ND
Phenol	1	mg/kg	0.010	0.037	ND
Pyrene	1	mg/kg	0.013	0.037	ND

## TAL Metals 6010D

Analyte	DF	Units	MDL	RL	Result
Aluminum	1	mg/kg	19	220	5900
Barium	1	mg/kg	0.76	11	28
Calcium	1	mg/kg	110	1100	120J
Chromium	1	mg/kg	0.75	5.6	21
Cobalt	1	mg/kg	0.80	2.8	2.1J
Copper	1	mg/kg	0.69	5.6	8.1
Iron	1	mg/kg	15	220	6900
Lead	1	mg/kg	0.69	5.6	4.4J
Magnesium	1	mg/kg	22	560	940B
Manganese	1	mg/kg	0.72	11	36
Nickel	1	mg/kg	1.2	5.6	7.6
Potassium	1	mg/kg	110	560	280J
Sodium	1	mg/kg	140	280	ND
Zinc	1	mg/kg	1.7	11	12

## TAL Metals 6020B

Analyte	DF	Units	MDL	RL	Result
Antimony	1	mg/kg	0.025	0.90	ND
Arsenic	1	mg/kg	0.020	0.22	1.5
Beryllium	1	mg/kg	0.018	0.22	0.22J
Cadmium	1	mg/kg	0.016	0.45	0.020J
Selenium	1	mg/kg	0.071	2.2	1.3J
Silver	1	mg/kg	0.029	0.22	0.042JB
Thallium	1	mg/kg	0.020	0.45	0.021J
Vanadium	1	mg/kg	0.012	0.22	20B

## Volatile Organics (no search) 8260

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	63.2	mg/kg	0.025	0.071	ND
1,1,2,2-Tetrachloroethane	63.2	mg/kg	0.032	0.071	0.052J
1,1,2-Trichloro-1,2,2-trifluoroethane	63.2	mg/kg	0.052	0.071	ND
1,1,2-Trichloroethane	63.2	mg/kg	0.023	0.071	ND
1,1-Dichloroethane	63.2	mg/kg	0.030	0.071	ND
1,1-Dichloroethene	63.2	mg/kg	0.038	0.071	ND
1,2,3-Trichlorobenzene	63.2	mg/kg	0.056	0.071	ND
1,2,4-Trichlorobenzene	63.2	mg/kg	0.052	0.071	ND
1,2-Dibromo-3-chloropropane	63.2	mg/kg	0.059	0.071	ND
1,2-Dibromoethane	63.2	mg/kg	0.024	0.071	ND
1,2-Dichlorobenzene	63.2	mg/kg	0.023	0.071	ND
1,2-Dichloroethane	63.2	mg/kg	0.045	0.045	0.070
1,2-Dichloropropane	63.2	mg/kg	0.021	0.071	ND
1,3-Dichlorobenzene	63.2	mg/kg	0.027	0.071	ND
1,4-Dichlorobenzene	63.2	mg/kg	0.026	0.071	ND
1,4-Dioxane	63.2	mg/kg	2.8	3.6	ND
2-Butanone	63.2	mg/kg	0.053	0.071	ND
2-Hexanone	63.2	mg/kg	0.043	0.071	ND
4-Methyl-2-pentanone	63.2	mg/kg	0.035	0.071	ND
Acetone	63.2	mg/kg	0.33	0.36	ND
Benzene	63.2	mg/kg	0.021	0.036	ND
Bromochloromethane	63.2	mg/kg	0.056	0.071	ND
Bromodichloromethane	63.2	mg/kg	0.025	0.071	ND
Bromoform	63.2	mg/kg	0.038	0.071	ND
Bromomethane	63.2	mg/kg	0.036	0.071	ND
Carbon disulfide	63.2	mg/kg	0.030	0.071	ND
Carbon tetrachloride	63.2	mg/kg	0.023	0.071	ND
Chlorobenzene	63.2	mg/kg	0.023	0.071	0.17

NOTE: Soil Results are reported to Dry Weigh

Project #: 0100230

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Sample ID: HSI-SB-10(5.5-6)

Collection Date: 10/1/2020

Lab#: AD19595-009

Receipt Date: 10/2/2020

Matrix: Soil/Terracore

Chloroethane	63.2	mg/kg	0.041	0.071	ND
Chloroform	63.2	mg/kg	0.14	0.14	ND
Chloromethane	63.2	mg/kg	0.037	0.071	ND
<b>cis-1,2-Dichloroethene</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.045</b>	0.071	<b>0.40</b>
cis-1,3-Dichloropropene	63.2	mg/kg	0.023	0.071	ND
Cyclohexane	63.2	mg/kg	0.035	0.071	ND
Dibromochloromethane	63.2	mg/kg	0.017	0.071	ND
Dichlorodifluoromethane	63.2	mg/kg	0.044	0.071	ND
<b>Ethylbenzene</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.033</b>	0.071	<b>0.053J</b>
Isopropylbenzene	63.2	mg/kg	0.035	0.071	ND
<b>m&amp;p-Xylenes</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.060</b>	0.071	<b>0.099</b>
Methyl Acetate	63.2	mg/kg	0.050	0.071	ND
Methylcyclohexane	63.2	mg/kg	0.044	0.071	ND
Methylene chloride	63.2	mg/kg	0.021	0.071	ND
Methyl-t-butyl ether	63.2	mg/kg	0.022	0.036	ND
<b>o-Xylene</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.049</b>	0.071	<b>0.054J</b>
Styrene	63.2	mg/kg	0.039	0.071	ND
<b>Tetrachloroethene</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.025</b>	0.071	<b>0.028J</b>
<b>Toluene</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.023</b>	0.071	<b>0.040J</b>
trans-1,2-Dichloroethene	63.2	mg/kg	0.022	0.071	ND
trans-1,3-Dichloropropene	63.2	mg/kg	0.022	0.071	ND
<b>Trichloroethene</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.025</b>	0.071	<b>0.24</b>
Trichlorofluoromethane	63.2	mg/kg	0.022	0.071	ND
Vinyl chloride	63.2	mg/kg	0.050	0.071	ND
<b>Xylenes (Total)</b>	<b>63.2</b>	<b>mg/kg</b>	<b>0.049</b>	0.071	<b>0.15</b>

Sample ID: HSI-SB-10(7-7.5)

Collection Date: 10/1/2020

Lab#: AD19595-010

Receipt Date: 10/2/2020

Matrix: Soil/Terracore

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	61.7	mg/kg	0.027	0.074	ND
1,1,2,2-Tetrachloroethane	61.7	mg/kg	0.033	0.074	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	61.7	mg/kg	0.054	0.074	ND
1,1,2-Trichloroethane	61.7	mg/kg	0.024	0.074	ND
1,1-Dichloroethane	61.7	mg/kg	0.032	0.074	ND
1,1-Dichloroethene	61.7	mg/kg	0.040	0.074	ND
1,2,3-Trichlorobenzene	61.7	mg/kg	0.059	0.074	ND
1,2,4-Trichlorobenzene	61.7	mg/kg	0.054	0.074	ND
1,2-Dibromo-3-chloropropane	61.7	mg/kg	0.062	0.074	ND
1,2-Dibromoethane	61.7	mg/kg	0.025	0.074	ND
1,2-Dichlorobenzene	61.7	mg/kg	0.024	0.074	ND
1,2-Dichloroethane	61.7	mg/kg	0.047	0.047	ND
1,2-Dichloropropane	61.7	mg/kg	0.022	0.074	ND
1,3-Dichlorobenzene	61.7	mg/kg	0.028	0.074	ND
1,4-Dichlorobenzene	61.7	mg/kg	0.027	0.074	ND
1,4-Dioxane	61.7	mg/kg	2.9	3.7	ND
2-Butanone	61.7	mg/kg	0.056	0.074	ND
2-Hexanone	61.7	mg/kg	0.045	0.074	ND
4-Methyl-2-pentanone	61.7	mg/kg	0.036	0.074	ND
Acetone	61.7	mg/kg	0.34	0.37	ND
<b>Benzene</b>	<b>61.7</b>	<b>mg/kg</b>	<b>0.022</b>	<b>0.037</b>	<b>0.031J</b>
Bromochloromethane	61.7	mg/kg	0.058	0.074	ND
Bromodichloromethane	61.7	mg/kg	0.026	0.074	ND
Bromoform	61.7	mg/kg	0.040	0.074	ND
Bromomethane	61.7	mg/kg	0.037	0.074	ND
Carbon disulfide	61.7	mg/kg	0.031	0.074	ND
Carbon tetrachloride	61.7	mg/kg	0.024	0.074	ND
<b>Chlorobenzene</b>	<b>61.7</b>	<b>mg/kg</b>	<b>0.025</b>	<b>0.074</b>	<b>0.81</b>
Chloroethane	61.7	mg/kg	0.043	0.074	ND
Chloroform	61.7	mg/kg	0.15	0.15	ND
Chloromethane	61.7	mg/kg	0.038	0.074	ND
<b>cis-1,2-Dichloroethene</b>	<b>61.7</b>	<b>mg/kg</b>	<b>0.047</b>	<b>0.074</b>	<b>0.81</b>
cis-1,3-Dichloropropene	61.7	mg/kg	0.024	0.074	ND
Cyclohexane	61.7	mg/kg	0.036	0.074	ND
Dibromochloromethane	61.7	mg/kg	0.018	0.074	ND
Dichlorodifluoromethane	61.7	mg/kg	0.046	0.074	ND
<b>Ethylbenzene</b>	<b>61.7</b>	<b>mg/kg</b>	<b>0.035</b>	<b>0.074</b>	<b>0.045J</b>
Isopropylbenzene	61.7	mg/kg	0.037	0.074	ND
m&p-Xylenes	61.7	mg/kg	0.063	0.074	ND
Methyl Acetate	61.7	mg/kg	0.052	0.074	ND
Methylcyclohexane	61.7	mg/kg	0.046	0.074	ND
Methylene chloride	61.7	mg/kg	0.022	0.074	ND
Methyl-t-butyl ether	61.7	mg/kg	0.023	0.037	ND
o-Xylene	61.7	mg/kg	0.051	0.074	ND
Styrene	61.7	mg/kg	0.040	0.074	ND
Tetrachloroethene	61.7	mg/kg	0.027	0.074	ND
<b>Toluene</b>	<b>61.7</b>	<b>mg/kg</b>	<b>0.024</b>	<b>0.074</b>	<b>0.063J</b>
trans-1,2-Dichloroethene	61.7	mg/kg	0.023	0.074	ND
trans-1,3-Dichloropropene	61.7	mg/kg	0.023	0.074	ND
Trichloroethene	61.7	mg/kg	0.026	0.074	ND
Trichlorofluoromethane	61.7	mg/kg	0.023	0.074	ND
<b>Vinyl chloride</b>	<b>61.7</b>	<b>mg/kg</b>	<b>0.053</b>	<b>0.074</b>	<b>0.75</b>
Xylenes (Total)	61.7	mg/kg	0.051	0.074	ND

Sample ID: HSI-SB-10(8-8.5)  
 Lab#: AD19595-011  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	0.679	mg/kg	0.00076	0.0017	ND
1,1,2,2-Tetrachloroethane	0.679	mg/kg	0.00037	0.0017	0.028
1,1,2-Trichloro-1,2,2-trifluoroethane	0.679	mg/kg	0.0012	0.0017	ND
1,1,2-Trichloroethane	0.679	mg/kg	0.00038	0.0017	0.0043
1,1-Dichloroethane	0.679	mg/kg	0.00072	0.0017	ND
1,1-Dichloroethene	0.679	mg/kg	0.00095	0.0017	ND
1,2,3-Trichlorobenzene	0.679	mg/kg	0.00046	0.0017	ND
1,2,4-Trichlorobenzene	0.679	mg/kg	0.00052	0.0017	ND
1,2-Dibromo-3-chloropropane	0.679	mg/kg	0.00046	0.0017	ND
1,2-Dibromoethane	0.679	mg/kg	0.00041	0.00083	ND
1,2-Dichlorobenzene	0.679	mg/kg	0.00042	0.0017	ND
1,2-Dichloroethane	0.679	mg/kg	0.00034	0.0017	0.018
1,2-Dichloropropane	0.679	mg/kg	0.00068	0.0017	ND
1,3-Dichlorobenzene	0.679	mg/kg	0.00046	0.0017	ND
1,4-Dichlorobenzene	0.679	mg/kg	0.00044	0.0017	ND
1,4-Dioxane	0.679	mg/kg	0.040	0.083	ND
2-Butanone	0.679	mg/kg	0.00099	0.0017	ND
2-Hexanone	0.679	mg/kg	0.00070	0.0017	ND
4-Methyl-2-pentanone	0.679	mg/kg	0.00048	0.0017	ND
Acetone	0.679	mg/kg	0.0056	0.0083	0.019
Benzene	0.679	mg/kg	0.00060	0.00083	0.0018
Bromochloromethane	0.679	mg/kg	0.00058	0.0017	ND
Bromodichloromethane	0.679	mg/kg	0.00039	0.0017	ND
Bromoform	0.679	mg/kg	0.00027	0.0017	ND
Bromomethane	0.679	mg/kg	0.0013	0.0017	ND
Carbon disulfide	0.679	mg/kg	0.0028	0.0028	ND
Carbon tetrachloride	0.679	mg/kg	0.00080	0.0017	ND
Chlorobenzene	0.679	mg/kg	0.00051	0.0017	0.052
Chloroethane	0.679	mg/kg	0.0016	0.0017	ND
Chloroform	0.679	mg/kg	0.0011	0.0017	ND
Chloromethane	0.679	mg/kg	0.0010	0.0017	ND
cis-1,2-Dichloroethene	0.679	mg/kg	0.00067	0.0017	0.059
cis-1,3-Dichloropropene	0.679	mg/kg	0.00044	0.0017	ND
Cyclohexane	0.679	mg/kg	0.00099	0.0017	ND
Dibromochloromethane	0.679	mg/kg	0.00036	0.0017	ND
Dichlorodifluoromethane	0.679	mg/kg	0.0012	0.0017	ND
Ethylbenzene	0.679	mg/kg	0.00057	0.00083	ND
Isopropylbenzene	0.679	mg/kg	0.00069	0.00083	ND
m&p-Xylenes	0.679	mg/kg	0.00099	0.00099	ND
Methyl Acetate	0.679	mg/kg	0.00080	0.0017	ND
Methylcyclohexane	0.679	mg/kg	0.00075	0.0017	ND
Methylene chloride	0.679	mg/kg	0.00062	0.0017	ND
Methyl-t-butyl ether	0.679	mg/kg	0.00045	0.00083	ND
o-Xylene	0.679	mg/kg	0.00059	0.00083	ND
Styrene	0.679	mg/kg	0.00046	0.0017	ND
Tetrachloroethene	0.679	mg/kg	0.00081	0.0017	0.0035
Toluene	0.679	mg/kg	0.00055	0.00083	0.0030
trans-1,2-Dichloroethene	0.679	mg/kg	0.00099	0.0017	0.0019
trans-1,3-Dichloropropene	0.679	mg/kg	0.00039	0.0017	ND
Trichloroethene	0.679	mg/kg	0.00068	0.0017	0.061
Trichlorofluoromethane	0.679	mg/kg	0.00098	0.0017	ND
Vinyl chloride	0.679	mg/kg	0.0010	0.0017	0.010
Xylenes (Total)	0.679	mg/kg	0.00059	0.00083	ND

Sample ID: HSI-SB-D2  
 Lab#: AD19595-012  
 Matrix: Soil/Terracore

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		76

**Volatile Organics (no search) 8260**

Analyte	DF	Units	MDL	RL	Result
1,1,1-Trichloroethane	70.7	mg/kg	0.033	0.093	ND
1,1,2,2-Tetrachloroethane	70.7	mg/kg	0.042	0.093	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	70.7	mg/kg	0.068	0.093	ND
1,1,2-Trichloroethane	70.7	mg/kg	0.030	0.093	ND
1,1-Dichloroethane	70.7	mg/kg	0.040	0.093	ND
1,1-Dichloroethene	70.7	mg/kg	0.050	0.093	ND
1,2,3-Trichlorobenzene	70.7	mg/kg	0.073	0.093	ND
1,2,4-Trichlorobenzene	70.7	mg/kg	0.068	0.093	ND
1,2-Dibromo-3-chloropropane	70.7	mg/kg	0.078	0.093	ND
1,2-Dibromoethane	70.7	mg/kg	0.032	0.093	ND
1,2-Dichlorobenzene	70.7	mg/kg	0.030	0.093	ND
1,2-Dichloroethane	70.7	mg/kg	0.059	0.059	ND
1,2-Dichloropropane	70.7	mg/kg	0.028	0.093	ND
1,3-Dichlorobenzene	70.7	mg/kg	0.035	0.093	ND
1,4-Dichlorobenzene	70.7	mg/kg	0.034	0.093	ND
1,4-Dioxane	70.7	mg/kg	3.7	4.7	ND
2-Butanone	70.7	mg/kg	0.070	0.093	ND
2-Hexanone	70.7	mg/kg	0.056	0.093	ND
<b>4-Methyl-2-pentanone</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.045</b>	0.093	<b>4.1</b>
Acetone	70.7	mg/kg	0.43	0.47	ND
<b>Benzene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.028</b>	0.047	<b>0.12</b>
Bromochloromethane	70.7	mg/kg	0.073	0.093	ND
Bromodichloromethane	70.7	mg/kg	0.032	0.093	ND
Bromoform	70.7	mg/kg	0.050	0.093	ND
Bromomethane	70.7	mg/kg	0.047	0.093	ND
Carbon disulfide	70.7	mg/kg	0.039	0.093	ND
Carbon tetrachloride	70.7	mg/kg	0.030	0.093	ND
<b>Chlorobenzene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.031</b>	0.093	<b>3.7</b>
Chloroethane	70.7	mg/kg	0.054	0.093	ND
Chloroform	70.7	mg/kg	0.18	0.18	ND
Chloromethane	70.7	mg/kg	0.048	0.093	ND
<b>cis-1,2-Dichloroethene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.059</b>	0.093	<b>0.40</b>
cis-1,3-Dichloropropene	70.7	mg/kg	0.030	0.093	ND
Cyclohexane	70.7	mg/kg	0.045	0.093	ND
Dibromochloromethane	70.7	mg/kg	0.022	0.093	ND
Dichlorodifluoromethane	70.7	mg/kg	0.058	0.093	ND
<b>Ethylbenzene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.043</b>	0.093	<b>0.068J</b>
Isopropylbenzene	70.7	mg/kg	0.046	0.093	ND
<b>m&amp;p-Xylenes</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.079</b>	0.093	<b>0.25</b>
Methyl Acetate	70.7	mg/kg	0.065	0.093	ND
Methylcyclohexane	70.7	mg/kg	0.057	0.093	ND
Methylene chloride	70.7	mg/kg	0.027	0.093	ND
Methyl-t-butyl ether	70.7	mg/kg	0.029	0.047	ND
<b>o-Xylene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.064</b>	0.093	<b>0.076J</b>
Styrene	70.7	mg/kg	0.051	0.093	ND
Tetrachloroethene	70.7	mg/kg	0.033	0.093	ND
<b>Toluene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.030</b>	0.093	<b>5.4</b>
<b>trans-1,2-Dichloroethene</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.029</b>	0.093	<b>0.068J</b>
trans-1,3-Dichloropropene	70.7	mg/kg	0.029	0.093	ND
Trichloroethene	70.7	mg/kg	0.032	0.093	ND
Trichlorofluoromethane	70.7	mg/kg	0.029	0.093	ND
<b>Vinyl chloride</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.066</b>	0.093	<b>1.1</b>
<b>Xylenes (Total)</b>	<b>70.7</b>	<b>mg/kg</b>	<b>0.064</b>	0.093	<b>0.33</b>

Sample ID: HSI-WC-NH  
 Lab#: AD19595-013  
 Matrix: Soil

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

**Diesel Range Organics 8015D(C10-C28)**

Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	70	ND

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result
Gasoline Range Organics	101	mg/kg	29	ND

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PCB 8082**

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

**TCLP Metals 6010D**

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	ND
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.10
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

**TCLP Semivolatiles 8270**

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/l	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol	1	mg/l	0.0020	ND
3&4-Methylphenol	1	mg/l	0.0020	ND
Hexachlorobenzene	1	mg/l	0.0080	ND
Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	1	mg/l	0.0080	ND
Nitrobenzene	1	mg/l	0.0080	ND
Pentachlorophenol	1	mg/l	0.040	ND
Pyridine	1	mg/l	0.0083	ND

**TCLP Volatiles 8260**

Analyte	DF	Units	RL	Result
1,1-Dichloroethene	1	mg/l	0.0010	ND
1,2-Dichloroethane	1	mg/l	0.00064	ND
1,4-Dichlorobenzene	1	mg/l	0.0010	ND
2-Butanone	1	mg/l	0.0010	ND
Benzene	1	mg/l	0.00050	ND
Carbon tetrachloride	1	mg/l	0.0010	ND
Chlorobenzene	1	mg/l	0.0010	0.0031
Chloroform	1	mg/l	0.0020	ND
Tetrachloroethene	1	mg/l	0.0010	ND
Trichloroethene	1	mg/l	0.0010	ND

<b>Sample ID:</b> HSI-WC-NH	<b>Collection Date:</b> 10/1/2020
<b>Lab#:</b> AD19595-013	<b>Receipt Date:</b> 10/2/2020
<b>Matrix:</b> Soil	

Vinyl chloride

1

mg/l

0.0010

ND

Sample ID: HSI-WC-H  
 Lab#: AD19595-014  
 Matrix: Soil

Collection Date: 10/1/2020  
 Receipt Date: 10/2/2020

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

**Diesel Range Organics 8015D(C10-C28)**

Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	72	ND

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result
Gasoline Range Organics	99	mg/kg	30	94

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.0050	ND

**PCB 8082**

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

**TCLP Metals 6010D**

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	ND
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.21
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

**TCLP Semivolatiles 8270**

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/l	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol	1	mg/l	0.0020	0.0069
3&4-Methylphenol	1	mg/l	0.0020	0.012
Hexachlorobenzene	1	mg/l	0.0080	ND
Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	1	mg/l	0.0080	ND
Nitrobenzene	1	mg/l	0.0080	ND
Pentachlorophenol	1	mg/l	0.040	ND
Pyridine	1	mg/l	0.0083	ND

**TCLP Volatiles 8260**

Analyte	DF	Units	RL	Result
1,1-Dichloroethene	10	mg/l	0.010	ND
1,2-Dichloroethane	10	mg/l	0.0064	0.033
1,4-Dichlorobenzene	10	mg/l	0.010	ND
2-Butanone	10	mg/l	0.010	ND
Benzene	10	mg/l	0.0050	ND
Carbon tetrachloride	10	mg/l	0.010	ND
Chlorobenzene	10	mg/l	0.010	0.83
Chloroform	10	mg/l	0.020	ND
Tetrachloroethene	10	mg/l	0.010	0.039
Trichloroethene	10	mg/l	0.010	0.51

NOTE: Soil Results are reported to Dry Weigh

Project #: 0100230

Page 19 of 20

Sample ID: HSI-WC-H  
Lab#: AD19595-014  
Matrix: Soil

Collection Date: 10/1/2020  
Receipt Date: 10/2/2020

Vinyl chloride

10

mg/l

0.010

ND



## HC Reporting Limit Definitions/Data Qualifiers

### REPORTING DEFINITIONS

**DF** = Dilution Factor

**NA** = Not Applicable

**LCS** = Laboratory Control Spike

**ND** = Not Detected

**MBS** = Method Blank Spike

**PS** = Post Digestion Spike

**MS** = Matrix Spike

**RL\*** = Reporting Limit

**MSD** = Matrix Spike Duplicate

**RT** = Retention Time

**MDL** = Method Detection Limit

*\*Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

### DATA QUALIFIERS

- A-** Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R-** Retention Time is out.
- Y-** Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

# Laboratory Chronicle

0100230 0030

**Client:** Chesapeake Geosciences Inc  
**Project:** Hot Spot Investigation

**HC Project #:** 0100230

**Lab#:** AD19595-001 **Sample ID:** HSI-SB-05(4.5-5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/8/20 12:23	RL

**Lab#:** AD19595-002 **Sample ID:** HSI-SB-06(4.5-5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/9/20 13:41	BK

**Lab#:** AD19595-003 **Sample ID:** HSI-SB-07(4.5-5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/8/20 11:42	RL

**Lab#:** AD19595-004 **Sample ID:** HSI-SB-08(3.5-4)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/05/20 08:00	asilva	EPA 7471B	10/5/20 16:11	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/6/20 19:31	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/05/20 08:00	asilva	EPA 6010D	10/5/20 16:02	OA
TAL Metals 6010D	3005&10/3050	10/05/20 08:00	asilva	EPA 6010D	10/5/20 18:00	OA
TAL Metals 6020B	3005&10/3050	10/05/20 08:00	asilva	EPA 6020B	10/5/20 14:12	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/9/20 14:01	BK

**Lab#:** AD19595-005 **Sample ID:** HSI-SB-08(8-8.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/8/20 12:44	RL

# Laboratory Chronicle

0100230 0031

Client: Chesapeake Geosciences Inc  
Project: Hot Spot Investigation

HC Project #: 0100230

Lab#: AD19595-006 Sample ID: HSI-SB-08(12-13)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/9/20 14:43	BK

Lab#: AD19595-007 Sample ID: HSI-SB-08(13-13.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 19:12	BK

Lab#: AD19595-008 Sample ID: HSI-SB-09(14-14.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 19:33	BK

Lab#: AD19595-009 Sample ID: HSI-SB-10(5.5-6)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Mercury (Soil/Waste) 7471B	EPA 7471B	10/05/20 08:00	asilva	EPA 7471B	10/5/20 16:12	OA
Semivolatile Organics (no search) 8270	3510C/3550C	10/06/20	jprevilon	EPA 8270E	10/6/20 13:22	AH/JKR/JB
TAL Metals 6010D	3005&10/3050	10/05/20 08:00	asilva	EPA 6010D	10/5/20 16:06	OA
TAL Metals 6010D	3005&10/3050	10/05/20 08:00	asilva	EPA 6010D	10/5/20 18:04	OA
TAL Metals 6020B	3005&10/3050	10/05/20 08:00	asilva	EPA 6020B	10/5/20 14:16	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/8/20 11:21	RL

Lab#: AD19595-010 Sample ID: HSI-SB-10(7-7.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/8/20 12:02	RL

# Laboratory Chronicle

0100230 0032

**Client:** Chesapeake Geosciences Inc  
**Project:** Hot Spot Investigation

**HC Project #:** 0100230

**Lab#:** AD19595-011                      **Sample ID:** HSI-SB-10(8-8.5)

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/7/20 19:54	BK

**Lab#:** AD19595-012                      **Sample ID:** HSI-SB-D2

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260D	10/9/20 15:03	BK

**Lab#:** AD19595-013                      **Sample ID:** HSI-WC-NH

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Diesel Range Organics 8015D(C10-C28)	Mod. Shaker	10/05/20 05:16	marie	EPA 8015D	10/6/20 11:24	ABM/AH/RR
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	10/8/20 12:43	RL
Mercury (TCLP) 7470A	EPA 7470A	10/07/20 11:00	asilva	EPA 7470A	10/8/20 12:51	BR
PCB 8082	3510C/3550C	10/06/20 11:35	marie	EPA 8082A	10/7/20 14:04	MS/MLC/ON
TCLP Metals 6010D	3005&10/3050	10/07/20 11:00	asilva	EPA 6010D	10/7/20 17:22	CJA
TCLP Metals 6010D	3005&10/3050	10/07/20 11:00	asilva	EPA 6010D	10/7/20 20:49	CJA
TCLP Metals Extraction 1311	EPA 1311	10/05/20 14:33	efaustin		10/6/20 09:45	efaustin
TCLP Organics Extraction 1311	EPA 1311	10/05/20 14:33	efaustin		10/6/20 09:45	efaustin
TCLP Semivolatiles 8270	EPA 3510	10/07/20 12:44	Lynda	EPA 8270E	10/8/20 10:03	AH/JKR/JB
TCLP Volatiles 8260	EPA 5030C			EPA 8260D	10/6/20 17:56	WP
TCLP Zero Headspace Extraction	EPA 1311	10/05/20 14:43	jprevilon			

# Laboratory Chronicle

0100230 0033

**Client:** Chesapeake Geosciences Inc  
**Project:** Hot Spot Investigation

**HC Project #:** 0100230

**Lab#:** AD19595-014

**Sample ID:** HSI-WC-H

<b>Test Code</b>	<b>Prep Method</b>	<b>Prep Date</b>	<b>By</b>	<b>Analytical Method</b>	<b>Analysis Date</b>	<b>By</b>
% Solids SM2540G				SM 2540G	10/5/20 00:00	BEENA
Diesel Range Organics 8015D(C10-C28)	Mod. Shaker	10/05/20 05:16	marie	EPA 8015D	10/6/20 11:50	ABM/AH/RR
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	10/8/20 13:00	RL
Mercury (TCLP) 7470A	EPA 7470A	10/07/20 11:00	asilva	EPA 7470A	10/8/20 12:55	BR
PCB 8082	3510C/3550C	10/06/20 11:35	marie	EPA 8082A	10/7/20 14:18	MS/MLC/ON
TCLP Metals 6010D	3005&10/3050	10/07/20 11:00	asilva	EPA 6010D	10/7/20 17:26	CJA
TCLP Metals 6010D	3005&10/3050	10/07/20 11:00	asilva	EPA 6010D	10/7/20 20:53	CJA
TCLP Metals Extraction 1311	EPA 1311	10/05/20 14:33	efaustin		10/6/20 10:25	efaustin
TCLP Organics Extraction 1311	EPA 1311	10/05/20 14:33	efaustin		10/6/20 10:25	efaustin
TCLP Semivolatiles 8270	EPA 3510	10/07/20 12:44	Lynda	EPA 8270E	10/8/20 11:13	AH/JKR/JB
TCLP Volatiles 8260	EPA 5030C			EPA 8260D	10/6/20 20:33	WP
TCLP Zero Headspace Extraction	EPA 1311	10/05/20 14:43	jprevilon			

## **Chain of Custody**

**Hampton-Clarke, Inc. (WBE/DBE/SBE)**  
 175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458  
 Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056  
 NELACNJ #07071 | PA #66-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

**HC**  
 CHAIN OF CUSTODY  
 RECORD  
 Hampton-Clarke  
 A Women-Owned, Disadvantaged, Small Business Enterprise

Project # (Lab Use Only) 0100280 Page 1 of 2  
**3) Reporting Requirements (Please Circle)**  
 Turnaround: \_\_\_\_\_  
 When Available: \_\_\_\_\_  
 1 Business Day (100%)\*  
 2 Business Days (75%)\*  
 3 Business Days (50%)\*  
 4 Business Days (35%)\*  
 5 Business Days (25%)\*  
 (8 Business Days (Standard))  
 Other: \_\_\_\_\_

**Customer Information**  
 1a) Customer: Chesapeake Steel Resources Inc  
 Address: 5105 Turnknolls Rd Ste 1  
Columbia, MD 21045  
 Email/Cell/Fax/Ph: mlp@aegs.us.com  
 1b) Send Invoice to: Y  
 1c) Send Report to: Y  
 1d) Send Report to: Y

**Project Information**  
 2a) Project: Hot Spot Investigation  
Management Practices  
Nancy Lane  
 2b) Project Mgr: James Df  
 2c) Project Location (City/State): North East Maryland  
 2d) Quote/PO # (if Applicable): CA07042310MS

**Reporting Requirements (Please Circle)**  
 Summary: Results + QC (Waste)  
 Reduced: I N I N Y  
I J PA Other MD  
 NY Full / NY ASP Call  
 NY ASP Call  
 Other: \_\_\_\_\_  
 \* Expedited TAT Not Always Available. Please Check with Lab.

**FOR LAB USE ONLY**  
 Batch # ADP9545  
 Matrix Codes: DW - Drinking Water S - Soil A - Air  
 GW - Ground Water SL - Sludge  
 WW - Waste Water OL - Oil  
 OT - Other (please specify under Item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Sample Time	Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)					8) # of Bottles	9) Comments
							VOCs 8260	SVOCs 8270	TAL Metals 6080	MeOH	En Core		
001	HSE-08-05145	S	9/22/20	16:45	X	X	X	X	X	X	X	X	
002	HSE-08-06458	S	9/24/20	13:45	X	X	X	X	X	X	X	X	
003	HSE-08-07145	S	9/24/20	14:15	X	X	X	X	X	X	X	X	
004	HSE-08-08354	S	10/12/20	16:40	X	X	X	X	X	X	X	X	
005	HSE-08-08386	S	10/25/20	16:50	X	X	X	X	X	X	X	X	
006	HSE-08-081212	S	11/06/20	11:00	X	X	X	X	X	X	X	X	
007	HSE-08-081345	S	11/10/20	15:10	X	X	X	X	X	X	X	X	
008	HSE-08-091414	S	12/25/20	13:25	X	X	X	X	X	X	X	X	
009	HSE-08-10654	S	5/25/21	6:55	X	X	X	X	X	X	X	X	
010	HSE-08-10775	S	6/20/21	16:05	X	X	X	X	X	X	X	X	

10) Sampling by: EGS Accepted by: [Signature] Date: 10/21/20 Time: 11:15  
 11) Sampler (print name): Greg James Date: 10/21/20  
**Additional Notes**  
MDR RMP Contract Rates  
 Comments, Notes, Special Requirements, HAZARDS  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270D SIM)  NUDEP GWQS  
 VOC (8260C SIM or 8011)  NUDEP SRS  
 SPLP (BN, BNA, Metals)  NUDEP SPLP  
 1,4 Dioxane  Other (specify):  
 Check if applicable:   
 Project-Specific Reporting Limits: HSE-08-08-13  
 High Contaminant Concentrations: HSE-08-08-13  
 NJ LSRP Project (also check boxes above/right)  
 Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.  
 Internal use: sampling plan (check box) HC [ ] or client [ ] FSP# 5433  
 Cooler Temperature 5433

**Hampton-Clarke, Inc. (WBE/DBE/SBE)**  
 175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458  
 Service Center: 137-D Gather Drive, Mount Laurel, New Jersey 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056  
 NEIACNJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved



**CHAIN OF CUSTODY RECORD**  
 A Woman-Owned, Disadvantaged, Small Business Enterprise

Project # (Lab Use Only)  
**0100230**

Page **2** of **2**  
 3) Reporting Requirements (Please Circle)

**Customer Information**  
 1a) Customer: *Chasapeake Gas Services*  
 Address: *6705 Hiram Knobelsdorfer Rd | Columbia MD 21045*  
 Email/Cell/Fax/Ph: *mlaw@cgsgas.com*

**Project Information**  
 2a) Project: *Hot Spot Investigation*  
 2b) Project Mgr: *Matt Gormery Producers*  
 2c) Project Location (City/State): *North East Maryland*  
 2d) Quote/PO # (If Applicable): *CGE942310ME*

**When Available:**  
 1 Business Day (100%)\*  
 2 Business Days (75%)\*  
 3 Business Days (50%)\*  
 4 Business Days (35%)\*  
 5 Business Days (25%)  
 8 Business Days (Standard)

**Report Type:**  
 Summary  
 Results + QC (Waste)  
 Reduced:  
 [ ] NJ [ ] NY  
 [ ] PA [ ] Other **MD**  
 NJ Full / NY ASP Calif  
 NY ASP Calif

**Electronic Data Deliv.:**  
 NJ Hazsite  
 Excel Req. **NI/NY/PA**  
 EnviroData  
 EQUS:  
 [ ] 4-File [ ] EZ  
 [ ] NYDEC  
 [ ] Region 2 or 5

**Turnaround:**  
 Expedited TAT Not Always Available. Please Check with Lab.

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time	Sample Type		7) Analysis (Specify methods & parameter lists)		8) # of Bottles					9) Comments		
					Composite (C)	Grab (G)	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:			
<i>011</i>	<i>HSE-SB-10(85)</i>	<i>S</i>	<i>10/20/15</i>	<i>08:00</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>VEG 8260</i>	<i>NO3 8270</i>	<i>TAL Metals 8080</i>	<i>VOCs 8260</i>	<i>8270</i>	<i>8270</i>	<i>8270</i>	<i>8270</i>	<i>8270</i>	
<i>012</i>	<i>HSE-SB-DQ</i>	<i>S</i>	<i>10/20/15</i>	<i>08:00</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<i>013</i>	<i>HSE-MC-NH</i>	<i>S</i>	<i>10/20/15</i>	<i>08:40</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<i>014</i>	<i>HSE-MC-H</i>	<i>S</i>	<i>10/20/15</i>	<i>08:50</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<i>Maybe hot</i>

**FOR LAB USE ONLY**  
 Batch # *A19595*

**Matrix Codes**  
 DW - Drinking Water S - Soil A - Air  
 GW - Ground Water SL - Sludge  
 WW - Waste Water OL - Oil  
 OT - Other (Please specify under item 9, Comments)

**Comments, Notes, Special Requirements, HAZARDS**  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270D SIM)  
 VOC (8260C SIM or 8011)  
 SPLP (BN, BNA, Metals)  
 1,4 Dioxane

**Project-Specific Reporting Limits**  
 High Contaminant Concentrations **HSE-MC-NH\***  
 NJ LSRP Project (also check boxes above/right)  
 Please note **NUMBERED** items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

**Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#**

**Additional Notes:**  
*Mag Staines*  
 Date: *10/21/20*  
*WDE RMS Contract Refers*

**Cooler Temperature:**  
*3.0-3.3*



## CONDITION UPON RECEIPT

Batch Number AD19595

Entered By: maxwell

Date Entered 10/3/2020 6:00:00 AM

- 
- 1 Yes Is there a corresponding COC included with the samples?
  - 2 Yes Are the samples in a container such as a cooler or Ice chest?
  - 3 No Are the COC seals intact?
  - 4 T0054 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).  
3.0,3.3
  - 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
  - 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
  - 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
  - 8 Yes Are all of the sample labels or numbers legible? If no specify:
  - 9 Yes Do the contents match the COC? If no, specify
  - 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
  - 11 Yes Are samples preserved correctly?
  - 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
  - 13 NA Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
  - 14 NA Corrective actions (Specify item number and corrective action taken).
  - 15 No Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

0100230 0038

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD19595-001	10/02/20 17:00	MAXW	0	M	Received	AD19595-006	10/05/20 07:54	RL	1	A	VOA
AD19595-001	10/02/20 17:30	MAXW	0	M	Login	AD19595-006	10/05/20 08:06	R31	1	A	NONE
AD19595-001	10/02/20 17:47	R31	1	A	NONE	AD19595-006	10/09/20 12:34	WP	1	A	VOA
AD19595-001	10/05/20 07:54	RL	1	A	VOA	AD19595-006	10/09/20 12:37	R31	1	A	NONE
AD19595-001	10/05/20 08:06	R31	1	A	NONE	AD19595-006	10/02/20 17:48	F18	2	A	NONE
AD19595-001	10/07/20 21:34	R31	1	A	NONE	AD19595-006	10/02/20 17:48	F18	3	A	NONE
AD19595-001	10/07/20 21:34	WP	1	A	VOA	AD19595-006	10/03/20 08:11	R12	4	A	NONE
AD19595-001	10/02/20 17:48	F18	2	A	NONE	AD19595-006	10/05/20 09:14	BCT	4	A	SOLIDS
AD19595-001	10/06/20 19:03	WP	2	A	VOA	AD19595-006	10/05/20 10:35	R12	4	A	NONE
AD19595-001	10/02/20 17:48	WP	3	A	NONE	AD19595-007	10/02/20 17:00	MAXW	0	M	Received
AD19595-001	10/07/20 15:49	BK	3	A	VOA	AD19595-007	10/02/20 17:30	MAXW	0	M	Login
AD19595-001	10/03/20 08:11	R12	4	A	NONE	AD19595-007	10/02/20 17:47	R31	1	A	NONE
AD19595-001	10/05/20 09:14	BCT	4	A	SOLIDS	AD19595-007	10/05/20 07:54	RL	1	A	VOA
AD19595-001	10/05/20 10:35	R12	4	A	NONE	AD19595-007	10/05/20 08:06	R31	1	A	NONE
AD19595-002	10/02/20 17:00	MAXW	0	M	Received	AD19595-007	10/09/20 12:34	WP	1	A	VOA
AD19595-002	10/02/20 17:30	MAXW	0	M	Login	AD19595-007	10/09/20 12:37	R31	1	A	NONE
AD19595-002	10/02/20 17:47	R31	1	A	NONE	AD19595-007	10/02/20 17:48	F18	2	A	NONE
AD19595-002	10/05/20 07:54	RL	1	A	VOA	AD19595-007	10/06/20 19:03	WP	2	A	VOA
AD19595-002	10/05/20 08:06	R31	1	A	NONE	AD19595-007	10/02/20 17:48	F18	3	A	NONE
AD19595-002	10/09/20 12:34	WP	1	A	VOA	AD19595-007	10/07/20 15:49	BK	3	A	VOA
AD19595-002	10/09/20 12:37	R31	1	A	NONE	AD19595-007	10/03/20 08:11	R12	4	A	NONE
AD19595-002	10/02/20 17:48	F18	2	A	NONE	AD19595-007	10/05/20 09:14	BCT	4	A	SOLIDS
AD19595-002	10/02/20 17:48	F18	3	A	NONE	AD19595-007	10/05/20 10:35	R12	4	A	NONE
AD19595-002	10/09/20 12:07	WP	3	A	VOA	AD19595-008	10/02/20 17:00	MAXW	0	M	Received
AD19595-002	10/03/20 08:11	R12	4	A	NONE	AD19595-008	10/02/20 17:30	MAXW	0	M	Login
AD19595-002	10/05/20 09:14	BCT	4	A	SOLIDS	AD19595-008	10/02/20 17:47	R31	1	A	NONE
AD19595-002	10/05/20 10:35	R12	4	A	NONE	AD19595-008	10/05/20 07:54	RL	1	A	VOA
AD19595-003	10/02/20 17:00	MAXW	0	M	Received	AD19595-008	10/05/20 08:06	R31	1	A	NONE
AD19595-003	10/02/20 17:30	MAXW	0	M	Login	AD19595-008	10/02/20 17:48	F18	2	A	NONE
AD19595-003	10/02/20 17:47	R31	1	A	NONE	AD19595-008	10/06/20 19:03	WP	2	A	VOA
AD19595-003	10/05/20 07:54	RL	1	A	VOA	AD19595-008	10/02/20 17:48	F18	3	A	NONE
AD19595-003	10/05/20 08:06	R31	1	A	NONE	AD19595-008	10/07/20 15:49	BK	3	A	VOA
AD19595-003	10/07/20 21:34	R31	1	A	NONE	AD19595-008	10/03/20 08:11	R12	4	A	NONE
AD19595-003	10/07/20 21:34	WP	1	A	VOA	AD19595-008	10/05/20 09:14	BCT	4	A	SOLIDS
AD19595-003	10/02/20 17:48	F18	2	A	NONE	AD19595-008	10/05/20 10:35	R12	4	A	NONE
AD19595-003	10/06/20 19:03	WP	2	A	VOA	AD19595-009	10/02/20 17:00	MAXW	0	M	Received
AD19595-003	10/02/20 17:48	F18	3	A	NONE	AD19595-009	10/02/20 17:30	MAXW	0	M	Login
AD19595-003	10/07/20 15:49	BK	3	A	VOA	AD19595-009	10/02/20 17:47	R31	1	A	NONE
AD19595-003	10/03/20 08:11	R12	4	A	NONE	AD19595-009	10/05/20 07:54	RL	1	A	VOA
AD19595-003	10/05/20 09:14	BCT	4	A	SOLIDS	AD19595-009	10/05/20 08:06	R31	1	A	NONE
AD19595-003	10/05/20 10:35	R12	4	A	NONE	AD19595-009	10/07/20 21:34	WP	1	A	VOA
AD19595-004	10/02/20 17:00	MAXW	0	M	Received	AD19595-009	10/07/20 21:34	R31	1	A	NONE
AD19595-004	10/02/20 17:30	MAXW	0	M	Login	AD19595-009	10/02/20 17:48	F18	2	A	NONE
AD19595-004	10/02/20 17:47	R31	1	A	NONE	AD19595-009	10/06/20 19:03	WP	2	A	VOA
AD19595-004	10/05/20 07:54	RL	1	A	VOA	AD19595-009	10/02/20 17:48	F18	3	A	NONE
AD19595-004	10/05/20 08:06	R31	1	A	NONE	AD19595-009	10/07/20 15:49	BK	3	A	VOA
AD19595-004	10/09/20 12:34	WP	1	A	VOA	AD19595-009	10/03/20 08:11	R12	4	A	NONE
AD19595-004	10/09/20 12:37	R31	1	A	NONE	AD19595-009	10/05/20 10:35	R12	4	A	NONE
AD19595-004	10/02/20 17:48	F18	2	A	NONE	AD19595-009	10/03/20 08:11	R12	5	A	NONE
AD19595-004	10/02/20 17:48	F18	3	A	NONE	AD19595-009	10/05/20 08:16	ANS	5	A	MIX
AD19595-004	10/09/20 12:09	WP	3	A	VOA	AD19595-009	10/05/20 08:16	ANS	5	A	TDSI/Hg
AD19595-004	10/03/20 08:11	R12	4	A	NONE	AD19595-009	10/05/20 09:14	BCT	5	A	SOLIDS
AD19595-004	10/05/20 08:16	ANS	4	A	TDSI/Hg	AD19595-009	10/05/20 10:35	R12	5	A	NONE
AD19595-004	10/05/20 08:16	ANS	4	A	MIX	AD19595-009	10/06/20 07:18	JP	5	A	bn-soil
AD19595-004	10/05/20 09:14	BCT	4	A	SOLIDS	AD19595-009	10/06/20 07:19	R12	5	A	NONE
AD19595-004	10/05/20 10:35	R12	4	A	NONE	AD19595-010	10/02/20 17:00	MAXW	0	M	Received
AD19595-004	10/06/20 07:18	JP	4	A	bn-soil	AD19595-010	10/02/20 17:30	MAXW	0	M	Login
AD19595-004	10/06/20 07:19	R12	4	A	NONE	AD19595-010	10/02/20 17:47	R31	1	A	NONE
AD19595-005	10/02/20 17:00	MAXW	0	M	Received	AD19595-010	10/05/20 07:54	RL	1	A	VOA
AD19595-005	10/02/20 17:30	MAXW	0	M	Login	AD19595-010	10/05/20 08:06	R31	1	A	NONE
AD19595-005	10/02/20 17:47	R31	1	A	NONE	AD19595-010	10/07/20 21:34	WP	1	A	VOA
AD19595-005	10/05/20 07:54	RL	1	A	VOA	AD19595-010	10/07/20 21:34	R31	1	A	NONE
AD19595-005	10/05/20 08:06	R31	1	A	NONE	AD19595-010	10/02/20 17:48	F18	2	A	NONE
AD19595-005	10/07/20 21:34	WP	1	A	VOA	AD19595-010	10/06/20 19:03	WP	2	A	VOA
AD19595-005	10/07/20 21:34	R31	1	A	NONE	AD19595-010	10/02/20 17:48	F18	3	A	NONE
AD19595-005	10/02/20 17:48	F18	2	A	NONE	AD19595-010	10/07/20 15:49	BK	3	A	VOA
AD19595-005	10/06/20 19:03	WP	2	A	VOA	AD19595-010	10/03/20 08:11	R12	4	A	NONE
AD19595-005	10/02/20 17:48	F18	3	A	NONE	AD19595-010	10/05/20 09:14	BCT	4	A	SOLIDS
AD19595-005	10/07/20 15:49	BK	3	A	VOA	AD19595-010	10/05/20 10:35	R12	4	A	NONE
AD19595-005	10/03/20 08:11	R12	4	A	NONE	AD19595-011	10/02/20 17:00	MAXW	0	M	Received
AD19595-005	10/05/20 09:14	BCT	4	A	SOLIDS	AD19595-011	10/02/20 17:30	MAXW	0	M	Login
AD19595-005	10/05/20 10:35	R12	4	A	NONE	AD19595-011	10/02/20 17:47	R31	1	A	NONE
AD19595-006	10/02/20 17:00	MAXW	0	M	Received	AD19595-011	10/05/20 07:54	RL	1	A	VOA
AD19595-006	10/02/20 17:30	MAXW	0	M	Login	AD19595-011	10/05/20 08:06	R31	1	A	NONE
AD19595-006	10/02/20 17:47	R31	1	A	NONE	AD19595-011	10/02/20 17:48	F18	2	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

0100230 0039

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD19595-011	10/06/20 19:03	WP	2	A	VOA
AD19595-011	10/02/20 17:48	F18	3	A	NONE
AD19595-011	10/07/20 15:49	BK	3	A	VOA
AD19595-011	10/03/20 08:11	R12	4	A	NONE
AD19595-011	10/05/20 09:14	BCT	4	A	SOLIDS
AD19595-011	10/05/20 10:35	R12	4	A	NONE
AD19595-012	10/02/20 17:00	MAXW	0	M	Received
AD19595-012	10/02/20 17:30	MAXW	0	M	Login
AD19595-012	10/02/20 17:47	R31	1	A	NONE
AD19595-012	10/05/20 07:54	RL	1	A	VOA
AD19595-012	10/05/20 08:06	R31	1	A	NONE
AD19595-012	10/09/20 12:34	WP	1	A	VOA
AD19595-012	10/09/20 12:37	R31	1	A	NONE
AD19595-012	10/02/20 17:48	F18	2	A	NONE
AD19595-012	10/02/20 17:48	F18	3	A	NONE
AD19595-012	10/03/20 08:11	R12	4	A	NONE
AD19595-012	10/05/20 09:14	BCT	4	A	SOLIDS
AD19595-012	10/05/20 10:35	R12	4	A	NONE
AD19595-013	10/02/20 17:00	MAXW	0	M	Received
AD19595-013	10/02/20 17:30	MAXW	0	M	Login
AD19595-013	10/03/20 08:11	R12	2	A	NONE
AD19595-013	10/05/20 09:14	BCT	2	A	SOLIDS
AD19595-013	10/05/20 10:35	R12	2	A	NONE
AD19595-013	10/05/20 05:16	MSL	3	A	tph
AD19595-013	10/05/20 05:16	R12	3	A	NONE
AD19595-013	10/05/20 13:24	R12	3	A	NONE
AD19595-013	10/05/20 13:24	JP	3	A	tclp-zhe
AD19595-013	10/05/20 14:32	EF	3	A	TCLP
AD19595-013	10/05/20 14:33	EF	3	A	R12
AD19595-013	10/06/20 11:35	MSL	3	A	p/p
AD19595-013	10/06/20 11:37	R12	3	A	NONE
AD19595-013	10/08/20 10:23	R30	4	A	NONE
AD19595-013	10/08/20 11:32	WP	4	A	VOA
AD19595-013	10/08/20 11:58	R30	4	A	NONE
AD19595-013	10/08/20 12:21	RL	4	A	GRO
AD19595-013	10/08/20 12:27	R30	4	A	NONE
AD19595-013	10/08/20 12:36	RL	5	A	GRO
AD19595-013	10/08/20 12:37	R31	5	A	NONE
AD19595-014	10/02/20 17:00	MAXW	0	M	Received
AD19595-014	10/02/20 17:30	MAXW	0	M	Login
AD19595-014	10/03/20 08:11	R12	2	A	NONE
AD19595-014	10/05/20 09:14	BCT	2	A	SOLIDS
AD19595-014	10/05/20 10:35	R12	2	A	NONE
AD19595-014	10/03/20 08:11	R12	3	A	NONE
AD19595-014	10/05/20 05:16	MSL	3	A	tph
AD19595-014	10/05/20 05:16	R12	3	A	NONE
AD19595-014	10/05/20 13:24	R12	3	A	NONE
AD19595-014	10/05/20 13:24	JP	3	A	tclp-zhe
AD19595-014	10/05/20 14:32	EF	3	A	TCLP
AD19595-014	10/05/20 14:33	EF	3	A	R12
AD19595-014	10/06/20 11:35	MSL	3	A	p/p
AD19595-014	10/06/20 11:37	R12	3	A	NONE
AD19595-014	10/08/20 10:23	R30	4	A	NONE
AD19595-014	10/08/20 11:32	WP	4	A	VOA
AD19595-014	10/08/20 11:58	R30	4	A	NONE
AD19595-014	10/08/20 12:21	RL	4	A	GRO
AD19595-014	10/08/20 12:27	R30	4	A	NONE
AD19595-014	10/08/20 12:36	RL	5	A	GRO
AD19595-014	10/08/20 12:37	R31	5	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

## **Volatile Data**

**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-001      Method: EPA 8260D  
 Client Id: HSI-SB-05(4.5-5)      Matrix: Methanol  
 Data File: 1M140274.D      Extraction Ratio: 7.27g:10ml  
 Analysis Date: 10/08/20 12:23      Final Vol: NA  
 Date Rec/Extracted: 10/02/20-NA      Dilution: 68.8  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 86

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.029	0.080	U	56-23-5	Carbon Tetrachloride	0.026	0.080	U
79-34-5	1,1,2,2-Tetrachloroethane	0.036	0.080	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.026</b>	<b>0.080</b>	<b>0.050J</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.058	0.080	U	75-00-3	Chloroethane	0.046	0.080	U
79-00-5	1,1,2-Trichloroethane	0.026	0.080	U	67-66-3	Chloroform	0.16	0.16	U
75-34-3	1,1-Dichloroethane	0.034	0.080	U	74-87-3	Chloromethane	0.041	0.080	U
75-35-4	1,1-Dichloroethene	0.043	0.080	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.051</b>	<b>0.080</b>	<b>0.34</b>
87-61-6	1,2,3-Trichlorobenzene	0.063	0.080	U	10061-01-5	cis-1,3-Dichloropropene	0.026	0.080	U
120-82-1	1,2,4-Trichlorobenzene	0.058	0.080	U	110-82-7	Cyclohexane	0.039	0.080	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.067	0.080	U	124-48-1	Dibromochloromethane	0.019	0.080	U
106-93-4	1,2-Dibromoethane	0.027	0.080	U	75-71-8	Dichlorodifluoromethane	0.050	0.080	U
95-50-1	1,2-Dichlorobenzene	0.026	0.080	U	100-41-4	Ethylbenzene	0.037	0.080	U
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.051</b>	<b>0.051</b>	<b>0.10</b>	98-82-8	Isopropylbenzene	0.039	0.080	U
78-87-5	1,2-Dichloropropane	0.024	0.080	U	179601-23-1	m&p-Xylenes	0.068	0.080	U
541-73-1	1,3-Dichlorobenzene	0.030	0.080	U	79-20-9	Methyl Acetate	0.056	0.080	U
106-46-7	1,4-Dichlorobenzene	0.029	0.080	U	<b>108-87-2</b>	<b>Methylcyclohexane</b>	<b>0.049</b>	<b>0.080</b>	<b>U</b>
123-91-1	1,4-Dioxane	3.1	4.0	U	75-09-2	Methylene Chloride	0.024	0.080	U
78-93-3	2-Butanone	0.060	0.080	U	1634-04-4	Methyl-t-butyl ether	0.025	0.040	U
591-78-6	2-Hexanone	0.048	0.080	U	95-47-6	o-Xylene	0.055	0.080	U
108-10-1	4-Methyl-2-Pentanone	0.039	0.080	U	100-42-5	Styrene	0.043	0.080	U
67-64-1	Acetone	0.37	0.40	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.029</b>	<b>0.080</b>	<b>0.059J</b>
71-43-2	Benzene	0.024	0.040	U	108-88-3	Toluene	0.026	0.080	U
74-97-5	Bromochloromethane	0.063	0.080	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.025</b>	<b>0.080</b>	<b>0.076J</b>
75-27-4	Bromodichloromethane	0.028	0.080	U	10061-02-6	trans-1,3-Dichloropropene	0.025	0.080	U
75-25-2	Bromoform	0.043	0.080	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.028</b>	<b>0.080</b>	<b>0.85</b>
74-83-9	Bromomethane	0.040	0.080	U	75-69-4	Trichlorofluoromethane	0.025	0.080	U
75-15-0	Carbon Disulfide	0.034	0.080	U	75-01-4	Vinyl Chloride	0.056	0.080	U
1330-20-7	Xylenes (Total)	0.055	0.080	U					

Worksheet #: 569869

**Total Target Concentration 1.5**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-001  
 Data File: 1M140274.D  
 Acq On : 10/08/20 12:23

Operator : RL  
 Sam Mult : 1 Vial# : 79  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/08/20 13:18  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.336	96	370489	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	392819	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	263631	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.940	111	100876	29.18	ug/l	0.00	
Spiked Amount	30.000						Recovery = 97.27%
39) 1,2-Dichloroethane-d4	5.143	67	56508	30.02	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.07%
66) Toluene-d8	6.198	98	415370	26.17	ug/l	0.00	
Spiked Amount	30.000						Recovery = 87.23%
76) Bromofluorobenzene	7.622	174	204639	30.81	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.70%
Target Compounds							
28) trans-1,2-Dichloroethene	3.940	96	2164	0.9503	ug/l	77	Qvalue
30) cis-1,2-Dichloroethene	4.657	61	18447	4.2523	ug/l	97	
40) 1,2-Dichloroethane	5.191	62	4787	1.2948	ug/l	95	
49) Trichloroethene	5.538	130	30492	10.6851	ug/l	91	
65) Tetrachloroethene	6.542	164	2100	0.7408	ug/l	100	
69) Chlorobenzene	7.001	112	5680	0.6265	ug/l	100	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

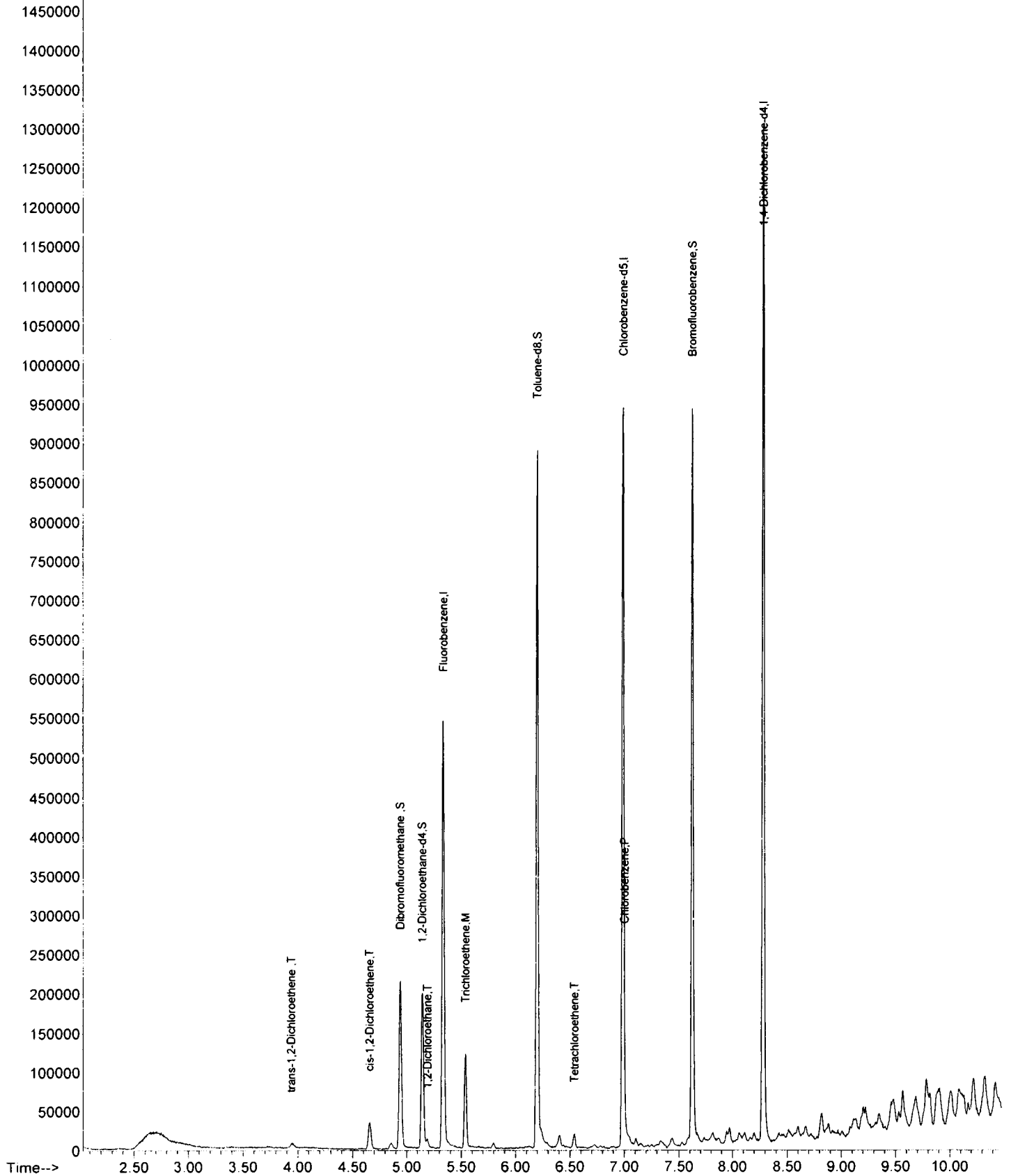
TIC: 1M140274.D\data.ms

Quant QT Reviewed

SampleID : AD19595-001  
Data File: 1M140274.D  
Acq On : 10/08/20 12:23

Operator : RL  
Sam Mult : 1 Vial# : 79  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/08/20 13:18  
Qt Upd On: 09/10/20 15:58



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-002

Client Id: HSI-SB-06(4.5-5)

Data File: 1M140342.D

Analysis Date: 10/09/20 13:41

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Methanol

Extraction Ratio: 7.41g:10ml

Final Vol: NA

Dilution: 67.5

Solids: 85

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.028	0.079	U	56-23-5	Carbon Tetrachloride	0.026	0.079	U
79-34-5	1,1,2,2-Tetrachloroethane	0.036	0.079	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.026</b>	<b>0.079</b>	<b>1.4</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.058	0.079	U	75-00-3	Chloroethane	0.046	0.079	U
79-00-5	1,1,2-Trichloroethane	0.025	0.079	U	67-66-3	Chloroform	0.16	0.16	U
75-34-3	1,1-Dichloroethane	0.034	0.079	U	74-87-3	Chloromethane	0.041	0.079	U
75-35-4	1,1-Dichloroethene	0.042	0.079	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.050</b>	<b>0.079</b>	<b>0.17</b>
87-61-6	1,2,3-Trichlorobenzene	0.062	0.079	U	10061-01-5	cis-1,3-Dichloropropene	0.025	0.079	U
120-82-1	1,2,4-Trichlorobenzene	0.058	0.079	U	110-82-7	Cyclohexane	0.039	0.079	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.066	0.079	U	124-48-1	Dibromochloromethane	0.019	0.079	U
106-93-4	1,2-Dibromoethane	0.027	0.079	U	75-71-8	Dichlorodifluoromethane	0.049	0.079	U
95-50-1	1,2-Dichlorobenzene	0.026	0.079	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.037</b>	<b>0.079</b>	<b>0.044 J</b>
107-06-2	1,2-Dichloroethane	0.051	0.051	U	98-82-8	Isopropylbenzene	0.039	0.079	U
78-87-5	1,2-Dichloropropane	0.024	0.079	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.067</b>	<b>0.079</b>	<b>0.16</b>
541-73-1	1,3-Dichlorobenzene	0.030	0.079	U	79-20-9	Methyl Acetate	0.056	0.079	U
106-46-7	1,4-Dichlorobenzene	0.029	0.079	U	108-87-2	Methylcyclohexane	0.049	0.079	U
123-91-1	1,4-Dioxane	3.1	4.0	U	75-09-2	Methylene Chloride	0.023	0.079	U
78-93-3	2-Butanone	0.059	0.079	U	1634-04-4	Methyl-t-butyl ether	0.025	0.040	U
591-78-6	2-Hexanone	0.048	0.079	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.054</b>	<b>0.079</b>	<b>0.067 J</b>
108-10-1	4-Methyl-2-Pentanone	0.039	0.079	U	100-42-5	Styrene	0.043	0.079	U
67-64-1	Acetone	0.36	0.40	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.028</b>	<b>0.079</b>	<b>0.028 J</b>
71-43-2	Benzene	0.023	0.040	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.026</b>	<b>0.079</b>	<b>0.39</b>
74-97-5	Bromochloromethane	0.062	0.079	U	156-60-5	trans-1,2-Dichloroethene	0.025	0.079	U
75-27-4	Bromodichloromethane	0.027	0.079	U	10061-02-6	trans-1,3-Dichloropropene	0.024	0.079	U
75-25-2	Bromoform	0.043	0.079	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.027</b>	<b>0.079</b>	<b>0.54</b>
74-83-9	Bromomethane	0.040	0.079	U	75-69-4	Trichlorofluoromethane	0.024	0.079	U
75-15-0	Carbon Disulfide	0.034	0.079	U	75-01-4	Vinyl Chloride	0.056	0.079	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.054</b>	<b>0.079</b>	<b>0.23</b>					

Worksheet #: 569869

**Total Target Concentration 2.8**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.



SampleID : AD19595-002  
 Data File: 1M140342.D  
 Acq On : 10/09/20 13:41

Operator : BK  
 Sam Mult : 1 Vial# : 16  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 13:58  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	349551	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.986	117	374999	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	258756	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.941	111	99717	30.57	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.90%
39) 1,2-Dichloroethane-d4	5.143	67	55311	31.14	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.80%
66) Toluene-d8	6.198	98	391704	25.85	ug/l	0.00	
Spiked Amount	30.000						Recovery = 86.17%
76) Bromofluorobenzene	7.622	174	196349	30.12	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.40%
Target Compounds							
30) cis-1,2-Dichloroethene	4.654	61	8719	2.1302	ug/l	93	Qvalue
49) Trichloroethene	5.539	130	18258	6.7813	ug/l	92	
65) Tetrachloroethene	6.539	164	969	0.3581	ug/l	90	
67) Toluene	6.233	92	36568	4.9312	ug/l	91	
69) Chlorobenzene	7.002	112	149114	17.2299	ug/l	97	
74) Ethylbenzene	7.047	106	2295	0.5583	ug/l	92	
78) m&p-Xylenes	7.104	106	11254	2.0398	ug/l	91	
79) o-Xylene	7.333	106	4736	0.8383	ug/l	95	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

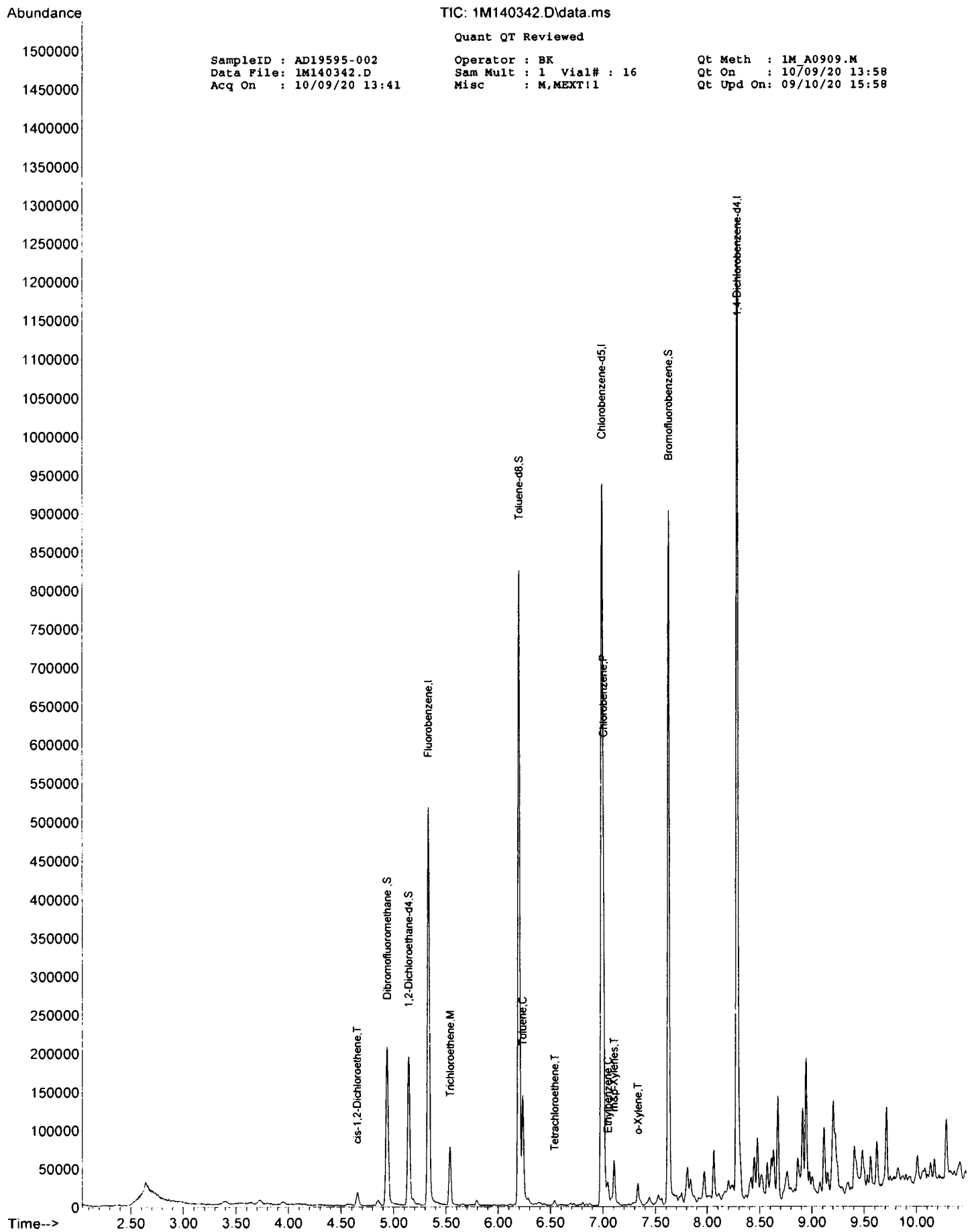
TIC: 1M140342.D\data.ms

Quant QT Reviewed

SampleID : AD19595-002  
Data File: 1M140342.D  
Acq On : 10/09/20 13:41

Operator : BK  
Sam Mult : 1 Vial# : 16  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/09/20 13:58  
Qt Upd On: 09/10/20 15:58



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-003

Client Id: HSI-SB-07(4.5-5)

Data File: 1M140272.D

Analysis Date: 10/08/20 11:42

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Methanol

Extraction Ratio: 7.06g:10ml

Final Vol: NA

Dilution: 70.8

Solids: 86

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.029	0.082	U	56-23-5	Carbon Tetrachloride	0.027	0.082	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.037</b>	<b>0.082</b>	<b>0.17</b>	108-90-7	Chlorobenzene	0.027	0.082	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.060	0.082	U	75-00-3	Chloroethane	0.048	0.082	U
79-00-5	1,1,2-Trichloroethane	0.026	0.082	U	67-66-3	Chloroform	0.16	0.16	U
75-34-3	1,1-Dichloroethane	0.035	0.082	U	74-87-3	Chloromethane	0.042	0.082	U
75-35-4	1,1-Dichloroethene	0.044	0.082	U	156-59-2	cis-1,2-Dichloroethene	0.052	0.082	U
87-61-6	1,2,3-Trichlorobenzene	0.065	0.082	U	10061-01-5	cis-1,3-Dichloropropene	0.026	0.082	U
120-82-1	1,2,4-Trichlorobenzene	0.060	0.082	U	110-82-7	Cyclohexane	0.040	0.082	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.069	0.082	U	124-48-1	Dibromochloromethane	0.020	0.082	U
106-93-4	1,2-Dibromoethane	0.028	0.082	U	75-71-8	Dichlorodifluoromethane	0.051	0.082	U
95-50-1	1,2-Dichlorobenzene	0.027	0.082	U	100-41-4	Ethylbenzene	0.038	0.082	U
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.053</b>	<b>0.053</b>	<b>0.087</b>	98-82-8	Isopropylbenzene	0.041	0.082	U
78-87-5	1,2-Dichloropropane	0.025	0.082	U	179601-23-1	m&p-Xylenes	0.070	0.082	U
541-73-1	1,3-Dichlorobenzene	0.031	0.082	U	79-20-9	Methyl Acetate	0.058	0.082	U
106-46-7	1,4-Dichlorobenzene	0.030	0.082	U	108-87-2	Methylcyclohexane	0.051	0.082	U
123-91-1	1,4-Dioxane	3.2	4.1	U	75-09-2	Methylene Chloride	0.024	0.082	U
78-93-3	2-Butanone	0.062	0.082	U	1634-04-4	Methyl-t-butyl ether	0.026	0.041	U
591-78-6	2-Hexanone	0.049	0.082	U	95-47-6	o-Xylene	0.056	0.082	U
108-10-1	4-Methyl-2-Pentanone	0.040	0.082	U	100-42-5	Styrene	0.045	0.082	U
67-64-1	Acetone	0.38	0.41	U	127-18-4	Tetrachloroethene	0.029	0.082	U
71-43-2	Benzene	0.024	0.041	U	108-88-3	Toluene	0.027	0.082	U
74-97-5	Bromochloromethane	0.065	0.082	U	156-60-5	trans-1,2-Dichloroethene	0.025	0.082	U
75-27-4	Bromodichloromethane	0.028	0.082	U	10061-02-6	trans-1,3-Dichloropropene	0.025	0.082	U
75-25-2	Bromoform	0.045	0.082	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.028</b>	<b>0.082</b>	<b>0.11</b>
74-83-9	Bromomethane	0.041	0.082	U	75-69-4	Trichlorofluoromethane	0.025	0.082	U
75-15-0	Carbon Disulfide	0.035	0.082	U	75-01-4	Vinyl Chloride	0.058	0.082	U
1330-20-7	Xylenes (Total)	0.056	0.082	U					

Worksheet #: 569869

**Total Target Concentration 0.37**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-003  
 Data File: 1M140272.D  
 Acq On : 10/08/20 11:42

Operator : RL  
 Sam Mult : 1 Vial# : 77  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/08/20 13:17  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	373220	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.986	117	393780	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	270998	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.937	111	103180	29.63	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.77%
39) 1,2-Dichloroethane-d4	5.146	67	57323	30.23	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.77%
66) Toluene-d8	6.198	98	418623	26.31	ug/l	0.00	
Spiked Amount	30.000						Recovery = 87.70%
76) Bromofluorobenzene	7.622	174	211452	30.97	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.23%
Target Compounds							
40) 1,2-Dichloroethane	5.185	62	3915	1.0512	ug/l	92	
49) Trichloroethene	5.539	130	3912	1.3608	ug/l	99	
75) 1,1,2,2-Tetrachloroethane	7.677	83	10881	2.0339	ug/l	98	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

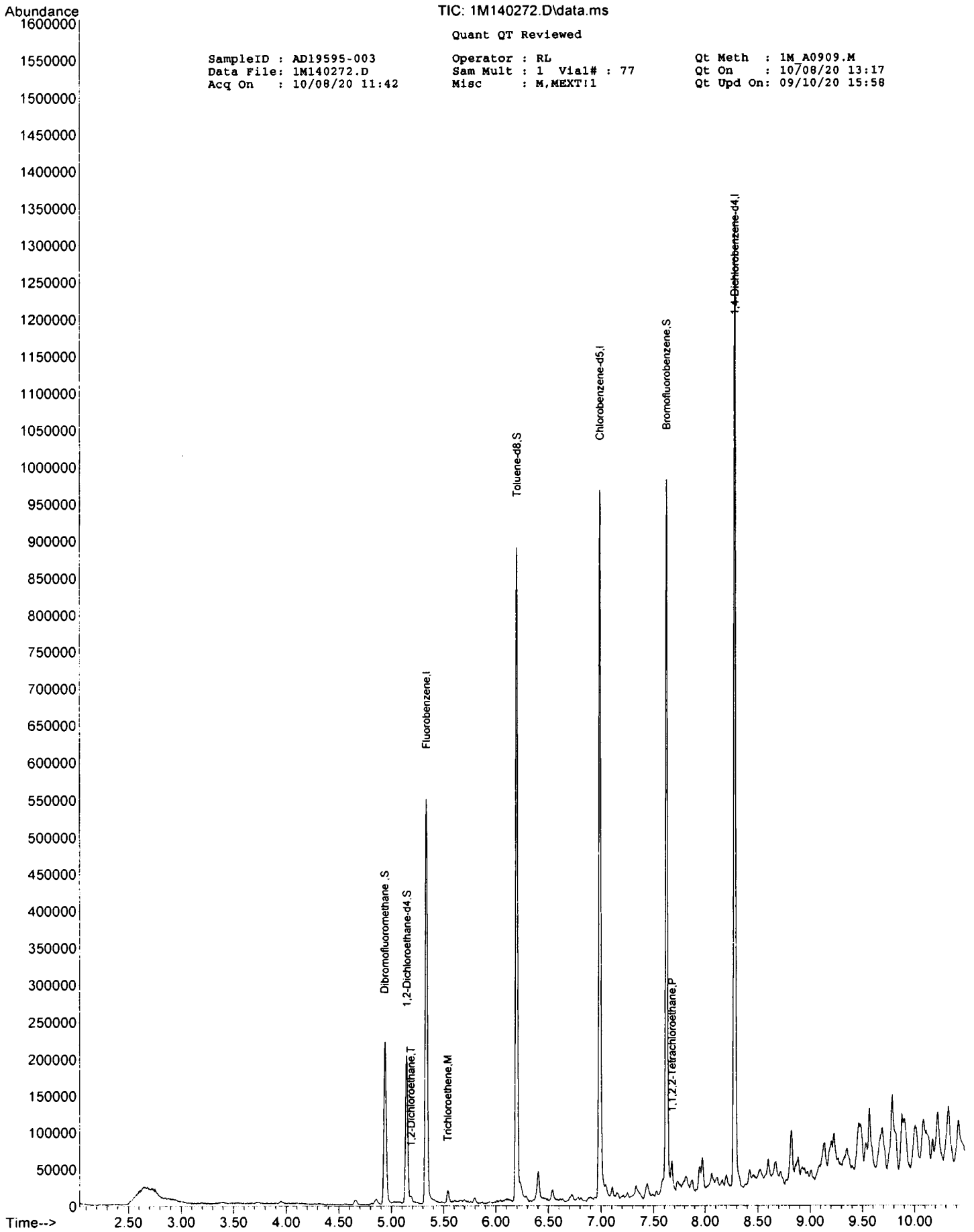
TIC: 1M140272.D\data.ms

Quant QT Reviewed

SampleID : AD19595-003  
Data File: 1M140272.D  
Acq On : 10/08/20 11:42

Operator : RL  
Sam Mult : 1 Vial# : 77  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/08/20 13:17  
Qt Upd On: 09/10/20 15:58



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-004

Client Id: HSI-SB-08(3.5-4)

Data File: 1M140343.D

Analysis Date: 10/09/20 14:01

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Methanol

Extraction Ratio: 7.73g:10ml

Final Vol: NA

Dilution: 64.7

Solids: 87

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.027	0.074	U	56-23-5	Carbon Tetrachloride	0.024	0.074	U
79-34-5	1,1,2,2-Tetrachloroethane	0.033	0.074	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.025</b>	<b>0.074</b>	<b>1.3</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.054	0.074	U	75-00-3	Chloroethane	0.043	0.074	U
79-00-5	1,1,2-Trichloroethane	0.024	0.074	U	67-66-3	Chloroform	0.15	0.15	U
75-34-3	1,1-Dichloroethane	0.032	0.074	U	74-87-3	Chloromethane	0.038	0.074	U
75-35-4	1,1-Dichloroethene	0.040	0.074	U	156-59-2	cis-1,2-Dichloroethene	0.047	0.074	U
87-61-6	1,2,3-Trichlorobenzene	0.058	0.074	U	10061-01-5	cis-1,3-Dichloropropene	0.024	0.074	U
120-82-1	1,2,4-Trichlorobenzene	0.054	0.074	U	110-82-7	Cyclohexane	0.036	0.074	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.062	0.074	U	124-48-1	Dibromochloromethane	0.018	0.074	U
106-93-4	1,2-Dibromoethane	0.025	0.074	U	75-71-8	Dichlorodifluoromethane	0.046	0.074	U
<b>95-50-1</b>	<b>1,2-Dichlorobenzene</b>	<b>0.024</b>	<b>0.074</b>	<b>0.029J</b>	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.035</b>	<b>0.074</b>	<b>0.11</b>
107-06-2	1,2-Dichloroethane	0.047	0.047	U	98-82-8	Isopropylbenzene	0.037	0.074	U
78-87-5	1,2-Dichloropropane	0.022	0.074	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.063</b>	<b>0.074</b>	<b>0.47</b>
541-73-1	1,3-Dichlorobenzene	0.028	0.074	U	79-20-9	Methyl Acetate	0.052	0.074	U
106-46-7	1,4-Dichlorobenzene	0.027	0.074	U	108-87-2	Methylcyclohexane	0.046	0.074	U
123-91-1	1,4-Dioxane	2.9	3.7	U	75-09-2	Methylene Chloride	0.022	0.074	U
78-93-3	2-Butanone	0.056	0.074	U	1634-04-4	Methyl-t-butyl ether	0.023	0.037	U
591-78-6	2-Hexanone	0.045	0.074	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.051</b>	<b>0.074</b>	<b>0.14</b>
108-10-1	4-Methyl-2-Pentanone	0.036	0.074	U	100-42-5	Styrene	0.040	0.074	U
67-64-1	Acetone	0.34	0.37	U	127-18-4	Tetrachloroethene	0.027	0.074	U
71-43-2	Benzene	0.022	0.037	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.024</b>	<b>0.074</b>	<b>0.49</b>
74-97-5	Bromochloromethane	0.058	0.074	U	156-60-5	trans-1,2-Dichloroethene	0.023	0.074	U
75-27-4	Bromodichloromethane	0.026	0.074	U	10061-02-6	trans-1,3-Dichloropropene	0.023	0.074	U
75-25-2	Bromoform	0.040	0.074	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.026</b>	<b>0.074</b>	<b>0.030J</b>
74-83-9	Bromomethane	0.037	0.074	U	75-69-4	Trichlorofluoromethane	0.023	0.074	U
75-15-0	Carbon Disulfide	0.031	0.074	U	75-01-4	Vinyl Chloride	0.053	0.074	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.051</b>	<b>0.074</b>	<b>0.61</b>					

Worksheet #: 569869

**Total Target Concentration 2.6**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-004  
 Data File: 1M140343.D  
 Acq On : 10/09/20 14:01

Operator : BK  
 Sam Mult : 1 Vial# : 17  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 14:19  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	378849	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.986	117	407191	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	275813	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.937	111	103950	29.41	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.03%
39) 1,2-Dichloroethane-d4	5.143	67	58023	30.14	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.47%
66) Toluene-d8	6.198	98	426674	25.93	ug/l	0.00	
Spiked Amount	30.000						Recovery = 86.43%
76) Bromofluorobenzene	7.622	174	213706	30.75	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.50%
Target Compounds							
49) Trichloroethene	5.535	130	1159	0.3972	ug/l	79	Qvalue
67) Toluene	6.233	92	52644	6.5378	ug/l	92	
69) Chlorobenzene	7.002	112	161135	17.1469	ug/l	99	
74) Ethylbenzene	7.047	106	6533	1.4911	ug/l	94	
78) m&p-Xylenes	7.104	106	36829	6.2625	ug/l	97	
79) o-Xylene	7.330	106	11361	1.8866	ug/l	90	
83) 1,2-Dichlorobenzene	8.519	146	3535	0.3952	ug/l	92	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

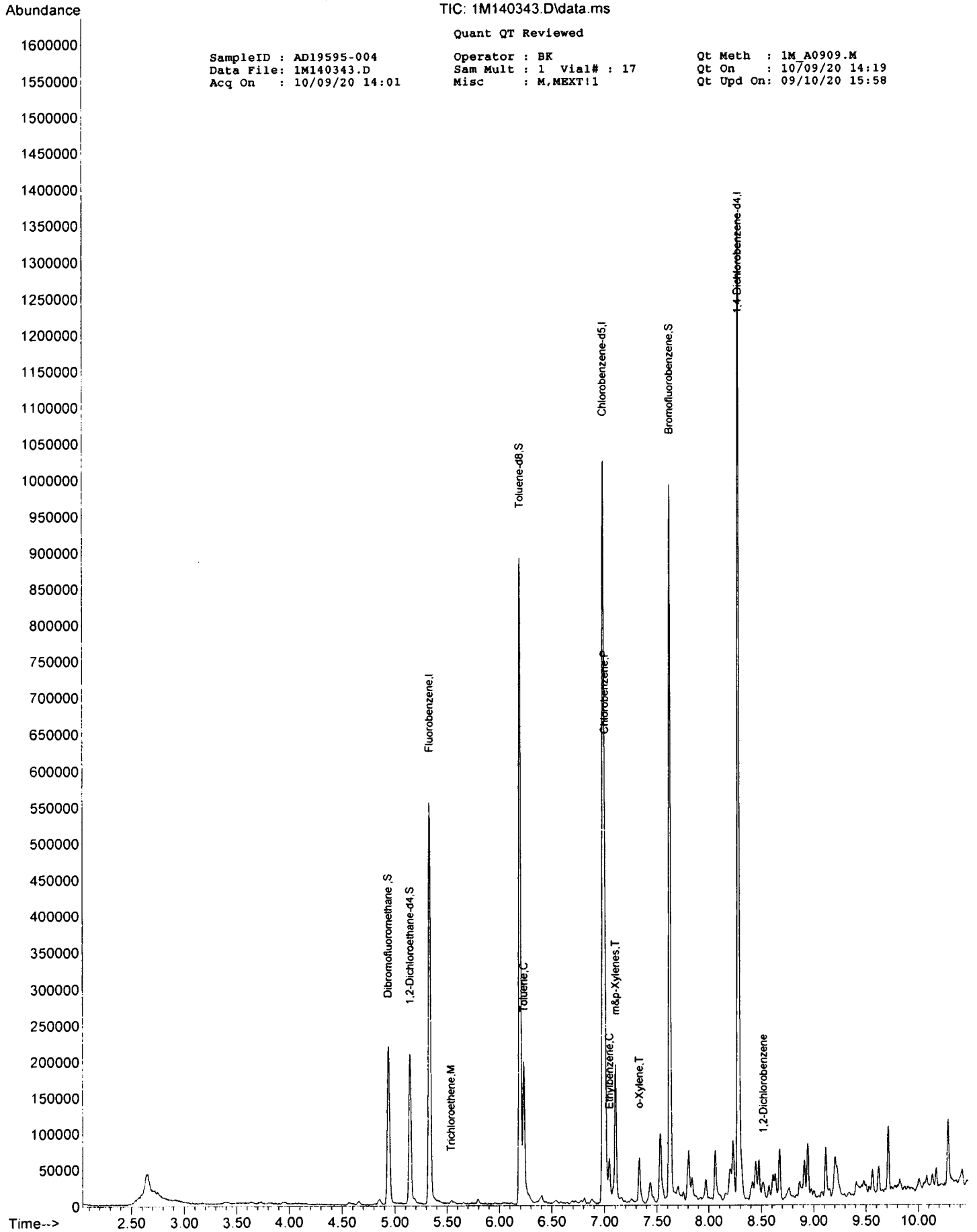
TIC: 1M140343.D\data.ms

Quant QT Reviewed

SampleID : AD19595-004  
Data File: 1M140343.D  
Acq On : 10/09/20 14:01

Operator : BK  
Sam Mult : 1 Vial# : 17  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/09/20 14:19  
Qt Upd On: 09/10/20 15:58





**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-005      Method: EPA 8260D  
 Client Id: HSI-SB-08(8-8.5)      Matrix: Methanol  
 Data File: 1M140275.D      Extraction Ratio: 7.55g:10ml  
 Analysis Date: 10/08/20 12:44      Final Vol: NA  
 Date Rec/Extracted: 10/02/20-NA      Dilution: 66.2  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 82

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.029	0.081	U	56-23-5	Carbon Tetrachloride	0.026	0.081	U
79-34-5	1,1,2,2-Tetrachloroethane	0.036	0.081	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.027</b>	<b>0.081</b>	<b>1.0</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.059	0.081	U	75-00-3	Chloroethane	0.047	0.081	U
79-00-5	1,1,2-Trichloroethane	0.026	0.081	U	67-66-3	Chloroform	0.16	0.16	U
75-34-3	1,1-Dichloroethane	0.035	0.081	U	74-87-3	Chloromethane	0.042	0.081	U
75-35-4	1,1-Dichloroethene	0.043	0.081	U	156-59-2	cis-1,2-Dichloroethene	0.051	0.081	U
87-61-6	1,2,3-Trichlorobenzene	0.064	0.081	U	10061-01-5	cis-1,3-Dichloropropene	0.026	0.081	U
120-82-1	1,2,4-Trichlorobenzene	0.059	0.081	U	110-82-7	Cyclohexane	0.039	0.081	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.067	0.081	U	124-48-1	Dibromochloromethane	0.019	0.081	U
106-93-4	1,2-Dibromoethane	0.028	0.081	U	75-71-8	Dichlorodifluoromethane	0.050	0.081	U
95-50-1	1,2-Dichlorobenzene	0.026	0.081	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.038</b>	<b>0.081</b>	<b>0.15</b>
107-06-2	1,2-Dichloroethane	0.052	0.052	U	98-82-8	Isopropylbenzene	0.040	0.081	U
78-87-5	1,2-Dichloropropane	0.024	0.081	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.069</b>	<b>0.081</b>	<b>0.56</b>
541-73-1	1,3-Dichlorobenzene	0.030	0.081	U	79-20-9	Methyl Acetate	0.057	0.081	U
106-46-7	1,4-Dichlorobenzene	0.030	0.081	U	108-87-2	Methylcyclohexane	0.050	0.081	U
123-91-1	1,4-Dioxane	3.2	4.0	U	75-09-2	Methylene Chloride	0.024	0.081	U
78-93-3	2-Butanone	0.060	0.081	U	1634-04-4	Methyl-t-butyl ether	0.025	0.040	U
591-78-6	2-Hexanone	0.048	0.081	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.055</b>	<b>0.081</b>	<b>0.18</b>
108-10-1	4-Methyl-2-Pentanone	0.039	0.081	U	100-42-5	Styrene	0.044	0.081	U
67-64-1	Acetone	0.37	0.40	U	127-18-4	Tetrachloroethene	0.029	0.081	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.024</b>	<b>0.040</b>	<b>0.040 J</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.026</b>	<b>0.081</b>	<b>0.053 J</b>
74-97-5	Bromochloromethane	0.063	0.081	U	156-60-5	trans-1,2-Dichloroethene	0.025	0.081	U
75-27-4	Bromodichloromethane	0.028	0.081	U	10061-02-6	trans-1,3-Dichloropropene	0.025	0.081	U
75-25-2	Bromoform	0.044	0.081	U	79-01-6	Trichloroethene	0.028	0.081	U
74-83-9	Bromomethane	0.041	0.081	U	75-69-4	Trichlorofluoromethane	0.025	0.081	U
75-15-0	Carbon Disulfide	0.034	0.081	U	75-01-4	Vinyl Chloride	0.057	0.081	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.055</b>	<b>0.081</b>	<b>0.74</b>					

Worksheet #: 569869

**Total Target Concentration 2**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-005 Operator : RL Qt Meth : 1M\_A0909.M  
 Data File: 1M140275.D Sam Mult : 1 Vial# : 80 Qt On : 10/08/20 13:18  
 Acq On : 10/08/20 12:44 Misc : M,MEXT!1 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.333	96	367380	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.985	117	392001	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	261331	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.940	111	102513	29.91	ug/l	0.00	
Spiked Amount	30.000						Recovery = 99.70%
39) 1,2-Dichloroethane-d4	5.146	67	56478	30.25	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.83%
66) Toluene-d8	6.198	98	415480	26.23	ug/l	0.00	
Spiked Amount	30.000						Recovery = 87.43%
76) Bromofluorobenzene	7.622	174	204842	31.11	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.70%
Target Compounds							
50) Benzene	5.191	78	4774	0.4935	ug/l	100	Qvalue
67) Toluene	6.233	92	5121	0.6606	ug/l	99	
69) Chlorobenzene	7.005	112	113937	12.5942	ug/l	99	
74) Ethylbenzene	7.046	106	7852	1.8915	ug/l	96	
78) m&p-Xylenes	7.104	106	38602	6.9277	ug/l	95	
79) o-Xylene	7.326	106	12424	2.1775	ug/l	94	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

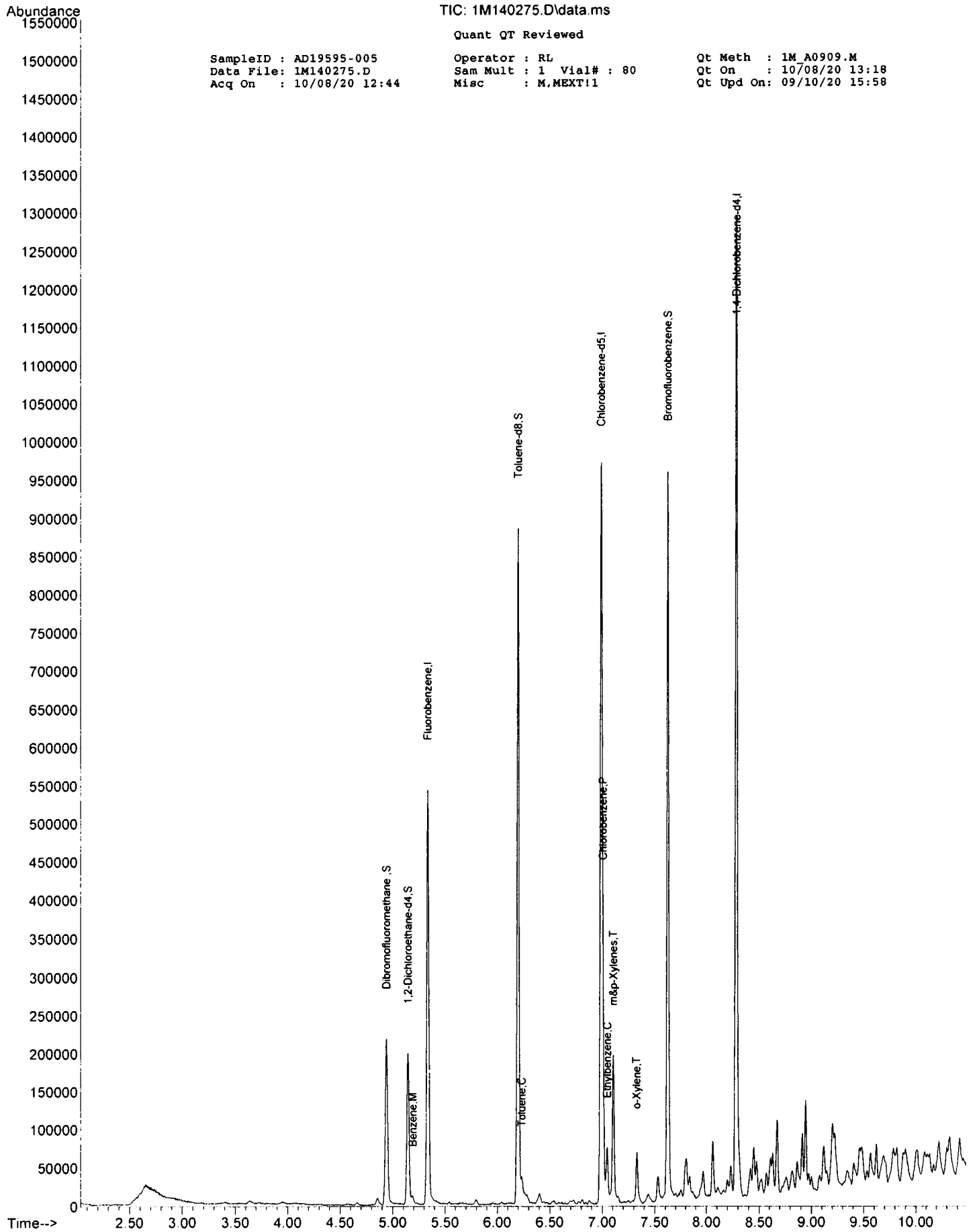
TIC: 1M140275.D\data.ms

Quant QT Reviewed

SampleID : AD19595-005  
Data File: 1M140275.D  
Acq On : 10/08/20 12:44

Operator : RL  
Sam Mult : 1 Vial# : 80  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/08/20 13:18  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-006      Method: EPA 8260D  
 Client Id: HSI-SB-08(12-13)      Matrix: Methanol  
 Data File: 1M140345.D      Extraction Ratio: 7.2g:10ml  
 Analysis Date: 10/09/20 14:43      Final Vol: NA  
 Date Rec/Extracted: 10/02/20-NA      Dilution: 69.4  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 76

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.033	0.091	U	56-23-5	Carbon Tetrachloride	0.029	0.091	U
79-34-5	1,1,2,2-Tetrachloroethane	0.041	0.091	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.030</b>	<b>0.091</b>	<b>3.7</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.066	0.091	U	75-00-3	Chloroethane	0.053	0.091	U
79-00-5	1,1,2-Trichloroethane	0.029	0.091	U	67-66-3	Chloroform	0.18	0.18	U
75-34-3	1,1-Dichloroethane	0.039	0.091	U	74-87-3	Chloromethane	0.047	0.091	U
75-35-4	1,1-Dichloroethene	0.049	0.091	U	156-59-2	cis-1,2-Dichloroethene	0.058	0.091	U
87-61-6	1,2,3-Trichlorobenzene	0.072	0.091	U	10061-01-5	cis-1,3-Dichloropropene	0.029	0.091	U
120-82-1	1,2,4-Trichlorobenzene	0.067	0.091	U	110-82-7	Cyclohexane	0.044	0.091	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.076	0.091	U	124-48-1	Dibromochloromethane	0.022	0.091	U
106-93-4	1,2-Dibromoethane	0.031	0.091	U	75-71-8	Dichlorodifluoromethane	0.057	0.091	U
95-50-1	1,2-Dichlorobenzene	0.030	0.091	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.043</b>	<b>0.091</b>	<b>0.065 J</b>
107-06-2	1,2-Dichloroethane	0.058	0.058	U	98-82-8	Isopropylbenzene	0.045	0.091	U
78-87-5	1,2-Dichloropropane	0.027	0.091	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.078</b>	<b>0.091</b>	<b>0.27</b>
541-73-1	1,3-Dichlorobenzene	0.034	0.091	U	79-20-9	Methyl Acetate	0.064	0.091	U
106-46-7	1,4-Dichlorobenzene	0.033	0.091	U	108-87-2	Methylcyclohexane	0.056	0.091	U
123-91-1	1,4-Dioxane	3.6	4.6	U	75-09-2	Methylene Chloride	0.027	0.091	U
78-93-3	2-Butanone	0.068	0.091	U	1634-04-4	Methyl-t-butyl ether	0.029	0.046	U
591-78-6	2-Hexanone	0.055	0.091	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.062</b>	<b>0.091</b>	<b>0.068 J</b>
108-10-1	4-Methyl-2-Pentanone	0.044	0.091	U	100-42-5	Styrene	0.050	0.091	U
67-64-1	Acetone	0.42	0.46	U	127-18-4	Tetrachloroethene	0.033	0.091	U
71-43-2	<b>Benzene</b>	<b>0.027</b>	<b>0.046</b>	<b>0.13</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.030</b>	<b>0.091</b>	<b>1.1</b>
74-97-5	Bromochloromethane	0.072	0.091	U	156-60-5	trans-1,2-Dichloroethene	0.028	0.091	U
75-27-4	Bromodichloromethane	0.032	0.091	U	10061-02-6	trans-1,3-Dichloropropene	0.028	0.091	U
75-25-2	Bromoform	0.049	0.091	U	79-01-6	Trichloroethene	0.032	0.091	U
74-83-9	Bromomethane	0.046	0.091	U	75-69-4	Trichlorofluoromethane	0.028	0.091	U
75-15-0	Carbon Disulfide	0.039	0.091	U	75-01-4	Vinyl Chloride	0.065	0.091	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.062</b>	<b>0.091</b>	<b>0.34</b>					

Worksheet #: 569869

**Total Target Concentration 5.3**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-006  
 Data File: 1M140345.D  
 Acq On : 10/09/20 14:43

Operator : BK  
 Sam Mult : 1 Vial# : 19  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 15:08  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.336	96	374082	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	397321	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	257473	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.941	111	102756	29.44	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.13%
39) 1,2-Dichloroethane-d4	5.146	67	57294	30.14	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.47%
66) Toluene-d8	6.198	98	418200	26.05	ug/l	0.00	
Spiked Amount	30.000						Recovery = 86.83%
76) Bromofluorobenzene	7.625	174	203761	31.41	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.70%
Target Compounds							
50) Benzene	5.188	78	13910	1.4122	ug/l	100	Qvalue
67) Toluene	6.233	92	94107	11.9774	ug/l	90	
69) Chlorobenzene	7.005	112	368834	40.2238	ug/l	98	
74) Ethylbenzene	7.047	106	2889	0.7064	ug/l	86	
78) m&p-Xylenes	7.104	106	16060	2.9254	ug/l	82	
79) o-Xylene	7.333	106	4185	0.7445	ug/l	93	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

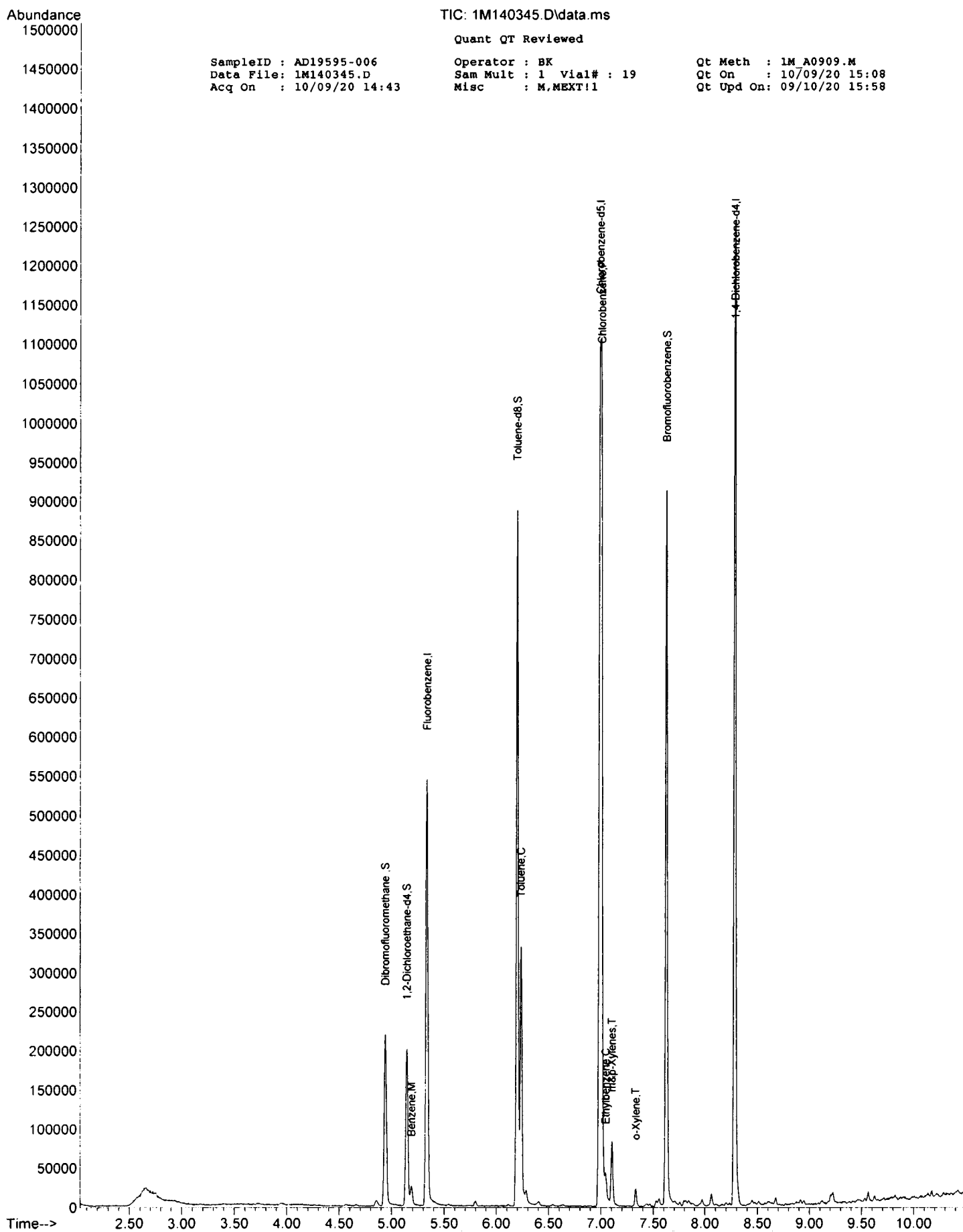
TIC: 1M140345.D\data.ms

Quant QT Reviewed

SampleID : AD19595-006  
Data File: 1M140345.D  
Acq On : 10/09/20 14:43

Operator : BK  
Sam Mult : 1 Vial# : 19  
Misc : M.MEXT!1

Qt Meth : 1M\_A0909.M  
Qt On : 10/09/20 15:08  
Qt Upd On: 09/10/20 15:58



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-007

Client Id: HSI-SB-08(13-13.5)

Data File: 6M133228.D

Analysis Date: 10/07/20 19:12

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 7.34g

Final Vol: NA

Dilution: 0.681

Solids: 77

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00081	0.0018	U	56-23-5	Carbon Tetrachloride	0.00086	0.0018	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00040	0.0018	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.00055</b>	<b>0.0018</b>	<b>0.20</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0012	0.0018	U	75-00-3	Chloroethane	0.0017	0.0018	U
79-00-5	1,1,2-Trichloroethane	0.00041	0.0018	U	67-66-3	Chloroform	0.0012	0.0018	U
75-34-3	1,1-Dichloroethane	0.00077	0.0018	U	74-87-3	Chloromethane	0.0011	0.0018	U
75-35-4	1,1-Dichloroethene	0.0010	0.0018	U	156-59-2	cis-1,2-Dichloroethene	0.00072	0.0018	U
87-61-6	1,2,3-Trichlorobenzene	0.00049	0.0018	U	10061-01-5	cis-1,3-Dichloropropene	0.00047	0.0018	U
120-82-1	1,2,4-Trichlorobenzene	0.00056	0.0018	U	110-82-7	Cyclohexane	0.0011	0.0018	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00049	0.0018	U	124-48-1	Dibromochloromethane	0.00038	0.0018	U
106-93-4	1,2-Dibromoethane	0.00043	0.00088	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0018	U
95-50-1	1,2-Dichlorobenzene	0.00045	0.0018	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.00061</b>	<b>0.00088</b>	<b>0.0019</b>
107-06-2	1,2-Dichloroethane	0.00036	0.0018	U	98-82-8	Isopropylbenzene	0.00073	0.00088	U
78-87-5	1,2-Dichloropropane	0.00073	0.0018	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.0011</b>	<b>0.0011</b>	<b>0.0071</b>
541-73-1	1,3-Dichlorobenzene	0.00049	0.0018	U	79-20-9	Methyl Acetate	0.00085	0.0018	U
106-46-7	1,4-Dichlorobenzene	0.00047	0.0018	U	108-87-2	Methylcyclohexane	0.00080	0.0018	U
123-91-1	1,4-Dioxane	0.043	0.088	U	75-09-2	Methylene Chloride	0.00066	0.0018	U
78-93-3	2-Butanone	0.0011	0.0018	U	<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>0.00048</b>	<b>0.00088</b>	<b>0.0016</b>
591-78-6	2-Hexanone	0.00075	0.0018	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.00063</b>	<b>0.00088</b>	<b>0.0019</b>
108-10-1	4-Methyl-2-Pentanone	0.00051	0.0018	U	100-42-5	Styrene	0.00049	0.0018	U
67-64-1	Acetone	0.0060	0.0088	U	127-18-4	Tetrachloroethene	0.00087	0.0018	U
71-43-2	<b>Benzene</b>	<b>0.00065</b>	<b>0.00088</b>	<b>0.0086</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00058</b>	<b>0.00088</b>	<b>0.0035</b>
74-97-5	Bromochloromethane	0.00062	0.0018	U	156-60-5	trans-1,2-Dichloroethene	0.0011	0.0018	U
75-27-4	Bromodichloromethane	0.00042	0.0018	U	10061-02-6	trans-1,3-Dichloropropene	0.00042	0.0018	U
75-25-2	Bromoform	0.00029	0.0018	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00073</b>	<b>0.0018</b>	<b>0.0033</b>
74-83-9	Bromomethane	0.0014	0.0018	U	75-69-4	Trichlorofluoromethane	0.0010	0.0018	U
75-15-0	Carbon Disulfide	0.0030	0.0030	U	75-01-4	Vinyl Chloride	0.0011	0.0018	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.00063</b>	<b>0.00088</b>	<b>0.0090</b>					

Worksheet #: 569869

**Total Target Concentration 0.23**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-007  
 Data File: 6M133228.D  
 Acq On : 10/07/20 19:12

Operator : BK  
 Sam Mult : 1 Vial# : 21  
 Misc : S,5G!3

Qt Meth : 6M\_S1006.M  
 Qt On : 10/07/20 19:23  
 Qt Upd On: 10/07/20 11:33

Data Path : G:\GcMsData\2020\GCMS\_6\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_6\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.123	96	285338	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.763	117	235170	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.050	152	123170	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.727	111	82097	30.48	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.60%
39) 1,2-Dichloroethane-d4	4.934	67	41778	32.62	ug/l	0.00	
Spiked Amount	30.000						Recovery = 108.73%
66) Toluene-d8	5.983	98	289613	29.44	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.13%
76) Bromofluorobenzene	7.397	174	90998	30.50	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.67%
Target Compounds							
26) Methyl-t-butyl ether	3.666	73	7962	1.7759	ug/l	95	Qvalue
49) Trichloroethene	5.330	130	9967	3.7847	ug/l	93	
50) Benzene	4.977	78	84127	9.7102	ug/l	100	
67) Toluene	6.019	92	24003	3.9261	ug/l	71	
69) Chlorobenzene	6.781	112	1509850	223.9777	ug/l	99	
74) Ethylbenzene	6.818	106	7438	2.1132	ug/l	91	
78) m&p-Xylenes	6.879	106	39329	8.0654	ug/l	91	
79) o-Xylene	7.098	106	10173	2.1721	ug/l	96	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Abundance

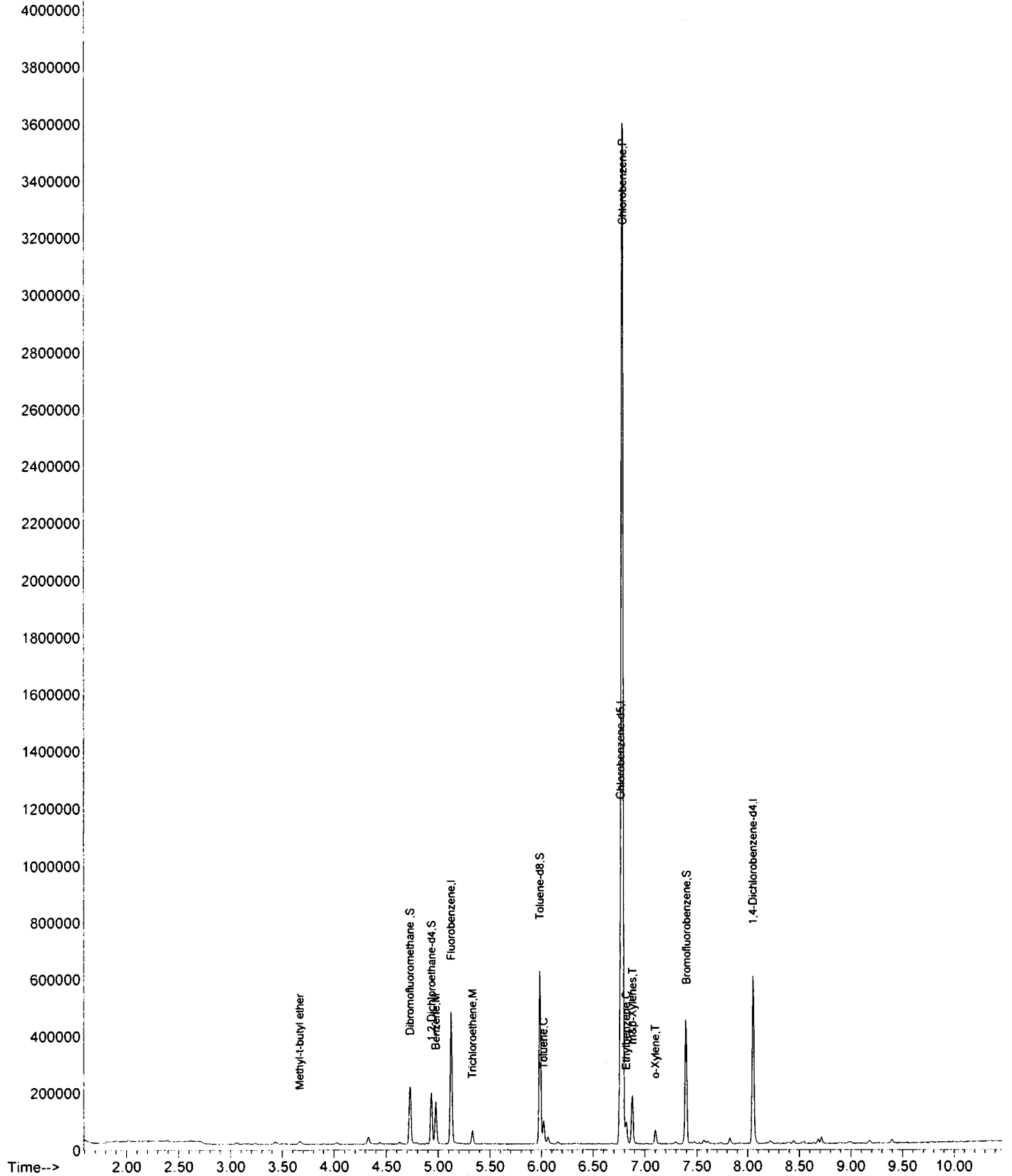
TIC: 6M133228.D\data.ms

Quant QT Reviewed

SampleID : AD19595-007  
Data File: 6M133228.D  
Acq On : 10/07/20 19:12

Operator : BK  
Sam Mult : 1 Vial# : 21  
Misc : S,5G13

Qt Meth : 6M\_S1006.M  
Qt On : 10/07/20 19:23  
Qt Upd On: 10/07/20 11:33



## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-008

Client Id: HSI-SB-09(14-14.5)

Data File: 6M133229.D

Analysis Date: 10/07/20 19:33

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 7.17g

Final Vol: NA

Dilution: 0.697

Solids: 80

				Units: mg/Kg								
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc			
71-55-6	1,1,1-Trichloroethane	0.00080	0.0017	U	56-23-5	Carbon Tetrachloride	0.00085	0.0017	U			
79-34-5	1,1,2,2-Tetrachloroethane	0.00039	0.0017	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.00054</b>	<b>0.0017</b>	<b>0.064</b>			
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0012	0.0017	U	75-00-3	Chloroethane	0.0017	0.0017	U			
79-00-5	1,1,2-Trichloroethane	0.00040	0.0017	U	67-66-3	Chloroform	0.0012	0.0017	U			
75-34-3	1,1-Dichloroethane	0.00076	0.0017	U	74-87-3	Chloromethane	0.0011	0.0017	U			
75-35-4	1,1-Dichloroethene	0.0010	0.0017	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.00071</b>	<b>0.0017</b>	<b>0.040</b>			
87-61-6	1,2,3-Trichlorobenzene	0.00048	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.00046	0.0017	U			
120-82-1	1,2,4-Trichlorobenzene	0.00055	0.0017	U	110-82-7	Cyclohexane	0.0010	0.0017	U			
96-12-8	1,2-Dibromo-3-Chloropropa	0.00048	0.0017	U	124-48-1	Dibromochloromethane	0.00037	0.0017	U			
106-93-4	1,2-Dibromoethane	0.00043	0.00087	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0017	U			
95-50-1	1,2-Dichlorobenzene	0.00044	0.0017	U	100-41-4	Ethylbenzene	0.00060	0.00087	U			
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.00036</b>	<b>0.0017</b>	<b>0.0047</b>	98-82-8	Isopropylbenzene	0.00072	0.00087	U			
78-87-5	1,2-Dichloropropane	0.00071	0.0017	U	179601-23-1	m&p-Xylenes	0.0010	0.0010	U			
541-73-1	1,3-Dichlorobenzene	0.00048	0.0017	U	79-20-9	Methyl Acetate	0.00084	0.0017	U			
106-46-7	1,4-Dichlorobenzene	0.00046	0.0017	U	108-87-2	Methylcyclohexane	0.00078	0.0017	U			
123-91-1	1,4-Dioxane	0.042	0.087	U	75-09-2	Methylene Chloride	0.00065	0.0017	U			
78-93-3	2-Butanone	0.0010	0.0017	U	<b>1634-04-4</b>	<b>Methyl-t-butyl ether</b>	<b>0.00047</b>	<b>0.00087</b>	<b>0.0022</b>			
591-78-6	2-Hexanone	0.00074	0.0017	U	95-47-6	o-Xylene	0.00062	0.00087	U			
108-10-1	4-Methyl-2-Pentanone	0.00051	0.0017	U	100-42-5	Styrene	0.00048	0.0017	U			
67-64-1	Acetone	0.0059	0.0087	U	127-18-4	Tetrachloroethene	0.00085	0.0017	U			
<b>71-43-2</b>	<b>Benzene</b>	<b>0.00064</b>	<b>0.00087</b>	<b>0.0039</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00058</b>	<b>0.00087</b>	<b>0.0038</b>			
74-97-5	Bromochloromethane	0.00061	0.0017	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.0010</b>	<b>0.0017</b>	<b>0.010</b>			
75-27-4	Bromodichloromethane	0.00041	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.00041	0.0017	U			
75-25-2	Bromoform	0.00029	0.0017	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00071</b>	<b>0.0017</b>	<b>0.0062</b>			
74-83-9	Bromomethane	0.0014	0.0017	U	75-69-4	Trichlorofluoromethane	0.0010	0.0017	U			
75-15-0	Carbon Disulfide	0.0030	0.0030	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>0.0011</b>	<b>0.0017</b>	<b>0.0057</b>			
1330-20-7	Xylenes (Total)	0.00062	0.00087	U								

Worksheet #: 569869

**Total Target Concentration 0.14**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-008  
 Data File: 6M133229.D  
 Acq On : 10/07/20 19:33

Operator : BK  
 Sam Mult : 1 Vial# : 22  
 Misc : S,5G!3

Qt Meth : 6M\_S1006.M  
 Qt On : 10/07/20 19:46  
 Qt Upd On: 10/07/20 11:33

Data Path : G:\GcMsData\2020\GCMS\_6\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_6\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
-----							
Internal Standards							
4) Fluorobenzene	5.123	96	345312	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.763	117	275099	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.050	152	136400	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.727	111	100804	30.93	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.10%
39) 1,2-Dichloroethane-d4	4.934	67	50357	32.49	ug/l	0.00	
Spiked Amount	30.000						Recovery = 108.30%
66) Toluene-d8	5.983	98	339279	29.48	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.27%
76) Bromofluorobenzene	7.397	174	107078	32.41	ug/l	0.00	
Spiked Amount	30.000						Recovery = 108.03%
Target Compounds							
9) Vinyl Chloride	1.916	62	22341	6.5679	ug/l	100	
26) Methyl-t-butyl ether	3.666	73	13669	2.5194	ug/l	92	
28) trans-1,2-Dichloroethene	3.678	96	32121	11.5794	ug/l	83	
30) cis-1,2-Dichloroethene	4.434	61	186773	46.3702	ug/l	93	
40) 1,2-Dichloroethane	4.977	62	18135	5.4416	ug/l	90	
49) Trichloroethene	5.330	130	22836	7.1652	ug/l	91	
50) Benzene	4.977	78	46651	4.4494	ug/l	100	
67) Toluene	6.019	92	30886	4.3187	ug/l	93	
69) Chlorobenzene	6.775	112	577121	73.1865	ug/l	100	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

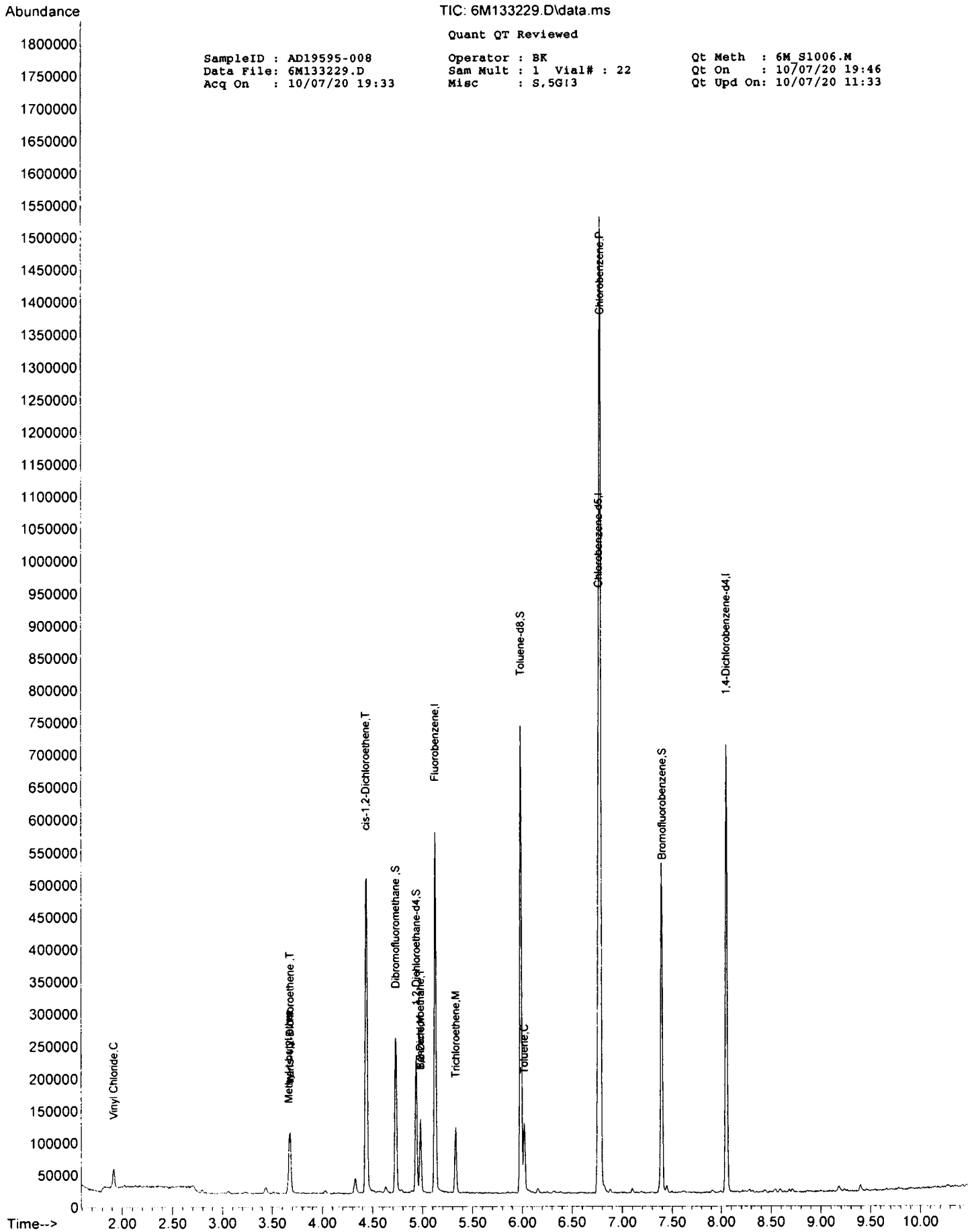
TIC: 6M133229.D\data.ms

Quant QT Reviewed

SampleID : AD19595-008  
Data File: 6M133229.D  
Acq On : 10/07/20 19:33

Operator : BK  
Sam Mult : 1 Vial# : 22  
Misc : S,SG13

Qt Meth : 6M\_S1006.M  
Qt On : 10/07/20 19:46  
Qt Upd On: 10/07/20 11:33



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-009      Method: EPA 8260D  
 Client Id: HSI-SB-10(5.5-6)      Matrix: Methanol  
 Data File: 1M140271.D      Extraction Ratio: 7.91g:10ml  
 Analysis Date: 10/08/20 11:21      Final Vol: NA  
 Date Rec/Extracted: 10/02/20-NA      Dilution: 63.2  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 89

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.025	0.071	U	56-23-5	Carbon Tetrachloride	0.023	0.071	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.032</b>	<b>0.071</b>	<b>0.052J</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.023</b>	<b>0.071</b>	<b>0.17</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.052	0.071	U	75-00-3	Chloroethane	0.041	0.071	U
79-00-5	1,1,2-Trichloroethane	0.023	0.071	U	67-66-3	Chloroform	0.14	0.14	U
75-34-3	1,1-Dichloroethane	0.030	0.071	U	74-87-3	Chloromethane	0.037	0.071	U
75-35-4	1,1-Dichloroethene	0.038	0.071	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.045</b>	<b>0.071</b>	<b>0.40</b>
87-61-6	1,2,3-Trichlorobenzene	0.056	0.071	U	10061-01-5	cis-1,3-Dichloropropene	0.023	0.071	U
120-82-1	1,2,4-Trichlorobenzene	0.052	0.071	U	110-82-7	Cyclohexane	0.035	0.071	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.059	0.071	U	124-48-1	Dibromochloromethane	0.017	0.071	U
106-93-4	1,2-Dibromoethane	0.024	0.071	U	75-71-8	Dichlorodifluoromethane	0.044	0.071	U
95-50-1	1,2-Dichlorobenzene	0.023	0.071	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.033</b>	<b>0.071</b>	<b>0.053J</b>
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.045</b>	<b>0.045</b>	<b>0.070</b>	98-82-8	Isopropylbenzene	0.035	0.071	U
78-87-5	1,2-Dichloropropane	0.021	0.071	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.060</b>	<b>0.071</b>	<b>0.099</b>
541-73-1	1,3-Dichlorobenzene	0.027	0.071	U	79-20-9	Methyl Acetate	0.050	0.071	U
106-46-7	1,4-Dichlorobenzene	0.026	0.071	U	108-87-2	Methylcyclohexane	0.044	0.071	U
123-91-1	1,4-Dioxane	2.8	3.6	U	75-09-2	Methylene Chloride	0.021	0.071	U
78-93-3	2-Butanone	0.053	0.071	U	1634-04-4	Methyl-t-butyl ether	0.022	0.036	U
591-78-6	2-Hexanone	0.043	0.071	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.049</b>	<b>0.071</b>	<b>0.054J</b>
108-10-1	4-Methyl-2-Pentanone	0.035	0.071	U	100-42-5	Styrene	0.039	0.071	U
67-64-1	Acetone	0.33	0.36	U	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.025</b>	<b>0.071</b>	<b>0.028J</b>
71-43-2	Benzene	0.021	0.036	U	<b>108-88-3</b>	<b>Toluene</b>	<b>0.023</b>	<b>0.071</b>	<b>0.040J</b>
74-97-5	Bromochloromethane	0.056	0.071	U	156-60-5	trans-1,2-Dichloroethene	0.022	0.071	U
75-27-4	Bromodichloromethane	0.025	0.071	U	10061-02-6	trans-1,3-Dichloropropene	0.022	0.071	U
75-25-2	Bromoform	0.038	0.071	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.025</b>	<b>0.071</b>	<b>0.24</b>
74-83-9	Bromomethane	0.036	0.071	U	75-69-4	Trichlorofluoromethane	0.022	0.071	U
75-15-0	Carbon Disulfide	0.030	0.071	U	75-01-4	Vinyl Chloride	0.050	0.071	U
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.049</b>	<b>0.071</b>	<b>0.15</b>					

Worksheet #: 569869

**Total Target Concentration 1.2**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-009  
 Data File: 1M140271.D  
 Acq On : 10/08/20 11:21

Operator : RL  
 Sam Mult : 1 Vial# : 76  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/08/20 13:17  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.336	96	372819	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	388024	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	262906	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.940	111	105934	30.45	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.50%
39) 1,2-Dichloroethane-d4	5.143	67	56918	30.05	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.17%
66) Toluene-d8	6.198	98	417770	26.64	ug/l	0.00	
Spiked Amount	30.000						Recovery = 88.80%
76) Bromofluorobenzene	7.622	174	208161	31.42	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.73%
Target Compounds							
30) cis-1,2-Dichloroethene	4.657	61	24746	5.6687	ug/l	94	
40) 1,2-Dichloroethane	5.188	62	3648	0.9806	ug/l	100	
49) Trichloroethene	5.538	130	9851	3.4305	ug/l	94	
65) Tetrachloroethene	6.538	164	1114	0.3978	ug/l	94	
67) Toluene	6.230	92	4299	0.5603	ug/l	68	
69) Chlorobenzene	7.005	112	21850	2.4400	ug/l	91	
74) Ethylbenzene	7.046	106	3136	0.7509	ug/l	64	
75) 1,1,2,2-Tetrachloroethane	7.670	83	3764	0.7252	ug/l	92	
78) m&p-Xylenes	7.108	106	7779	1.3877	ug/l	88	
79) o-Xylene	7.329	106	4340	0.7561	ug/l	88	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

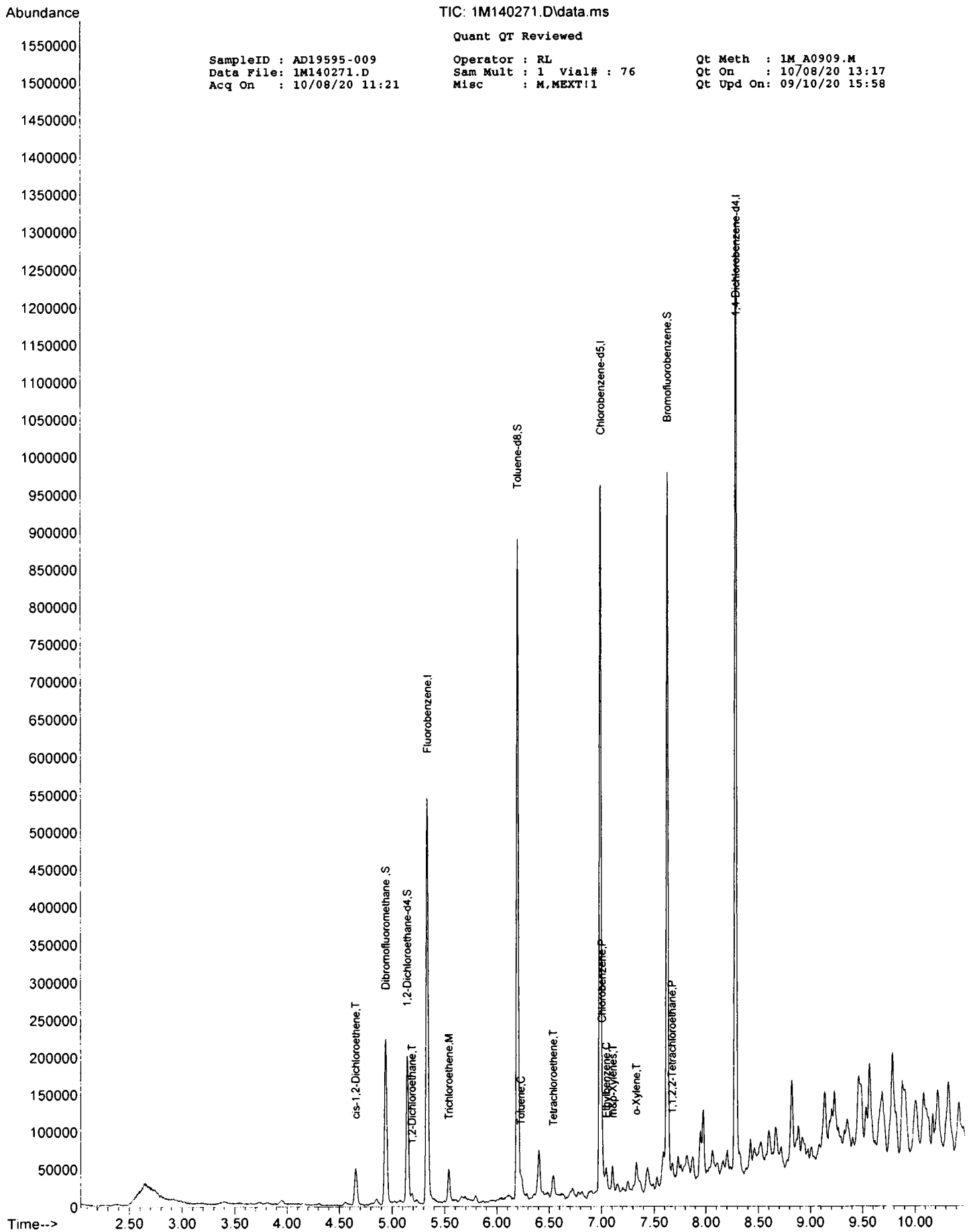
TIC: 1M140271.D\data.ms

Quant QT Reviewed

SampleID : AD19595-009  
 Data File: 1M140271.D  
 Acq On : 10/08/20 11:21

Operator : RL  
 Sam Mult : 1 Vial# : 76  
 Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
 Qt On : 10/08/20 13:17  
 Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-010      Method: EPA 8260D  
 Client Id: HSI-SB-10(7-7.5)      Matrix: Methanol  
 Data File: 1M140273.D      Extraction Ratio: 8.1g:10ml  
 Analysis Date: 10/08/20 12:02      Final Vol: NA  
 Date Rec/Extracted: 10/02/20-NA      Dilution: 61.7  
 Column: DB-624 25M 0.200mm ID 1.12um film      Solids: 83

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.027	0.074	U	56-23-5	Carbon Tetrachloride	0.024	0.074	U
79-34-5	1,1,2,2-Tetrachloroethane	0.033	0.074	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.025</b>	<b>0.074</b>	<b>0.81</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.054	0.074	U	75-00-3	Chloroethane	0.043	0.074	U
79-00-5	1,1,2-Trichloroethane	0.024	0.074	U	67-66-3	Chloroform	0.15	0.15	U
75-34-3	1,1-Dichloroethane	0.032	0.074	U	74-87-3	Chloromethane	0.038	0.074	U
75-35-4	1,1-Dichloroethene	0.040	0.074	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.047</b>	<b>0.074</b>	<b>0.81</b>
87-61-6	1,2,3-Trichlorobenzene	0.059	0.074	U	10061-01-5	cis-1,3-Dichloropropene	0.024	0.074	U
120-82-1	1,2,4-Trichlorobenzene	0.054	0.074	U	110-82-7	Cyclohexane	0.036	0.074	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.062	0.074	U	124-48-1	Dibromochloromethane	0.018	0.074	U
106-93-4	1,2-Dibromoethane	0.025	0.074	U	75-71-8	Dichlorodifluoromethane	0.046	0.074	U
95-50-1	1,2-Dichlorobenzene	0.024	0.074	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.035</b>	<b>0.074</b>	<b>0.045J</b>
107-06-2	1,2-Dichloroethane	0.047	0.047	U	98-82-8	Isopropylbenzene	0.037	0.074	U
78-87-5	1,2-Dichloropropane	0.022	0.074	U	179601-23-1	m&p-Xylenes	0.063	0.074	U
541-73-1	1,3-Dichlorobenzene	0.028	0.074	U	79-20-9	Methyl Acetate	0.052	0.074	U
106-46-7	1,4-Dichlorobenzene	0.027	0.074	U	108-87-2	Methylcyclohexane	0.046	0.074	U
123-91-1	1,4-Dioxane	2.9	3.7	U	75-09-2	Methylene Chloride	0.022	0.074	U
78-93-3	2-Butanone	0.056	0.074	U	1634-04-4	Methyl-t-butyl ether	0.023	0.037	U
591-78-6	2-Hexanone	0.045	0.074	U	95-47-6	o-Xylene	0.051	0.074	U
108-10-1	4-Methyl-2-Pentanone	0.036	0.074	U	100-42-5	Styrene	0.040	0.074	U
67-64-1	Acetone	0.34	0.37	U	127-18-4	Tetrachloroethene	0.027	0.074	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.022</b>	<b>0.037</b>	<b>0.031J</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.024</b>	<b>0.074</b>	<b>0.063J</b>
74-97-5	Bromochloromethane	0.058	0.074	U	156-60-5	trans-1,2-Dichloroethene	0.023	0.074	U
75-27-4	Bromodichloromethane	0.026	0.074	U	10061-02-6	trans-1,3-Dichloropropene	0.023	0.074	U
75-25-2	Bromoform	0.040	0.074	U	79-01-6	Trichloroethene	0.026	0.074	U
74-83-9	Bromomethane	0.037	0.074	U	75-69-4	Trichlorofluoromethane	0.023	0.074	U
75-15-0	Carbon Disulfide	0.031	0.074	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>0.053</b>	<b>0.074</b>	<b>0.75</b>
1330-20-7	Xylenes (Total)	0.051	0.074	U					

Worksheet #: 569869

**Total Target Concentration 2.5**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.



SampleID : AD19595-010  
 Data File: 1M140273.D  
 Acq On : 10/08/20 12:02

Operator : RL  
 Sam Mult : 1 Vial# : 78  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/08/20 13:18  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.336	96	381868	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	401122	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	269577	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.941	111	104453	29.31	ug/l	0.00	
Spiked Amount	30.000						Recovery = 97.70%
39) 1,2-Dichloroethane-d4	5.143	67	59621	30.73	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.43%
66) Toluene-d8	6.198	98	425188	26.23	ug/l	0.00	
Spiked Amount	30.000						Recovery = 87.43%
76) Bromofluorobenzene	7.622	174	209743	30.88	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.93%
Target Compounds							
9) Vinyl Chloride	2.391	62	28372	10.0861	ug/l	100	Qvalue
30) cis-1,2-Dichloroethene	4.654	61	48900	10.9363	ug/l	97	
50) Benzene	5.188	78	4154m	0.4131	ug/l		
67) Toluene	6.230	92	6732	0.8487	ug/l	85	
69) Chlorobenzene	7.005	112	101141	10.9256	ug/l	97	
74) Ethylbenzene	7.047	106	2619m	0.6116	ug/l		
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

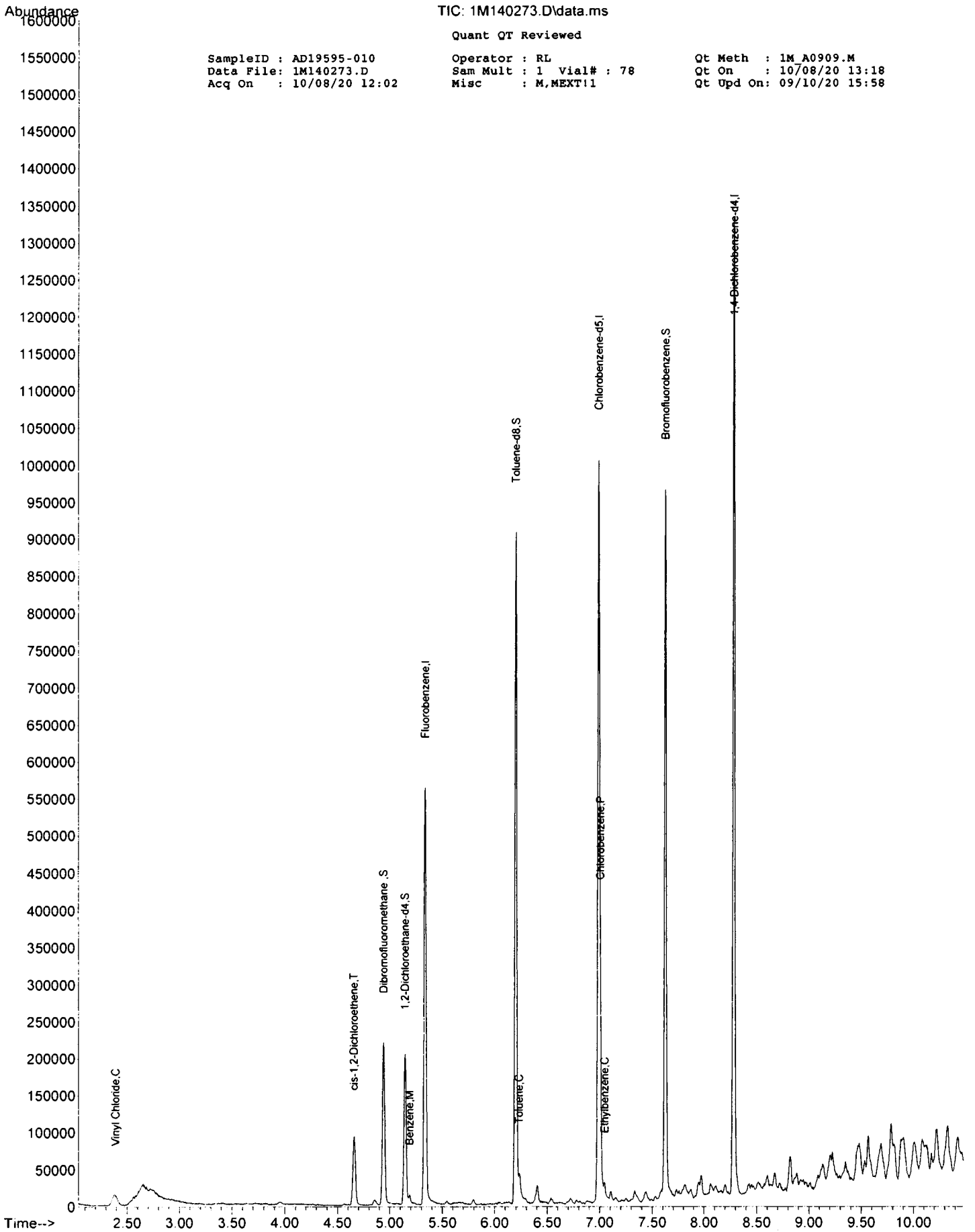
TIC: 1M140273.D\data.ms

Quant QT Reviewed

SampleID : AD19595-010  
Data File: 1M140273.D  
Acq On : 10/08/20 12:02

Operator : RL  
Sam Mult : 1 Vial# : 78  
Misc : M,MEXT11

Qt Meth : 1M\_A0909.M  
Qt On : 10/08/20 13:18  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-011  
 Client Id: HSI-SB-10(8-8.5)  
 Data File: 6M133230.D  
 Analysis Date: 10/07/20 19:54  
 Date Rec/Extracted: 10/02/20-NA  
 Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
 Matrix: Soil  
 Initial Vol: 7.36g  
 Final Vol: NA  
 Dilution: 0.679  
 Solids: 82

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00076	0.0017	U	56-23-5	Carbon Tetrachloride	0.00080	0.0017	U
<b>79-34-5</b>	<b>1,1,2,2-Tetrachloroethane</b>	<b>0.00037</b>	<b>0.0017</b>	<b>0.028</b>	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.00051</b>	<b>0.0017</b>	<b>0.052</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0012	0.0017	U	75-00-3	Chloroethane	0.0016	0.0017	U
<b>79-00-5</b>	<b>1,1,2-Trichloroethane</b>	<b>0.00038</b>	<b>0.0017</b>	<b>0.0043</b>	67-66-3	Chloroform	0.0011	0.0017	U
75-34-3	1,1-Dichloroethane	0.00072	0.0017	U	74-87-3	Chloromethane	0.0010	0.0017	U
75-35-4	1,1-Dichloroethene	0.00095	0.0017	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.00067</b>	<b>0.0017</b>	<b>0.059</b>
87-61-6	1,2,3-Trichlorobenzene	0.00046	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.00044	0.0017	U
120-82-1	1,2,4-Trichlorobenzene	0.00052	0.0017	U	110-82-7	Cyclohexane	0.00099	0.0017	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00046	0.0017	U	124-48-1	Dibromochloromethane	0.00036	0.0017	U
106-93-4	1,2-Dibromoethane	0.00041	0.00083	U	75-71-8	Dichlorodifluoromethane	0.0012	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.00042	0.0017	U	100-41-4	Ethylbenzene	0.00057	0.00083	U
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.00034</b>	<b>0.0017</b>	<b>0.018</b>	98-82-8	Isopropylbenzene	0.00069	0.00083	U
78-87-5	1,2-Dichloropropane	0.00068	0.0017	U	179601-23-1	m&p-Xylenes	0.00099	0.00099	U
541-73-1	1,3-Dichlorobenzene	0.00046	0.0017	U	79-20-9	Methyl Acetate	0.00080	0.0017	U
106-46-7	1,4-Dichlorobenzene	0.00044	0.0017	U	108-87-2	Methylcyclohexane	0.00075	0.0017	U
123-91-1	1,4-Dioxane	0.040	0.083	U	75-09-2	Methylene Chloride	0.00062	0.0017	U
78-93-3	2-Butanone	0.00099	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00045	0.00083	U
591-78-6	2-Hexanone	0.00070	0.0017	U	95-47-6	o-Xylene	0.00059	0.00083	U
108-10-1	4-Methyl-2-Pentanone	0.00048	0.0017	U	100-42-5	Styrene	0.00046	0.0017	U
<b>67-64-1</b>	<b>Acetone</b>	<b>0.0056</b>	<b>0.0083</b>	<b>0.019</b>	<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>0.00081</b>	<b>0.0017</b>	<b>0.0035</b>
<b>71-43-2</b>	<b>Benzene</b>	<b>0.00060</b>	<b>0.00083</b>	<b>0.0018</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.00055</b>	<b>0.00083</b>	<b>0.0030</b>
74-97-5	Bromochloromethane	0.00058	0.0017	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.00099</b>	<b>0.0017</b>	<b>0.0019</b>
75-27-4	Bromodichloromethane	0.00039	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.00039	0.0017	U
75-25-2	Bromoform	0.00027	0.0017	U	<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.00068</b>	<b>0.0017</b>	<b>0.061</b>
74-83-9	Bromomethane	0.0013	0.0017	U	75-69-4	Trichlorofluoromethane	0.00098	0.0017	U
75-15-0	Carbon Disulfide	0.0028	0.0028	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>0.0010</b>	<b>0.0017</b>	<b>0.010</b>
1330-20-7	Xylenes (Total)	0.00059	0.00083	U					

Worksheet #: 569869

**Total Target Concentration 0.26**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-011  
 Data File: 6M133230.D  
 Acq On : 10/07/20 19:54

Operator : BK  
 Sam Mult : 1 Vial# : 23  
 Misc : S,5G!3

Qt Meth : 6M\_S1006.M  
 Qt On : 10/07/20 20:13  
 Qt Upd On: 10/07/20 11:33

Data Path : G:\GcMsData\2020\GCMS\_6\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_6\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.123	96	342747	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.763	117	277307	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.049	152	141317	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.727	111	100459	31.05	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.50%
39) 1,2-Dichloroethane-d4	4.934	67	50063	32.55	ug/l	0.00	
Spiked Amount	30.000						Recovery = 108.50%
66) Toluene-d8	5.983	98	343385	29.60	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.67%
76) Bromofluorobenzene	7.397	174	103889	30.35	ug/l	0.00	
Spiked Amount	30.000						Recovery = 101.17%
Target Compounds							
9) Vinyl Chloride	1.916	62	41016	12.1483	ug/l	93	Qvalue
19) Acetone	3.056	43	12862	22.9134	ug/l	84	
28) trans-1,2-Dichloroethene	3.672	96	6235	2.2645	ug/l	87	
30) cis-1,2-Dichloroethene	4.434	61	286719	71.7165	ug/l	95	
40) 1,2-Dichloroethane	4.977	62	72563	21.9361	ug/l	96	
49) Trichloroethene	5.330	130	233670	73.8671	ug/l	96	
50) Benzene	4.977	78	22358	2.1484	ug/l	100	
60) 1,1,2-Trichloroethane	6.220	97	12402	5.1979	ug/l	89	
65) Tetrachloroethene	6.318	164	10796	4.1960	ug/l	97	
67) Toluene	6.019	92	26257	3.6422	ug/l	92	
69) Chlorobenzene	6.781	112	496063	62.4064	ug/l	99	
75) 1,1,2,2-Tetrachloroethane	7.446	83	87927	33.3284	ug/l	97	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

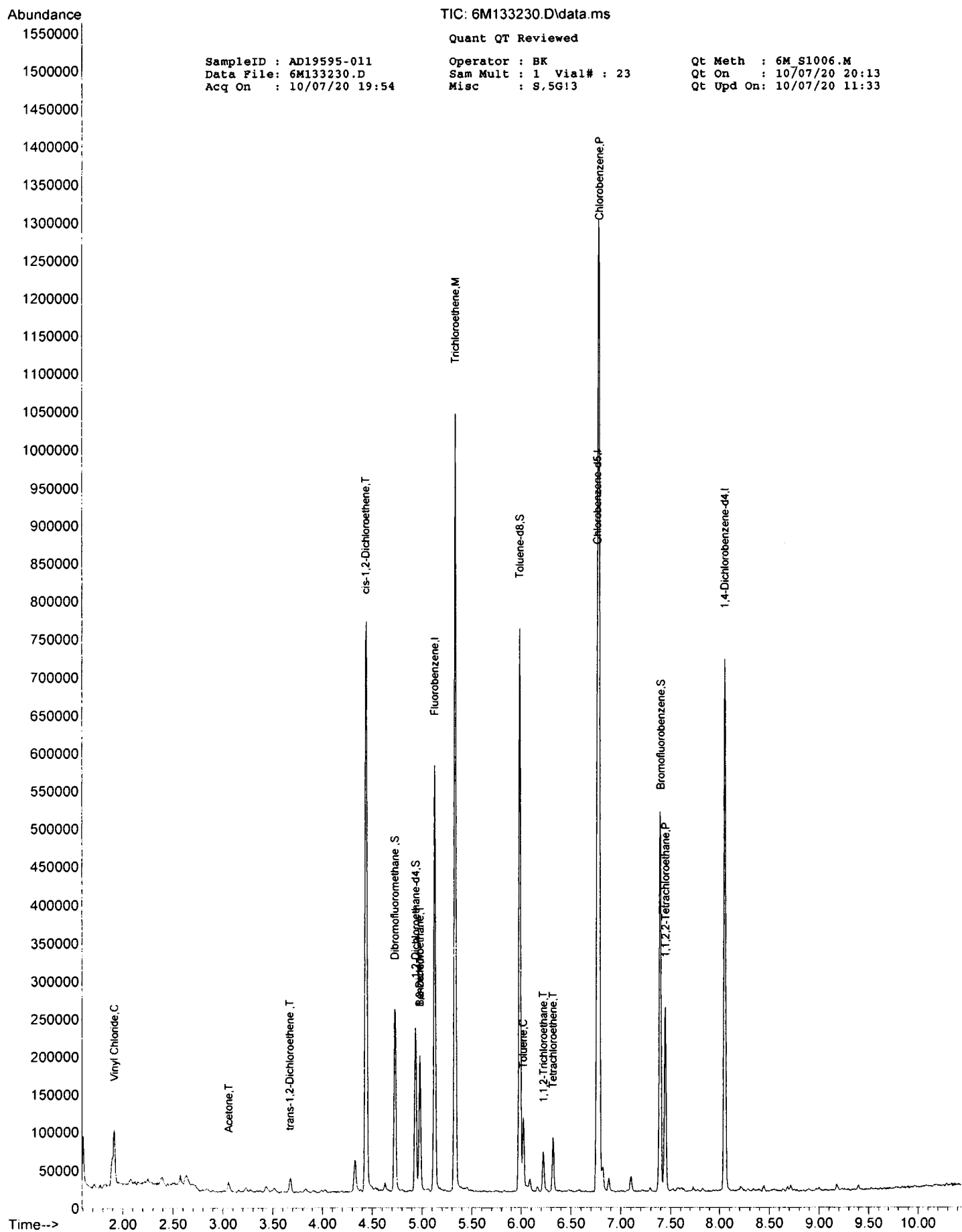
TIC: 6M133230.D\data.ms

Quant QT Reviewed

SampleID : AD19595-011  
 Data File: 6M133230.D  
 Acq On : 10/07/20 19:54

Operator : BK  
 Sam Mult : 1 Vial# : 23  
 Misc : S,5G13

Qt Meth : 6M\_S1006.M  
 Qt On : 10/07/20 20:13  
 Qt Upd On: 10/07/20 11:33



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AD19595-012  
Client Id: HSI-SB-D2  
Data File: 1M140346.D  
Analysis Date: 10/09/20 15:03  
Date Rec/Extracted: 10/02/20-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Methanol  
Extraction Ratio: 7.07g:10ml  
Final Vol: NA  
Dilution: 70.7  
Solids: 76

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.033	0.093	U	56-23-5	Carbon Tetrachloride	0.030	0.093	U
79-34-5	1,1,2,2-Tetrachloroethane	0.042	0.093	U	<b>108-90-7</b>	<b>Chlorobenzene</b>	<b>0.031</b>	<b>0.093</b>	<b>3.7</b>
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.068	0.093	U	75-00-3	Chloroethane	0.054	0.093	U
79-00-5	1,1,2-Trichloroethane	0.030	0.093	U	67-66-3	Chloroform	0.18	0.18	U
75-34-3	1,1-Dichloroethane	0.040	0.093	U	74-87-3	Chloromethane	0.048	0.093	U
75-35-4	1,1-Dichloroethene	0.050	0.093	U	<b>156-59-2</b>	<b>cis-1,2-Dichloroethene</b>	<b>0.059</b>	<b>0.093</b>	<b>0.40</b>
87-61-6	1,2,3-Trichlorobenzene	0.073	0.093	U	10061-01-5	cis-1,3-Dichloropropene	0.030	0.093	U
120-82-1	1,2,4-Trichlorobenzene	0.068	0.093	U	110-82-7	Cyclohexane	0.045	0.093	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.078	0.093	U	124-48-1	Dibromochloromethane	0.022	0.093	U
106-93-4	1,2-Dibromoethane	0.032	0.093	U	75-71-8	Dichlorodifluoromethane	0.058	0.093	U
95-50-1	1,2-Dichlorobenzene	0.030	0.093	U	<b>100-41-4</b>	<b>Ethylbenzene</b>	<b>0.043</b>	<b>0.093</b>	<b>0.069J</b>
107-06-2	1,2-Dichloroethane	0.059	0.059	U	98-82-8	Isopropylbenzene	0.046	0.093	U
78-87-5	1,2-Dichloropropane	0.028	0.093	U	<b>179601-23-1</b>	<b>m&amp;p-Xylenes</b>	<b>0.079</b>	<b>0.093</b>	<b>0.25</b>
541-73-1	1,3-Dichlorobenzene	0.035	0.093	U	79-20-9	Methyl Acetate	0.065	0.093	U
106-46-7	1,4-Dichlorobenzene	0.034	0.093	U	108-87-2	Methylcyclohexane	0.057	0.093	U
123-91-1	1,4-Dioxane	3.7	4.7	U	75-09-2	Methylene Chloride	0.027	0.093	U
78-93-3	2-Butanone	0.070	0.093	U	1634-04-4	Methyl-t-butyl ether	0.029	0.047	U
591-78-6	2-Hexanone	0.056	0.093	U	<b>95-47-6</b>	<b>o-Xylene</b>	<b>0.064</b>	<b>0.093</b>	<b>0.076J</b>
<b>108-10-1</b>	<b>4-Methyl-2-Pentanone</b>	<b>0.045</b>	<b>0.093</b>	<b>4.1</b>	100-42-5	Styrene	0.051	0.093	U
67-64-1	Acetone	0.43	0.47	U	127-18-4	Tetrachloroethene	0.033	0.093	U
<b>71-43-2</b>	<b>Benzene</b>	<b>0.028</b>	<b>0.047</b>	<b>0.12</b>	<b>108-88-3</b>	<b>Toluene</b>	<b>0.030</b>	<b>0.093</b>	<b>5.4</b>
74-97-5	Bromochloromethane	0.073	0.093	U	<b>156-60-5</b>	<b>trans-1,2-Dichloroethene</b>	<b>0.029</b>	<b>0.093</b>	<b>0.068J</b>
75-27-4	Bromodichloromethane	0.032	0.093	U	10061-02-6	trans-1,3-Dichloropropene	0.029	0.093	U
75-25-2	Bromoform	0.050	0.093	U	79-01-6	Trichloroethene	0.032	0.093	U
74-83-9	Bromomethane	0.047	0.093	U	75-69-4	Trichlorofluoromethane	0.029	0.093	U
75-15-0	Carbon Disulfide	0.039	0.093	U	<b>75-01-4</b>	<b>Vinyl Chloride</b>	<b>0.066</b>	<b>0.093</b>	<b>1.1</b>
<b>1330-20-7</b>	<b>Xylenes (Total)</b>	<b>0.064</b>	<b>0.093</b>	<b>0.33</b>					

Worksheet #: 569869

**Total Target Concentration 15**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-012  
 Data File: 1M140346.D  
 Acq On : 10/09/20 15:03

Operator : BK  
 Sam Mult : 1 Vial# : 20  
 Misc : M,MEXT!1

Qt Meth : 1M A0909.M  
 Qt On : 10/09/20 15:28  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.336	96	373395	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.989	117	392590	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.281	152	258244	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.940	111	102581	29.44	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.13%
39) 1,2-Dichloroethane-d4	5.146	67	56052	29.54	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.47%
66) Toluene-d8	6.198	98	424412	26.75	ug/l	0.00	
Spiked Amount	30.000						Recovery = 89.17%
76) Bromofluorobenzene	7.625	174	199769	30.70	ug/l	0.00	
Spiked Amount	30.000						Recovery = 102.33%
Target Compounds							
9) Vinyl Chloride	2.384	62	32405	11.7813	ug/l	96	
28) trans-1,2-Dichloroethene	3.947	96	1685	0.7342	ug/l	80	
30) cis-1,2-Dichloroethene	4.661	61	18935	4.3308	ug/l	92	
50) Benzene	5.188	78	12353	1.2564	ug/l	100	
63) 4-Methyl-2-Pentanone	6.114	43	156249	44.2235	ug/l	94	
67) Toluene	6.236	92	452914	58.3388	ug/l	92	
69) Chlorobenzene	7.005	112	361438	39.8922	ug/l	98	
74) Ethylbenzene	7.050	106	3022	0.7367	ug/l	88	
78) m&p-Xylenes	7.108	106	15074	2.7376	ug/l	96	
79) o-Xylene	7.333	106	4618	0.8190	ug/l	83	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed



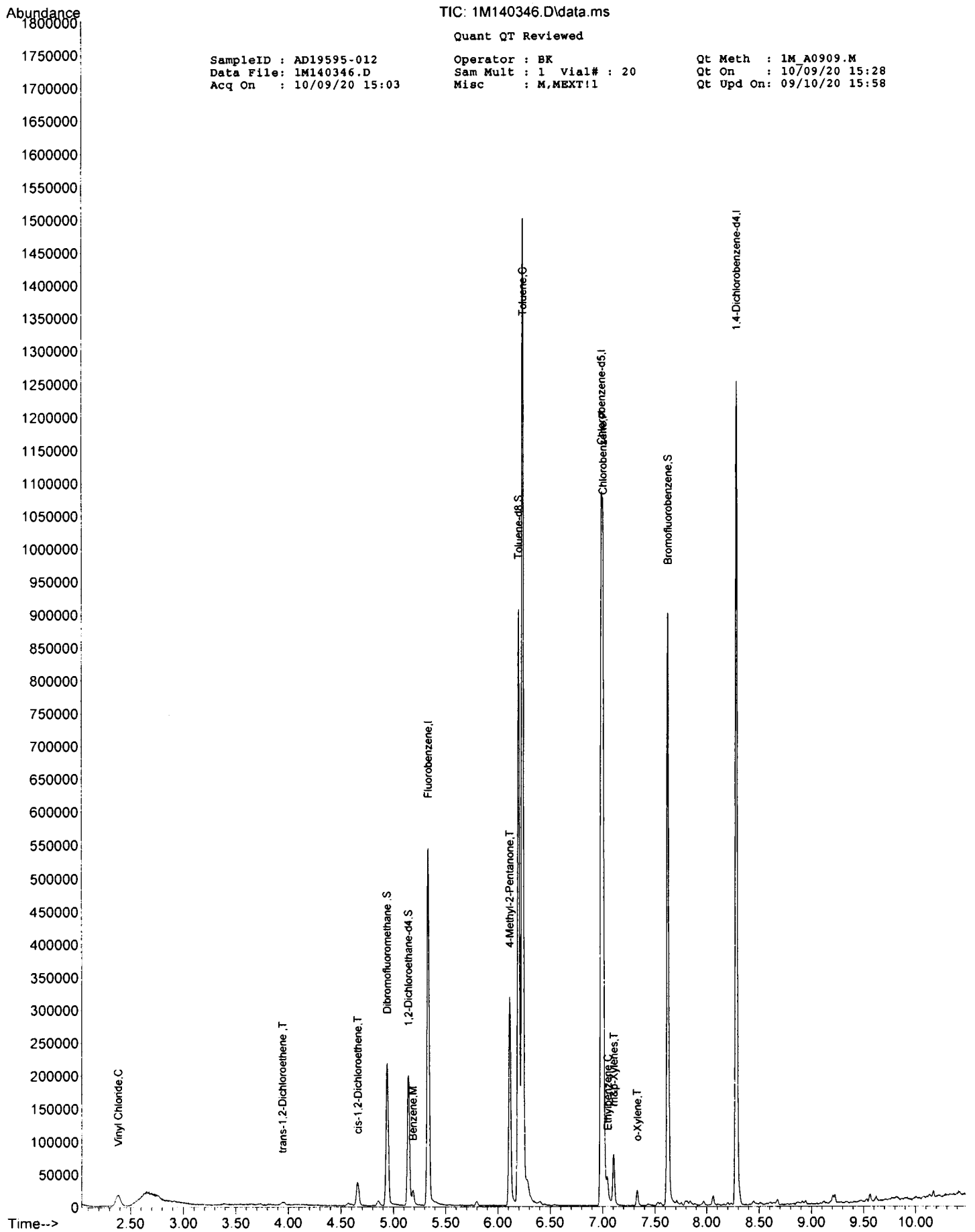
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Quant QT Reviewed

SampleID : AD19595-012  
 Data File: 1M140346.D  
 Acq On : 10/09/20 15:03

Operator : BK  
 Sam Mult : 1 Vial# : 20  
 Misc : M,MEXT!1

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 15:28  
 Qt Upd On: 09/10/20 15:58





## Form1

## ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Method: EPA 8260D

Client Id:

Matrix: Methanol

Data File: 1M140250.D

Extraction Ratio: 5g:10ml

Analysis Date: 10/08/20 04:06

Final Vol: NA

Date Rec/Extracted:

Dilution: 100

Column: DB-624 25M 0.200mm ID 1.12um film

Solids: 100

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.036	0.10	U	56-23-5	Carbon Tetrachloride	0.032	0.10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.045	0.10	U	108-90-7	Chlorobenzene	0.033	0.10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.073	0.10	U	75-00-3	Chloroethane	0.058	0.10	U
79-00-5	1,1,2-Trichloroethane	0.032	0.10	U	67-66-3	Chloroform	0.20	0.20	U
75-34-3	1,1-Dichloroethane	0.043	0.10	U	74-87-3	Chloromethane	0.052	0.10	U
75-35-4	1,1-Dichloroethene	0.053	0.10	U	156-59-2	cis-1,2-Dichloroethene	0.064	0.10	U
87-61-6	1,2,3-Trichlorobenzene	0.079	0.10	U	10061-01-5	cis-1,3-Dichloropropene	0.032	0.10	U
120-82-1	1,2,4-Trichlorobenzene	0.073	0.10	U	110-82-7	Cyclohexane	0.049	0.10	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.083	0.10	U	124-48-1	Dibromochloromethane	0.024	0.10	U
106-93-4	1,2-Dibromoethane	0.034	0.10	U	75-71-8	Dichlorodifluoromethane	0.062	0.10	U
95-50-1	1,2-Dichlorobenzene	0.032	0.10	U	100-41-4	Ethylbenzene	0.047	0.10	U
107-06-2	1,2-Dichloroethane	0.064	0.064	U	98-82-8	Isopropylbenzene	0.049	0.10	U
78-87-5	1,2-Dichloropropane	0.030	0.10	U	179601-23-1	m&p-Xylenes	0.085	0.10	U
541-73-1	1,3-Dichlorobenzene	0.038	0.10	U	79-20-9	Methyl Acetate	0.070	0.10	U
106-46-7	1,4-Dichlorobenzene	0.037	0.10	U	108-87-2	Methylcyclohexane	0.061	0.10	U
123-91-1	1,4-Dioxane	3.9	5.0	U	75-09-2	Methylene Chloride	0.029	0.10	U
78-93-3	2-Butanone	0.075	0.10	U	1634-04-4	Methyl-t-butyl ether	0.031	0.050	U
591-78-6	2-Hexanone	0.060	0.10	U	95-47-6	o-Xylene	0.068	0.10	U
108-10-1	4-Methyl-2-Pentanone	0.049	0.10	U	100-42-5	Styrene	0.054	0.10	U
67-64-1	Acetone	0.46	0.50	U	127-18-4	Tetrachloroethene	0.036	0.10	U
71-43-2	Benzene	0.030	0.050	U	108-88-3	Toluene	0.033	0.10	U
74-97-5	Bromochloromethane	0.079	0.10	U	156-60-5	trans-1,2-Dichloroethene	0.031	0.10	U
75-27-4	Bromodichloromethane	0.035	0.10	U	10061-02-6	trans-1,3-Dichloropropene	0.031	0.10	U
75-25-2	Bromoform	0.054	0.10	U	79-01-6	Trichloroethene	0.035	0.10	U
74-83-9	Bromomethane	0.050	0.10	U	75-69-4	Trichlorofluoromethane	0.031	0.10	U
75-15-0	Carbon Disulfide	0.042	0.10	U	75-01-4	Vinyl Chloride	0.071	0.10	U

Worksheet #: 569869

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 1M140250.D  
 Acq On : 10/08/20 04:06

Operator : RL  
 Sam Mult : 1 Vial# : 55  
 Misc : M,MEOH

Qt Meth : 1M A0909.M  
 Qt On : 10/08/20 06:50  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.336	96	340986	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.985	117	358722	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.281	152	224057	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.937	111	98458	30.95	ug/l	0.00
Spiked Amount	30.000					
					Recovery =	103.17%
39) 1,2-Dichloroethane-d4	5.143	67	49851	28.77	ug/l	0.00
Spiked Amount	30.000				Recovery =	95.90%
66) Toluene-d8	6.198	98	383777	26.47	ug/l	0.00
Spiked Amount	30.000				Recovery =	88.23%
76) Bromofluorobenzene	7.622	174	170879	30.27	ug/l	0.00
Spiked Amount	30.000				Recovery =	100.90%
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

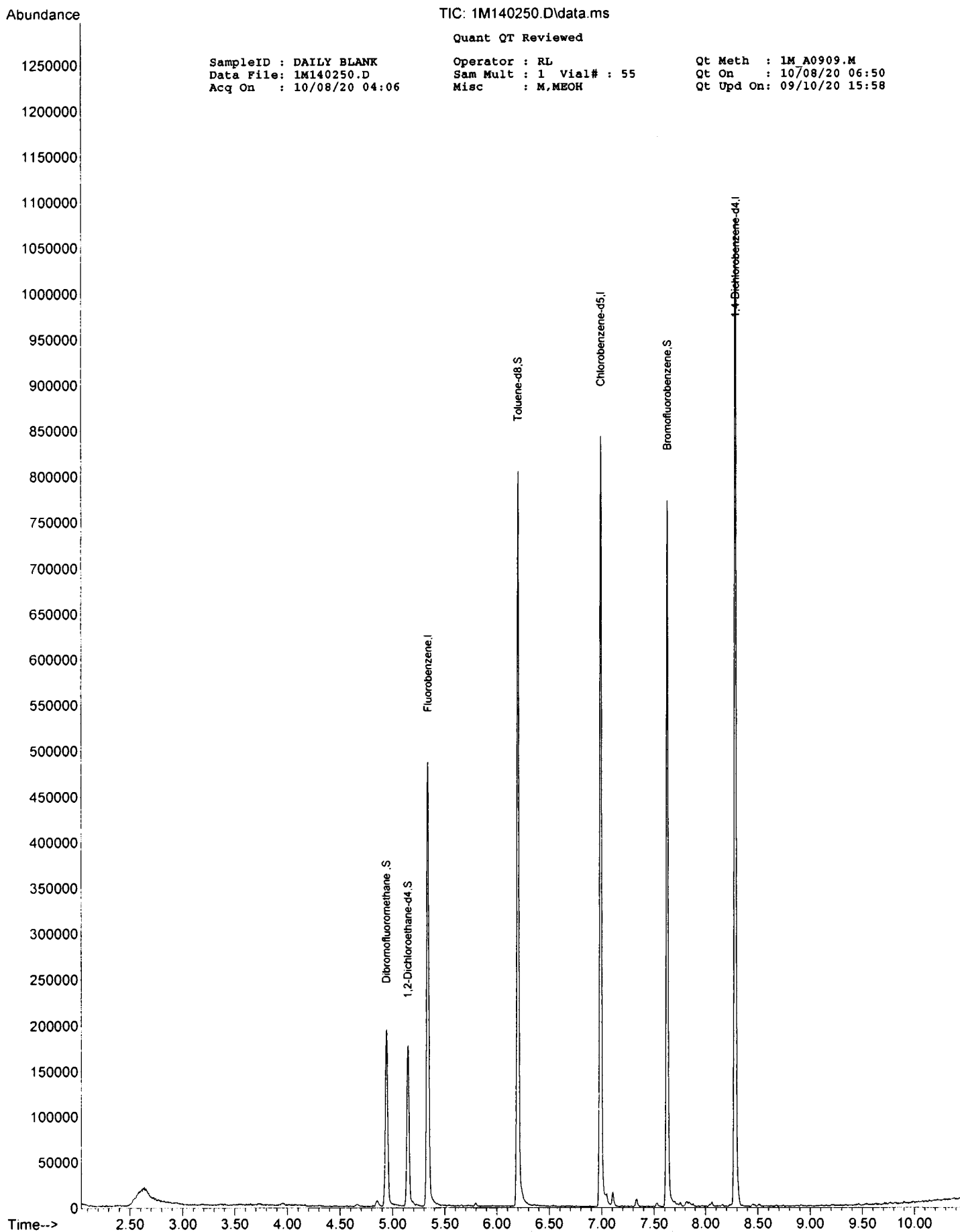
TIC: 1M140250.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 1M140250.D  
Acq On : 10/08/20 04:06

Operator : RL  
Sam Mult : 1 Vial# : 55  
Misc : M,MEOH

Qt Meth : 1M\_A0909.M  
Qt On : 10/08/20 06:50  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK  
Client Id:  
Data File: 1M140333.D  
Analysis Date: 10/09/20 10:26  
Date Rec/Extracted:  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D  
Matrix: Methanol  
Extraction Ratio: 5g:10ml  
Final Vol: NA  
Dilution: 100  
Solids: 100

**Units: mg/Kg**

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.036	0.10	U	56-23-5	Carbon Tetrachloride	0.032	0.10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.045	0.10	U	108-90-7	Chlorobenzene	0.033	0.10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.073	0.10	U	75-00-3	Chloroethane	0.058	0.10	U
79-00-5	1,1,2-Trichloroethane	0.032	0.10	U	67-66-3	Chloroform	0.20	0.20	U
75-34-3	1,1-Dichloroethane	0.043	0.10	U	74-87-3	Chloromethane	0.052	0.10	U
75-35-4	1,1-Dichloroethene	0.053	0.10	U	156-59-2	cis-1,2-Dichloroethene	0.064	0.10	U
87-61-6	1,2,3-Trichlorobenzene	0.079	0.10	U	10061-01-5	cis-1,3-Dichloropropene	0.032	0.10	U
120-82-1	1,2,4-Trichlorobenzene	0.073	0.10	U	110-82-7	Cyclohexane	0.049	0.10	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.083	0.10	U	124-48-1	Dibromochloromethane	0.024	0.10	U
106-93-4	1,2-Dibromoethane	0.034	0.10	U	75-71-8	Dichlorodifluoromethane	0.062	0.10	U
95-50-1	1,2-Dichlorobenzene	0.032	0.10	U	100-41-4	Ethylbenzene	0.047	0.10	U
107-06-2	1,2-Dichloroethane	0.064	0.064	U	98-82-8	Isopropylbenzene	0.049	0.10	U
78-87-5	1,2-Dichloropropane	0.030	0.10	U	179601-23-1	m&p-Xylenes	0.085	0.10	U
541-73-1	1,3-Dichlorobenzene	0.038	0.10	U	79-20-9	Methyl Acetate	0.070	0.10	U
106-46-7	1,4-Dichlorobenzene	0.037	0.10	U	108-87-2	Methylcyclohexane	0.061	0.10	U
123-91-1	1,4-Dioxane	3.9	5.0	U	75-09-2	Methylene Chloride	0.029	0.10	U
78-93-3	2-Butanone	0.075	0.10	U	1634-04-4	Methyl-t-butyl ether	0.031	0.050	U
591-78-6	2-Hexanone	0.060	0.10	U	95-47-6	o-Xylene	0.068	0.10	U
108-10-1	4-Methyl-2-Pentanone	0.049	0.10	U	100-42-5	Styrene	0.054	0.10	U
67-64-1	Acetone	0.46	0.50	U	127-18-4	Tetrachloroethene	0.036	0.10	U
71-43-2	Benzene	0.030	0.050	U	108-88-3	Toluene	0.033	0.10	U
74-97-5	Bromochloromethane	0.079	0.10	U	156-60-5	trans-1,2-Dichloroethene	0.031	0.10	U
75-27-4	Bromodichloromethane	0.035	0.10	U	10061-02-6	trans-1,3-Dichloropropene	0.031	0.10	U
75-25-2	Bromoform	0.054	0.10	U	79-01-6	Trichloroethene	0.035	0.10	U
74-83-9	Bromomethane	0.050	0.10	U	75-69-4	Trichlorofluoromethane	0.031	0.10	U
75-15-0	Carbon Disulfide	0.042	0.10	U	75-01-4	Vinyl Chloride	0.071	0.10	U

Worksheet #: 569869

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*R* - Retention Time Out*B* - Indicates the analyte was found in the blank as well as in the sample.*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 1M140333.D  
 Acq On : 10/09/20 10:26

Operator : BK  
 Sam Mult : 1 Vial# : 7  
 Misc : M,MEOH

Qt Meth : 1M\_A0909.M  
 Qt On : 10/09/20 10:37  
 Qt Upd On: 09/10/20 15:58

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Qt Path : G:\GcMsData\2020\GCMS\_1\MethodQt\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.339	96	365030	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.989	117	396377	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.281	152	254182	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.944	111	106315	31.21	ug/l	0.00
Spiked Amount	30.000					
					Recovery =	104.03%
39) 1,2-Dichloroethane-d4	5.146	67	57783	31.15	ug/l	0.00
Spiked Amount	30.000				Recovery =	103.83%
66) Toluene-d8	6.201	98	415052	25.91	ug/l	0.00
Spiked Amount	30.000				Recovery =	86.37%
76) Bromofluorobenzene	7.625	174	201372	31.44	ug/l	0.00
Spiked Amount	30.000				Recovery =	104.80%
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

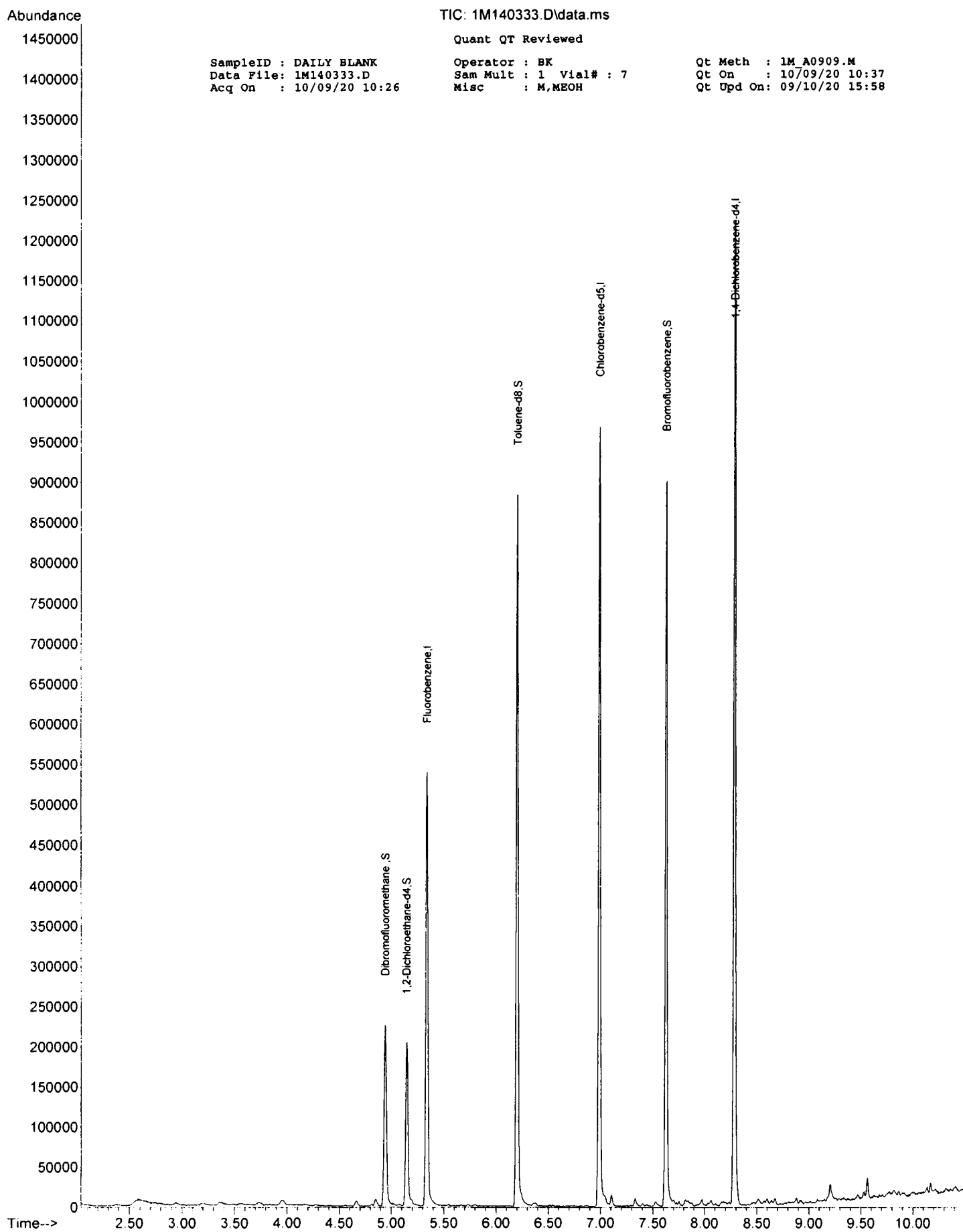
TIC: 1M140333.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 1M140333.D  
Acq On : 10/09/20 10:26

Operator : BK  
Sam Mult : 1 Vial# : 7  
Misc : M, MEOH

Qt Meth : 1M\_A0909.M  
Qt On : 10/09/20 10:37  
Qt Upd On: 09/10/20 15:58



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 6M133214.D

Analysis Date: 10/07/20 14:06

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Soil

Initial Vol: 5g

Final Vol: NA

Dilution: 1.00

Solids: 100

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.00092	0.0020	U	56-23-5	Carbon Tetrachloride	0.00097	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.00045	0.0020	U	108-90-7	Chlorobenzene	0.00062	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0014	0.0020	U	75-00-3	Chloroethane	0.0020	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.00046	0.0020	U	67-66-3	Chloroform	0.0014	0.0020	U
75-34-3	1,1-Dichloroethane	0.00087	0.0020	U	74-87-3	Chloromethane	0.0012	0.0020	U
75-35-4	1,1-Dichloroethene	0.0012	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.00081	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.00055	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.00053	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.00063	0.0020	U	110-82-7	Cyclohexane	0.0012	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.00055	0.0020	U	124-48-1	Dibromochloromethane	0.00043	0.0020	U
106-93-4	1,2-Dibromoethane	0.00049	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0014	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.00051	0.0020	U	100-41-4	Ethylbenzene	0.00069	0.0010	U
107-06-2	1,2-Dichloroethane	0.00041	0.0020	U	98-82-8	Isopropylbenzene	0.00083	0.0010	U
78 87-5	1,2-Dichloropropane	0.00082	0.0020	U	179601-23-1	m&p-Xylenes	0.0012	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.00055	0.0020	U	79-20-9	Methyl Acetate	0.00096	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.00053	0.0020	U	108-87-2	Methylcyclohexane	0.00090	0.0020	U
123-91-1	1,4-Dioxane	0.049	0.10	U	75-09-2	Methylene Chloride	0.00075	0.0020	U
78-93-3	2-Butanone	0.0012	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.00054	0.0010	U
591-78-6	2-Hexanone	0.00085	0.0020	U	95-47-6	o-Xylene	0.00071	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.00058	0.0020	U	100-42-5	Styrene	0.00055	0.0020	U
67-64-1	Acetone	0.0068	0.010	U	127-18-4	Tetrachloroethene	0.00098	0.0020	U
71-43-2	Benzene	0.00073	0.0010	U	108-88-3	Toluene	0.00066	0.0010	U
74-97-5	Bromochloromethane	0.00070	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0012	0.0020	U
75-27-4	Bromodichloromethane	0.00047	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.00047	0.0020	U
75-25-2	Bromoform	0.00033	0.0020	U	79-01-6	Trichloroethene	0.00082	0.0020	U
74-83-9	Bromomethane	0.0016	0.0020	U	75-69-4	Trichlorofluoromethane	0.0012	0.0020	U
75-15-0	Carbon Disulfide	0.0034	0.0034	U	75-01-4	Vinyl Chloride	0.0012	0.0020	U

Worksheet #: 569869

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : DAILY BLANK  
 Data File: 6M133214.D  
 Acq On : 10/07/20 14:06

Operator : BK  
 Sam Mult : 1 Vial# : 7  
 Misc : S,5G

Qt Meth : 6M\_S1006.M  
 Qt On : 10/07/20 14:24  
 Qt Upd On: 10/07/20 11:33

Data Path : G:\GcMsData\2020\GCMS\_6\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_6\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.123	96	341074	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	276624	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.050	152	139222	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	95650	29.71	ug/l	0.00
Spiked Amount						
						Recovery = 99.03%
39) 1,2-Dichloroethane-d4	4.934	67	46688	30.50	ug/l	0.00
Spiked Amount						
						Recovery = 101.67%
66) Toluene-d8	5.983	98	348632	30.13	ug/l	0.00
Spiked Amount						
						Recovery = 100.43%
76) Bromofluorobenzene	7.391	174	104714	31.05	ug/l	0.00
Spiked Amount						
						Recovery = 103.50%
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



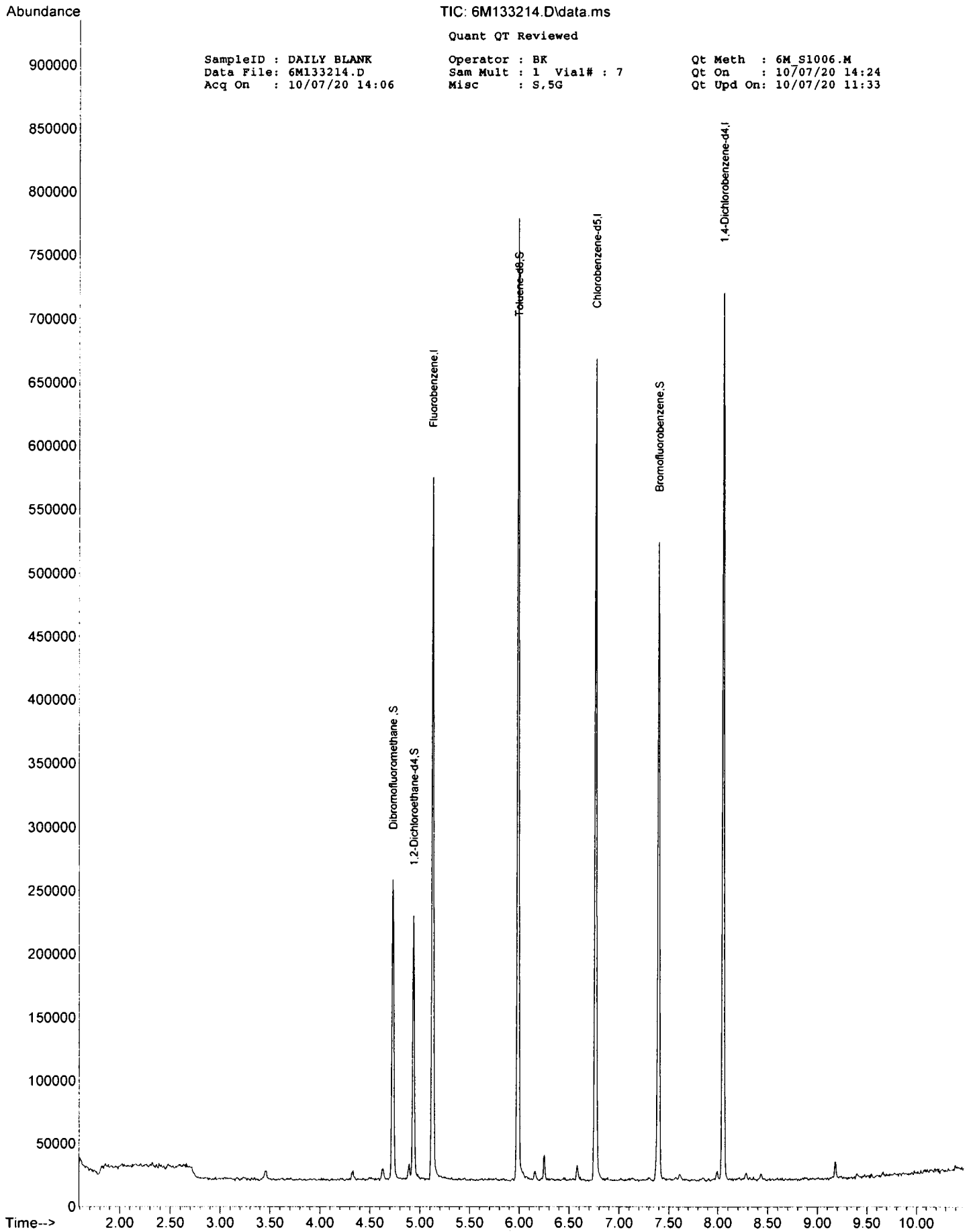
TIC: 6M133214.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK  
Data File: 6M133214.D  
Acq On : 10/07/20 14:06

Operator : BK  
Sam Mult : 1 Vial# : 7  
Misc : S,5G

Qt Meth : 6M\_S1006.M  
Qt On : 10/07/20 14:24  
Qt Upd On: 10/07/20 11:33



## FORM2

## Surrogate Recovery

Method: EPA 8260D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1	Column1	Column1	Column1	Column0	Column0
						S1 Recov	S2 Recov	S3 Recov	S4 Recov	S5 Recov	S6 Recov
1M140250.D	DAILY BLANK	M	10/08/20 04:06	1		103	96	88	101		
1M140333.D	DAILY BLANK	M	10/09/20 10:26	1		104	104	86	105		
6M133214.D	DAILY BLANK	S	10/07/20 14:06	1		99	102	100	104		
1M140274.D	DAD19595-001	M	10/08/20 12:23	1		97	100	87	103		
1M140342.D	DAD19595-002	M	10/09/20 13:41	1		102	104	86	100		
1M140272.D	DAD19595-003	M	10/08/20 11:42	1		99	101	88	103		
1M140343.D	DAD19595-004	M	10/09/20 14:01	1		98	100	86	103		
1M140275.D	DAD19595-005	M	10/08/20 12:44	1		100	101	87	104		
1M140345.D	DAD19595-006	M	10/09/20 14:43	1		98	100	87	105		
6M133228.D	DAD19595-007	S	10/07/20 19:12	1		102	109	98	102		
6M133229.D	DAD19595-008	S	10/07/20 19:33	1		103	108	98	108		
1M140271.D	DAD19595-009	M	10/08/20 11:21	1		102	100	89	105		
1M140273.D	DAD19595-010	M	10/08/20 12:02	1		98	102	87	103		
6M133230.D	DAD19595-011	S	10/07/20 19:54	1		104	108	99	101		
1M140346.D	DAD19595-012	M	10/09/20 15:03	1		98	98	89	102		
1M140259.D	DAD19619-001(MS)	M	10/08/20 07:12	1		97	102	90	109		
1M140260.D	DAD19619-001(MSD)	M	10/08/20 07:33	1		96	95	92	106		
1M140262.D	MBS89464	M	10/08/20 08:14	1		98	99	91	104		
1M140265.D	DAD19619-001	M	10/08/20 09:16	1		100	103	87	104		
1M140334.D	DAD19654-001	M	10/09/20 10:55	1		102	105	87	106		
1M140338.D	MBS89475	M	10/09/20 12:18	1		100	101	91	103		
1M140349.D	DAD19654-001(MS)	M	10/09/20 16:06	1		99	99	90	104		
1M140350.D	DAD19654-001(MSD)	M	10/09/20 16:26	1		98	99	90	102		
6M133217.D	DAD19589-001	S	10/07/20 15:25	1		104	113	110	129		
6M133218.D	MBS89449	S	10/07/20 15:45	1		95	94	100	103		
6M133219.D	DAD19589-002(MS:AD19	S	10/07/20 16:06	1		103	102	113	120		
6M133220.D	DAD19589-003(MSD:AD1	S	10/07/20 16:27	1		104	105	111	120		

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8260D

## Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89449

Data File		Sample ID:		Analysis Date			
Spike or Dup: 6M133218.D		MBS89449		10/7/2020 3:45:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	48.4186	0	50	97	20	130
<b>Dichlorodifluoromethane</b>	1	<b>24.6873</b>	0	50	49	20	130
<b>Chloromethane</b>	1	<b>35.524</b>	0	50	71	20	130
<b>Bromomethane</b>	1	<b>41.0165</b>	0	50	82	20	130
<b>Vinyl Chloride</b>	1	<b>37.3573</b>	0	50	75	20	130
<b>Chloroethane</b>	1	<b>43.6244</b>	0	50	87	20	130
<b>Trichlorofluoromethane</b>	1	<b>43.6294</b>	0	50	87	20	130
Ethyl ether	1	43.2289	0	50	86	50	130
Furan	1	41.3287	0	50	83	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>50.8062</b>	0	50	102	50	130
<b>Methylene Chloride</b>	1	<b>47.1057</b>	0	50	94	50	130
Acrolein	1	221.9695	0	200	111	20	130
Acrylonitrile	1	42.417	0	50	85	20	130
Iodomethane	1	40.3424	0	50	81	50	130
<b>Acetone</b>	1	<b>245.9656</b>	0	200	123	20	130
<b>Carbon Disulfide</b>	1	<b>42.1873</b>	0	50	84	50	130
t-Butyl Alcohol	1	212.1522	0	200	106	20	130
n-Hexane	1	53.4946	0	50	107	50	130
Di-isopropyl-ether	1	47.2472	0	50	94	50	130
<b>1,1-Dichloroethene</b>	1	<b>44.6242</b>	0	50	89	50	130
<b>Methyl Acetate</b>	1	<b>62.358</b>	0	50	125	50	130
<b>Methyl-t-butyl ether</b>	1	<b>47.0229</b>	0	50	94	50	130
<b>1,1-Dichloroethane</b>	1	<b>45.3153</b>	0	50	91	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>45.3166</b>	0	50	91	50	130
Ethyl-t-butyl ether	1	48.2751	0	50	97	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>46.9177</b>	0	50	94	50	130
<b>Bromochloromethane</b>	1	<b>47.2771</b>	0	50	95	50	130
2,2-Dichloropropane	1	48.0417	0	50	96	50	130
Ethyl acetate	1	49.235	0	50	98	50	130
<b>1,4-Dioxane</b>	1	<b>2157.224</b>	0	2500	86	50	130
1,1-Dichloropropene	1	47.4565	0	50	95	50	130
<b>Chloroform</b>	1	<b>47.4478</b>	0	50	95	50	130
<b>Cyclohexane</b>	1	<b>50.0599</b>	0	50	100	50	130
<b>1,2-Dichloroethane</b>	1	<b>44.9761</b>	0	50	90	50	130
<b>2-Butanone</b>	1	<b>41.4667</b>	0	50	83	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>47.7045</b>	0	50	95	50	130
<b>Carbon Tetrachloride</b>	1	<b>48.7324</b>	0	50	97	50	130
Vinyl Acetate	1	35.2771	0	50	71	50	130
<b>Bromodichloromethane</b>	1	<b>48.3508</b>	0	50	97	50	130
<b>Methylcyclohexane</b>	1	<b>52.3419</b>	0	50	105	50	130
Dibromomethane	1	47.5061	0	50	95	50	130
<b>1,2-Dichloropropane</b>	1	<b>46.667</b>	0	50	93	50	130
<b>Trichloroethene</b>	1	<b>47.7083</b>	0	50	95	50	130
<b>Benzene</b>	1	<b>46.136</b>	0	50	92	50	130
tert-Amyl methyl ether	1	48.6751	0	50	97	50	130
Iso-propylacetate	1	47.1995	0	50	94	50	130
Methyl methacrylate	1	46.5123	0	50	93	50	130
<b>Dibromochloromethane</b>	1	<b>50.0187</b>	0	50	100	50	130
2-Chloroethylvinylether	1	187.6839	0	50	375*	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>52.2586</b>	0	50	105	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>52.2039</b>	0	50	104	50	130
Ethyl methacrylate	1	51.7751	0	50	104	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>49.2472</b>	0	50	98	50	130
<b>1,2-Dibromoethane</b>	1	<b>49.8321</b>	0	50	100	50	130
1,3-Dichloropropane	1	50.3016	0	50	101	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>47.9055</b>	0	50	96	20	130
<b>2-Hexanone</b>	1	<b>45.8521</b>	0	50	92	20	130
<b>Tetrachloroethene</b>	1	<b>49.4315</b>	0	50	99	50	130
<b>Toluene</b>	1	<b>47.152</b>	0	50	94	50	130
1,1,1,2-Tetrachloroethane	1	50.7668	0	50	102	50	130
<b>Chlorobenzene</b>	1	<b>49.876</b>	0	50	100	50	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89449

Method: 8260D	Matrix: Soil	Units: mg/Kg		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	45.6839	0	50	91	50	130
n-Amyl acetate	1	48.8417	0	50	98	50	130
<b>Bromoform</b>	<b>1</b>	<b>54.5357</b>	<b>0</b>	<b>50</b>	<b>109</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>46.6033</b>	<b>0</b>	<b>50</b>	<b>93</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>56.7118</b>	<b>0</b>	<b>50</b>	<b>113</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>58.1262</b>	<b>0</b>	<b>50</b>	<b>116</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>97.3957</b>	<b>0</b>	<b>100</b>	<b>97</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>48.544</b>	<b>0</b>	<b>50</b>	<b>97</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	54.2448	0	50	108	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>53.8484</b>	<b>0</b>	<b>50</b>	<b>108</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>54.4178</b>	<b>0</b>	<b>50</b>	<b>109</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>52.239</b>	<b>0</b>	<b>50</b>	<b>104</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>53.7898</b>	<b>0</b>	<b>50</b>	<b>108</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	236.2275	0	250	94	50	130
Camphene	1	59.3917	0	50	119	50	130
1,2,3-Trichloropropane	1	52.9824	0	50	106	50	130
2-Chlorotoluene	1	51.8258	0	50	104	50	130
p-Ethyltoluene	1	52.5433	0	50	105	50	130
4-Chlorotoluene	1	54.8001	0	50	110	50	130
n-Propylbenzene	1	51.8382	0	50	104	50	130
Bromobenzene	1	53.9671	0	50	108	50	130
1,3,5-Trimethylbenzene	1	54.2389	0	50	108	50	130
Butyl methacrylate	1	48.8935	0	50	98	50	130
t-Butylbenzene	1	54.6254	0	50	109	50	130
1,2,4-Trimethylbenzene	1	55.5627	0	50	111	50	130
sec-Butylbenzene	1	56.0743	0	50	112	50	130
4-Isopropyltoluene	1	57.6258	0	50	115	50	130
n-Butylbenzene	1	59.2254	0	50	118	50	130
p-Diethylbenzene	1	57.4062	0	50	115	50	130
1,2,4,5-Tetramethylbenzene	1	53.6358	0	50	107	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>48.0551</b>	<b>0</b>	<b>50</b>	<b>96</b>	<b>50</b>	<b>130</b>
Camphor	1	437.1007	0	500	87	50	130
Hexachlorobutadiene	1	55.9848	0	50	112	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>54.0294</b>	<b>0</b>	<b>50</b>	<b>108</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>49.985</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>
Naphthalene	1	52.2657	0	50	105	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89449

Data File		Sample ID:		Analysis Date			
Spike or Dup: 6M133219.D		AD19589-002(MS:AD19589-001)		10/7/2020 4:06:00 PM			
Non Spike(If applicable): 6M133217.D		AD19589-001		10/7/2020 3:25:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	54.7136	0	50	109	20	130
<b>Dichlorodifluoromethane</b>	1	<b>26.7016</b>	0	50	53	20	130
<b>Chloromethane</b>	1	<b>35.9318</b>	0	50	72	20	130
<b>Bromomethane</b>	1	<b>38.1669</b>	0	50	76	20	130
<b>Vinyl Chloride</b>	1	<b>36.6293</b>	0	50	73	20	130
<b>Chloroethane</b>	1	<b>46.8173</b>	0	50	94	20	130
<b>Trichlorofluoromethane</b>	1	<b>46.0376</b>	0	50	92	20	130
Ethyl ether	1	49.5584	0	50	99	50	130
Furan	1	46.1169	0	50	92	50	130
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>50.3152</b>	0	50	101	50	130
<b>Methylene Chloride</b>	1	<b>52.2915</b>	<b>2.7913</b>	50	99	50	130
Acrolein	1	224.2551	0	200	112	20	130
Acrylonitrile	1	47.4713	0	50	95	20	130
Iodomethane	1	43.9647	0	50	88	50	130
<b>Acetone</b>	1	<b>294.5647</b>	<b>17.0863</b>	200	139*	20	130
<b>Carbon Disulfide</b>	1	<b>38.2306</b>	0	50	76	50	130
t-Butyl Alcohol	1	258.6632	0	200	129	20	130
n-Hexane	1	39.6192	0	50	79	50	130
Di-isopropyl-ether	1	53.3767	0	50	107	50	130
<b>1,1-Dichloroethene</b>	1	<b>45.5094</b>	0	50	91	50	130
<b>Methyl Acetate</b>	1	<b>72.8973</b>	0	50	146*	50	130
<b>Methyl-t-butyl ether</b>	1	<b>55.0157</b>	0	50	110	50	130
<b>1,1-Dichloroethane</b>	1	<b>49.3887</b>	0	50	99	50	130
<b>trans-1,2-Dichloroethene</b>	1	<b>43.5666</b>	0	50	87	50	130
Ethyl-t-butyl ether	1	57.1387	0	50	114	50	130
<b>cis-1,2-Dichloroethene</b>	1	<b>46.6389</b>	0	50	93	50	130
<b>Bromochloromethane</b>	1	<b>46.358</b>	0	50	93	50	130
2,2-Dichloropropane	1	52.3224	0	50	105	50	130
Ethyl acetate	1	54.3557	0	50	109	50	130
<b>1,4-Dioxane</b>	1	<b>2623.383</b>	0	2500	105	50	130
1,1-Dichloropropene	1	45.7351	0	50	91	50	130
<b>Chloroform</b>	1	<b>48.9465</b>	0	50	98	50	130
<b>Cyclohexane</b>	1	<b>46.4599</b>	0	50	93	50	130
<b>1,2-Dichloroethane</b>	1	<b>47.0863</b>	0	50	94	50	130
<b>2-Butanone</b>	1	<b>48.4745</b>	0	50	97	20	130
<b>1,1,1-Trichloroethane</b>	1	<b>50.3681</b>	0	50	101	50	130
<b>Carbon Tetrachloride</b>	1	<b>49.8371</b>	0	50	100	50	130
Vinyl Acetate	1	34.9694	0	50	70	50	130
<b>Bromodichloromethane</b>	1	<b>49.7825</b>	0	50	100	50	130
<b>Methylcyclohexane</b>	1	<b>40.2529</b>	0	50	81	50	130
Dibromomethane	1	44.8687	0	50	90	50	130
<b>1,2-Dichloropropane</b>	1	<b>50.5036</b>	0	50	101	50	130
<b>Trichloroethene</b>	1	<b>46.6674</b>	0	50	93	50	130
<b>Benzene</b>	1	<b>47.5958</b>	0	50	95	50	130
tert-Amyl methyl ether	1	56.7736	0	50	114	50	130
Iso-propylacetate	1	65.6299	0	50	131*	50	130
Methyl methacrylate	1	57.773	0	50	116	50	130
<b>Dibromochloromethane</b>	1	<b>55.7362</b>	0	50	111	50	130
2-Chloroethylvinylether	1	220.6386	0	50	441*	50	130
<b>cis-1,3-Dichloropropene</b>	1	<b>56.2441</b>	0	50	112	50	130
<b>trans-1,3-Dichloropropene</b>	1	<b>53.2583</b>	0	50	107	50	130
Ethyl methacrylate	1	62.8668	0	50	126	50	130
<b>1,1,2-Trichloroethane</b>	1	<b>58.0081</b>	0	50	116	50	130
<b>1,2-Dibromoethane</b>	1	<b>53.476</b>	0	50	107	50	130
1,3-Dichloropropane	1	57.3695	0	50	115	50	130
<b>4-Methyl-2-Pentanone</b>	1	<b>66.644</b>	0	50	133*	20	130
<b>2-Hexanone</b>	1	<b>59.5234</b>	0	50	119	20	130
<b>Tetrachloroethene</b>	1	<b>49.4401</b>	0	50	99	50	130
<b>Toluene</b>	1	<b>52.0407</b>	0	50	104	50	130
1,1,1,2-Tetrachloroethane	1	57.8016	0	50	116	50	130
<b>Chlorobenzene</b>	1	<b>47.6933</b>	0	50	95	50	130

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Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89449

Method: 8260D	Matrix: Soil		Units: mg/Kg		QC Type: MS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	61.633	0	50	123	50	130
n-Amyl acetate	1	63.1371	0	50	126	50	130
<b>Bromoform</b>	1	<b>68.6236</b>	0	50	<b>137 *</b>	20	130
<b>Ethylbenzene</b>	1	<b>60.1468</b>	0	50	<b>120</b>	50	130
<b>1,1,2,2-Tetrachloroethane</b>	1	<b>73.3665</b>	0	50	<b>147 *</b>	50	130
<b>Styrene</b>	1	<b>62.4244</b>	0	50	<b>125</b>	50	130
<b>m&amp;p-Xylenes</b>	1	<b>119.9539</b>	0	100	<b>120</b>	50	130
<b>o-Xylene</b>	1	<b>60.5521</b>	0	50	<b>121</b>	50	130
trans-1,4-Dichloro-2-butene	1	57.1346	0	50	114	20	130
<b>1,3-Dichlorobenzene</b>	1	<b>45.6889</b>	0	50	<b>91</b>	50	130
<b>1,4-Dichlorobenzene</b>	1	<b>42.4725</b>	0	50	<b>85</b>	50	130
<b>1,2-Dichlorobenzene</b>	1	<b>44.0189</b>	0	50	<b>88</b>	50	130
<b>Isopropylbenzene</b>	1	<b>63.3575</b>	0	50	<b>127</b>	50	130
Cyclohexanone	1	431.8169	0	250	173 *	50	130
Camphene	1	52.3194	0	50	105	50	130
1,2,3-Trichloropropane	1	67.2041	22.6761	50	89	50	130
2-Chlorotoluene	1	54.8482	0	50	110	50	130
p-Ethyltoluene	1	54.3702	0	50	109	50	130
4-Chlorotoluene	1	52.7583	0	50	106	50	130
n-Propylbenzene	1	54.1853	0	50	108	50	130
Bromobenzene	1	55.498	0	50	111	50	130
1,3,5-Trimethylbenzene	1	57.1396	0	50	114	50	130
Butyl methacrylate	1	57.3668	0	50	115	50	130
t-Butylbenzene	1	58.2208	0	50	116	50	130
1,2,4-Trimethylbenzene	1	55.9308	0	50	112	50	130
sec-Butylbenzene	1	51.8588	0	50	104	50	130
4-Isopropyltoluene	1	53.8115	0	50	108	50	130
n-Butylbenzene	1	45.2351	0	50	90	50	130
p-Diethylbenzene	1	46.7938	0	50	94	50	130
1,2,4,5-Tetramethylbenzene	1	39.7291	0	50	79	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	1	<b>54.2237</b>	0	50	<b>108</b>	50	130
Camphor	1	760.1582	0	500	152 *	50	130
Hexachlorobutadiene	1	25.9452	0	50	52	50	130
<b>1,2,4-Trichlorobenzene</b>	1	<b>24.627</b>	0	50	<b>49 *</b>	50	130
<b>1,2,3-Trichlorobenzene</b>	1	<b>22.8213</b>	0	50	<b>46 *</b>	50	130
Naphthalene	1	32.6418	0	50	65	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89449

Data File		Sample ID:		Analysis Date			
Spike or Dup: 6M133220.D		AD19589-003(MSD:AD19589-0		10/7/2020 4:27:00 PM			
Non Spike(If applicable): 6M133217.D		AD19589-001		10/7/2020 3:25:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	51.6194	0	50	103	20	130
<b><u>Dichlorodifluoromethane</u></b>	1	<b><u>28.1335</u></b>	0	50	<b><u>56</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
Chloromethane	1	35.097	0	50	70	20	130
<b><u>Bromomethane</u></b>	1	<b><u>40.3869</u></b>	0	50	<b><u>81</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Vinyl Chloride</u></b>	1	<b><u>36.6329</u></b>	0	50	<b><u>73</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Chloroethane</u></b>	1	<b><u>45.9697</u></b>	0	50	<b><u>92</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Trichlorofluoromethane</u></b>	1	<b><u>46.0633</u></b>	0	50	<b><u>92</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
Ethyl ether	1	49.3262	0	50	99	50	130
Furan	1	44.6259	0	50	89	50	130
<b><u>1,1,2-Trichloro-1,2,2-trifluoroethane</u></b>	1	<b><u>52.4817</u></b>	0	50	<b><u>105</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methylene Chloride</u></b>	1	<b><u>49.7527</u></b>	<b><u>2.7913</u></b>	50	<b><u>94</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Acrolein	1	216.8347	0	200	108	20	130
Acrylonitrile	1	47.3944	0	50	95	20	130
Iodomethane	1	45.1856	0	50	90	50	130
<b><u>Acetone</u></b>	1	<b><u>295.158</u></b>	<b><u>17.0863</u></b>	<b><u>200</u></b>	<b><u>139*</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Carbon Disulfide</u></b>	1	<b><u>38.2652</u></b>	0	50	<b><u>77</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
t-Butyl Alcohol	1	266.6472	0	200	133*	20	130
n-Hexane	1	47.2968	0	50	95	50	130
Di-isopropyl-ether	1	54.3021	0	50	109	50	130
<b><u>1,1-Dichloroethene</u></b>	1	<b><u>45.8491</u></b>	0	50	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methyl Acetate</u></b>	1	<b><u>75.653</u></b>	0	50	<b><u>151*</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methyl-t-butyl ether</u></b>	1	<b><u>54.5049</u></b>	0	50	<b><u>109</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>1,1-Dichloroethane</u></b>	1	<b><u>49.328</u></b>	0	50	<b><u>99</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>trans-1,2-Dichloroethene</u></b>	1	<b><u>44.4297</u></b>	0	50	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Ethyl-t-butyl ether	1	56.6163	0	50	113	50	130
<b><u>cis-1,2-Dichloroethene</u></b>	1	<b><u>46.8121</u></b>	0	50	<b><u>94</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Bromochloromethane</u></b>	1	<b><u>46.2208</u></b>	0	50	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
2,2-Dichloropropane	1	52.9817	0	50	106	50	130
Ethyl acetate	1	52.9829	0	50	106	50	130
<b><u>1,4-Dioxane</u></b>	1	<b><u>2524.737</u></b>	0	<b><u>2500</u></b>	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,1-Dichloropropene	1	44.915	0	50	90	50	130
<b><u>Chloroform</u></b>	1	<b><u>49.0867</u></b>	0	50	<b><u>98</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Cyclohexane</u></b>	1	<b><u>47.8394</u></b>	0	50	<b><u>96</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>1,2-Dichloroethane</u></b>	1	<b><u>44.4686</u></b>	0	50	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Butanone</u></b>	1	<b><u>46.6404</u></b>	0	50	<b><u>93</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>1,1,1-Trichloroethane</u></b>	1	<b><u>50.9699</u></b>	0	50	<b><u>102</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Carbon Tetrachloride</u></b>	1	<b><u>48.6343</u></b>	0	50	<b><u>97</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Vinyl Acetate	1	32.813	0	50	66	50	130
<b><u>Bromodichloromethane</u></b>	1	<b><u>49.1971</u></b>	0	50	<b><u>98</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Methylcyclohexane</u></b>	1	<b><u>44.2649</u></b>	0	50	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Dibromomethane	1	43.4557	0	50	87	50	130
<b><u>1,2-Dichloropropane</u></b>	1	<b><u>50.7169</u></b>	0	50	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Trichloroethene</u></b>	1	<b><u>45.3363</u></b>	0	50	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Benzene</u></b>	1	<b><u>47.9157</u></b>	0	50	<b><u>96</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
tert-Amyl methyl ether	1	56.3578	0	50	113	50	130
Iso-propylacetate	1	60.3405	0	50	121	50	130
Methyl methacrylate	1	56.1999	0	50	112	50	130
<b><u>Dibromochloromethane</u></b>	1	<b><u>53.4107</u></b>	0	50	<b><u>107</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
2-Chloroethylvinylether	1	212.2099	0	50	424*	50	130
<b><u>cis-1,3-Dichloropropene</u></b>	1	<b><u>50.4383</u></b>	0	50	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>trans-1,3-Dichloropropene</u></b>	1	<b><u>45.619</u></b>	0	50	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Ethyl methacrylate	1	62.1792	0	50	124	50	130
<b><u>1,1,2-Trichloroethane</u></b>	1	<b><u>55.2344</u></b>	0	50	<b><u>110</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>1,2-Dibromoethane</u></b>	1	<b><u>48.9441</u></b>	0	50	<b><u>98</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,3-Dichloropropane	1	53.1519	0	50	106	50	130
<b><u>4-Methyl-2-Pentanone</u></b>	1	<b><u>62.0668</u></b>	0	50	<b><u>124</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>2-Hexanone</u></b>	1	<b><u>57.0063</u></b>	0	50	<b><u>114</u></b>	<b><u>20</u></b>	<b><u>130</u></b>
<b><u>Tetrachloroethene</u></b>	1	<b><u>47.7406</u></b>	0	50	<b><u>95</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Toluene</u></b>	1	<b><u>49.4525</u></b>	0	50	<b><u>99</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
1,1,1,2-Tetrachloroethane	1	53.4433	0	50	107	50	130
<b><u>Chlorobenzene</u></b>	1	<b><u>44.9999</u></b>	0	50	<b><u>90</u></b>	<b><u>50</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89449

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	55.9925	0	50	112	50	130
n-Amyl acetate	1	56.3922	0	50	113	50	130
<b>Bromoform</b>	<b>1</b>	<b>64.3784</b>	<b>0</b>	<b>50</b>	<b>129</b>	<b>20</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>59.7076</b>	<b>0</b>	<b>50</b>	<b>119</b>	<b>50</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>68.7043</b>	<b>0</b>	<b>50</b>	<b>137*</b>	<b>50</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>58.921</b>	<b>0</b>	<b>50</b>	<b>118</b>	<b>50</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>115.9483</b>	<b>0</b>	<b>100</b>	<b>116</b>	<b>50</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>57.4831</b>	<b>0</b>	<b>50</b>	<b>115</b>	<b>50</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	55.5002	0	50	111	20	130
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>43.9118</b>	<b>0</b>	<b>50</b>	<b>88</b>	<b>50</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>40.2189</b>	<b>0</b>	<b>50</b>	<b>80</b>	<b>50</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>40.7419</b>	<b>0</b>	<b>50</b>	<b>81</b>	<b>50</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>61.5686</b>	<b>0</b>	<b>50</b>	<b>123</b>	<b>50</b>	<b>130</b>
Cyclohexanone	1	448.1724	0	250	179*	50	130
Camphene	1	57.9459	0	50	116	50	130
1,2,3-Trichloropropane	1	62.9276	22.6761	50	81	50	130
2-Chlorotoluene	1	49.9437	0	50	100	50	130
p-Ethyltoluene	1	53.1449	0	50	106	50	130
4-Chlorotoluene	1	49.1086	0	50	98	50	130
n-Propylbenzene	1	53.7619	0	50	108	50	130
Bromobenzene	1	52.605	0	50	105	50	130
1,3,5-Trimethylbenzene	1	56.8777	0	50	114	50	130
Butyl methacrylate	1	54.001	0	50	108	50	130
t-Butylbenzene	1	56.7246	0	50	113	50	130
1,2,4-Trimethylbenzene	1	53.9733	0	50	108	50	130
sec-Butylbenzene	1	52.8297	0	50	106	50	130
4-Isopropyltoluene	1	53.7115	0	50	107	50	130
n-Butylbenzene	1	46.5427	0	50	93	50	130
p-Diethylbenzene	1	46.5997	0	50	93	50	130
1,2,4,5-Tetramethylbenzene	1	38.2361	0	50	76	50	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>49.9609</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>130</b>
Camphor	1	732.3482	0	500	146*	50	130
Hexachlorobutadiene	1	31.7145	0	50	63	50	130
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>24.0597</b>	<b>0</b>	<b>50</b>	<b>48*</b>	<b>50</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>21.0409</b>	<b>0</b>	<b>50</b>	<b>42*</b>	<b>50</b>	<b>130</b>
Naphthalene	1	30.5296	0	50	61	50	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1



**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89449

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M133220.D	AD19589-003(MSD:AD19589-0	10/7/2020 4:27:00 PM
Duplicate(If applicable): 6M133219.D	AD19589-002(MS:AD19589-001	10/7/2020 4:06:00 PM
Inst Blank(If applicable):		

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	51.6194	54.7136	5.8	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>28.1335</b>	<b>26.7016</b>	<b>5.2</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>35.097</b>	<b>35.9318</b>	<b>2.4</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>40.3869</b>	<b>38.1669</b>	<b>5.7</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>36.6329</b>	<b>36.6293</b>	<b>0.01</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>45.9697</b>	<b>46.8173</b>	<b>1.8</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>46.0633</b>	<b>46.0376</b>	<b>0.06</b>	<b>30</b>
Ethyl ether	1	49.3262	49.5584	0.47	30
Furan	1	44.6259	46.1169	3.3	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>52.4817</b>	<b>50.3152</b>	<b>4.2</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>49.7527</b>	<b>52.2915</b>	<b>5</b>	<b>30</b>
Acrolein	1	216.8347	224.2551	3.4	30
Acrylonitrile	1	47.3944	47.4713	0.16	30
Iodomethane	1	45.1856	43.9647	2.7	30
<b>Acetone</b>	<b>1</b>	<b>295.158</b>	<b>294.5647</b>	<b>0.2</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>38.2652</b>	<b>38.2306</b>	<b>0.09</b>	<b>30</b>
t-Butyl Alcohol	1	266.6472	258.6632	3	30
n-Hexane	1	47.2968	39.6192	18	30
Di-isopropyl-ether	1	54.3021	53.3767	1.7	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>45.8491</b>	<b>45.5094</b>	<b>0.74</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>75.653</b>	<b>72.8973</b>	<b>3.7</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>54.5049</b>	<b>55.0157</b>	<b>0.93</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>49.328</b>	<b>49.3887</b>	<b>0.12</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>44.4297</b>	<b>43.5666</b>	<b>2</b>	<b>30</b>
Ethyl-t-butyl ether	1	56.6163	57.1387	0.92	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>46.8121</b>	<b>46.6389</b>	<b>0.37</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>46.2208</b>	<b>46.358</b>	<b>0.3</b>	<b>30</b>
2,2-Dichloropropane	1	52.9817	52.3224	1.3	30
Ethyl acetate	1	52.9829	54.3557	2.6	30
<b>1,4-Dioxane</b>	<b>1</b>	<b>2524.737</b>	<b>2623.383</b>	<b>3.8</b>	<b>30</b>
1,1-Dichloropropene	1	44.915	45.7351	1.8	30
<b>Chloroform</b>	<b>1</b>	<b>49.0867</b>	<b>48.9465</b>	<b>0.29</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>47.8394</b>	<b>46.4599</b>	<b>2.9</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>44.4686</b>	<b>47.0863</b>	<b>5.7</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>46.6404</b>	<b>48.4745</b>	<b>3.9</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>50.9699</b>	<b>50.3681</b>	<b>1.2</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>48.6343</b>	<b>49.8371</b>	<b>2.4</b>	<b>40</b>
Vinyl Acetate	1	32.813	34.9694	6.4	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>49.1971</b>	<b>49.7825</b>	<b>1.2</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>44.2649</b>	<b>40.2529</b>	<b>9.5</b>	<b>30</b>
Dibromomethane	1	43.4557	44.8687	3.2	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>50.7169</b>	<b>50.5036</b>	<b>0.42</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>45.3363</b>	<b>46.6674</b>	<b>2.9</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>47.9157</b>	<b>47.5958</b>	<b>0.67</b>	<b>40</b>
tert-Amyl methyl ether	1	56.3578	56.7736	0.74	30
Iso-propylacetate	1	60.3405	65.6299	8.4	30
Methyl methacrylate	1	56.1999	57.773	2.8	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>53.4107</b>	<b>55.7362</b>	<b>4.3</b>	<b>30</b>
2-Chloroethylvinylether	1	212.2099	220.6386	3.9	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>50.4383</b>	<b>56.2441</b>	<b>11</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>45.619</b>	<b>53.2583</b>	<b>15</b>	<b>30</b>
Ethyl methacrylate	1	62.1792	62.8668	1.1	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>55.2344</b>	<b>58.0081</b>	<b>4.9</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>48.9441</b>	<b>53.476</b>	<b>8.8</b>	<b>30</b>
1,3-Dichloropropane	1	53.1519	57.3695	7.6	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>62.0668</b>	<b>66.644</b>	<b>7.1</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>57.0063</b>	<b>59.5234</b>	<b>4.3</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>47.7406</b>	<b>49.4401</b>	<b>3.5</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>49.4525</b>	<b>52.0407</b>	<b>5.1</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	53.4433	57.8016	7.8	30
<b>Chlorobenzene</b>	<b>1</b>	<b>44.9999</b>	<b>47.6933</b>	<b>5.8</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89449

Method: 8260D	Matrix: Soil	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	55.9925	61.633	9.6	30
n-Amyl acetate	1	56.3922	63.1371	11	30
<b>Bromoform</b>	<b>1</b>	<b>64.3784</b>	<b>68.6236</b>	<b>6.4</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>59.7076</b>	<b>60.1468</b>	<b>0.73</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>68.7043</b>	<b>73.3665</b>	<b>6.6</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>58.921</b>	<b>62.4244</b>	<b>5.8</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>115.9483</b>	<b>119.9539</b>	<b>3.4</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>57.4831</b>	<b>60.5521</b>	<b>5.2</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	55.5002	57.1346	2.9	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>43.9118</b>	<b>45.6889</b>	<b>4</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>40.2189</b>	<b>42.4725</b>	<b>5.5</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>40.7419</b>	<b>44.0189</b>	<b>7.7</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>61.5686</b>	<b>63.3575</b>	<b>2.9</b>	<b>30</b>
Cyclohexanone	1	448.1724	431.8169	3.7	30
Camphene	1	57.9459	52.3194	10	30
1,2,3-Trichloropropane	1	62.9276	67.2041	6.6	30
2-Chlorotoluene	1	49.9437	54.8482	9.4	30
p-Ethyltoluene	1	53.1449	54.3702	2.3	30
4-Chlorotoluene	1	49.1086	52.7583	7.2	30
n-Propylbenzene	1	53.7619	54.1853	0.78	40
Bromobenzene	1	52.605	55.498	5.4	30
1,3,5-Trimethylbenzene	1	56.8777	57.1396	0.46	30
Butyl methacrylate	1	54.001	57.3668	6	30
t-Butylbenzene	1	56.7246	58.2208	2.6	30
1,2,4-Trimethylbenzene	1	53.9733	55.9308	3.6	30
sec-Butylbenzene	1	52.8297	51.8588	1.9	40
4-Isopropyltoluene	1	53.7115	53.8115	0.19	30
n-Butylbenzene	1	46.5427	45.2351	2.8	30
p-Diethylbenzene	1	46.5997	46.7938	0.42	30
1,2,4,5-Tetramethylbenzene	1	38.2361	39.7291	3.8	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>49.9609</b>	<b>54.2237</b>	<b>8.2</b>	<b>30</b>
Camphor	1	732.3482	760.1582	3.7	30
Hexachlorobutadiene	1	31.7145	25.9452	20	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>24.0597</b>	<b>24.627</b>	<b>2.3</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>21.0409</b>	<b>22.8213</b>	<b>8.1</b>	<b>30</b>
Naphthalene	1	30.5296	32.6418	6.7	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89464

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140262.D		MBS89464		10/8/2020 8:14:00 AM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	17.5687	0	20	88	50	150
<b><u>Dichlorodifluoromethane</u></b>	1	<b><u>21.4917</u></b>	0	20	<b><u>107</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Chloromethane	1	18.6956	0	20	93	50	150
<b><u>Bromomethane</u></b>	1	<b><u>14.3773</u></b>	0	20	<b><u>72</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Vinyl Chloride</u></b>	1	<b><u>20.7868</u></b>	0	20	<b><u>104</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Chloroethane</u></b>	1	<b><u>19.9984</u></b>	0	20	<b><u>100</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Trichlorofluoromethane</u></b>	1	<b><u>20.6319</u></b>	0	20	<b><u>103</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Ethyl ether	1	16.8506	0	20	84	50	150
Furan	1	18.2157	0	20	91	50	150
<b><u>1,1,2-Trichloro-1,2,2-trifluoroethane</u></b>	1	<b><u>20.6779</u></b>	0	20	<b><u>103</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Methylene Chloride</u></b>	1	<b><u>18.4503</u></b>	0	20	<b><u>92</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Acrolein	1	81.2743	0	100	81	50	150
Acrylonitrile	1	18.9841	0	20	95	50	150
Iodomethane	1	13.608	0	20	68	50	150
<b><u>Acetone</u></b>	1	<b><u>83.6851</u></b>	0	100	<b><u>84</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Carbon Disulfide</u></b>	1	<b><u>18.1415</u></b>	0	20	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
t-Butyl Alcohol	1	94.4778	0	100	94	50	150
n-Hexane	1	21.2114	0	20	106	70	130
Di-isopropyl-ether	1	16.8192	0	20	84	70	130
<b><u>1,1-Dichloroethene</u></b>	1	<b><u>19.1689</u></b>	0	20	<b><u>96</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Methyl Acetate</u></b>	1	<b><u>20.275</u></b>	0	20	<b><u>101</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Methyl-t-butyl ether</u></b>	1	<b><u>19.4002</u></b>	0	20	<b><u>97</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>1,1-Dichloroethane</u></b>	1	<b><u>16.6916</u></b>	0	20	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>trans-1,2-Dichloroethene</u></b>	1	<b><u>19.3148</u></b>	0	20	<b><u>97</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Ethyl-t-butyl ether	1	17.5509	0	20	88	70	130
<b><u>cis-1,2-Dichloroethene</u></b>	1	<b><u>17.3982</u></b>	0	20	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Bromochloromethane</u></b>	1	<b><u>14.8168</u></b>	0	20	<b><u>74</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
2,2-Dichloropropane	1	14.7021	0	20	74	70	130
Ethyl acetate	1	17.1513	0	20	86	50	150
<b><u>1,4-Dioxane</u></b>	1	<b><u>885.8327</u></b>	0	1000	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
1,1-Dichloropropene	1	19.4672	0	20	97	70	130
<b><u>Chloroform</u></b>	1	<b><u>17.0069</u></b>	0	20	<b><u>85</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Cyclohexane</u></b>	1	<b><u>20.0254</u></b>	0	20	<b><u>100</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>1,2-Dichloroethane</u></b>	1	<b><u>17.3797</u></b>	0	20	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Butanone</u></b>	1	<b><u>17.7414</u></b>	0	20	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>1,1,1-Trichloroethane</u></b>	1	<b><u>18.4042</u></b>	0	20	<b><u>92</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Carbon Tetrachloride</u></b>	1	<b><u>18.425</u></b>	0	20	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Vinyl Acetate	1	14.903	0	20	75	50	150
<b><u>Bromodichloromethane</u></b>	1	<b><u>16.2893</u></b>	0	20	<b><u>81</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Methylcyclohexane</u></b>	1	<b><u>20.4169</u></b>	0	20	<b><u>102</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Dibromomethane	1	18.1837	0	20	91	70	130
<b><u>1,2-Dichloropropane</u></b>	1	<b><u>16.2599</u></b>	0	20	<b><u>81</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Trichloroethene</u></b>	1	<b><u>18.7511</u></b>	0	20	<b><u>94</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Benzene</u></b>	1	<b><u>17.8144</u></b>	0	20	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
tert-Amyl methyl ether	1	17.5343	0	20	88	70	130
Iso-propylacetate	1	13.7212	0	20	69*	70	130
Methyl methacrylate	1	17.8583	0	20	89	70	130
<b><u>Dibromochloromethane</u></b>	1	<b><u>13.5507</u></b>	0	20	<b><u>68*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
2-Chloroethylvinylether	1	11.4609	0	20	57*	70	130
<b><u>cis-1,3-Dichloropropene</u></b>	1	<b><u>13.8049</u></b>	0	20	<b><u>69*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>trans-1,3-Dichloropropene</u></b>	1	<b><u>12.821</u></b>	0	20	<b><u>64*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Ethyl methacrylate	1	14.23	0	20	71	70	130
<b><u>1,1,2-Trichloroethane</u></b>	1	<b><u>14.2024</u></b>	0	20	<b><u>71</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>1,2-Dibromoethane</u></b>	1	<b><u>14.0487</u></b>	0	20	<b><u>70</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,3-Dichloropropane	1	14.5896	0	20	73	70	130
<b><u>4-Methyl-2-Pentanone</u></b>	1	<b><u>14.1045</u></b>	0	20	<b><u>71</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>2-Hexanone</u></b>	1	<b><u>15.6455</u></b>	0	20	<b><u>78</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Tetrachloroethene</u></b>	1	<b><u>17.1117</u></b>	0	20	<b><u>86</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
<b><u>Toluene</u></b>	1	<b><u>15.8128</u></b>	0	20	<b><u>79</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,1,1,2-Tetrachloroethane	1	15.5601	0	20	78	70	130
<b><u>Chlorobenzene</u></b>	1	<b><u>16.0189</u></b>	0	20	<b><u>80</u></b>	<b><u>70</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89464

Method: 8260D	Matrix: Methanol	Units: mg/Kg		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	12.468	0	20	62*	70	130
n-Amyl acetate	1	11.6737	0	20	58*	70	130
<b>Bromoform</b>	<b>1</b>	<b>12.6949</b>	<b>0</b>	<b>20</b>	<b>63*</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>15.6563</b>	<b>0</b>	<b>20</b>	<b>78</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>12.0844</b>	<b>0</b>	<b>20</b>	<b>60*</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>15.9973</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>33.075</b>	<b>0</b>	<b>40</b>	<b>83</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>16.295</b>	<b>0</b>	<b>20</b>	<b>81</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	12.6221	0	20	63	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>14.6903</b>	<b>0</b>	<b>20</b>	<b>73</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>14.7703</b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>14.6777</b>	<b>0</b>	<b>20</b>	<b>73</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>16.6977</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	72.1083	0	100	72	50	150
Camphene	1	16.0794	0	20	80	70	130
1,2,3-Trichloropropane	1	11.6717	0	20	58*	70	130
2-Chlorotoluene	1	14.7358	0	20	74	70	130
p-Ethyltoluene	1	15.5308	0	20	78	70	130
4-Chlorotoluene	1	15.0191	0	20	75	70	130
n-Propylbenzene	1	15.4254	0	20	77	70	130
Bromobenzene	1	14.2941	0	20	71	70	130
1,3,5-Trimethylbenzene	1	15.7049	0	20	79	70	130
Butyl methacrylate	1	13.4193	0	20	67*	70	130
t-Butylbenzene	1	16.5088	0	20	83	70	130
1,2,4-Trimethylbenzene	1	15.2732	0	20	76	70	130
sec-Butylbenzene	1	16.0626	0	20	80	70	130
4-Isopropyltoluene	1	16.3028	0	20	82	70	130
n-Butylbenzene	1	15.8377	0	20	79	70	130
p-Diethylbenzene	1	17.129	0	20	86	70	130
1,2,4,5-Tetramethylbenzene	1	14.1666	0	20	71	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>12.3473</b>	<b>0</b>	<b>20</b>	<b>62</b>	<b>50</b>	<b>150</b>
Camphor	1	106.2492	0	200	53	20	150
Hexachlorobutadiene	1	16.4785	0	20	82	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>15.8917</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>15.3436</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
Naphthalene	1	15.3547	0	20	77	50	150

- Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
'd and underline - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89464

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140259.D		AD19619-001(MS)		10/8/2020 7:12:00 AM			
Non Spike (If applicable): 1M140265.D		AD19619-001		10/8/2020 9:16:00 AM			
Inst Blank (If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	14.0857	0	20	70	50	150
<b>Dichlorodifluoromethane</b>	1	<b>9.026</b>	0	20	45*	50	150
<b>Chloromethane</b>	1	<b>22.2234</b>	0	20	111	50	150
<b>Bromomethane</b>	1	<b>11.0521</b>	0	20	55	50	150
<b>Vinyl Chloride</b>	1	<b>26.7689</b>	0	20	134	50	150
<b>Chloroethane</b>	1	<b>18.6798</b>	0	20	93	50	150
<b>Trichlorofluoromethane</b>	1	<b>23.5096</b>	0	20	118	50	150
Ethyl ether	1	20.551	0	20	103	50	150
Furan	1	19.8485	0	20	99	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>22.839</b>	0	20	114	50	150
<b>Methylene Chloride</b>	1	<b>21.3928</b>	0	20	107	70	130
Acrolein	1	105.2704	0	100	105	50	150
Acrylonitrile	1	8.403	0	20	42*	50	150
Iodomethane	1	7.7521	0	20	39*	50	150
<b>Acetone</b>	1	<b>100.4613</b>	0	100	100	50	150
<b>Carbon Disulfide</b>	1	<b>20.1625</b>	0	20	101	50	150
t-Butyl Alcohol	1	52.3179	0	100	52	50	150
n-Hexane	1	21.176	0	20	106	70	130
Di-isopropyl-ether	1	20.1744	0	20	101	70	130
<b>1,1-Dichloroethene</b>	1	<b>21.649</b>	0	20	108	70	130
<b>Methyl Acetate</b>	1	<b>22.9207</b>	0	20	115	50	150
<b>Methyl-t-butyl ether</b>	1	<b>21.9843</b>	0	20	110	70	130
<b>1,1-Dichloroethane</b>	1	<b>19.5994</b>	0	20	98	70	130
<b>trans-1,2-Dichloroethene</b>	1	<b>22.143</b>	0	20	111	70	130
Ethyl-t-butyl ether	1	20.4926	0	20	102	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>20.2244</b>	0	20	101	70	130
<b>Bromochloromethane</b>	1	<b>20.4653</b>	0	20	102	70	130
2,2-Dichloropropane	1	17.1324	0	20	86	70	130
Ethyl acetate	1	21.3199	0	20	107	50	150
<b>1,4-Dioxane</b>	1	<b>1108.739</b>	0	1000	111	50	150
1,1-Dichloropropene	1	22.4241	0	20	112	70	130
<b>Chloroform</b>	1	<b>21.0092</b>	0	20	105	70	130
<b>Cyclohexane</b>	1	<b>24.0228</b>	0	20	120	70	130
<b>1,2-Dichloroethane</b>	1	<b>19.9662</b>	0	20	100	70	130
<b>2-Butanone</b>	1	<b>20.3969</b>	0	20	102	50	150
<b>1,1,1-Trichloroethane</b>	1	<b>21.728</b>	0	20	109	70	130
<b>Carbon Tetrachloride</b>	1	<b>20.8761</b>	0	20	104	50	150
Vinyl Acetate	1	18.9834	0	20	95	50	150
<b>Bromodichloromethane</b>	1	<b>20.0889</b>	0	20	100	70	130
<b>Methylcyclohexane</b>	1	<b>26.3878</b>	0	20	132*	70	130
Dibromomethane	1	53.0389	0	20	265*	70	130
<b>1,2-Dichloropropane</b>	1	<b>19.4403</b>	0	20	97	70	130
<b>Trichloroethene</b>	1	<b>22.3754</b>	0	20	112	70	130
<b>Benzene</b>	1	<b>20.5787</b>	0	20	103	70	130
tert-Amyl methyl ether	1	20.3311	0	20	102	70	130
Iso-propylacetate	1	16.7044	0	20	84	70	130
Methyl methacrylate	1	20.7043	0	20	104	70	130
<b>Dibromochloromethane</b>	1	<b>15.2798</b>	0	20	76	70	130
2-Chloroethylvinylether	1	16.8605	0	20	84	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>17.2666</b>	0	20	86	70	130
<b>trans-1,3-Dichloropropene</b>	1	<b>15.4708</b>	0	20	77	70	130
Ethyl methacrylate	1	21.0434	0	20	105	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>18.4175</b>	0	20	92	70	130
<b>1,2-Dibromoethane</b>	1	<b>16.8552</b>	0	20	84	70	130
1,3-Dichloropropane	1	17.4069	0	20	87	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>17.0024</b>	0	20	85	50	150
<b>2-Hexanone</b>	1	<b>38.7471</b>	0	20	194*	50	150
<b>Tetrachloroethene</b>	1	<b>20.1855</b>	0	20	101	50	150
<b>Toluene</b>	1	<b>18.8781</b>	0	20	94	70	130
1,1,1,2-Tetrachloroethane	1	26.7219	0	20	134*	70	130
<b>Chlorobenzene</b>	1	<b>18.9405</b>	0	20	95	70	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

## Recovery Data Laboratory Limits

QC Batch: MBS89464

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	15.8583	0	20	79	70	130
n-Amyl acetate	1	15.7465	0	20	79	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.0963</b>	<b>0</b>	<b>20</b>	<b>75</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.8322</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>16.3811</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>18.2023</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>35.5031</b>	<b>0</b>	<b>40</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>19.3411</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	16.2958	0	20	81	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>18.278</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.3933</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.8551</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>18.6698</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	176.6462	0	100	177*	50	150
Camphene	1	18.8431	0	20	94	70	130
1,2,3-Trichloropropane	1	13.9836	0	20	70	70	130
2-Chlorotoluene	1	16.8016	0	20	84	70	130
p-Ethyltoluene	1	18.5648	0	20	93	70	130
4-Chlorotoluene	1	17.1629	0	20	86	70	130
n-Propylbenzene	1	18.4567	0	20	92	70	130
Bromobenzene	1	16.9998	0	20	85	70	130
1,3,5-Trimethylbenzene	1	16.9161	0	20	85	70	130
Butyl methacrylate	1	20.0358	0	20	100	70	130
t-Butylbenzene	1	19.4401	0	20	97	70	130
1,2,4-Trimethylbenzene	1	17.3211	0	20	87	70	130
sec-Butylbenzene	1	19.3969	0	20	97	70	130
4-Isopropyltoluene	1	19.753	0	20	99	70	130
n-Butylbenzene	1	18.3133	0	20	92	70	130
p-Diethylbenzene	1	21.3477	0	20	107	70	130
1,2,4,5-Tetramethylbenzene	1	18.6518	0	20	93	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>13.691</b>	<b>0</b>	<b>20</b>	<b>68</b>	<b>50</b>	<b>150</b>
Camphor	1	135.9329	0	200	68	20	150
Hexachlorobutadiene	1	18.4301	0	20	92	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>17.4529</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>17.172</b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.9139	0	20	90	50	150

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Bold and underline - Indicates the compounds reported on form1

Form3  
 Recovery Data Laboratory Limits  
 QC Batch: MBS89464

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140260.D		AD19619-001(MSD)		10/8/2020 7:33:00 AM			
Non Spike(If applicable): 1M140265.D		AD19619-001		10/8/2020 9:16:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.9778	0	20	105	50	150
<b>Dichlorodifluoromethane</b>	1	<b>26.107</b>	0	20	131	50	150
<b>Chloromethane</b>	1	<b>20.4511</b>	0	20	102	50	150
<b>Bromomethane</b>	1	<b>14.1301</b>	0	20	71	50	150
<b>Vinyl Chloride</b>	1	<b>25.4678</b>	0	20	127	50	150
<b>Chloroethane</b>	1	<b>17.6111</b>	0	20	88	50	150
<b>Trichlorofluoromethane</b>	1	<b>23.6227</b>	0	20	118	50	150
Ethyl ether	1	21.2961	0	20	106	50	150
Furan	1	20.7814	0	20	104	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>23.2906</b>	0	20	116	50	150
<b>Methylene Chloride</b>	1	<b>22.1562</b>	0	20	111	70	130
Acrolein	1	100.9467	0	100	101	50	150
Acrylonitrile	1	24.3579	0	20	122	50	150
Iodomethane	1	12.7538	0	20	64	50	150
<b>Acetone</b>	1	<b>103.1273</b>	0	100	103	50	150
<b>Carbon Disulfide</b>	1	<b>20.4232</b>	0	20	102	50	150
t-Butyl Alcohol	1	133.0716	0	100	133	50	150
n-Hexane	1	22.3935	0	20	112	70	130
Di-isopropyl-ether	1	20.5354	0	20	103	70	130
<b>1,1-Dichloroethene</b>	1	<b>22.3185</b>	0	20	112	70	130
<b>Methyl Acetate</b>	1	<b>22.6431</b>	0	20	113	50	150
<b>Methyl-t-butyl ether</b>	1	<b>23.0931</b>	0	20	115	70	130
<b>1,1-Dichloroethane</b>	1	<b>19.956</b>	0	20	100	70	130
<b>trans-1,2-Dichloroethene</b>	1	<b>22.4303</b>	0	20	112	70	130
Ethyl-t-butyl ether	1	21.573	0	20	108	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>20.5498</b>	0	20	103	70	130
<b>Bromochloromethane</b>	1	<b>21.1757</b>	0	20	106	70	130
2,2-Dichloropropane	1	17.159	0	20	86	70	130
Ethyl acetate	1	19.6677	0	20	98	50	150
<b>1,4-Dioxane</b>	1	<b>571.3019</b>	0	1000	57	50	150
1,1-Dichloropropene	1	22.7705	0	20	114	70	130
<b>Chloroform</b>	1	<b>20.406</b>	0	20	102	70	130
<b>Cyclohexane</b>	1	<b>24.3092</b>	0	20	122	70	130
<b>1,2-Dichloroethane</b>	1	<b>20.9287</b>	0	20	105	70	130
<b>2-Butanone</b>	1	<b>18.4274</b>	0	20	92	50	150
<b>1,1,1-Trichloroethane</b>	1	<b>21.3984</b>	0	20	107	70	130
<b>Carbon Tetrachloride</b>	1	<b>21.3994</b>	0	20	107	50	150
Vinyl Acetate	1	19.1667	0	20	96	50	150
<b>Bromodichloromethane</b>	1	<b>19.4645</b>	0	20	97	70	130
<b>Methylcyclohexane</b>	1	<b>25.2665</b>	0	20	126	70	130
Dibromomethane	1	28.5715	0	20	143*	70	130
<b>1,2-Dichloropropane</b>	1	<b>19.7066</b>	0	20	99	70	130
<b>Trichloroethene</b>	1	<b>21.7809</b>	0	20	109	70	130
<b>Benzene</b>	1	<b>21.7656</b>	0	20	109	70	130
tert-Amyl methyl ether	1	21.1738	0	20	106	70	130
Iso-propylacetate	1	17.3749	0	20	87	70	130
Methyl methacrylate	1	19.1273	0	20	96	70	130
<b>Dibromochloromethane</b>	1	<b>15.5515</b>	0	20	78	70	130
2-Chloroethylvinylether	1	15.4082	0	20	77	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>17.2413</b>	0	20	86	70	130
<b>trans-1,3-Dichloropropene</b>	1	<b>15.5789</b>	0	20	78	70	130
Ethyl methacrylate	1	19.5784	0	20	98	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>20.5042</b>	0	20	103	70	130
<b>1,2-Dibromoethane</b>	1	<b>17.2658</b>	0	20	86	70	130
1,3-Dichloropropane	1	17.8557	0	20	89	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>18.0252</b>	0	20	90	50	150
<b>2-Hexanone</b>	1	<b>35.5093</b>	0	20	178*	50	150
<b>Tetrachloroethene</b>	1	<b>21.5809</b>	0	20	108	50	150
<b>Toluene</b>	1	<b>19.3369</b>	0	20	97	70	130
1,1,1,2-Tetrachloroethane	1	25.0672	0	20	125	70	130
<b>Chlorobenzene</b>	1	<b>19.803</b>	0	20	99	70	130

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Bold and underline - Indicates the compounds reported on form 1

## Recovery Data Laboratory Limits

QC Batch: MBS89464

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	16.4315	0	20	82	70	130
n-Amyl acetate	1	15.3653	0	20	77	70	130
<b><u>Bromoform</u></b>	<b>1</b>	<b><u>16.0655</u></b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>70</b>	<b>130</b>
<b><u>Ethylbenzene</u></b>	<b>1</b>	<b><u>18.4326</u></b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b><u>1,1,2,2-Tetrachloroethane</u></b>	<b>1</b>	<b><u>15.1111</u></b>	<b>0</b>	<b>20</b>	<b>76</b>	<b>70</b>	<b>130</b>
<b><u>Styrene</u></b>	<b>1</b>	<b><u>19.4847</u></b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b><u>m&amp;p-Xylenes</u></b>	<b>1</b>	<b><u>39.0676</u></b>	<b>0</b>	<b>40</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b><u>o-Xylene</u></b>	<b>1</b>	<b><u>19.3972</u></b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	15.9621	0	20	80	50	150
<b><u>1,3-Dichlorobenzene</u></b>	<b>1</b>	<b><u>18.6673</u></b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b><u>1,4-Dichlorobenzene</u></b>	<b>1</b>	<b><u>18.4292</u></b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b><u>1,2-Dichlorobenzene</u></b>	<b>1</b>	<b><u>18.5836</u></b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b><u>Isopropylbenzene</u></b>	<b>1</b>	<b><u>19.9755</u></b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	142.6603	0	100	143	50	150
Camphene	1	20.6871	0	20	103	70	130
1,2,3-Trichloropropane	1	13.6566	0	20	68*	70	130
2-Chlorotoluene	1	17.8135	0	20	89	70	130
p-Ethyltoluene	1	18.7561	0	20	94	70	130
4-Chlorotoluene	1	18.1542	0	20	91	70	130
n-Propylbenzene	1	19.2623	0	20	96	70	130
Bromobenzene	1	17.3921	0	20	87	70	130
1,3,5-Trimethylbenzene	1	19.1803	0	20	96	70	130
Butyl methacrylate	1	14.2785	0	20	71	70	130
t-Butylbenzene	1	21.5365	0	20	108	70	130
1,2,4-Trimethylbenzene	1	19.1133	0	20	96	70	130
sec-Butylbenzene	1	20.4997	0	20	102	70	130
4-Isopropyltoluene	1	20.8458	0	20	104	70	130
n-Butylbenzene	1	19.247	0	20	96	70	130
p-Diethylbenzene	1	21.7718	0	20	109	70	130
1,2,4,5-Tetramethylbenzene	1	18.3507	0	20	92	70	130
<b><u>1,2-Dibromo-3-Chloropropane</u></b>	<b>1</b>	<b><u>13.3394</u></b>	<b>0</b>	<b>20</b>	<b>67</b>	<b>50</b>	<b>150</b>
Camphor	1	132.4758	0	200	66	20	150
Hexachlorobutadiene	1	18.8588	0	20	94	50	150
<b><u>1,2,4-Trichlorobenzene</u></b>	<b>1</b>	<b><u>19.5361</u></b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b><u>1,2,3-Trichlorobenzene</u></b>	<b>1</b>	<b><u>18.486</u></b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
Naphthalene	1	19.0532	0	20	95	50	150

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Bold and underline - Indicates the compounds reported on form 1



### Form3 RPD Data Laboratory Limits

QC Batch: MBS89464

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M140260.D	AD19619-001(MSD)	10/8/2020 7:33:00 AM
Duplicate (If applicable): 1M140259.D	AD19619-001(MS)	10/8/2020 7:12:00 AM
Inst Blank (If applicable):		
Method: 8260D	Matrix: Methanol	Units: mg/Kg
QC Type: MSD		

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	20.9778	14.0857	39*	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>26.107</b>	<b>9.026</b>	<b>97*</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>20.4511</b>	<b>22.2234</b>	<b>8.3</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>14.1301</b>	<b>11.0521</b>	<b>24</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>25.4678</b>	<b>26.7689</b>	<b>5</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>17.6111</b>	<b>18.6798</b>	<b>5.9</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>23.6227</b>	<b>23.5096</b>	<b>0.48</b>	<b>30</b>
Ethyl ether	1	21.2961	20.551	3.6	30
Furan	1	20.7814	19.8485	4.6	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>23.2906</b>	<b>22.839</b>	<b>2</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>22.1562</b>	<b>21.3928</b>	<b>3.5</b>	<b>30</b>
Acrolein	1	100.9467	105.2704	4.2	30
Acrylonitrile	1	24.3579	8.403	97*	30
Iodomethane	1	12.7538	7.7521	49*	30
<b>Acetone</b>	<b>1</b>	<b>103.1273</b>	<b>100.4613</b>	<b>2.6</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>20.4232</b>	<b>20.1625</b>	<b>1.3</b>	<b>30</b>
t-Butyl Alcohol	1	133.0716	52.3179	87*	30
n-Hexane	1	22.3935	21.176	5.6	30
Di-isopropyl-ether	1	20.5354	20.1744	1.8	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>22.3185</b>	<b>21.649</b>	<b>3</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>22.6431</b>	<b>22.9207</b>	<b>1.2</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>23.0931</b>	<b>21.9843</b>	<b>4.9</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>19.956</b>	<b>19.5994</b>	<b>1.8</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>22.4303</b>	<b>22.143</b>	<b>1.3</b>	<b>30</b>
Ethyl-t-butyl ether	1	21.573	20.4926	5.1	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>20.5498</b>	<b>20.2244</b>	<b>1.6</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>21.1757</b>	<b>20.4653</b>	<b>3.4</b>	<b>30</b>
2,2-Dichloropropane	1	17.159	17.1324	0.16	30
Ethyl acetate	1	19.6677	21.3199	8.1	20
<b>1,4-Dioxane</b>	<b>1</b>	<b>571.3019</b>	<b>1108.739</b>	<b>64*</b>	<b>30</b>
1,1-Dichloropropene	1	22.7705	22.4241	1.5	30
<b>Chloroform</b>	<b>1</b>	<b>20.406</b>	<b>21.0092</b>	<b>2.9</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>24.3092</b>	<b>24.0228</b>	<b>1.2</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>20.9287</b>	<b>19.9662</b>	<b>4.7</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>18.4274</b>	<b>20.3969</b>	<b>10</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>21.3984</b>	<b>21.728</b>	<b>1.5</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>21.3994</b>	<b>20.8761</b>	<b>2.5</b>	<b>40</b>
Vinyl Acetate	1	19.1667	18.9834	0.96	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>19.4645</b>	<b>20.0889</b>	<b>3.2</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>25.2665</b>	<b>26.3878</b>	<b>4.3</b>	<b>30</b>
Dibromomethane	1	28.5715	53.0389	60*	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>19.7066</b>	<b>19.4403</b>	<b>1.4</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>21.7809</b>	<b>22.3754</b>	<b>2.7</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>21.7656</b>	<b>20.5787</b>	<b>5.6</b>	<b>40</b>
tert-Amyl methyl ether	1	21.1738	20.3311	4.1	30
Iso-propylacetate	1	17.3749	16.7044	3.9	30
Methyl methacrylate	1	19.1273	20.7043	7.9	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>15.5515</b>	<b>15.2798</b>	<b>1.8</b>	<b>30</b>
2-Chloroethylvinylether	1	15.4082	16.8605	9	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>17.2413</b>	<b>17.2666</b>	<b>0.15</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>15.5789</b>	<b>15.4708</b>	<b>0.7</b>	<b>30</b>
Ethyl methacrylate	1	19.5784	21.0434	7.2	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>20.5042</b>	<b>18.4175</b>	<b>11</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>17.2658</b>	<b>16.8552</b>	<b>2.4</b>	<b>30</b>
1,3-Dichloropropane	1	17.8557	17.4069	2.5	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>18.0252</b>	<b>17.0024</b>	<b>5.8</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>35.5093</b>	<b>38.7471</b>	<b>8.7</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>21.5809</b>	<b>20.1855</b>	<b>6.7</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>19.3369</b>	<b>18.8781</b>	<b>2.4</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	25.0672	26.7219	6.4	30
<b>Chlorobenzene</b>	<b>1</b>	<b>19.803</b>	<b>18.9405</b>	<b>4.5</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3  
RPD Data Laboratory Limits

QC Batch: MBS89464

Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MSD	
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit		
n-Butyl acrylate	1	16.4315	15.8583	3.6	30		
n-Amyl acetate	1	15.3653	15.7465	2.5	30		
<b>Bromoform</b>	<b>1</b>	<b>16.0655</b>	<b>15.0963</b>	<b>6.2</b>	<b>30</b>		
<b>Ethylbenzene</b>	<b>1</b>	<b>18.4326</b>	<b>16.8322</b>	<b>9.1</b>	<b>30</b>		
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>15.1111</b>	<b>16.3811</b>	<b>8.1</b>	<b>30</b>		
<b>Styrene</b>	<b>1</b>	<b>19.4847</b>	<b>18.2023</b>	<b>6.8</b>	<b>30</b>		
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>39.0676</b>	<b>35.5031</b>	<b>9.6</b>	<b>30</b>		
<b>o-Xylene</b>	<b>1</b>	<b>19.3972</b>	<b>19.3411</b>	<b>0.29</b>	<b>30</b>		
trans-1,4-Dichloro-2-butene	1	15.9621	16.2958	2.1	30		
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>18.6673</b>	<b>18.278</b>	<b>2.1</b>	<b>30</b>		
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>18.4292</b>	<b>17.3933</b>	<b>5.8</b>	<b>40</b>		
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>18.5836</b>	<b>17.8551</b>	<b>4</b>	<b>40</b>		
<b>Isopropylbenzene</b>	<b>1</b>	<b>19.9755</b>	<b>18.6698</b>	<b>6.8</b>	<b>30</b>		
Cyclohexanone	1	142.6603	176.6462	21	30		
Camphene	1	20.6871	18.8431	9.3	30		
1,2,3-Trichloropropane	1	13.6566	13.9836	2.4	30		
2-Chlorotoluene	1	17.8135	16.8016	5.8	30		
p-Ethyltoluene	1	18.7561	18.5648	1	30		
4-Chlorotoluene	1	18.1542	17.1629	5.6	30		
n-Propylbenzene	1	19.2623	18.4567	4.3	40		
Bromobenzene	1	17.3921	16.9998	2.3	30		
1,3,5-Trimethylbenzene	1	19.1803	16.9161	13	30		
Butyl methacrylate	1	14.2785	20.0358	34*	30		
t-Butylbenzene	1	21.5365	19.4401	10	30		
1,2,4-Trimethylbenzene	1	19.1133	17.3211	9.8	30		
sec-Butylbenzene	1	20.4997	19.3969	5.5	40		
4-Isopropyltoluene	1	20.8458	19.753	5.4	30		
n-Butylbenzene	1	19.247	18.3133	5	30		
p-Diethylbenzene	1	21.7718	21.3477	2	30		
1,2,4,5-Tetramethylbenzene	1	18.3507	18.6518	1.6	30		
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>13.3394</b>	<b>13.691</b>	<b>2.6</b>	<b>30</b>		
Camphor	1	132.4758	135.9329	2.6	30		
Hexachlorobutadiene	1	18.8588	18.4301	2.3	30		
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>19.5361</b>	<b>17.4529</b>	<b>11</b>	<b>30</b>		
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>18.486</b>	<b>17.172</b>	<b>7.4</b>	<b>30</b>		
Naphthalene	1	19.0532	17.9139	6.2	30		

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140338.D		MBS89475		10/9/2020 12:18:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.3437	0	20	82	50	150
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>1.6083</b>	<b>0</b>	<b>20</b>	<b>8*</b>	<b>50</b>	<b>150</b>
<b>Chloromethane</b>	<b>1</b>	<b>6.8355</b>	<b>0</b>	<b>20</b>	<b>34*</b>	<b>50</b>	<b>150</b>
<b>Bromomethane</b>	<b>1</b>	<b>12.2111</b>	<b>0</b>	<b>20</b>	<b>61</b>	<b>50</b>	<b>150</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>10.8249</b>	<b>0</b>	<b>20</b>	<b>54</b>	<b>50</b>	<b>150</b>
<b>Chloroethane</b>	<b>1</b>	<b>17.5107</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>50</b>	<b>150</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>19.1737</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>50</b>	<b>150</b>
Ethyl ether	1	20.6542	0	20	103	50	150
Furan	1	17.9763	0	20	90	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>22.8111</b>	<b>0</b>	<b>20</b>	<b>114</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>21.4514</b>	<b>0</b>	<b>20</b>	<b>107</b>	<b>70</b>	<b>130</b>
Acrolein	1	105.8326	0	100	106	50	150
Acrylonitrile	1	22.8419	0	20	114	50	150
Iodomethane	1	10.1343	0	20	51	50	150
<b>Acetone</b>	<b>1</b>	<b>98.4305</b>	<b>0</b>	<b>100</b>	<b>98</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>16.0963</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	125.4374	0	100	125	50	150
n-Hexane	1	20.1288	0	20	101	70	130
Di-isopropyl-ether	1	19.676	0	20	98	70	130
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>18.9801</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>29.312</b>	<b>0</b>	<b>20</b>	<b>147</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>24.1366</b>	<b>0</b>	<b>20</b>	<b>121</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>18.9285</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>21.603</b>	<b>0</b>	<b>20</b>	<b>108</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	21.2555	0	20	106	70	130
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>20.0092</b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>17.5262</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	20.6425	0	20	103	70	130
Ethyl acetate	1	24.0715	0	20	120	50	150
<b>1,4-Dioxane</b>	<b>1</b>	<b>1035.309</b>	<b>0</b>	<b>1000</b>	<b>104</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	20.9777	0	20	105	70	130
<b>Chloroform</b>	<b>1</b>	<b>20.8717</b>	<b>0</b>	<b>20</b>	<b>104</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	<b>1</b>	<b>20.5027</b>	<b>0</b>	<b>20</b>	<b>103</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>21.762</b>	<b>0</b>	<b>20</b>	<b>109</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	<b>1</b>	<b>31.9944</b>	<b>0</b>	<b>20</b>	<b>160*</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>21.071</b>	<b>0</b>	<b>20</b>	<b>105</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>21.5444</b>	<b>0</b>	<b>20</b>	<b>108</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	14.2143	0	20	71	50	150
<b>Bromodichloromethane</b>	<b>1</b>	<b>20.4592</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>21.7654</b>	<b>0</b>	<b>20</b>	<b>109</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	22.4848	0	20	112	70	130
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>19.5714</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	<b>1</b>	<b>22.9514</b>	<b>0</b>	<b>20</b>	<b>115</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	<b>1</b>	<b>20.3592</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	21.8399	0	20	109	70	130
Iso-propylacetate	1	17.5629	0	20	88	70	130
Methyl methacrylate	1	16.9604	0	20	85	70	130
<b>Dibromochloromethane</b>	<b>1</b>	<b>18.0132</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	50.5661	0	20	253*	70	130
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>18.3427</b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>16.9026</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	19.5985	0	20	98	70	130
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>17.9872</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>18.0395</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	17.92	0	20	90	70	130
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>17.977</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	<b>1</b>	<b>17.3114</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>19.6433</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	<b>1</b>	<b>27.5575</b>	<b>0</b>	<b>20</b>	<b>138*</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	18.3563	0	20	92	70	130
<b>Chlorobenzene</b>	<b>1</b>	<b>25.1047</b>	<b>0</b>	<b>20</b>	<b>126</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	16.0201	0	20	80	70	130
n-Amyl acetate	1	16.1255	0	20	81	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.7257</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>16.8626</b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>16.0213</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>18.1009</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>38.2612</b>	<b>0</b>	<b>40</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.2803</b>	<b>0</b>	<b>20</b>	<b>91</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	15.1538	0	20	76	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.4642</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.3872</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.3575</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>18.7332</b>	<b>0</b>	<b>20</b>	<b>94</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	78.7178	0	100	79	50	150
Camphene	1	17.0166	0	20	85	70	130
1,2,3-Trichloropropane	1	14.5972	0	20	73	70	130
2-Chlorotoluene	1	16.9228	0	20	85	70	130
p-Ethyltoluene	1	18.5859	0	20	93	70	130
4-Chlorotoluene	1	17.4444	0	20	87	70	130
n-Propylbenzene	1	17.4119	0	20	87	70	130
Bromobenzene	1	14.9998	0	20	75	70	130
1,3,5-Trimethylbenzene	1	17.4792	0	20	87	70	130
Butyl methacrylate	1	17.2062	0	20	86	70	130
t-Butylbenzene	1	18.2251	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.8257	0	20	89	70	130
sec-Butylbenzene	1	18.073	0	20	90	70	130
4-Isopropyltoluene	1	18.6287	0	20	93	70	130
n-Butylbenzene	1	17.5934	0	20	88	70	130
p-Diethylbenzene	1	18.9095	0	20	95	70	130
1,2,4,5-Tetramethylbenzene	1	14.3674	0	20	72	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>15.6931</b>	<b>0</b>	<b>20</b>	<b>78</b>	<b>50</b>	<b>150</b>
Camphor	1	120.3586	0	200	60	20	150
Hexachlorobutadiene	1	17.4462	0	20	87	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>17.6923</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>16.574</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.2641	0	20	86	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89475

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140349.D		AD19654-001(MS)		10/9/2020 4:06:00 PM			
Non Spike(If applicable): 1M140334.D		AD19654-001		10/9/2020 10:55:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.1017	0	20	106	50	150
<b>Dichlorodifluoromethane</b>	1	<b>0</b>	<b>0</b>	<b>20</b>	<b>0*</b>	<b>50</b>	<b>150</b>
<b>Chloromethane</b>	1	<b>6.5106</b>	<b>0</b>	<b>20</b>	<b>33*</b>	<b>50</b>	<b>150</b>
<b>Bromomethane</b>	1	<b>9.6073</b>	<b>0</b>	<b>20</b>	<b>48*</b>	<b>50</b>	<b>150</b>
<b>Vinyl Chloride</b>	1	<b>11.4355</b>	<b>0</b>	<b>20</b>	<b>57</b>	<b>50</b>	<b>150</b>
<b>Chloroethane</b>	1	<b>11.8418</b>	<b>0</b>	<b>20</b>	<b>59</b>	<b>50</b>	<b>150</b>
<b>Trichlorofluoromethane</b>	1	<b>17.9205</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>50</b>	<b>150</b>
Ethyl ether	1	20.7551	0	20	104	50	150
Furan	1	17.3775	0	20	87	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>21.981</b>	<b>0</b>	<b>20</b>	<b>110</b>	<b>50</b>	<b>150</b>
<b>Methylene Chloride</b>	1	<b>21.5482</b>	<b>0</b>	<b>20</b>	<b>108</b>	<b>70</b>	<b>130</b>
Acrolein	1	110.7009	0	100	111	50	150
Acrylonitrile	1	24.9355	0	20	125	50	150
Iodomethane	1	9.5645	0	20	48*	50	150
<b>Acetone</b>	1	<b>110.5759</b>	<b>0</b>	<b>100</b>	<b>111</b>	<b>50</b>	<b>150</b>
<b>Carbon Disulfide</b>	1	<b>15.9888</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>50</b>	<b>150</b>
t-Butyl Alcohol	1	55.7934	0	100	56	50	150
n-Hexane	1	20.937	0	20	105	70	130
Di-isopropyl-ether	1	20.0127	0	20	100	70	130
<b>1,1-Dichloroethene</b>	1	<b>18.9949</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>Methyl Acetate</b>	1	<b>30.3167</b>	<b>0</b>	<b>20</b>	<b>152*</b>	<b>50</b>	<b>150</b>
<b>Methyl-t-butyl ether</b>	1	<b>23.6304</b>	<b>0.958</b>	<b>20</b>	<b>113</b>	<b>70</b>	<b>130</b>
<b>1,1-Dichloroethane</b>	1	<b>18.9154</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
<b>trans-1,2-Dichloroethene</b>	1	<b>21.4017</b>	<b>0</b>	<b>20</b>	<b>107</b>	<b>70</b>	<b>130</b>
Ethyl-t-butyl ether	1	21.0541	0	20	105	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>20.4228</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>Bromochloromethane</b>	1	<b>20.1477</b>	<b>0</b>	<b>20</b>	<b>101</b>	<b>70</b>	<b>130</b>
2,2-Dichloropropane	1	18.9813	0	20	95	70	130
Ethyl acetate	1	25.9632	0	20	130	50	150
<b>1,4-Dioxane</b>	1	<b>474.7633</b>	<b>0</b>	<b>1000</b>	<b>47*</b>	<b>50</b>	<b>150</b>
1,1-Dichloropropene	1	21.57	0	20	108	70	130
<b>Chloroform</b>	1	<b>20.3488</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>Cyclohexane</b>	1	<b>21.4426</b>	<b>0</b>	<b>20</b>	<b>107</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichloroethane</b>	1	<b>21.1912</b>	<b>0</b>	<b>20</b>	<b>106</b>	<b>70</b>	<b>130</b>
<b>2-Butanone</b>	1	<b>34.5088</b>	<b>0</b>	<b>20</b>	<b>173*</b>	<b>50</b>	<b>150</b>
<b>1,1,1-Trichloroethane</b>	1	<b>20.9688</b>	<b>0</b>	<b>20</b>	<b>105</b>	<b>70</b>	<b>130</b>
<b>Carbon Tetrachloride</b>	1	<b>20.8195</b>	<b>0</b>	<b>20</b>	<b>104</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	13.8379	0	20	69	50	150
<b>Bromodichloromethane</b>	1	<b>20.3805</b>	<b>0</b>	<b>20</b>	<b>102</b>	<b>70</b>	<b>130</b>
<b>Methylcyclohexane</b>	1	<b>21.8967</b>	<b>0</b>	<b>20</b>	<b>109</b>	<b>70</b>	<b>130</b>
Dibromomethane	1	22.0516	0	20	110	70	130
<b>1,2-Dichloropropane</b>	1	<b>19.3817</b>	<b>0</b>	<b>20</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>Trichloroethene</b>	1	<b>21.0735</b>	<b>0</b>	<b>20</b>	<b>105</b>	<b>70</b>	<b>130</b>
<b>Benzene</b>	1	<b>20.1586</b>	<b>0</b>	<b>20</b>	<b>101</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	21.354	0	20	107	70	130
Iso-propylacetate	1	17.5601	0	20	88	70	130
Methyl methacrylate	1	17.6552	0	20	88	70	130
<b>Dibromochloromethane</b>	1	<b>17.8925</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
2-Chloroethylvinylether	1	47.2867	0	20	236*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>17.6534</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>trans-1,3-Dichloropropene</b>	1	<b>16.1808</b>	<b>0</b>	<b>20</b>	<b>81</b>	<b>70</b>	<b>130</b>
Ethyl methacrylate	1	20.3089	0	20	102	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>18.5285</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
<b>1,2-Dibromoethane</b>	1	<b>18.0075</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
1,3-Dichloropropane	1	18.3382	0	20	92	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>19.643</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>50</b>	<b>150</b>
<b>2-Hexanone</b>	1	<b>19.2144</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>50</b>	<b>150</b>
<b>Tetrachloroethene</b>	1	<b>20.076</b>	<b>0</b>	<b>20</b>	<b>100</b>	<b>50</b>	<b>150</b>
<b>Toluene</b>	1	<b>18.9198</b>	<b>0</b>	<b>20</b>	<b>95</b>	<b>70</b>	<b>130</b>
1,1,1,2-Tetrachloroethane	1	18.1177	0	20	91	70	130
<b>Chlorobenzene</b>	1	<b>19.7747</b>	<b>0</b>	<b>20</b>	<b>99</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

## Recovery Data Laboratory Limits

QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	15.876	0	20	79	70	130
n-Amyl acetate	1	16.1645	0	20	81	70	130
<b>Bromoform</b>	<b>1</b>	<b>15.444</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>17.394</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>15.7126</b>	<b>0</b>	<b>20</b>	<b>79</b>	<b>70</b>	<b>130</b>
<b>Styrene</b>	<b>1</b>	<b>19.1253</b>	<b>0</b>	<b>20</b>	<b>96</b>	<b>70</b>	<b>130</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>38.6043</b>	<b>0</b>	<b>40</b>	<b>97</b>	<b>70</b>	<b>130</b>
<b>o-Xylene</b>	<b>1</b>	<b>18.572</b>	<b>0</b>	<b>20</b>	<b>93</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	15.0851	0	20	75	50	150
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>17.8777</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>17.9564</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>17.6245</b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>19.5377</b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	89.7964	0	100	90	50	150
Camphene	1	17.7531	0	20	89	70	130
1,2,3-Trichloropropane	1	15.3064	0	20	77	70	130
2-Chlorotoluene	1	17.9022	0	20	90	70	130
p-Ethyltoluene	1	18.0451	0	20	90	70	130
4-Chlorotoluene	1	18.0952	0	20	90	70	130
n-Propylbenzene	1	17.95	0	20	90	70	130
Bromobenzene	1	17.3407	0	20	87	70	130
1,3,5-Trimethylbenzene	1	18.8558	0	20	94	70	130
Butyl methacrylate	1	17.1211	0	20	86	70	130
t-Butylbenzene	1	19.1266	0	20	96	70	130
1,2,4-Trimethylbenzene	1	18.046	0	20	90	70	130
sec-Butylbenzene	1	18.8235	0	20	94	70	130
4-Isopropyltoluene	1	19.3173	0	20	97	70	130
n-Butylbenzene	1	18.39	0	20	92	70	130
p-Diethylbenzene	1	19.2631	0	20	96	70	130
1,2,4,5-Tetramethylbenzene	1	14.3041	0	20	72	70	130
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>15.0525</b>	<b>0</b>	<b>20</b>	<b>75</b>	<b>50</b>	<b>150</b>
Camphor	1	129.371	0	200	65	20	150
Hexachlorobutadiene	1	19.9953	0	20	100	50	150
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>18.0395</b>	<b>0</b>	<b>20</b>	<b>90</b>	<b>70</b>	<b>130</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>17.4954</b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>70</b>	<b>130</b>
Naphthalene	1	17.4715	0	20	87	50	150

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M140350.D		AD19654-001(MSD)		10/9/2020 4:26:00 PM			
Non Spike(If applicable): 1M140334.D		AD19654-001		10/9/2020 10:55:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Methanol		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.8133	0	20	94	50	150
<b>Dichlorodifluoromethane</b>	1	<b>3.0755</b>	0	20	15*	50	150
<b>Chloromethane</b>	1	<b>5.9199</b>	0	20	30*	50	150
<b>Bromomethane</b>	1	<b>8.1158</b>	0	20	41*	50	150
<b>Vinyl Chloride</b>	1	<b>5.6087</b>	0	20	28*	50	150
<b>Chloroethane</b>	1	<b>9.9808</b>	0	20	50	50	150
<b>Trichlorofluoromethane</b>	1	0	0	20	0*	50	150
Ethyl ether	1	17.6997	0	20	88	50	150
Furan	1	15.6497	0	20	78	50	150
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	1	<b>20.0104</b>	0	20	100	50	150
<b>Methylene Chloride</b>	1	<b>19.4049</b>	0	20	97	70	130
Acrolein	1	97.2982	0	100	97	50	150
Acrylonitrile	1	22.5835	0	20	113	50	150
Iodomethane	1	10.4425	0	20	52	50	150
<b>Acetone</b>	1	<b>96.1393</b>	0	100	96	50	150
<b>Carbon Disulfide</b>	1	<b>13.4225</b>	0	20	67	50	150
t-Butyl Alcohol	1	55.9815	0	100	56	50	150
n-Hexane	1	20.1434	0	20	101	70	130
Di-isopropyl-ether	1	18.3917	0	20	92	70	130
<b>1,1-Dichloroethene</b>	1	<b>17.1609</b>	0	20	86	70	130
<b>Methyl Acetate</b>	1	<b>27.3412</b>	0	20	137	50	150
<b>Methyl-t-butyl ether</b>	1	<b>21.4991</b>	0.958	20	103	70	130
<b>1,1-Dichloroethane</b>	1	<b>16.9959</b>	0	20	85	70	130
<b>trans-1,2-Dichloroethene</b>	1	<b>19.5351</b>	0	20	98	70	130
Ethyl-t-butyl ether	1	19.3418	0	20	97	70	130
<b>cis-1,2-Dichloroethene</b>	1	<b>18.3196</b>	0	20	92	70	130
<b>Bromochloromethane</b>	1	<b>18.5446</b>	0	20	93	70	130
2,2-Dichloropropane	1	16.756	0	20	84	70	130
Ethyl acetate	1	22.8855	0	20	114	50	150
<b>1,4-Dioxane</b>	1	<b>395.5967</b>	0	1000	40*	50	150
1,1-Dichloropropene	1	18.7824	0	20	94	70	130
<b>Chloroform</b>	1	<b>18.4747</b>	0	20	92	70	130
<b>Cyclohexane</b>	1	<b>19.4517</b>	0	20	97	70	130
<b>1,2-Dichloroethane</b>	1	<b>19.6661</b>	0	20	98	70	130
<b>2-Butanone</b>	1	<b>30.4181</b>	0	20	152*	50	150
<b>1,1,1-Trichloroethane</b>	1	<b>18.7995</b>	0	20	94	70	130
<b>Carbon Tetrachloride</b>	1	<b>18.6879</b>	0	20	93	50	150
Vinyl Acetate	1	12.5666	0	20	63	50	150
<b>Bromodichloromethane</b>	1	<b>17.9689</b>	0	20	90	70	130
<b>Methylcyclohexane</b>	1	<b>20.6754</b>	0	20	103	70	130
Dibromomethane	1	19.8323	0	20	99	70	130
<b>1,2-Dichloropropane</b>	1	<b>17.5897</b>	0	20	88	70	130
<b>Trichloroethene</b>	1	<b>19.2606</b>	0	20	96	70	130
<b>Benzene</b>	1	<b>18.229</b>	0	20	91	70	130
tert-Amyl methyl ether	1	19.6078	0	20	98	70	130
Iso-propylacetate	1	15.9341	0	20	80	70	130
Methyl methacrylate	1	16.2681	0	20	81	70	130
<b>Dibromochloromethane</b>	1	<b>16.0405</b>	0	20	80	70	130
2-Chloroethylvinylether	1	45.5427	0	20	228*	70	130
<b>cis-1,3-Dichloropropene</b>	1	<b>15.7891</b>	0	20	79	70	130
<b>trans-1,3-Dichloropropene</b>	1	<b>14.8531</b>	0	20	74	70	130
Ethyl methacrylate	1	17.2436	0	20	86	70	130
<b>1,1,2-Trichloroethane</b>	1	<b>16.2753</b>	0	20	81	70	130
<b>1,2-Dibromoethane</b>	1	<b>16.3442</b>	0	20	82	70	130
1,3-Dichloropropane	1	16.7281	0	20	84	70	130
<b>4-Methyl-2-Pentanone</b>	1	<b>17.1771</b>	0	20	86	50	150
<b>2-Hexanone</b>	1	<b>17.0154</b>	0	20	85	50	150
<b>Tetrachloroethene</b>	1	<b>17.4875</b>	0	20	87	50	150
<b>Toluene</b>	1	<b>16.9129</b>	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	16.5834	0	20	83	70	130
<b>Chlorobenzene</b>	1	<b>18.1011</b>	0	20	91	70	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	14.6922	0	20	73	70	130
n-Amyl acetate	1	14.4364	0	20	72	70	130
<b><u>Bromoform</u></b>	<b>1</b>	<b>13.5391</b>	<b>0</b>	<b>20</b>	<b>68*</b>	<b>70</b>	<b>130</b>
<b><u>Ethylbenzene</u></b>	<b>1</b>	<b>15.4948</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>70</b>	<b>130</b>
<b><u>1,1,2,2-Tetrachloroethane</u></b>	<b>1</b>	<b>14.0187</b>	<b>0</b>	<b>20</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b><u>Styrene</u></b>	<b>1</b>	<b>17.1792</b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
<b><u>m&amp;p-Xylenes</u></b>	<b>1</b>	<b>35.155</b>	<b>0</b>	<b>40</b>	<b>88</b>	<b>70</b>	<b>130</b>
<b><u>o-Xylene</u></b>	<b>1</b>	<b>17.063</b>	<b>0</b>	<b>20</b>	<b>85</b>	<b>70</b>	<b>130</b>
trans-1,4-Dichloro-2-butene	1	13.4328	0	20	67	50	150
<b><u>1,3-Dichlorobenzene</u></b>	<b>1</b>	<b>16.441</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b><u>1,4-Dichlorobenzene</u></b>	<b>1</b>	<b>16.4946</b>	<b>0</b>	<b>20</b>	<b>82</b>	<b>70</b>	<b>130</b>
<b><u>1,2-Dichlorobenzene</u></b>	<b>1</b>	<b>16.1699</b>	<b>0</b>	<b>20</b>	<b>81</b>	<b>70</b>	<b>130</b>
<b><u>Isopropylbenzene</u></b>	<b>1</b>	<b>17.8376</b>	<b>0</b>	<b>20</b>	<b>89</b>	<b>70</b>	<b>130</b>
Cyclohexanone	1	82.9164	0	100	83	50	150
Camphene	1	17.0285	0	20	85	70	130
1,2,3-Trichloropropane	1	13.6922	0	20	68*	70	130
2-Chlorotoluene	1	16.1085	0	20	81	70	130
p-Ethyltoluene	1	16.8207	0	20	84	70	130
4-Chlorotoluene	1	16.1632	0	20	81	70	130
n-Propylbenzene	1	16.4798	0	20	82	70	130
Bromobenzene	1	15.8868	0	20	79	70	130
1,3,5-Trimethylbenzene	1	17.4244	0	20	87	70	130
Butyl methacrylate	1	15.2468	0	20	76	70	130
t-Butylbenzene	1	17.8232	0	20	89	70	130
1,2,4-Trimethylbenzene	1	16.6933	0	20	83	70	130
sec-Butylbenzene	1	17.5415	0	20	88	70	130
4-Isopropyltoluene	1	17.7047	0	20	89	70	130
n-Butylbenzene	1	17.1214	0	20	86	70	130
p-Diethylbenzene	1	17.9225	0	20	90	70	130
1,2,4,5-Tetramethylbenzene	1	13.2982	0	20	66*	70	130
<b><u>1,2-Dibromo-3-Chloropropane</u></b>	<b>1</b>	<b>13.2101</b>	<b>0</b>	<b>20</b>	<b>66</b>	<b>50</b>	<b>150</b>
Camphor	1	110.1634	0	200	55	20	150
Hexachlorobutadiene	1	17.1469	0	20	86	50	150
<b><u>1,2,4-Trichlorobenzene</u></b>	<b>1</b>	<b>16.6717</b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
<b><u>1,2,3-Trichlorobenzene</u></b>	<b>1</b>	<b>15.951</b>	<b>0</b>	<b>20</b>	<b>80</b>	<b>70</b>	<b>130</b>
Naphthalene	1	15.5997	0	20	78	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form 1



**Form3**  
**RPD Data Laboratory Limits**  
**QC Batch: MBS89475**

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M140350.D	AD19654-001(MSD)	10/9/2020 4:26:00 PM
Duplicate(If applicable): 1M140349.D	AD19654-001(MS)	10/9/2020 4:06:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Methanol	Units: mg/Kg
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	18.8133	21.1017	11	30
<b>Dichlorodifluoromethane</b>	<b>1</b>	<b>3.0755</b>	<b>0</b>	<b>200*</b>	<b>30</b>
<b>Chloromethane</b>	<b>1</b>	<b>5.9199</b>	<b>6.5106</b>	<b>9.5</b>	<b>30</b>
<b>Bromomethane</b>	<b>1</b>	<b>8.1158</b>	<b>9.6073</b>	<b>17</b>	<b>30</b>
<b>Vinyl Chloride</b>	<b>1</b>	<b>5.6087</b>	<b>11.4355</b>	<b>68*</b>	<b>40</b>
<b>Chloroethane</b>	<b>1</b>	<b>9.9808</b>	<b>11.8418</b>	<b>17</b>	<b>30</b>
<b>Trichlorofluoromethane</b>	<b>1</b>	<b>0</b>	<b>17.9205</b>	<b>200*</b>	<b>30</b>
Ethyl ether	1	17.6997	20.7551	16	30
Furan	1	15.6497	17.3775	10	30
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>1</b>	<b>20.0104</b>	<b>21.981</b>	<b>9.4</b>	<b>30</b>
<b>Methylene Chloride</b>	<b>1</b>	<b>19.4049</b>	<b>21.5482</b>	<b>10</b>	<b>30</b>
Acrolein	1	97.2982	110.7009	13	30
Acrylonitrile	1	22.5835	24.9355	9.9	30
Iodomethane	1	10.4425	9.5645	8.8	30
<b>Acetone</b>	<b>1</b>	<b>96.1393</b>	<b>110.5759</b>	<b>14</b>	<b>30</b>
<b>Carbon Disulfide</b>	<b>1</b>	<b>13.4225</b>	<b>15.9888</b>	<b>17</b>	<b>30</b>
t-Butyl Alcohol	1	55.9815	55.7934	0.34	30
n-Hexane	1	20.1434	20.937	3.9	30
Di-isopropyl-ether	1	18.3917	20.0127	8.4	30
<b>1,1-Dichloroethene</b>	<b>1</b>	<b>17.1609</b>	<b>18.9949</b>	<b>10</b>	<b>40</b>
<b>Methyl Acetate</b>	<b>1</b>	<b>27.3412</b>	<b>30.3167</b>	<b>10</b>	<b>30</b>
<b>Methyl-t-butyl ether</b>	<b>1</b>	<b>21.4991</b>	<b>23.6304</b>	<b>9.4</b>	<b>30</b>
<b>1,1-Dichloroethane</b>	<b>1</b>	<b>16.9959</b>	<b>18.9154</b>	<b>11</b>	<b>40</b>
<b>trans-1,2-Dichloroethene</b>	<b>1</b>	<b>19.5351</b>	<b>21.4017</b>	<b>9.1</b>	<b>30</b>
Ethyl-t-butyl ether	1	19.3418	21.0541	8.5	30
<b>cis-1,2-Dichloroethene</b>	<b>1</b>	<b>18.3196</b>	<b>20.4228</b>	<b>11</b>	<b>30</b>
<b>Bromochloromethane</b>	<b>1</b>	<b>18.5446</b>	<b>20.1477</b>	<b>8.3</b>	<b>30</b>
2,2-Dichloropropane	1	16.756	18.9813	12	30
Ethyl acetate	1	22.8855	25.9632	13	20
<b>1,4-Dioxane</b>	<b>1</b>	<b>395.5967</b>	<b>474.7633</b>	<b>18</b>	<b>30</b>
1,1-Dichloropropene	1	18.7824	21.57	14	30
<b>Chloroform</b>	<b>1</b>	<b>18.4747</b>	<b>20.3488</b>	<b>9.7</b>	<b>40</b>
<b>Cyclohexane</b>	<b>1</b>	<b>19.4517</b>	<b>21.4426</b>	<b>9.7</b>	<b>30</b>
<b>1,2-Dichloroethane</b>	<b>1</b>	<b>19.6661</b>	<b>21.1912</b>	<b>7.5</b>	<b>40</b>
<b>2-Butanone</b>	<b>1</b>	<b>30.4181</b>	<b>34.5088</b>	<b>13</b>	<b>40</b>
<b>1,1,1-Trichloroethane</b>	<b>1</b>	<b>18.7995</b>	<b>20.9688</b>	<b>11</b>	<b>30</b>
<b>Carbon Tetrachloride</b>	<b>1</b>	<b>18.6879</b>	<b>20.8195</b>	<b>11</b>	<b>40</b>
Vinyl Acetate	1	12.5666	13.8379	9.6	30
<b>Bromodichloromethane</b>	<b>1</b>	<b>17.9689</b>	<b>20.3805</b>	<b>13</b>	<b>30</b>
<b>Methylcyclohexane</b>	<b>1</b>	<b>20.6754</b>	<b>21.8967</b>	<b>5.7</b>	<b>30</b>
Dibromomethane	1	19.8323	22.0516	11	30
<b>1,2-Dichloropropane</b>	<b>1</b>	<b>17.5897</b>	<b>19.3817</b>	<b>9.7</b>	<b>30</b>
<b>Trichloroethene</b>	<b>1</b>	<b>19.2606</b>	<b>21.0735</b>	<b>9</b>	<b>40</b>
<b>Benzene</b>	<b>1</b>	<b>18.229</b>	<b>20.1586</b>	<b>10</b>	<b>40</b>
tert-Amyl methyl ether	1	19.6078	21.354	8.5	30
Iso-propylacetate	1	15.9341	17.5601	9.7	30
Methyl methacrylate	1	16.2681	17.6552	8.2	30
<b>Dibromochloromethane</b>	<b>1</b>	<b>16.0405</b>	<b>17.8925</b>	<b>11</b>	<b>30</b>
2-Chloroethylvinylether	1	45.5427	47.2867	3.8	30
<b>cis-1,3-Dichloropropene</b>	<b>1</b>	<b>15.7891</b>	<b>17.6534</b>	<b>11</b>	<b>30</b>
<b>trans-1,3-Dichloropropene</b>	<b>1</b>	<b>14.8531</b>	<b>16.1808</b>	<b>8.6</b>	<b>30</b>
Ethyl methacrylate	1	17.2436	20.3089	16	30
<b>1,1,2-Trichloroethane</b>	<b>1</b>	<b>16.2753</b>	<b>18.5285</b>	<b>13</b>	<b>30</b>
<b>1,2-Dibromoethane</b>	<b>1</b>	<b>16.3442</b>	<b>18.0075</b>	<b>9.7</b>	<b>30</b>
1,3-Dichloropropane	1	16.7281	18.3382	9.2	30
<b>4-Methyl-2-Pentanone</b>	<b>1</b>	<b>17.1771</b>	<b>19.643</b>	<b>13</b>	<b>30</b>
<b>2-Hexanone</b>	<b>1</b>	<b>17.0154</b>	<b>19.2144</b>	<b>12</b>	<b>30</b>
<b>Tetrachloroethene</b>	<b>1</b>	<b>17.4875</b>	<b>20.076</b>	<b>14</b>	<b>40</b>
<b>Toluene</b>	<b>1</b>	<b>16.9129</b>	<b>18.9198</b>	<b>11</b>	<b>40</b>
1,1,1,2-Tetrachloroethane	1	16.5834	18.1177	8.8	30
<b>Chlorobenzene</b>	<b>1</b>	<b>18.1011</b>	<b>19.7747</b>	<b>8.8</b>	<b>40</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89475

Method: 8260D	Matrix: Methanol	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	14.6922	15.876	7.7	30
n-Amyl acetate	1	14.4364	16.1645	11	30
<b>Bromoform</b>	<b>1</b>	<b>13.5391</b>	<b>15.444</b>	<b>13</b>	<b>30</b>
<b>Ethylbenzene</b>	<b>1</b>	<b>15.4948</b>	<b>17.394</b>	<b>12</b>	<b>30</b>
<b>1,1,2,2-Tetrachloroethane</b>	<b>1</b>	<b>14.0187</b>	<b>15.7126</b>	<b>11</b>	<b>30</b>
<b>Styrene</b>	<b>1</b>	<b>17.1792</b>	<b>19.1253</b>	<b>11</b>	<b>30</b>
<b>m&amp;p-Xylenes</b>	<b>1</b>	<b>35.155</b>	<b>38.6043</b>	<b>9.4</b>	<b>30</b>
<b>o-Xylene</b>	<b>1</b>	<b>17.063</b>	<b>18.572</b>	<b>8.5</b>	<b>30</b>
trans-1,4-Dichloro-2-butene	1	13.4328	15.0851	12	30
<b>1,3-Dichlorobenzene</b>	<b>1</b>	<b>16.441</b>	<b>17.8777</b>	<b>8.4</b>	<b>30</b>
<b>1,4-Dichlorobenzene</b>	<b>1</b>	<b>16.4946</b>	<b>17.9564</b>	<b>8.5</b>	<b>40</b>
<b>1,2-Dichlorobenzene</b>	<b>1</b>	<b>16.1699</b>	<b>17.6245</b>	<b>8.6</b>	<b>40</b>
<b>Isopropylbenzene</b>	<b>1</b>	<b>17.8376</b>	<b>19.5377</b>	<b>9.1</b>	<b>30</b>
Cyclohexanone	1	82.9164	89.7964	8	30
Camphene	1	17.0285	17.7531	4.2	30
1,2,3-Trichloropropane	1	13.6922	15.3064	11	30
2-Chlorotoluene	1	16.1085	17.9022	11	30
p-Ethyltoluene	1	16.8207	18.0451	7	30
4-Chlorotoluene	1	16.1632	18.0952	11	30
n-Propylbenzene	1	16.4798	17.95	8.5	40
Bromobenzene	1	15.8868	17.3407	8.8	30
1,3,5-Trimethylbenzene	1	17.4244	18.8558	7.9	30
Butyl methacrylate	1	15.2468	17.1211	12	30
t-Butylbenzene	1	17.8232	19.1266	7.1	30
1,2,4-Trimethylbenzene	1	16.6933	18.046	7.8	30
sec-Butylbenzene	1	17.5415	18.8235	7.1	40
4-Isopropyltoluene	1	17.7047	19.3173	8.7	30
n-Butylbenzene	1	17.1214	18.39	7.1	30
p-Diethylbenzene	1	17.9225	19.2631	7.2	30
1,2,4,5-Tetramethylbenzene	1	13.2982	14.3041	7.3	30
<b>1,2-Dibromo-3-Chloropropane</b>	<b>1</b>	<b>13.2101</b>	<b>15.0525</b>	<b>13</b>	<b>30</b>
Camphor	1	110.1634	129.371	16	30
Hexachlorobutadiene	1	17.1469	19.9953	15	30
<b>1,2,4-Trichlorobenzene</b>	<b>1</b>	<b>16.6717</b>	<b>18.0395</b>	<b>7.9</b>	<b>30</b>
<b>1,2,3-Trichlorobenzene</b>	<b>1</b>	<b>15.951</b>	<b>17.4954</b>	<b>9.2</b>	<b>30</b>
Naphthalene	1	15.5997	17.4715	11	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 6M133214.D  
Matrix: SoilBlank Analysis Date: 10/07/20 14:06  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19595-007	6M133228.D	10/07/20 19:12
AD19595-008	6M133229.D	10/07/20 19:33
AD19595-011	6M133230.D	10/07/20 19:54
MBS89449	6M133218.D	10/07/20 15:45
AD19589-002(MS:	6M133219.D	10/07/20 16:06
AD19589-001	6M133217.D	10/07/20 15:25
AD19589-003(MSD	6M133220.D	10/07/20 16:27

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 1M140250.D  
Matrix: MethanolBlank Analysis Date: 10/08/20 04:06  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19595-001	1M140274.D	10/08/20 12:23
AD19595-003	1M140272.D	10/08/20 11:42
AD19595-005	1M140275.D	10/08/20 12:44
AD19595-009	1M140271.D	10/08/20 11:21
AD19595-010	1M140273.D	10/08/20 12:02
AD19619-001(MS)	1M140259.D	10/08/20 07:12
AD19619-001	1M140265.D	10/08/20 09:16
MBS89464	1M140262.D	10/08/20 08:14
AD19619-001(MSD)	1M140260.D	10/08/20 07:33

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 1M140333.D  
Matrix: MethanolBlank Analysis Date: 10/09/20 10:26  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19595-002	1M140342.D	10/09/20 13:41
AD19595-004	1M140343.D	10/09/20 14:01
AD19595-006	1M140345.D	10/09/20 14:43
AD19595-012	1M140346.D	10/09/20 15:03
AD19654-001	1M140334.D	10/09/20 10:55
AD19654-001(MSD)	1M140350.D	10/09/20 16:26
AD19654-001(MS)	1M140349.D	10/09/20 16:06
MBS89475	1M140338.D	10/09/20 12:18

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 1

Data File: 1M139257.D  
Analysis Date: 09/09/20 18:32  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.599 to 7.635 min

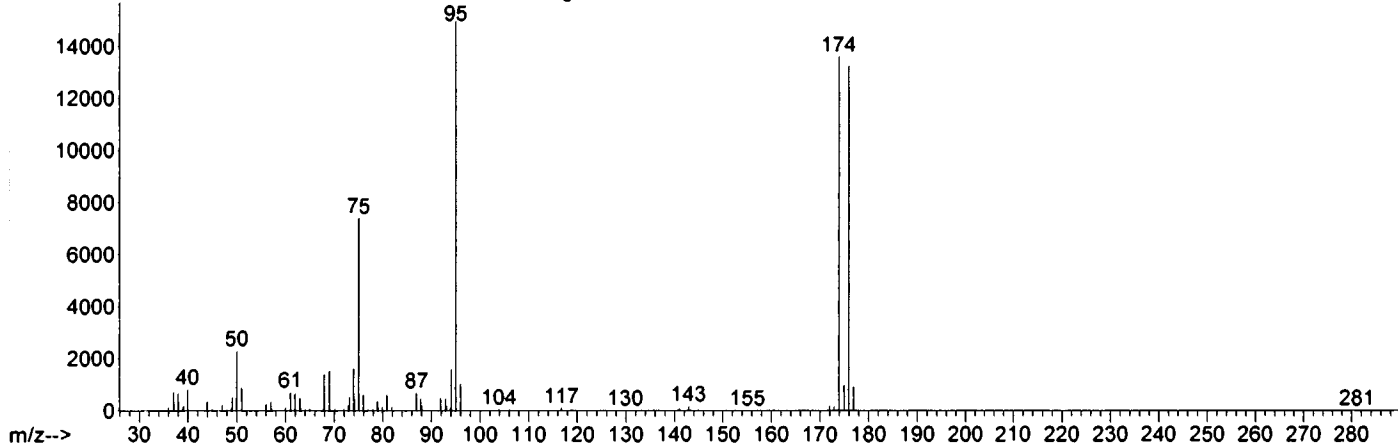
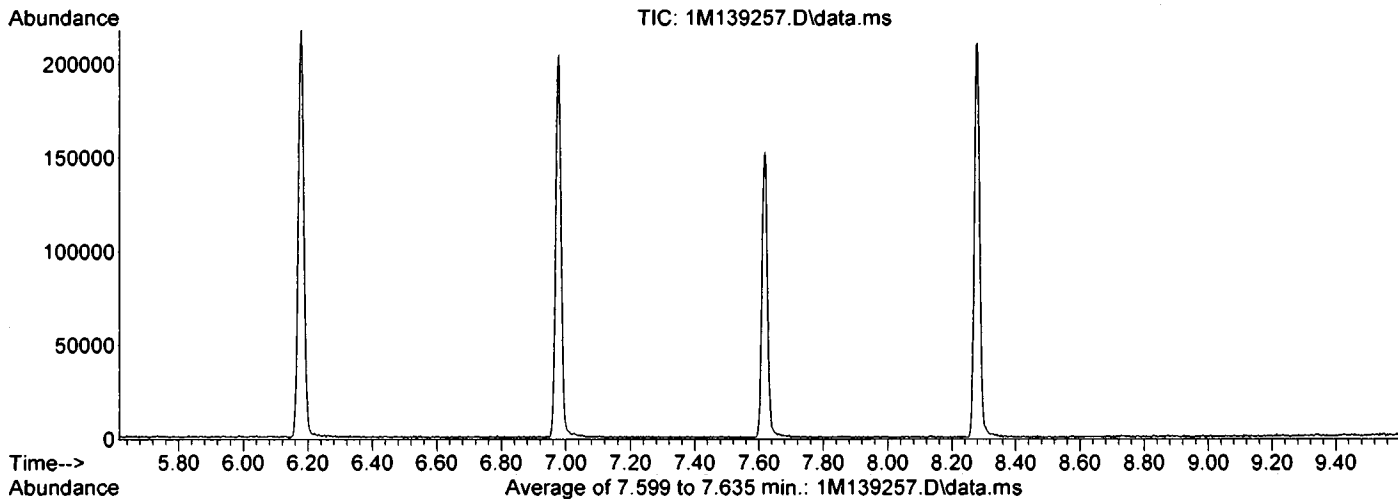
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	15.4	2307	PASS
75	95	30	60	49.5	7412	PASS
95	95	100	100	100.0	14974	PASS
96	95	5	9	6.9	1036	PASS
173	174	0.00	2	1.3	171	PASS
174	95	50	100	90.9	13612	PASS
175	174	5	9	7.3	996	PASS
176	174	95	101	97.3	13246	PASS
177	176	5	9	7.0	928	PASS

Data File	Sample Number	Analysis Date:
1M139258.D	BLK	09/09/20 18:46
1M139260.D	CAL @ 0.5 PPB	09/09/20 19:28
1M139261.D	CAL @ 1 PPB	09/09/20 19:48
1M139262.D	CAL @ 5 PPB	09/09/20 20:09
1M139263.D	CAL @ 10 PPB	09/09/20 20:30
1M139264.D	CAL @ 20 PPB	09/09/20 20:51
1M139266.D	CAL @ 50 PPB	09/09/20 21:33
1M139268.D	CAL @ 500 PPB	09/09/20 22:14
1M139271.D	CAL @ 250 PPB	09/09/20 23:16
1M139272.D	BLK	09/09/20 23:37
1M139274.D	CAL @ 100 PPB	09/10/20 00:19
1M139275.D	BLK	09/10/20 00:40
1M139279.D	ICV	09/10/20 02:02

Data Path : G:\GcMsData\2020\GCMS\_1\Data\09-09-20\  
 Data File : 1M139257.D  
 Acq On : 09 Sep 2020 18:32  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : A, 5ML  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS\_1\MethodQt\1M\_A0710.M  
 Title : @GCMS\_1,ug,624,8260  
 Last Update : Fri Jul 10 13:55:20 2020



Spectrum Information: Average of 7.599 to 7.635 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	2307	PASS
75	95	30	60	49.5	7412	PASS
95	95	100	100	100.0	14974	PASS
96	95	5	9	6.9	1036	PASS
173	174	0.00	2	1.3	171	PASS
174	95	50	100	90.9	13612	PASS
175	174	5	9	7.3	996	PASS
176	174	95	101	97.3	13246	PASS
177	176	5	9	7.0	928	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 6

Data File: 6M133169.D  
Analysis Date: 10/06/20 09:09  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.385 to 7.397 min

Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
50	95	15	40		15.2	5179	PASS
75	95	30	60		51.5	17560	PASS
95	95	100	100		100.0	34118	PASS
96	95	5	9		7.8	2650	PASS
173	174	0.00	2		1.7	499	PASS
174	95	50	100		85.9	29312	PASS
175	174	5	9		8.9	2614	PASS
176	174	95	101		98.2	28777	PASS
177	176	5	9		6.4	1839	PASS

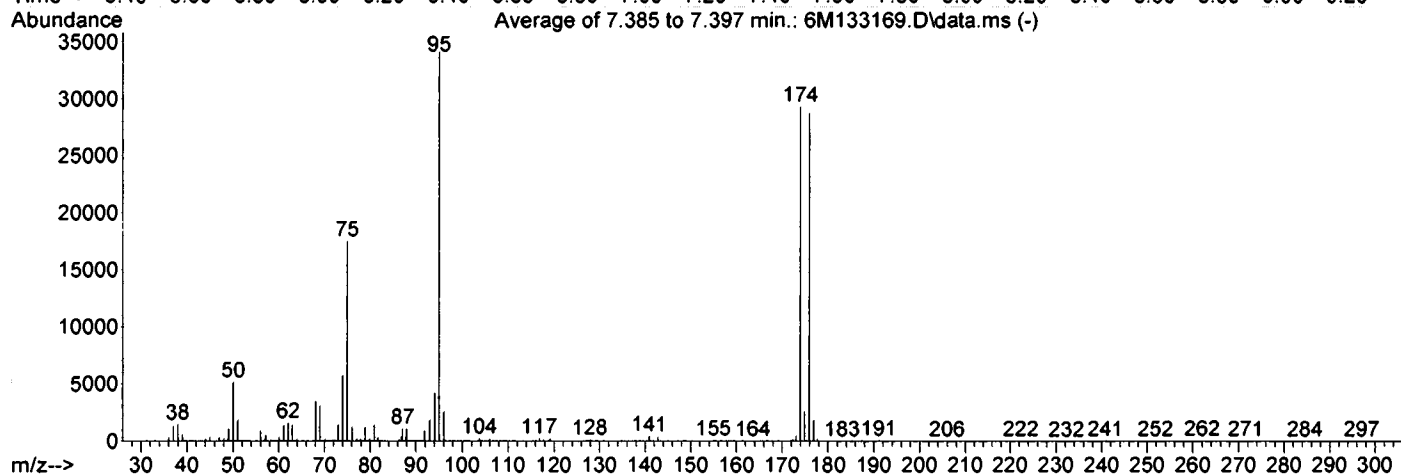
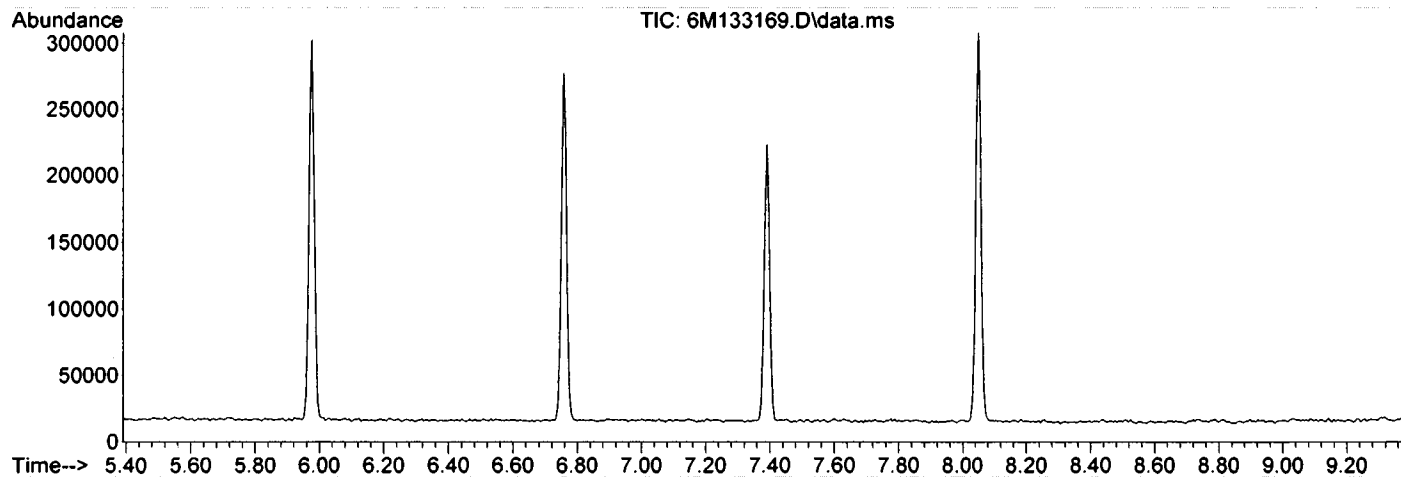
Data File	Sample Number	Analysis Date:
6M133170.D	BLK	10/06/20 09:24
6M133171.D	BLK	10/06/20 09:45
6M133172.D	BLK	10/06/20 10:05
6M133173.D	BLK	10/06/20 10:26
6M133174.D	CAL @ 0.5 PPB	10/06/20 10:47
6M133175.D	CAL @ 1 PPB	10/06/20 11:07
6M133176.D	CAL @ 2 PPB	10/06/20 11:28
6M133177.D	CAL @ 5 PPB	10/06/20 11:49
6M133178.D	CAL @ 20 PPB	10/06/20 12:10
6M133179.D	CAL @ 50 PPB	10/06/20 12:30
6M133180.D	CAL @ 100 PPB	10/06/20 12:51
6M133181.D	BLK	10/06/20 13:12
6M133182.D	BLK	10/06/20 13:33
6M133183.D	250 PPB	10/06/20 13:53
6M133184.D	BLK	10/06/20 14:14
6M133185.D	BLK	10/06/20 14:35
6M133186.D	500 PPB	10/06/20 14:56
6M133187.D	BLK	10/06/20 15:16
6M133188.D	BLK	10/06/20 15:37
6M133189.D	BLK	10/06/20 15:58
6M133190.D	500 PPB	10/06/20 16:19
6M133191.D	BLK	10/06/20 16:39
6M133192.D	BLK	10/06/20 17:00
6M133193.D	BLK	10/06/20 17:21
6M133194.D	CAL @ 250 PPB	10/06/20 17:42
6M133195.D	BLK	10/06/20 18:02
6M133196.D	BLK	10/06/20 18:23
6M133197.D	BLK	10/06/20 18:44
6M133198.D	BLK	10/06/20 19:05
6M133199.D	BLK	10/06/20 19:26
6M133200.D	BLK	10/06/20 19:46
6M133201.D	ICV	10/06/20 20:07
6M133202.D	BLK	10/06/20 20:28
6M133203.D	BLK	10/07/20 07:33
6M133204.D	BLK	10/07/20 07:54
6M133205.D	BLK	10/07/20 08:15
6M133206.D	BLK	10/07/20 08:35
6M133207.D	DAILY BLANK	10/07/20 08:56



Data Path : G:\GcMsData\2020\GCMS\_6\Data\10-06-20\  
 Data File : 6M133169.D  
 Acq On : 06 Oct 2020 09:09  
 Operator : BK  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_6\METHODQT\6M\_S1006.M  
 Title : @GCMS\_6,ug,624,8260  
 Last Update : Wed Oct 07 11:27:46 2020



Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	5179	PASS
75	95	30	60	51.5	17560	PASS
95	95	100	100	100.0	34118	PASS
96	95	5	9	7.8	2650	PASS
173	174	0.00	2	1.7	499	PASS
174	95	50	100	85.9	29312	PASS
175	174	5	9	8.9	2614	PASS
176	174	95	101	98.2	28777	PASS
177	176	5	9	6.4	1839	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 6

Data File: 6M133208.D  
Analysis Date: 10/07/20 11:49  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.385 to 7.397 min

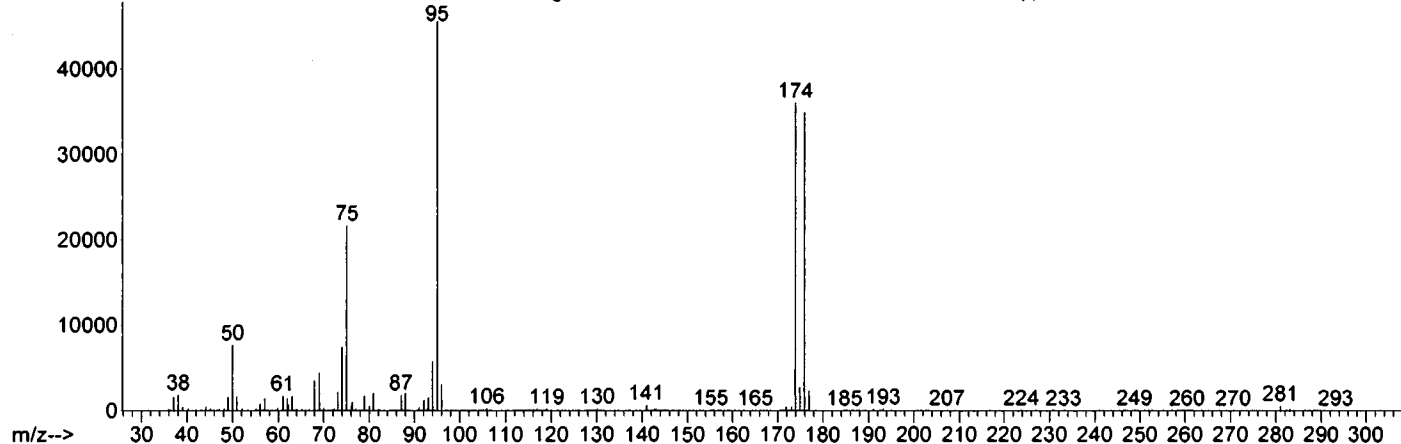
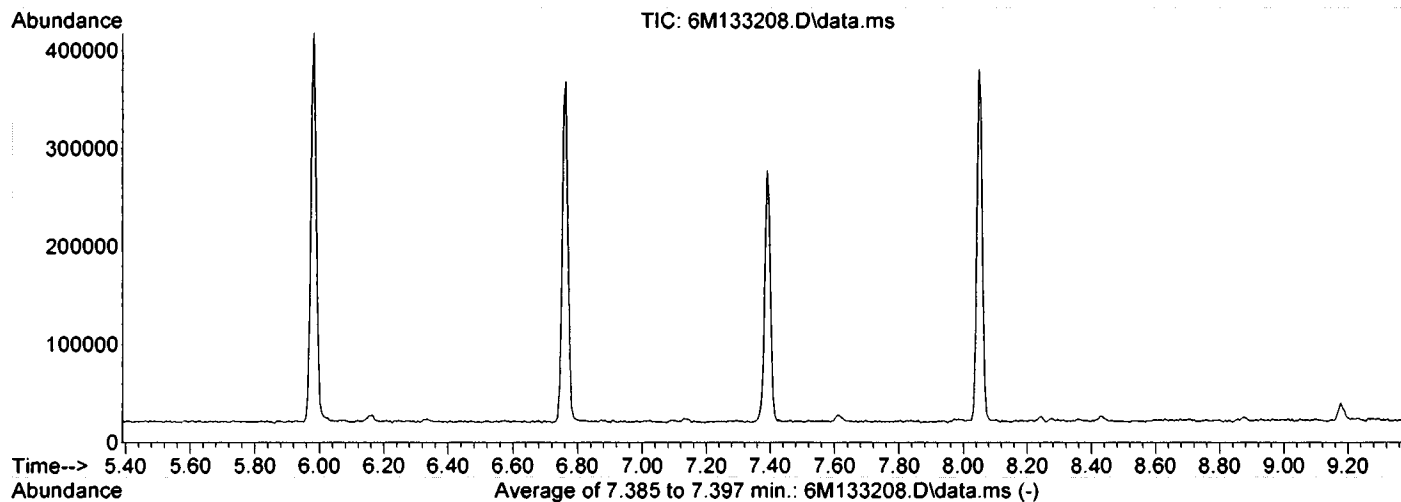
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.9	7720	PASS
75	95	30	60	47.6	21726	PASS
95	95	100	100	100.0	45627	PASS
96	95	5	9	6.9	3160	PASS
173	174	0.00	2	1.4	522	PASS
174	95	50	100	79.0	36056	PASS
175	174	5	9	7.7	2790	PASS
176	174	95	101	96.9	34928	PASS
177	176	5	9	6.8	2366	PASS

Data File	Sample Number	Analysis Date:
6M133209.D	BLK	10/07/20 12:15
6M133210.D	CAL @ 50 PPB	10/07/20 12:30
6M133211.D	BLK	10/07/20 12:59
6M133212.D	BLK	10/07/20 13:20
6M133213.D	BLK	10/07/20 13:40
6M133214.D	DAILY BLANK	10/07/20 14:06
6M133215.D	AD19542-001	10/07/20 14:37
6M133216.D	BLK	10/07/20 15:04
6M133217.D	AD19589-001	10/07/20 15:25
6M133218.D	MBS89449	10/07/20 15:45
6M133219.D	AD19589-002(MS)	10/07/20 16:06
6M133220.D	AD19589-003(MSD)	10/07/20 16:27
6M133222.D	BLK	10/07/20 17:08
6M133223.D	BLK	10/07/20 17:29
6M133224.D	AD19589-004	10/07/20 17:49
6M133225.D	AD19589-005	10/07/20 18:10
6M133226.D	AD19589-006	10/07/20 18:31
6M133227.D	AD19595-003	10/07/20 18:51
6M133228.D	AD19595-007	10/07/20 19:12
6M133229.D	AD19595-008	10/07/20 19:33
6M133230.D	AD19595-011	10/07/20 19:54
6M133231.D	AD19595-009	10/07/20 20:14
6M133232.D	AD19595-010	10/07/20 20:35
6M133233.D	AD19595-005	10/07/20 20:56
6M133234.D	AD19595-001	10/07/20 21:16
6M133235.D	BLK	10/07/20 21:37
6M133236.D	AD19644-002	10/07/20 21:58
6M133237.D	AD19644-004	10/07/20 22:18
6M133238.D	AD19644-006	10/07/20 22:39
6M133239.D	AD19644-005	10/07/20 23:00
6M133240.D	AD19644-008	10/07/20 23:20
6M133241.D	AD19644-007	10/07/20 23:41
6M133242.D	AD19643-002	10/08/20 00:02
6M133243.D	MBS89455	10/08/20 00:22
6M133244.D	BLK	10/08/20 00:43
6M133245.D	BLK	10/08/20 01:03
6M133246.D	BLK	10/08/20 01:24
6M133247.D	BLK	10/08/20 01:45
6M133248.D	BLK	10/08/20 02:05

Data Path : G:\GcMsData\2020\GCMS\_6\Data\10-07-20\  
 Data File : 6M133208.D  
 Acq On : 07 Oct 2020 11:49  
 Operator : BK  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_6\METHODQT\6M\_S1006.M  
 Title : @GCMS\_6,ug,624,8260  
 Last Update : Wed Oct 07 11:27:46 2020



Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	7720	PASS
75	95	30	60	47.6	21726	PASS
95	95	100	100	100.0	45627	PASS
96	95	5	9	6.9	3160	PASS
173	174	0.00	2	1.4	522	PASS
174	95	50	100	79.0	36056	PASS
175	174	5	9	7.7	2790	PASS
176	174	95	101	96.9	34928	PASS
177	176	5	9	6.8	2366	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 1

Data File: 1M140245.D  
Analysis Date: 10/08/20 02:23  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.619 to 7.625 min

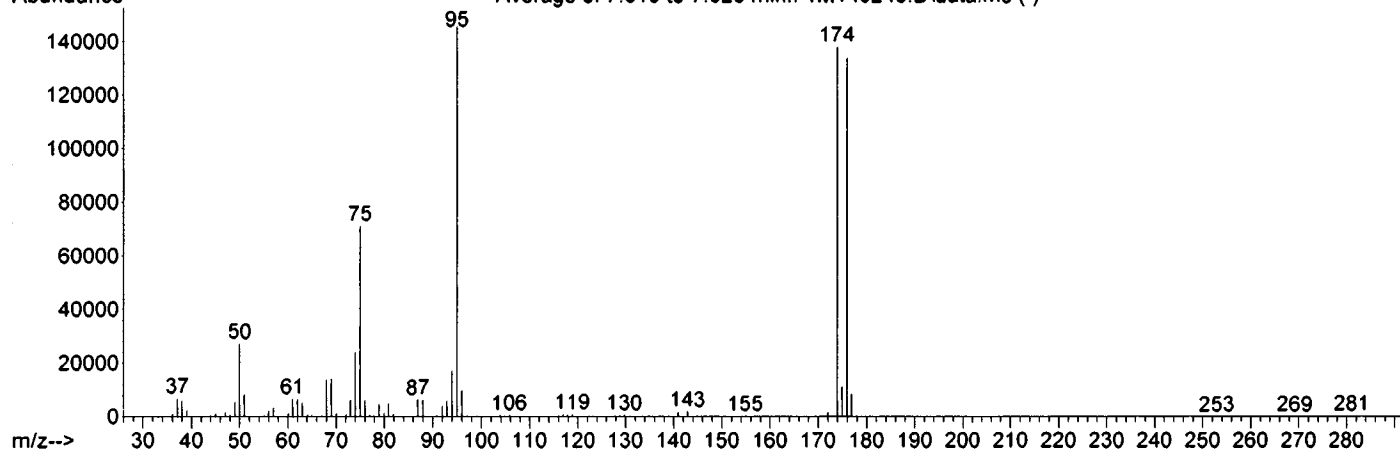
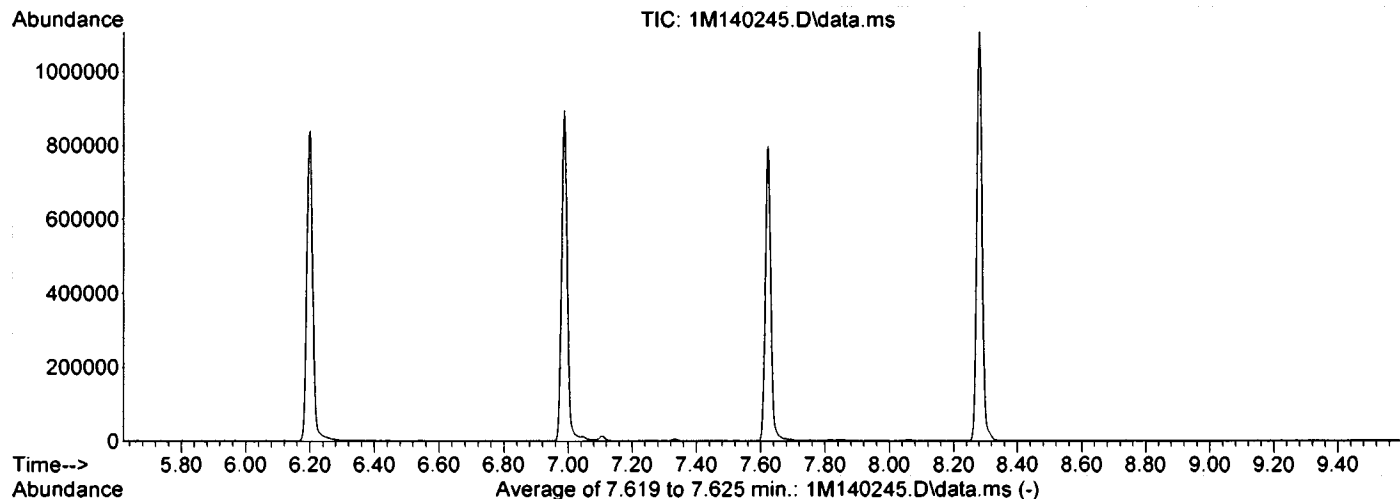
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.8	27296	PASS
75	95	30	60	48.9	71120	PASS
95	95	100	100	100.0	145493	PASS
96	95	5	9	6.9	10000	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	94.9	138024	PASS
175	174	5	9	8.0	11104	PASS
176	174	95	101	97.0	133861	PASS
177	176	5	9	6.4	8578	PASS

Data File	Sample Number	Analysis Date:
1M140246.D	CAL @ 20 PPB	10/08/20 02:43
1M140247.D	20 PPB	10/08/20 03:04
1M140248.D	BLK	10/08/20 03:25
1M140249.D	BLK	10/08/20 03:45
1M140250.D	DAILY BLANK	10/08/20 04:06
1M140251.D	DAILY BLANK	10/08/20 04:27
1M140252.D	AD19636-002(400u)	10/08/20 04:47
1M140253.D	AD19587-007	10/08/20 05:08
1M140254.D	AD19596-002	10/08/20 05:29
1M140255.D	AD19581-003	10/08/20 05:49
1M140256.D	AD19581-001(400u)	10/08/20 06:10
1M140257.D	AD19559-001(400u)	10/08/20 06:31
1M140258.D	AD19517-004	10/08/20 06:51
1M140259.D	AD19619-001(MS)	10/08/20 07:12
1M140260.D	AD19619-001(MSD)	10/08/20 07:33
1M140261.D	MBS89456	10/08/20 07:53
1M140262.D	MBS89464	10/08/20 08:14
1M140263.D	BLK	10/08/20 08:35
1M140264.D	BLK	10/08/20 08:55
1M140265.D	AD19619-001	10/08/20 09:16
1M140266.D	AD19629-002	10/08/20 09:37
1M140267.D	AD19629-001	10/08/20 09:58
1M140268.D	AD19580-001(MS)	10/08/20 10:18
1M140269.D	AD19598-012	10/08/20 10:39
1M140270.D	AD19580-001(MSD)	10/08/20 11:00
1M140271.D	AD19595-009	10/08/20 11:21
1M140272.D	AD19595-003	10/08/20 11:42
1M140273.D	AD19595-010	10/08/20 12:02
1M140274.D	AD19595-001	10/08/20 12:23
1M140275.D	AD19595-005	10/08/20 12:44
1M140276.D	AD19636-002(80uL)	10/08/20 13:05
1M140277.D	AD19598-013	10/08/20 13:25
1M140278.D	AD19598-014	10/08/20 13:46
1M140279.D	AD19568-002	10/08/20 14:07

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-0720\  
 Data File : 1M140245.D  
 Acq On : 08 Oct 2020 02:23  
 Operator : RL  
 Sample : BFB TUNE  
 Misc : A, 5ML  
 ALS Vial : 50 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS\_1\MethodQt\1M\_A0909.M  
 Title : @GCMS\_1,ug,624,8260  
 Last Update : Thu Sep 10 15:56:53 2020



Spectrum Information: Average of 7.619 to 7.625 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	27296	PASS
75	95	30	60	48.9	71120	PASS
95	95	100	100	100.0	145493	PASS
96	95	5	9	6.9	10000	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	94.9	138024	PASS
175	174	5	9	8.0	11104	PASS
176	174	95	101	97.0	133861	PASS
177	176	5	9	6.4	8578	PASS

*M*

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS I

Data File: 1M140327.D  
Analysis Date: 10/09/20 08:01  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.612 to 7.619 min

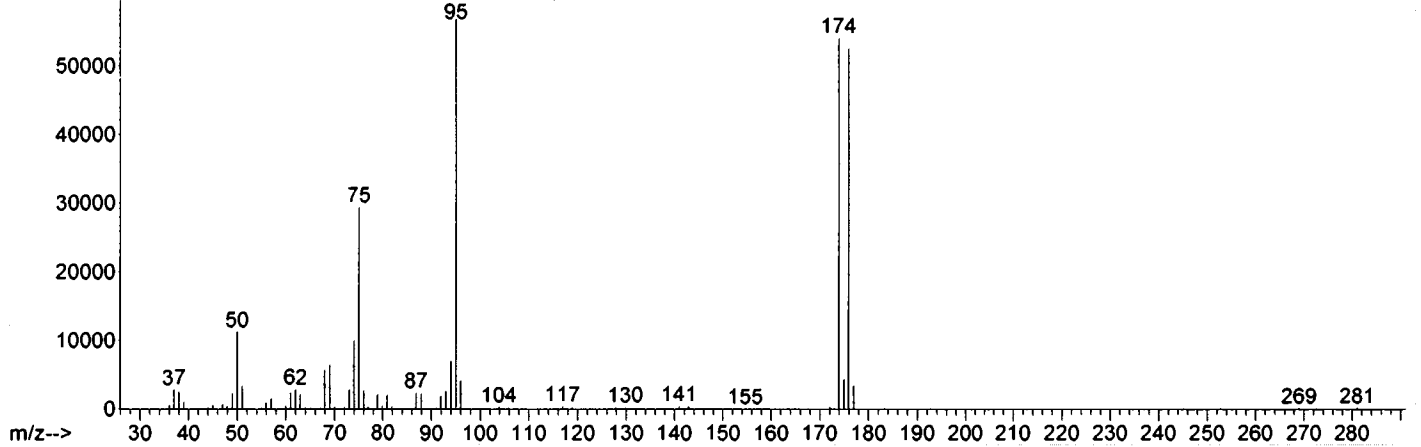
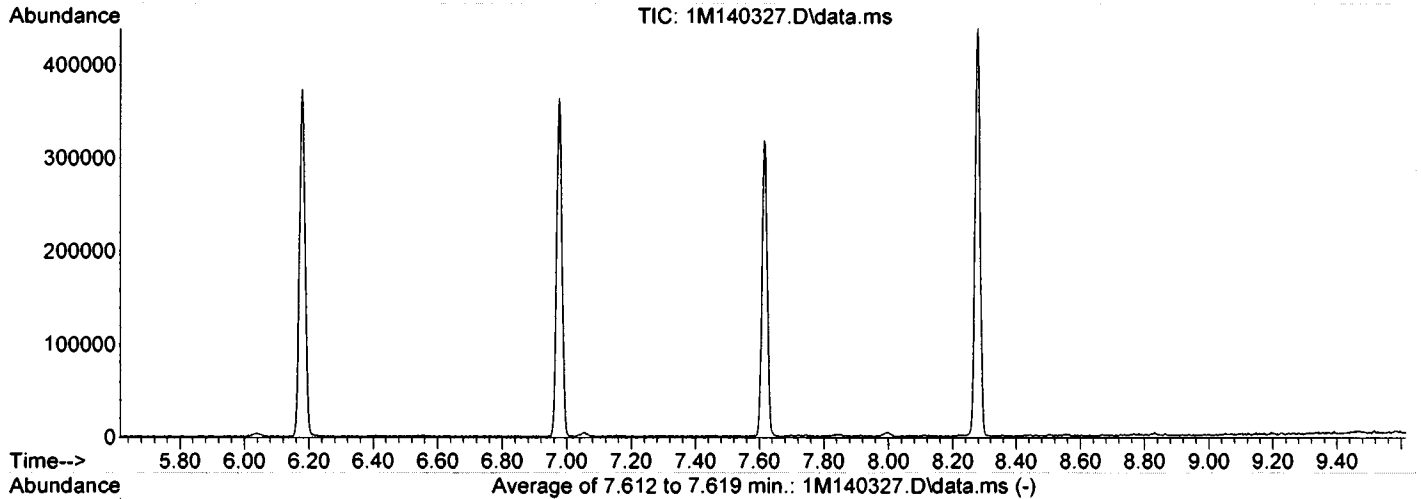
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
50	95	15	40	19.9	11282	PASS	
75	95	30	60	51.9	29459	PASS	
95	95	100	100	100.0	56771	PASS	
96	95	5	9	7.3	4151	PASS	
173	174	0.00	2	0.4	198	PASS	
174	95	50	100	95.3	54075	PASS	
175	174	5	9	8.1	4361	PASS	
176	174	95	101	97.2	52539	PASS	
177	176	5	9	6.6	3478	PASS	

Data File	Sample Number	Analysis Date:
1M140328.D	20 PPB	10/09/20 08:15
1M140329.D	CAL @ 20 PPB	10/09/20 08:41
1M140330.D	BLK	10/09/20 09:11
1M140331.D	BLK	10/09/20 09:31
1M140332.D	DAILY BLANK	10/09/20 09:56
1M140333.D	DAILY BLANK	10/09/20 10:26
1M140334.D	AD19654-001	10/09/20 10:55
1M140335.D	AD19616-001	10/09/20 11:16
1M140336.D	AD19539-012(400u	10/09/20 11:36
1M140337.D	AD19539-014(40uL	10/09/20 11:57
1M140338.D	MBS89475	10/09/20 12:18
1M140339.D	MBS89476	10/09/20 12:39
1M140340.D	AD19598-012	10/09/20 12:59
1M140341.D	AD19539-012	10/09/20 13:20
1M140342.D	AD19595-002	10/09/20 13:41
1M140343.D	AD19595-004	10/09/20 14:01
1M140344.D	19595-007	10/09/20 14:22
1M140345.D	AD19595-006	10/09/20 14:43
1M140346.D	AD19595-012	10/09/20 15:03
1M140347.D	AD19616-002(MS:	10/09/20 15:24
1M140348.D	AD19616-003(MSD	10/09/20 15:45
1M140349.D	AD19654-001(MS)	10/09/20 16:06
1M140350.D	AD19654-001(MSD	10/09/20 16:26
1M140351.D	BLK	10/09/20 16:47
1M140352.D	BLK	10/09/20 17:07
1M140353.D	AD19592-002	10/09/20 17:28
1M140354.D	AD19592-003	10/09/20 17:49
1M140355.D	AD19591-003	10/09/20 18:10
1M140356.D	AD19591-004	10/09/20 18:30
1M140357.D	AD19616-006	10/09/20 18:51
1M140358.D	AD19592-001	10/09/20 19:12
1M140359.D	AD19593-001	10/09/20 19:33
1M140360.D	AD19593-003	10/09/20 19:54
1M140361.D	AD19616-004	10/09/20 20:14
1M140362.D	AD19616-005	10/09/20 20:35
1M140363.D	19517-004	10/09/20 20:56
1M140364.D	MBS89482	10/09/20 21:16
1M140365.D	BLK	10/09/20 21:37
1M140366.D	BLK	10/09/20 21:58
1M140367.D	BLK	10/09/20 22:18
1M140368.D	BLK	10/09/20 22:39
1M140369.D	BLK	10/09/20 23:00
1M140370.D	BLK	10/09/20 23:21
1M140371.D	BLK	10/09/20 23:41

Data Path : G:\GcMsData\2020\GCMS\_1\Data\10-09-20\  
 Data File : 1M140327.D  
 Acq On : 09 Oct 2020 08:01  
 Operator : BK  
 Sample : BFB TUNE  
 Misc : A,5ML  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS\_1\MethodQt\1M\_A0909.M  
 Title : @GCMS\_1,ug,624,8260  
 Last Update : Thu Sep 10 15:56:53 2020



Spectrum Information: Average of 7.612 to 7.619 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	11282	PASS
75	95	30	60	51.9	29459	PASS
95	95	100	100	100.0	56771	PASS
96	95	5	9	7.3	4151	PASS
173	174	0.00	2	0.4	198	PASS
174	95	50	100	95.3	54075	PASS
175	174	5	9	8.1	4361	PASS
176	174	95	101	97.2	52539	PASS
177	176	5	9	6.6	3478	PASS

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																			
1	1M139264.D	CAL @ 20 PPB	09/09/20 20:51	2	1M139262.D	CAL @ 5 PPB	09/09/20 20:09	LW1 LW2 LW3 LW4 LW5 LW6 LW7 LW8 LW9																			
3	1M139263.D	CAL @ 10 PPB	09/09/20 20:30	4	1M139266.D	CAL @ 50 PPB	09/09/20 21:33																				
5	1M139274.D	CAL @ 100 PPB	09/10/20 00:19	6	1M139271.D	CAL @ 250 PPB	09/09/20 23:16																				
7	1M139268.D	CAL @ 500 PPB	09/09/20 22:14	8	1M139261.D	CAL @ 1 PPB	09/09/20 19:48																				
9	1M139260.D	CAL @ 0.5 PPB	09/09/20 19:28																								
Compound	Col	Mr	Flt	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	LW1	LW2	LW3	LW4	LW5	LW6	LW7	LW8	LW9	
Chlorodifluoromethane	1	0	Avg	0.3873	0.3844	0.4236	0.3679	0.4144	0.4430	0.4172	0.4290	---	0.4082	2.14	0.999	0.999	6.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluoromethane	1	0	Avg	0.1967	0.1757	0.1946	0.1832	0.2138	0.2260	0.2132	0.1820	---	0.1982	2.12	0.999	0.999	9.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.2861	0.2703	0.2873	0.2445	0.2718	0.2797	0.2580	0.2894	---	0.2732	3.30	0.998	1.000	5.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Avg	0.1164	0.1100	0.1142	0.1120	0.1418	0.1458	0.1337	0.1352	---	0.1262	2.66	0.998	0.999	11.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.2196	0.2025	0.2227	0.1988	0.2280	0.2411	0.2315	0.2234	---	0.2212	2.37	0.999	1.000	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1327	0.1250	0.1317	0.1203	0.1309	0.1314	0.1183	0.1485	---	0.1302	2.74	0.997	1.000	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethane	1	0	Avg	0.2772	0.2594	0.2930	0.2630	0.3149	0.3519	0.3382	0.2914	---	0.2992	2.96	0.999	0.999	11.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1464	0.1304	0.1429	0.1293	0.1452	0.1491	0.1392	0.1537	---	0.1423	3.17	0.999	1.000	6.1	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.3037	0.2847	0.2910	0.2762	0.3108	0.3246	0.3081	0.3354	---	0.3043	3.20	0.999	1.000	6.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0	Avg	0.1166	0.1153	0.1351	0.1182	0.1307	0.1365	0.1258	0.1389	---	0.1273	3.35	0.998	0.999	7.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2005	0.1889	0.2006	0.1844	0.1976	0.2011	0.1968	0.2464	---	0.2023	3.74	1.000	1.000	9.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0332	0.0295	0.0309	0.0305	0.0324	0.0345	0.0332	0.0331	---	0.0322	3.27	1.000	1.000	5.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrylonitrile	1	0	Avg	0.0926	0.0939	0.0921	0.0826	0.0826	0.0909	0.0865	0.0748	---	0.0879	3.92	0.999	1.000	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Avg	0.2479	0.1891	0.2236	0.2407	0.2448	0.2726	0.2630	0.1769	---	0.2323	3.50	0.999	0.999	15.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.0759	0.0797	0.0785	0.0681	0.0765	0.0780	0.0714	0.1024	---	0.0789	3.38	0.998	1.000	13.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Disulfide	1	0	Avg	0.5240	0.4774	0.5176	0.4922	0.5602	0.5804	0.5592	0.5677	---	0.5353	5.57	0.999	1.000	7.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0228	0.0242	0.0217	0.0202	0.0219	0.0231	0.0212	0.0237	---	0.0224	3.80	0.998	0.999	6.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Hexane	1	0	Avg	0.1518	0.1596	0.1866	0.1577	0.1801	0.1906	0.1856	0.1725	---	0.1734	4.17	1.000	1.000	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.5659	0.4971	0.5311	0.5274	0.5971	0.6018	0.5743	0.5315	---	0.5534	4.31	0.999	1.000	6.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.2526	0.2464	0.2566	0.2356	0.2621	0.2922	0.2833	0.2621	---	0.2613	3.36	0.999	0.999	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1557	0.1862	0.1562	0.1489	0.1612	0.1685	0.1567	0.2300	---	0.1703	3.64	0.999	1.000	16.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.4649	0.4430	0.4503	0.4337	0.4856	0.5095	0.4848	0.4951	0.3564	---	0.4583	3.96	0.999	1.000	10.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
1,1-Dichloroethane	1	0	Avg	0.3692	0.3335	0.3629	0.3393	0.3635	0.3756	0.4046	0.3515	---	0.3634	4.28	0.999	1.000	6.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethane	1	0	Avg	0.1877	0.1722	0.1840	0.1706	0.1843	0.1862	0.1845	0.2053	---	0.1843	3.96	1.000	1.000	5.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.5106	0.4295	0.4716	0.4943	0.5666	0.5894	0.5731	0.4363	---	0.5094	4.56	1.000	1.000	12.0	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethane	1	0	Avg	0.3525	0.3195	0.3362	0.3296	0.3657	0.3774	0.3926	0.3374	---	0.3514	4.66	1.000	1.000	7.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.2176	0.1953	0.1818	0.2015	0.2156	0.2199	0.2191	0.2399	---	0.2114	4.82	1.000	1.000	8.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.2892	0.2845	0.3004	0.2716	0.2898	0.3049	0.3099	0.2927	---	0.2934	4.67	1.000	1.000	4.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.2938	0.2585	0.2951	0.2876	0.3129	0.3223	0.3102	0.2503	---	0.2914	4.69	1.000	1.000	8.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0041	0.0034	0.0037	0.0031	0.0042	0.0043	0.0042	0.0030	---	0.0038	5.73	0.999	0.999	14.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloropropene	1	0	Avg	0.2655	0.2383	0.2652	0.2634	0.2963	0.3047	0.3020	0.2285	---	0.2715	5.07	1.000	1.000	11.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.3808	0.3557	0.3679	0.3510	0.3823	0.3915	0.3876	0.3756	---	0.3744	4.85	1.000	1.000	3.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethane	1	0	Avg	0.2752	0.2822	0.2798	0.2749	0.2726	0.2713	0.2802	0.2926	0.2902	---	0.2804	4.95	-1.000	-1.000	2.7	0.10	20.00	5.00	10.00	50.00	100.0	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2227	0.2046	0.2488	0.2485	0.2957	0.3165	0.3100	0.2068	---	0.2575	5.03	0.999	1.000	18.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1538	0.1515	0.1492	0.1500	0.1468	0.1495	0.1513	0.1615	0.1579	---	0.1525	5.15	-1.000	-1.000	3.0	0.10	20.00	5.00	10.00	50.00	100.0	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.2958	0.2830	0.2980	0.2749	0.2996	0.3070	0.3125	0.3154	0.3077	---	0.2995	5.19	1.000	1.000	4.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
2-Butanone	1	0	Avg	0.3203	0.2040	0.1926	0.2469	0.2450	0.2515	0.2157	0.1924	---	0.2194	4.98	0.994	0.999	11.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3268	0.3173	0.3322	0.3087	0.3426	0.3525	0.3537	0.3306	---	0.3334	4.98	1.000	1.000	4.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.2896	0.2681	0.2989	0.2835	0.3152	0.3235	0.3334	0.2862	---	0.2995	5.08													



Compound	Col Mr	Fit	Data File									AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
			RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9						LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9
Methylcyclohexane	1	0	0.1912	0.1790	0.2181	0.2191	0.2678	0.2859	0.2836	0.1912	0.230566	1.00	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Dibromomethane	1	0	0.1709	0.1553	0.1636	0.1557	0.1707	0.1763	0.1796	0.1525	0.166573	1.00	1.00	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2-Dichloropropane	1	0	0.2171	0.1998	0.2070	0.2033	0.2185	0.2291	0.2304	0.2126	0.215567	1.00	1.00	5.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Trichloroethene	1	0	0.2285	0.2207	0.2201	0.2111	0.2359	0.2497	0.2533	0.2289	0.231554	1.00	1.00	6.3	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Benzene	1	0	0.8430	0.7706	0.8042	0.7898	0.8450	0.8496	0.8306	0.7922	0.790519	1.00	1.00	10	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	0.50		
tert-Amyl methyl ether	1	0	0.4764	0.3856	0.4327	0.4839	0.5435	0.5557	0.5684	0.4341	0.485524	1.00	1.00	14	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Iso-propylacetate	1	0	0.4523	0.4180	0.4318	0.4373	0.4709	0.4620	0.4113	0.3976	0.435519	0.996	1.00	5.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Methyl methacrylate	1	0	0.2546	0.1901	0.2147	0.2426	0.2662	0.2332	0.2241	0.236569	0.995	1.00	11	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00			
Dibromochloromethane	1	0	0.2939	0.2629	0.2758	0.2740	0.2983	0.3087	0.3063	0.2409	0.283667	1.00	1.00	8.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
2-Chloroethylvinyl ether	1	0	0.0594	0.0473	0.0535	0.0597	0.0693	0.0697	0.0660	0.0362	0.0577595	0.999	1.00	20	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
cis-1,3-Dichloropropene	1	0	0.3782	0.3292	0.3575	0.3672	0.3971	0.4007	0.3831	0.2978	0.364605	0.999	1.00	9.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
trans-1,3-Dichloropropene	1	0	0.3722	0.3310	0.3494	0.3628	0.3877	0.4004	0.3903	0.3468	0.368633	1.00	1.00	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Ethyl methacrylate	1	0	0.2563	0.1856	0.2061	0.2277	0.2521	0.2504	0.2413	0.1938	0.224636	1.00	1.00	11	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,1,2-Trichloroethane	1	0	0.2401	0.2249	0.2463	0.2263	0.2362	0.2361	0.2262	0.2333	0.234644	1.00	1.00	3.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2-Dibromoethane	1	0	0.2549	0.2290	0.2507	0.2405	0.2601	0.2693	0.2643	0.2467	0.252675	1.00	1.00	5.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,3-Dichloropropane	1	0	0.4174	0.3828	0.4056	0.3874	0.4138	0.4141	0.3943	0.3792	0.399654	0.999	1.00	3.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
4-Methyl-2-Pentanone	1	0	0.2873	0.2403	0.2558	0.2728	0.2986	0.2995	0.2795	0.2260	0.270611	0.999	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
2-Hexanone	1	0	0.2156	0.1803	0.1902	0.2070	0.2301	0.2317	0.2134	0.1734	0.205655	0.998	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Tetrachloroethene	1	0	0.2138	0.2106	0.2267	0.2087	0.2262	0.2245	0.2123	0.2088	0.216654	0.999	1.00	3.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Toluene-d8	1	0	1.2685	1.2420	1.2649	1.2473	1.2102	1.1664	1.1161	1.2021	1.216200	0.999	1.00	4.0	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Toluene	1	0	0.6226	0.5722	0.6160	0.5777	0.6115	0.6037	0.5659	0.5761	0.593624	0.999	1.00	3.8	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,1,1,2-Tetrachloroeth	1	0	0.2612	0.2399	0.2573	0.2417	0.2599	0.2712	0.2685	0.2605	0.257704	1.00	1.00	5.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Chlorobenzene	1	0	0.7099	0.6515	0.7119	0.6569	0.7023	0.7175	0.7005	0.6879	0.692701	1.00	1.00	3.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
n-Butyl acrylate	1	0	0.7654	0.6133	0.6768	0.7684	0.8869	0.9466	0.9217	0.6136	0.774725	1.00	1.00	17	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
n-Amyl acetate	1	0	0.8011	0.6638	0.7252	0.7573	0.8573	0.8585	0.8298	0.5792	0.755737	1.00	1.00	13	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Bromoforn	1	0	0.3569	0.3440	0.3450	0.3324	0.3741	0.4110	0.4216	0.3549	0.368746	0.999	1.00	8.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Ethylbenzene	1	0	0.4694	0.3972	0.4713	0.4501	0.4912	0.5144	0.4875	0.5210	0.477705	1.00	1.00	8.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,1,2,2-Tetrachloroeth	1	0	0.5926	0.5820	0.5843	0.5347	0.5733	0.5996	0.5862	0.6850	0.592768	1.00	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Bromofluorobenzene	1	0	0.7353	0.7384	0.7399	0.7491	0.7568	0.7737	0.8013	0.7639	0.7444	0.756763	-1	2.8	0.30	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Styrene	1	0	1.2049	0.9635	1.1086	1.1444	1.2293	1.2658	1.2206	0.9782	1.14734	1.00	1.00	10	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
m&Xylenes	1	0	0.6832	0.5682	0.6548	0.6583	0.7010	0.7136	0.6990	0.6183	0.6402	0.640711	1.00	1.00	13	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.0	2.00	
o-Xylene	1	0	0.6924	0.5992	0.6558	0.6555	0.6938	0.7175	0.7240	0.5325	0.655733	1.00	1.00	9.7	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
trans-1,4-Dichloro-2-b	1	0	0.2131	0.1997	0.2148	0.2090	0.2346	0.2577	0.2545	0.2200	0.225770	1.00	1.00	9.5	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,3-Dichlorobenzene	1	0	1.0187	0.9494	1.0109	0.9406	1.0208	1.0446	0.9888	0.9041	0.985825	0.999	1.00	4.9	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,4-Dichlorobenzene	1	0	1.0385	0.9920	1.0448	0.9688	1.0456	1.0712	1.0134	1.0830	1.03830	0.999	1.00	3.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2-Dichlorobenzene	1	0	0.9899	0.9123	0.9881	0.9284	0.9994	1.0173	0.9621	0.9848	0.973852	0.999	1.00	3.7	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Isopropylbenzene	1	0	1.6209	1.3926	1.5867	1.6399	1.8321	1.9385	1.8725	1.3141	1.65753	1.00	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Cyclohexanone	1	0	0.0229	0.0150	0.0220	0.0203	0.0230	0.0229	0.0169	0.0205760	0.998	1.00	15	0.10	100.0	25.00	50.00	250.0	500.0	250.0	2500.0	5000.0	5.00		
Camphene	1	0	0.4118	0.3948	0.4759	0.4454	0.5182	0.5685	0.5711	0.4618	0.481770	0.999	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,3-Trichloropropane	1	0	0.7382	0.7074	0.7201	0.6910	0.7463	0.7785	0.7440	0.8067	0.742772	0.999	1.00	5.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
2-Chlorotoluene	1	0	1.1665	1.0354	1.1522	1.0906	1.1791	1.2253	1.1366	1.1868	1.15782	0.999	1.00	5.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		

Flags  
a - failed the min of criteria  
c - failed the minimum correlation coeff. criteria (if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level	Concentrations																						
1	1M139264.D	CAL @ 10 PPB	09/09/20 20:51	2	1M139262.D	CAL @ 5 PPB	09/09/20 20:09	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9															
3	1M139263.D	CAL @ 100 PPB	09/10/20 00:19	4	1M139266.D	CAL @ 50 PPB	09/09/20 21:33	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00																
5	1M139274.D	CAL @ 500 PPB	09/09/20 22:14	6	1M139271.D	CAL @ 250 PPB	09/09/20 23:16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00																
7	1M139268.D	CAL @ 0.5 PPB	09/09/20 19:28	8	1M139261.D	CAL @ 1 PPB	09/09/20 19:48	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00																
9	1M139260.D																														
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9					
p-Ethyltoluene	1	0	Avg	1.7532	1.5023	1.7302	1.7287	1.8820	2.0542	1.8689	1.4515	---	1.75781	0.998	0.999	1.00	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
4-Chlorotoluene	1	0	Avg	1.1573	1.1275	1.1800	1.0949	1.1893	1.2361	1.1622	1.0712	---	1.15788	0.999	1.00	1.00	4.6	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
n-Propylbenzene	1	0	Avg	2.0890	1.9142	2.0944	2.0200	2.2275	2.3088	2.1481	1.9328	---	2.09775	0.999	1.00	1.00	6.5	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
Bromobenzene	1	0	Avg	1.1504	1.0913	1.1763	1.0879	1.1865	1.2520	1.1489	1.1688	---	1.16772	0.998	0.999	1.00	4.6	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
1,3,5-Trimethylbenzen	1	0	Avg	1.5327	1.3812	1.5427	1.4700	1.6057	1.5433	1.4780	1.2648	---	1.48784	0.999	1.00	1.00	7.4	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
Butyl methacrylate	1	0	Avg	0.6097	0.4882	0.5561	0.5600	0.6167	0.6000	0.6039	0.4915	---	0.566785	1.00	1.00	1.00	9.2	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
t-Butylbenzene	1	0	Avg	1.3485	1.1612	1.3213	1.4036	1.5745	1.6580	1.5849	1.1234	---	1.40804	0.999	1.00	1.00	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
1,2,4-Trimethylbenzen	1	0	Avg	1.6021	1.3113	1.5381	1.5620	1.7149	1.7535	1.6331	1.1645	---	1.53806	0.999	1.00	1.00	13	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
sec-Butylbenzene	1	0	Avg	1.7088	1.4499	1.7186	1.7469	1.9874	2.0480	1.9082	1.3809	---	1.748.16	0.999	1.00	1.00	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
4-Isopropyltoluene	1	0	Avg	1.5212	1.2438	1.5053	1.5690	1.7712	1.8092	1.6738	1.0820	---	1.528.23	0.998	1.00	1.00	16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
n-Butylbenzene	1	0	Avg	1.7386	1.4656	1.7391	1.7444	1.9201	1.9371	1.7642	1.4282	---	1.728.47	0.998	1.00	1.00	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
p-Diethylbenzene	1	0	Avg	0.6574	0.6848	0.8049	0.9035	1.0320	1.0606	0.9849	0.6668	---	0.8748.45	0.998	1.00	1.00	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
1,2,4,5-Tetramethylbe	1	0	Qua	1.2716	0.8768	1.0787	1.3943	1.6251	1.6484	1.5055	0.8930	---	1.298.91	0.998	1.00	1.00	24	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
1,2-Dibromo-3-Chloro	1	0	Qua	0.1620	0.1512	0.1566	0.1595	0.1769	0.1794	0.1657	0.1606	---	0.1648.97	0.998	1.00	1.00	5.9	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
Camphor	1	0	Qua	0.0666	0.0451	0.0541	0.0715	0.0851	0.0855	0.0834	0.0447	0.0385	---	0.0639.9.41	1.00	1.00	2.9	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
Hexachlorobutadiene	1	0	Avg	0.2847	0.2671	0.3023	0.2831	0.3126	0.3067	0.2923	0.2771	---	0.2919.55	0.999	1.00	1.00	5.4	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
1,2,4-Trichlorobenzen	1	0	Avg	0.6761	0.5550	0.6347	0.6448	0.6965	0.6776	0.6353	0.5276	---	0.6319.46	0.999	1.00	1.00	9.5	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
1,2,3-Trichlorobenzen	1	0	Avg	0.5997	0.5032	0.5646	0.5762	0.6366	0.6201	0.5926	0.5602	---	0.5829.76	0.999	1.00	1.00	7.1	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						
Naphthalene	1	0	Avg	1.7064	1.2728	1.5139	1.7305	1.9502	1.8956	1.7245	1.1797	---	1.629.62	0.997	1.00	1.00	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00						

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria(if applicable)

Note:  
Corr 1 = Correlation Coefficients for linear Eq.  
Corr 2 = Correlation Coefficients for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 8.758



Compound	Col	Mr	File	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9	
Methylcyclohexane	1	0	Avg	0.2729	0.3234	0.3727	0.3075	0.3118	0.3127	---	---	---	0.3175	5.45	1.00	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Dibromomethane	1	0	Avg	0.1477	0.1592	0.1534	0.1526	0.1597	0.1556	---	---	---	0.1555	5.53	1.00	1.00	2.9	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,2-Dichloropropane	1	0	Avg	0.1948	0.2092	0.2296	0.1980	0.2016	0.2012	---	---	---	0.2065	5.46	1.00	1.00	6.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Trichloroethene	1	0	Avg	0.2430	0.2950	0.3182	0.2628	0.2691	0.2730	---	---	---	0.2775	5.33	1.00	1.00	9.5	0.20	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Benzene	1	0	Avg	0.8296	0.9399	1.0247	0.8682	0.8663	0.8713	---	0.9760	---	0.9114	4.98	1.00	1.00	7.8	0.50	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
tert-Amyl methyl ether	1	0	Avg	0.4697	0.3985	0.4939	0.4854	0.5022	0.4979	---	---	---	0.4755	5.02	1.00	1.00	8.2	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
iso-propylacetate	1	0	Avg	0.3321	0.3169	0.3515	0.3574	0.3565	0.3672	---	---	---	0.3474	4.98	1.00	1.00	5.4	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Methyl methacrylate	1	0	Avg	0.1554	0.1822	0.2189	0.1632	0.1654	0.1671	---	---	---	0.1755	5.48	1.00	1.00	1.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Dibromochloromethane	1	0	Avg	0.2714	0.2572	0.3084	0.3084	0.3146	0.3156	---	---	---	0.2966	6.45	1.00	1.00	8.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
2-Chloroethylvinyl ether	1	0	Avg	0.0361	0.0308	0.0378	0.0375	0.0381	0.0385	---	---	---	0.0365	5.73	1.00	1.00	7.9	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
cis-1,3-Dichloropropene	1	0	Avg	0.3730	0.3569	0.3925	0.4049	0.4250	0.4160	---	---	---	0.3955	5.83	1.00	1.00	6.6	0.20	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
trans-1,3-Dichloropropene	1	0	Avg	0.3324	0.3073	0.2949	0.3604	0.3777	0.3708	---	---	---	0.3416	6.12	1.00	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Ethyl methacrylate	1	0	Avg	0.1614	0.1496	0.1267	0.1669	0.1712	0.1771	---	---	---	0.1596	6.14	1.00	1.00	12	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,1,2-Trichloroethane	1	0	Avg	0.2541	0.2637	0.2753	0.2517	0.2659	0.2478	---	---	---	0.2586	6.22	1.00	1.00	3.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,2-Dibromoethane	1	0	Avg	0.2583	0.2466	0.2740	0.2642	0.2682	0.2656	---	0.2689	---	0.2646	6.53	1.00	1.00	3.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,3-Dichloropropane	1	0	Avg	0.4112	0.3852	0.4357	0.4053	0.4041	0.3966	---	---	---	0.4066	6.32	1.00	1.00	4.2	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
4-Methyl-2-Pentanone	1	0	Avg	0.1931	0.2019	0.2180	0.2196	0.2140	0.2211	---	---	---	0.2115	5.90	1.00	1.00	5.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
2-Hexanone	1	0	Avg	0.1484	0.1559	0.1881	0.1635	0.1595	0.1602	---	---	---	0.1636	6.33	1.00	1.00	8.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Tetrachloroethene	1	0	Avg	0.2401	0.2759	0.3574	0.2637	0.2679	0.2647	---	---	---	0.2786	6.32	1.00	1.00	15	0.20	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Toluene-d8	1	0	Avg	1.2648	1.2521	1.2652	1.3022	1.2431	1.2535	---	---	---	1.2293	1.2294	---	---	---	---	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.7124	0.7998	0.8489	0.7294	0.7293	0.7208	---	0.9184	---	0.7806	6.02	1.00	1.00	10	0.40	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2622	0.2603	0.2815	0.2774	0.2919	0.2938	---	---	---	0.2786	6.81	1.00	1.00	5.1	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Chlorobenzene	1	0	Avg	0.7994	0.8785	1.0127	0.8281	0.8313	0.8093	---	---	---	0.8606	7.78	1.00	1.00	9.3	0.50	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
n-Butyl acrylate	1	0	Qua	0.6515	0.6145	0.8204	0.6935	0.7148	0.4056	---	---	---	0.6507	7.02	0.912	0.997	21	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
n-Amyl acetate	1	0	Avg	0.6187	0.6292	0.7682	0.6092	0.5963	0.4818	---	---	---	0.6177	7.13	0.980	0.999	15	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Bromoforn	1	0	Avg	0.3315	0.3113	0.3448	0.3637	0.3776	0.2992	---	---	---	0.3387	7.23	0.988	0.999	8.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Ethylbenzene	1	0	Qua	0.6261	0.8026	1.0995	0.6814	0.7182	0.3984	---	0.8933	---	0.7466	8.82	0.911	0.995	29	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.6121	0.5920	0.5436	0.6266	0.6007	0.3851	---	---	---	0.5607	7.45	0.948	0.999	16	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Bromofluorobenzene	1	0	Avg	0.7426	0.7662	0.7489	0.7366	0.7315	0.5989	---	---	---	0.7277	7.40	---	---	7.3	---	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Styrene	1	0	Avg	1.5317	1.6242	1.5822	1.5687	1.6289	0.9703	---	---	---	1.4871	7.10	0.929	0.997	17	0.30	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
m&p-Xylenes	1	0	Qua	0.9341	1.1020	1.1867	0.9571	0.9828	0.5633	---	1.2291	1.2725	1.0268	8.8	0.906	0.996	23	0.10	40.00	10.00	4.00	100.0	200.0	500.0	---	---	
o-Xylene	1	0	Avg	0.9139	1.0090	1.2006	0.9489	0.9514	0.5623	---	---	---	0.9477	7.10	0.930	0.998	21	0.30	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2203	0.2358	0.2681	0.2431	0.2486	0.1838	---	---	---	0.2337	7.47	0.979	0.999	12	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,3-Dichlorobenzene	1	0	Avg	1.1487	1.3813	1.3825	1.1988	1.1993	1.0020	---	---	---	1.2280	8.02	0.994	1.00	12	0.60	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,4-Dichlorobenzene	1	0	Avg	1.1219	1.2981	1.5419	1.1889	1.2074	1.1610	---	---	---	1.2580	8.07	1.00	1.00	12	0.50	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,2-Dichlorobenzene	1	0	Avg	1.0684	1.2848	1.4627	1.1186	1.1141	1.0200	---	---	---	1.1882	8.29	0.999	1.00	14	0.40	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Isopropylbenzene	1	0	Avg	2.2874	2.8550	3.0632	2.5001	2.5199	1.8083	---	---	---	2.5072	9.29	0.976	0.999	16	0.10	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
Cyclohexanone	1	0	Qua	0.0196	0.0239	0.0458	0.0182	0.0182	0.0147	---	---	---	0.0235	7.37	0.992	1.00	4.8	---	100.0	25.00	10.00	250.0	500.0	1.250	---	---	
Camphene	1	0	Avg	0.7474	0.8346	0.9742	0.8430	0.8801	0.6326	---	---	---	0.8197	7.47	0.975	0.998	14	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
1,2,3-Trichloropropane	1	0	Avg	0.7236	0.7293	0.7710	0.7116	0.6986	0.5688	---	---	---	0.7017	7.48	0.991	1.00	9.8	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	
2-Chlorotoluene	1	0	Avg	1.4360	1.6916	1.8028	1.4933	1.4747	1.5524	---	---	---	1.5877	7.59	1.00	1.00	9.1	---	20.00	5.00	2.00	50.00	100.0	250.0	---	---	

Calibration Level Concentrations

**Flags**  
a - failed the min of criteria  
c - failed the minimum correlation coeff criteria (if applicable)

**Note:**  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																		
1	6M133178.D	CAL @ 20 PPB	10/06/20 12:10	2	6M133177.D	CAL @ 5 PPB	10/06/20 11:49	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9																		
3	6M133176.D	CAL @ 2 PPB	10/06/20 11:28	4	6M133179.D	CAL @ 50 PPB	10/06/20 12:30																			
5	6M133180.D	CAL @ 100 PPB	10/06/20 12:51	6	6M133194.D	CAL @ 250 PPB	10/06/20 17:42																			
7	6M133175.D	CAL @ 1 PPB	10/06/20 11:07	8	6M133174.D	CAL @ 0.5 PPB	10/06/20 10:47																			
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.3424	2.7687	3.0256	2.4705	2.4649	2.6381	---	---	---	2.627.58	0.999	1.00	9.5		20.00	5.00	2.00	50.00	100.0	250.0			
4-Chlorotoluene	1	0	Avg	1.3632	1.5991	1.8008	1.4132	1.3965	1.1989	---	---	---	1.467.65	0.995	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0			
n-Propylbenzene	1	0	Avg	2.6900	3.1978	3.7908	2.8856	2.8725	2.8847	---	---	3.3477	3.107.52	1.00	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0			
Bromobenzene	1	0	Avg	1.3556	1.5319	1.7226	1.3909	1.3845	1.1488	---	---	---	1.427.49	0.993	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0			
1,3,5-Trimethylbenzen	1	0	Avg	1.8435	2.1699	2.2087	1.9945	1.9598	1.9347	---	---	1.8518	1.997.61	1.00	1.00	7.2		20.00	5.00	2.00	50.00	100.0	250.0			
Butyl methacrylate	1	0	Avg	0.4945	0.5392	0.7032	0.5050	0.4975	0.4067	---	---	---	0.5247.61	0.992	1.00	19	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0			
t-Butylbenzene	1	0	Avg	1.8764	2.3393	2.3760	2.0653	2.0872	1.7908	---	---	1.6963	2.037.81	0.995	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0			
1,2,4-Trimethylbenzen	1	0	Avg	1.9105	2.2473	2.2886	2.0467	2.0248	1.4432	---	---	2.0967	2.017.83	0.974	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0			
sec-Butylbenzene	1	0	Avg	2.5084	2.9700	3.4014	2.6660	2.7307	1.9891	---	---	2.5928	2.697.93	0.978	0.999	16		20.00	5.00	2.00	50.00	100.0	250.0			
4-Isopropyltoluene	1	0	Avg	2.0339	2.4791	2.5912	2.2358	2.2902	1.6955	---	---	2.0407	2.208.00	0.981	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0			
n-Butylbenzene	1	0	Avg	2.2527	2.7673	3.1706	2.4308	2.4522	1.7122	---	---	2.2140	2.438.24	0.971	0.999	19		20.00	5.00	2.00	50.00	100.0	250.0			
p-Diethylbenzene	1	0	Avg	1.1853	1.3088	1.5985	1.2730	1.2987	1.1142	---	---	---	1.308.22	0.995	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0			
1,2,4,5-Tetramethylbe	1	0	Avg	1.6875	1.8280	2.1917	1.8907	1.9578	2.1208	---	---	---	1.958.68	0.999	1.00	9.6		20.00	5.00	2.00	50.00	100.0	250.0			
1,2-Dibromo-3-Chloro	1	0	Avg	0.1514	0.1361	0.1821	0.1463	0.1529	0.1966	---	---	---	0.1618.74	0.991	1.00	14	0.05	20.00	5.00	2.00	50.00	100.0	250.0			
Camphor	1	0	Qua	0.0653	0.0754	0.1316	0.0689	0.0677	0.0463	---	---	---	0.0759.18	0.965	0.999	38		20.00	5.00	2.00	50.00	100.0	250.0			
Hexachlorobutadiene	1	0	Avg	0.3435	0.4260	0.5092	0.3917	0.4065	0.2852	---	---	---	0.3949.32	0.971	0.998	19		20.00	5.00	2.00	50.00	100.0	250.0			
1,2,4-Trichlorobenzen	1	0	Qua	0.6598	0.6998	0.9387	0.7414	0.7324	0.4611	---	---	---	0.7069.24	0.944	0.998	22	0.20	20.00	5.00	2.00	50.00	100.0	250.0			
1,2,3-Trichlorobenzen	1	0	Qua	0.6166	0.7020	0.8588	0.7015	0.6803	0.4126	---	---	---	0.6629.54	0.932	0.998	22		20.00	5.00	2.00	50.00	100.0	250.0			
Naphthalene	1	0	Avg	1.7754	1.8141	2.2017	1.9308	1.9081	1.1660	---	---	2.2633	1.879.40	0.939	0.998	19		20.00	5.00	2.00	50.00	100.0	250.0			

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 12.54

Form7  
Continuing CalibrationCalibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/7/2020 12:30:00 PData File: 6M133210.D  
Method: EPA 8260D

Instrument: GCMS 6

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.12	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.64	54.15	50	20	0.1	0.279	0.302	8.29	
Dichlorodifluoromethane	1	0		1.64	44.73	50	20	0.1	0.251	0.225	10.55	
Chloromethane	1	0		1.81	47.55	50	20	0.1	0.272	0.230	4.90	
Bromomethane	1	0		2.23	45.11	50	20	0.1	0.225	0.203	9.77	
Vinyl Chloride	1	0		1.92	45.70	50	20	0.1	0.296	0.270	8.60	
Chloroethane	1	0		2.32	46.98	50	20	0.1	0.195	0.162	6.04	
Trichlorofluoromethane	1	0		2.56	46.65	50	20	0.1	0.479	0.447	6.70	
Ethyl ether	1	0		2.81	43.57	50	20	0.5	0.132	0.115	12.85	
Furan	1	0		2.84	42.45	50	20	0.5	0.246	0.209	15.10	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	46.73	50	20	0.1	0.167	0.156	6.55	
Methylene Chloride	1	0		3.43	46.74	50	20	0.1	0.254	0.210	6.53	
Acrolein	1	0		2.92	216.55	250	20		0.029	0.025	13.38	
Acrylonitrile	1	0		3.64	41.96	50	20		0.068	0.057	16.09	
Iodomethane	1	0		3.17	41.87	50	20		0.209	0.232	16.26	
Acetone	1	0		3.06	246.68	250	20	0.1	0.058	0.049	1.33	
Carbon Disulfide	1	0		3.23	44.66	50	20	0.1	0.663	0.593	10.68	
t-Butyl Alcohol	1	0		3.50	200.65	250	20		0.023	0.018	19.74	
n-Hexane	1	0		3.91	52.68	50	20		0.218	0.210	5.37	
Di-isopropyl-ether	1	0		4.06	43.03	50	20		0.450	0.387	13.94	
1,1-Dichloroethene	1	0		3.02	43.73	50	20	0.1	0.294	0.258	12.55	
Methyl Acetate	1	0		3.34	45.04	50	20	0.1	0.117	0.106	9.92	
Methyl-t-butyl ether	1	0		3.67	44.18	50	20	0.1	0.471	0.417	11.64	
1,1-Dichloroethane	1	0		4.03	43.14	50	20	0.2	0.368	0.318	13.71	
trans-1,2-Dichloroethene	1	0		3.68	46.14	50	20	0.1	0.241	0.222	7.72	
Ethyl-t-butyl ether	1	0		4.32	45.13	50	20	0.5	0.457	0.412	9.75	
cis-1,2-Dichloroethene	1	0		4.44	45.93	50	20	0.1	0.350	0.321	8.14	
Bromochloromethane	1	0		4.59	44.98	50	20		0.156	0.141	10.04	
2,2-Dichloropropane	1	0		4.45	45.65	50	20		0.317	0.289	8.70	
Ethyl acetate	1	0		4.46	48.79	50	20		0.172	0.168	2.41	
1,4-Dioxane	1	0		5.52	2058.00	2500	20		0.003	0.003	17.68	
1,1-Dichloropropene	1	0		4.85	45.55	50	20		0.321	0.293	8.91	
Chloroform	1	0		4.64	44.04	50	20	0.2	0.421	0.371	11.92	
Dibromofluoromethane	1	0	S	4.73	28.82	75	**		0.283	0.272	3.94	
Cyclohexane	1	0		4.81	49.29	50	20	0.1	0.281	0.277	1.43	
1,2-Dichloroethane-d4	1	0	S	4.93	28.92	75	**		0.135	0.130	3.60	
1,2-Dichloroethane	1	0		4.98	41.92	50	20	0.1	0.290	0.243	16.16	
2-Butanone	1	0		4.43	47.42	50	20	0.1	0.090	0.085	5.16	
1,1,1-Trichloroethane	1	0		4.76	45.05	50	20	0.1	0.376	0.339	9.89	
Carbon Tetrachloride	1	0		4.86	45.95	50	20	0.1	0.341	0.314	8.11	
Vinyl Acetate	1	0		4.05	45.92	50	20		0.521	0.478	8.15	
Bromodichloromethane	1	0		5.59	44.48	50	20	0.2	0.300	0.267	11.05	
Methylcyclohexane	1	0		5.45	49.18	50	20	0.1	0.317	0.312	1.64	
Dibromomethane	1	0		5.53	42.91	50	20		0.155	0.133	14.17	
1,2-Dichloropropane	1	0		5.46	43.64	50	20	0.1	0.206	0.180	12.71	
Trichloroethene	1	0		5.33	44.61	50	20	0.2	0.277	0.247	10.78	
Benzene	1	0		4.98	45.02	50	20	0.5	0.911	0.820	9.95	
tert-Amyl methyl ether	1	0		5.02	43.90	50	20		0.475	0.417	12.20	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	46.04	50	20	0.5	0.347	0.320	7.91	
Methyl methacrylate	1	0		5.48	44.19	50	20	0.5	0.175	0.155	11.62	
Dibromochloromethane	1	0		6.45	46.23	50	20	0.1	0.296	0.274	7.53	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

Form7  
Continuing CalibrationCalibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 10/7/2020 12:30:00 PData File: 6M133210.D  
Method: EPA 8260D

Instrument: GCMS 6

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	44.21	50	20		0.037	0.032	11.59	
cis-1,3-Dichloropropene	1	0		5.83	48.47	50	20	0.2	0.395	0.383	3.06	
trans-1,3-Dichloropropene	1	0		6.12	48.18	50	20	0.1	0.341	0.328	3.64	
Ethyl methacrylate	1	0		6.14	48.88	50	20	0.5	0.159	0.155	2.24	
1,1,2-Trichloroethane	1	0		6.22	44.10	50	20	0.1	0.258	0.228	11.81	
1,2-Dibromoethane	1	0		6.53	46.98	50	20	0.1	0.264	0.248	6.04	
1,3-Dichloropropane	1	0		6.32	46.35	50	20		0.406	0.377	7.30	
4-Methyl-2-Pentanone	1	0		5.90	43.35	50	20	0.1	0.211	0.183	13.31	
2-Hexanone	1	0		6.33	41.77	50	20	0.1	0.163	0.136	16.46	
Tetrachloroethene	1	0		6.32	45.42	50	20	0.2	0.278	0.253	9.16	
Toluene-d8	1	0	S	5.98	31.15	75	**		1.255	1.303	3.84	
Toluene	1	0		6.02	44.55	50	20	0.4	0.780	0.695	10.90	
1,1,1,2-Tetrachloroethane	1	0		6.81	45.71	50	20		0.278	0.254	8.59	
Chlorobenzene	1	0		6.78	45.73	50	20	0.5	0.860	0.787	8.53	
1,4-Dichlorobenzene-d4	1	0	I	8.05	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	38.62	50	20	0.5	0.650	0.610	22.76	C1
n-Amyl acetate	1	0		7.13	44.81	50	20	0.5	0.617	0.553	10.37	
Bromoform	1	0		7.23	45.19	50	20	0.1	0.338	0.306	9.61	
Ethylbenzene	1	0		6.82	43.18	50	20	0.1	0.746	0.675	13.64	
1,1,2,2-Tetrachloroethane	1	0		7.44	48.26	50	20	0.1	0.560	0.541	3.49	
Bromofluorobenzene	1	0	S	7.39	29.37	75	**		0.727	0.711	2.10	
Styrene	1	0		7.10	51.06	50	20	0.3	1.484	1.516	2.13	
m&p-Xylenes	1	0		6.88	86.86	100	20	0.1	1.025	0.941	13.14	
o-Xylene	1	0		7.10	42.65	50	20	0.3	0.947	0.893	14.70	
trans-1,4-Dichloro-2-butene	1	0		7.47	48.07	50	20		0.233	0.224	3.86	
1,3-Dichlorobenzene	1	0		8.02	47.64	50	20	0.6	1.219	1.161	4.72	
1,4-Dichlorobenzene	1	0		8.07	46.67	50	20	0.5	1.253	1.170	6.66	
1,2-Dichlorobenzene	1	0		8.29	46.08	50	20	0.4	1.178	1.086	7.83	
Isopropylbenzene	1	0		7.29	48.25	50	20	0.1	2.504	2.417	3.50	
Cyclohexanone	1	0		7.37	225.24	250	20		0.023	0.017	9.90	
Camphene	1	0		7.47	52.40	50	20		0.819	0.858	4.81	
1,2,3-Trichloropropane	1	0		7.48	46.09	50	20		0.701	0.646	7.83	
2-Chlorotoluene	1	0		7.59	45.33	50	20		1.575	1.428	9.33	
p-Ethyltoluene	1	0		7.58	46.65	50	20		2.618	2.443	6.70	
4-Chlorotoluene	1	0		7.65	49.05	50	20		1.462	1.434	1.90	
n-Propylbenzene	1	0		7.52	45.89	50	20		3.096	2.841	8.23	
Bromobenzene	1	0		7.49	46.76	50	20		1.422	1.330	6.48	
1,3,5-Trimethylbenzene	1	0		7.60	47.49	50	20		1.995	1.895	5.01	
Butyl methacrylate	1	0		7.61	44.73	50	20	0.5	0.524	0.469	10.54	
t-Butylbenzene	1	0		7.81	48.40	50	20		2.033	1.968	3.21	
1,2,4-Trimethylbenzene	1	0		7.83	48.59	50	20		2.008	1.952	2.82	
sec-Butylbenzene	1	0		7.93	49.60	50	20		2.694	2.672	0.80	
4-Isopropyltoluene	1	0		8.00	50.94	50	20		2.195	2.237	1.88	
n-Butylbenzene	1	0		8.24	51.73	50	20		2.429	2.513	3.47	
p-Diethylbenzene	1	0		8.22	49.76	50	20		1.296	1.290	0.49	
1,2,4,5-Tetramethylbenzene	1	0		8.68	46.75	50	20		1.946	1.820	6.51	
1,2-Dibromo-3-Chloropropane	1	0		8.74	42.85	50	20	0.05	0.161	0.138	14.30	
Camphor	1	0		9.18	406.90	500	20		0.076	0.060	18.62	
Hexachlorobutadiene	1	0		9.32	50.53	50	20		0.394	0.398	1.07	
1,2,4-Trichlorobenzene	1	0		9.23	46.95	50	20	0.2	0.706	0.744	6.09	
1,2,3-Trichlorobenzene	1	0		9.54	43.36	50	20		0.662	0.650	13.27	
Naphthalene	1	0		9.40	47.25	50	20		1.866	1.763	5.50	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

Form7  
Continuing CalibrationCalibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/8/2020 2:43:00 AData File: IM140246.D  
Method: EPA 8260D

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.15	20.00	20	20	0.1	0.408	0.408	0.01	
Dichlorodifluoromethane	1	0		2.13	22.33	20	20	0.1	0.198	0.221	11.67	
Chloromethane	1	0		2.31	22.76	20	20	0.1	0.273	0.311	13.78	
Bromomethane	1	0		2.67	17.08	20	20	0.1	0.126	0.108	14.59	
Vinyl Chloride	1	0		2.38	24.35	20	20	0.1	0.221	0.269	21.76	C1
Chloroethane	1	0		2.75	26.19	20	20	0.1	0.130	0.170	30.96	C1
Trichlorofluoromethane	1	0		2.96	22.84	20	20	0.1	0.299	0.341	14.18	
Ethyl ether	1	0		3.17	21.80	20	20	0.5	0.142	0.155	9.01	
Furan	1	0		3.22	19.64	20	20	0.5	0.304	0.299	1.79	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.36	22.45	20	20	0.1	0.127	0.143	12.26	
Methylene Chloride	1	0		3.73	21.66	20	20	0.1	0.202	0.219	8.29	
Acrolein	1	0		3.27	92.54	100	20		0.032	0.030	7.46	
Acrylonitrile	1	0		3.93	21.72	20	20		0.088	0.095	8.62	
Iodomethane	1	0		3.51	12.30	20	20		0.232	0.143	38.49	C1
Acetone	1	0		3.39	96.02	100	20	0.1	0.079	0.076	3.98	
Carbon Disulfide	1	0		3.57	22.12	20	20	0.1	0.535	0.592	10.60	
t-Butyl Alcohol	1	0		3.81	104.69	100	20		0.022	0.023	4.69	
n-Hexane	1	0		4.17	21.55	20	20		0.173	0.187	7.77	
Di-isopropyl-ether	1	0		4.31	20.96	20	20		0.553	0.580	4.81	
1,1-Dichloroethene	1	0		3.37	21.97	20	20	0.1	0.261	0.287	9.85	
Methyl Acetate	1	0		3.65	21.97	20	20	0.1	0.170	0.187	9.84	
Methyl-t-butyl ether	1	0		3.96	21.96	20	20	0.1	0.458	0.503	9.81	
1,1-Dichloroethane	1	0		4.28	21.40	20	20	0.2	0.363	0.388	7.02	
trans-1,2-Dichloroethene	1	0		3.96	22.78	20	20	0.1	0.184	0.210	13.89	
Ethyl-t-butyl ether	1	0		4.56	19.96	20	20	0.5	0.509	0.508	0.22	
cis-1,2-Dichloroethene	1	0		4.66	21.07	20	20	0.1	0.351	0.370	5.37	
Bromochloromethane	1	0		4.82	21.12	20	20		0.211	0.223	5.59	
2,2-Dichloropropane	1	0		4.67	17.48	20	20		0.293	0.256	12.60	
Ethyl acetate	1	0		4.69	19.79	20	20		0.291	0.288	1.07	
1,4-Dioxane	1	0		5.73	990.27	1000	20		0.004	0.004	0.97	
1,1-Dichloropropene	1	0		5.07	21.59	20	20		0.271	0.292	7.96	
Chloroform	1	0		4.85	20.95	20	20	0.2	0.374	0.392	4.74	
Dibromofluoromethane	1	0	S	4.94	29.74	30	**		0.280	0.278	0.85	
Cyclohexane	1	0		5.02	21.30	20	20	0.1	0.257	0.273	6.49	
1,2-Dichloroethane-d4	1	0	S	5.15	28.29	30	**		0.152	0.144	5.69	
1,2-Dichloroethane	1	0		5.19	19.92	20	20	0.1	0.299	0.298	0.39	
2-Butanone	1	0		4.69	19.96	20	20	0.1	0.219	0.219	0.21	
1,1,1-Trichloroethane	1	0		4.98	20.10	20	20	0.1	0.333	0.335	0.51	
Carbon Tetrachloride	1	0		5.08	20.61	20	20	0.1	0.299	0.308	3.05	
Vinyl Acetate	1	0		4.29	19.26	20	20		0.696	0.670	3.69	
Bromodichloromethane	1	0		5.81	20.47	20	20	0.2	0.293	0.300	2.37	
Methylcyclohexane	1	0		5.66	20.28	20	20	0.1	0.230	0.233	1.38	
Dibromomethane	1	0		5.73	22.05	20	20		0.166	0.183	10.27	
1,2-Dichloropropane	1	0		5.67	20.44	20	20	0.1	0.215	0.220	2.21	
Trichloroethene	1	0		5.54	21.61	20	20	0.2	0.231	0.250	8.06	
Benzene	1	0		5.19	22.17	20	20	0.5	0.790	0.876	10.84	
tert-Amyl methyl ether	1	0		5.24	20.03	20	20		0.485	0.486	0.15	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.19	16.49	20	20	0.5	0.435	0.359	17.55	
Methyl methacrylate	1	0		5.69	18.23	20	20	0.5	0.236	0.216	8.83	
Dibromochloromethane	1	0		6.67	17.74	20	20	0.1	0.283	0.251	11.32	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF



# Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB  
 Cont Calibration Date/Time 10/8/2020 2:43:00 A

Data File: 1M140246.D  
 Method: EPA 8260D

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.94	12.70	20	20		0.058	0.037	36.50	C1
cis-1,3-Dichloropropene	1	0		6.04	17.52	20	20	0.2	0.364	0.319	12.40	
trans-1,3-Dichloropropene	1	0		6.33	16.06	20	20	0.1	0.368	0.295	19.69	
Ethyl methacrylate	1	0		6.36	17.39	20	20	0.5	0.224	0.195	13.03	
1,1,2-Trichloroethane	1	0		6.44	18.55	20	20	0.1	0.234	0.217	7.27	
1,2-Dibromoethane	1	0		6.75	17.60	20	20	0.1	0.252	0.222	12.02	
1,3-Dichloropropane	1	0		6.54	18.19	20	20		0.399	0.363	9.07	
4-Methyl-2-Pentanone	1	0		6.11	17.20	20	20	0.1	0.270	0.232	13.98	
2-Hexanone	1	0		6.55	16.91	20	20	0.1	0.205	0.174	15.43	
Tetrachloroethene	1	0		6.54	20.03	20	20	0.2	0.216	0.217	0.16	
Toluene-d8	1	0	S	6.20	28.11	30	**		1.212	1.136	6.29	
Toluene	1	0		6.24	19.15	20	20	0.4	0.593	0.568	4.24	
1,1,1,2-Tetrachloroethane	1	0		7.04	17.80	20	20		0.257	0.229	11.01	
Chlorobenzene	1	0		7.00	18.86	20	20	0.5	0.692	0.653	5.69	
1,4-Dichlorobenzene-d4	1	0	I	8.28	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	15.75	20	20	0.5	0.774	0.610	21.25	C1
n-Amyl acetate	1	0		7.37	16.09	20	20	0.5	0.755	0.608	19.53	
Bromoform	1	0		7.46	15.76	20	20	0.1	0.368	0.290	21.21	C1
Ethylbenzene	1	0		7.05	18.15	20	20	0.1	0.477	0.432	9.27	
1,1,2,2-Tetrachloroethane	1	0		7.67	16.85	20	20	0.1	0.592	0.499	15.75	
Bromofluorobenzene	1	0	S	7.63	30.40	30	**		0.756	0.766	1.34	
Styrene	1	0		7.33	19.03	20	20	0.3	1.139	1.084	4.85	
m&p-Xylenes	1	0		7.11	39.53	40	20	0.1	0.640	0.632	1.18	
o-Xylene	1	0		7.33	18.74	20	20	0.3	0.655	0.614	6.30	
trans-1,4-Dichloro-2-butene	1	0		7.70	15.01	20	20		0.225	0.169	24.96	C1
1,3-Dichlorobenzene	1	0		8.25	18.16	20	20	0.6	0.985	0.894	9.19	
1,4-Dichlorobenzene	1	0		8.30	17.83	20	20	0.5	1.032	0.920	10.87	
1,2-Dichlorobenzene	1	0		8.52	18.17	20	20	0.4	0.973	0.884	9.16	
Isopropylbenzene	1	0		7.53	18.52	20	20	0.1	1.650	1.528	7.39	
Cyclohexanone	1	0		7.60	78.77	100	20		0.021	0.016	21.23	C1
Camphene	1	0		7.70	16.70	20	20		0.481	0.402	16.48	
1,2,3-Trichloropropane	1	0		7.72	15.16	20	20		0.742	0.562	24.19	C1
2-Chlorotoluene	1	0		7.82	18.12	20	20		1.147	1.039	9.41	
p-Ethyltoluene	1	0		7.81	18.90	20	20		1.746	1.650	5.52	
4-Chlorotoluene	1	0		7.88	17.61	20	20		1.152	1.015	11.96	
n-Propylbenzene	1	0		7.75	18.04	20	20		2.092	1.887	9.79	
Bromobenzene	1	0		7.72	17.13	20	20		1.158	0.992	14.34	
1,3,5-Trimethylbenzene	1	0		7.84	18.04	20	20		1.477	1.332	9.81	
Butyl methacrylate	1	0		7.85	16.69	20	20	0.5	0.566	0.472	16.56	
t-Butylbenzene	1	0		8.04	18.39	20	20		1.397	1.284	8.07	
1,2,4-Trimethylbenzene	1	0		8.06	18.27	20	20		1.535	1.402	8.63	
sec-Butylbenzene	1	0		8.16	18.56	20	20		1.744	1.618	7.22	
4-Isopropyltoluene	1	0		8.23	18.77	20	20		1.522	1.428	6.15	
n-Butylbenzene	1	0		8.47	18.03	20	20		1.717	1.548	9.87	
p-Diethylbenzene	1	0		8.45	18.36	20	20		0.874	0.803	8.18	
1,2,4,5-Tetramethylbenzene	1	0		8.91	13.27	20	20		1.287	1.130	33.63	C1
1,2-Dibromo-3-Chloropropane	1	0		8.97	16.17	20	20	0.05	0.164	0.133	19.16	
Camphor	1	0		9.41	99.79	200	20		0.064	0.042	50.10	C1
Hexachlorobutadiene	1	0		9.55	18.10	20	20		0.291	0.263	9.50	
1,2,4-Trichlorobenzene	1	0		9.46	17.87	20	20	0.2	0.631	0.564	10.63	
1,2,3-Trichlorobenzene	1	0		9.76	16.83	20	20		0.582	0.489	15.85	
Naphthalene	1	0		9.62	16.34	20	20		1.622	1.325	18.28	

S-Surrogate Compound  
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
 CI-Compound %Diff exceeds limits

Page 2 of 2

\*\* - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
 524.2 limits are compared against the %DIFF

Form7  
Continuing CalibrationCalibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/9/2020 8:41:00 AData File: IM140329.D  
Method: EPA 8260D

Instrument: GCMS I

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.15	15.35	20	20	0.1	0.408	0.313	23.26	C1
Dichlorodifluoromethane	1	0		2.13	10.83	20	20	0.1	0.198	0.107	45.84	C1
Chloromethane	1	0		2.30	15.32	20	20	0.1	0.273	0.209	23.38	C1
Bromomethane	1	0		2.67	17.26	20	20	0.1	0.126	0.109	13.70	
Vinyl Chloride	1	0		2.39	17.35	20	20	0.1	0.221	0.192	13.27	
Chloroethane	1	0		2.74	22.44	20	20	0.1	0.130	0.146	12.22	
Trichlorofluoromethane	1	0		2.95	21.39	20	20	0.1	0.299	0.319	6.93	
Ethyl ether	1	0		3.17	20.98	20	20	0.5	0.142	0.149	4.90	
Furan	1	0		3.21	18.99	20	20	0.5	0.304	0.289	5.04	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.36	22.39	20	20	0.1	0.127	0.142	11.95	
Methylene Chloride	1	0		3.73	21.53	20	20	0.1	0.202	0.218	7.64	
Acrolein	1	0		3.28	109.29	100	20		0.032	0.035	9.29	
Acrylonitrile	1	0		3.93	22.69	20	20		0.088	0.100	13.43	
Iodomethane	1	0		3.50	17.05	20	20		0.232	0.198	14.76	
Acetone	1	0		3.39	103.61	100	20	0.1	0.079	0.082	3.61	
Carbon Disulfide	1	0		3.57	18.78	20	20	0.1	0.535	0.502	6.11	
t-Butyl Alcohol	1	0		3.80	124.57	100	20		0.022	0.028	24.57	C1
n-Hexane	1	0		4.17	21.67	20	20		0.173	0.188	8.36	
Di-isopropyl-ether	1	0		4.31	20.35	20	20		0.553	0.563	1.75	
1,1-Dichloroethene	1	0		3.37	20.26	20	20	0.1	0.261	0.265	1.32	
Methyl Acetate	1	0		3.64	22.46	20	20	0.1	0.170	0.191	12.28	
Methyl-t-butyl ether	1	0		3.96	24.30	20	20	0.1	0.458	0.557	21.52	C1
1,1-Dichloroethane	1	0		4.28	18.88	20	20	0.2	0.363	0.342	5.61	
trans-1,2-Dichloroethene	1	0		3.96	22.11	20	20	0.1	0.184	0.204	10.57	
Ethyl-t-butyl ether	1	0		4.56	20.85	20	20	0.5	0.509	0.531	4.24	
cis-1,2-Dichloroethene	1	0		4.66	20.12	20	20	0.1	0.351	0.353	0.58	
Bromochloromethane	1	0		4.81	17.61	20	20		0.211	0.186	11.96	
2,2-Dichloropropane	1	0		4.68	20.72	20	20		0.293	0.303	3.58	
Ethyl acetate	1	0		4.69	19.02	20	20		0.291	0.277	4.88	
1,4-Dioxane	1	0		5.73	1100.64	1000	20		0.004	0.004	10.06	
1,1-Dichloropropene	1	0		5.07	20.79	20	20		0.271	0.281	3.95	
Chloroform	1	0		4.85	20.12	20	20	0.2	0.374	0.376	0.59	
Dibromofluoromethane	1	0	S	4.94	30.53	30	**		0.280	0.285	1.78	
Cyclohexane	1	0		5.02	19.69	20	20	0.1	0.257	0.253	1.54	
1,2-Dichloroethane-d4	1	0	S	5.15	29.78	30	**		0.152	0.151	0.73	
1,2-Dichloroethane	1	0		5.19	20.88	20	20	0.1	0.299	0.313	4.40	
2-Butanone	1	0		4.69	20.33	20	20	0.1	0.219	0.223	1.64	
1,1,1-Trichloroethane	1	0		4.98	20.49	20	20	0.1	0.333	0.341	2.45	
Carbon Tetrachloride	1	0		5.08	20.40	20	20	0.1	0.299	0.305	2.02	
Vinyl Acetate	1	0		4.30	20.11	20	20		0.696	0.700	0.54	
Bromodichloromethane	1	0		5.81	20.21	20	20	0.2	0.293	0.296	1.07	
Methylcyclohexane	1	0		5.66	21.15	20	20	0.1	0.230	0.243	5.74	
Dibromomethane	1	0		5.73	21.42	20	20		0.166	0.177	7.12	
1,2-Dichloropropane	1	0		5.67	18.94	20	20	0.1	0.215	0.203	5.30	
Trichloroethene	1	0		5.54	20.37	20	20	0.2	0.231	0.235	1.86	
Benzene	1	0		5.19	19.71	20	20	0.5	0.790	0.779	1.45	
tert-Amyl methyl ether	1	0		5.24	21.74	20	20		0.485	0.527	8.69	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.19	17.69	20	20	0.5	0.435	0.385	11.53	
Methyl methacrylate	1	0		5.69	17.79	20	20	0.5	0.236	0.210	11.06	
Dibromochloromethane	1	0		6.67	17.55	20	20	0.1	0.283	0.248	12.23	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

Form7  
Continuing CalibrationCalibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/9/2020 8:41:00 AData File: 1M140329.D  
Method: EPA 8260D

Instrument: GCMS I

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.95	12.99	20	20		0.058	0.037	35.03	C1
cis-1,3-Dichloropropene	1	0		6.04	17.83	20	20	0.2	0.364	0.324	10.84	
trans-1,3-Dichloropropene	1	0		6.33	16.53	20	20	0.1	0.368	0.304	17.33	
Ethyl methacrylate	1	0		6.36	20.04	20	20	0.5	0.224	0.225	0.21	
1,1,2-Trichloroethane	1	0		6.44	17.86	20	20	0.1	0.234	0.209	10.71	
1,2-Dibromoethane	1	0		6.74	17.67	20	20	0.1	0.252	0.223	11.66	
1,3-Dichloropropane	1	0		6.54	17.45	20	20		0.399	0.348	12.76	
4-Methyl-2-Pentanone	1	0		6.11	18.22	20	20	0.1	0.270	0.246	8.89	
2-Hexanone	1	0		6.55	18.03	20	20	0.1	0.205	0.185	9.83	
Tetrachloroethene	1	0		6.54	19.38	20	20	0.2	0.216	0.210	3.08	
Toluene-d8	1	0	S	6.20	27.28	30	**		1.212	1.102	9.06	
Toluene	1	0		6.24	17.93	20	20	0.4	0.593	0.532	10.34	
1,1,1,2-Tetrachloroethane	1	0		7.04	17.65	20	20		0.257	0.227	11.75	
Chlorobenzene	1	0		7.00	18.78	20	20	0.5	0.692	0.650	6.10	
1,4-Dichlorobenzene-d4	1	0	I	8.28	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	16.49	20	20	0.5	0.774	0.638	17.54	
n-Amyl acetate	1	0		7.37	16.37	20	20	0.5	0.755	0.618	18.14	
Bromoform	1	0		7.46	16.00	20	20	0.1	0.368	0.294	20.02	
Ethylbenzene	1	0		7.05	16.98	20	20	0.1	0.477	0.405	15.10	
1,1,2,2-Tetrachloroethane	1	0		7.67	15.53	20	20	0.1	0.592	0.460	22.33	C1
Bromofluorobenzene	1	0	S	7.62	31.36	30	**		0.756	0.790	4.52	
Styrene	1	0		7.33	18.56	20	20	0.3	1.139	1.057	7.20	
m&p-Xylenes	1	0		7.11	38.62	40	20	0.1	0.640	0.618	3.44	
o-Xylene	1	0		7.33	18.55	20	20	0.3	0.655	0.608	7.24	
trans-1,4-Dichloro-2-butene	1	0		7.70	15.89	20	20		0.225	0.179	20.53	C1
1,3-Dichlorobenzene	1	0		8.25	17.40	20	20	0.6	0.985	0.857	13.00	
1,4-Dichlorobenzene	1	0		8.30	17.48	20	20	0.5	1.032	0.902	12.62	
1,2-Dichlorobenzene	1	0		8.52	17.14	20	20	0.4	0.973	0.834	14.30	
Isopropylbenzene	1	0		7.53	18.73	20	20	0.1	1.650	1.545	6.37	
Cyclohexanone	1	0		7.60	94.33	100	20		0.021	0.019	5.67	
Camphene	1	0		7.70	17.77	20	20		0.481	0.427	11.15	
1,2,3-Trichloropropane	1	0		7.71	15.29	20	20		0.742	0.567	23.56	C1
2-Chlorotoluene	1	0		7.82	17.10	20	20		1.147	0.980	14.50	
p-Ethyltoluene	1	0		7.81	18.51	20	20		1.746	1.617	7.43	
4-Chlorotoluene	1	0		7.88	17.00	20	20		1.152	0.979	15.01	
n-Propylbenzene	1	0		7.75	17.54	20	20		2.092	1.834	12.31	
Bromobenzene	1	0		7.73	17.00	20	20		1.158	0.984	15.00	
1,3,5-Trimethylbenzene	1	0		7.84	17.58	20	20		1.477	1.299	12.10	
Butyl methacrylate	1	0		7.85	16.98	20	20	0.5	0.566	0.480	15.10	
t-Butylbenzene	1	0		8.04	18.22	20	20		1.397	1.272	8.92	
1,2,4-Trimethylbenzene	1	0		8.06	17.88	20	20		1.535	1.372	10.62	
sec-Butylbenzene	1	0		8.16	17.97	20	20		1.744	1.566	10.17	
4-Isopropyltoluene	1	0		8.23	18.71	20	20		1.522	1.424	6.47	
n-Butylbenzene	1	0		8.47	17.52	20	20		1.717	1.505	12.38	
p-Diethylbenzene	1	0		8.45	18.33	20	20		0.874	0.801	8.35	
1,2,4,5-Tetramethylbenzene	1	0		8.91	14.86	20	20		1.287	1.264	25.71	C1
1,2-Dibromo-3-Chloropropane	1	0		8.97	15.76	20	20	0.05	0.164	0.129	21.21	C1
Camphor	1	0		9.41	133.20	200	20		0.064	0.057	33.40	C1
Hexachlorobutadiene	1	0		9.55	18.36	20	20		0.291	0.267	8.21	
1,2,4-Trichlorobenzene	1	0		9.46	18.39	20	20	0.2	0.631	0.580	8.03	
1,2,3-Trichlorobenzene	1	0		9.76	17.58	20	20		0.582	0.511	12.09	
Naphthalene	1	0		9.62	18.52	20	20		1.622	1.502	7.40	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

Page 2 of 2

\*\* - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 1M139264.D

Analysis Date/Time: 09/09/20 20:51

Method: EPA 8260D

Lab File ID: CAL @ 20 PPB

0  
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	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	
340053	5.34	291274	6.99	188560	8.28									
Eval File Area Limit: 170026-680106 145637-582548 94280-377120														
Eval File Rt Limit: 4.84-5.84 6.49-7.49 7.78-8.78														

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M139258.D	BLK	305672	5.34	266592	6.99	149667	8.28						
1M139260.D	CAL @ 0.5 PPB	308077	5.34	265447	6.99	151034	8.28						
1M139261.D	CAL @ 1 PPB	306556	5.34	272359	6.99	154590	8.28						
1M139262.D	CAL @ 5 PPB	326134	5.34	278828	6.99	174032	8.28						
1M139263.D	CAL @ 10 PPB	333407	5.34	281542	6.99	179860	8.28						
1M139264.D	CAL @ 20 PPB	340053	5.34	291274	6.99	188560	8.28						
1M139266.D	CAL @ 50 PPB	344963	5.34	296582	6.99	195857	8.28						
1M139268.D	CAL @ 500 PPB	338072	5.34	353086	6.99	227068	8.28						
1M139271.D	CAL @ 250 PPB	350686	5.34	335254	6.99	221713	8.28						
1M139272.D	BLK	377940	5.34	320860	6.99	196577	8.28						
1M139274.D	CAL @ 100 PPB	352301	5.34	314499	6.99	208956	8.28						
1M139275.D	BLK	356564	5.34	308564	6.99	186298	8.28						
1M139279.D	ICV	314855	5.34	270761	6.99	174786	8.28						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORM8**

Internal Standard Areas

Evaluation Std Data File: 6M133178.D

Analysis Date/Time: 10/06/20 12:10

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

Area	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	351697	5.12	273291	6.76	148795	8.05								
Eval File Area Limit:	175848-703394		136646-546582		74398-297590									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.55-8.55									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
6M133202.D	BLK	150352	5.12	114148	6.76	61762	8.05						
6M133203.D	BLK	645953	5.12	497682	6.76	259602	8.05						
6M133204.D	BLK	160602	5.12	129116	6.76	69889	8.05						
6M133205.D	BLK	333386	5.12	271456	6.76	141145	8.05						
6M133206.D	BLK	175479	5.12	144605	6.76	73615	8.05						
6M133207.D	DAILY BLANK	326363	5.13	259937	6.76	134205	8.05						

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	
13 =	1,4-Dichlorobenzene-d4	16 =	
			625/8270 Internal Standard concentration = 40 mg/L (in final extract)
			624/8260 Internal Standard concentration = 30ug/L
			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 6M133210.D

Analysis Date/Time: 10/07/20 12:30

Lab File ID: CAL @ 50 PPB

Method: EPA 8260D

10  
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Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
325741	5.12	250124	6.76	141751	8.05									
Eval File Area Limit:	162870-651482	125062-500248	70876-283502											
Eval File RT Limit:	4.62-5.62	6.26-7.26	7.55-8.55											

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
6M133243.D	MBS89455	342044	5.12	261461	6.76	144809	8.05						
6M133244.D	BLK	336591	5.12	266965	6.76	136070	8.05						
6M133245.D	BLK	312003	5.12	250859	6.76	127541	8.05						
6M133246.D	BLK	325265	5.12	256732	6.76	129473	8.05						
6M133247.D	BLK	308824	5.12	249514	6.76	123378	8.05						
6M133248.D	BLK	327637	5.12	253591	6.76	129463	8.05						

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
13 =	1,4-Dichlorobenzene-d4	16 =	624/8260 Internal Standard concentration = 30mg/L
			524 Internal Standard concentration =5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORM8**

Internal Standard Areas

Evaluation Std Data File: 1M140246.D

Analysis Date/Time: 10/08/20 02:43

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	
Eval File Area/RT:	355931	5.34	354261	6.99	242245	8.28								
Eval File Area Limit:	177966-711862		177130-708522		121122-484490									
Eval File RI Limit:	4.84-5.84		6.49-7.49		7.78-8.78									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140247.D	20 PPB	376969	5.34	370952	6.99	257292	8.28						
1M140248.D	BLK	362576	5.34	373642	6.99	240878	8.28						
1M140249.D	BLK	354481	5.34	367841	6.99	231895	8.28						
1M140250.D	DAILY BLANK	340986	5.34	358722	6.99	224057	8.28						
1M140251.D	DAILY BLANK	353142	5.34	371796	6.99	227527	8.28						
1M140252.D	AD19636-002(400uL)	351050	5.34	362159	6.99	237169	8.28						
1M140253.D	AD19587-007	349907	5.33	369479	6.99	241442	8.28						
1M140254.D	AD19596-002	366694	5.33	393532	6.99	274920	8.28						
1M140255.D	AD19581-003	408517	5.33	441506	6.99	312911	8.28						
1M140256.D	AD19581-001(400uL)	385796	5.34	395699	6.99	305500	8.28						
1M140257.D	AD19559-001(400uL)	391617	5.34	395020	6.99	276454	8.28						
1M140258.D	AD19517-004	388372	5.34	403050	6.99	134709	8.28						
1M140259.D	AD19619-001(MS)	406316	5.34	397019	6.99	290097	8.28						
1M140260.D	AD19619-001(MSD)	393141	5.33	387819	6.99	273257	8.28						
1M140261.D	MBS89456	408927	5.34	405871	6.99	285487	8.28						
1M140262.D	MBS89464	383072	5.33	387322	6.99	264833	8.28						
1M140263.D	BLK	385180	5.34	410892	6.99	269214	8.28						
1M140264.D	BLK	413471	5.34	435788	6.99	286152	8.28						
1M140265.D	AD19619-001	373329	5.34	401576	6.99	265689	8.28						
1M140266.D	AD19629-002	380011	5.33	412531	6.99	320932	8.28						
1M140267.D	AD19629-001	392238	5.33	420898	6.99	143961	8.28						
1M140268.D	AD19580-001(MS)	450394	5.34	453289	6.99	324400	8.28						
1M140269.D	AD19598-012	420314	5.34	431357	6.99	293813	8.28						
1M140270.D	AD19580-001(MSD)	407719	5.34	411817	6.99	280933	8.28						
1M140271.D	AD19595-009	372819	5.34	388024	6.99	262905	8.28						
1M140272.D	AD19595-003	373220	5.33	393780	6.99	270998	8.28						
1M140273.D	AD19595-010	381868	5.34	401122	6.99	269577	8.28						
1M140274.D	AD19595-001	370489	5.34	392819	6.99	263631	8.28						
1M140275.D	AD19595-005	367380	5.33	392001	6.99	261331	8.28						
1M140276.D	AD19636-002(80uL)	401639	5.34	418779	6.99	274367	8.28						
1M140277.D	AD19598-013	420744	5.34	447208	6.99	298549	8.28						
1M140278.D	AD19598-014	391575	5.34	415015	6.99	274765	8.28						

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	
13 =	1,4-Dichlorobenzene-d4	16 =	
			625/8270 Internal Standard concentration = 40 mg/L (in final extract)
			624/8260 Internal Standard concentration = 30ug/L
			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pl.

Lower Limit = - 50% of internal standard area from daily cal or mid pl.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pl.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 1M140246.D

Analysis Date/Time: 10/08/20 02:43

Method: EPA 8260D

Lab File ID: CAL @ 20 PPB

1 2 3 4 14 21 22 23 24

Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
355931	5.34	354261	6.99	242245	8.28						
177966-711862		177130-708522		121122-484490							
4.84-5.84		6.49-7.49		7.78-8.78							

Data File Sample# 1M140279.D AD19568-002 381895 5.34 405515 6.99 261736 8.28

11 =	Fluorobenzene	14 =	17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30mg/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration = 5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

# FORM8

Internal Standard Areas  
Evaluation Std Data File: 1M140329.D  
Analysis Date/Time: 10/09/20 08:41  
Method: EPA 8260D  
Lab File ID: CAL @ 20 PPB

Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
382262	5.34	387438	6.99	263399	8.28								
Eval File Area Limit:		191131-764524		193719-774876		131700-526798							
Eval File Rt Limit:		4.84-5.84		6.49-7.49		7.78-8.78							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140328.D	20 PPB	412075	5.34	447412	6.99	305725	8.28						
1M140330.D	BLK	371150	5.34	399836	6.99	258045	8.28						
1M140331.D	BLK	374870	5.34	393036	6.99	254771	8.28						
1M140332.D	DAILY BLANK	374548	5.34	398073	6.99	259481	8.28						
1M140333.D	DAILY BLANK	365030	5.34	396377	6.99	254182	8.28						
1M140334.D	AD19654-001	365186	5.34	398400	6.99	254222	8.28						
1M140335.D	AD19616-001	401236	5.34	418046	6.99	265313	8.28						
1M140336.D	AD19639-012(400uL)	364335	5.34	383680	6.99	244935	8.28						
1M140337.D	AD19639-014(40uL)	378004	5.34	401823	6.99	265203	8.28						
1M140338.D	MBS89475	379647	5.34	385156	6.99	270019	8.28						
1M140339.D	MBS89476	393888	5.34	396711	6.99	274785	8.28						
1M140340.D	AD19698-012	381486	5.34	389506	6.99	261826	8.28						
1M140341.D	AD19639-012	357563	5.33	379066	6.99	250948	8.28						
1M140342.D	AD19695-002	349551	5.33	374999	6.99	258756	8.28						
1M140343.D	AD19695-004	378849	5.33	407191	6.99	275813	8.28						
1M140344.D	19695-007	352612	5.34	376087	6.99	260133	8.28						
1M140345.D	AD19695-006	374082	5.34	397321	6.99	257473	8.28						
1M140346.D	AD19695-012	373395	5.34	392590	6.99	258244	8.28						
1M140347.D	AD19616-002(MS:AD)	407471	5.34	409067	6.99	278279	8.28						
1M140348.D	AD19616-003(MS:AD)	388621	5.34	397424	6.99	271295	8.28						
1M140349.D	AD19654-001(MS)	341378	5.33	349474	6.99	247612	8.28						
1M140350.D	AD19654-001(MSD)	372473	5.33	380560	6.99	271819	8.28						
1M140351.D	BLK	365607	5.34	389861	6.99	253733	8.28						
1M140352.D	BLK	377406	5.34	401212	6.99	260557	8.28						
1M140353.D	AD19692-002	399962	5.34	423279	6.99	274224	8.28						
1M140354.D	AD19692-003	366475	5.34	390483	6.99	251481	8.28						
1M140355.D	AD19691-003	366099	5.34	389312	6.99	251903	8.28						
1M140356.D	AD19691-004	369116	5.34	394417	6.99	235559	8.28						
1M140357.D	AD19616-006	368403	5.34	388900	6.99	249538	8.28						
1M140358.D	AD19692-001	363436	5.34	386666	6.99	251611	8.28						
1M140359.D	AD19693-001	55851	5.34	149121	6.99	112729	8.28						
1M140360.D	AD19693-003	391204	5.34	401863	6.99	279600	8.28						

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
13 =	1,4-Dichlorobenzene-d4	16 =	624/8260 Internal Standard concentration = 30ug/L
			524 Internal Standard concentration = 5ug/L

### Internal Standard Areas

### Flags:

Upper Limit = + 100% of internal standard area from daily cal or mid pt.      A - Indicates the compound failed the internal standard area criteria  
 Lower Limit = - 50% of internal standard area from daily cal or mid pt.      R - Indicates the compound failed the internal standard retention time criteria  
 Retention Times:      Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 1M140329.D

Analysis Date/Time: 10/09/20 08:41

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area
Eval File Area/RT:	382262	5.34	387438	6.99	263399	8.28								
Eval File Area Limit:	191131-764524		193719-774876		131700-526798									
Eval File Rt Limit:	4.84-5.84		6.49-7.49		7.78-8.78									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M140361.D	AD19616-004	374919	5.34	391436	6.99	264870	8.28								
1M140362.D	AD19616-005	365605	5.34	386611	6.99	251362	8.28								
1M140363.D	19517-004	352171	5.34	397837	6.99	153009	8.28								
1M140364.D	MBS89482	418210	5.34	416938	6.99	306562	8.28								
1M140365.D	BLK	396585	5.34	414870	6.99	283250	8.28								
1M140366.D	BLK	397222	5.34	421405	6.99	285106	8.28								
1M140367.D	BLK	392750	5.34	419086	6.99	283002	8.28								
1M140368.D	BLK	405384	5.34	434109	6.99	285332	8.28								
1M140369.D	BLK	397998	5.34	423241	6.99	282317	8.28								
1M140370.D	BLK	395626	5.34	421638	6.99	279458	8.28								
1M140371.D	BLK	390264	5.34	417453	6.99	276180	8.28								

11 =	Fluorobenzene	14 =		625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pl.

Lower Limit = - 50% of internal standard area from daily cal or mid pl.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pl.

## **TCLP Volatile Data**

## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-013(T)

Client Id: HSI-WC-NH

Data File: 2M142777.D

Analysis Date: 10/06/20 17:56

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

## Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	0.0031
107-06-2	1,2-Dichloroethane	0.00064	U	67-66-3	Chloroform	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 569845

**Total Target Concentration 0.0031**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used. Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

SampleID : AD19595-013(T) Operator : WP Qt Meth : 2M\_A0929.M  
 Data File: 2M142777.D Sam Mult : 1 Vial# : 11 Qt On : 10/06/20 18:26  
 Acq On : 10/06/20 17:56 Misc : A,5ML:18 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.099	96	390864	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.733	117	328290	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.019	152	192684	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.703	111	113195	30.23	ug/l	0.00	
Spiked Amount	30.000						Recovery = 100.77%
39) 1,2-Dichloroethane-d4	4.910	67	59926	31.00	ug/l	0.00	
Spiked Amount	30.000						Recovery = 103.33%
66) Toluene-d8	5.952	98	423240	32.95	ug/l	0.00	
Spiked Amount	30.000						Recovery = 109.83%
76) Bromofluorobenzene	7.367	174	158055	31.23	ug/l	0.00	
Spiked Amount	30.000						Recovery = 104.10%
Target Compounds							
69) Chlorobenzene	6.751	112	30079	3.1084	ug/l	97	Qvalue
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

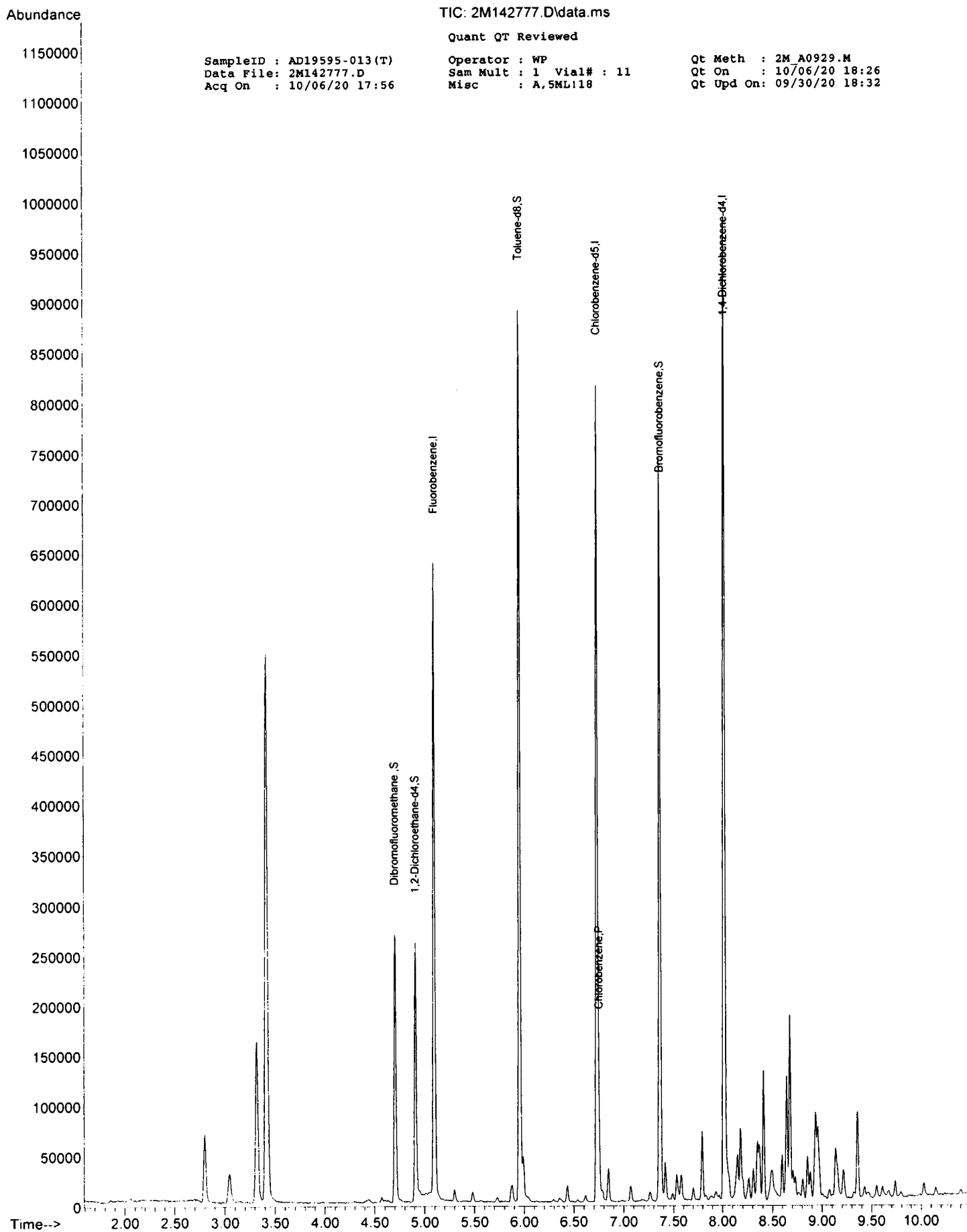
TIC: 2M142777.D\data.ms

Quant QT Reviewed

SampleID : AD19595-013(T)  
Data File: 2M142777.D  
Acq On : 10/06/20 17:56

Operator : WP  
Sam Mult : 1 Vial# : 11  
Misc : A,5ML118

Qt Meth : 2M\_A0929.M  
Qt On : 10/06/20 18:26  
Qt Upd On: 09/30/20 18:32





## Form1

## ORGANICS VOLATILE REPORT

Sample Number: AD19595-014(10X)(T)

Client Id: HSI-WC-H

Data File: 2M142785.D

Analysis Date: 10/06/20 20:33

Date Rec/Extracted: 10/02/20-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 10.0

Solids: 0

## Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.010	U	108-90-7	Chlorobenzene	0.010	0.83
107-06-2	1,2-Dichloroethane	0.0064	0.033	67-66-3	Chloroform	0.020	U
106-46-7	1,4-Dichlorobenzene	0.010	U	127-18-4	Tetrachloroethene	0.010	0.039
78-93-3	2-Butanone	0.010	U	79-01-6	Trichloroethene	0.010	0.51
71-43-2	Benzene	0.0050	U	75-01-4	Vinyl Chloride	0.010	U
56-23-5	Carbon Tetrachloride	0.010	U				

Worksheet #: 569845

**Total Target Concentration 1.4**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration use *Chlordane (Total)* is sum of *α-Chlordane* and *γ-Chlordane*.

SampleID : AD19595-014(10X)(T) Operator : WP Qt Meth : 2M\_A0929.M  
 Data File: 2M142785.D Sam Mult : 1 Vial# : 19 Qt On : 10/06/20 22:14  
 Acq On : 10/06/20 20:33 Misc : A,5ML:11 Qt Upd On: 09/30/20 18:32

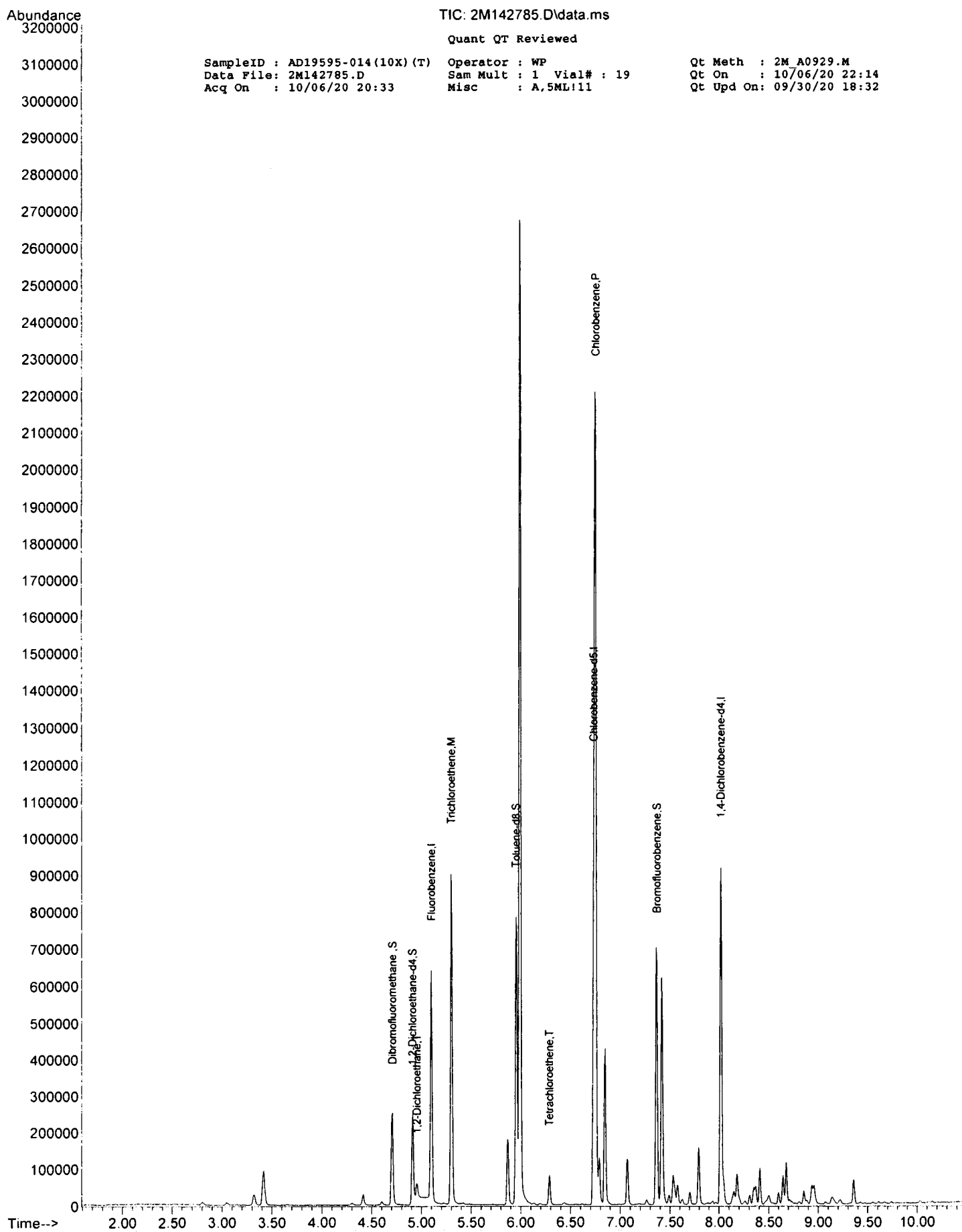
Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
4) Fluorobenzene	5.099	96	375629	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.732	117	354760	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.019	152	182191	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.708	111	106680	29.65	ug/l	0.00	
Spiked Amount	30.000						Recovery = 98.83%
39) 1,2-Dichloroethane-d4	4.910	67	55500	29.87	ug/l	0.00	
Spiked Amount	30.000						Recovery = 99.57%
66) Toluene-d8	5.952	98	375195	27.03	ug/l	0.00	
Spiked Amount	30.000						Recovery = 90.10%
76) Bromofluorobenzene	7.366	174	152942	31.96	ug/l	0.00	
Spiked Amount	30.000						Recovery = 106.53%
Target Compounds							
40) 1,2-Dichloroethane	4.952	62	18062	3.3233	ug/l	95	Qvalue
49) Trichloroethene	5.300	130	201730	50.7933	ug/l	97	
65) Tetrachloroethene	6.287	164	12496	3.9133	ug/l	95	
69) Chlorobenzene	6.751	112	872373	83.4252	ug/l	99	
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

TIC: 2M142785.D\data.ms

Quant QT Reviewed

SampleID : AD19595-014 (10X) (T)  
Data File: 2M142785.D  
Acq On : 10/06/20 20:33Operator : WP  
Sam Mult : 1 Vial# : 19  
Misc : A,5ML:11Qt Meth : 2M\_A0929.M  
Qt On : 10/06/20 22:14  
Qt Upd On: 09/30/20 18:32

## Form1

## ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 2M142770.D

Analysis Date: 10/06/20 15:32

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

## Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00064	U	67-66-3	Chloroform	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 569845

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

SampleID : DAILY BLANK  
 Data File: 2M142770.D  
 Acq On : 10/06/20 15:32

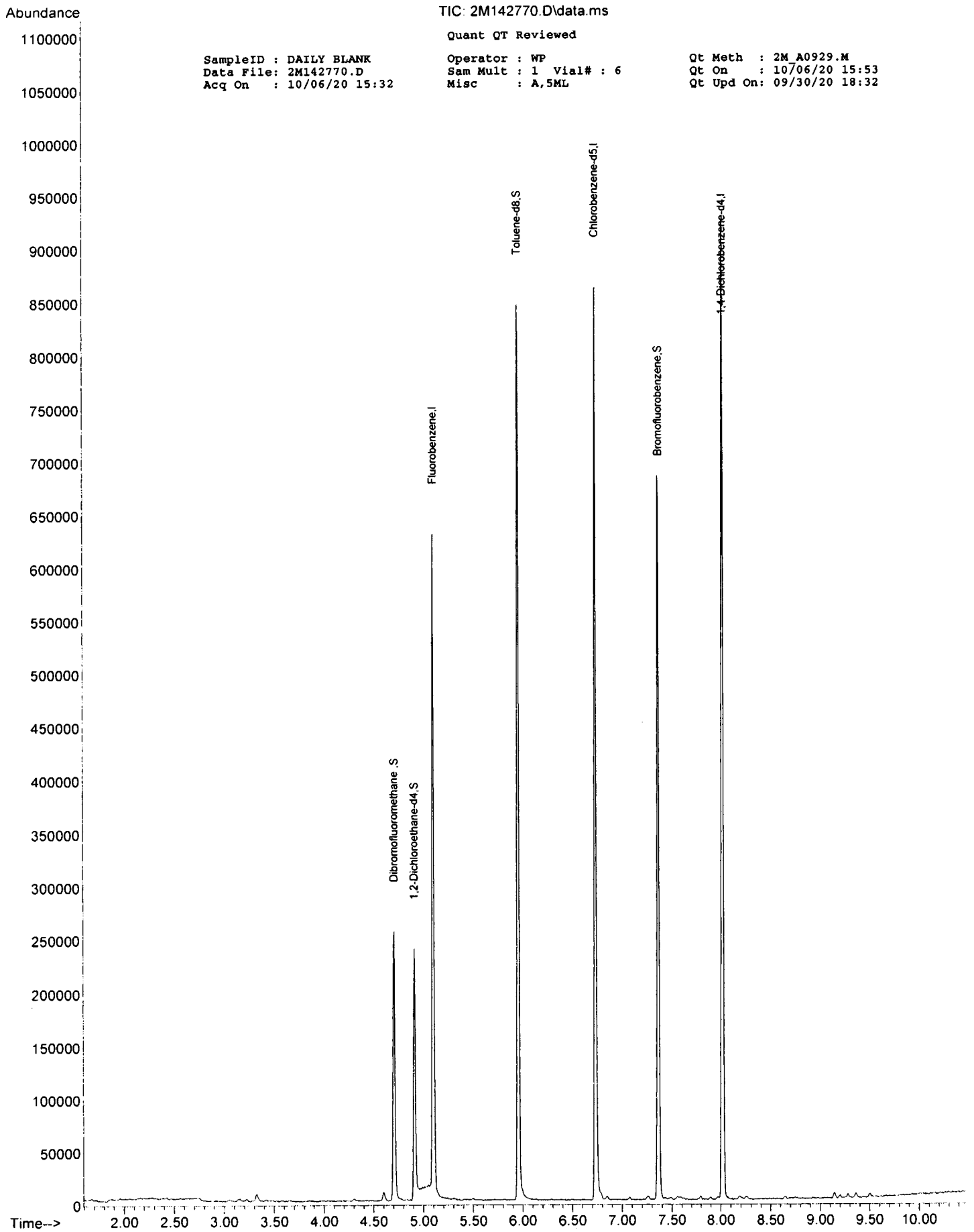
Operator : WP  
 Sam Mult : 1 Vial# : 6  
 Misc : A,5ML

Qt Meth : 2M\_A0929.M  
 Qt On : 10/06/20 15:53  
 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	5.098	96	371657	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	345686	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	180982	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.708	111	108035	30.34	ug/l	0.00
Spiked Amount	30.000					
					Recovery =	101.13%
39) 1,2-Dichloroethane-d4	4.909	67	54987	29.91	ug/l	0.00
Spiked Amount	30.000				Recovery =	99.70%
66) Toluene-d8	5.952	98	402737	29.78	ug/l	0.00
Spiked Amount	30.000				Recovery =	99.27%
76) Bromofluorobenzene	7.366	174	149653	31.48	ug/l	0.00
Spiked Amount	30.000				Recovery =	104.93%
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**

## ORGANICS VOLATILE REPORT

Sample Number: EF-V1-335534(100620)

Client Id:

Data File: 2M142789.D

Analysis Date: 10/06/20 21:55

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

**Units: mg/L**

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00064	U	67-66-3	Chloroform	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 569927

**Total Target Concentration 0**

ColumnID:(^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used  
Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

SampleID : EF-V1-335534(100620) Operator : WP Qt Meth : 2M\_A0929.M  
 Data File: 2M142789.D Sam Mult : 1 Vial# : 23 Qt On : 10/06/20 22:15  
 Acq On : 10/06/20 21:55 Misc : A,5ML!22 Qt Upd On: 09/30/20 18:32

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_2\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
4) Fluorobenzene	5.099	96	356707	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.732	117	334466	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	159221m	30.00	ug/l	0.00
<b>System Monitoring Compounds</b>						
37) Dibromofluoromethane	4.702	111	103381	30.25	ug/l	0.00
Spiked Amount	30.000					
					Recovery =	100.83%
39) 1,2-Dichloroethane-d4	4.910	67	53408	30.27	ug/l	0.00
Spiked Amount	30.000				Recovery =	100.90%
66) Toluene-d8	5.952	98	388226	29.67	ug/l	0.00
Spiked Amount	30.000				Recovery =	98.90%
76) Bromofluorobenzene	7.367	174	138793m	33.19	ug/l	0.00
Spiked Amount	30.000				Recovery =	110.63%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



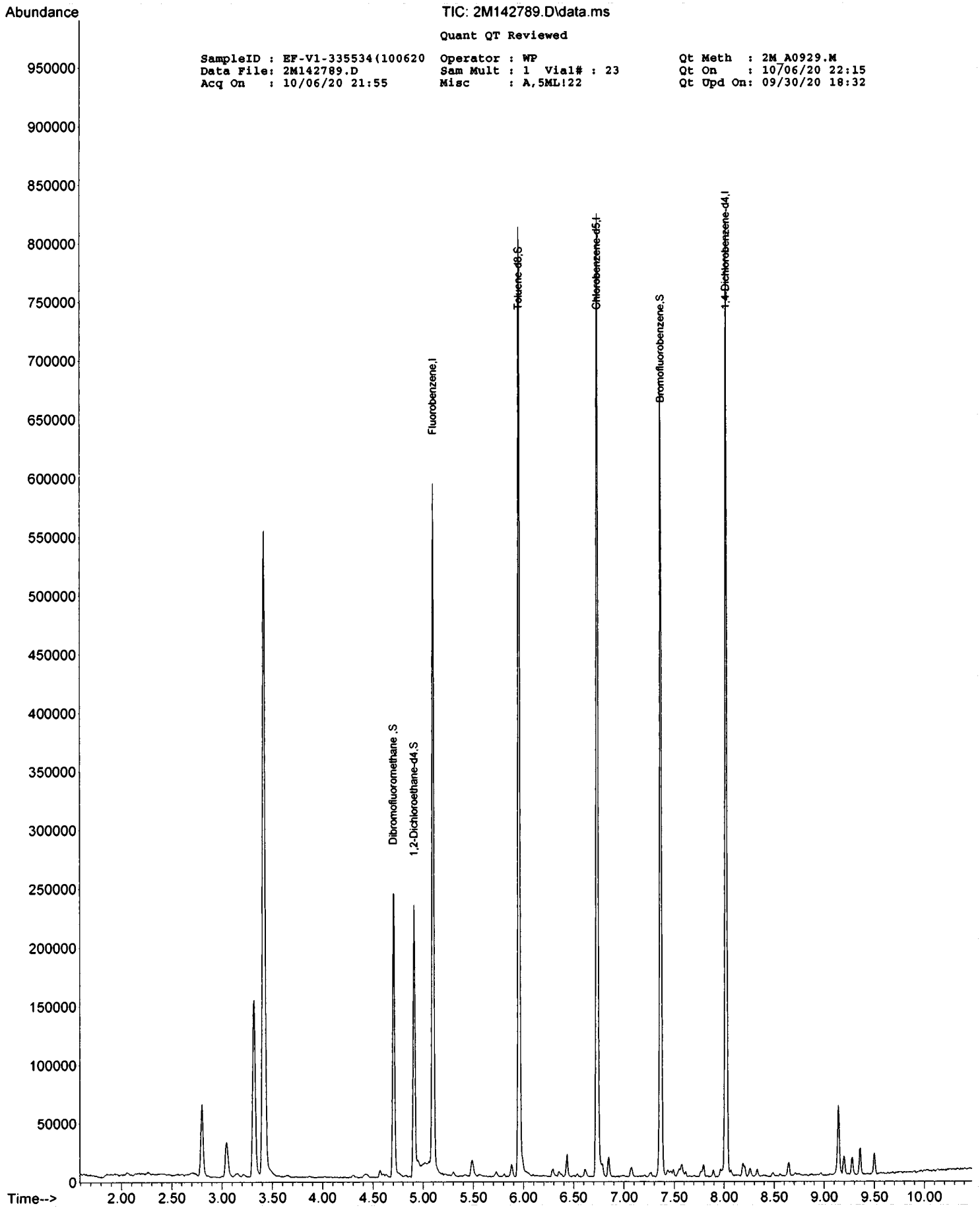
TIC: 2M142789.D\data.ms

Quant QT Reviewed

SampleID : EF-V1-335534(100620)  
Data File: 2M142789.D  
Acq On : 10/06/20 21:55

Operator : WP  
Sam Mult : 1 Vial# : 23  
Misc : A,5ML122

Qt Meth : 2M A0929.M  
Qt On : 10/06/20 22:15  
Qt Upd On: 09/30/20 18:32



## FORM2

## Surrogate Recovery

Method: EPA 8260D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1	Column1	Column1	Column1	Column0	Column0
						S1 Recov	S2 Recov	S3 Recov	S4 Recov	S5 Recov	S6 Recov
2M142770.D	DAILY BLANK	A	10/06/20 15:32	1		101	100	99	105		
2M142789.D	DEF-V1-335534(100620)	A	10/06/20 21:55	1		101	101	99	111		
2M142777.D	DAD19595-013(T)	A	10/06/20 17:56	1		101	103	110	104		
2M142785.D	DAD19595-014(10X)(T)	A	10/06/20 20:33	1		99	100	90	107		
2M142775.D	DAD19542-001(T)	A	10/06/20 17:17	1		98	100	98	106		
2M142779.D	MBS89438	A	10/06/20 18:35	1		100	104	99	102		
2M142787.D	DAD19542-001(T:MS)	A	10/06/20 21:16	1		94	91	85	100		
2M142788.D	DAD19542-001(T:MSD)	A	10/06/20 21:36	1		97	101	99	104		

---

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8260D

**Aqueous Laboratory Limits**

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89438

0100230 0159

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M142779.D		MBS89438		10/6/2020 6:35:00 PM			
Non Spike (If applicable):							
Inst Blank (If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	18.7778	0	20	94	50	150
Dichlorodifluoromethane	1	11.4743	0	20	57	50	150
Chloromethane	1	13.1453	0	20	66	50	150
Bromomethane	1	11.2894	0	20	56	50	150
<b><u>Vinyl Chloride</u></b>	<b><u>1</u></b>	<b><u>15.4014</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>77</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Chloroethane	1	13.2962	0	20	66	50	150
Trichlorofluoromethane	1	12.204	0	20	61	50	150
Ethyl ether	1	14.2929	0	20	71	50	150
Furan	1	13.5464	0	20	68	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	15.5216	0	20	78	50	150
Methylene Chloride	1	16.3693	0	20	82	70	130
Acrolein	1	69.3496	0	100	69	50	150
Acrylonitrile	1	17.2223	0	20	86	50	150
Iodomethane	1	13.9781	0	20	70	50	150
Acetone	1	72.4312	0	100	72	50	150
Carbon Disulfide	1	16.336	0	20	82	50	150
t-Butyl Alcohol	1	88.012	0	100	88	50	150
n-Hexane	1	18.6324	0	20	93	70	130
Di-isopropyl-ether	1	16.346	0	20	82	70	130
<b><u>1,1-Dichloroethene</u></b>	<b><u>1</u></b>	<b><u>14.9172</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>75</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Methyl Acetate	1	26.0488	0	20	130	50	150
Methyl-t-butyl ether	1	14.9216	0	20	75	70	130
1,1-Dichloroethane	1	16.6287	0	20	83	70	130
trans-1,2-Dichloroethene	1	16.4057	0	20	82	70	130
Ethyl-t-butyl ether	1	16.7185	0	20	84	70	130
cis-1,2-Dichloroethene	1	15.9753	0	20	80	70	130
Bromochloromethane	1	16.9682	0	20	85	70	130
2,2-Dichloropropane	1	17.2761	0	20	86	70	130
Ethyl acetate	1	16.9417	0	20	85	50	150
1,4-Dioxane	1	701.8288	0	1000	70	50	150
1,1-Dichloropropene	1	16.6829	0	20	83	70	130
<b><u>Chloroform</u></b>	<b><u>1</u></b>	<b><u>16.5779</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>83</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Cyclohexane	1	17.3763	0	20	87	70	130
<b><u>1,2-Dichloroethane</u></b>	<b><u>1</u></b>	<b><u>15.076</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>75</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Butanone</u></b>	<b><u>1</u></b>	<b><u>16.5978</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>83</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
1,1,1-Trichloroethane	1	16.7466	0	20	84	70	130
<b><u>Carbon Tetrachloride</u></b>	<b><u>1</u></b>	<b><u>16.7268</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>84</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Vinyl Acetate	1	12.8929	0	20	64	50	150
Bromodichloromethane	1	14.9979	0	20	75	70	130
Methylcyclohexane	1	17.137	0	20	86	70	130
Dibromomethane	1	15.748	0	20	79	70	130
1,2-Dichloropropane	1	16.2716	0	20	81	70	130
<b><u>Trichloroethene</u></b>	<b><u>1</u></b>	<b><u>17.7399</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Benzene</u></b>	<b><u>1</u></b>	<b><u>16.291</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>81</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
tert-Amyl methyl ether	1	15.9646	0	20	80	70	130
Iso-propylacetate	1	17.0262	0	20	85	70	130
Methyl methacrylate	1	16.126	0	20	81	70	130
Dibromochloromethane	1	16.4495	0	20	82	70	130
2-Chloroethylvinylether	1	73.7994	0	20	369*	70	130
cis-1,3-Dichloropropene	1	16.2043	0	20	81	70	130
trans-1,3-Dichloropropene	1	15.8597	0	20	79	70	130
Ethyl methacrylate	1	15.7898	0	20	79	70	130
1,1,2-Trichloroethane	1	15.7013	0	20	79	70	130
1,2-Dibromoethane	1	16.1775	0	20	81	70	130
1,3-Dichloropropane	1	15.4552	0	20	77	70	130
4-Methyl-2-Pentanone	1	18.5778	0	20	93	50	150
2-Hexanone	1	17.2777	0	20	86	50	150
<b><u>Tetrachloroethene</u></b>	<b><u>1</u></b>	<b><u>16.0707</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>80</u></b>	<b><u>50</u></b>	<b><u>150</u></b>
Toluene	1	18.0525	0	20	90	70	130
1,1,1,2-Tetrachloroethane	1	15.1299	0	20	76	70	130
<b><u>Chlorobenzene</u></b>	<b><u>1</u></b>	<b><u>19.1266</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>96</u></b>	<b><u>70</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89438

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.8736	0	20	89	70	130
n-Amyl acetate	1	17.6826	0	20	88	70	130
Bromoform	1	16.9507	0	20	85	70	130
Ethylbenzene	1	18.2507	0	20	91	70	130
1,1,2,2-Tetrachloroethane	1	19.2282	0	20	96	70	130
Styrene	1	17.0341	0	20	85	70	130
m&p-Xylenes	1	33.27	0	40	83	70	130
o-Xylene	1	17.2555	0	20	86	70	130
trans-1,4-Dichloro-2-butene	1	20.04	0	20	100	50	150
1,3-Dichlorobenzene	1	15.8488	0	20	79	70	130
<b><u>1,4-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>15.3678</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>77</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2-Dichlorobenzene	1	15.4754	0	20	77	70	130
Isopropylbenzene	1	17.79	0	20	89	70	130
Cyclohexanone	1	83.2813	0	100	83	50	150
Camphene	1	16.1793	0	20	81	70	130
1,2,3-Trichloropropane	1	16.5899	0	20	83	70	130
2-Chlorotoluene	1	17.0735	0	20	85	70	130
p-Ethyltoluene	1	17.1215	0	20	86	70	130
4-Chlorotoluene	1	17.5317	0	20	88	70	130
n-Propylbenzene	1	17.295	0	20	86	70	130
Bromobenzene	1	15.568	0	20	78	70	130
1,3,5-Trimethylbenzene	1	16.7972	0	20	84	70	130
Butyl methacrylate	1	15.9206	0	20	80	70	130
t-Butylbenzene	1	17.5757	0	20	88	70	130
1,2,4-Trimethylbenzene	1	17.0842	0	20	85	70	130
sec-Butylbenzene	1	17.6946	0	20	88	70	130
4-Isopropyltoluene	1	17.1671	0	20	86	70	130
n-Butylbenzene	1	18.0279	0	20	90	70	130
p-Diethylbenzene	1	17.6786	0	20	88	70	130
1,2,4,5-Tetramethylbenzene	1	17.2157	0	20	86	70	130
1,2-Dibromo-3-Chloropropane	1	17.0524	0	20	85	50	150
Camphor	1	219.4095	0	200	110	20	150
Hexachlorobutadiene	1	15.4361	0	20	77	50	150
1,2,4-Trichlorobenzene	1	15.3954	0	20	77	70	130
1,2,3-Trichlorobenzene	1	15.8378	0	20	79	70	130
Naphthalene	1	18.8974	0	20	94	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89438

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M142787.D		AD19542-001(T:MS)		10/6/2020 9:16:00 PM			
Non Spike(if applicable): 2M142775.D		AD19542-001(T)		10/6/2020 5:17:00 PM			
Inst Blank(if applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	16.5533	0	20	83	50	150
Dichlorodifluoromethane	1	10.8545	0	20	54	50	150
Chloromethane	1	11.1546	0	20	56	50	150
Bromomethane	1	12.6506	0	20	63	50	150
<b><u>Vinyl Chloride</u></b>	<b>1</b>	<b><u>14.3114</u></b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>50</b>	<b>150</b>
Chloroethane	1	14.7442	0	20	74	50	150
Trichlorofluoromethane	1	17.048	0	20	85	50	150
Ethyl ether	1	22.6516	0	20	113	50	150
Furan	1	15.5902	0	20	78	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.635	0	20	88	50	150
Methylene Chloride	1	68.0471	0	20	340*	70	130
Acrolein	1	6.8788	0	100	6.9*	50	150
Acrylonitrile	1	10.1282	0	20	51	50	150
Iodomethane	1	13.8134	0	20	69	50	150
Acetone	1	69.6792	0	100	70	50	150
Carbon Disulfide	1	15.1168	0	20	76	50	150
t-Butyl Alcohol	1	54.009	0	100	54	50	150
n-Hexane	1	18.589	0	20	93	70	130
Di-isopropyl-ether	1	15.9633	0	20	80	70	130
<b><u>1,1-Dichloroethene</u></b>	<b>1</b>	<b><u>16.5384</u></b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
Methyl Acetate	1	5.7023	0	20	29*	50	150
Methyl-t-butyl ether	1	12.5502	0	20	63*	70	130
1,1-Dichloroethane	1	16.561	0	20	83	70	130
trans-1,2-Dichloroethene	1	16.1286	0	20	81	70	130
Ethyl-t-butyl ether	1	16.0025	0	20	80	70	130
cis-1,2-Dichloroethene	1	14.9501	0	20	75	70	130
Bromochloromethane	1	16.7832	0	20	84	70	130
2,2-Dichloropropane	1	17.2013	0	20	86	70	130
Ethyl acetate	1	6.5586	0	20	33*	50	150
1,4-Dioxane	1	492.4296	0	1000	49*	50	150
1,1-Dichloropropene	1	16.8892	0	20	84	70	130
<b><u>Chloroform</u></b>	<b>1</b>	<b><u>17.2262</u></b>	<b>0</b>	<b>20</b>	<b>86</b>	<b>70</b>	<b>130</b>
Cyclohexane	1	17.2031	0	20	86	70	130
<b><u>1,2-Dichloroethane</u></b>	<b>1</b>	<b><u>14.2266</u></b>	<b>0</b>	<b>20</b>	<b>71</b>	<b>70</b>	<b>130</b>
<b><u>2-Butanone</u></b>	<b>1</b>	<b><u>12.8109</u></b>	<b>0</b>	<b>20</b>	<b>64</b>	<b>50</b>	<b>150</b>
1,1,1-Trichloroethane	1	17.683	0	20	88	70	130
<b><u>Carbon Tetrachloride</u></b>	<b>1</b>	<b><u>17.6123</u></b>	<b>0</b>	<b>20</b>	<b>88</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	7.2301	0	20	36*	50	150
Bromodichloromethane	1	12.4863	0	20	62*	70	130
Methylcyclohexane	1	15.4458	0	20	77	70	130
Dibromomethane	1	12.6339	0	20	63*	70	130
1,2-Dichloropropane	1	14.0753	0	20	70	70	130
<b><u>Trichloroethene</u></b>	<b>1</b>	<b><u>26.8144</u></b>	<b>0</b>	<b>20</b>	<b>134*</b>	<b>70</b>	<b>130</b>
<b><u>Benzene</u></b>	<b>1</b>	<b><u>16.5332</u></b>	<b>0</b>	<b>20</b>	<b>83</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	15.2918	0	20	76	70	130
Iso-propylacetate	1	6.7712	0	20	34*	70	130
Methyl methacrylate	1	2.3298	0	20	12*	70	130
Dibromochloromethane	1	15.5395	0	20	78	70	130
2-Chloroethylvinylether	1	45.0506	0	20	225*	70	130
cis-1,3-Dichloropropene	1	13.1213	0	20	66*	70	130
trans-1,3-Dichloropropene	1	14.9835	0	20	75	70	130
Ethyl methacrylate	1	5.7726	0	20	29*	70	130
1,1,2-Trichloroethane	1	13.3555	0	20	67*	70	130
1,2-Dibromoethane	1	13.5749	0	20	68*	70	130
1,3-Dichloropropane	1	13.8199	0	20	69*	70	130
4-Methyl-2-Pentanone	1	9.1804	0	20	46*	50	150
2-Hexanone	1	10.5137	0	20	53	50	150
<b><u>Tetrachloroethene</u></b>	<b>1</b>	<b><u>17.3137</u></b>	<b>0</b>	<b>20</b>	<b>87</b>	<b>50</b>	<b>150</b>
Toluene	1	14.6676	0	20	73	70	130
1,1,1,2-Tetrachloroethane	1	15.972	0	20	80	70	130
<b><u>Chlorobenzene</u></b>	<b>1</b>	<b><u>16.8637</u></b>	<b>0</b>	<b>20</b>	<b>84</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89438

0100230 0162

Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	2.7781	0	20	14*	70	130
n-Amyl acetate	1	2.5325	0	20	13*	70	130
Bromoform	1	13.8075	0	20	69*	70	130
Ethylbenzene	1	17.3165	0	20	87	70	130
1,1,2,2-Tetrachloroethane	1	0	0	20	0*	70	130
Styrene	1	16.9455	0	20	85	70	130
m&p-Xylenes	1	32.8164	0	40	82	70	130
o-Xylene	1	16.9531	0	20	85	70	130
trans-1,4-Dichloro-2-butene	1	16.6546	0	20	83	50	150
1,3-Dichlorobenzene	1	16.3152	0	20	82	70	130
<b><u>1,4-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>15.7506</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>79</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2-Dichlorobenzene	1	15.573	0	20	78	70	130
Isopropylbenzene	1	17.5942	0	20	88	70	130
Cyclohexanone	1	64.5234	0	100	65	50	150
Camphene	1	16.8444	0	20	84	70	130
1,2,3-Trichloropropane	1	11.8567	0	20	59*	70	130
2-Chlorotoluene	1	17.7083	0	20	89	70	130
p-Ethyltoluene	1	17.9752	0	20	90	70	130
4-Chlorotoluene	1	17.3889	0	20	87	70	130
n-Propylbenzene	1	17.4481	0	20	87	70	130
Bromobenzene	1	14.8418	0	20	74	70	130
1,3,5-Trimethylbenzene	1	17.6514	0	20	88	70	130
Butyl methacrylate	1	10.0708	0	20	50*	70	130
t-Butylbenzene	1	18.3201	0	20	92	70	130
1,2,4-Trimethylbenzene	1	17.2902	0	20	86	70	130
sec-Butylbenzene	1	18.5164	0	20	93	70	130
4-Isopropyltoluene	1	18.4826	0	20	92	70	130
n-Butylbenzene	1	18.4622	0	20	92	70	130
p-Diethylbenzene	1	18.4539	0	20	92	70	130
1,2,4,5-Tetramethylbenzene	1	17.6809	0	20	88	70	130
1,2-Dibromo-3-Chloropropane	1	10.6466	0	20	53	50	150
Camphor	1	173.2843	0	200	87	20	150
Hexachlorobutadiene	1	15.3102	0	20	77	50	150
1,2,4-Trichlorobenzene	1	15.5885	0	20	78	70	130
1,2,3-Trichlorobenzene	1	15.2077	0	20	76	70	130
Naphthalene	1	13.3958	0	20	67	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS89438

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M142788.D		AD19542-001(T:MSD)		10/6/2020 9:36:00 PM			
Non Spike(if applicable): 2M142775.D		AD19542-001(T)		10/6/2020 5:17:00 PM			
Inst Blank(if applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	14.0871	0	20	70	50	150
Dichlorodifluoromethane	1	8.6301	0	20	43*	50	150
Chloromethane	1	10.974	0	20	55	50	150
Bromomethane	1	13.3402	0	20	67	50	150
<b><u>Vinyl Chloride</u></b>	<b>1</b>	<b><u>12.168</u></b>	<b>0</b>	<b>20</b>	<b>61</b>	<b>50</b>	<b>150</b>
Chloroethane	1	12.8116	0	20	64	50	150
Trichlorofluoromethane	1	13.1334	0	20	66	50	150
Ethyl ether	1	23.4265	0	20	117	50	150
Furan	1	13.699	0	20	68	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	14.3148	0	20	72	50	150
Methylene Chloride	1	61.0115	0	20	305*	70	130
Acrolein	1	11.1724	0	100	11*	50	150
Acrylonitrile	1	15.7304	0	20	79	50	150
Iodomethane	1	13.8705	0	20	69	50	150
Acetone	1	114.6118	0	100	115	50	150
Carbon Disulfide	1	13.0398	0	20	65	50	150
t-Butyl Alcohol	1	83.2749	0	100	83	50	150
n-Hexane	1	14.1604	0	20	71	70	130
Di-isopropyl-ether	1	14.4591	0	20	72	70	130
<b><u>1,1-Dichloroethene</u></b>	<b>1</b>	<b><u>14.3968</u></b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>70</b>	<b>130</b>
Methyl Acetate	1	6.6561	0	20	33*	50	150
Methyl-t-butyl ether	1	13.7485	0	20	69*	70	130
1,1-Dichloroethane	1	14.3819	0	20	72	70	130
trans-1,2-Dichloroethene	1	13.7075	0	20	69*	70	130
Ethyl-t-butyl ether	1	15.0189	0	20	75	70	130
cis-1,2-Dichloroethene	1	12.9296	0	20	65*	70	130
Bromochloromethane	1	15.9077	0	20	80	70	130
2,2-Dichloropropane	1	14.3146	0	20	72	70	130
Ethyl acetate	1	10.0574	0	20	50	50	150
1,4-Dioxane	1	919.0422	0	1000	92	50	150
1,1-Dichloropropene	1	13.9698	0	20	70	70	130
<b><u>Chloroform</u></b>	<b>1</b>	<b><u>14.7064</u></b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>70</b>	<b>130</b>
Cyclohexane	1	13.946	0	20	70	70	130
<b><u>1,2-Dichloroethane</u></b>	<b>1</b>	<b><u>14.0649</u></b>	<b>0</b>	<b>20</b>	<b>70</b>	<b>70</b>	<b>130</b>
<b><u>2-Butanone</u></b>	<b>1</b>	<b><u>19.6453</u></b>	<b>0</b>	<b>20</b>	<b>98</b>	<b>50</b>	<b>150</b>
1,1,1-Trichloroethane	1	14.6234	0	20	73	70	130
<b><u>Carbon Tetrachloride</u></b>	<b>1</b>	<b><u>14.3598</u></b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>50</b>	<b>150</b>
Vinyl Acetate	1	6.5644	0	20	33*	50	150
Bromodichloromethane	1	13.5192	0	20	68*	70	130
Methylcyclohexane	1	13.93	0	20	70	70	130
Dibromomethane	1	15.4819	0	20	77	70	130
1,2-Dichloropropane	1	14.4986	0	20	72	70	130
<b><u>Trichloroethene</u></b>	<b>1</b>	<b><u>25.9707</u></b>	<b>0</b>	<b>20</b>	<b>130</b>	<b>70</b>	<b>130</b>
<b><u>Benzene</u></b>	<b>1</b>	<b><u>13.9959</u></b>	<b>0</b>	<b>20</b>	<b>70</b>	<b>70</b>	<b>130</b>
tert-Amyl methyl ether	1	15.1184	0	20	76	70	130
Iso-propylacetate	1	9.2596	0	20	46*	70	130
Methyl methacrylate	1	2.3635	0	20	12*	70	130
Dibromochloromethane	1	15.3032	0	20	77	70	130
2-Chloroethylvinylether	1	68.2081	0	20	341*	70	130
cis-1,3-Dichloropropene	1	15.0409	0	20	75	70	130
trans-1,3-Dichloropropene	1	15.1427	0	20	76	70	130
Ethyl methacrylate	1	6.1249	0	20	31*	70	130
1,1,2-Trichloroethane	1	14.2089	0	20	71	70	130
1,2-Dibromoethane	1	15.5623	0	20	78	70	130
1,3-Dichloropropane	1	14.8901	0	20	74	70	130
4-Methyl-2-Pentanone	1	17.144	0	20	86	50	150
2-Hexanone	1	18.2049	0	20	91	50	150
<b><u>Tetrachloroethene</u></b>	<b>1</b>	<b><u>14.3089</u></b>	<b>0</b>	<b>20</b>	<b>72</b>	<b>50</b>	<b>150</b>
Toluene	1	14.1589	0	20	71	70	130
1,1,1,2-Tetrachloroethane	1	14.308	0	20	72	70	130
<b><u>Chlorobenzene</u></b>	<b>1</b>	<b><u>14.8516</u></b>	<b>0</b>	<b>20</b>	<b>74</b>	<b>70</b>	<b>130</b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3  
Recovery Data Laboratory Limits  
QC Batch: MBS89438

0100230 0164

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	2.9391	0	20	15*	70	130
n-Amyl acetate	1	3.588	0	20	18*	70	130
Bromoform	1	18.164	0	20	91	70	130
Ethylbenzene	1	17.1018	0	20	86	70	130
1,1,2,2-Tetrachloroethane	1	0	0	20	0*	70	130
Styrene	1	16.7394	0	20	84	70	130
m&p-Xylenes	1	32.0211	0	40	80	70	130
o-Xylene	1	16.6855	0	20	83	70	130
trans-1,4-Dichloro-2-butene	1	18.9587	0	20	95	50	150
1,3-Dichlorobenzene	1	14.3007	0	20	72	70	130
<b><u>1,4-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>14.2617</u></b>	<b><u>0</u></b>	<b><u>20</u></b>	<b><u>71</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2-Dichlorobenzene	1	15.0363	0	20	75	70	130
Isopropylbenzene	1	15.762	0	20	79	70	130
Cyclohexanone	1	108.5412	0	100	109	50	150
Camphene	1	13.4741	0	20	67*	70	130
1,2,3-Trichloropropane	1	15.9173	0	20	80	70	130
2-Chlorotoluene	1	14.9585	0	20	75	70	130
p-Ethyltoluene	1	15.6396	0	20	78	70	130
4-Chlorotoluene	1	15.489	0	20	77	70	130
n-Propylbenzene	1	14.9443	0	20	75	70	130
Bromobenzene	1	14.1849	0	20	71	70	130
1,3,5-Trimethylbenzene	1	14.9946	0	20	75	70	130
Butyl methacrylate	1	9.1326	0	20	46*	70	130
t-Butylbenzene	1	15.7727	0	20	79	70	130
1,2,4-Trimethylbenzene	1	14.9043	0	20	75	70	130
sec-Butylbenzene	1	15.8227	0	20	79	70	130
4-Isopropyltoluene	1	15.6006	0	20	78	70	130
n-Butylbenzene	1	15.5437	0	20	78	70	130
p-Diethylbenzene	1	15.1617	0	20	76	70	130
1,2,4,5-Tetramethylbenzene	1	17.9284	0	20	90	70	130
1,2-Dibromo-3-Chloropropane	1	18.1352	0	20	91	50	150
Camphor	1	379.84	0	200	190*	20	150
Hexachlorobutadiene	1	17.5186	0	20	88	50	150
1,2,4-Trichlorobenzene	1	18.1814	0	20	91	70	130
1,2,3-Trichlorobenzene	1	19.8851	0	20	99	70	130
Naphthalene	1	20.8744	0	20	104	50	150

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
**Bold and underline** - Indicates the compounds reported on form1



**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89438

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M142788.D	AD19542-001(T:MSD)	10/6/2020 9:36:00 PM
Duplicate(If applicable): 2M142787.D	AD19542-001(T:MS)	10/6/2020 9:16:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	14.0871	16.5533	16	30
Dichlorodifluoromethane	1	8.6301	10.8545	23	30
Chloromethane	1	10.974	11.1546	1.6	30
Bromomethane	1	13.3402	12.6506	5.3	30
<b><u>Vinyl Chloride</u></b>	<b><u>1</u></b>	<b><u>12.168</u></b>	<b><u>14.3114</u></b>	<b><u>16</u></b>	<b><u>40</u></b>
Chloroethane	1	12.8116	14.7442	14	30
Trichlorofluoromethane	1	13.1334	17.048	26	30
Ethyl ether	1	23.4265	22.6516	3.4	30
Furan	1	13.699	15.5902	13	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	14.3148	17.635	21	30
Methylene Chloride	1	61.0115	68.0471	11	30
Acrolein	1	11.1724	6.8788	48*	30
Acrylonitrile	1	15.7304	10.1282	43*	30
Iodomethane	1	13.8705	13.8134	0.41	30
Acetone	1	114.6118	69.6792	49*	30
Carbon Disulfide	1	13.0398	15.1168	15	30
t-Butyl Alcohol	1	83.2749	54.009	43*	30
n-Hexane	1	14.1604	18.589	27	30
Di-isopropyl-ether	1	14.4591	15.9633	9.9	30
<b><u>1,1-Dichloroethene</u></b>	<b><u>1</u></b>	<b><u>14.3968</u></b>	<b><u>16.5384</u></b>	<b><u>14</u></b>	<b><u>40</u></b>
Methyl Acetate	1	6.6561	5.7023	15	30
Methyl-t-butyl ether	1	13.7485	12.5502	9.1	30
1,1-Dichloroethane	1	14.3819	16.561	14	40
trans-1,2-Dichloroethene	1	13.7075	16.1286	16	30
Ethyl-t-butyl ether	1	15.0189	16.0025	6.3	30
cis-1,2-Dichloroethene	1	12.9296	14.9501	14	30
Bromochloromethane	1	15.9077	16.7832	5.4	30
2,2-Dichloropropane	1	14.3146	17.2013	18	30
Ethyl acetate	1	10.0574	6.5586	42*	30
1,4-Dioxane	1	919.0422	492.4296	60*	30
1,1-Dichloropropene	1	13.9698	16.8892	19	30
<b><u>Chloroform</u></b>	<b><u>1</u></b>	<b><u>14.7064</u></b>	<b><u>17.2262</u></b>	<b><u>16</u></b>	<b><u>40</u></b>
Cyclohexane	1	13.946	17.2031	21	30
<b><u>1,2-Dichloroethane</u></b>	<b><u>1</u></b>	<b><u>14.0649</u></b>	<b><u>14.2266</u></b>	<b><u>1.1</u></b>	<b><u>40</u></b>
<b><u>2-Butanone</u></b>	<b><u>1</u></b>	<b><u>19.6453</u></b>	<b><u>12.8109</u></b>	<b><u>42*</u></b>	<b><u>40</u></b>
1,1,1-Trichloroethane	1	14.6234	17.683	19	30
<b><u>Carbon Tetrachloride</u></b>	<b><u>1</u></b>	<b><u>14.3598</u></b>	<b><u>17.6123</u></b>	<b><u>20</u></b>	<b><u>40</u></b>
Vinyl Acetate	1	6.5644	7.2301	9.7	30
Bromodichloromethane	1	13.5192	12.4863	7.9	30
Methylcyclohexane	1	13.93	15.4458	10	30
Dibromomethane	1	15.4819	12.6339	20	30
1,2-Dichloropropane	1	14.4986	14.0753	3	30
<b><u>Trichloroethene</u></b>	<b><u>1</u></b>	<b><u>25.9707</u></b>	<b><u>26.8144</u></b>	<b><u>3.2</u></b>	<b><u>40</u></b>
<b><u>Benzene</u></b>	<b><u>1</u></b>	<b><u>13.9959</u></b>	<b><u>16.5332</u></b>	<b><u>17</u></b>	<b><u>40</u></b>
tert-Amyl methyl ether	1	15.1184	15.2918	1.1	30
Iso-propylacetate	1	9.2596	6.7712	31*	30
Methyl methacrylate	1	2.3635	2.3298	1.4	30
Dibromochloromethane	1	15.3032	15.5395	1.5	30
2-Chloroethylvinylether	1	68.2081	45.0506	41*	30
cis-1,3-Dichloropropene	1	15.0409	13.1213	14	30
trans-1,3-Dichloropropene	1	15.1427	14.9835	1.1	30
Ethyl methacrylate	1	6.1249	5.7726	5.9	30
1,1,2-Trichloroethane	1	14.2089	13.3555	6.2	30
1,2-Dibromoethane	1	15.5623	13.5749	14	30
1,3-Dichloropropane	1	14.8901	13.8199	7.5	30
4-Methyl-2-Pentanone	1	17.144	9.1804	61*	30
2-Hexanone	1	18.2049	10.5137	54*	30
<b><u>Tetrachloroethene</u></b>	<b><u>1</u></b>	<b><u>14.3089</u></b>	<b><u>17.3137</u></b>	<b><u>19</u></b>	<b><u>40</u></b>
Toluene	1	14.1589	14.6676	3.5	40
1,1,1,2-Tetrachloroethane	1	14.308	15.972	11	30
<b><u>Chlorobenzene</u></b>	<b><u>1</u></b>	<b><u>14.8516</u></b>	<b><u>16.8637</u></b>	<b><u>13</u></b>	<b><u>40</u></b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: MBS89438

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	2.9391	2.7781	5.6	30
n-Amyl acetate	1	3.588	2.5325	34*	30
Bromoform	1	18.164	13.8075	27	30
Ethylbenzene	1	17.1018	17.3165	1.2	30
1,1,2,2-Tetrachloroethane	1	0	0	NA	30
Styrene	1	16.7394	16.9455	1.2	30
m&p-Xylenes	1	32.0211	32.8164	2.5	30
o-Xylene	1	16.6855	16.9531	1.6	30
trans-1,4-Dichloro-2-butene	1	18.9587	16.6546	13	30
1,3-Dichlorobenzene	1	14.3007	16.3152	13	30
<b><u>1,4-Dichlorobenzene</u></b>	<b><u>1</u></b>	<b><u>14.2617</u></b>	<b><u>15.7506</u></b>	<b><u>9.9</u></b>	<b><u>40</u></b>
1,2-Dichlorobenzene	1	15.0363	15.573	3.5	40
Isopropylbenzene	1	15.762	17.5942	11	30
Cyclohexanone	1	108.5412	64.5234	51*	30
Camphene	1	13.4741	16.8444	22	30
1,2,3-Trichloropropane	1	15.9173	11.8567	29	30
2-Chlorotoluene	1	14.9585	17.7083	17	30
p-Ethyltoluene	1	15.6396	17.9752	14	30
4-Chlorotoluene	1	15.489	17.3889	12	30
n-Propylbenzene	1	14.9443	17.4481	15	40
Bromobenzene	1	14.1849	14.8418	4.5	30
1,3,5-Trimethylbenzene	1	14.9946	17.6514	16	30
Butyl methacrylate	1	9.1326	10.0708	9.8	30
t-Butylbenzene	1	15.7727	18.3201	15	30
1,2,4-Trimethylbenzene	1	14.9043	17.2902	15	30
sec-Butylbenzene	1	15.8227	18.5164	16	40
4-Isopropyltoluene	1	15.6006	18.4826	17	30
n-Butylbenzene	1	15.5437	18.4622	17	30
p-Diethylbenzene	1	15.1617	18.4539	20	30
1,2,4,5-Tetramethylbenzene	1	17.9284	17.6809	1.4	30
1,2-Dibromo-3-Chloropropane	1	18.1352	10.6466	52*	30
Camphor	1	379.84	173.2843	75*	30
Hexachlorobutadiene	1	17.5186	15.3102	13	30
1,2,4-Trichlorobenzene	1	18.1814	15.5885	15	30
1,2,3-Trichlorobenzene	1	19.8851	15.2077	27	30
Naphthalene	1	20.8744	13.3958	44*	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 2M142770.D  
Matrix: AqueousBlank Analysis Date: 10/06/20 15:32  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD19595-013(T)	2M142777.D	10/06/20 17:56
AD19595-014(10X)	2M142785.D	10/06/20 20:33
EF-V1-335534(100)	2M142789.D	10/06/20 21:55
AD19542-001(T:M)	2M142788.D	10/06/20 21:36
AD19542-001(T:M)	2M142787.D	10/06/20 21:16
MBS89438	2M142779.D	10/06/20 18:35
AD19542-001(T)	2M142775.D	10/06/20 17:17

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 2

Data File: 2M142484.D  
Analysis Date: 09/29/20 14:14  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.336 to 7.379 min

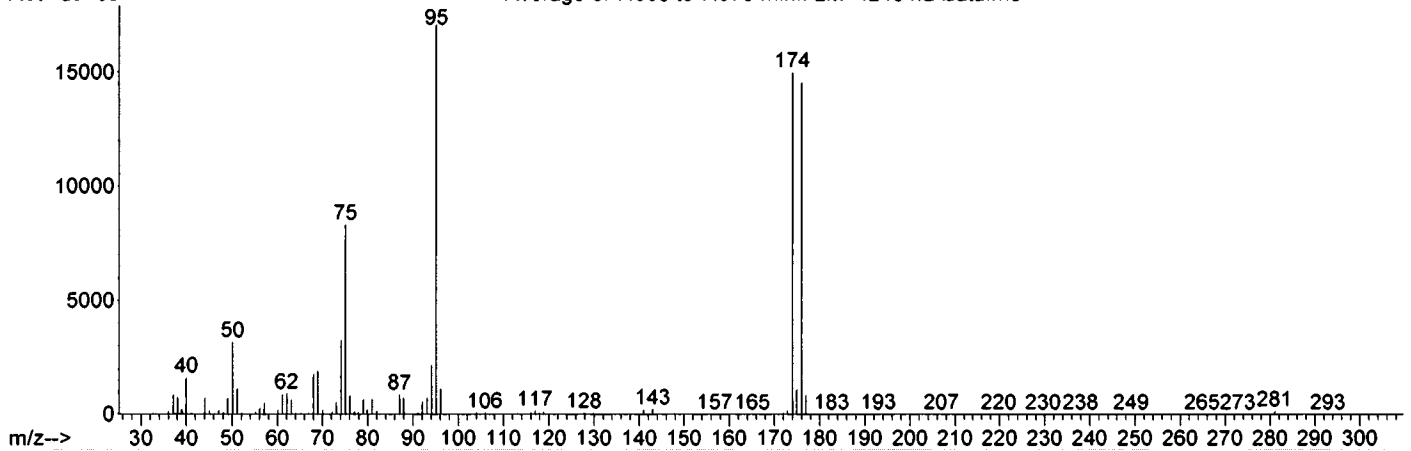
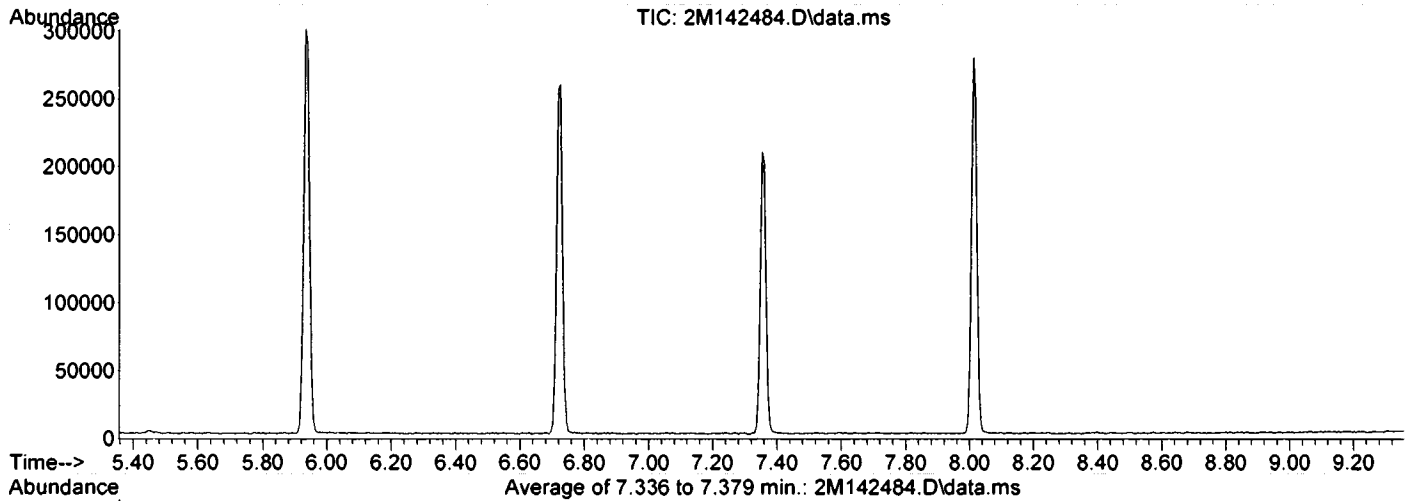
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

Data File	Sample Number	Analysis Date:
2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09
2M142488.D	CAL @ 1 PPB	09/29/20 15:28
2M142489.D	CAL @ 5 PPB	09/29/20 15:48
2M142490.D	CAL @ 10 PPB	09/29/20 16:08
2M142492.D	CAL @ 20 PPB	09/29/20 16:47
2M142494.D	CAL @ 50 PPB	09/29/20 17:26
2M142496.D	CAL @ 100 PPB	09/29/20 18:05
2M142499.D	CAL @ 250 PPB	09/29/20 19:04
2M142502.D	CAL @ 500 PPB	09/29/20 20:03
2M142508.D	ICV	09/29/20 22:00

Data Path : G:\GcMsData\2020\GCMS\_2\Data\09-29-20\  
 Data File : 2M142484.D  
 Acq On : 29 Sep 2020 14:14  
 Operator : JR  
 Sample : BFB TUNE  
 Misc : A, 5ML  
 ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_2\METHODQT\2M\_A0909.M  
 Title : @GCMS\_2,ug,624,8260  
 Last Update : Thu Sep 10 14:44:02 2020



Spectrum Information: Average of 7.336 to 7.379 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	3176	PASS
75	95	30	60	48.8	8328	PASS
95	95	100	100	100.0	17082	PASS
96	95	5	9	6.7	1137	PASS
173	174	0.00	2	1.2	175	PASS
174	95	50	100	87.8	15005	PASS
175	174	5	9	7.3	1088	PASS
176	174	95	101	97.0	14548	PASS
177	176	5	9	5.8	850	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 2

Data File: 2M142766.D  
Analysis Date: 10/06/20 14:14  
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.355 to 7.367 min

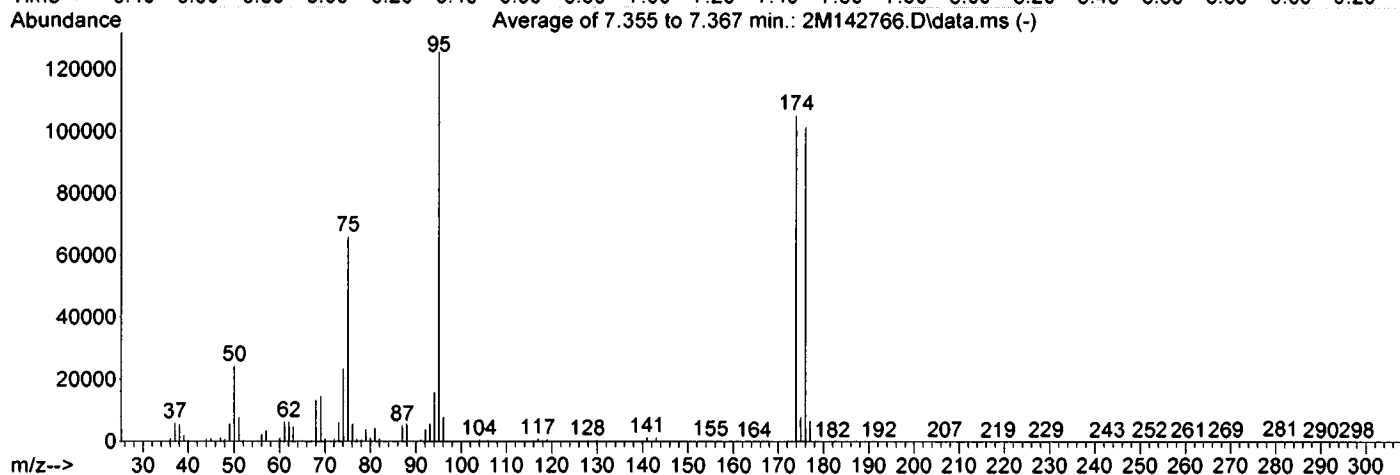
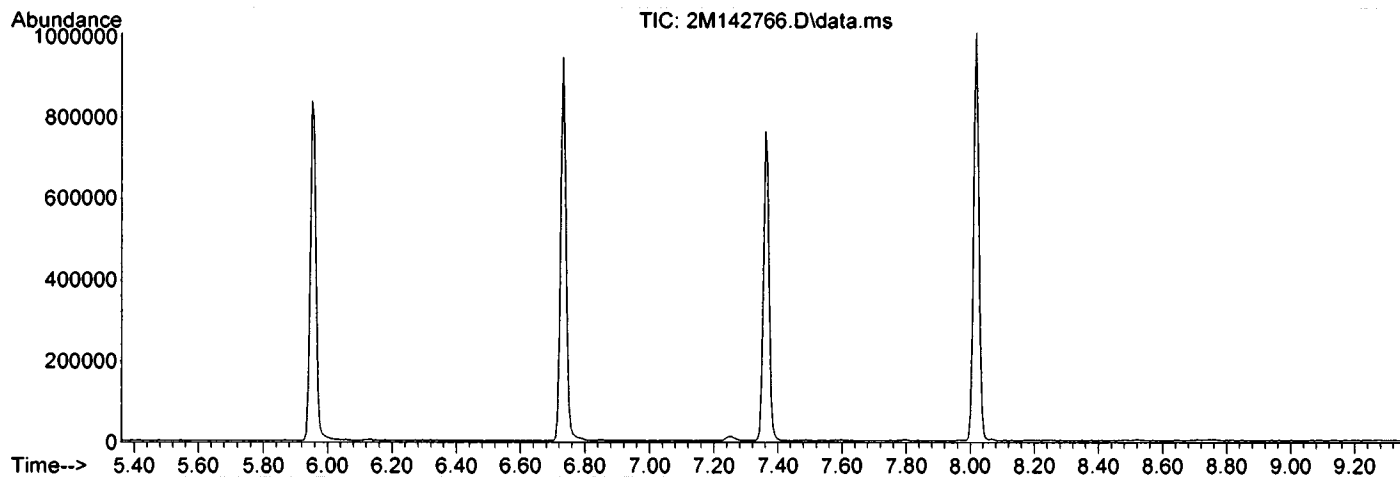
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.4	24411	PASS
75	95	30	60	52.6	66155	PASS
95	95	100	100	100.0	125664	PASS
96	95	5	9	6.4	8032	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.9	105371	PASS
175	174	5	9	7.6	7967	PASS
176	174	95	101	96.4	101629	PASS
177	176	5	9	6.5	6617	PASS

Data File	Sample Number	Analysis Date:
2M142767.D	CAL @ 20 PPB	10/06/20 14:33
2M142768.D	20 PPB	10/06/20 14:53
2M142769.D	BLK	10/06/20 15:12
2M142770.D	DAILY BLANK	10/06/20 15:32
2M142771.D	DAILY BLANK	10/06/20 15:51
2M142772.D	BLK	10/06/20 16:11
2M142773.D	AD19615-001	10/06/20 16:30
2M142774.D	BLKTEST	10/06/20 16:57
2M142775.D	AD19542-001(T)	10/06/20 17:17
2M142776.D	AD19560-001(T)	10/06/20 17:37
2M142777.D	AD19595-013(T)	10/06/20 17:56
2M142778.D	AD19595-014(T)	10/06/20 18:16
2M142779.D	MBS89438	10/06/20 18:35
2M142780.D	AD19548-001(T)	10/06/20 18:55
2M142781.D	AD19543-001(T)	10/06/20 19:14
2M142782.D	AD19526-002(T)	10/06/20 19:34
2M142783.D	AD19527-002(T)	10/06/20 19:54
2M142784.D	AD19548-001(T)	10/06/20 20:13
2M142785.D	AD19595-014(10X)	10/06/20 20:33
2M142787.D	AD19542-001(T:M)	10/06/20 21:16
2M142788.D	AD19542-001(T:M)	10/06/20 21:36
2M142789.D	EF-V1-335534(100)	10/06/20 21:55
2M142790.D	BLK	10/06/20 22:15
2M142791.D	AD19615-001	10/06/20 22:34
2M142792.D	AD19598-001	10/06/20 22:54
2M142793.D	AD19598-002	10/06/20 23:13
2M142794.D	AD19598-003	10/06/20 23:33
2M142795.D	AD19598-004	10/06/20 23:52
2M142796.D	AD19598-005	10/07/20 00:12
2M142797.D	AD19598-006	10/07/20 00:32
2M142798.D	AD19598-007	10/07/20 00:51
2M142799.D	AD19598-008	10/07/20 01:11
2M142800.D	AD19598-009	10/07/20 01:30
2M142801.D	AD19598-010	10/07/20 01:50
2M142802.D	AD19598-011	10/07/20 02:09
2M142803.D	AD19568-002	10/07/20 02:29
2M142804.D	MBS89439	10/07/20 02:48
2M142805.D	BLK	10/07/20 03:08
2M142806.D	BLK	10/07/20 03:28
2M142807.D	BLK	10/07/20 03:47
2M142808.D	BLK	10/07/20 04:07
2M142809.D	BLK	10/07/20 04:27
2M142810.D	BLK	10/07/20 04:46
2M142811.D	BLK	10/07/20 05:06

Data Path : G:\GcMsData\2020\GCMS\_2\Data\10-0620\  
 Data File : 2M142766.D  
 Acq On : 06 Oct 2020 14:14  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : A,5ML  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS\_2\METHODQT\2M\_A0929.M  
 Title : @GCMS\_2,ug,624,8260  
 Last Update : Wed Sep 30 10:28:52 2020



Spectrum Information: Average of 7.355 to 7.367 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	24411	PASS
75	95	30	60	52.6	66155	PASS
95	95	100	100	100.0	125664	PASS
96	95	5	9	6.4	8032	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.9	105371	PASS
175	174	5	9	7.6	7967	PASS
176	174	95	101	96.4	101629	PASS
177	176	5	9	6.5	6617	PASS

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level	Concentrations																		
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9											
3	2M142490.D	CAL @ 100 PPB	09/29/20 18:05	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26																				
5	2M142496.D	CAL @ 500 PPB	09/29/20 20:03	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04																				
7	2M142502.D	CAL @ 0.5 PPB	09/29/20 15:09	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28																				
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09																								
Compound	Col	Mr	Flt	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
Chlorodifluoromethane	1	0	Avg	0.3084	0.3044	0.2719	0.3264	0.3317	0.3264	0.3218	0.2561	---	0.306169	1.00	1.00	1.00	9.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorofluoromethane	1	0	Avg	0.3267	0.3071	0.2716	0.3305	0.3409	0.3349	0.3272	0.2258	---	0.308168	1.00	1.00	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.3208	0.3455	0.3030	0.3431	0.3602	0.3483	0.3434	0.3809	---	0.343185	1.00	1.00	1.00	6.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Avg	0.1427	0.1504	0.1402	0.1526	0.1877	0.2192	---	0.1737	---	0.167225	0.995	1.00	1.00	17	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.3712	0.3975	0.3370	0.3874	0.4038	0.3891	0.3690	0.3256	---	0.373195	0.999	1.00	1.00	7.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.2427	0.2454	0.2330	0.2520	0.2602	0.2632	0.2708	0.2210	---	0.249234	1.00	1.00	1.00	6.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethane	1	0	Avg	0.5649	0.5937	0.5441	0.5973	0.6141	0.6010	0.5927	0.4597	---	0.571257	1.00	1.00	1.00	8.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1834	0.2015	0.1816	0.1983	0.2124	0.2081	0.2124	0.1881	---	0.198280	1.00	1.00	1.00	6.4	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.3176	0.3432	0.3104	0.3268	0.3519	0.3501	0.3537	0.3281	---	0.335284	1.00	1.00	1.00	5.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-trifluoroethane	1	0	Avg	0.1928	0.2050	0.1789	0.2064	0.2137	0.2108	0.2197	0.1739	---	0.200300	1.00	1.00	1.00	8.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2692	0.2961	0.2518	0.2796	0.2975	0.2895	0.2877	0.2943	---	0.283342	1.00	1.00	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0436	0.0448	0.0416	0.0449	0.0472	0.0477	0.0495	0.0427	---	0.0453292	1.00	1.00	1.00	6.0		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00	
Acrylonitrile	1	0	Avg	0.0909	0.1026	0.0899	0.0973	0.1005	0.1059	0.1059	0.0931	---	0.0983362	1.00	1.00	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.1842	0.1649	0.1597	0.2148	0.2704	0.2893	---	0.1873	---	0.210315	0.985	0.996	24		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Acetone	1	0	Avg	0.0724	0.0805	0.0736	0.0819	0.0811	0.0803	0.0782	0.0973	---	0.0807304	1.00	1.00	1.00	9.4	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00	
Carbon Disulfide	1	0	Avg	0.7173	0.8037	0.6973	0.7494	0.7799	0.7709	0.7692	0.8299	---	0.765321	1.00	1.00	1.00	5.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0240	0.0260	0.0247	0.0264	0.0274	0.0284	0.0273	0.0236	---	0.0260348	1.00	1.00	1.00	6.6		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00	
n-Hexane	1	0	Avg	0.2239	0.2349	0.2319	0.2427	0.2551	0.2505	0.2547	0.2015	---	0.237387	1.00	1.00	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dihisopropyl-ether	1	0	Avg	0.6484	0.6639	0.6085	0.6783	0.7341	0.7590	0.5936	---	0.678403	1.00	1.00	1.00	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,1-Dichloroethane	1	0	Avg	0.3732	0.3939	0.3528	0.3913	0.4108	0.4089	0.4224	0.3327	---	0.386301	1.00	1.00	1.00	8.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1654	0.1951	0.1782	0.1758	0.1829	0.1831	0.1793	0.1966	---	0.182332	1.00	1.00	1.00	5.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	LinF	0.6903	0.7095	0.6580	0.7318	0.7958	0.7997	0.8090	0.6631	0.6760	---	0.726364	1.00	1.00	8.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.4511	0.4789	0.4094	0.4701	0.4999	0.4976	0.5042	0.4522	---	0.470400	1.00	1.00	1.00	6.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethane	1	0	Avg	0.2717	0.2935	0.2517	0.2806	0.2979	0.3025	0.3091	0.2687	---	0.285365	1.00	1.00	1.00	6.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.7025	0.7205	0.6735	0.7352	0.7971	0.7992	0.8129	0.6313	---	0.734429	1.00	1.00	1.00	8.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethane	1	0	Avg	0.4472	0.4819	0.4211	0.4700	0.4999	0.5089	0.5261	0.4699	---	0.478441	1.00	1.00	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.2157	0.2288	0.2019	0.2157	0.2198	0.1993	0.2032	0.2145	---	0.212457	1.00	1.00	1.00	4.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.4060	0.4388	0.3852	0.4197	0.4452	0.4418	0.4433	0.3919	---	0.422442	1.00	1.00	1.00	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.2318	0.2533	0.2229	0.2446	0.2531	0.2523	0.2546	0.2435	---	0.245443	1.00	1.00	1.00	4.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0032	0.0032	0.0034	0.0035	0.0036	0.0038	0.0039	0.0026	---	0.0034450	1.00	1.00	1.00	12		1000.0	250.0	500.0	2500.0	5000.0	12500.0	25000.0	50.00	
1,1-Dichloropropene	1	0	Avg	0.3798	0.4031	0.3497	0.3978	0.4190	0.4300	0.4551	0.3564	---	0.399482	0.999	1.00	1.00	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.5013	0.5330	0.4704	0.5194	0.5417	0.5271	0.5376	0.4676	---	0.512460	1.00	1.00	1.00	5.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethane	1	0	Avg	0.2832	0.2901	0.2899	0.2896	0.2919	0.2861	0.2726	0.2918	0.2911	---	0.287470	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3426	0.3485	0.3316	0.3563	0.3747	0.3794	0.3957	0.2989	---	0.354477	1.00	1.00	1.00	8.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1495	0.1453	0.1515	0.1499	0.1544	0.1467	0.1430	0.1463	0.1486	---	0.148491	-1	-1	2.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3888	0.4296	0.3712	0.4102	0.4423	0.4534	0.4858	0.3889	0.5360	---	0.434495	0.999	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00
2-Butanone	1	0	Avg	0.1134	0.1161	0.1032	0.1334	0.1389	0.1533	0.1562	0.0868	---	0.125440	1.00	1.00	1.00	20	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.4457	0.4577	0.4112	0.4660	0.4886	0.4816	0.4928	0.3898	---	0.454473	1.00	1.00	1.00	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.3755	0.37																						



Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations									
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9									
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:08	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26										
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:05	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04										
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28										
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09														
Compound	Col	Mr	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	
Methylcyclohexane	1	0	0.3212	0.3500	0.3057	0.3390	0.3640	0.3671	0.3909	0.3040		0.343	5.42	0.999	1.00	9.1	0.10
Dibromomethane	1	0	0.1971	0.2030	0.1811	0.2042	0.2169	0.2219	0.2320	0.1896		0.282	5.43	1.00	1.00	8.3	0.10
1,2-Dichloropropane	1	0	0.2630	0.2805	0.2534	0.2766	0.2987	0.3061	0.3250	0.2532		0.206	5.40	0.999	1.00	9.2	0.10
Trichloroethene	1	0	0.3015	0.3095	0.2835	0.3148	0.3301	0.3354	0.3542	0.3081		0.317	5.30	0.999	1.00	6.9	0.20
Benzene	1	0	1.0566	1.1138	1.0147	1.1109	1.2035	1.2372	1.2892	1.0142	1.0677	1.124	9.95	1.00	1.00	8.8	0.50
tert-Amyl methyl ether	1	0	0.7223	0.7775	0.6761	0.7784	0.8586	0.8567	0.9875	0.6615		0.790	4.99	0.996	1.00	14	0.50
Iso-propylacetate	1	0	0.4767	0.4834	0.4634	0.5264	0.5658	0.5730	0.6223	0.4683		0.522	4.95	0.999	1.00	11	0.50
Methyl methacrylate	1	0	0.2432	0.2604	0.2316	0.2544	0.2609	0.2713	0.2225			0.252	5.45	1.00	1.00	7.0	0.50
Dibromochloroethane	1	0	0.3365	0.3563	0.3267	0.3584	0.3898	0.3725	0.3978	0.2746		0.352	6.42	0.999	1.00	11	0.10
2-Chloroethylvinyl ether	1	0	0.0366	0.0366	0.0303	0.0412	0.0451	0.0436	0.0460	0.0276		0.0384	5.71	0.999	1.00	18	
cis-1,3-Dichloropropene	1	0	0.4659	0.4908	0.4463	0.4725	0.5119	0.4931	0.5049	0.4587		0.481	5.81	1.00	1.00	4.8	0.20
trans-1,3-Dichloropropene	1	0	0.4268	0.4649	0.4115	0.4484	0.4908	0.4751	0.5129	0.4299		0.458	6.09	0.999	1.00	7.6	0.10
Ethyl methacrylate	1	0	0.2412	0.2608	0.2334	0.2628	0.2845	0.2806	0.3345	0.2182		0.265	6.10	0.994	1.00	14	0.50
1,1,2-Trichloroethane	1	0	0.2825	0.2949	0.2767	0.2959	0.3139	0.3048	0.3393	0.2668		0.297	6.20	0.998	1.00	7.7	0.10
1,2-Dibromoethane	1	0	0.3028	0.3235	0.2770	0.3146	0.3357	0.3159	0.3307	0.3040		0.313	6.49	1.00	1.00	6.0	0.10
1,3-Dichloropropane	1	0	0.4818	0.5241	0.4653	0.5076	0.5566	0.5574	0.6126	0.4463		0.519	6.29	0.998	1.00	11	
4-Methyl-2-Pentanone	1	0	0.2679	0.2873	0.2564	0.2800	0.2930	0.2921	0.3042	0.2595		0.280	5.87	1.00	1.00	6.2	0.10
2-Hexanone	1	0	0.1896	0.2087	0.1802	0.2084	0.2158	0.2206	0.2480	0.1963		0.208	6.30	0.997	1.00	10	0.10
Tetrachloroethene	1	0	0.2589	0.2738	0.2401	0.2683	0.2882	0.2869	0.3127	0.2312		0.270	6.29	0.998	1.00	9.9	0.20
Toluene-d8	1	0	1.1861	1.1986	1.1924	1.1932	1.1755	1.1297	1.1090	1.1941	1.1851	1.175	5.99	-1	-1	2.7	
Toluene	1	0	0.7568	0.8301	0.6967	0.7850	0.8350	0.8184	0.8811	0.7363		0.792	5.95	0.999	1.00	7.6	0.40
1,1,1,2-Tetrachloroeth	1	0	0.2858	0.3239	0.2828	0.3050	0.3414	0.3426	0.3885	0.2699		0.318	6.78	0.997	1.00	12	
Chlorobenzene	1	0	0.8546	0.9026	0.7999	0.8728	0.9417	0.9215	0.9383	0.8425		0.884	6.75	1.00	1.00	5.7	0.50
n-Butyl acrylate	1	0	1.0368	1.0495	0.9831	1.1125	1.2049	0.9964	0.8195	0.8936		1.01	6.99	0.985	0.999	12	0.50
n-Amyl acetate	1	0	0.8680	0.8958	0.8281	0.9223	1.0274	0.9167		0.7816		0.891	7.11	0.997	0.999	8.8	0.50
Bromoforn	1	0	0.4460	0.4727	0.4144	0.4635	0.4951	0.4802	0.4182	0.3913		0.448	7.20	0.995	1.00	8.2	0.10
Ethylbenzene	1	0	0.7215	0.7124	0.6496	0.7088	0.7993	0.6198		0.5676		0.683	6.79	0.987	0.998	11	0.10
1,1,2,2-Tetrachloroeth	1	0	0.7637	0.8266	0.7271	0.7848	0.8123	0.6413	1.1360	0.7313		0.803	7.42	0.956	0.994	18	0.10
Bromofluorobenzene	1	0	0.8056	0.8174	0.8159	0.8012	0.7872	0.6645	0.7653	0.8229	0.8116	0.788	7.37	-1	-1	6.3	
Styrene	1	0	1.7747	1.8889	1.6569	1.8301	2.0008	1.8243	1.0632	1.6717		1.71	7.07	0.905	0.997	17	0.30
m,p-Xylenes	1	0	1.0340	1.0939	0.9659	1.0408	1.1392	0.9889	0.9896	1.1927		1.04	6.85	0.994	1.00	9.2	0.10
o-Xylene	1	0	1.0041	1.0710	0.9276	1.0414	1.1310	1.0054	0.7052	0.9830		0.984	7.07	0.960	0.999	13	0.30
trans-1,4-Dichloro-2-b	1	0	0.1883	0.1749	0.1528	0.2071	0.2387	0.2032		0.1616		0.190	7.44	0.995	0.998	16	
1,3-Dichlorobenzene	1	0	1.1796	1.2835	1.1410	1.2034	1.2869	1.2282	1.2308	1.1999		1.22	7.99	1.00	1.00	4.2	0.60
1,4-Dichlorobenzene	1	0	1.1768	1.2810	1.1266	1.2036	1.3079	1.2265	1.3834	1.2848		1.25	8.04	0.997	0.999	6.5	0.50
1,2-Dichlorobenzene	1	0	1.0779	1.1950	1.0384	1.0979	1.2106	1.1601	1.2217	1.2032		1.15	8.26	0.999	1.00	6.1	0.40
Isopropylbenzene	1	0	2.5331	2.7095	2.3666	2.5218	2.7377	2.3923	1.5864	3.1666		2.40	7.26	0.945	0.999	15	0.10
Cyclohexanone	1	0	0.0216	0.0272	0.0214	0.0215	0.0213	0.0189	0.0142	0.0191		0.020	7.34	0.975	1.00	17	
Camphene	1	0	0.6702	0.7217	0.6523	0.6872	0.7358	0.5838	0.9876	0.6258		0.708	7.43	0.961	0.994	17	
1,2,3-Trichloropropane	1	0	0.7874	0.8061	0.7283	0.8437	0.9464	0.8308	1.2755	0.7426		0.870	7.46	0.972	0.997	20	
2-Chlorotoluene	1	0	1.4787	1.6277	1.4300	1.5536	1.6953	1.4416	0.9231	1.3925		1.44	7.56	0.933	0.999	16	

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria(if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																		
1	2M142492.D	CAL @ 20 PPB	09/29/20 16:47	2	2M142489.D	CAL @ 5 PPB	09/29/20 15:48	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8 Lvl9																		
3	2M142490.D	CAL @ 10 PPB	09/29/20 16:05	4	2M142494.D	CAL @ 50 PPB	09/29/20 17:26																			
5	2M142496.D	CAL @ 100 PPB	09/29/20 18:08	6	2M142499.D	CAL @ 250 PPB	09/29/20 19:04																			
7	2M142502.D	CAL @ 500 PPB	09/29/20 20:03	8	2M142488.D	CAL @ 1 PPB	09/29/20 15:28																			
9	2M142487.D	CAL @ 0.5 PPB	09/29/20 15:09																							
Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.4062	2.6874	2.3407	2.4997	2.7248	2.7429	1.6090	2.3031	---	2.41755	0.912	0.994	15	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
4-Chloroluene	1	0	Avg	1.4959	1.6231	1.4308	1.5804	1.7572	0.9110	---	1.4889	---	1.47762	0.885	0.992	18	20.00	5.00	10.00	50.00	100.0	250.0	1.00			
n-Propylbenzene	1	0	Avg	2.9227	3.1237	2.8066	3.0040	3.2240	2.9041	2.1478	2.9683	---	2.89749	0.972	1.00	11	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Bromobenzene	1	0	Avg	1.4792	1.6627	1.4345	1.5518	1.7064	1.4734	2.0297	1.5105	---	1.61746	0.983	0.997	12	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,3,5-Trimethylbenzen	1	0	Avg	1.9328	2.0335	1.8301	2.0046	2.2028	1.1981	---	1.8900	---	1.87757	0.904	0.994	17	20.00	5.00	10.00	50.00	100.0	250.0	1.00			
Butyl methacrylate	1	0	Avg	0.7041	0.7555	0.6700	0.7514	0.8501	---	---	0.6534	---	0.731758	0.996	1.00	9.8	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
t-Butylbenzene	1	0	Avg	1.8937	2.0928	1.8163	1.9202	2.0934	1.8489	1.0676	1.8633	---	1.82778	0.899	0.998	18	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,4-Trimethylbenzen	1	0	Avg	2.0056	2.1723	1.9204	2.0775	2.2364	1.7137	---	1.9768	---	2.01780	0.986	0.999	8.6	20.00	5.00	10.00	50.00	100.0	250.0	1.00			
sec-Butylbenzene	1	0	Avg	2.3365	2.5682	2.2416	2.3901	2.5814	2.3469	1.2902	2.2855	---	2.26790	0.882	0.997	18	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
4-Isopropyltoluene	1	0	Avg	1.9862	2.0940	1.8405	2.0175	2.1777	2.0361	1.3000	1.8688	---	1.92796	0.937	0.998	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
n-Butylbenzene	1	0	Avg	2.0370	2.1798	1.9305	2.1144	2.2571	2.0506	1.2200	2.0605	---	1.98820	0.912	0.998	16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
p-Diethylbenzene	1	0	Avg	1.0661	1.1629	1.0199	1.1076	1.1892	1.0958	0.9058	1.1145	---	1.08819	0.989	1.00	8.2	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,4,5-Tetramethylbe	1	0	Avg	1.5303	1.6348	1.4365	1.5927	1.7098	1.2843	2.1031	1.3747	---	1.58865	0.965	0.993	16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1708	0.1749	0.1496	0.1703	0.1822	0.1421	---	0.1520	---	0.163871	0.988	0.999	9.2	20.00	5.00	10.00	50.00	100.0	250.0	1.00			
Campfor	1	0	Avg	0.0627	0.0604	0.0591	0.0714	0.0773	0.0654	---	0.0566	0.0620	---	0.0644915	0.995	0.999	11	20.00	5.00	10.00	50.00	100.0	250.0	10.00	5.00	
Hexachlorobutadiene	1	0	Avg	0.2327	0.2736	0.2236	0.2390	0.2424	0.1645	0.3030	0.3077	---	0.248928	0.951	0.990	19	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,4-Trichlorobenzen	1	0	Avg	0.5644	0.5925	0.5389	0.5732	0.6091	0.4389	0.8041	0.6075	---	0.591920	0.952	0.992	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
1,2,3-Trichlorobenzen	1	0	Avg	0.4534	0.5003	0.4542	0.4852	0.5073	0.3617	0.6368	0.5236	---	0.490950	0.956	0.992	16	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		
Naphthalene	1	0	Avg	1.5393	1.5307	1.4269	1.6731	1.8176	1.3629	2.3710	1.4483	---	1.65936	0.958	0.993	20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00		

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria(if applicable)

Note:  
Avg Rsd: 10.08  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Form7  
Continuing CalibrationCalibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/6/2020 2:33:00 PData File: 2M142767.D  
Method: EPA 8260D

Instrument: GCMS 2

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.10	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.70	18.59	20	20	0.1	0.306	0.284	7.04	
Dichlorodifluoromethane	1	0		1.68	16.41	20	20	0.1	0.308	0.253	17.93	
Chloromethane	1	0		1.86	18.57	20	20	0.1	0.343	0.319	7.13	
Bromomethane	1	0		2.26	16.89	20	20	0.1	0.167	0.141	15.54	
Vinyl Chloride	1	0		1.95	18.55	20	20	0.1	0.373	0.346	7.23	
Chloroethane	1	0		2.35	17.96	20	20	0.1	0.249	0.223	10.20	
Trichlorofluoromethane	1	0		2.56	17.17	20	20	0.1	0.571	0.490	14.16	
Ethyl ether	1	0		2.80	18.54	20	20	0.5	0.198	0.184	7.32	
Furan	1	0		2.85	18.70	20	20	0.5	0.335	0.314	6.48	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.00	17.04	20	20	0.1	0.200	0.171	14.82	
Methylene Chloride	1	0		3.42	18.90	20	20	0.1	0.283	0.268	5.49	
Acrolein	1	0		2.92	93.47	100	20		0.045	0.042	6.53	
Acrylonitrile	1	0		3.62	19.64	20	20		0.098	0.097	1.82	
Iodomethane	1	0		3.16	17.57	20	20		0.210	0.188	12.15	
Acetone	1	0		3.05	92.00	100	20	0.1	0.081	0.074	8.00	
Carbon Disulfide	1	0		3.22	18.65	20	20	0.1	0.765	0.713	6.74	
t-Butyl Alcohol	1	0		3.48	100.58	100	20		0.026	0.026	0.58	
n-Hexane	1	0		3.88	16.98	20	20		0.237	0.201	15.09	
Di-isopropyl-ether	1	0		4.03	19.35	20	20		0.678	0.656	3.23	
1,1-Dichloroethene	1	0		3.02	18.34	20	20	0.1	0.386	0.354	8.28	
Methyl Acetate	1	0		3.32	25.40	20	20	0.1	0.182	0.231	27.02	C1
Methyl-t-butyl ether	1	0		3.64	17.26	20	20	0.1	0.726	0.696	13.69	
1,1-Dichloroethane	1	0		4.00	19.16	20	20	0.2	0.470	0.451	4.21	
trans-1,2-Dichloroethene	1	0		3.65	18.06	20	20	0.1	0.285	0.257	9.71	
Ethyl-t-butyl ether	1	0		4.29	20.05	20	20	0.5	0.734	0.736	0.25	
cis-1,2-Dichloroethene	1	0		4.41	18.66	20	20	0.1	0.478	0.446	6.72	
Bromochloromethane	1	0		4.57	20.51	20	20		0.212	0.218	2.52	
2,2-Dichloropropane	1	0		4.42	19.94	20	20		0.422	0.420	0.32	
Ethyl acetate	1	0		4.44	21.27	20	20		0.245	0.260	6.35	
1,4-Dioxane	1	0		5.49	977.66	1000	20		0.003	0.003	2.23	
1,1-Dichloropropene	1	0		4.83	18.37	20	20		0.399	0.366	8.13	
Chloroform	1	0		4.61	19.07	20	20	0.2	0.512	0.489	4.63	
Dibromofluoromethane	1	0	S	4.70	30.29	30	**		0.287	0.290	0.95	
Cyclohexane	1	0		4.77	16.64	20	20	0.1	0.354	0.294	16.82	
1,2-Dichloroethane-d4	1	0	S	4.91	29.77	30	**		0.148	0.147	0.77	
1,2-Dichloroethane	1	0		4.95	17.53	20	20	0.1	0.434	0.380	12.37	
2-Butanone	1	0		4.42	19.33	20	20	0.1	0.125	0.121	3.35	
1,1,1-Trichloroethane	1	0		4.73	18.87	20	20	0.1	0.454	0.429	5.64	
Carbon Tetrachloride	1	0		4.83	17.98	20	20	0.1	0.385	0.346	10.12	
Vinyl Acetate	1	0		4.02	21.30	20	20		0.761	0.810	6.52	
Bromodichloromethane	1	0		5.57	17.32	20	20	0.2	0.415	0.397	13.38	
Methylcyclohexane	1	0		5.42	16.20	20	20	0.1	0.343	0.278	18.99	
Dibromomethane	1	0		5.50	19.21	20	20		0.206	0.198	3.95	
1,2-Dichloropropane	1	0		5.43	18.66	20	20	0.1	0.282	0.263	6.68	
Trichloroethene	1	0		5.30	18.67	20	20	0.2	0.317	0.296	6.67	
Benzene	1	0		4.95	18.61	20	20	0.5	1.123	1.045	6.95	
tert-Amyl methyl ether	1	0		4.99	18.85	20	20		0.790	0.744	5.76	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.95	22.71	20	20	0.5	0.522	0.593	13.53	
Methyl methacrylate	1	0		5.45	20.83	20	20	0.5	0.252	0.262	4.17	
Dibromochloromethane	1	0		6.42	21.42	20	20	0.1	0.352	0.377	7.11	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

Form7  
Continuing CalibrationCalibration Name: CAL @ 20 PPB  
Cont Calibration Date/Time 10/6/2020 2:33:00 PData File: 2M142767.D  
Method: EPA 8260D

Instrument: GCMS 2

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.71	24.79	20	20	0.038	0.048	23.93	C1	
cis-1,3-Dichloropropene	1	0		5.80	21.44	20	20	0.2	0.481	0.515	7.20	
trans-1,3-Dichloropropene	1	0		6.09	21.14	20	20	0.1	0.458	0.484	5.72	
Ethyl methacrylate	1	0		6.11	20.95	20	20	0.5	0.265	0.277	4.77	
1,1,2-Trichloroethane	1	0		6.20	20.57	20	20	0.1	0.297	0.305	2.86	
1,2-Dibromoethane	1	0		6.50	20.95	20	20	0.1	0.313	0.328	4.74	
1,3-Dichloropropane	1	0		6.29	20.35	20	20	0.519	0.528	1.73		
4-Methyl-2-Pentanone	1	0		5.87	20.97	20	20	0.1	0.280	0.294	4.87	
2-Hexanone	1	0		6.30	19.99	20	20	0.1	0.208	0.208	0.07	
Tetrachloroethene	1	0		6.29	19.35	20	20	0.2	0.270	0.261	3.24	
Toluene-d8	1	0	S	5.95	33.33	30	**	1.174	1.304	11.10		
Toluene	1	0		5.99	20.41	20	20	0.4	0.792	0.809	2.04	
1,1,1,2-Tetrachloroethane	1	0		6.78	17.81	20	20	0.318	0.283	10.94		
Chlorobenzene	1	0		6.75	18.59	20	20	0.5	0.884	0.822	7.07	
1,4-Dichlorobenzene-d4	1	0	I	8.02	30.00	30	**	0.000	0.000	0.00		
n-Butyl acrylate	1	0		6.99	19.82	20	20	0.5	1.012	1.003	0.91	
n-Amyl acetate	1	0		7.11	19.08	20	20	0.5	0.891	0.850	4.60	
Bromoform	1	0		7.20	20.04	20	20	0.1	0.448	0.449	0.19	
Ethylbenzene	1	0		6.79	20.68	20	20	0.1	0.683	0.706	3.38	
1,1,2,2-Tetrachloroethane	1	0		7.42	18.15	20	20	0.1	0.803	0.729	9.24	
Bromofluorobenzene	1	0	S	7.36	30.94	30	**	0.788	0.813	3.14		
Styrene	1	0		7.08	19.57	20	20	0.3	1.714	1.677	2.13	
m&p-Xylenes	1	0		6.85	36.44	40	20	0.1	1.039	0.947	8.90	
o-Xylene	1	0		7.07	18.75	20	20	0.3	0.984	0.922	6.26	
trans-1,4-Dichloro-2-butene	1	0		7.44	21.29	20	20	0.190	0.202	6.46		
1,3-Dichlorobenzene	1	0		7.98	18.32	20	20	0.6	1.220	1.118	8.38	
1,4-Dichlorobenzene	1	0		8.03	17.70	20	20	0.5	1.249	1.105	11.50	
1,2-Dichlorobenzene	1	0		8.26	17.78	20	20	0.4	1.151	1.023	11.09	
Isopropylbenzene	1	0		7.27	19.43	20	20	0.1	2.399	2.331	2.83	
Cyclohexanone	1	0		7.34	96.49	100	20	0.021	0.020	3.51		
Camphene	1	0		7.44	15.34	20	20	0.708	0.543	23.29	C1	
1,2,3-Trichloropropane	1	0		7.46	18.73	20	20	0.870	0.815	6.34		
2-Chlorotoluene	1	0		7.56	19.29	20	20	1.443	1.391	3.57		
p-Ethyltoluene	1	0		7.55	19.88	20	20	2.414	2.400	0.61		
4-Chlorotoluene	1	0		7.62	19.33	20	20	1.470	1.421	3.33		
n-Propylbenzene	1	0		7.49	18.86	20	20	2.888	2.724	5.68		
Bromobenzene	1	0		7.47	17.79	20	20	1.606	1.429	11.03		
1,3,5-Trimethylbenzene	1	0		7.58	18.25	20	20	1.870	1.707	8.75		
Butyl methacrylate	1	0		7.58	19.11	20	20	0.5	0.731	0.698	4.45	
t-Butylbenzene	1	0		7.77	19.13	20	20	1.825	1.745	4.38		
1,2,4-Trimethylbenzene	1	0		7.80	18.74	20	20	2.015	1.888	6.30		
sec-Butylbenzene	1	0		7.89	18.96	20	20	2.255	2.138	5.18		
4-Isopropyltoluene	1	0		7.97	18.80	20	20	1.915	1.800	5.99		
n-Butylbenzene	1	0		8.20	18.95	20	20	1.981	1.878	5.24		
p-Diethylbenzene	1	0		8.19	18.61	20	20	1.083	1.008	6.94		
1,2,4,5-Tetramethylbenzene	1	0		8.64	18.28	20	20	1.583	1.447	8.59		
1,2-Dibromo-3-Chloropropane	1	0		8.71	18.95	20	20	0.05	0.163	0.155	5.26	
Camphor	1	0		9.14	188.64	200	20	0.064	0.061	5.68		
Hexachlorobutadiene	1	0		9.28	17.71	20	20	0.248	0.220	11.46		
1,2,4-Trichlorobenzene	1	0		9.20	17.69	20	20	0.2	0.591	0.523	11.55	
1,2,3-Trichlorobenzene	1	0		9.50	16.82	20	20	0.490	0.412	15.89		
Naphthalene	1	0		9.36	16.88	20	20	1.646	1.390	15.60		

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 2M142492.D

Analysis Date/Time: 09/29/20 16:47

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11	12	13	14	15	16	17
Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	359594 5.10	324303 6.73	173285 8.02				
Eval File Area Limit:	179797-719188	162152-648606	86642-346570				
Eval File RI Limit:	4.6-5.6	6.23-7.23	7.52-8.52				

Data File Sample#

2M142487.D	CAL @ 0.5 PPB	346417	5.10	307168	6.73	160675	8.02
2M142488.D	CAL @ 1 PPB	387579	5.10	349135	6.73	180533	8.02
2M142489.D	CAL @ 5 PPB	340498	5.10	303983	6.73	159994	8.02
2M142490.D	CAL @ 10 PPB	387191	5.10	348044	6.73	187417	8.02
2M142492.D	CAL @ 20 PPB	359594	5.10	324303	6.73	173285	8.02
2M142494.D	CAL @ 50 PPB	341318	5.10	313870	6.73	172876	8.02
2M142496.D	CAL @ 100 PPB	347100	5.10	321317	6.73	178964	8.02
2M142499.D	CAL @ 250 PPB	354579	5.10	343475	6.73	250266	8.02
2M142502.D	CAL @ 500 PPB	378988	5.10	368525	6.73	177011	8.03
2M142508.D	ICV	379486	5.10	341026	6.73	179492	8.02

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30mg/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration =5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 2M142767.D

Analysis Date/Time: 10/06/20 14:33

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	
Eval File Area/RT:	341576	5.10	287212	6.73	149984	8.02								
Eval File Area Limit:	170788-683152		143606-574424		74992-299968									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
2M142768.D	20 PPB	376395	5.10	345669	6.73	180454	8.02						
2M142769.D	BLK	372443	5.10	343232	6.73	175202	8.02						
2M142770.D	DAILY BLANK	371657	5.10	345686	6.73	180982	8.02						
2M142771.D	DAILY BLANK	368821	5.10	309850	6.73	160862	8.02						
2M142772.D	BLK	359666	5.10	335385	6.73	167763	8.02						
2M142774.D	BLKTEST	366913	5.10	343625	6.73	176661	8.02						
2M142775.D	AD19542-001(T)	358725	5.10	337266	6.73	172636	8.02						
2M142776.D	AD19560-001(T)	373854	5.10	350765	6.73	184022	8.02						
2M142777.D	AD19595-013(T)	390864	5.10	328290	6.73	192684	8.02						
2M142778.D	AD19595-014(T)	354260	5.10	355320	6.73	175072	8.02						
2M142779.D	MBS89438	371948	5.10	350313	6.73	187520	8.02						
2M142780.D	AD19548-001(T)	367415	5.10	344291	6.73	174329	8.02						
2M142781.D	AD19543-001(T)	374127	5.10	353021	6.73	181411	8.02						
2M142782.D	AD19526-002(T)	382287	5.10	313880	6.73	183657	8.02						
2M142783.D	AD19527-002(T)	365542	5.10	345236	6.73	175029	8.02						
2M142784.D	AD19548-001(T)	373944	5.10	347213	6.73	180225	8.02						
2M142785.D	AD19595-014(10X)(T)	375629	5.10	354760	6.73	182191	8.02						
2M142787.D	AD19542-001(T:MS)	552741	5.10	540966	6.73	309897	8.02						
2M142788.D	AD19542-001(T:MSD)	324616	5.10	302168	6.73	146852	8.02						
2M142789.D	EF-V1-335534(100620)	356750	5.10	334466	6.73	159221	8.02						
2M142790.D	BLK	365750	5.10	337072	6.73	169421	8.02						
2M142793.D	AD19598-002	365838	5.10	336510	6.73	173241	8.02						
2M142796.D	AD19598-005	365519	5.10	338948	6.73	160249	8.02						
2M142798.D	AD19598-007	377706	5.10	306910	6.73	164099	8.02						
2M142799.D	AD19598-008	358798	5.10	339508	6.73	175056	8.02						
2M142801.D	AD19598-010	354765	5.10	341531	6.73	178446	8.02						
2M142802.D	AD19598-011	359100	5.10	296900	6.73	152650	8.02						
2M142803.D	AD19568-002	311017	5.10	291270	6.73	152685	8.02						
2M142804.D	MBS89439	306348	5.09	290883	6.73	159459	8.02						
2M142805.D	BLK	322530	5.10	308686	6.73	157845	8.02						
2M142806.D	BLK	318602	5.10	302024	6.73	154954	8.02						
2M142807.D	BLK	318001	5.10	301423	6.73	147914	8.02						

11 =	Fluorobenzene	14 =		17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =			624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =			524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 2M142767.D

Analysis Date/Time: 10/06/20 14:33

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	341576	5.10	287212	6.73	149984	8.02								
Eval File Area Limit:	170788-683152		143606-574424		74992-299968									
Eval File Rt Limit:	4.6-5.6		6.23-7.23		7.52-8.52									

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
2M142808.D	BLK	322135	5.10	299530	6.73	153316	8.02						
2M142809.D	BLK	331233	5.10	267303	6.73	63498	8.02						
2M142810.D	BLK	326967	5.10	263558	6.73	59289	8.02						
2M142811.D	BLK	362962	5.10	296680	6.73	74918	8.02						

11 =	Fluorobenzene	14 =	17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:** Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## **Base Neutral/Acid Extractable Data**



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19595-004

Client Id: HSI-SB-08(3.5-4)

Data File: 7M109909.D

Analysis Date: 10/06/20 19:31

Date Rec/Extracted: 10/02/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 87

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.038	0.10	50-32-8	Benzo[a]pyrene	0.013	0.038	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.013	0.038	U	205-99-2	Benzo[b]fluoranthene	0.014	0.038	U
123-91-1	1,4-Dioxane	0.019	0.0096	U	191-24-2	Benzo[g,h,i]perylene	0.00026	0.038	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.038	U	207-08-9	Benzo[k]fluoranthene	0.014	0.038	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.038	U	111-91-1	bis(2-Chloroethoxy)methan	0.011	0.038	U
88-06-2	2,4,6-Trichlorophenol	0.030	0.038	U	111-44-4	bis(2-Chloroethyl)ether	0.0093	0.038	U
120-83-2	2,4-Dichlorophenol	0.014	0.0096	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.038	U
105-67-9	2,4-Dimethylphenol	0.019	0.0096	U	<b>117-81-7</b>	<b>bis(2-Ethylhexyl)phthalate</b>	<b>0.034</b>	<b>0.038</b>	<b>0.38</b>
51-28-5	2,4-Dinitrophenol	0.17	0.19	U	85-68-7	Butylbenzylphthalate	0.029	0.038	U
121-14-2	2,4-Dinitrotoluene	0.012	0.038	U	105-60-2	Caprolactam	0.031	0.038	U
606-20-2	2,6-Dinitrotoluene	0.020	0.038	U	86-74-8	Carbazole	0.012	0.038	U
91-58-7	2-Chloronaphthalene	0.017	0.038	U	218-01-9	Chrysene	0.013	0.038	U
95-57-8	2-Chlorophenol	0.013	0.038	U	53-70-3	Dibenzo[a,h]anthracene	0.014	0.038	U
<b>91-57-6</b>	<b>2-Methylnaphthalene</b>	<b>0.012</b>	<b>0.038</b>	<b>0.12</b>	132-64-9	Dibenzofuran	0.0097	0.0096	U
95-48-7	2-Methylphenol	0.011	0.0096	U	84-66-2	Diethylphthalate	0.025	0.038	U
88-74-4	2-Nitroaniline	0.018	0.038	U	131-11-3	Dimethylphthalate	0.011	0.038	U
88-75-5	2-Nitrophenol	0.017	0.038	U	<b>84-74-2</b>	<b>Di-n-butylphthalate</b>	<b>0.044</b>	<b>0.0096</b>	<b>0.064</b>
<b>106-44-5</b>	<b>3&amp;4-Methylphenol</b>	<b>0.011</b>	<b>0.0096</b>	<b>0.021</b>	117-84-0	Di-n-octylphthalate	0.025	0.038	U
91-94-1	3,3'-Dichlorobenzidine	0.031	0.038	U	206-44-0	Fluoranthene	0.015	0.038	U
99-09-2	3-Nitroaniline	0.015	0.038	U	86-73-7	Fluorene	0.010	0.038	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.19	U	118-74-1	Hexachlorobenzene	0.016	0.038	U
101-55-3	4-Bromophenyl-phenylether	0.011	0.038	U	87-68-3	Hexachlorobutadiene	0.017	0.038	U
59-50-7	4-Chloro-3-methylphenol	0.0092	0.038	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.038	U
106-47-8	4-Chloroaniline	0.017	0.0096	U	67-72-1	Hexachloroethane	0.017	0.038	U
7005-72-3	4-Chlorophenyl-phenylether	0.012	0.038	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.038	U
100-01-6	4-Nitroaniline	0.015	0.038	U	78-59-1	Isophorone	0.012	0.038	U
100-02-7	4-Nitrophenol	0.029	0.038	U	<b>91-20-3</b>	<b>Naphthalene</b>	<b>0.011</b>	<b>0.0096</b>	<b>0.10</b>
83-32-9	Acenaphthene	0.011	0.038	U	98-95-3	Nitrobenzene	0.0016	0.038	U
208-96-8	Acenaphthylene	0.011	0.038	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0096	U
98-86-2	Acetophenone	0.014	0.038	U	86-30-6	n-Nitrosodiphenylamine	0.13	0.038	U
120-12-7	Anthracene	0.011	0.038	U	87-86-5	Pentachlorophenol	0.18	0.19	U
1912-24-9	Atrazine	0.015	0.038	U	<b>85-01-8</b>	<b>Phenanthrene</b>	<b>0.012</b>	<b>0.038</b>	<b>0.019J</b>
100-52-7	Benzaldehyde	0.42	0.038	U	108-95-2	Phenol	0.011	0.038	U
56-55-3	Benzo[a]anthracene	0.013	0.038	U	129-00-0	Pyrene	0.013	0.038	U

Worksheet #: 569892

**Total Target Concentration 0.8**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*N*-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : AD19595-004  
 Data File: 7M109909.D  
 Acq On : 10/ 6/20 19:31

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 23  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/07/20 09:23  
 Qt Upd On: 09/17/20 14:01

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0620\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.687	96	81461	40.00	ng	-0.01	
21) 1,4-Dichlorobenzene-d4	5.895	152	179484	40.00	ng	0.00	
31) Naphthalene-d8	6.900	136	665487	40.00	ng	0.00	
50) Acenaphthene-d10	8.339	164	337148	40.00	ng	0.00	
77) Phenanthrene-d10	9.826	188	620533	40.00	ng	0.00	
91) Chrysene-d12	12.893	240	508677	40.00	ng	0.00	
103) Perylene-d12	14.544	264	506697	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	4.737	112	339677	70.81	ng	0.02	
Spiked Amount	100.000		Recovery	=	70.81%		
16) Phenol-d5	5.595	99	453225	78.63	ng	0.02	
Spiked Amount	100.000		Recovery	=	78.63%		
32) Nitrobenzene-d5	6.341	128	91600	34.65	ng	0.00	
Spiked Amount	50.000		Recovery	=	69.30%		
55) 2-Fluorobiphenyl	7.746	172	403249	35.86	ng	0.00	
Spiked Amount	50.000		Recovery	=	71.72%		
80) 2,4,6-Tribromophenol	9.091	330	118486	74.11	ng	0.00	
Spiked Amount	100.000		Recovery	=	74.11%		
94) Terphenyl-d14	11.641	244	331181	40.89	ng	0.00	
Spiked Amount	50.000		Recovery	=	81.78%		
Target Compounds							
30) 3&4-Methylphenol	6.230	108	6025	1.1190	ng		94
41) Naphthalene	6.911	128	91996m	5.3155	ng		
46) 2-Methylnaphthalene	7.452	142	72762	6.2292	ng		100
49) 1,1'-Biphenyl	7.828	154	73642	5.3660	ng		95
86) Phenanthrene	9.849	178	16387m	1.0055	ng		
89) Di-n-butylphthalate	10.454	149	62618	3.3302	ng		97
102) bis(2-Ethylhexyl)phtha...	12.922	149	191812	19.9369	ng		95
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

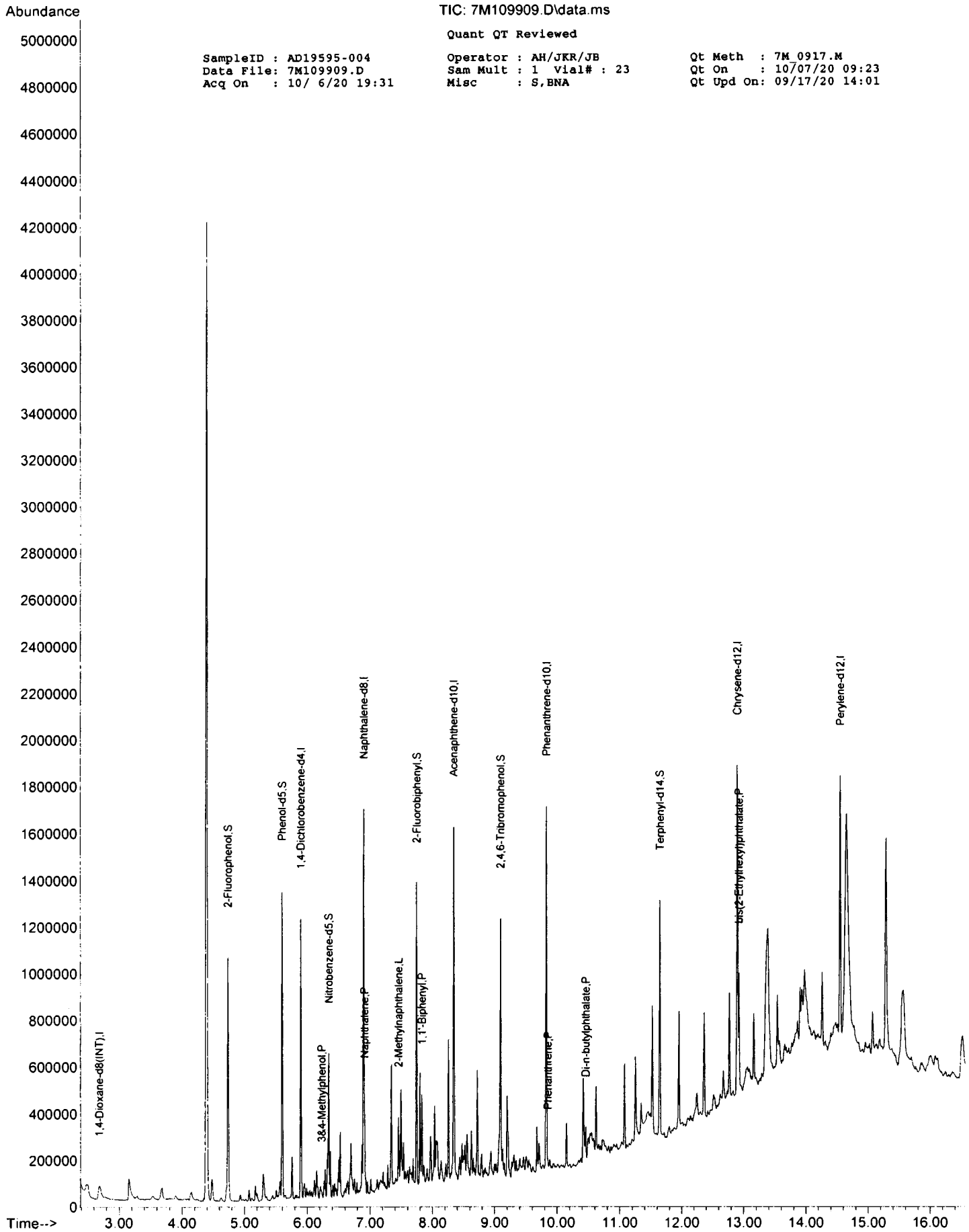
TIC: 7M109909.D\data.ms

Quant QT Reviewed

SampleID : AD19595-004  
 Data File: 7M109909.D  
 Acq On : 10/ 6/20 19:31

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 23  
 Misc : S,BNA

Qt Meth : 7M\_0917.M  
 Qt On : 10/07/20 09:23  
 Qt Upd On: 09/17/20 14:01



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19595-009

Client Id: HSI-SB-10(5.5-6)

Data File: 9M101551.D

Analysis Date: 10/06/20 13:22

Date Rec/Extracted: 10/02/20-10/06/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 89

## Units: mg/Kg

Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.011	0.037	U	50-32-8	Benzo[a]pyrene	0.013	0.037	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.013	0.037	U	205-99-2	Benzo[b]fluoranthene	0.013	0.037	U
123-91-1	1,4-Dioxane	0.019	0.0094	U	191-24-2	Benzo[g,h,i]perylene	0.00026	0.037	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.014	0.037	U	207-08-9	Benzo[k]fluoranthene	0.014	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.011	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.011	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.029	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0091	0.0094	U
120-83-2	2,4-Dichlorophenol	0.014	0.0094	U	108-60-1	bis(2-chloroisopropyl)ether	0.015	0.037	U
105-67-9	2,4-Dimethylphenol	0.018	0.0094	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	0.037	U
51-28-5	2,4-Dinitrophenol	0.16	0.19	U	85-68-7	Butylbenzylphthalate	0.029	0.037	U
121-14-2	2,4-Dinitrotoluene	0.012	0.037	U	105-60-2	Caprolactam	0.030	0.037	U
606-20-2	2,6-Dinitrotoluene	0.019	0.037	U	86-74-8	Carbazole	0.012	0.037	U
91-58-7	2-Chloronaphthalene	0.017	0.037	U	218-01-9	Chrysene	0.013	0.037	U
95-57-8	2-Chlorophenol	0.012	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.014	0.037	U
91-57-6	2-Methylnaphthalene	0.012	0.037	U	132-64-9	Dibenzofuran	0.0095	0.0094	U
95-48-7	2-Methylphenol	0.011	0.0094	U	84-66-2	Diethylphthalate	0.024	0.037	U
88-74-4	2-Nitroaniline	0.018	0.037	U	131-11-3	Dimethylphthalate	0.011	0.037	U
88-75-5	2-Nitrophenol	0.017	0.037	U	84-74-2	Di-n-butylphthalate	0.043	0.0094	U
106-44-5	3&4-Methylphenol	0.011	0.0094	U	117-84-0	Di-n-octylphthalate	0.025	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.030	0.037	U	206-44-0	Fluoranthene	0.014	0.037	U
99-09-2	3-Nitroaniline	0.015	0.037	U	86-73-7	Fluorene	0.010	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.13	0.19	U	118-74-1	Hexachlorobenzene	0.016	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.010	0.037	U	87-68-3	Hexachlorobutadiene	0.017	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.0090	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.12	0.037	U
106-47-8	4-Chloroaniline	0.016	0.0094	U	67-72-1	Hexachloroethane	0.017	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.011	0.037	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.017	0.037	U
100-01-6	4-Nitroaniline	0.014	0.037	U	78-59-1	Isophorone	0.012	0.037	U
100-02-7	4-Nitrophenol	0.028	0.037	U	91-20-3	Naphthalene	0.011	0.0094	U
83-32-9	Acenaphthene	0.011	0.037	U	98-95-3	Nitrobenzene	0.0015	0.037	U
208-96-8	Acenaphthylene	0.011	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.014	0.0094	U
98-86-2	Acetophenone	0.013	0.037	U	86-30-6	n-Nitrosodiphenylamine	0.13	0.037	U
120-12-7	Anthracene	0.010	0.037	U	87-86-5	Pentachlorophenol	0.18	0.19	U
1912-24-9	Atrazine	0.015	0.037	U	85-01-8	Phenanthrene	0.012	0.037	U
100-52-7	Benzaldehyde	0.41	0.037	U	108-95-2	Phenol	0.010	0.037	U
56-55-3	Benzo[a]anthracene	0.012	0.037	U	129-00-0	Pyrene	0.013	0.037	U

Worksheet #: 569892

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

SampleID : AD19595-009  
 Data File: 9M101551.D  
 Acq On : 10/ 6/20 13:22

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 8  
 Misc : S,BNA

Qt Meth : 9M\_0917.M  
 Qt On : 10/06/20 14:01  
 Qt Upd On: 09/29/20 13:20

Data Path : G:\GcmsData\2020\GCMS\_9\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.690	96	57576	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.901	152	105065	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	405724	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	212977	40.00	ng	0.00
77) Phenanthrene-d10	9.819	188	414463	40.00	ng	0.00
91) Chrysene-d12	12.877	240	415843	40.00	ng	-0.01
103) Perylene-d12	14.513	264	408841	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.713	112	172680	57.33	ng	0.00
Spiked Amount						100.000
			Recovery	=		57.33%
16) Phenol-d5	5.578	99	224206	61.54	ng	0.00
Spiked Amount						100.000
			Recovery	=		61.54%
32) Nitrobenzene-d5	6.348	128	44273	30.34	ng	0.00
Spiked Amount						50.000
			Recovery	=		60.68%
55) 2-Fluorobiphenyl	7.748	172	224900	30.86	ng	0.00
Spiked Amount						50.000
			Recovery	=		61.72%
80) 2,4,6-Tribromophenol	9.089	330	59372	62.21	ng	0.00
Spiked Amount						100.000
			Recovery	=		62.21%
94) Terphenyl-d14	11.624	244	200842	33.18	ng	-0.01
Spiked Amount						50.000
			Recovery	=		66.36%

Target Compounds Qvalue

-----  
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

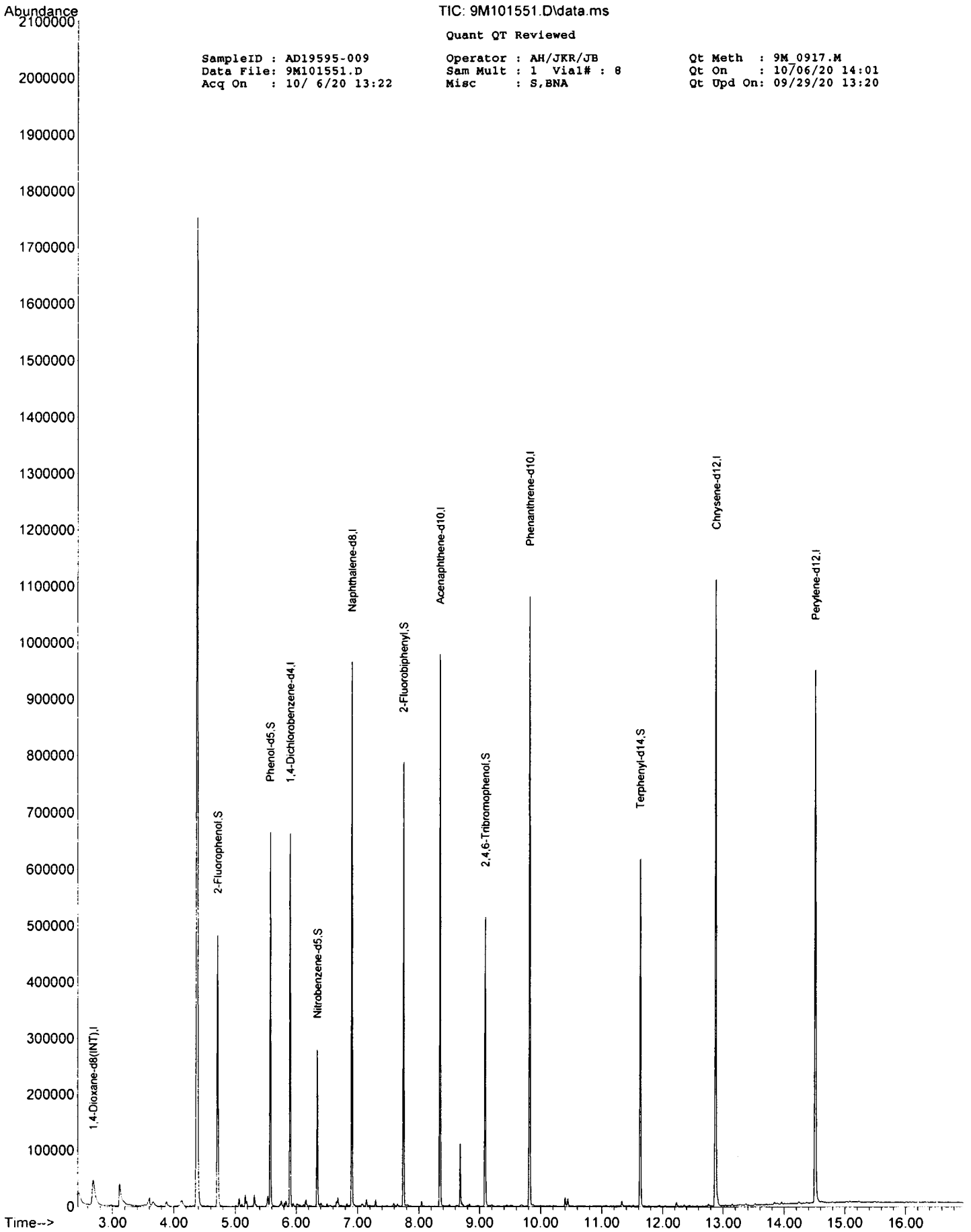
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Quant QT Reviewed

SampleID : AD19595-009  
Data File: 9M101551.D  
Acq On : 10/ 6/20 13:22

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 8  
Misc : S,BNA

Qt Meth : 9M\_0917.M  
Qt On : 10/06/20 14:01  
Qt Upd On: 09/29/20 13:20



**Form1**  
ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB88132  
Client Id:  
Data File: 9M101549.D  
Analysis Date: 10/06/20 12:34  
Date Rec/Extracted: NA-10/06/20  
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E  
Matrix: Soil  
Initial Vol: 30g  
Final Vol: 0.5ml  
Dilution: 1  
Solids: 100

Units: mg/Kg									
Cas #	Compound	MDL	RL	Conc	Cas #	Compound	MDL	RL	Conc
92-52-4	1,1'-Biphenyl	0.0096	0.033	U	50-32-8	Benzo[a]pyrene	0.011	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.011	0.033	U	205-99-2	Benzo[b]fluoranthene	0.012	0.033	U
123-91-1	1,4-Dioxane	0.017	0.0083	U	191-24-2	Benzo[g,h,i]perylene	0.00023	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.013	0.033	U	207-08-9	Benzo[k]fluoranthene	0.012	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.0095	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.0094	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.026	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0081	0.0083	U
120-83-2	2,4-Dichlorophenol	0.013	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.013	0.033	U
105-67-9	2,4-Dimethylphenol	0.016	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.029	0.033	U
51-28-5	2,4-Dinitrophenol	0.14	0.17	U	85-68-7	Butylbenzylphthalate	0.026	0.033	U
121-14-2	2,4-Dinitrotoluene	0.010	0.033	U	105-60-2	Caprolactam	0.027	0.033	U
606-20-2	2,6-Dinitrotoluene	0.017	0.033	U	86-74-8	Carbazole	0.010	0.033	U
91-58-7	2-Chloronaphthalene	0.015	0.033	U	218-01-9	Chrysene	0.011	0.033	U
95-57-8	2-Chlorophenol	0.011	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.012	0.033	U
91-57-6	2-Methylnaphthalene	0.010	0.033	U	132-64-9	Dibenzofuran	0.0084	0.0083	U
95-48-7	2-Methylphenol	0.0096	0.0083	U	84-66-2	Diethylphthalate	0.021	0.033	U
88-74-4	2-Nitroaniline	0.016	0.033	U	131-11-3	Dimethylphthalate	0.0094	0.033	U
88-75-5	2-Nitrophenol	0.015	0.033	U	84-74-2	Di-n-butylphthalate	0.038	0.0083	U
106-44-5	3&4-Methylphenol	0.0097	0.0083	U	117-84-0	Di-n-octylphthalate	0.022	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.027	0.033	U	206-44-0	Fluoranthene	0.013	0.033	U
99-09-2	3-Nitroaniline	0.013	0.033	U	86-73-7	Fluorene	0.0091	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.12	0.17	U	118-74-1	Hexachlorobenzene	0.014	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.0093	0.033	U	87-68-3	Hexachlorobutadiene	0.015	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.0080	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.11	0.033	U
106-47-8	4-Chloroaniline	0.015	0.0083	U	67-72-1	Hexachloroethane	0.015	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.010	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.015	0.033	U
100-01-6	4-Nitroaniline	0.013	0.033	U	78-59-1	Isophorone	0.011	0.033	U
100-02-7	4-Nitrophenol	0.025	0.033	U	91-20-3	Naphthalene	0.0096	0.0083	U
83-32-9	Acenaphthene	0.0095	0.033	U	98-95-3	Nitrobenzene	0.0013	0.033	U
208-96-8	Acenaphthylene	0.010	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.013	0.0083	U
98-86-2	Acetophenone	0.012	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.11	0.033	U
120-12-7	Anthracene	0.0092	0.033	U	87-86-5	Pentachlorophenol	0.16	0.17	U
1912-24-9	Atrazine	0.013	0.033	U	85-01-8	Phenanthrene	0.011	0.033	U
100-52-7	Benzaldehyde	0.36	0.033	U	108-95-2	Phenol	0.0092	0.033	U
56-55-3	Benzo[a]anthracene	0.011	0.033	U	129-00-0	Pyrene	0.011	0.033	U

Worksheet #: 569892

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*N*-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

SampleID : SMB88132  
 Data File: 9M101549.D  
 Acq On : 10/ 6/20 12:34

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 6  
 Misc : S,BNA

Qt Meth : 9M\_0917.M  
 Qt On : 10/06/20 13:08  
 Qt Upd On: 09/29/20 13:20

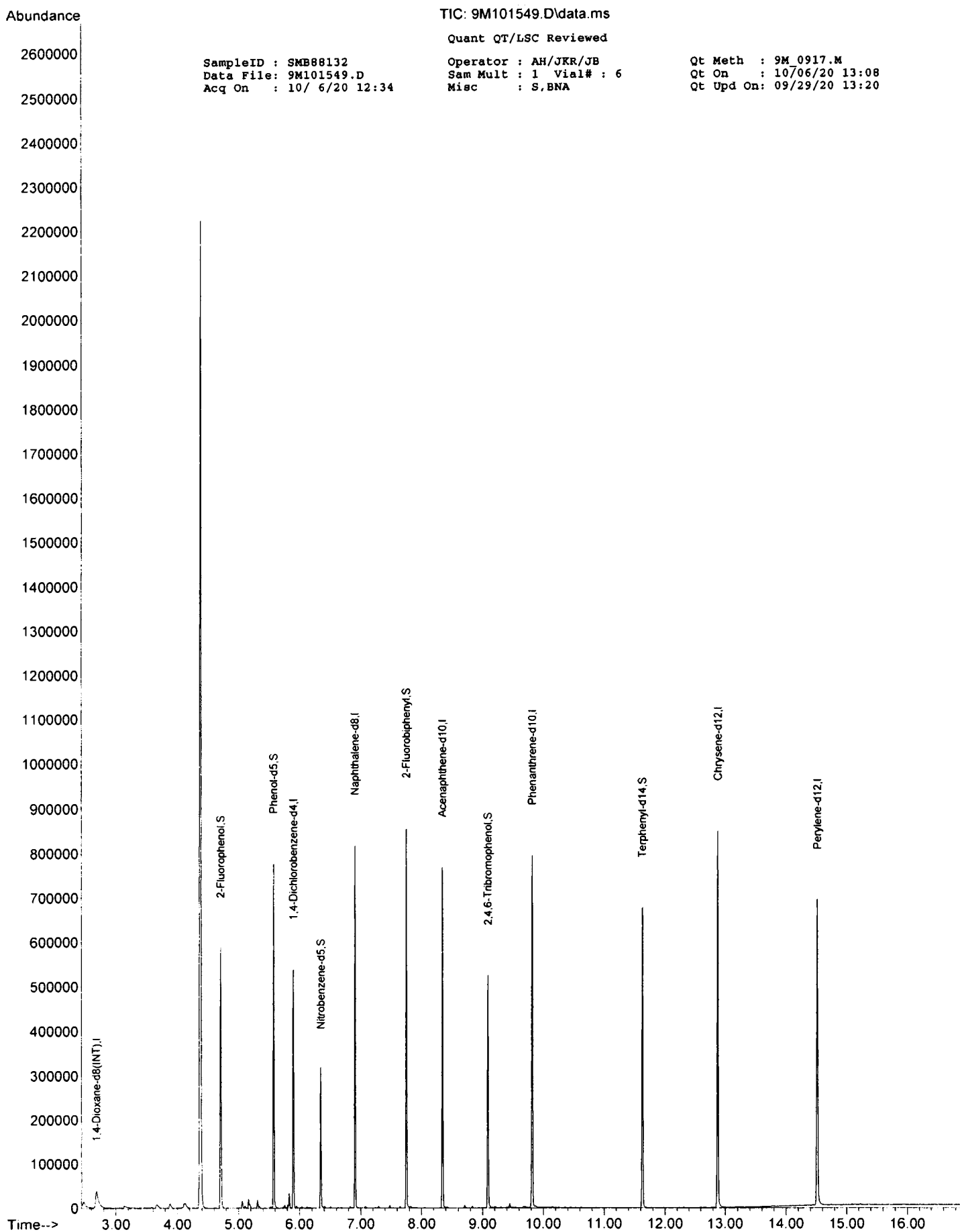
Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-06-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.684	96	48355	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.901	152	86785	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	328473	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	168631	40.00	ng	0.00
77) Phenanthrene-d10	9.819	188	326648	40.00	ng	0.00
91) Chrysene-d12	12.877	240	304927	40.00	ng	-0.01
103) Perylene-d12	14.512	264	304884	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.713	112	206548	81.66	ng	0.00
Spiked Amount						Recovery = 81.66%
16) Phenol-d5	5.578	99	257161	84.05	ng	0.00
Spiked Amount						Recovery = 84.05%
32) Nitrobenzene-d5	6.348	128	50199	42.49	ng	0.00
Spiked Amount						Recovery = 84.98%
55) 2-Fluorobiphenyl	7.748	172	257444	44.61	ng	0.00
Spiked Amount						Recovery = 89.22%
80) 2,4,6-Tribromophenol	9.089	330	61496	81.75	ng	0.00
Spiked Amount						Recovery = 81.75%
94) Terphenyl-d14	11.624	244	224147	50.50	ng	-0.01
Spiked Amount						Recovery = 101.00%

Target Compounds Qvalue

-----  
 (#) = qualifier out of range (m) = manual integration (+) = signals summed





## FORM2

Surrogate Recovery

Method: EPA 8270E

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1	Column1	Column1	Column1	Column1	Column1
						S1 Recov	S2 Recov	S3 Recov	S4 Recov	S5 Recov	S6 Recov
9M101549.D	SMB88132	S	10/06/20 12:34	1		82	84	85	89	82	101
7M109909.D	DAD19595-004	S	10/06/20 19:31	1		71	79	69	72	74	82
9M101551.D	DAD19595-009	S	10/06/20 13:22	1		57	62	61	62	62	66
7M109910.D	DAD19562-002	S	10/06/20 19:55	1		71	77	69	73	69	80
7M109911.D	DAD19562-004(MS:AD19	S	10/06/20 20:18	1		73	78	70	72	76	86
7M109912.D	DAD19562-006(MSD:AD1	S	10/06/20 20:42	1		69	77	70	74	77	86
9M101548.D	SMB88132(MS)	S	10/06/20 12:11	1		80	87	91	95	103	104

---

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8270E

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101548.D		SMB88132(MS)		10/6/2020 12:11:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	25.2364	0	50	50	1	150
N-Nitrosodimethylamine	1	40.8154	0	50	82	50	130
<b><u>Benzaldehyde</u></b>	1	<b><u>40.7399</u></b>	0	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>20</u></b>	<b><u>220</u></b>
Aniline	1	25.9014	0	50	52	20	150
Pentachloroethane	1	36.7234	0	50	73	50	130
<b><u>bis(2-Chloroethyl)ether</u></b>	1	<b><u>45.9948</u></b>	0	<b><u>50</u></b>	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Phenol</u></b>	1	<b><u>78.1802</u></b>	0	<b><u>100</u></b>	<b><u>78</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2-Chlorophenol</u></b>	1	<b><u>82.2506</u></b>	0	<b><u>100</u></b>	<b><u>82</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
N-Decane	1	31.2811	0	50	63	20	130
1,3-Dichlorobenzene	1	40.98	0	50	82	60	130
1,4-Dichlorobenzene	1	46.3334	0	50	93	60	130
1,2-Dichlorobenzene	1	46.142	0	50	92	50	130
Benzyl alcohol	1	48.725	0	50	97	20	130
<b><u>bis(2-chloroisopropyl)ether</u></b>	1	<b><u>45.5304</u></b>	0	<b><u>50</u></b>	<b><u>91</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>2-Methylphenol</u></b>	1	<b><u>94.0137</u></b>	0	<b><u>100</u></b>	<b><u>94</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Acetophenone</u></b>	1	<b><u>45.4438</u></b>	0	<b><u>50</u></b>	<b><u>91</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Hexachloroethane</u></b>	1	<b><u>45.9821</u></b>	0	<b><u>50</u></b>	<b><u>92</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	1	<b><u>52.1323</u></b>	0	<b><u>50</u></b>	<b><u>104</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>3&amp;4-Methylphenol</u></b>	1	<b><u>98.8253</u></b>	0	<b><u>100</u></b>	<b><u>99</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Nitrobenzene</u></b>	1	<b><u>52.343</u></b>	0	<b><u>50</u></b>	<b><u>105</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Isophorone</u></b>	1	<b><u>51.4584</u></b>	0	<b><u>50</u></b>	<b><u>103</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2-Nitrophenol</u></b>	1	<b><u>92.9534</u></b>	0	<b><u>100</u></b>	<b><u>93</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dimethylphenol</u></b>	1	<b><u>103.2401</u></b>	0	<b><u>100</u></b>	<b><u>103</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
Benzoic Acid	1	28.3762	0	100	28	20	130
<b><u>bis(2-Chloroethoxy)methane</u></b>	1	<b><u>53.244</u></b>	0	<b><u>50</u></b>	<b><u>106</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2,4-Dichlorophenol</u></b>	1	<b><u>95.0002</u></b>	0	<b><u>100</u></b>	<b><u>95</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2,4-Trichlorobenzene	1	50.3274	0	50	101	50	130
<b><u>Naphthalene</u></b>	1	<b><u>49.5156</u></b>	0	<b><u>50</u></b>	<b><u>99</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloroaniline</u></b>	1	<b><u>28.3205</u></b>	0	<b><u>50</u></b>	<b><u>57</u></b>	<b><u>10</u></b>	<b><u>150</u></b>
<b><u>Hexachlorobutadiene</u></b>	1	<b><u>48.0823</u></b>	0	<b><u>50</u></b>	<b><u>96</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Caprolactam</u></b>	1	<b><u>52.9506</u></b>	0	<b><u>50</u></b>	<b><u>106</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloro-3-methylphenol</u></b>	1	<b><u>95.0676</u></b>	0	<b><u>100</u></b>	<b><u>95</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Methylnaphthalene</u></b>	1	<b><u>48.3377</u></b>	0	<b><u>50</u></b>	<b><u>97</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1-Methylnaphthalene	1	49.5763	0	50	99	70	130
<b><u>1,1'-Biphenyl</u></b>	1	<b><u>42.0938</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	1	<b><u>45.24</u></b>	0	<b><u>50</u></b>	<b><u>90</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorocyclopentadiene</u></b>	1	<b><u>52.3968</u></b>	0	<b><u>50</u></b>	<b><u>105</u></b>	<b><u>20</u></b>	<b><u>160</u></b>
<b><u>2,4,6-Trichlorophenol</u></b>	1	<b><u>93.4661</u></b>	0	<b><u>100</u></b>	<b><u>93</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4,5-Trichlorophenol</u></b>	1	<b><u>95.3092</u></b>	0	<b><u>100</u></b>	<b><u>95</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Chloronaphthalene</u></b>	1	<b><u>54.8822</u></b>	0	<b><u>50</u></b>	<b><u>110</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,4-Dimethylnaphthalene	1	42.5953	0	50	85	70	130
Diphenyl Ether	1	49.4685	0	50	99	70	130
<b><u>2-Nitroaniline</u></b>	1	<b><u>53.9294</u></b>	0	<b><u>50</u></b>	<b><u>108</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Coumarin	1	47.1065	0	50	94	70	130
<b><u>Acenaphthylene</u></b>	1	<b><u>57.7765</u></b>	0	<b><u>50</u></b>	<b><u>116</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dimethylphthalate</u></b>	1	<b><u>55.06</u></b>	0	<b><u>50</u></b>	<b><u>110</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	1	<b><u>56.5044</u></b>	0	<b><u>50</u></b>	<b><u>113</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Acenaphthene</u></b>	1	<b><u>54.555</u></b>	0	<b><u>50</u></b>	<b><u>109</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3-Nitroaniline</u></b>	1	<b><u>42.4376</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>10</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrophenol</u></b>	1	<b><u>26.1825</u></b>	0	<b><u>100</u></b>	<b><u>26</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>Dibenzofuran</u></b>	1	<b><u>52.0037</u></b>	0	<b><u>50</u></b>	<b><u>104</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	1	<b><u>56.8677</u></b>	0	<b><u>50</u></b>	<b><u>114</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>4-Nitrophenol</u></b>	1	<b><u>84.8796</u></b>	0	<b><u>100</u></b>	<b><u>85</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2,3,4,6-Tetrachlorophenol</u></b>	1	<b><u>87.1629</u></b>	0	<b><u>100</u></b>	<b><u>87</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Fluorene</u></b>	1	<b><u>54.7413</u></b>	0	<b><u>50</u></b>	<b><u>109</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chlorophenyl-phenylether</u></b>	1	<b><u>55.3846</u></b>	0	<b><u>50</u></b>	<b><u>111</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Diethylphthalate</u></b>	1	<b><u>55.5981</u></b>	0	<b><u>50</u></b>	<b><u>111</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>4-Nitroaniline</u></b>	1	<b><u>55.0749</u></b>	0	<b><u>50</u></b>	<b><u>110</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Atrazine</u></b>	1	<b><u>53.152</u></b>	0	<b><u>50</u></b>	<b><u>106</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4,6-Dinitro-2-methylphenol</u></b>	1	<b><u>49.7756</u></b>	0	<b><u>100</u></b>	<b><u>50</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	1	<b><u>46.8118</u></b>	0	<b><u>50</u></b>	<b><u>94</u></b>	<b><u>50</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88132

Method: 8270E	Matrix: Soil	Units: mg/Kg	QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	55.7864	0	50	112	70	130
<b>4-Bromophenyl-phenylether</b>	1	<b>56.1557</b>	<b>0</b>	<b>50</b>	<b>112</b>	<b>70</b>	<b>130</b>
<b>Hexachlorobenzene</b>	1	<b>51.3841</b>	<b>0</b>	<b>50</b>	<b>103</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	56.8282	0	50	114	70	130
<b>Pentachlorophenol</b>	1	<b>89.9256</b>	<b>0</b>	<b>100</b>	<b>90</b>	<b>40</b>	<b>130</b>
Phenanthrene	1	55.8146	0	50	112	70	130
Anthracene	1	55.9455	0	50	112	70	130
Carbazole	1	48.2992	0	50	97	70	130
Di-n-butylphthalate	1	55.3138	0	50	111	70	130
Fluoranthene	1	57.5641	0	50	115	70	130
Pyrene	1	56.1276	0	50	112	50	130
Benzidine	1	7.6824	0	50	15	1	130
Butylbenzylphthalate	1	54.6642	0	50	109	50	130
3,3'-Dichlorobenzidine	1	34.9351	0	50	70	10	130
Benzo[a]anthracene	1	51.9931	0	50	104	70	130
Chrysene	1	47.4162	0	50	95	60	130
bis(2-Ethylhexyl)phthalate	1	55.8205	0	50	112	70	130
Di-n-octylphthalate	1	55.3487	0	50	111	70	130
Benzo[b]fluoranthene	1	65.0384	0	50	130	70	130
Benzo[k]fluoranthene	1	58.6368	0	50	117	70	130
Benzo[a]pyrene	1	61.6032	0	50	123	70	130
Indeno[1,2,3-cd]pyrene	1	60.395	0	50	121	70	130
Dibenzo[a,h]anthracene	1	60.2045	0	50	120	60	130
Benzo[g,h,i]perylene	1	59.7774	0	50	120	70	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form 1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M109911.D		AD19562-004(MS:AD19562-002)		10/6/2020 8:18:00 PM			
Non Spike(If applicable): 7M109910.D		AD19562-002		10/6/2020 7:55:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	22.8741	0	50	46	1	150
N-Nitrosodimethylamine	1	36.875	0	50	74	50	130
<b><u>Benzaldehyde</u></b>	1	<b><u>40.8931</u></b>	0	<b><u>50</u></b>	<b><u>82</u></b>	<b><u>20</u></b>	<b><u>220</u></b>
Aniline	1	1.5219	0	50	3*	20	150
Pentachloroethane	1	35.5288	0	50	71	50	130
<b><u>bis(2-Chloroethyl)ether</u></b>	1	<b><u>43.0896</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Phenol</u></b>	1	<b><u>73.6316</u></b>	0	<b><u>100</u></b>	<b><u>74</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2-Chlorophenol</u></b>	1	<b><u>75.0948</u></b>	0	<b><u>100</u></b>	<b><u>75</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
N-Decane	1	30.461	0	50	61	20	130
1,3-Dichlorobenzene	1	35.4379	0	50	71	60	130
1,4-Dichlorobenzene	1	35.2333	0	50	70	60	130
1,2-Dichlorobenzene	1	35.4288	0	50	71	50	130
Benzyl alcohol	1	35.0915	0	50	70	20	130
<b><u>bis(2-chloroisopropyl)ether</u></b>	1	<b><u>40.9178</u></b>	0	<b><u>50</u></b>	<b><u>82</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>2-Methylphenol</u></b>	1	<b><u>73.3382</u></b>	0	<b><u>100</u></b>	<b><u>73</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Acetophenone</u></b>	1	<b><u>39.9659</u></b>	0	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Hexachloroethane</u></b>	1	<b><u>31.8803</u></b>	0	<b><u>50</u></b>	<b><u>64</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	1	<b><u>41.6008</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>3&amp;4-Methylphenol</u></b>	1	<b><u>75.2684</u></b>	0	<b><u>100</u></b>	<b><u>75</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Nitrobenzene</u></b>	1	<b><u>42.6034</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Isophorone</u></b>	1	<b><u>40.4114</u></b>	0	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2-Nitrophenol</u></b>	1	<b><u>71.9668</u></b>	0	<b><u>100</u></b>	<b><u>72</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dimethylphenol</u></b>	1	<b><u>78.575</u></b>	0	<b><u>100</u></b>	<b><u>79</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
Benzoic Acid	1	50.8458	0	100	51	20	130
<b><u>bis(2-Chloroethoxy)methane</u></b>	1	<b><u>42.7739</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2,4-Dichlorophenol</u></b>	1	<b><u>70.7819</u></b>	0	<b><u>100</u></b>	<b><u>71</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2,4-Trichlorobenzene	1	38.4523	0	50	77	50	130
<b><u>Naphthalene</u></b>	1	<b><u>37.9852</u></b>	0	<b><u>50</u></b>	<b><u>76</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloroaniline</u></b>	1	<b><u>18.6172</u></b>	0	<b><u>50</u></b>	<b><u>37</u></b>	<b><u>10</u></b>	<b><u>150</u></b>
<b><u>Hexachlorobutadiene</u></b>	1	<b><u>35.1499</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Caprolactam</u></b>	1	<b><u>42.049</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloro-3-methylphenol</u></b>	1	<b><u>70.1841</u></b>	0	<b><u>100</u></b>	<b><u>70</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Methylnaphthalene</u></b>	1	<b><u>36.1122</u></b>	0	<b><u>50</u></b>	<b><u>72</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1-Methylnaphthalene	1	41.5176	0	50	83	70	130
<b><u>1,1'-Biphenyl</u></b>	1	<b><u>33.1605</u></b>	0	<b><u>50</u></b>	<b><u>66</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	1	<b><u>38.9158</u></b>	0	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorocyclopentadiene</u></b>	1	<b><u>0</u></b>	0	<b><u>50</u></b>	<b><u>0*</u></b>	<b><u>20</u></b>	<b><u>160</u></b>
<b><u>2,4,6-Trichlorophenol</u></b>	1	<b><u>72.5256</u></b>	0	<b><u>100</u></b>	<b><u>73</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4,5-Trichlorophenol</u></b>	1	<b><u>75.8462</u></b>	0	<b><u>100</u></b>	<b><u>76</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Chloronaphthalene</u></b>	1	<b><u>42.0134</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,4-Dimethylnaphthalene	1	36.2316	0	50	72	70	130
Diphenyl Ether	1	41.0301	0	50	82	70	130
<b><u>2-Nitroaniline</u></b>	1	<b><u>44.5786</u></b>	0	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Coumarin	1	38.0624	0	50	76	70	130
<b><u>Acenaphthylene</u></b>	1	<b><u>43.1541</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dimethylphthalate</u></b>	1	<b><u>41.7784</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	1	<b><u>42.8226</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Acenaphthene</u></b>	1	<b><u>42.1443</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3-Nitroaniline</u></b>	1	<b><u>31.7996</u></b>	0	<b><u>50</u></b>	<b><u>64*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrophenol</u></b>	1	<b><u>19.8407</u></b>	0	<b><u>100</u></b>	<b><u>20</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>Dibenzofuran</u></b>	1	<b><u>39.0638</u></b>	0	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	1	<b><u>41.9356</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>4-Nitrophenol</u></b>	1	<b><u>72.1157</u></b>	0	<b><u>100</u></b>	<b><u>72</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2,3,4,6-Tetrachlorophenol</u></b>	1	<b><u>66.4552</u></b>	0	<b><u>100</u></b>	<b><u>66*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
Fluorene	1	42.8903	0	50	86	50	130
<b><u>4-Chlorophenyl-phenylether</u></b>	1	<b><u>42.2303</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Diethylphthalate</u></b>	1	<b><u>42.7186</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>4-Nitroaniline</u></b>	1	<b><u>38.5286</u></b>	0	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Atrazine</u></b>	1	<b><u>38.0617</u></b>	0	<b><u>50</u></b>	<b><u>76</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4,6-Dinitro-2-methylphenol</u></b>	1	<b><u>31.3089</u></b>	0	<b><u>100</u></b>	<b><u>31*</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	1	<b><u>37.0389</u></b>	0	<b><u>50</u></b>	<b><u>74</u></b>	<b><u>50</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88132

Method: 8270E	Matrix: Soil		Units: mg/Kg		QC Type: MS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	50.2523	0	50	101	70	130
<b><u>4-Bromophenyl-phenylether</u></b>	1	<b><u>42.4892</u></b>	0	50	85	70	130
<b><u>Hexachlorobenzene</u></b>	1	<b><u>40.1565</u></b>	0	50	80	70	130
N-Octadecane	1	49.3111	0	50	99	70	130
<b><u>Pentachlorophenol</u></b>	1	<b><u>71.3457</u></b>	0	100	71	40	130
<b><u>Phenanthrene</u></b>	1	<b><u>47.5828</u></b>	0	50	95	70	130
<b><u>Anthracene</u></b>	1	<b><u>43.9529</u></b>	0	50	88	70	130
<b><u>Carbazole</u></b>	1	<b><u>36.4639</u></b>	0	50	73	70	130
<b><u>Di-n-butylphthalate</u></b>	1	<b><u>45.8245</u></b>	0	50	92	70	130
<b><u>Fluoranthene</u></b>	1	<b><u>49.7557</u></b>	0	50	100	70	130
<b><u>Pyrene</u></b>	1	<b><u>55.3869</u></b>	0	50	111	50	130
Benzidine	1	0	0	50	0*	1	130
<b><u>Butylbenzylphthalate</u></b>	1	<b><u>51.0076</u></b>	0	50	102	50	130
<b><u>3,3'-Dichlorobenzidine</u></b>	1	<b><u>31.7695</u></b>	0	50	64	10	130
<b><u>Benzo[a]anthracene</u></b>	1	<b><u>45.8941</u></b>	0	50	92	70	130
<b><u>Chrysene</u></b>	1	<b><u>42.2928</u></b>	0	50	85	60	130
<b><u>bis(2-Ethylhexyl)phthalate</u></b>	1	<b><u>51.2163</u></b>	0	50	102	70	130
<b><u>Di-n-octylphthalate</u></b>	1	<b><u>52.9673</u></b>	0	50	106	70	130
<b><u>Benzo[b]fluoranthene</u></b>	1	<b><u>55.5178</u></b>	0	50	111	70	130
<b><u>Benzo[k]fluoranthene</u></b>	1	<b><u>59.2585</u></b>	0	50	119	70	130
<b><u>Benzo[a]pyrene</u></b>	1	<b><u>49.6008</u></b>	0	50	99	70	130
<b><u>Indeno[1,2,3-cd]pyrene</u></b>	1	<b><u>48.0288</u></b>	0	50	96	70	130
<b><u>Dibenzo[a,h]anthracene</u></b>	1	<b><u>47.7943</u></b>	0	50	96	60	130
<b><u>Benzo[g,h,i]perylene</u></b>	1	<b><u>46.399</u></b>	0	50	93	70	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M109912.D		AD19562-006(MSD:AD19562-0)		10/6/2020 8:42:00 PM			
Non Spike(If applicable): 7M109910.D		AD19562-002		10/6/2020 7:55:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	21.1594	0	50	42	1	150
N-Nitrosodimethylamine	1	36.7461	0	50	73	50	130
<b><u>Benzaldehyde</u></b>	1	<b><u>38.4919</u></b>	0	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>20</u></b>	<b><u>220</u></b>
Aniline	1	19.6779	0	50	39	20	150
Pentachloroethane	1	32.5201	0	50	65	50	130
<b><u>bis(2-Chloroethyl)ether</u></b>	1	<b><u>42.571</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Phenol</u></b>	1	<b><u>71.2754</u></b>	0	<b><u>100</u></b>	<b><u>71</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2-Chlorophenol</u></b>	1	<b><u>72.1208</u></b>	0	<b><u>100</u></b>	<b><u>72</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
N-Decane	1	27.9422	0	50	56	20	130
1,3-Dichlorobenzene	1	34.0505	0	50	68	60	130
1,4-Dichlorobenzene	1	35.5674	0	50	71	60	130
1,2-Dichlorobenzene	1	35.729	0	50	71	50	130
Benzyl alcohol	1	36.3293	0	50	73	20	130
<b><u>bis(2-chloroisopropyl)ether</u></b>	1	<b><u>41.4884</u></b>	0	<b><u>50</u></b>	<b><u>83</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>2-Methylphenol</u></b>	1	<b><u>73.634</u></b>	0	<b><u>100</u></b>	<b><u>74</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Acetophenone</u></b>	1	<b><u>39.7427</u></b>	0	<b><u>50</u></b>	<b><u>79</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Hexachloroethane</u></b>	1	<b><u>31.5209</u></b>	0	<b><u>50</u></b>	<b><u>63</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	1	<b><u>42.1098</u></b>	0	<b><u>50</u></b>	<b><u>84</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>3&amp;4-Methylphenol</u></b>	1	<b><u>76.6268</u></b>	0	<b><u>100</u></b>	<b><u>77</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Nitrobenzene</u></b>	1	<b><u>42.4423</u></b>	0	<b><u>50</u></b>	<b><u>85</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Isophorone</u></b>	1	<b><u>41.1362</u></b>	0	<b><u>50</u></b>	<b><u>82</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2-Nitrophenol</u></b>	1	<b><u>71.5407</u></b>	0	<b><u>100</u></b>	<b><u>72</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dimethylphenol</u></b>	1	<b><u>77.4908</u></b>	0	<b><u>100</u></b>	<b><u>77</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
Benzoic Acid	1	61.5026	0	100	62	20	130
<b><u>bis(2-Chloroethoxy)methane</u></b>	1	<b><u>43.8515</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>2,4-Dichlorophenol</u></b>	1	<b><u>70.359</u></b>	0	<b><u>100</u></b>	<b><u>70</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,2,4-Trichlorobenzene	1	38.6323	0	50	77	50	130
<b><u>Naphthalene</u></b>	1	<b><u>38.4442</u></b>	0	<b><u>50</u></b>	<b><u>77</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloroaniline</u></b>	1	<b><u>23.8718</u></b>	0	<b><u>50</u></b>	<b><u>48</u></b>	<b><u>10</u></b>	<b><u>150</u></b>
<b><u>Hexachlorobutadiene</u></b>	1	<b><u>35.4718</u></b>	0	<b><u>50</u></b>	<b><u>71</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>Caprolactam</u></b>	1	<b><u>40.3373</u></b>	0	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chloro-3-methylphenol</u></b>	1	<b><u>71.0551</u></b>	0	<b><u>100</u></b>	<b><u>71</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>2-Methylnaphthalene</u></b>	1	<b><u>37.5402</u></b>	0	<b><u>50</u></b>	<b><u>75</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1-Methylnaphthalene	1	41.7299	0	50	83	70	130
<b><u>1,1'-Biphenyl</u></b>	1	<b><u>33.7939</u></b>	0	<b><u>50</u></b>	<b><u>68</u></b>	<b><u>60</u></b>	<b><u>130</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	1	<b><u>39.0931</u></b>	0	<b><u>50</u></b>	<b><u>78</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Hexachlorocyclopentadiene</u></b>	1	<b><u>0</u></b>	0	<b><u>50</u></b>	<b><u>0*</u></b>	<b><u>20</u></b>	<b><u>160</u></b>
<b><u>2,4,6-Trichlorophenol</u></b>	1	<b><u>73.1778</u></b>	0	<b><u>100</u></b>	<b><u>73</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4,5-Trichlorophenol</u></b>	1	<b><u>76.1086</u></b>	0	<b><u>100</u></b>	<b><u>76</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2-Chloronaphthalene</u></b>	1	<b><u>43.8318</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
1,4-Dimethylnaphthalene	1	36.086	0	50	72	70	130
Diphenyl Ether	1	41.4878	0	50	83	70	130
<b><u>2-Nitroaniline</u></b>	1	<b><u>45.1187</u></b>	0	<b><u>50</u></b>	<b><u>90</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
Coumarin	1	37.9448	0	50	76	70	130
<b><u>Acenaphthylene</u></b>	1	<b><u>45.1583</u></b>	0	<b><u>50</u></b>	<b><u>90</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Dimethylphthalate</u></b>	1	<b><u>43.1968</u></b>	0	<b><u>50</u></b>	<b><u>86</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	1	<b><u>44.6917</u></b>	0	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Acenaphthene</u></b>	1	<b><u>43.3758</u></b>	0	<b><u>50</u></b>	<b><u>87</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>3-Nitroaniline</u></b>	1	<b><u>35.0681</u></b>	0	<b><u>50</u></b>	<b><u>70</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrophenol</u></b>	1	<b><u>23.0472</u></b>	0	<b><u>100</u></b>	<b><u>23</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>Dibenzofuran</u></b>	1	<b><u>40.1191</u></b>	0	<b><u>50</u></b>	<b><u>80</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	1	<b><u>43.9625</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>4-Nitrophenol</u></b>	1	<b><u>71.3957</u></b>	0	<b><u>100</u></b>	<b><u>71</u></b>	<b><u>20</u></b>	<b><u>150</u></b>
<b><u>2,3,4,6-Tetrachlorophenol</u></b>	1	<b><u>67.9045</u></b>	0	<b><u>100</u></b>	<b><u>68*</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Fluorene</u></b>	1	<b><u>44.0296</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4-Chlorophenyl-phenylether</u></b>	1	<b><u>44.1141</u></b>	0	<b><u>50</u></b>	<b><u>88</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>Diethylphthalate</u></b>	1	<b><u>44.3062</u></b>	0	<b><u>50</u></b>	<b><u>89</u></b>	<b><u>70</u></b>	<b><u>130</u></b>
<b><u>4-Nitroaniline</u></b>	1	<b><u>40.3658</u></b>	0	<b><u>50</u></b>	<b><u>81</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>Atrazine</u></b>	1	<b><u>37.6435</u></b>	0	<b><u>50</u></b>	<b><u>75</u></b>	<b><u>50</u></b>	<b><u>130</u></b>
<b><u>4,6-Dinitro-2-methylphenol</u></b>	1	<b><u>35.1408</u></b>	0	<b><u>100</u></b>	<b><u>35*</u></b>	<b><u>40</u></b>	<b><u>130</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	1	<b><u>37.2313</u></b>	0	<b><u>50</u></b>	<b><u>74</u></b>	<b><u>50</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: SMB88132

Method: 8270E		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	51.1776	0	50	102	70	130
<b>4-Bromophenyl-phenylether</b>	1	<b>43.6632</b>	0	50	87	70	130
<b>Hexachlorobenzene</b>	1	<b>41.3089</b>	0	50	83	70	130
N-Octadecane	1	48.0089	0	50	96	70	130
<b>Pentachlorophenol</b>	1	<b>71.3338</b>	0	100	71	40	130
<b>Phenanthrene</b>	1	<b>44.6643</b>	0	50	89	70	130
<b>Anthracene</b>	1	<b>43.5229</b>	0	50	87	70	130
<b>Carbazole</b>	1	<b>35.7121</b>	0	50	71	70	130
<b>Di-n-butylphthalate</b>	1	<b>45.6275</b>	0	50	91	70	130
<b>Fluoranthene</b>	1	<b>43.331</b>	0	50	87	70	130
<b>Pyrene</b>	1	<b>49.0554</b>	0	50	98	50	130
Benzidine	1	0	0	50	0*	1	130
<b>Butylbenzylphthalate</b>	1	<b>52.1399</b>	0	50	104	50	130
<b>3,3'-Dichlorobenzidine</b>	1	<b>36.026</b>	0	50	72	10	130
<b>Benzoflanthracene</b>	1	<b>41.4821</b>	0	50	83	70	130
<b>Chrysene</b>	1	<b>39.0371</b>	0	50	78	60	130
<b>bis(2-Ethylhexyl)phthalate</b>	1	<b>52.0217</b>	0	50	104	70	130
<b>Di-n-octylphthalate</b>	1	<b>52.9278</b>	0	50	106	70	130
<b>Benzo[b]fluoranthene</b>	1	<b>50.3211</b>	0	50	101	70	130
<b>Benzo[k]fluoranthene</b>	1	<b>45.23</b>	0	50	90	70	130
<b>Benzo[a]pyrene</b>	1	<b>46.5094</b>	0	50	93	70	130
<b>Indeno[1,2,3-cd]pyrene</b>	1	<b>46.6381</b>	0	50	93	70	130
<b>Dibenzo[a,h]anthracene</b>	1	<b>46.3343</b>	0	50	93	60	130
<b>Benzo[g,h,i]perylene</b>	1	<b>44.7993</b>	0	50	90	70	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1



### Form3 RPD Data Laboratory Limits

QC Batch: SMB88132

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M109912.D	AD19562-006(MSD:AD19562-0	10/6/2020 8:42:00 PM
Duplicate(If applicable): 7M109911.D	AD19562-004(MS:AD19562-002	10/6/2020 8:18:00 PM
Inst Blank(If applicable):		
Method: 8270E	Matrix: Soil	Units: mg/Kg
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	21.1594	22.8741	7.8	30
N-Nitrosodimethylamine	1	36.7461	36.875	0.35	30
<b><u>Benzaldehyde</u></b>	<b><u>1</u></b>	<b><u>38.4919</u></b>	<b><u>40.8931</u></b>	<b><u>6</u></b>	<b><u>30</u></b>
Aniline	1	19.6779	1.5219	171 *	30
Pentachloroethane	1	32.5201	35.5288	8.8	30
<b><u>bis(2-Chloroethyl)ether</u></b>	<b><u>1</u></b>	<b><u>42.571</u></b>	<b><u>43.0896</u></b>	<b><u>1.2</u></b>	<b><u>30</u></b>
<b><u>Phenol</u></b>	<b><u>1</u></b>	<b><u>71.2754</u></b>	<b><u>73.6316</u></b>	<b><u>3.3</u></b>	<b><u>40</u></b>
<b><u>2-Chlorophenol</u></b>	<b><u>1</u></b>	<b><u>72.1208</u></b>	<b><u>75.0948</u></b>	<b><u>4</u></b>	<b><u>40</u></b>
N-Decane	1	27.9422	30.461	8.6	30
1,3-Dichlorobenzene	1	34.0505	35.4379	4	30
1,4-Dichlorobenzene	1	35.5674	35.2333	0.94	40
1,2-Dichlorobenzene	1	35.729	35.4288	0.84	30
Benzyl alcohol	1	36.3293	35.0915	3.5	30
<b><u>bis(2-chloroisopropyl)ether</u></b>	<b><u>1</u></b>	<b><u>41.4884</u></b>	<b><u>40.9178</u></b>	<b><u>1.4</u></b>	<b><u>30</u></b>
<b><u>2-Methylphenol</u></b>	<b><u>1</u></b>	<b><u>73.634</u></b>	<b><u>73.3382</u></b>	<b><u>0.4</u></b>	<b><u>40</u></b>
<b><u>Acetophenone</u></b>	<b><u>1</u></b>	<b><u>39.7427</u></b>	<b><u>39.9659</u></b>	<b><u>0.56</u></b>	<b><u>30</u></b>
<b><u>Hexachloroethane</u></b>	<b><u>1</u></b>	<b><u>31.5209</u></b>	<b><u>31.8803</u></b>	<b><u>1.1</u></b>	<b><u>30</u></b>
<b><u>N-Nitroso-di-n-propylamine</u></b>	<b><u>1</u></b>	<b><u>42.1098</u></b>	<b><u>41.6008</u></b>	<b><u>1.2</u></b>	<b><u>40</u></b>
<b><u>3&amp;4-Methylphenol</u></b>	<b><u>1</u></b>	<b><u>76.6268</u></b>	<b><u>75.2684</u></b>	<b><u>1.8</u></b>	<b><u>30</u></b>
<b><u>Nitrobenzene</u></b>	<b><u>1</u></b>	<b><u>42.4423</u></b>	<b><u>42.6034</u></b>	<b><u>0.38</u></b>	<b><u>30</u></b>
<b><u>Isophorone</u></b>	<b><u>1</u></b>	<b><u>41.1362</u></b>	<b><u>40.4114</u></b>	<b><u>1.8</u></b>	<b><u>30</u></b>
<b><u>2-Nitrophenol</u></b>	<b><u>1</u></b>	<b><u>71.5407</u></b>	<b><u>71.9668</u></b>	<b><u>0.59</u></b>	<b><u>30</u></b>
<b><u>2,4-Dimethylphenol</u></b>	<b><u>1</u></b>	<b><u>77.4908</u></b>	<b><u>78.575</u></b>	<b><u>1.4</u></b>	<b><u>40</u></b>
Benzoic Acid	1	61.5026	50.8458	19	30
<b><u>bis(2-Chloroethoxy)methane</u></b>	<b><u>1</u></b>	<b><u>43.8515</u></b>	<b><u>42.7739</u></b>	<b><u>2.5</u></b>	<b><u>30</u></b>
<b><u>2,4-Dichlorophenol</u></b>	<b><u>1</u></b>	<b><u>70.359</u></b>	<b><u>70.7819</u></b>	<b><u>0.6</u></b>	<b><u>30</u></b>
1,2,4-Trichlorobenzene	1	38.6323	38.4523	0.47	40
<b><u>Naphthalene</u></b>	<b><u>1</u></b>	<b><u>38.4442</u></b>	<b><u>37.9852</u></b>	<b><u>1.2</u></b>	<b><u>40</u></b>
<b><u>4-Chloroaniline</u></b>	<b><u>1</u></b>	<b><u>23.8718</u></b>	<b><u>18.6172</u></b>	<b><u>25</u></b>	<b><u>30</u></b>
<b><u>Hexachlorobutadiene</u></b>	<b><u>1</u></b>	<b><u>35.4718</u></b>	<b><u>35.1499</u></b>	<b><u>0.91</u></b>	<b><u>30</u></b>
<b><u>Caprolactam</u></b>	<b><u>1</u></b>	<b><u>40.3373</u></b>	<b><u>42.049</u></b>	<b><u>4.2</u></b>	<b><u>30</u></b>
<b><u>4-Chloro-3-methylphenol</u></b>	<b><u>1</u></b>	<b><u>71.0551</u></b>	<b><u>70.1841</u></b>	<b><u>1.2</u></b>	<b><u>40</u></b>
<b><u>2-Methylnaphthalene</u></b>	<b><u>1</u></b>	<b><u>37.5402</u></b>	<b><u>36.1122</u></b>	<b><u>3.9</u></b>	<b><u>30</u></b>
1-Methylnaphthalene	1	41.7299	41.5176	0.51	30
<b><u>1,1'-Biphenyl</u></b>	<b><u>1</u></b>	<b><u>33.7939</u></b>	<b><u>33.1605</u></b>	<b><u>1.9</u></b>	<b><u>30</u></b>
<b><u>1,2,4,5-Tetrachlorobenzene</u></b>	<b><u>1</u></b>	<b><u>39.0931</u></b>	<b><u>38.9158</u></b>	<b><u>0.45</u></b>	<b><u>30</u></b>
Hexachlorocyclopentadiene	1	0	0	NA	30
<b><u>2,4,6-Trichlorophenol</u></b>	<b><u>1</u></b>	<b><u>73.1778</u></b>	<b><u>72.5256</u></b>	<b><u>0.9</u></b>	<b><u>30</u></b>
<b><u>2,4,5-Trichlorophenol</u></b>	<b><u>1</u></b>	<b><u>76.1086</u></b>	<b><u>75.8462</u></b>	<b><u>0.35</u></b>	<b><u>30</u></b>
<b><u>2-Chloronaphthalene</u></b>	<b><u>1</u></b>	<b><u>43.8318</u></b>	<b><u>42.0134</u></b>	<b><u>4.2</u></b>	<b><u>30</u></b>
1,4-Dimethylnaphthalene	1	36.086	36.2316	0.4	30
Diphenyl Ether	1	41.4878	41.0301	1.1	30
<b><u>2-Nitroaniline</u></b>	<b><u>1</u></b>	<b><u>45.1187</u></b>	<b><u>44.5786</u></b>	<b><u>1.2</u></b>	<b><u>30</u></b>
Coumarin	1	37.9448	38.0624	0.31	30
<b><u>Acenaphthylene</u></b>	<b><u>1</u></b>	<b><u>45.1583</u></b>	<b><u>43.1541</u></b>	<b><u>4.5</u></b>	<b><u>30</u></b>
<b><u>Dimethylphthalate</u></b>	<b><u>1</u></b>	<b><u>43.1968</u></b>	<b><u>41.7784</u></b>	<b><u>3.3</u></b>	<b><u>30</u></b>
<b><u>2,6-Dinitrotoluene</u></b>	<b><u>1</u></b>	<b><u>44.6917</u></b>	<b><u>42.8226</u></b>	<b><u>4.3</u></b>	<b><u>30</u></b>
<b><u>Acenaphthene</u></b>	<b><u>1</u></b>	<b><u>43.3758</u></b>	<b><u>42.1443</u></b>	<b><u>2.9</u></b>	<b><u>40</u></b>
<b><u>3-Nitroaniline</u></b>	<b><u>1</u></b>	<b><u>35.0681</u></b>	<b><u>31.7996</u></b>	<b><u>9.8</u></b>	<b><u>30</u></b>
<b><u>2,4-Dinitrophenol</u></b>	<b><u>1</u></b>	<b><u>23.0472</u></b>	<b><u>19.8407</u></b>	<b><u>15</u></b>	<b><u>30</u></b>
<b><u>Dibenzofuran</u></b>	<b><u>1</u></b>	<b><u>40.1191</u></b>	<b><u>39.0638</u></b>	<b><u>2.7</u></b>	<b><u>30</u></b>
<b><u>2,4-Dinitrotoluene</u></b>	<b><u>1</u></b>	<b><u>43.9625</u></b>	<b><u>41.9356</u></b>	<b><u>4.7</u></b>	<b><u>40</u></b>
<b><u>4-Nitrophenol</u></b>	<b><u>1</u></b>	<b><u>71.3957</u></b>	<b><u>72.1157</u></b>	<b><u>1</u></b>	<b><u>40</u></b>
<b><u>2,3,4,6-Tetrachlorophenol</u></b>	<b><u>1</u></b>	<b><u>67.9045</u></b>	<b><u>66.4552</u></b>	<b><u>2.2</u></b>	<b><u>30</u></b>
<b><u>Fluorene</u></b>	<b><u>1</u></b>	<b><u>44.0296</u></b>	<b><u>42.8903</u></b>	<b><u>2.6</u></b>	<b><u>40</u></b>
<b><u>4-Chlorophenyl-phenylether</u></b>	<b><u>1</u></b>	<b><u>44.1141</u></b>	<b><u>42.2303</u></b>	<b><u>4.4</u></b>	<b><u>30</u></b>
<b><u>Diethylphthalate</u></b>	<b><u>1</u></b>	<b><u>44.3062</u></b>	<b><u>42.7186</u></b>	<b><u>3.6</u></b>	<b><u>30</u></b>
<b><u>4-Nitroaniline</u></b>	<b><u>1</u></b>	<b><u>40.3658</u></b>	<b><u>38.5286</u></b>	<b><u>4.7</u></b>	<b><u>30</u></b>
<b><u>Atrazine</u></b>	<b><u>1</u></b>	<b><u>37.6435</u></b>	<b><u>38.0617</u></b>	<b><u>1.1</u></b>	<b><u>30</u></b>
<b><u>4,6-Dinitro-2-methylphenol</u></b>	<b><u>1</u></b>	<b><u>35.1408</u></b>	<b><u>31.3089</u></b>	<b><u>12</u></b>	<b><u>30</u></b>
<b><u>n-Nitrosodiphenylamine</u></b>	<b><u>1</u></b>	<b><u>37.2313</u></b>	<b><u>37.0389</u></b>	<b><u>0.52</u></b>	<b><u>30</u></b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3  
RPD Data Laboratory Limits

QC Batch: SMB88132

Method: 8270E	Matrix: Soil	Units: mg/Kg	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,2-Diphenylhydrazine	1	51.1776	50.2523	1.8	30
<b>4-Bromophenyl-phenylether</b>	1	<b>43.6632</b>	<b>42.4892</b>	<b>2.7</b>	<b>30</b>
<b>Hexachlorobenzene</b>	1	<b>41.3089</b>	<b>40.1565</b>	<b>2.8</b>	<b>30</b>
N-Octadecane	1	48.0089	49.3111	2.7	30
<b>Pentachlorophenol</b>	1	<b>71.3338</b>	<b>71.3457</b>	<b>0.02</b>	<b>40</b>
<b>Phenanthrene</b>	1	<b>44.6643</b>	<b>47.5828</b>	<b>6.3</b>	<b>30</b>
<b>Anthracene</b>	1	<b>43.5229</b>	<b>43.9529</b>	<b>0.98</b>	<b>30</b>
<b>Carbazole</b>	1	<b>35.7121</b>	<b>36.4639</b>	<b>2.1</b>	<b>30</b>
<b>Di-n-butylphthalate</b>	1	<b>45.6275</b>	<b>45.8245</b>	<b>0.43</b>	<b>30</b>
<b>Fluoranthene</b>	1	<b>43.331</b>	<b>49.7557</b>	<b>14</b>	<b>30</b>
<b>Pyrene</b>	1	<b>49.0554</b>	<b>55.3869</b>	<b>12</b>	<b>40</b>
Benzidine	1	0	0	NA	30
<b>Butylbenzylphthalate</b>	1	<b>52.1399</b>	<b>51.0076</b>	<b>2.2</b>	<b>40</b>
<b>3,3'-Dichlorobenzidine</b>	1	<b>36.026</b>	<b>31.7695</b>	<b>13</b>	<b>30</b>
<b>Benzo[a]anthracene</b>	1	<b>41.4821</b>	<b>45.8941</b>	<b>10</b>	<b>30</b>
<b>Chrysene</b>	1	<b>39.0371</b>	<b>42.2928</b>	<b>8</b>	<b>30</b>
<b>bis(2-Ethylhexyl)phthalate</b>	1	<b>52.0217</b>	<b>51.2163</b>	<b>1.6</b>	<b>30</b>
<b>Di-n-octylphthalate</b>	1	<b>52.9278</b>	<b>52.9673</b>	<b>0.07</b>	<b>30</b>
<b>Benzo[b]fluoranthene</b>	1	<b>50.3211</b>	<b>55.5178</b>	<b>9.8</b>	<b>30</b>
<b>Benzo[k]fluoranthene</b>	1	<b>45.23</b>	<b>59.2585</b>	<b>27</b>	<b>30</b>
<b>Benzo[a]pyrene</b>	1	<b>46.5094</b>	<b>49.6008</b>	<b>6.4</b>	<b>30</b>
<b>Indeno[1,2,3-cd]pyrene</b>	1	<b>46.6381</b>	<b>48.0288</b>	<b>2.9</b>	<b>30</b>
<b>Dibenzof[a,h]anthracene</b>	1	<b>46.3343</b>	<b>47.7943</b>	<b>3.1</b>	<b>30</b>
<b>Benzo[g,h,i]perylene</b>	1	<b>44.7993</b>	<b>46.399</b>	<b>3.5</b>	<b>30</b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**FORM 4**  
Blank Summary

Blank Number: SMB88132  
Blank Data File: 9M101549.D  
Matrix: Soil

Blank Analysis Date: 10/06/20 12:34  
Blank Extraction Date: 10/06/20  
(If Applicable)  
Method: EPA 8270E

Sample Number	Data File	Analysis Date
AD19595-004	7M109909.D	10/06/20 19:31
AD19595-009	9M101551.D	10/06/20 13:22
SMB88132(MS)	9M101548.D	10/06/20 12:11
AD19562-006(MSD	7M109912.D	10/06/20 20:42
AD19562-004(MS:	7M109911.D	10/06/20 20:18
AD19562-002	7M109910.D	10/06/20 19:55

## Form 5

Tune Name: CAL DFTPP

Data File: 7M109431.D

Instrument: GCMS 7

Analysis Date: 09/17/20 09:43

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.108 min

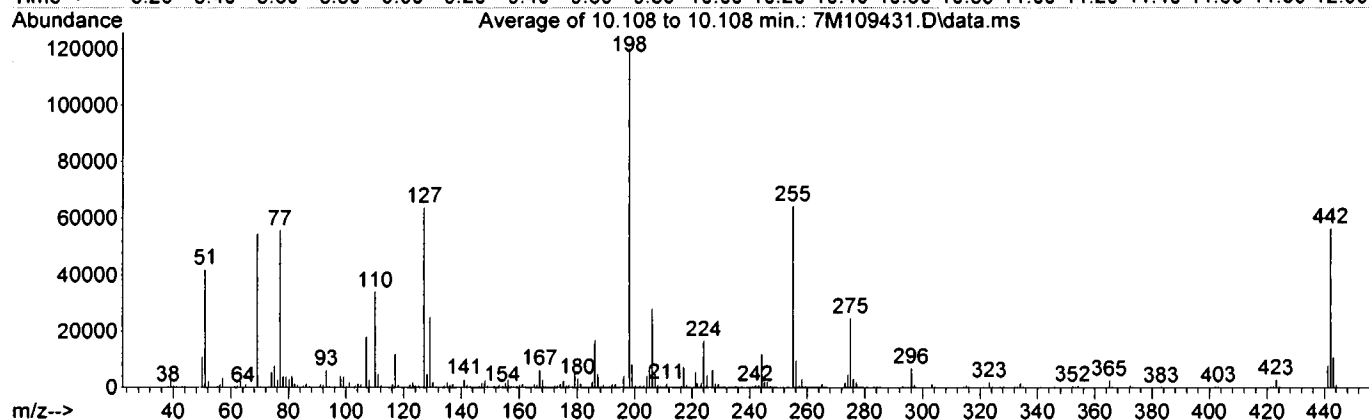
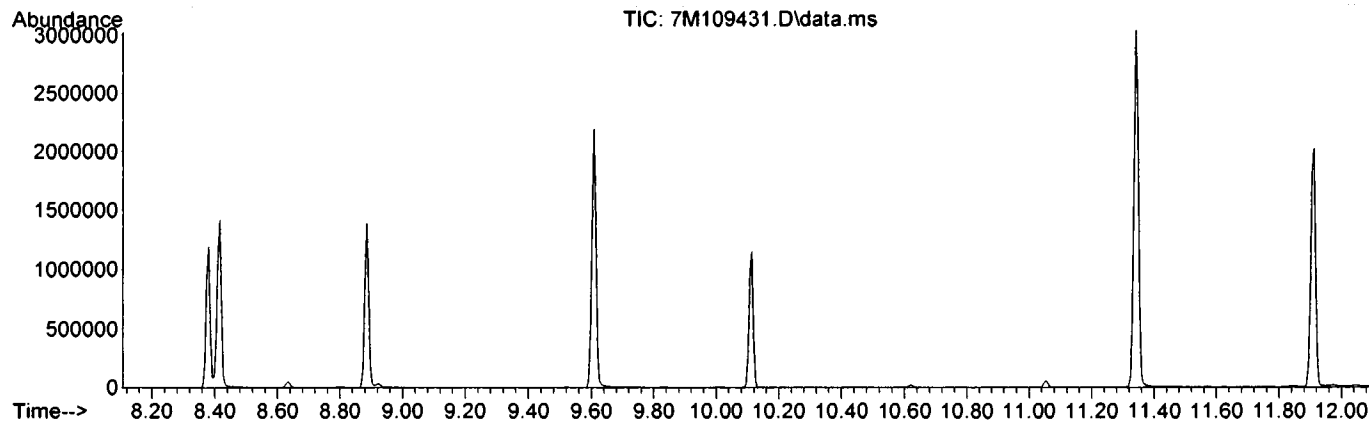
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	35.1	42072		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	45.6	54704		PASS
70	69	0.00	2	0.7	373		PASS
127	198	40	60	53.1	63672		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	120000		PASS
199	198	5	9	6.8	8197		PASS
275	198	10	30	20.8	24936		PASS
365	198	1	100	2.2	2683		PASS
441	443	0.01	100	72.0	7872		PASS
442	198	40	100	47.1	56488		PASS
443	442	17	23	19.3	10930		PASS

Data File	Sample Number	Analysis Date:
7M109432.D	CAL BNA@2PPM	09/17/20 10:08
7M109433.D	CAL BNA@10PPM	09/17/20 10:32
7M109434.D	CAL BNA@196PP	09/17/20 10:55
7M109435.D	CAL BNA@160PP	09/17/20 11:22
7M109436.D	CAL BNA@120PP	09/17/20 11:46
7M109437.D	CAL BNA@80PPM	09/17/20 12:09
7M109438.D	CAL BNA@20PPM	09/17/20 12:33
7M109439.D	CAL BNA@0.5PP	09/17/20 12:57
7M109440.D	CAL BNA@50PPM	09/17/20 13:20
7M109441.D	ICV BNA@50PPM	09/17/20 13:44

Data Path : G:\GcMsData\2020\GCMS\_7\Data\09-17-20\  
 Data File : 7M109431.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.108 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.1	42072	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.6	54704	PASS
70	69	0.00	2	0.7	373	PASS
127	198	40	60	53.1	63672	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	120000	PASS
199	198	5	9	6.8	8197	PASS
275	198	10	30	20.8	24936	PASS
365	198	1	100	2.2	2683	PASS
441	443	0.01	100	72.0	7872	PASS
442	198	40	100	47.1	56488	PASS
443	442	17	23	19.3	10930	PASS

RR

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 9

Data File: 9M101312.D  
Analysis Date: 09/17/20 09:43  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.107 to 10.107 min

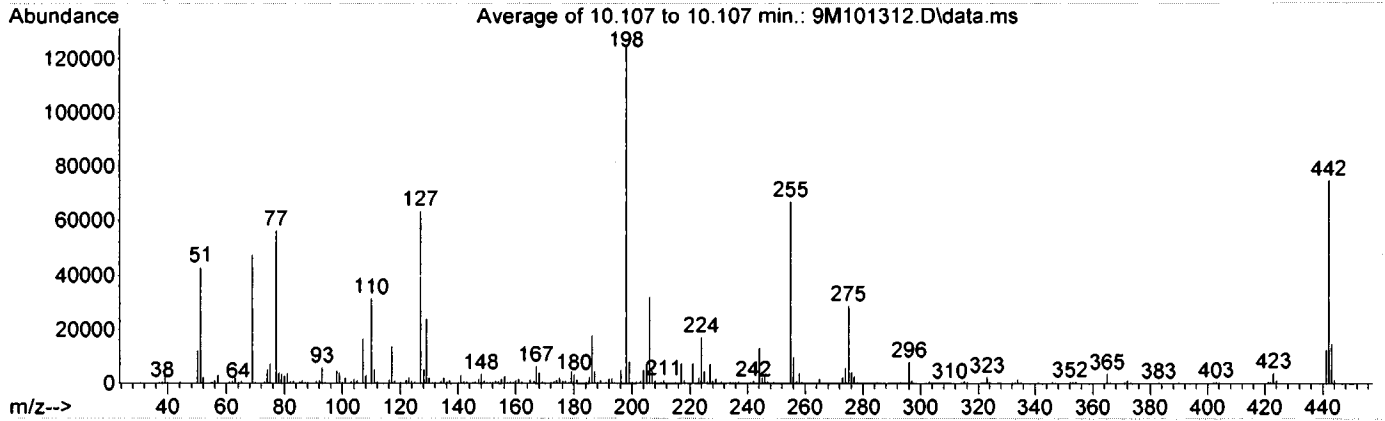
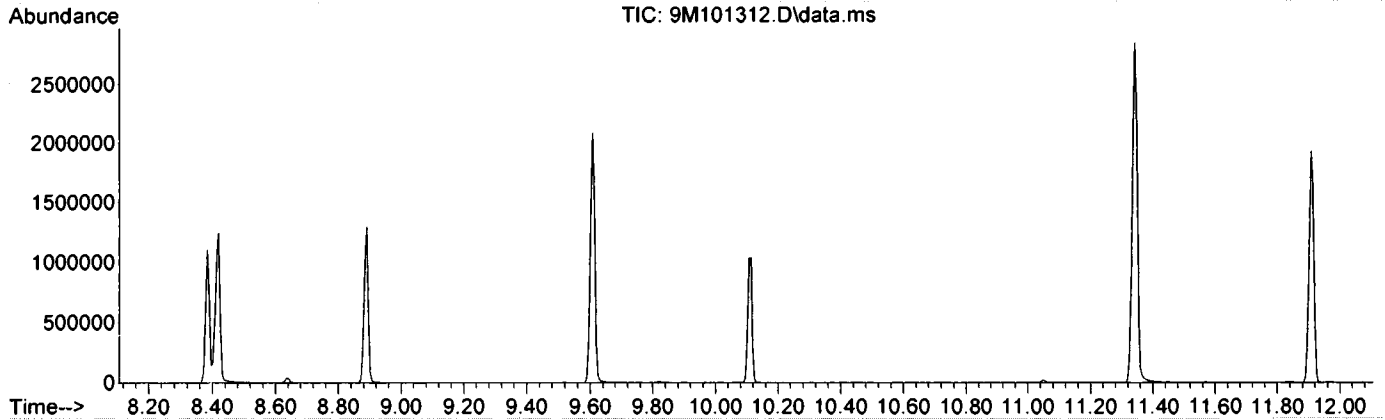
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	34.3	42992	PASS	
68	69	0.00	2	0.0	0	PASS	
69	198	0.00	100	38.1	47736	PASS	
70	69	0.00	2	0.4	213	PASS	
127	198	40	60	50.6	63424	PASS	
197	198	0.00	1	0.0	0	PASS	
198	198	100	100	100.0	125368	PASS	
199	198	5	9	6.6	8281	PASS	
275	198	10	30	23.1	28904	PASS	
365	198	1	100	2.9	3594	PASS	
441	443	0.01	100	85.2	12575	PASS	
442	198	40	100	59.7	74840	PASS	
443	442	17	23	19.7	14757	PASS	

Data File	Sample Number	Analysis Date:
9M101313.D	CAL BNA@10PPM	09/17/20 10:10
9M101314.D	CAL BNA@2PPM	09/17/20 10:34
9M101315.D	CAL BNA@196PP	09/17/20 11:00
9M101316.D	CAL BNA@160PP	09/17/20 11:24
9M101317.D	CAL BNA@120PP	09/17/20 11:47
9M101318.D	CAL BNA@80PPM	09/17/20 12:12
9M101319.D	CAL BNA@20PPM	09/17/20 12:35
9M101320.D	CAL BNA@0.5PP	09/17/20 12:58
9M101321.D	CAL BNA@50PPM	09/17/20 13:22
9M101322.D	ICV BNA@50PPM	09/17/20 13:47
9M101323.D	SMB88017	09/17/20 14:11
9M101324.D	SMB88018	09/17/20 14:34
9M101326.D	88018	09/17/20 15:48

Data Path : G:\GcMsData\2020\GCMS\_9\Data\09-17-20\  
 Data File : 9M101312.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.107 to 10.107 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.3	42992	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.1	47736	PASS
70	69	0.00	2	0.4	213	PASS
127	198	40	60	50.6	63424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	125368	PASS
199	198	5	9	6.6	8281	PASS
275	198	10	30	23.1	28904	PASS
365	198	1	100	2.9	3594	PASS
441	443	0.01	100	85.2	12575	PASS
442	198	40	100	59.7	74840	PASS
443	442	17	23	19.7	14757	PASS

RR

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 9

Data File: 9M101544.D  
Analysis Date: 10/06/20 08:03  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.095 to 10.113 min

Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60	31.6	22462	PASS	
68	69	0.00	2	0.0	0	PASS	
69	198	0.00	100	34.9	24835	PASS	
70	69	0.00	2	0.4	95	PASS	
127	198	40	60	48.4	34436	PASS	
197	198	0.00	1	0.0	0	PASS	
198	198	100	100	100.0	71194	PASS	
199	198	5	9	6.7	4781	PASS	
275	198	10	30	26.1	18549	PASS	
365	198	1	100	3.1	2237	PASS	
441	443	0.01	100	87.5	10723	PASS	
442	198	40	100	89.2	63514	PASS	
443	442	17	23	19.3	12261	PASS	

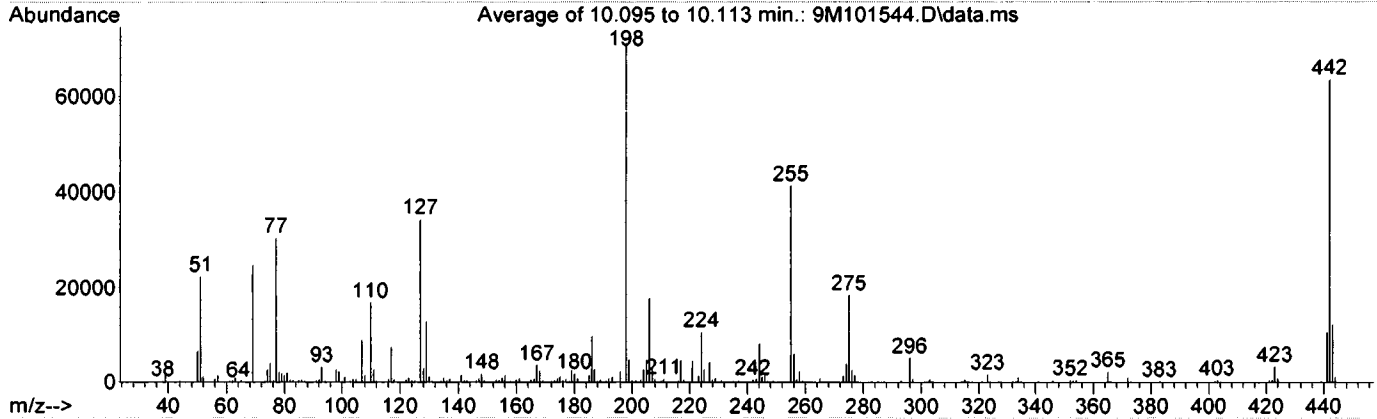
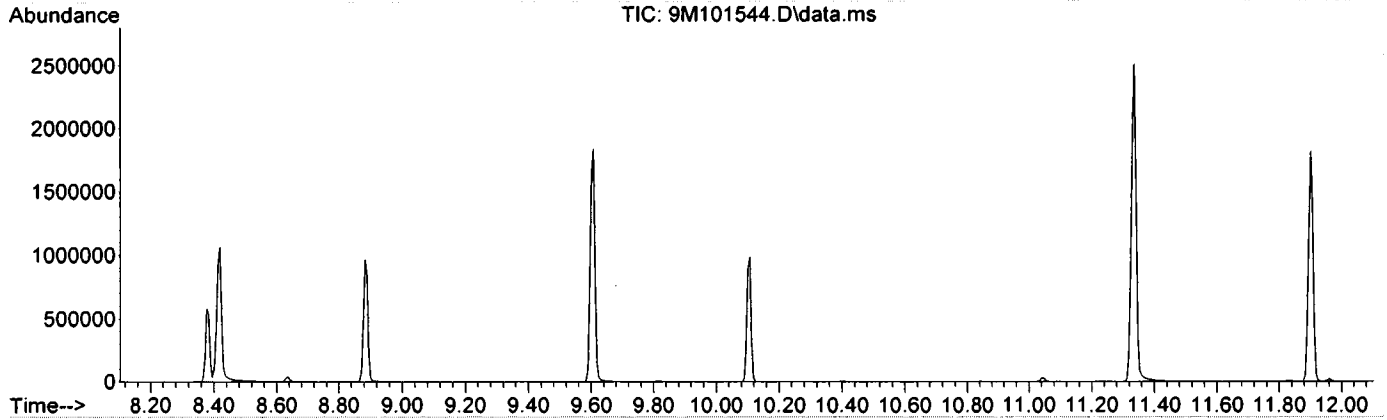
Data File	Sample Number	Analysis Date:
9M101545.D	CAL BNA@50PPM	10/06/20 08:27
9M101546.D	OMB88168(MS)	10/06/20 11:24
9M101547.D	OMB88168	10/06/20 11:47
9M101548.D	SMB88132(MS)	10/06/20 12:11
9M101549.D	SMB88132	10/06/20 12:34
9M101550.D	AD19539-011	10/06/20 12:59
9M101551.D	AD19595-009	10/06/20 13:22
9M101552.D	SMB88133	10/06/20 13:45
9M101553.D	SMB88133(MS)	10/06/20 14:09
9M101554.D	SMB88095(MS)	10/06/20 14:32
9M101555.D	SMB88095	10/06/20 14:56
9M101556.D	AD19501-003(MS)	10/06/20 15:19
9M101557.D	AD19501-003(MSD)	10/06/20 15:42



Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-06-20\  
 Data File : 9M101544.D  
 Acq On : 6 Oct 2020 8:03  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.095 to 10.113 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.6	22462	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.9	24835	PASS
70	69	0.00	2	0.4	95	PASS
127	198	40	60	48.4	34436	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	71194	PASS
199	198	5	9	6.7	4781	PASS
275	198	10	30	26.1	18549	PASS
365	198	1	100	3.1	2237	PASS
441	443	0.01	100	87.5	10723	PASS
442	198	40	100	89.2	63514	PASS
443	442	17	23	19.3	12261	PASS

PK

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 7

Data File: 7M109897.D  
Analysis Date: 10/06/20 14:33  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.108 to 10.114 min

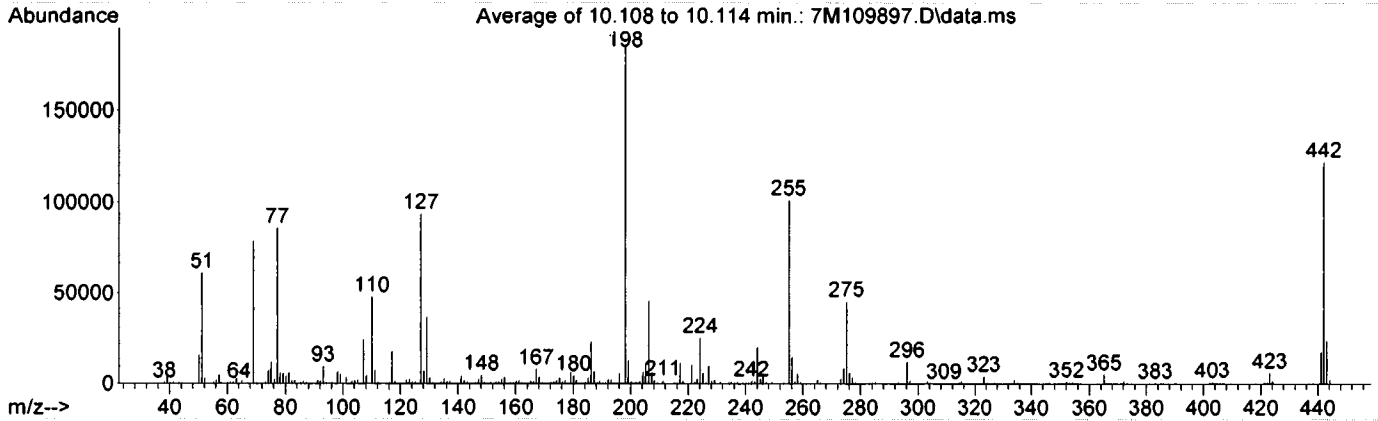
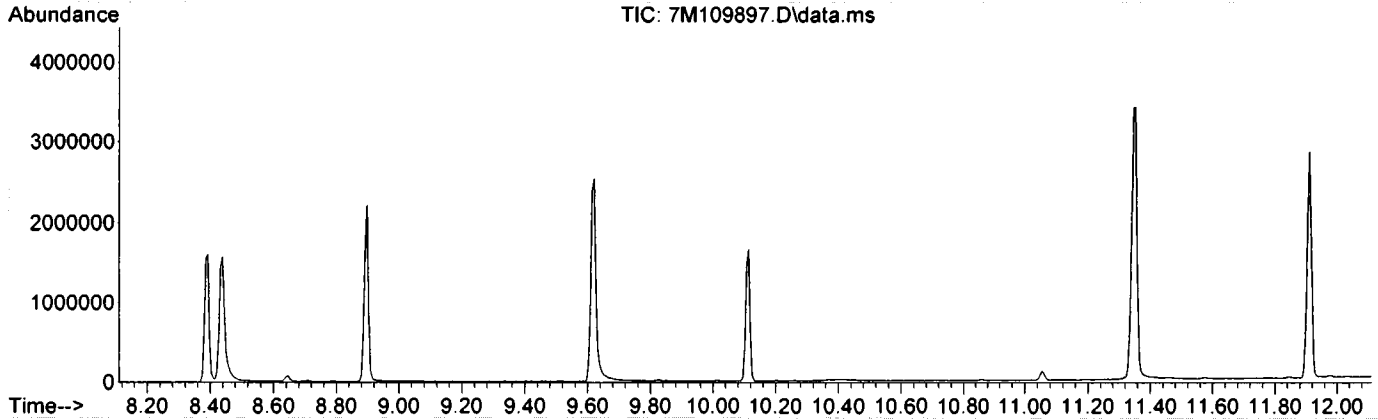
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30		60	32.9	61300	PASS
68	69	0.00		2	0.0	0	PASS
69	198	0.00		100	42.4	78872	PASS
70	69	0.00		2	0.7	527	PASS
127	198	40		60	50.4	93736	PASS
197	198	0.00		1	0.0	0	PASS
198	198	100		100	100.0	186048	PASS
199	198	5		9	6.9	12813	PASS
275	198	10		30	24.5	45612	PASS
365	198	1		100	2.8	5185	PASS
441	443	0.01		100	73.4	17511	PASS
442	198	40		100	65.7	122176	PASS
443	442	17		23	19.5	23847	PASS

Data File	Sample Number	Analysis Date:
7M109898.D	CAL BNA@50PPM	10/06/20 14:57
7M109899.D	SMB88132	10/06/20 15:37
7M109900.D	OMB88168	10/06/20 16:00
7M109901.D	AD19542-001	10/06/20 16:24
7M109902.D	AD19542-001(MS)	10/06/20 16:47
7M109903.D	AD19542-001(MSD)	10/06/20 17:10
7M109904.D	AD19587-007(5X)	10/06/20 17:34
7M109905.D	AD19539-007	10/06/20 17:57
7M109906.D	AD19539-013	10/06/20 18:20
7M109907.D	AD19539-014	10/06/20 18:44
7M109908.D	AD19539-017	10/06/20 19:08
7M109909.D	AD19595-004	10/06/20 19:31
7M109910.D	AD19562-002	10/06/20 19:55
7M109911.D	AD19562-004(MS)	10/06/20 20:18
7M109912.D	AD19562-006(MSD)	10/06/20 20:42
7M109913.D	AD19562-008	10/06/20 21:05
7M109914.D	AD19551-001	10/06/20 21:29
7M109915.D	AD19599-001	10/06/20 21:52
7M109916.D	AD19599-002	10/06/20 22:16
7M109917.D	AD19582-001(3X)	10/06/20 22:39
7M109918.D	AD19482-005(3X)	10/06/20 23:03
7M109919.D	AD19517-002(5X)	10/06/20 23:26
7M109920.D	AD19517-004(5X)	10/06/20 23:50
7M109921.D	AD19517-001(5X)	10/07/20 00:13
7M109922.D	AD19517-003(10X)	10/07/20 00:37
7M109923.D	AD19551-002(5X)	10/07/20 01:01

Data Path : G:\GcMsData\2020\GCMS\_7\Data\10-0620\  
 Data File : 7M109897.D  
 Acq On : 6 Oct 2020 14:33  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_7\METHODQT\7M\_EVALN.M  
 Title : @GCMS\_7  
 Last Update : Thu Sep 10 08:21:04 2020



Spectrum Information: Average of 10.108 to 10.114 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.9	61300	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.4	78872	PASS
70	69	0.00	2	0.7	527	PASS
127	198	40	60	50.4	93736	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	186048	PASS
199	198	5	9	6.9	12813	PASS
275	198	10	30	24.5	45612	PASS
365	198	1	100	2.8	5185	PASS
441	443	0.01	100	73.4	17511	PASS
442	198	40	100	65.7	122176	PASS
443	442	17	23	19.5	23847	PASS

RR

Compound	Level #	Data File	Cal Identifier	Analysis Date/Time									Level #	Data File	Cal Identifier	Analysis Date/Time								
				RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9				AVGRT	RT	Corr1	Corr2	%Rsd	LW1	LW2	LW3	LW4
1,4-Dioxane	1	0 Avg	0.9668	1.1816	1.1240	0.9562	0.9473	0.9547	0.9719	0.9869	1.2364	1.0427	1.00	1.00	11	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	0.50
Pyridine	1	0 Avg	2.2822	2.7150	2.4197	2.1866	2.2357	2.2432	2.3058	2.2885	2.3332	1.00	1.00	7.2	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	0.50	
N-Nitrosodimethylamin	1	0 Avg	1.4514	1.4804	1.5365	1.3723	1.4411	1.4720	1.4796	1.4964	1.4733	1.00	1.00	3.3	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	0.50	
2-Fluorophenol	1	0 Avg	2.3080	2.4029	2.5400	2.1946	2.3315	2.3477	2.3726	2.3458	2.3644	0.998	0.998	4.1	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	0.50	
Benzaldehyde	1	0 Avg	2.2528	2.5614	2.5966	2.2023	2.2383	2.2249	2.1906	2.1155	2.3055	0.999	1.00	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Aniline	1	0 Avg	3.6292	4.1426	4.0564	3.5853	3.6364	3.6033	3.6378	3.5147	3.7955	0.999	1.00	7.6	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Pentachloroethane	1	0 Avg	0.8172	0.9204	0.9396	0.8129	0.8117	0.7990	0.8039	0.7847	0.8365	0.999	1.00	7.1	0.05	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
bis(2-Chloroethyl)ether	1	0 Avg	2.3867	2.7789	2.7857	2.3989	2.3989	2.3181	2.3009	2.2391	2.2979	0.999	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Phenol-d5	1	0 Avg	2.7898	2.9699	3.1464	2.7032	2.7853	2.7657	2.7658	2.7168	2.8355	0.999	1.00	5.3	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Phenol	1	0 Avg	3.3862	3.9079	3.9643	3.3198	3.3385	3.3020	3.2681	3.1926	3.4655	0.999	1.00	8.7	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
2-Chlorophenol	1	0 Avg	2.6981	2.9972	3.1158	2.6442	2.6497	2.6532	2.6524	2.5832	2.7557	0.999	1.00	7.1	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
N-Decane	1	0 Avg	1.8656	2.2904	2.2050	1.8633	1.8740	1.7770	1.7474	1.7152	1.9255	0.999	1.00	11	0.05	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
1,3-Dichlorobenzene	1	0 Avg	2.9113	3.2906	3.3604	2.9118	2.9649	2.8746	2.8642	2.7747	2.9958	0.999	1.00	7.1	0.05	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
1,4-Dichlorobenzene	1	0 Avg	1.4926	1.5648	1.6299	1.4220	1.4369	1.4550	1.4263	1.4465	1.4859	0.999	1.00	5.1	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
1,2-Dichlorobenzene	1	0 Avg	1.4100	1.5061	1.5397	1.3662	1.3659	1.3678	1.3445	1.3765	1.4160	0.999	1.00	5.2	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Benzyl alcohol	1	0 Avg	0.8438	0.9017	0.8937	0.7937	0.8050	0.8188	0.8038	0.8352	0.8376	0.999	1.00	4.9	0.80	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
bis(2-chloroisopropyl)le	1	0 Avg	1.1229	1.2085	1.2299	1.0841	1.0806	1.0423	1.0131	1.0438	1.1061	0.999	0.999	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
2-Methylphenol	1	0 Avg	1.1784	1.2528	1.2572	1.1146	1.1227	1.1367	1.1139	1.1486	1.2225	0.999	1.00	5.0	0.70	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Acetophenone	1	0 Avg	1.7996	2.0492	2.0634	1.7758	1.6607	1.6769	1.6185	1.6464	1.7966	0.999	0.999	10	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Hexachloroethane	1	0 Avg	0.5702	0.6156	0.6237	0.5454	0.5555	0.5509	0.5449	0.5631	0.5716	0.999	1.00	5.5	0.30	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
N-Nitroso-di-n-propyla	1	0 Avg	0.8428	0.9300	0.9489	0.8133	0.7616	0.7632	0.7421	0.7603	0.8436	0.999	1.00	12	0.50	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
3,8,4-Methylphenol	1	0 Avg	1.1925	1.3190	1.3216	1.1468	1.1128	1.1207	1.0690	1.0898	1.2066	0.999	0.999	10	0.50	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Nitrobenzene-d5	1	0 Avg	0.1576	0.1658	0.1718	0.1508	0.1590	0.1535	0.1531	0.1594	0.1596	0.999	0.999	4.4	0.20	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0 Avg	0.3459	0.3723	0.3763	0.3326	0.3353	0.3278	0.3205	0.3297	0.3436	0.999	0.999	6.1	0.20	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Isodhronone	1	0 Avg	0.6350	0.6864	0.6859	0.6102	0.6011	0.5961	0.5921	0.6090	0.6276	0.999	0.999	6.2	0.40	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
2-Nitrophenol	1	0 Avg	0.1976	0.1932	0.2095	0.1844	0.1956	0.1936	0.1908	0.1975	0.1956	0.999	1.00	3.7	0.10	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
2,4-Dimethylphenol	1	0 Avg	0.3144	0.3281	0.3550	0.3012	0.3022	0.3036	0.2996	0.3089	0.3684	0.999	1.00	7.9	0.20	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Benzoic Acid	1	0	0.2265	-----	0.1668	0.1856	0.2500	0.2566	0.2815	-----	0.2336	0.999	1.00	18	0.00	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
bis(2-Chloroethoxy)me	1	0 Avg	0.3943	0.4111	0.4283	0.3771	0.3741	0.3611	0.3647	0.3641	0.3836	0.999	0.999	6.8	0.30	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
2,4-Dichlorophenol	1	0 Avg	0.3043	0.3012	0.3405	0.2945	0.2980	0.2977	0.2926	0.3023	0.3192	0.999	1.00	5.0	0.20	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
1,2,4-Trichlorobenzene	1	0 Avg	0.3297	0.3827	0.3653	0.3192	0.3200	0.3188	0.3163	0.3218	0.3346	0.999	1.00	7.6	0.20	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Naphthalene	1	0 Avg	1.0361	1.1179	1.1376	0.9819	0.9819	0.9910	0.9631	0.9839	1.0469	0.999	1.00	7.6	0.70	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
4-Chloroaniline	1	0 Avg	0.4150	0.4514	0.4611	0.4066	0.3860	0.3873	0.3786	0.3848	0.4809	0.999	1.00	8.9	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Hexachlorobutadiene	1	0 Avg	0.1875	0.1926	0.1999	0.1851	0.1861	0.1848	0.1911	-----	0.1887	0.999	1.00	3.7	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Caprolactam	1	0 Avg	0.1184	0.1106	0.1229	0.1121	0.1169	0.1159	0.1185	0.1316	0.1187	0.999	0.998	5.6	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
4-Chloro-3-methylphe	1	0 Avg	0.3084	0.3338	0.3341	0.2883	0.2971	0.2991	0.2952	0.3049	0.3087	0.999	1.00	5.6	0.20	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
2-Methylnaphthalene	1	0 Avg	0.7067	0.7453	0.7803	0.6834	0.6750	0.6755	0.6696	0.6806	0.7027	0.999	1.00	5.7	0.40	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
1-Methylnaphthalene	1	0 Avg	0.6665	0.7154	0.7299	0.6366	0.6383	0.6405	0.6302	0.6399	0.6627	0.999	1.00	5.9	0.40	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
Methylnaphthalenes (T	1	0 Avg	0.6864	0.7304	0.7551	0.6600	0.6665	0.6573	0.6492	0.6601	0.6827	0.999	1.00	5.8	0.01	100.00	4.00	20.00	40.00	160.00	240.00	320.00	392.00	
1,1'-Biphenyl	1	0 Avg	0.8308	0.8728	0.9106	0.8018	0.7956	0.7989	0.7859	0.8023	0.8257	0.999	1.00	5.4	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	
1,2,4,5-Tetrachloroben	1	0 Avg	0.6206	0.6526	0.7126	0.6023	0.6215	0.6039	0.6014	0.6028	0.6277	0.999	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.00	160.00	196.00	

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.



Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																			
1	7M109440.D	CAL BNA@50PPM	09/17/20 13:20	2	7M109432.D	CAL BNA@20PPM	09/17/20 10:08	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9											
1	7M109440.D	CAL BNA@50PPM	09/17/20 13:20	2	7M109432.D	CAL BNA@20PPM	09/17/20 10:08	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
3	7M109433.D	CAL BNA@10PPM	09/17/20 10:32	4	7M109438.D	CAL BNA@20PPM	09/17/20 12:33	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
5	7M109437.D	CAL BNA@80PPM	09/17/20 12:09	6	7M109436.D	CAL BNA@120PPM	09/17/20 11:46	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
7	7M109435.D	CAL BNA@160PPM	09/17/20 11:22	8	7M109434.D	CAL BNA@196PPM	09/17/20 10:55	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
9	7M109439.D	CAL BNA@0.5PPM	09/17/20 12:57					50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
4,4'-DDE	1	0	Avg	0.3503	0.3655	0.3774	0.3341	0.3460	0.3571	0.3595	0.3678	0.3678	0.357	11.57	0.999	1.00	3.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4,4'-DDD	1	0	Avg	0.5173	0.5040	0.5516	0.4863	0.5081	0.5152	0.5081	0.5278	0.5278	0.515	11.97	0.999	1.00	3.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Butylbenzylphthalate	1	0	Avg	0.5670	0.5750	0.6106	0.5386	0.5454	0.5565	0.5463	0.5709	0.5709	0.564	12.23	0.999	0.999	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.5693	0.5393	0.6429	0.5529	0.5709	0.5754	0.5760	0.5874	0.5874	0.581	12.33	0.999	0.999	5.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.4587	0.4820	0.4897	0.4247	0.4479	0.4540	0.4440	0.4567	0.4567	0.487	12.85	1.00	1.00	4.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzoflathracene	1	0	Avg	1.1813	1.2500	1.2776	1.1055	1.1167	1.1531	1.1306	1.1707	1.1707	1.17	12.88	0.999	0.999	5.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0967	1.1295	1.2176	1.0668	1.0498	1.0409	1.0250	1.0596	1.0596	1.09	12.92	0.999	0.999	5.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7615	0.8450	0.8447	0.7274	0.7265	0.7171	0.7088	0.7210	0.7210	0.757	12.92	1.00	1.00	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dh-n-octylphthalate	1	0	Avg	1.2794	1.3745	1.4455	1.2328	1.2345	1.2196	1.1919	1.2391	1.2391	1.28	13.68	0.999	0.999	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.1394	1.2007	1.2147	1.1224	1.0944	1.0793	1.0414	1.1490	1.1490	1.13	14.11	0.998	0.998	5.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.0417	1.1169	1.1984	0.9900	1.0351	1.0321	1.0449	1.0116	1.0116	1.06	14.14	0.999	1.00	6.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.0102	1.0406	1.0815	0.9527	0.9757	0.9811	0.9730	1.0095	1.0095	1.00	14.48	0.999	1.00	4.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl. 2,3-cdIbvren	1	0	Avg	1.1141	1.1817	1.2143	1.0361	1.0844	1.0993	1.0993	1.1488	1.1488	1.12	15.94	0.999	0.999	5.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzola.hanthracen	1	0	Avg	0.9343	0.9522	1.0181	0.8771	0.9158	0.9263	0.9176	0.9561	0.9561	0.937	15.96	0.999	1.00	4.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	0.9171	1.0021	1.0080	0.8577	0.8974	0.9121	0.9112	0.9585	0.9585	0.933	16.33	0.998	0.999	5.6	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coefft criteria(if applicable)

Note:  
Avg Rsd: 6.036  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations									
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@20PPM	09/17/20 10:34	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@20PPM	09/17/20 10:34	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
3	9M101313.D	CAL BNA@10PPM	09/17/20 10:10	4	9M101319.D	CAL BNA@20PPM	09/17/20 12:35	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
5	9M101318.D	CAL BNA@80PPM	09/17/20 12:12	6	9M101317.D	CAL BNA@120PPM	09/17/20 11:47	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
7	9M101316.D	CAL BNA@160PPM	09/17/20 11:24	8	9M101315.D	CAL BNA@196PPM	09/17/20 11:00	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
9	9M101320.D	CAL BNA@0.5PPM	09/17/20 12:58														
Compound	Col	Mr	Fi	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd
4-Dioxane	1	0	Avg	1.0092	1.3770	1.0933	0.9598	0.9781	0.9877	0.9761	1.0082	1.1212	1.062	2.74	0.999	0.999	12
Pyridine	1	0	Avg	2.1975	1.9967	2.1554	2.1183	2.2474	2.3090	2.2557	2.2887	---	2.203	3.20	1.00	1.00	4.7
N-Nitrosodimethylamin	1	0	Avg	1.3973	1.2536	1.4270	1.3062	1.4170	1.4614	1.4159	1.4494	---	1.393	3.14	1.00	1.00	5.2
2-Fluorophenol	1	0	Avg	2.1263	1.8750	2.0379	2.0095	2.1819	2.2213	2.1411	2.1460	---	2.094	5.73	0.999	1.00	5.4
Benzaldehyde	1	0	Avg	2.0239	2.0447	2.1054	1.9406	2.0339	2.0178	1.9449	1.9182	---	2.005	5.51	0.999	1.00	3.2
Aniline	1	0	Avg	3.4677	3.5376	3.5659	3.3541	3.4792	3.5098	3.3609	3.3561	3.5095	3.465	5.62	0.999	1.00	2.4
Pentachloroethane	1	0	Avg	0.7232	0.7500	0.7570	0.7143	0.7267	0.7277	0.7032	0.6926	---	0.724	5.67	0.999	1.00	3.0
bis(2-Chloroethyl)ether	1	0	Avg	2.2340	2.4920	2.4416	2.2289	2.2191	2.2171	2.0969	2.0700	2.4664	2.275	6.68	0.999	1.00	6.9
Phenol-d5	1	0	Avg	2.5778	2.4275	2.5598	2.4705	2.5997	2.6482	2.5092	2.4547	---	2.535	5.58	0.998	1.00	3.1
Phenol	1	0	Avg	3.1962	3.3548	3.8289	3.1139	3.1995	3.2243	3.0391	2.9781	---	3.245	5.59	0.998	0.999	8.1
2-Chlorophenol	1	0	Avg	2.5357	2.4465	2.8406	2.4276	2.5640	2.5695	2.4526	2.3984	---	2.535	5.72	0.998	1.00	5.6
N-Decane	1	0	Avg	1.9398	2.1709	2.0925	1.9033	1.9058	1.8405	1.7378	1.6629	---	1.915	5.77	0.996	1.00	8.8
1,3-Dichlorobenzene	1	0	Avg	2.7937	2.9965	2.9323	2.7274	2.7938	2.7512	2.6097	2.5624	---	2.775	5.85	0.998	1.00	5.3
1,4-Dichlorobenzene	1	0	Avg	1.5017	1.6423	1.6377	1.4123	1.4405	1.4806	1.4301	1.4233	---	1.505	5.92	0.999	1.00	6.3
1,2-Dichlorobenzene	1	0	Avg	1.4369	1.5773	1.5119	1.3274	1.3672	1.3973	1.3512	1.3522	---	1.426	6.04	1.00	1.00	6.2
Benzyl alcohol	1	0	Avg	0.8432	0.7567	0.8151	0.7594	0.8246	0.8521	0.8211	0.8246	---	0.812	6.01	1.00	1.00	4.4
bis(2-chloroisopropyl)e	1	0	Avg	1.2683	1.4421	1.4098	1.1805	1.2115	1.2306	1.1772	1.1685	---	1.266	6.12	0.999	1.00	8.5
2-Methylphenol	1	0	Avg	1.1950	1.0908	1.2246	1.1022	1.1564	1.2078	1.1433	1.1487	1.1461	1.166	6.10	0.999	0.999	3.9
Acetophenone	1	0	Avg	1.7553	1.9443	1.9766	1.7023	1.6551	1.6179	1.5065	1.4596	---	1.706	6.22	0.996	1.00	1.1
Hexachloroethane	1	0	Avg	0.5300	0.5570	0.5499	0.4859	0.5248	0.5307	0.5167	0.5135	---	0.526	6.32	1.00	1.00	4.2
N-Nitroso-di-n-propyla	1	0	Avg	0.7993	0.7997	0.8365	0.7439	0.7399	0.7348	0.6947	0.6761	0.6633	0.741	6.22	0.997	1.00	7.8
3,8,4-Methylphenol	1	0	Avg	1.2145	1.1581	1.2742	1.1368	1.1501	1.1296	1.0304	0.9890	1.1368	1.146	6.22	0.993	1.00	7.5
Nitrobenzene-d5	1	0	Avg	0.1456	0.1237	0.1352	0.1338	0.1476	0.1564	0.1528	0.1555	---	0.144	6.35	0.999	1.00	8.2
Nitrobenzene	1	0	Avg	0.3175	0.3102	0.3316	0.2954	0.3150	0.3186	0.3095	0.3132	---	0.314	6.37	1.00	1.00	3.2
Isophorone	1	0	Avg	0.5638	0.5696	0.5877	0.5498	0.5768	0.5830	0.5657	0.5753	---	0.574	6.55	1.00	1.00	2.1
2-Nitrophenol	1	0	Avg	0.1785	0.1309	0.1962	0.1646	0.1819	0.1911	0.1866	0.1871	---	0.177	6.61	0.999	0.999	1.2
2,4-Dimethylphenol	1	0	Avg	0.3003	0.2900	0.3699	0.2758	0.2903	0.2954	0.2889	0.2897	0.2410	0.294	6.64	1.00	1.00	1.1
Benzoic Acid	1	0	Qua	0.1881	---	0.1099	0.1505	0.2280	0.2481	0.2576	0.2622	---	0.206	6.66	0.996	0.999	28
bis(2-Chloroethoxy)me	1	0	Avg	0.3681	0.4105	0.3972	0.3445	0.3533	0.3569	0.3443	0.3423	---	0.365	6.71	0.999	1.00	7.1
2,4-Dichlorophenol	1	0	Avg	0.2863	0.2447	0.3338	0.2603	0.2794	0.2852	0.2773	0.2774	0.1849	0.270	6.80	1.00	1.00	1.5
1,2,4-Trichlorobenzen	1	0	Avg	0.3141	0.3430	0.3434	0.2912	0.3001	0.3076	0.2992	0.3010	---	0.312	6.87	1.00	1.00	6.4
Naphthalene	1	0	Avg	1.0578	1.2184	1.1567	1.0103	1.0211	1.0122	0.9750	0.9728	1.1347	1.066	6.92	0.999	1.00	8.2
4-Chloroaniline	1	0	Avg	0.4049	0.3926	0.4205	0.3812	0.3945	0.3946	0.3774	0.3674	0.3750	0.390	6.96	0.998	1.00	4.2
Hexachlorobutadiene	1	0	Avg	0.1752	0.1904	0.1886	0.1656	0.1683	0.1721	0.1684	0.1703	---	0.175	7.02	1.00	1.00	5.4
Caproactam	1	0	Avg	0.1090	0.0688	0.0985	0.0984	0.1104	0.1175	0.1140	0.1236	---	0.105	7.23	0.998	0.999	1.6
4-Chloro-3-methylpibe	1	0	Avg	0.2761	0.2460	0.3340	0.2475	0.2714	0.2814	0.2749	0.2751	---	0.276	7.32	1.00	1.00	9.8
2-Methylnaphthalene	1	0	Avg	0.7090	0.7642	0.7614	0.6676	0.6781	0.6824	0.6565	0.6564	---	0.697	7.47	0.999	1.00	6.3
1-Methylnaphthalene	1	0	Avg	0.6696	0.7576	0.7280	0.6332	0.6489	0.6475	0.6227	0.6195	---	0.666	7.55	0.999	1.00	7.6
Methylnaphthalenes (T	1	0	Avg	0.6696	0.7609	0.7436	0.6502	0.6632	0.6649	0.6406	0.6382	---	0.668	7.47	0.999	1.00	6.9
1,1'-Biphenyl	1	0	Avg	0.8201	0.9130	0.8633	0.7644	0.7805	0.7913	0.7558	0.7522	---	0.805	7.84	0.999	1.00	7.1
1,2,4,5-Tetrachloroben	1	0	Avg	0.6288	0.7091	0.6711	0.5899	0.6236	0.6163	0.5946	0.5944	---	0.629	7.60	0.999	1.00	6.7

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.





Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations								
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@2PPM	09/17/20 10:34	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
3	9M101313.D	CAL BNA@10PPM	09/17/20 10:10	4	9M101319.D	CAL BNA@20PPM	09/17/20 12:35	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
5	9M101318.D	CAL BNA@80PPM	09/17/20 12:12	6	9M101317.D	CAL BNA@120PPM	09/17/20 11:47	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
7	9M101316.D	CAL BNA@160PPM	09/17/20 11:24	8	9M101315.D	CAL BNA@196PPM	09/17/20 11:00	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
9	9M101320.D	CAL BNA@0.5PPM	09/17/20 12:58					50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Compound	Col	Mt	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.3164	0.3085	0.3251	0.2870	0.3181	0.3368	0.3355	0.3357	0.320	11.57	0.999	1.00	5.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4676	0.3298	0.4118	0.4039	0.4696	0.4943	0.4859	0.4842	0.443	11.97	0.999	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.4710	0.2384	0.3600	0.3840	0.4937	0.5153	0.5030	0.5012	0.433	12.23	0.999	0.999	23	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.5607	0.4100	0.6178	0.5043	0.5646	0.5801	0.5774	0.5756	0.549	12.33	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3898	0.2240	0.4113	0.3352	0.4035	0.4225	0.4142	0.3995	0.375	12.85	0.999	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzoflathracene	1	0	Avg	1.1262	1.1259	1.1404	1.0406	1.1448	1.1645	1.1679	1.1421	1.13	12.88	1.00	1.00	3.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1020	1.2634	1.1943	1.0445	1.0556	1.0822	1.0400	1.0496	1.10	12.92	1.00	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6559	0.3313	0.5540	0.5664	0.6633	0.6739	0.6511	0.6267	0.580	12.92	0.998	0.999	19	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.0321	0.3373	0.6180	0.8050	1.0983	1.1633	1.1157	1.0860	0.907	13.68	0.998	0.999	33	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.0627	0.8442	0.9841	0.9332	1.0674	1.1317	1.1321	1.1712	1.04	14.10	0.999	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.1059	1.0441	1.1654	1.0308	1.0850	1.0826	1.0345	0.9585	1.06	14.13	0.994	0.999	5.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	0.9862	0.7020	0.9358	0.8535	0.9952	1.0171	1.0027	0.9943	0.936	14.47	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl,2,3-cdlbren	1	0	Avg	1.1882	0.9198	1.0889	1.0476	1.2176	1.2755	1.2625	1.2526	1.16	15.89	1.00	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzola,hanthracen	1	0	Avg	1.0042	0.7706	0.9347	0.8922	1.0083	1.0517	1.0405	1.0286	0.966	15.92	1.00	1.00	9.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofl, h,libervlene	1	0	Avg	0.9795	0.8174	0.9208	0.8688	0.9875	1.0324	1.0163	1.0094	0.954	16.29	1.00	1.00	8.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

**Flags**  
*a - failed the min rf criteria*  
*c - failed the minimum correlation coeff criteria(if applicable)*

**Note:**  
 Avg Rsd: 8.313  
 Corr 1 = Correlation Coefficient for linear Eq.  
 Corr 2 = Correlation Coefficient for quad Eq.  
 Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 8:27:00 AData File: 9M101545.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.71	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.74	47.74	50	**	1.057	1.009		4.52	
Pyridine	1	0		3.21	50.45	50	**	2.196	2.216		0.90	
N-Nitrosodimethylamine	1	0		3.14	51.95	50	**	1.391	1.445		3.91	
2-Fluorophenol	1	0	S	4.71	50.91	50	**	2.092	2.130		1.81	
Benzaldehyde	1	0		5.52	49.15	50	20	0.01	2.004	1.970	1.70	
Aniline	1	0		5.62	50.58	50	**		3.460	3.500	1.17	
Pentachloroethane	1	0		5.67	49.29	50	**	0.05	0.724	0.714	1.42	
bis(2-Chloroethyl)ether	1	0		5.68	51.97	50	20	0.7	2.274	2.364	3.94	
Phenol-d5	1	0	S	5.58	51.68	50	**		2.531	2.616	3.37	
Phenol	1	0		5.59	50.76	50	20	0.8	3.242	3.291	1.52	
2-Chlorophenol	1	0		5.72	50.18	50	20	0.8	2.529	2.538	0.35	
N-Decane	1	0		5.77	51.28	50	**	0.05	1.907	1.956	2.56	
1,3-Dichlorobenzene	1	0		5.85	50.04	50	**		2.771	2.773	0.09	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.92	50.71	50	20		1.496	1.517	1.42	
1,2-Dichlorobenzene	1	0		6.04	50.63	50	**		1.415	1.433	1.27	
Benzyl alcohol	1	0		6.01	50.81	50	**		0.812	0.825	1.62	
bis(2-chloroisopropyl)ether	1	0		6.12	52.96	50	20	0.01	1.260	1.334	5.92	
2-Methylphenol	1	0		6.10	52.60	50	20	0.7	1.157	1.217	5.21	
Acetophenone	1	0		6.22	51.72	50	20	0.01	1.702	1.761	3.44	
Hexachloroethane	1	0		6.32	51.22	50	20	0.3	0.526	0.539	2.44	
N-Nitroso-di-n-propylamine	1	0		6.22	53.55	50	20	0.5	0.741	0.793	7.09	
3&4-Methylphenol	1	0		6.22	53.11	50	20		1.136	1.206	6.22	
Naphthalene-d8	1	0	I	6.91	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.35	26.62	25	**		0.144	0.153	6.48	
Nitrobenzene	1	0		6.37	51.60	50	20	0.2	0.314	0.324	3.20	
Isophorone	1	0		6.55	52.75	50	20	0.4	0.574	0.606	5.50	
2-Nitrophenol	1	0		6.61	52.91	50	20	0.1	0.177	0.187	5.82	
2,4-Dimethylphenol	1	0		6.64	51.46	50	20	0.2	0.294	0.302	2.92	
Benzoic Acid	1	0		6.69	37.57	50	**		0.206	0.143	24.87	
bis(2-Chloroethoxy)methane	1	0		6.71	51.46	50	20	0.3	0.365	0.375	2.91	
2,4-Dichlorophenol	1	0		6.80	52.73	50	20	0.2	0.270	0.285	5.45	
1,2,4-Trichlorobenzene	1	0		6.86	49.96	50	**		0.312	0.312	0.07	
Naphthalene	1	0		6.92	50.52	50	20	0.7	1.062	1.073	1.04	
4-Chloroaniline	1	0		6.95	51.16	50	20	0.01	0.390	0.399	2.32	
Hexachlorobutadiene	1	0		7.01	49.66	50	20	0.01	0.175	0.174	0.68	
Caprolactam	1	0		7.22	54.01	50	20	0.01	0.105	0.113	8.02	
4-Chloro-3-methylphenol	1	0		7.32	50.23	50	20	0.2	0.276	0.277	0.46	
2-Methylnaphthalene	1	0		7.47	50.94	50	**	0.4	0.697	0.710	1.88	
1-Methylnaphthalene	1	0		7.54	50.37	50	**	0.4	0.666	0.671	0.74	
Methylnaphthalenes	1	0		7.54	101.44	50	**			1.382	102.88	
1,1'-Biphenyl	1	0		7.84	50.44	50	20	0.01	0.805	0.812	0.89	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.60	50.09	50	20	0.01	0.629	0.630	0.18	
Hexachlorocyclopentadiene	1	0		7.59	47.77	50	20	0.05	0.339	0.324	4.45	
2,4,6-Trichlorophenol	1	0		7.68	49.38	50	20	0.2	0.381	0.376	1.25	
2,4,5-Trichlorophenol	1	0		7.71	50.46	50	20	0.2	0.392	0.396	0.92	
2-Fluorobiphenyl	1	0	S	7.75	25.55	25	**		1.369	1.399	2.21	
2-Chloronaphthalene	1	0		7.87	51.16	50	20	0.8	1.192	1.220	2.32	
1,4-Dimethylnaphthalene	1	0		8.15	50.91	50	**		0.906	0.923	1.82	
Dimethylnaphthalenes	1	0		8.15	50.91	50	20			0.923	1.82	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 8:27:00 AData File: 9M101545.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	50.84	50	**	0.884	0.899		1.69	
2-Nitroaniline	1	0		7.94	54.42	50	20	0.01	0.330	0.359	8.85	
Coumarin	1	0		8.12	52.31		**	0.444				
Acenaphthylene	1	0		8.22	51.89	50	20	0.9	1.789	1.856	3.77	
Dimethylphthalate	1	0		8.08	51.28	50	20	0.01	1.339	1.373	2.56	
2,6-Dinitrotoluene	1	0		8.14	53.83	50	20	0.2	0.284	0.305	7.66	
Acenaphthene	1	0		8.38	50.84	50	20	0.9	1.239	1.260	1.69	
3-Nitroaniline	1	0		8.29	54.15	50	20	0.01	0.327	0.354	8.29	
2,4-Dinitrophenol	1	0		8.38	43.96	50	20	0.2	0.157	0.134	12.08	
Dibenzofuran	1	0		8.53	50.59	50	20	0.8	1.727	1.747	1.17	
2,4-Dinitrotoluene	1	0		8.50	54.33	50	20	0.2	0.381	0.414	8.65	
4-Nitrophenol	1	0		8.41	48.53	50	20	0.01	0.209	0.221	2.94	
2,3,4,6-Tetrachlorophenol	1	0		8.64	51.65	50	20	0.01	0.349	0.360	3.29	
Fluorene	1	0		8.86	50.71	50	20	0.9	1.363	1.382	1.41	
4-Chlorophenyl-phenylether	1	0		8.85	50.43	50	20	0.4	0.672	0.678	0.86	
Diethylphthalate	1	0		8.72	51.72	50	20	0.01	1.277	1.321	3.44	
4-Nitroaniline	1	0		8.86	55.29	50	20	0.01	0.342	0.378	10.58	
Atrazine	1	0		9.49	52.24	50	20	0.01	0.397	0.414	4.47	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	47.37	50	20	0.01	0.126	0.120	5.25	
n-Nitrosodiphenylamine	1	0		8.96	51.47	50	20	0.01	0.622	0.640	2.94	
2,4,6-Tribromophenol	1	0	S	9.09	51.86	50	**	0.092	0.096		3.72	
1,2-Diphenylhydrazine	1	0		9.00	51.21	50	**	0.641	0.656		2.42	
4-Bromophenyl-phenylether	1	0		9.34	50.54	50	20	0.1	0.206	0.208	1.09	
Hexachlorobenzene	1	0		9.41	48.46	50	20	0.1	0.229	0.222	3.08	
N-Octadecane	1	0		9.68	55.34	50	**	0.05	0.287	0.318	10.68	
Pentachlorophenol	1	0		9.61	48.97	50	20	0.05	0.146	0.143	2.06	
Phenanthrene	1	0		9.85	49.90	50	20	0.7	1.063	1.061	0.20	
Anthracene	1	0		9.90	50.88	50	20	0.7	1.063	1.081	1.76	
Carbazole	1	0		10.07	52.47	50	20	0.01	0.962	1.010	4.93	
Di-n-butylphthalate	1	0		10.45	49.45	50	20	0.01	0.987	1.130	1.11	
Fluoranthene	1	0		11.18	52.88	50	20	0.6	1.134	1.200	5.76	
Chrysene-d12	1	0	I	12.88	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.45	52.12	50	20	0.6	1.179	1.229	4.24	
Benzidine	1	0		11.33	45.72	50	**	0.577	0.564		8.56	
Terphenyl-d14	1	0	S	11.62	26.22	25	**	0.582	0.611		4.89	
4,4'-DDE	1	0		11.57	50.17		**	0.320				
4,4'-DDD	1	0		11.96	53.69		**	0.443				
Butylbenzylphthalate	1	0		12.22	49.60	50	20	0.01	0.433	0.489	0.81	
4,4'-DDT	1	0		12.32	52.53		**	0.549				
3,3'-Dichlorobenzidine	1	0		12.84	48.20	50	20	0.01	0.375	0.399	3.59	
Benzo[a]anthracene	1	0		12.87	52.03	50	20	0.8	1.132	1.177	4.06	
Chrysene	1	0		12.91	50.14	50	20	0.7	1.104	1.107	0.27	
bis(2-Ethylhexyl)phthalate	1	0		12.91	49.86	50	20	0.01	0.590	0.677	0.28	
Perylene-d12	1	0	I	14.51	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.66	48.58	50	20	0.01	0.907	1.082	2.85	
Benzo[b]fluoranthene	1	0		14.08	54.07	50	20	0.7	1.041	1.126	8.15	
Benzo[k]fluoranthene	1	0		14.12	51.57	50	20	0.7	1.063	1.097	3.15	
Benzo[a]pyrene	1	0		14.45	54.51	50	20	0.7	0.936	1.020	9.02	
Indeno[1,2,3-cd]pyrene	1	0		15.87	54.01	50	20	0.5	1.157	1.249	8.02	
Dibenzo[a,h]anthracene	1	0		15.89	53.77	50	20	0.4	0.966	1.039	7.54	
Benzo[g,h,i]perylene	1	0		16.27	53.56	50	20	0.5	0.954	1.022	7.12	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 8:27:00 AData File: 9M101545.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.906		0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.681		0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 3 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 2:57:00 PData File: 7M109898.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.70	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.75	47.35	50	**	1.035	0.980	0.980	5.30	
Pyridine	1	0		3.23	50.92	50	**	2.335	2.378	2.378	1.84	
N-Nitrosodimethylamine	1	0		3.16	56.84	50	**	1.466	1.667	1.667	13.68	
2-Fluorophenol	1	0	S	4.73	51.07	50	**	2.355	2.406	2.406	2.14	
Benzaldehyde	1	0		5.52	51.88	50	20	0.01	2.298	2.385	3.76	
Aniline	1	0		5.62	50.77	50	**	3.788	3.846	3.846	1.54	
Pentachloroethane	1	0		5.66	49.88	50	**	0.05	0.836	0.834	0.23	
bis(2-Chloroethyl)ether	1	0		5.67	54.14	50	20	0.7	2.509	2.654	8.28	
Phenol-d5	1	0	S	5.59	54.29	50	**	2.830	3.073	3.073	8.59	
Phenol	1	0		5.60	54.00	50	20	0.8	3.460	3.737	8.00	
2-Chlorophenol	1	0		5.72	50.77	50	20	0.8	2.749	2.792	1.54	
N-Decane	1	0		5.76	57.56	50	**	0.05	1.917	2.207	15.11	
1,3-Dichlorobenzene	1	0		5.85	48.88	50	**	2.994	2.927	2.927	2.25	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	51.31	50	20	1.484	1.523	1.523	2.62	
1,2-Dichlorobenzene	1	0		6.04	50.70	50	**	1.410	1.429	1.429	1.40	
Benzyl alcohol	1	0		6.01	46.64	50	**	0.837	0.781	0.781	6.72	
bis(2-chloroisopropyl)ether	1	0		6.12	63.85	50	20	0.01	1.103	1.409	27.69	C1
2-Methylphenol	1	0		6.10	55.80	50	20	0.7	1.172	1.308	11.61	
Acetophenone	1	0		6.22	55.06	50	20	0.01	1.786	1.967	10.12	
Hexachloroethane	1	0		6.31	51.37	50	20	0.3	0.571	0.587	2.73	
N-Nitroso-di-n-propylamine	1	0		6.22	58.08	50	20	0.5	0.843	0.979	16.16	
3&4-Methylphenol	1	0		6.22	54.50	50	20	1.200	1.308	1.308	8.99	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.64	25	**	0.159	0.163	0.163	2.54	
Nitrobenzene	1	0		6.36	53.32	50	20	0.2	0.343	0.365	6.64	
Isophorone	1	0		6.54	54.29	50	20	0.4	0.627	0.681	8.58	
2-Nitrophenol	1	0		6.61	51.69	50	20	0.1	0.195	0.202	3.38	
2,4-Dimethylphenol	1	0		6.63	49.52	50	20	0.2	0.320	0.317	0.95	
Benzoic Acid	1	0		6.69	28.00	50	**	0.233	0.120	0.120	44.00	
bis(2-Chloroethoxy)methane	1	0		6.70	53.75	50	20	0.3	0.383	0.412	7.49	
2,4-Dichlorophenol	1	0		6.79	48.30	50	20	0.2	0.306	0.295	3.40	
1,2,4-Trichlorobenzene	1	0		6.85	47.17	50	**	0.334	0.315	0.315	5.66	
Naphthalene	1	0		6.92	50.19	50	20	0.7	1.040	1.044	0.39	
4-Chloroaniline	1	0		6.95	49.95	50	20	0.01	0.418	0.418	0.11	
Hexachlorobutadiene	1	0		7.01	46.28	50	20	0.01	0.188	0.174	7.45	
Caprolactam	1	0		7.22	53.13	50	20	0.01	0.118	0.126	6.25	
4-Chloro-3-methylphenol	1	0		7.32	49.67	50	20	0.2	0.308	0.306	0.66	
2-Methylnaphthalene	1	0		7.45	50.74	50	**	0.4	0.702	0.712	1.48	
1-Methylnaphthalene	1	0		7.53	50.89	50	**	0.4	0.662	0.674	1.77	
Methylnaphthalenes	1	0		7.53	101.67	50	**			1.387	103.33	
1,1'-Biphenyl	1	0		7.83	50.24	50	20	0.01	0.825	0.829	0.47	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.59	49.30	50	20	0.01	0.627	0.619	1.39	
Hexachlorocyclopentadiene	1	0		7.58	32.70	50	20	0.05	0.351	0.230	34.60	C1
2,4,6-Trichlorophenol	1	0		7.68	48.79	50	20	0.2	0.417	0.407	2.42	
2,4,5-Trichlorophenol	1	0		7.72	49.99	50	20	0.2	0.434	0.434	0.03	
2-Fluorobiphenyl	1	0	S	7.75	24.80	25	**	1.334	1.323	1.323	0.81	
2-Chloronaphthalene	1	0		7.86	50.95	50	20	0.8	1.201	1.223	1.91	
1,4-Dimethylnaphthalene	1	0		8.14	52.31	50	**	0.879	0.920	0.920	4.63	
Dimethylnaphthalenes	1	0		8.14	52.31	50	20			0.920	4.63	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 2:57:00 PData File: 7M109898.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	51.30	50	**		0.859	0.881	2.60	
2-Nitroaniline	1	0		7.93	57.17	50	20	0.01	0.367	0.419	14.35	
Coumarin	1	0		8.12	53.29		**		0.454			
Acenaphthylene	1	0		8.22	51.69	50	20	0.9	1.762	1.821	3.37	
Dimethylphthalate	1	0		8.08	51.23	50	20	0.01	1.380	1.414	2.47	
2,6-Dinitrotoluene	1	0		8.14	53.43	50	20	0.2	0.313	0.334	6.86	
Acenaphthene	1	0		8.37	51.78	50	20	0.9	1.171	1.213	3.56	
3-Nitroaniline	1	0		8.29	53.18	50	20	0.01	0.349	0.372	6.36	
2,4-Dinitrophenol	1	0		8.39	50.83	50	20	0.2	0.184	0.187	1.65	
Dibenzofuran	1	0		8.53	50.63	50	20	0.8	1.723	1.745	1.27	
2,4-Dinitrotoluene	1	0		8.50	52.93	50	20	0.2	0.433	0.458	5.86	
4-Nitrophenol	1	0		8.43	44.42	50	20	0.01	0.248	0.220	11.16	
2,3,4,6-Tetrachlorophenol	1	0		8.64	49.74	50	20	0.01	0.376	0.374	0.52	
Fluorene	1	0		8.86	52.55	50	20	0.9	1.381	1.451	5.10	
4-Chlorophenyl-phenylether	1	0		8.84	50.22	50	20	0.4	0.694	0.697	0.43	
Diethylphthalate	1	0		8.72	51.76	50	20	0.01	1.375	1.423	3.51	
4-Nitroaniline	1	0		8.87	54.33	50	20	0.01	0.371	0.403	8.66	
Atrazine	1	0		9.50	49.65	50	20	0.01	0.455	0.452	0.70	
Phenanthrene-d10	1	0	I	9.83	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.90	52.83	50	20	0.01	0.133	0.141	5.66	
n-Nitrosodiphenylamine	1	0		8.96	51.79	50	20	0.01	0.622	0.644	3.58	
2,4,6-Tribromophenol	1	0	S	9.10	48.77	50	**		0.103	0.101	2.46	
1,2-Diphenylhydrazine	1	0		9.00	55.89	50	**		0.652	0.729	11.77	
4-Bromophenyl-phenylether	1	0		9.34	49.37	50	20	0.1	0.219	0.217	1.26	
Hexachlorobenzene	1	0		9.41	48.89	50	20	0.1	0.234	0.229	2.22	
N-Octadecane	1	0		9.68	62.13	50	**	0.05	0.299	0.372	24.27	
Pentachlorophenol	1	0		9.61	40.03	50	20	0.05	0.154	0.124	19.94	
Phenanthrene	1	0		9.85	51.01	50	20	0.7	1.051	1.072	2.01	
Anthracene	1	0		9.91	51.24	50	20	0.7	1.079	1.106	2.48	
Carbazole	1	0		10.08	52.38	50	20	0.01	0.990	1.037	4.77	
Di-n-butylphthalate	1	0		10.45	52.47	50	20	0.01	1.212	1.272	4.95	
Fluoranthene	1	0		11.19	50.54	50	20	0.6	1.193	1.205	1.07	
Chrysene-d12	1	0	I	12.90	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.46	52.49	50	20	0.6	1.247	1.309	4.98	
Benzidine	1	0		11.34	37.81	50	**		0.737	0.558	24.38	
Terphenyl-d14	1	0	S	11.64	25.60	25	**		0.637	0.652	2.38	
4,4'-DDE	1	0		11.58	50.43		**		0.357			
4,4'-DDD	1	0		11.98	52.32		**		0.515			
Butylbenzylphthalate	1	0		12.23	53.83	50	20	0.01	0.564	0.607	7.66	
4,4'-DDT	1	0		12.33	54.21		**		0.581			
3,3'-Dichlorobenzidine	1	0		12.86	50.72	50	20	0.01	0.457	0.464	1.45	
Benzo[a]anthracene	1	0		12.89	51.12	50	20	0.8	1.173	1.200	2.25	
Chrysene	1	0		12.93	52.82	50	20	0.7	1.086	1.147	5.65	
bis(2-Ethylhexyl)phthalate	1	0		12.92	55.06	50	20	0.01	0.757	0.833	10.13	
Perylene-d12	1	0	I	14.55	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.67	54.24	50	20	0.01	1.277	1.386	8.48	
Benzo[b]fluoranthene	1	0		14.11	50.94	50	20	0.7	1.130	1.151	1.87	
Benzo[k]fluoranthene	1	0		14.14	50.90	50	20	0.7	1.059	1.078	1.80	
Benzo[a]pyrene	1	0		14.49	51.04	50	20	0.7	1.003	1.024	2.07	
Indeno[1,2,3-cd]pyrene	1	0		15.95	51.99	50	20	0.5	1.122	1.167	3.97	
Dibenzo[a,h]anthracene	1	0		15.97	53.27	50	20	0.4	0.937	0.999	6.54	
Benzo[g,h,i]perylene	1	0		16.35	52.29	50	20	0.5	0.933	0.976	4.58	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/6/2020 2:57:00 PData File: 7M109898.D  
Method: EPA 8270E

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.682		0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.879		0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 3 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 7M109440.D

Method: EPA 8270E

Analysis Date/Time: 09/17/20 13:20

Lab File ID: CAL BNA@50PPM

02  
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Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
73342	2.70	143111	5.90	535871	6.90	299982	8.35	591079	9.83	566863	12.89	606663	14.54
Eval File Area Limit:													
36671-146684		71556-286222		267936-1071742		149991-599964		295540-1182158		283432-1133726		303332-1213326	
Eval File Rt Limit:													
2-2-3-2		5-4-6-4		6-4-7-4		7-85-8-85		9-33-10-33		12-39-13-39		14-04-15-04	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M109432.D	CAL BNA@2PPM	69531	2.70	148428	5.90	561422	6.90	316478	8.35	606550	9.82	573487	12.89
7M109433.D	CAL BNA@10PPM	64785	2.70	134629	5.89	507069	6.90	279139	8.35	539654	9.82	514810	12.89
7M109434.D	CAL BNA@196PPM	67077	2.70	128427	5.90	488036	6.91	277961	8.35	551065	9.83	511721	12.90
7M109435.D	CAL BNA@160PPM	67760	2.70	136063	5.90	515749	6.91	291779	8.35	586013	9.83	545173	12.90
7M109436.D	CAL BNA@120PPM	69954	2.70	139227	5.90	527795	6.90	296088	8.35	589714	9.83	559462	12.90
7M109437.D	CAL BNA@80PPM	70857	2.70	145864	5.90	544080	6.91	297856	8.36	591364	9.83	573376	12.89
7M109438.D	CAL BNA@20PPM	72238	2.70	147645	5.90	554057	6.90	303248	8.35	586639	9.82	574202	12.89
7M109439.D	CAL BNA@0.5PPM	76478	2.70	159729	5.89	603591	6.91	332270	8.35	642708	9.83	623159	12.89
7M109440.D	CAL BNA@50PPM	73342	2.70	143111	5.90	535871	6.90	299982	8.35	591079	9.83	566863	12.89
7M109441.D	ICV BNA@50PPM	67053	2.70	134202	5.90	503057	6.90	276686	8.35	543669	9.83	533914	12.89

11 =	1,4-Dioxane-d8(I/N/T)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.



**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 9M101321.D

Analysis Date/Time: 09/17/20 13:22

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

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Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53	
Eval File Area Limit:	26070-104282	48526-194106	184986-739944	96780-387120	187272-749086	187988-751954	193707-774828							
Eval File Rt Limit:	2.2-3.2	5.4-6.4	6.41-7.41	7.85-8.85	9.32-10.32	12.39-13.39	14.03-15.03							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT		
9M101313.D	CAL BNA@10PPM	51565	2.70	94603	5.90	357644	6.91	186206	8.35	356949	9.82	362365	12.89	363176	14.52
9M101314.D	CAL BNA@2PPM	57993	2.71	109516	5.90	415864	6.91	224715	8.35	427849	9.82	428070	12.89	441726	14.52
9M101315.D	CAL BNA@196PPM	54800	2.71	98295	5.91	370914	6.91	198313	8.35	385348	9.83	372874	12.90	404382	14.54
9M101316.D	CAL BNA@160PPM	54281	2.70	99671	5.91	380119	6.91	201097	8.35	386668	9.82	376869	12.90	404156	14.54
9M101317.D	CAL BNA@120PPM	53716	2.70	100690	5.90	388633	6.91	204304	8.35	396990	9.82	389040	12.90	411181	14.53
9M101318.D	CAL BNA@80PPM	50413	2.70	96900	5.90	367645	6.91	189022	8.35	364874	9.82	368614	12.89	384858	14.53
9M101319.D	CAL BNA@20PPM	50283	2.70	98086	5.90	373409	6.91	195446	8.35	372145	9.82	381268	12.89	390149	14.53
9M101320.D	CAL BNA@0.5PPM	54868	2.70	105764	5.90	401840	6.91	207520	8.35	400507	9.82	398325	12.89	412513	14.52
9M101321.D	CAL BNA@50PPM	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53
9M101322.D	ICV BNA@50PPM	46870	2.70	89922	5.90	342712	6.91	179589	8.35	348639	9.82	350075	12.89	359279	14.54
9M101323.D	SMB88017	49284	2.68	94546	5.90	357728	6.91	185930	8.35	361831	9.82	347985	12.89	341541	14.52
9M101324.D	SMB88018	45386	2.68	84733	5.90	321859	6.91	165009	8.35	323960	9.82	309160	12.88	301351	14.54
9M101326.D	88018	51046	2.68	92137	5.91	348476	6.93	179935	8.38	346012	9.84	345538	12.91	349749	14.58

11 =	1,4-Dioxane-d&(NTT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 9M101545.D

Method: EPA 8270E

Analysis Date/Time: 10/06/20 08:27

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	
64846	2.71	120477	5.90	462914	6.91	240589	8.35	465052	9.82	461393	12.88	480646	14.51	
Eval File Area Limit:	32423-129692	60238-240954	231457-925828	120294-481178	232826-930104	230696-922786	240323-961292							
Eval File Rt Limit:	2.21-3.21	5.4-6.4	6.41-7.41	7.85-8.85	9.32-10.32	12.38-13.38	14.01-15.01							

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101546.D	OMB88168(MS)	49839	2.71	87981	5.90	333569	6.91	170902	8.35	325322	9.82	322612	12.88
9M101547.D	OMB88168	52355	2.71	95122	5.90	362991	6.91	189970	8.34	366889	9.82	339498	12.88
9M101548.D	SMB88132(MS)	45157	2.69	78129	5.90	297200	6.91	152191	8.35	292441	9.82	288810	12.88
9M101549.D	SMB88132	48355	2.68	86785	5.90	328473	6.91	168631	8.34	326648	9.82	304927	12.88
9M101550.D	AD19539-011	67682	2.70	125964	5.90	485597	6.91	263417	8.34	512963	9.82	505973	12.88
9M101551.D	AD19595-009	57576	2.69	105065	5.90	405724	6.91	212977	8.34	414463	9.82	415843	12.88
9M101552.D	SMB88133	54457	2.69	99988	5.90	382461	6.91	202399	8.34	389770	9.82	369510	12.88
9M101553.D	SMB88133(MS)	55325	2.69	100977	5.90	384336	6.91	201449	8.35	383763	9.82	383435	12.88
9M101554.D	SMB88095(MS)	51114	2.69	96671	5.90	368059	6.91	191656	8.35	363406	9.82	363417	12.88
9M101555.D	SMB88095	46322	2.69	87814	5.90	336070	6.91	174862	8.34	338431	9.82	318746	12.88
9M101556.D	AD19501-003(MS)	52179	2.70	96966	5.90	367910	6.91	192298	8.35	365232	9.82	364927	12.88
9M101557.D	AD19501-003(MSD)	45686	2.69	84569	5.90	321373	6.91	167660	8.34	318901	9.82	318522	12.88

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM 8**

Internal Standard Areas

Evaluation Std Data File: 7M109898.D

Analysis Date/Time: 10/06/20 14:57

Lab File ID: CAL BNA@50PPM

Method: EPA 8270E

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Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
94005	2.70	183010	5.90	718228	6.90	388948	8.35	760702	9.83	689073	12.90	703473	14.55	
Eval File Area Limit:	47002-188010		91505-366020		359114-1436456		194474-777896		380351-1521404		344536-1378146		351736-1406946	
Eval File Rt Limit:	2.2-3.2		5.4-6.4		6.4-7.4		7.85-8.85		9.33-10.33		12.4-13.4		14.05-15.05	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M109899.D	SMB88132	68220	2.68	130338	5.90	499541	6.90	265133	8.35	504806	9.83	441795	12.90	417396	14.54
7M109900.D	OMB88168	76887	2.70	143883	5.89	560845	6.90	300163	8.34	570525	9.82	497748	12.89	470539	14.54
7M109901.D	AD19542-001	79992	2.70	152722	5.89	564596	6.90	278229	8.34	479970	9.82	336510	12.93	236863	14.67
7M109902.D	AD19542-001(MS)	67252	2.71	135682	5.90	504512	6.90	268765	8.34	457625	9.83	310347	12.93	202367	14.67
7M109903.D	AD19542-001(MSD)	64249	2.71	132842	5.90	499846	6.90	246785	8.35	456176	9.83	319636	12.93	206875	14.67
7M109904.D	AD19587-007(5X)	82517	2.70	172473	5.89	650086	6.90	328272	8.34	604189	9.83	590381	12.91	626947	14.58
7M109905.D	AD19539-007	76553	2.68	167480	5.90	626910	6.90	322446	8.34	588763	9.82	541619	12.89	535684	14.54
7M109906.D	AD19539-013	83622	2.69	183905	5.90	693603	6.90	369590	8.34	643444	9.82	551971	12.89	521804	14.54
7M109907.D	AD19539-014	105751	2.69	151028	5.90	532285	6.91	303559	8.35	570386	9.83	507738	12.92	503912	14.56
7M109908.D	AD19539-017	101191	2.69	149707	5.90	508898	6.91	302802	8.35	548776	9.83	496028	12.92	487309	14.57
7M109909.D	AD19595-004	81461	2.69	179484	5.89	665487	6.90	337148	8.34	620533	9.83	508677	12.89	506697	14.54
7M109910.D	AD19562-002	93013	2.69	198969	5.90	765551	6.90	380815	8.34	717810	9.83	574873	12.90	557951	14.54
7M109911.D	AD19562-004(MS:AD)	80852	2.69	171699	5.89	641716	6.90	330943	8.35	629478	9.83	518455	12.90	497161	14.54
7M109912.D	AD19562-006(MSD:A)	96287	2.69	196004	5.89	746660	6.90	386184	8.35	741528	9.83	598713	12.90	586228	14.54
7M109913.D	AD19562-008	88043	2.69	186620	5.89	705132	6.90	350030	8.34	664610	9.82	532877	12.89	510346	14.54
7M109914.D	AD19551-001	98497	2.69	200885	5.89	769915	6.90	400901	8.34	742886	9.82	612338	12.90	596303	14.54
7M109915.D	AD19599-001	84276	2.70	173873	5.89	668725	6.90	340109	8.34	601547	9.82	513702	12.90	511323	14.55
7M109916.D	AD19599-002	87073	2.69	183732	5.90	699488	6.90	360055	8.34	632224	9.82	534689	12.90	539286	14.55
7M109917.D	AD19582-001(3X)	85485	2.71	176667	5.90	672928	6.90	338161	8.34	597833	9.82	489224	12.90	505912	14.54
7M109918.D	AD19482-005(3X)	88055	2.70	172991	5.90	585503	6.90	360825	8.35	603105	9.84	542161	12.90	516488	14.54
7M109919.D	AD19517-002(5X)	95739	2.71	200667	5.89	756987	6.90	369609	8.34	684098	9.83	563268	12.90	569464	14.55
7M109920.D	AD19517-004(5X)	92014	2.70	184927	5.90	656254	6.90	355450	8.35	673960	9.83	573464	12.90	570404	14.55
7M109921.D	AD19517-001(5X)	93446	2.70	201572	5.89	772949	6.90	393953	8.34	696469	9.83	545084	12.90	553081	14.54
7M109922.D	AD19517-003(10X)	85767	2.72	186558	5.90	669756	6.90	350574	8.34	602068	9.82	499148	12.90	496695	14.55
7M109923.D	AD19551-002(5X)	91790	2.71	202054	5.90	771652	6.90	388928	8.34	675041	9.83	552723	12.90	549175	14.55

11 =	1,4-Dioxane-d8(N17)	14 =	Aceanthrene-d10	17 =	Perylene-d12	625/8270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			524/8260	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration =5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## **TCLP Base Neutral/Acid Extractable Data**

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19595-013(T)

Client Id: HSI-WC-NH

Data File: 9M101580.D

Analysis Date: 10/08/20 10:03

Date Rec/Extracted: 10/02/20-10/07/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Aqueous

Initial Vol: 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

## Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.0083	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 569908

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

SampleID : AD19595-013(T)  
 Data File: 9M101580.D  
 Acq On : 10/ 8/20 10:03

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 5  
 Misc : A,BNA

Qt Meth : 9M\_0917.M  
 Qt On : 10/08/20 10:42  
 Qt Upd On: 09/29/20 13:20

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-08-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
7) 1,4-Dioxane-d8 (INT)	2.713	96	45971	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.895	152	83150	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	314933	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	164226	40.00	ng	0.00
77) Phenanthrene-d10	9.813	188	316305	40.00	ng	-0.01
91) Chrysene-d12	12.877	240	306957	40.00	ng	-0.01
103) Perylene-d12	14.507	264	310670	40.00	ng	-0.02
<b>System Monitoring Compounds</b>						
11) 2-Fluorophenol	4.701	112	225992	93.98	ng	0.00
Spiked Amount	100.000		Recovery	=	93.98%	
16) Phenol-d5	5.572	99	269012	92.48	ng	0.00
Spiked Amount	100.000		Recovery	=	92.48%	
32) Nitrobenzene-d5	6.342	128	61277	54.09	ng	0.00
Spiked Amount	50.000		Recovery	=	108.18%	
55) 2-Fluorobiphenyl	7.748	172	291522	51.87	ng	0.00
Spiked Amount	50.000		Recovery	=	103.74%	
80) 2,4,6-Tribromophenol	9.089	330	82880	113.78	ng	0.00
Spiked Amount	100.000		Recovery	=	113.78%	
94) Terphenyl-d14	11.624	244	274320	61.40	ng	-0.01
Spiked Amount	50.000		Recovery	=	122.80%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

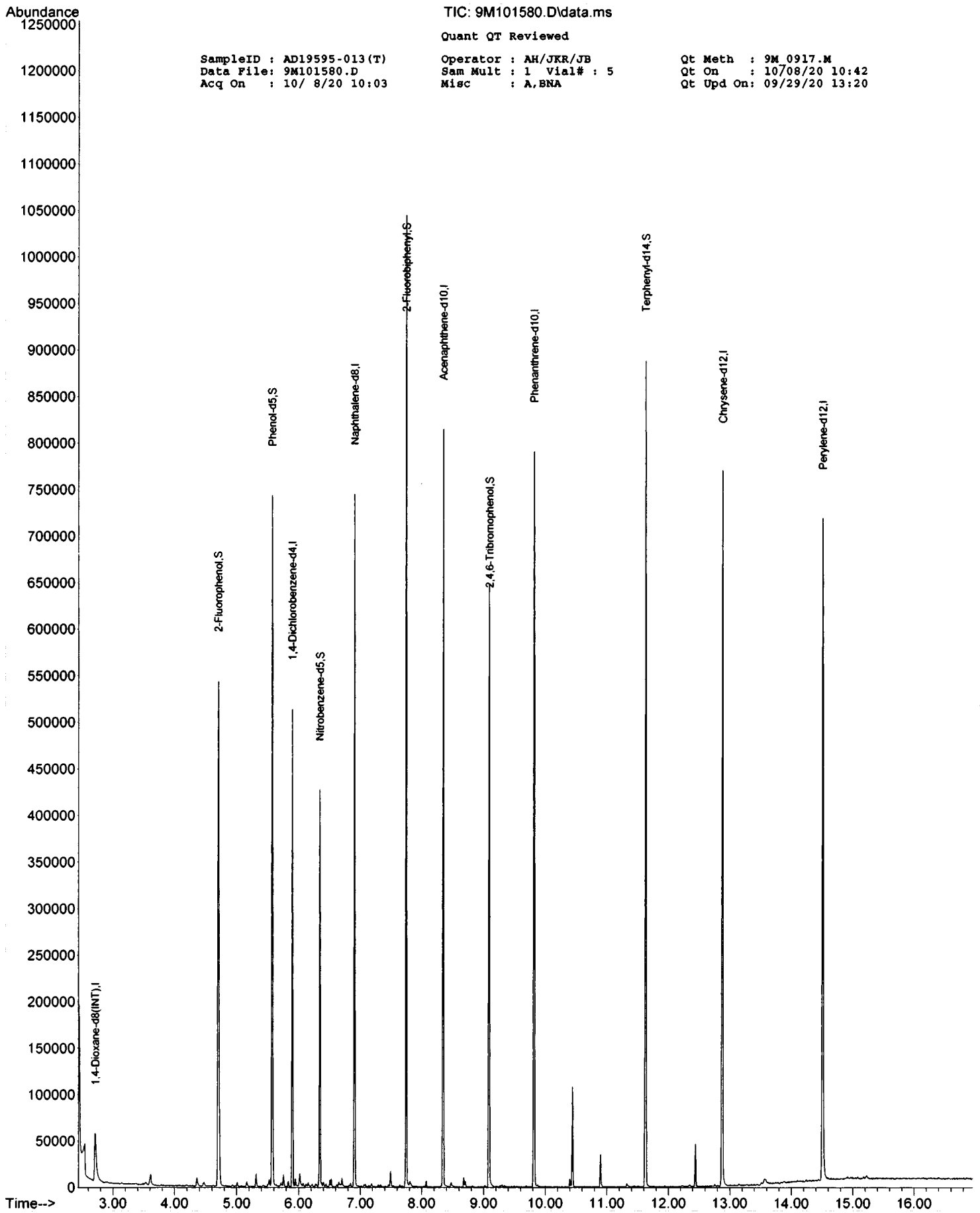
TIC: 9M101580.D\data.ms

Quant QT Reviewed

SampleID : AD19595-013(T)  
Data File: 9M101580.D  
Acq On : 10/ 8/20 10:03

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 5  
Misc : A,BNA

Qt Meth : 9M 0917.M  
Qt On : 10/08/20 10:42  
Qt Upd On: 09/29/20 13:20



**Form1**

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AD19595-014(T)

Client Id: HSI-WC-H

Data File: 9M101583.D

Analysis Date: 10/08/20 11:13

Date Rec/Extracted: 10/02/20-10/07/20

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E

Matrix: Aqueous

Initial Vol: 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

**Units: mg/L**

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
<b>95-48-7</b>	<b>2-Methylphenol</b>	<b>0.0020</b>	<b>0.0069</b>	87-86-5	Pentachlorophenol	0.040	U
<b>106-44-5</b>	<b>3&amp;4-Methylphenol</b>	<b>0.0020</b>	<b>0.012</b>	110-86-1	Pyridine	0.0083	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 569908

**Total Target Concentration 0.019**

ColumnID:(^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*



SampleID : AD19595-014(T)  
 Data File: 9M101583.D  
 Acq On : 10/ 8/20 11:13

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 7  
 Misc : A,BNA

Qt Meth : 9M\_0917.M  
 Qt On : 10/08/20 11:32  
 Qt Upd On: 09/29/20 13:20

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-08-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.713	96	52105	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.895	152	89253	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	337358	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	175709	40.00	ng	0.00
77) Phenanthrene-d10	9.813	188	339284	40.00	ng	-0.01
91) Chrysene-d12	12.877	240	331755	40.00	ng	-0.01
103) Perylene-d12	14.507	264	333322	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.701	112	240746	88.33	ng	0.00
Spiked Amount 100.000			Recovery =	88.33%		
16) Phenol-d5	5.572	99	290440	88.10	ng	0.00
Spiked Amount 100.000			Recovery =	88.10%		
32) Nitrobenzene-d5	6.342	128	67949	55.99	ng	0.00
Spiked Amount 50.000			Recovery =	111.98%		
55) 2-Fluorobiphenyl	7.748	172	320141	53.24	ng	0.00
Spiked Amount 50.000			Recovery =	106.48%		
80) 2,4,6-Tribromophenol	9.089	330	91570	117.20	ng	0.00
Spiked Amount 100.000			Recovery =	117.20%		
94) Terphenyl-d14	11.624	244	294900	61.07	ng	-0.01
Spiked Amount 50.000			Recovery =	122.14%		
Target Compounds						
26) 2-Methylphenol	6.095	108	4422	1.7127	ng	95
30) 3&4-Methylphenol	6.213	108	7603m	3.0006	ng	
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

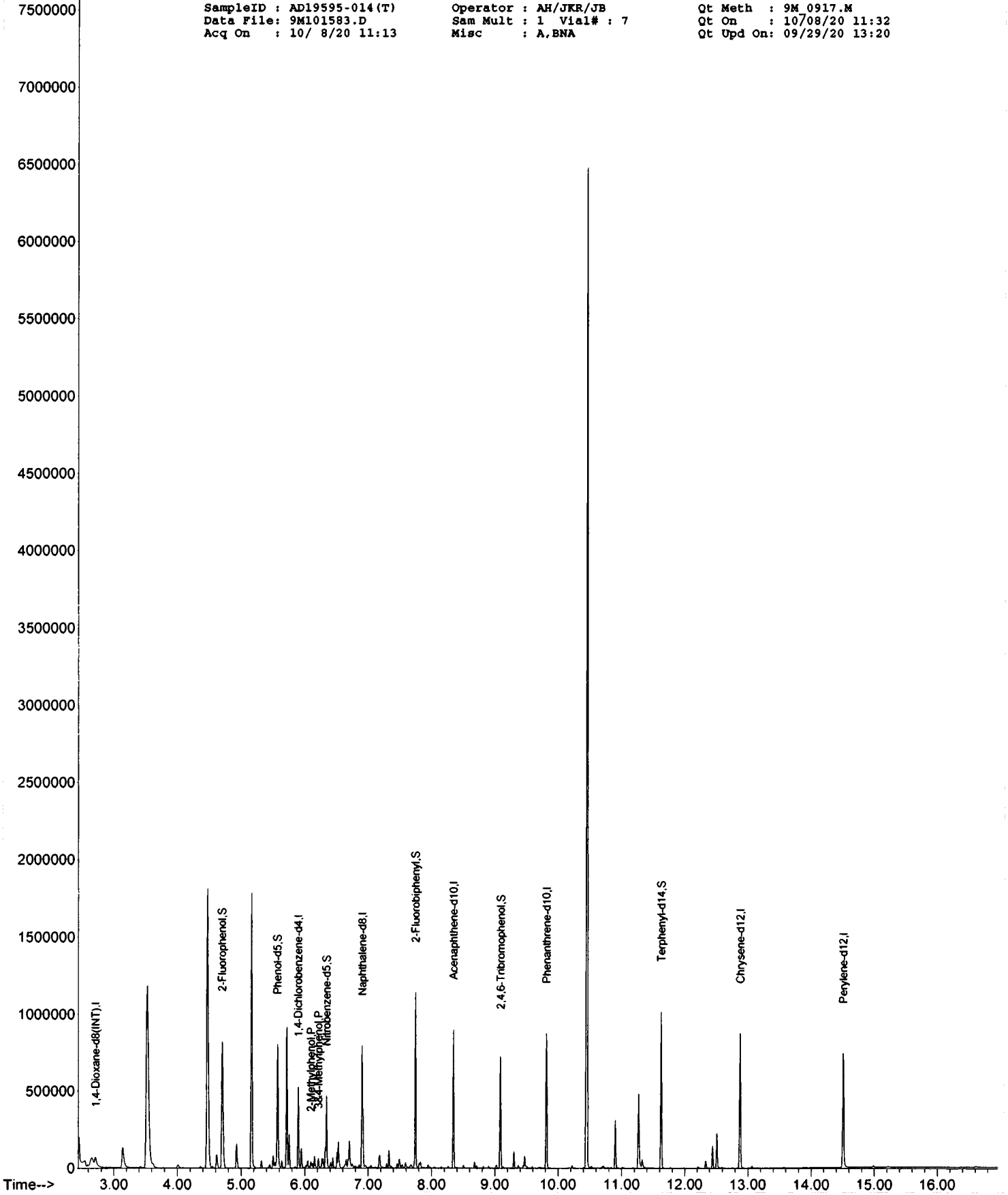
TIC: 9M101583.D\data.ms

Quant QT Reviewed

SampleID : AD19595-014(T)  
Data File: 9M101583.D  
Acq On : 10/ 8/20 11:13

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 7  
Misc : A,BNA

Qt Meth : 9M 0917.M  
Qt On : 10/08/20 11:32  
Qt Upd On: 09/29/20 13:20



## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB88180  
 Client Id:  
 Data File: 9M101575.D  
 Analysis Date: 10/07/20 15:57  
 Date Rec/Extracted: NA-10/07/20  
 Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270E  
 Matrix: Aqueous  
 Initial Vol: 1000ml  
 Final Vol: 1ml  
 Dilution: 1  
 Solids: 0

Units: mg/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0020	U	87-68-3	Hexachlorobutadiene	0.0020	U
88-06-2	2,4,6-Trichlorophenol	0.0020	U	67-72-1	Hexachloroethane	0.0020	U
121-14-2	2,4-Dinitrotoluene	0.0020	U	98-95-3	Nitrobenzene	0.0020	U
95-48-7	2-Methylphenol	0.00050	U	87-86-5	Pentachlorophenol	0.010	U
106-44-5	3&4-Methylphenol	0.00050	U	110-86-1	Pyridine	0.0021	U
118-74-1	Hexachlorobenzene	0.0020	U				

Worksheet #: 569908

**Total Target Concentration** 0

ColumnID:(^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

SampleID : WMB88180  
 Data File: 9M101575.D  
 Acq On : 10/ 7/20 15:57

Operator : AH/JKR/JB  
 Sam Mult : 1 Vial# : 17  
 Misc : A,BNA

Qt Meth : 9M\_0917.M  
 Qt On : 10/08/20 07:23  
 Qt Upd On: 09/29/20 13:20

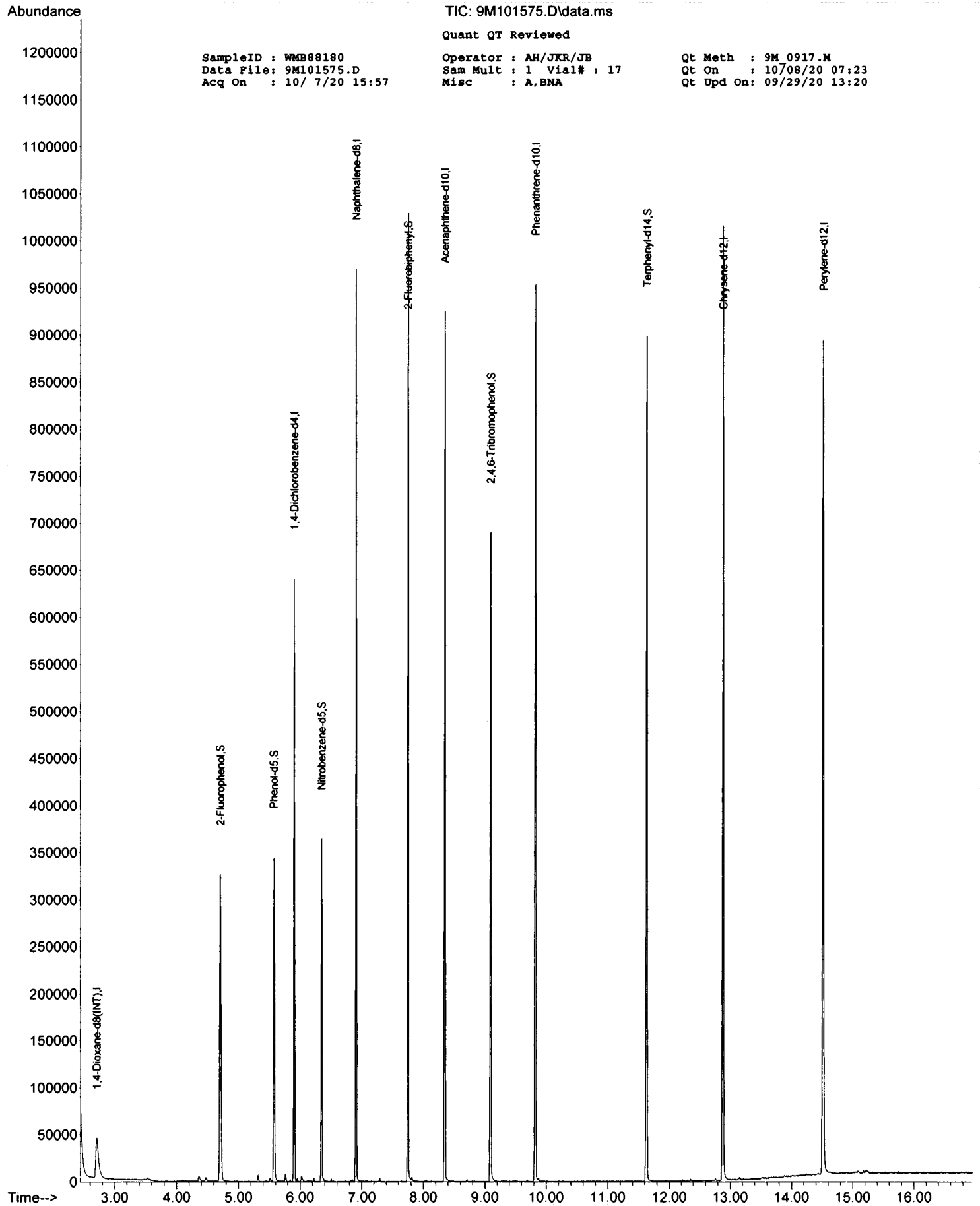
Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-07-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.707	96	56480	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.901	152	103213	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	386307	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	201535	40.00	ng	0.00
77) Phenanthrene-d10	9.819	188	384934	40.00	ng	0.00
91) Chrysene-d12	12.877	240	369425	40.00	ng	-0.01
103) Perylene-d12	14.512	264	373991	40.00	ng	-0.02

System Monitoring Compounds						
11) 2-Fluorophenol	4.707	112	156014	52.81	ng	0.00
Spiked Amount	100.000		Recovery	=	52.81%	
16) Phenol-d5	5.572	99	139345	38.99	ng	0.00
Spiked Amount	100.000		Recovery	=	38.99%	
32) Nitrobenzene-d5	6.348	128	61693	44.40	ng	0.00
Spiked Amount	50.000		Recovery	=	88.80%	
55) 2-Fluorobiphenyl	7.748	172	300936	43.64	ng	0.00
Spiked Amount	50.000		Recovery	=	87.28%	
80) 2,4,6-Tribromophenol	9.089	330	84426	95.24	ng	0.00
Spiked Amount	100.000		Recovery	=	95.24%	
94) Terphenyl-d14	11.630	244	286422	53.27	ng	0.00
Spiked Amount	50.000		Recovery	=	106.54%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



TIC: 9M101575.D\data.ms

Quant QT Reviewed

SampleID : WMB88180  
Data File: 9M101575.D  
Acq On : 10/ 7/20 15:57

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 17  
Misc : A,BNA

Qt Meth : 9M 0917.M  
Qt On : 10/08/20 07:23  
Qt Upd On: 09/29/20 13:20

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: EF-1-V-335534(10/06)

Method: EPA 8270E

Client Id:

Matrix: Aqueous

Data File: 9M101585.D

Initial Vol: 250ml

Analysis Date: 10/08/20 12:01

Final Vol: 1ml

Date Rec/Extracted: NA-10/07/20

Dilution: 1

Column: DB-5MS 30M 0.250mm ID 0.25um film

Solids: 0

## Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.0083	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 569908

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**R - Retention Time Out**B - Indicates the analyte was found in the blank as well as in the sample.**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

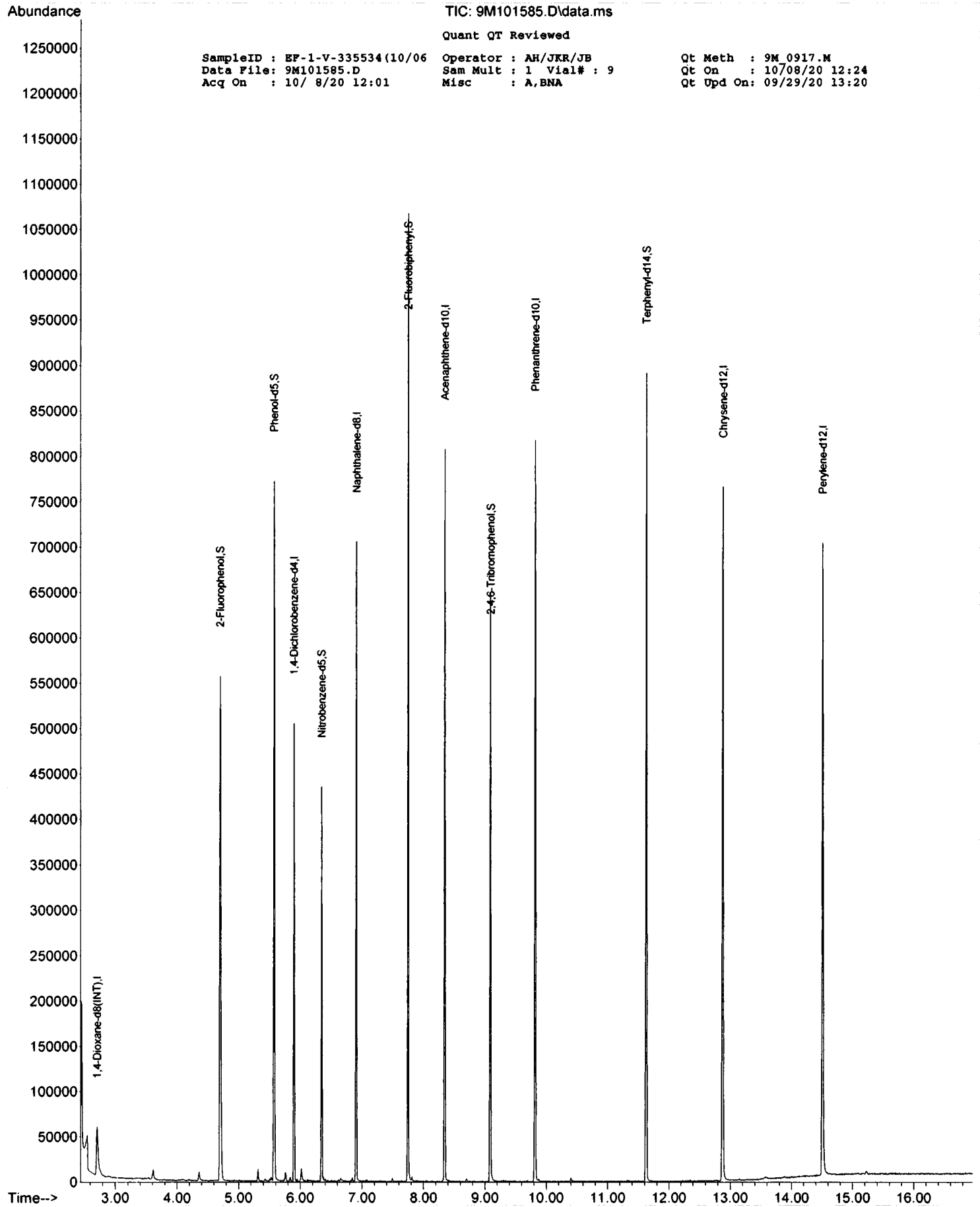
SampleID : EF-1-V-335534(10/06 Operator : AH/JKR/JB Qt Meth : 9M\_0917.M  
 Data File: 9M101585.D Sam Mult : 1 Vial# : 9 Qt On : 10/08/20 12:24  
 Acq On : 10/ 8/20 12:01 Misc : A,BNA Qt Upd On: 09/29/20 13:20

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-08-20\  
 Qt Path : G:\GCMSDATA\2020\GCMS\_9\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.713	96	45682	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.895	152	83570	40.00	ng	0.00
31) Naphthalene-d8	6.907	136	315648	40.00	ng	0.00
50) Acenaphthene-d10	8.342	164	162157	40.00	ng	0.00
77) Phenanthrene-d10	9.813	188	313887	40.00	ng	-0.01
91) Chrysene-d12	12.877	240	299345	40.00	ng	-0.01
103) Perylene-d12	14.507	264	299570	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.701	112	231120	96.72	ng	0.00
Spiked Amount	100.000		Recovery	=	96.72%	
16) Phenol-d5	5.572	99	278856	96.47	ng	0.00
Spiked Amount	100.000		Recovery	=	96.47%	
32) Nitrobenzene-d5	6.342	128	62251	54.83	ng	0.00
Spiked Amount	50.000		Recovery	=	109.66%	
55) 2-Fluorobiphenyl	7.748	172	298276	53.75	ng	0.00
Spiked Amount	50.000		Recovery	=	107.50%	
80) 2,4,6-Tribromophenol	9.089	330	81512	112.77	ng	0.00
Spiked Amount	100.000		Recovery	=	112.77%	
94) Terphenyl-d14	11.624	244	271329	62.27	ng	-0.01
Spiked Amount	50.000		Recovery	=	124.54%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



TIC: 9M101585.D\data.ms

Quant QT Reviewed

SampleID : EP-1-V-335534(10/06  
Data File: 9M101585.D  
Acq On : 10/ 8/20 12:01

Operator : AH/JKR/JB  
Sam Mult : 1 Vial# : 9  
Misc : A,BNA

Qt Meth : 9M\_0917.M  
Qt On : 10/08/20 12:24  
Qt Upd On: 09/29/20 13:20



## FORM2

Surrogate Recovery

Method: EPA 8270E

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
9M101575.D	WMB88180	A	10/07/20 15:57	1		53	39	89	87	95	107
9M101585.D	DEF-1-V-335534(10/06)	A	10/08/20 12:01	1		97	96	110	108	113	125
9M101580.D	DAD19595-013(T)	A	10/08/20 10:03	1		94	92	108	104	114	123
9M101583.D	DAD19595-014(T)	A	10/08/20 11:13	1		88	88	112	106	117	122
5M114533.D	WMB88180(MS)	A	10/07/20 15:10	1		59	44	100	96	114	108
9M101572.D	DAD19542-001(T)	A	10/07/20 14:46	1		86	75	111	114	122	122
9M101593.D	DAD19542-001(T)(MS)	A	10/08/20 15:08	1		50	53	61	59	66	65
9M101594.D	DAD19542-001(T)(MSD)	A	10/08/20 15:32	1		103	99	123	112	129	125

---

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8270E

**Aqueous Laboratory Limits**

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: WMB88180

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M114533.D		WMB88180(MS)		10/7/2020 3:10:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270E		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	50.7183	0	100	51	20	160
<b>Pyridine</b>	<b>1</b>	<b>28.0088</b>	<b>0</b>	<b>100</b>	<b>28</b>	<b>5</b>	<b>150</b>
N-Nitrosodimethylamine	1	55.2949	0	100	55	50	150
Benzaldehyde	1	90.6775	0	100	91	20	220
Aniline	1	59.7208	0	100	60	20	150
Pentachloroethane	1	81.6117	0	100	82	50	130
bis(2-Chloroethyl)ether	1	80.8604	0	100	81	50	130
Phenol	1	44.5838	0	100	45	20	150
2-Chlorophenol	1	84.3276	0	100	84	70	130
N-Decane	1	77.676	0	100	78	40	130
1,3-Dichlorobenzene	1	70.3539	0	100	70	50	130
1,4-Dichlorobenzene	1	75.149	0	100	75	50	130
1,2-Dichlorobenzene	1	74.7732	0	100	75	50	130
Benzyl alcohol	1	80.3411	0	100	80	70	130
bis(2-chloroisopropyl)ether	1	70.1627	0	100	70	40	130
<b>2-Methylphenol</b>	<b>1</b>	<b>79.1611</b>	<b>0</b>	<b>100</b>	<b>79</b>	<b>60</b>	<b>130</b>
Acetophenone	1	92.9444	0	100	93	50	130
<b>Hexachloroethane</b>	<b>1</b>	<b>78.1215</b>	<b>0</b>	<b>100</b>	<b>78</b>	<b>50</b>	<b>130</b>
N-Nitroso-di-n-propylamine	1	80.4637	0	100	80	50	130
<b>3&amp;4-Methylphenol</b>	<b>1</b>	<b>74.2951</b>	<b>0</b>	<b>100</b>	<b>74</b>	<b>50</b>	<b>130</b>
<b>Nitrobenzene</b>	<b>1</b>	<b>88.6713</b>	<b>0</b>	<b>100</b>	<b>89</b>	<b>70</b>	<b>130</b>
Isophorone	1	87.8831	0	100	88	70	130
2-Nitrophenol	1	102.4167	0	100	102	70	130
2,4-Dimethylphenol	1	101.8918	0	100	102	40	130
Benzoic Acid	1	37.3655	0	100	37	20	130
bis(2-Chloroethoxy)methane	1	86.9907	0	100	87	70	130
2,4-Dichlorophenol	1	92.2827	0	100	92	70	130
1,2,4-Trichlorobenzene	1	82.4847	0	100	82	50	130
Naphthalene	1	81.8442	0	100	82	70	130
4-Chloroaniline	1	84.3414	0	100	84	50	150
<b>Hexachlorobutadiene</b>	<b>1</b>	<b>82.6575</b>	<b>0</b>	<b>100</b>	<b>83</b>	<b>70</b>	<b>130</b>
Caprolactam	1	40.6435	0	100	41	20	130
4-Chloro-3-methylphenol	1	100.3838	0	100	100	70	130
2-Methylnaphthalene	1	83.9382	0	100	84	70	130
1-Methylnaphthalene	1	102.5799	0	100	103	70	130
1,1'-Biphenyl	1	86.1382	0	100	86	70	130
1,2,4,5-Tetrachlorobenzene	1	97.8255	0	100	98	70	130
Hexachlorocyclopentadiene	1	90.0868	0	100	90	20	130
<b>2,4,6-Trichlorophenol</b>	<b>1</b>	<b>101.1103</b>	<b>0</b>	<b>100</b>	<b>101</b>	<b>70</b>	<b>130</b>
<b>2,4,5-Trichlorophenol</b>	<b>1</b>	<b>109.0949</b>	<b>0</b>	<b>100</b>	<b>109</b>	<b>70</b>	<b>130</b>
2-Chloronaphthalene	1	85.5937	0	100	86	70	130
1,4-Dimethylnaphthalene	1	85.1541	0	100	85	70	130
Diphenyl Ether	1	103.1709	0	100	103	70	130
2-Nitroaniline	1	105.3536	0	100	105	50	150
Coumarin	1	91.982	0	100	92	70	130
Acenaphthylene	1	89.3903	0	100	89	70	130
Dimethylphthalate	1	91.127	0	100	91	70	130
2,6-Dinitrotoluene	1	91.9598	0	100	92	70	130
Acenaphthene	1	87.3576	0	100	87	70	130
3-Nitroaniline	1	96.6186	0	100	97	50	150
2,4-Dinitrophenol	1	113.1321	0	100	113	20	150
Dibenzofuran	1	94.4291	0	100	94	70	130
<b>2,4-Dinitrotoluene</b>	<b>1</b>	<b>99.6772</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>40</b>	<b>130</b>
4-Nitrophenol	1	58.1785	0	100	58	20	150
2,3,4,6-Tetrachlorophenol	1	97.4111	0	100	97	70	130
Fluorene	1	87.8119	0	100	88	70	130
4-Chlorophenyl-phenylether	1	93.2132	0	100	93	70	130
Diethylphthalate	1	93.019	0	100	93	50	130
4-Nitroaniline	1	100.4404	0	100	100	50	150
Atrazine	1	105.2086	0	100	105	50	130
4,6-Dinitro-2-methylphenol	1	112.1912	0	100	112	40	130

\* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: WMB88180

Method: 8270E	Matrix: Aqueous		Units: ug/L		QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nitrosodiphenylamine	1	72.5527	0	100	73	50	130
1,2-Diphenylhydrazine	1	89.4073	0	100	89	70	130
4-Bromophenyl-phenylether	1	92.77	0	100	93	70	130
<b>Hexachlorobenzene</b>	<b>1</b>	<b>87.2636</b>	<b>0</b>	<b>100</b>	<b>87</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	100.4266	0	100	100	70	130
<b>Pentachlorophenol</b>	<b>1</b>	<b>121.0651</b>	<b>0</b>	<b>100</b>	<b>121</b>	<b>40</b>	<b>130</b>
Phenanthrene	1	89.7863	0	100	90	70	130
Anthracene	1	90.1423	0	100	90	70	130
Carbazole	1	91.0424	0	100	91	70	130
Di-n-butylphthalate	1	101.3632	0	100	101	70	130
Fluoranthene	1	94.8077	0	100	95	70	130
Pyrene	1	89.7163	0	100	90	70	130
Benzidine	1	6.0486	0	100	6	1	130
Butylbenzylphthalate	1	93.4987	0	100	93	50	130
3,3'-Dichlorobenzidine	1	93.5232	0	100	94	1	150
Benzo[a]anthracene	1	82.9756	0	100	83	70	130
Chrysene	1	89.5766	0	100	90	50	130
bis(2-Ethylhexyl)phthalate	1	104.127	0	100	104	70	130
Di-n-octylphthalate	1	100.8394	0	100	101	70	130
Benzo[b]fluoranthene	1	95.1959	0	100	95	70	130
Benzo[k]fluoranthene	1	95.8473	0	100	96	70	130
Benzo[a]pyrene	1	98.3069	0	100	98	70	130
Indeno[1,2,3-cd]pyrene	1	96.2584	0	100	96	70	130
Dibenzo[a,h]anthracene	1	94.7248	0	100	95	70	130
Benzo[g,h,i]perylene	1	94.2092	0	100	94	70	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: WMB88180

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101593.D		AD19542-001(T)(MS)		10/8/2020 3:08:00 PM			
Non Spike(If applicable): 9M101572.D		AD19542-001(T)		10/7/2020 2:46:00 PM			
Inst Blank(If applicable):							
Method: 8270E		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	40.0599	0	100	40	20	160
<b>Pyridine</b>	<b>1</b>	<b>40.3166</b>	<b>0</b>	<b>100</b>	<b>40</b>	<b>5</b>	<b>150</b>
N-Nitrosodimethylamine	1	47.0167	0	100	47 *	50	150
Benzaldehyde	1	40.8147	0	100	41	20	220
Aniline	1	43.6276	0	100	44	20	150
Pentachloroethane	1	48.6722	0	100	49 *	50	130
bis(2-Chloroethyl)ether	1	48.7378	0	100	49 *	50	130
Phenol	1	49.591	0	100	50	20	150
2-Chlorophenol	1	52.8884	0	100	53 *	70	130
N-Decane	1	48.0932	0	100	48	40	130
1,3-Dichlorobenzene	1	44.255	0	100	44 *	50	130
1,4-Dichlorobenzene	1	47.5872	0	100	48 *	50	130
1,2-Dichlorobenzene	1	46.9582	0	100	47 *	50	130
Benzyl alcohol	1	55.3902	0	100	55 *	70	130
bis(2-chloroisopropyl)ether	1	46.8869	0	100	47	40	130
<b>2-Methylphenol</b>	<b>1</b>	<b>59.6197</b>	<b>0</b>	<b>100</b>	<b>60</b>	<b>60</b>	<b>130</b>
Acetophenone	1	59.6661	0	100	60	50	130
<b>Hexachloroethane</b>	<b>1</b>	<b>47.2207</b>	<b>0</b>	<b>100</b>	<b>47 *</b>	<b>50</b>	<b>130</b>
N-Nitroso-di-n-propylamine	1	68.6778	0	100	69	50	130
<b>3&amp;4-Methylphenol</b>	<b>1</b>	<b>62.4502</b>	<b>0</b>	<b>100</b>	<b>62</b>	<b>50</b>	<b>130</b>
<b>Nitrobenzene</b>	<b>1</b>	<b>54.0002</b>	<b>0</b>	<b>100</b>	<b>54 *</b>	<b>70</b>	<b>130</b>
Isophorone	1	54.0413	0	100	54 *	70	130
2-Nitrophenol	1	60.0215	0	100	60 *	70	130
2,4-Dimethylphenol	1	63.2277	0	100	63	40	130
Benzoic Acid	1	64.7954	0	100	65	20	130
bis(2-Chloroethoxy)methane	1	53.3669	0	100	53 *	70	130
2,4-Dichlorophenol	1	60.144	0	100	60 *	70	130
1,2,4-Trichlorobenzene	1	50.2285	0	100	50	50	130
Naphthalene	1	51.6515	0	100	52 *	70	130
4-Chloroaniline	1	51.5077	0	100	52	50	150
<b>Hexachlorobutadiene</b>	<b>1</b>	<b>48.2349</b>	<b>0</b>	<b>100</b>	<b>48 *</b>	<b>70</b>	<b>130</b>
Caprolactam	1	67.3915	0	100	67	20	130
4-Chloro-3-methylphenol	1	59.862	0	100	60 *	70	130
2-Methylnaphthalene	1	52.2097	0	100	52 *	70	130
1-Methylnaphthalene	1	64.2991	0	100	64 *	70	130
1,1'-Biphenyl	1	54.5937	0	100	55 *	70	130
1,2,4,5-Tetrachlorobenzene	1	57.0408	0	100	57 *	70	130
Hexachlorocyclopentadiene	1	47.7403	0	100	48	20	130
<b>2,4,6-Trichlorophenol</b>	<b>1</b>	<b>63.7955</b>	<b>0</b>	<b>100</b>	<b>64 *</b>	<b>70</b>	<b>130</b>
<b>2,4,5-Trichlorophenol</b>	<b>1</b>	<b>62.061</b>	<b>0</b>	<b>100</b>	<b>62 *</b>	<b>70</b>	<b>130</b>
2-Chloronaphthalene	1	53.6713	0	100	54 *	70	130
1,4-Dimethylnaphthalene	1	54.4365	0	100	54 *	70	130
Diphenyl Ether	1	61.9605	0	100	62 *	70	130
2-Nitroaniline	1	60.3566	0	100	60	50	150
Coumarin	1	57.3558	0	100	57 *	70	130
Acenaphthylene	1	55.9199	0	100	56 *	70	130
Dimethylphthalate	1	54.0949	0	100	54 *	70	130
2,6-Dinitrotoluene	1	57.3433	0	100	57 *	70	130
Acenaphthene	1	53.3725	0	100	53 *	70	130
3-Nitroaniline	1	56.7538	0	100	57	50	150
2,4-Dinitrophenol	1	39.2638	0	100	39	20	150
Dibenzofuran	1	54.8047	0	100	55 *	70	130
<b>2,4-Dinitrotoluene</b>	<b>1</b>	<b>57.5724</b>	<b>0</b>	<b>100</b>	<b>58</b>	<b>40</b>	<b>130</b>
4-Nitrophenol	1	50.6393	0	100	51	20	150
2,3,4,6-Tetrachlorophenol	1	55.997	0	100	56 *	70	130
Fluorene	1	53.7972	0	100	54 *	70	130
4-Chlorophenyl-phenylether	1	55.1774	0	100	55 *	70	130
Diethylphthalate	1	54.7753	0	100	55	50	130
4-Nitroaniline	1	56.2178	0	100	56	50	150
Atrazine	1	60.6912	0	100	61	50	130
4,6-Dinitro-2-methylphenol	1	46.4706	0	100	46	40	130

\* - Indicates outside of limits      # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

Form3  
Recovery Data Laboratory Limits  
QC Batch: WMB88180

Method: 8270E	Matrix: Aqueous		Units: ug/L		QC Type: MS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nitrosodiphenylamine	1	46.0957	0	100	46*	50	130
1,2-Diphenylhydrazine	1	60.0997	0	100	60*	70	130
4-Bromophenyl-phenylether	1	56.2331	0	100	56*	70	130
<b>Hexachlorobenzene</b>	<b>1</b>	<b>51.6654</b>	<b>0</b>	<b>100</b>	<b>52*</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	66.7088	0	100	67*	70	130
<b>Pentachlorophenol</b>	<b>1</b>	<b>67.6293</b>	<b>0</b>	<b>100</b>	<b>68</b>	<b>40</b>	<b>130</b>
Phenanthrene	1	55.247	0	100	55*	70	130
Anthracene	1	54.5763	0	100	55*	70	130
Carbazole	1	57.1615	0	100	57*	70	130
Di-n-butylphthalate	1	56.8396	0	100	57*	70	130
Fluoranthene	1	58.2616	0	100	58*	70	130
Pyrene	1	55.5476	0	100	56*	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	58.7007	0	100	59	50	130
3,3'-Dichlorobenzidine	1	36.65	0	100	37	1	150
Benzo[a]anthracene	1	51.817	0	100	52*	70	130
Chrysene	1	56.0349	0	100	56	50	130
bis(2-Ethylhexyl)phthalate	1	58.7619	0	100	59*	70	130
Di-n-octylphthalate	1	58.9837	0	100	59*	70	130
Benzo[b]fluoranthene	1	59.8415	0	100	60*	70	130
Benzo[k]fluoranthene	1	58.6915	0	100	59*	70	130
Benzo[a]pyrene	1	59.0703	0	100	59*	70	130
Indeno[1,2,3-cd]pyrene	1	57.8827	0	100	58*	70	130
Dibenzo[a,h]anthracene	1	56.4275	0	100	56*	70	130
Benzo[g,h,i]perylene	1	56.8822	0	100	57*	70	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: WMB88180

Data File		Sample ID:		Analysis Date			
Spike or Dup: 9M101594.D		AD19542-001(T)(MSD)		10/8/2020 3:32:00 PM			
Non Spike (If applicable): 9M101572.D		AD19542-001(T)		10/7/2020 2:46:00 PM			
Inst Blank (If applicable):							
Method: 8270E		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	84.4211	0	100	84	20	160
<b>Pyridine</b>	<b>1</b>	<b>54.2633</b>	<b>0</b>	<b>100</b>	<b>54</b>	<b>5</b>	<b>150</b>
N-Nitrosodimethylamine	1	92.7669	0	100	93	50	150
Benzaldehyde	1	68.395	0	100	68	20	220
Aniline	1	59.8324	0	100	60	20	150
Pentachloroethane	1	99.1868	0	100	99	50	130
bis(2-Chloroethyl)ether	1	101.9507	0	100	102	50	130
Phenol	1	91.5815	0	100	92	20	150
2-Chlorophenol	1	102.1536	0	100	102	70	130
N-Decane	1	97.9844	0	100	98	40	130
1,3-Dichlorobenzene	1	88.8697	0	100	89	50	130
1,4-Dichlorobenzene	1	95.1285	0	100	95	50	130
1,2-Dichlorobenzene	1	92.5355	0	100	93	50	130
Benzyl alcohol	1	106.6975	0	100	107	70	130
bis(2-chloroisopropyl)ether	1	90.002	0	100	90	40	130
<b>2-Methylphenol</b>	<b>1</b>	<b>113.5941</b>	<b>0</b>	<b>100</b>	<b>114</b>	<b>60</b>	<b>130</b>
Acetophenone	1	105.8109	0	100	106	50	130
<b>Hexachloroethane</b>	<b>1</b>	<b>96.6286</b>	<b>0</b>	<b>100</b>	<b>97</b>	<b>50</b>	<b>130</b>
N-Nitroso-di-n-propylamine	1	126.099	0	100	126	50	130
<b>3&amp;4-Methylphenol</b>	<b>1</b>	<b>113.0142</b>	<b>0</b>	<b>100</b>	<b>113</b>	<b>50</b>	<b>130</b>
<b>Nitrobenzene</b>	<b>1</b>	<b>105.5069</b>	<b>0</b>	<b>100</b>	<b>106</b>	<b>70</b>	<b>130</b>
Isophorone	1	104.3841	0	100	104	70	130
2-Nitrophenol	1	121.7109	0	100	122	70	130
2,4-Dimethylphenol	1	122.275	0	100	122	40	130
Benzoic Acid	1	164.0628	0	100	164*	20	130
bis(2-Chloroethoxy)methane	1	104.4722	0	100	104	70	130
2,4-Dichlorophenol	1	116.8217	0	100	117	70	130
1,2,4-Trichlorobenzene	1	98.9157	0	100	99	50	130
Naphthalene	1	98.1683	0	100	98	70	130
4-Chloroaniline	1	80.8699	0	100	81	50	150
<b>Hexachlorobutadiene</b>	<b>1</b>	<b>95.2314</b>	<b>0</b>	<b>100</b>	<b>95</b>	<b>70</b>	<b>130</b>
Caprolactam	1	69.211	0	100	69	20	130
4-Chloro-3-methylphenol	1	115.4993	0	100	115	70	130
2-Methylnaphthalene	1	99.4357	0	100	99	70	130
1-Methylnaphthalene	1	119.915	0	100	120	70	130
1,1'-Biphenyl	1	100.7702	0	100	101	70	130
1,2,4,5-Tetrachlorobenzene	1	106.851	0	100	107	70	130
Hexachlorocyclopentadiene	1	99.0606	0	100	99	20	130
<b>2,4,6-Trichlorophenol</b>	<b>1</b>	<b>122.3804</b>	<b>0</b>	<b>100</b>	<b>122</b>	<b>70</b>	<b>130</b>
<b>2,4,5-Trichlorophenol</b>	<b>1</b>	<b>121.0749</b>	<b>0</b>	<b>100</b>	<b>121</b>	<b>70</b>	<b>130</b>
2-Chloronaphthalene	1	100.5502	0	100	101	70	130
1,4-Dimethylnaphthalene	1	97.5628	0	100	98	70	130
Diphenyl Ether	1	113.1341	0	100	113	70	130
2-Nitroaniline	1	112.6349	0	100	113	50	150
Coumarin	1	106.0215	0	100	106	70	130
Acenaphthylene	1	105.2555	0	100	105	70	130
Dimethylphthalate	1	100.9838	0	100	101	70	130
2,6-Dinitrotoluene	1	106.2739	0	100	106	70	130
Acenaphthene	1	99.0419	0	100	99	70	130
3-Nitroaniline	1	95.4313	0	100	95	50	150
2,4-Dinitrophenol	1	123.6377	0	100	124	20	150
Dibenzofuran	1	100.8097	0	100	101	70	130
<b>2,4-Dinitrotoluene</b>	<b>1</b>	<b>111.9934</b>	<b>0</b>	<b>100</b>	<b>112</b>	<b>40</b>	<b>130</b>
4-Nitrophenol	1	105.6267	0	100	106	20	150
2,3,4,6-Tetrachlorophenol	1	112.9882	0	100	113	70	130
Fluorene	1	99.987	0	100	100	70	130
4-Chlorophenyl-phenylether	1	101.6515	0	100	102	70	130
Diethylphthalate	1	102.9864	0	100	103	50	130
4-Nitroaniline	1	99.0265	0	100	99	50	150
Atrazine	1	111.6587	0	100	112	50	130
4,6-Dinitro-2-methylphenol	1	124.5252	0	100	125	40	130

\* - Indicates outside of limits      # - Indicates outside of standard limits but within method exceedance limits

**Bold and underline** - Indicates the compounds reported on form1

Form3  
 Recovery Data Laboratory Limits  
 QC Batch: WMB88180

Method: 8270E	Matrix: Aqueous		Units: ug/L		QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nitrosodiphenylamine	1	87.2311	0	100	87	50	130
1,2-Diphenylhydrazine	1	103.2302	0	100	103	70	130
4-Bromophenyl-phenylether	1	106.2295	0	100	106	70	130
<b>Hexachlorobenzene</b>	<b>1</b>	<b>98.1568</b>	<b>0</b>	<b>100</b>	<b>98</b>	<b>70</b>	<b>130</b>
N-Octadecane	1	121.9513	0	100	122	70	130
<b>Pentachlorophenol</b>	<b>1</b>	<b>145.4823</b>	<b>0</b>	<b>100</b>	<b>145*</b>	<b>40</b>	<b>130</b>
Phenanthrene	1	102.1167	0	100	102	70	130
Anthracene	1	102.5662	0	100	103	70	130
Carbazole	1	104.8682	0	100	105	70	130
Di-n-butylphthalate	1	109.1831	0	100	109	70	130
Fluoranthene	1	109.1959	0	100	109	70	130
Pyrene	1	104.3555	0	100	104	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	112.7291	0	100	113	50	130
3,3'-Dichlorobenzidine	1	24.31	0	100	24	1	150
Benzo[a]anthracene	1	100.2136	0	100	100	70	130
Chrysene	1	102.198	0	100	102	50	130
bis(2-Ethylhexyl)phthalate	1	114.1159	0	100	114	70	130
Di-n-octylphthalate	1	118.6535	0	100	119	70	130
Benzo[b]fluoranthene	1	115.1059	0	100	115	70	130
Benzo[k]fluoranthene	1	108.926	0	100	109	70	130
Benzo[a]pyrene	1	114.0388	0	100	114	70	130
Indeno[1,2,3-cd]pyrene	1	113.6274	0	100	114	70	130
Dibenzo[a,h]anthracene	1	109.0534	0	100	109	70	130
Benzo[g,h,i]perylene	1	108.9508	0	100	109	70	130

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: WMB88180

Data File	Sample ID:	Analysis Date
Spike or Dup: 9M101594.D	AD19542-001(T)(MSD)	10/8/2020 3:32:00 PM
Duplicate(If applicable): 9M101593.D	AD19542-001(T)(MS)	10/8/2020 3:08:00 PM
Inst Blank(If applicable):		
Method: 8270E	Matrix: Aqueous	Units: ug/L
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	84.4211	40.0599	71*	20
<b>Pyridine</b>	<b>1</b>	<b><u>54.2633</u></b>	<b><u>40.3166</u></b>	<b>29</b>	<b>40</b>
N-Nitrosodimethylamine	1	92.7669	47.0167	65*	20
Benzaldehyde	1	68.395	40.8147	51*	20
Aniline	1	59.8324	43.6276	31*	20
Pentachloroethane	1	99.1868	48.6722	68*	20
bis(2-Chloroethyl)ether	1	101.9507	48.7378	71*	20
Phenol	1	91.5815	49.591	59*	40
2-Chlorophenol	1	102.1536	52.8884	64*	40
N-Decane	1	97.9844	48.0932	68*	20
1,3-Dichlorobenzene	1	88.8697	44.255	67*	20
1,4-Dichlorobenzene	1	95.1285	47.5872	67*	40
1,2-Dichlorobenzene	1	92.5355	46.9582	65*	20
Benzyl alcohol	1	106.6975	55.3902	63*	20
bis(2-chloroisopropyl)ether	1	90.002	46.8869	63*	20
<b>2-Methylphenol</b>	<b>1</b>	<b><u>113.5941</u></b>	<b><u>59.6197</u></b>	<b>62*</b>	<b>40</b>
Acetophenone	1	105.8109	59.6661	56*	20
<b>Hexachloroethane</b>	<b>1</b>	<b><u>96.6286</u></b>	<b><u>47.2207</u></b>	<b>69*</b>	<b>40</b>
N-Nitroso-di-n-propylamine	1	126.099	68.6778	59*	40
<b>3&amp;4-Methylphenol</b>	<b>1</b>	<b><u>113.0142</u></b>	<b><u>62.4502</u></b>	<b>58*</b>	<b>40</b>
<b>Nitrobenzene</b>	<b>1</b>	<b><u>105.5069</u></b>	<b><u>54.0002</u></b>	<b>65*</b>	<b>40</b>
Isophorone	1	104.3841	54.0413	64*	20
2-Nitrophenol	1	121.7109	60.0215	68*	20
2,4-Dimethylphenol	1	122.275	63.2277	64*	40
Benzoic Acid	1	164.0628	64.7954	87*	20
bis(2-Chloroethoxy)methane	1	104.4722	53.3669	65*	20
2,4-Dichlorophenol	1	116.8217	60.144	64*	20
1,2,4-Trichlorobenzene	1	98.9157	50.2285	65*	40
Naphthalene	1	98.1683	51.6515	62*	40
4-Chloroaniline	1	80.8699	51.5077	44*	20
<b>Hexachlorobutadiene</b>	<b>1</b>	<b><u>95.2314</u></b>	<b><u>48.2349</u></b>	<b>66*</b>	<b>40</b>
Caprolactam	1	69.211	67.3915	2.7	20
4-Chloro-3-methylphenol	1	115.4993	59.862	63*	40
2-Methylnaphthalene	1	99.4357	52.2097	62*	20
1-Methylnaphthalene	1	119.915	64.2991	60*	20
1,1'-Biphenyl	1	100.7702	54.5937	59*	20
1,2,4,5-Tetrachlorobenzene	1	106.851	57.0408	61*	20
Hexachlorocyclopentadiene	1	99.0606	47.7403	70*	20
<b>2,4,6-Trichlorophenol</b>	<b>1</b>	<b><u>122.3804</u></b>	<b><u>63.7955</u></b>	<b>63*</b>	<b>40</b>
<b>2,4,5-Trichlorophenol</b>	<b>1</b>	<b><u>121.0749</u></b>	<b><u>62.061</u></b>	<b>64*</b>	<b>40</b>
2-Chloronaphthalene	1	100.5502	53.6713	61*	20
1,4-Dimethylnaphthalene	1	97.5628	54.4365	57*	20
Diphenyl Ether	1	113.1341	61.9605	58*	20
2-Nitroaniline	1	112.6349	60.3566	60*	20
Coumarin	1	106.0215	57.3558	60*	20
Acenaphthylene	1	105.2555	55.9199	61*	20
Dimethylphthalate	1	100.9838	54.0949	60*	20
2,6-Dinitrotoluene	1	106.2739	57.3433	60*	20
Acenaphthene	1	99.0419	53.3725	60*	40
3-Nitroaniline	1	95.4313	56.7538	51*	20
2,4-Dinitrophenol	1	123.6377	39.2638	104*	20
Dibenzofuran	1	100.8097	54.8047	59*	20
<b>2,4-Dinitrotoluene</b>	<b>1</b>	<b><u>111.9934</u></b>	<b><u>57.5724</u></b>	<b>64*</b>	<b>40</b>
4-Nitrophenol	1	105.6267	50.6393	70*	40
2,3,4,6-Tetrachlorophenol	1	112.9882	55.997	67*	20
Fluorene	1	99.987	53.7972	60*	40
4-Chlorophenyl-phenylether	1	101.6515	55.1774	59*	20
Diethylphthalate	1	102.9864	54.7753	61*	20
4-Nitroaniline	1	99.0265	56.2178	55*	20
Atrazine	1	111.6587	60.6912	59*	20
4,6-Dinitro-2-methylphenol	1	124.5252	46.4706	91*	20

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1



Form3  
RPD Data Laboratory Limits

QC Batch: WMB88180

Method: 8270E		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit		
n-Nitrosodiphenylamine	1	87.2311	46.0957	62*	20		
1,2-Diphenylhydrazine	1	103.2302	60.0997	53*	20		
4-Bromophenyl-phenylether	1	106.2295	56.2331	62*	20		
<b><u>Hexachlorobenzene</u></b>	<b><u>1</u></b>	<b><u>98.1568</u></b>	<b><u>51.6654</u></b>	<b><u>62*</u></b>	<b><u>40</u></b>		
N-Octadecane	1	121.9513	66.7088	59*	20		
<b><u>Pentachlorophenol</u></b>	<b><u>1</u></b>	<b><u>145.4823</u></b>	<b><u>67.6293</u></b>	<b><u>73*</u></b>	<b><u>40</u></b>		
Phenanthrene	1	102.1167	55.247	60*	20		
Anthracene	1	102.5662	54.5763	61*	20		
Carbazole	1	104.8682	57.1615	59*	20		
Di-n-butylphthalate	1	109.1831	56.8396	63*	20		
Fluoranthene	1	109.1959	58.2616	61*	20		
Pyrene	1	104.3555	55.5476	61*	40		
Benzidine	1	0	0	NA	20		
Butylbenzylphthalate	1	112.7291	58.7007	63*	40		
3,3'-Dichlorobenzidine	1	24.31	36.65	40*	20		
Benzo[a]anthracene	1	100.2136	51.817	64*	20		
Chrysene	1	102.198	56.0349	58*	20		
bis(2-Ethylhexyl)phthalate	1	114.1159	58.7619	64*	20		
Di-n-octylphthalate	1	118.6535	58.9837	67*	20		
Benzo[b]fluoranthene	1	115.1059	59.8415	63*	20		
Benzo[k]fluoranthene	1	108.926	58.6915	60*	20		
Benzo[a]pyrene	1	114.0388	59.0703	64*	20		
Indeno[1,2,3-cd]pyrene	1	113.6274	57.8827	65*	20		
Dibenzo[a,h]anthracene	1	109.0534	56.4275	64*	20		
Benzo[g,h,i]perylene	1	108.9508	56.8822	63*	20		

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**FORM 4**  
Blank SummaryBlank Number: WMB88180  
Blank Data File: 9M101575.D  
Matrix: AqueousBlank Analysis Date: 10/07/20 15:57  
Blank Extraction Date: 10/07/20  
(If Applicable)  
Method: EPA 8270E

Sample Number	Data File	Analysis Date
AD19595-013(T)	9M101580.D	10/08/20 10:03
AD19595-014(T)	9M101583.D	10/08/20 11:13
EF-1-V-335534(10/	9M101585.D	10/08/20 12:01
AD19542-001(T)(M)	9M101594.D	10/08/20 15:32
AD19542-001(T)(M)	9M101593.D	10/08/20 15:08
AD19542-001(T)	9M101572.D	10/07/20 14:46
WMB88180(MS)	5M114533.D	10/07/20 15:10

## Form 5

Tune Name: CAL DFTPP

Data File: 9M101312.D

Instrument: GCMS 9

Analysis Date: 09/17/20 09:43

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.107 to 10.107 min

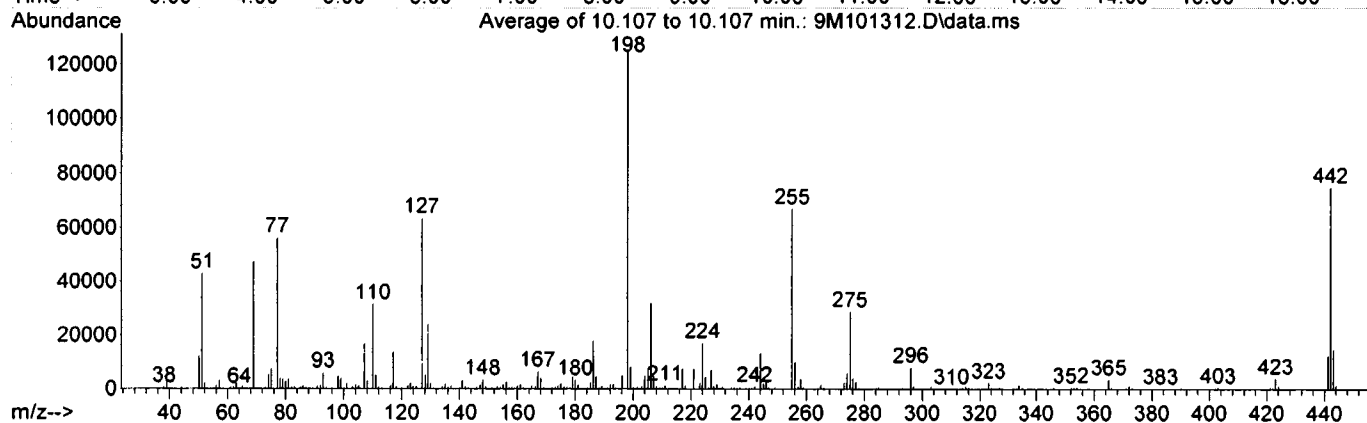
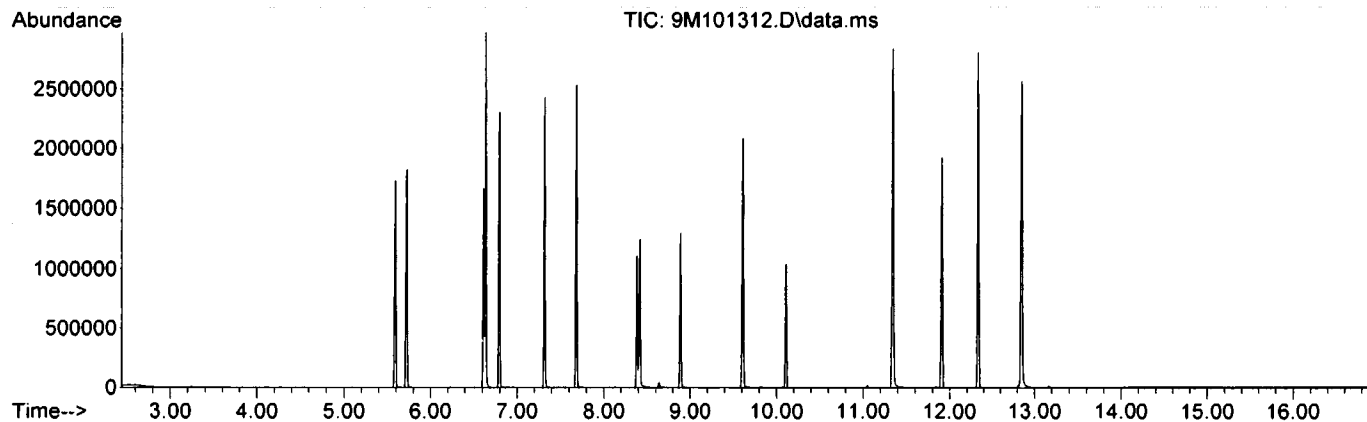
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	34.3	42992		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	38.1	47736		PASS
70	69	0.00	2	0.4	213		PASS
127	198	40	60	50.6	63424		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	125368		PASS
199	198	5	9	6.6	8281		PASS
275	198	10	30	23.1	28904		PASS
365	198	1	100	2.9	3594		PASS
441	443	0.01	100	85.2	12575		PASS
442	198	40	100	59.7	74840		PASS
443	442	17	23	19.7	14757		PASS

Data File	Sample Number	Analysis Date:
9M101313.D	CAL BNA@10PPM	09/17/20 10:10
9M101314.D	CAL BNA@2PPM	09/17/20 10:34
9M101315.D	CAL BNA@196PP	09/17/20 11:00
9M101316.D	CAL BNA@160PP	09/17/20 11:24
9M101317.D	CAL BNA@120PP	09/17/20 11:47
9M101318.D	CAL BNA@80PPM	09/17/20 12:12
9M101319.D	CAL BNA@20PPM	09/17/20 12:35
9M101320.D	CAL BNA@0.5PP	09/17/20 12:58
9M101321.D	CAL BNA@50PPM	09/17/20 13:22
9M101322.D	ICV BNA@50PPM	09/17/20 13:47
9M101323.D	SMB88017	09/17/20 14:11
9M101324.D	SMB88018	09/17/20 14:34
9M101326.D	88018	09/17/20 15:48

Data Path : G:\GcMsData\2020\GCMS\_9\Data\09-17-20\  
 Data File : 9M101312.D  
 Acq On : 17 Sep 2020 9:43  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.107 to 10.107 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.3	42992	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.1	47736	PASS
70	69	0.00	2	0.4	213	PASS
127	198	40	60	50.6	63424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	125368	PASS
199	198	5	9	6.6	8281	PASS
275	198	10	30	23.1	28904	PASS
365	198	1	100	2.9	3594	PASS
441	443	0.01	100	85.2	12575	PASS
442	198	40	100	59.7	74840	PASS
443	442	17	23	19.7	14757	PASS

RR

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 5

Data File: 5M114379.D  
Analysis Date: 09/24/20 09:29  
Method: EPA 8270E

Tune Scan/Time Range: Average of 9.980 to 9.980 min

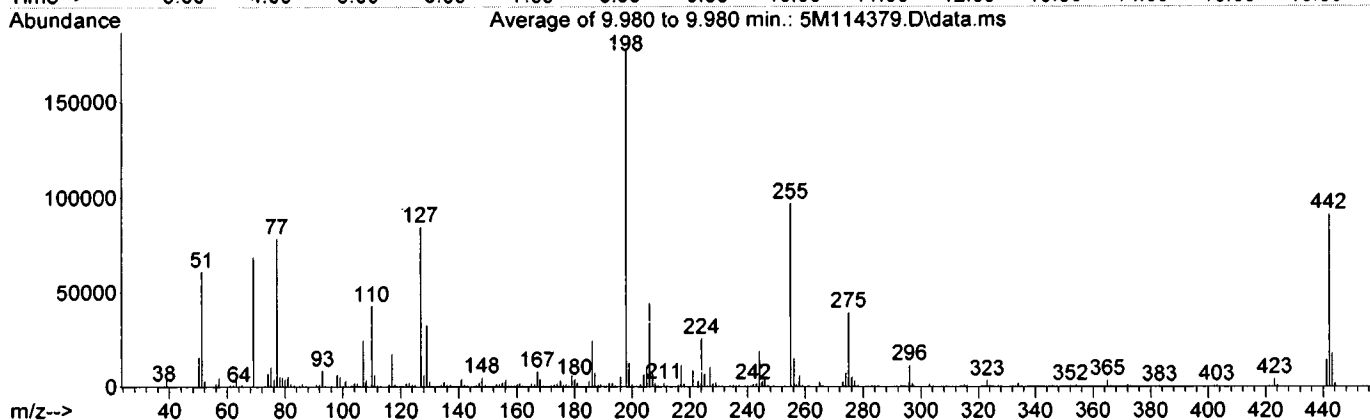
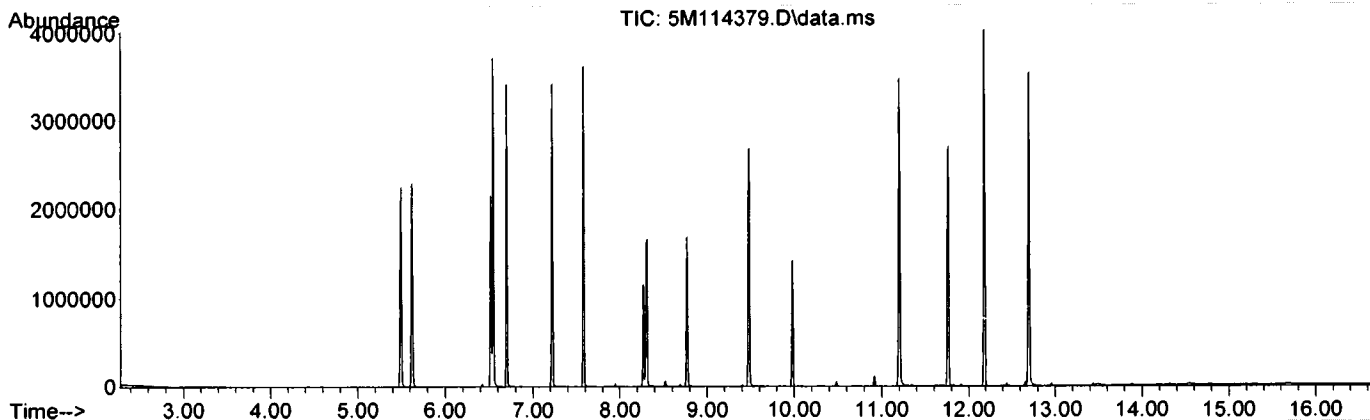
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60	34.3	61224	PASS	
68	69	0.00	2	0.0	0	PASS	
69	198	0.00	100	38.6	68816	PASS	
70	69	0.00	2	0.5	376	PASS	
127	198	40	60	47.5	84744	PASS	
197	198	0.00	1	0.0	0	PASS	
198	198	100	100	100.0	178240	PASS	
199	198	5	9	7.0	12522	PASS	
275	198	10	30	22.2	39512	PASS	
365	198	1	100	2.0	3558	PASS	
441	443	0.01	100	80.6	14442	PASS	
442	198	40	100	51.2	91184	PASS	
443	442	17	23	19.7	17920	PASS	

Data File	Sample Number	Analysis Date:
5M114380.D	CAL BNA@0.5PP	09/24/20 09:52
5M114381.D	CAL BNA@2PPM	09/24/20 10:15
5M114382.D	CAL BNA@10PPM	09/24/20 10:38
5M114383.D	CAL BNA@196PP	09/24/20 11:01
5M114384.D	CAL BNA@160PP	09/24/20 11:25
5M114385.D	CAL BNA@120PP	09/24/20 11:48
5M114386.D	CAL BNA@80PPM	09/24/20 12:11
5M114387.D	CAL BNA@20PPM	09/24/20 12:34
5M114388.D	CAL BNA@50PPM	09/24/20 12:58
5M114389.D	ICV BNA@50PPM	09/24/20 13:21
5M114390.D	AD19216-015	09/24/20 13:58
5M114391.D	WMB88059	09/24/20 14:21

Data Path : G:\GcMsData\2020\GCMS\_5\Data\09-24-20\  
 Data File : 5M114379.D  
 Acq On : 24 Sep 2020 9:29  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_5\METHODQT\5M\_EVALNX.M  
 Title : @GCMS\_5  
 Last Update : Fri Sep 25 08:56:06 2020



Spectrum Information: Average of 9.980 to 9.980 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.3	61224	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.6	68816	PASS
70	69	0.00	2	0.5	376	PASS
127	198	40	60	47.5	84744	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	178240	PASS
199	198	5	9	7.0	12522	PASS
275	198	10	30	22.2	39512	PASS
365	198	1	100	2.0	3558	PASS
441	443	0.01	100	80.6	14442	PASS
442	198	40	100	51.2	91184	PASS
443	442	17	23	19.7	17920	PASS

RR

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 9

Data File: 9M101558.D  
Analysis Date: 10/07/20 08:19  
Method: EPA 8270E

Tune Scan/Time Range: Average of 10.095 to 10.113 min

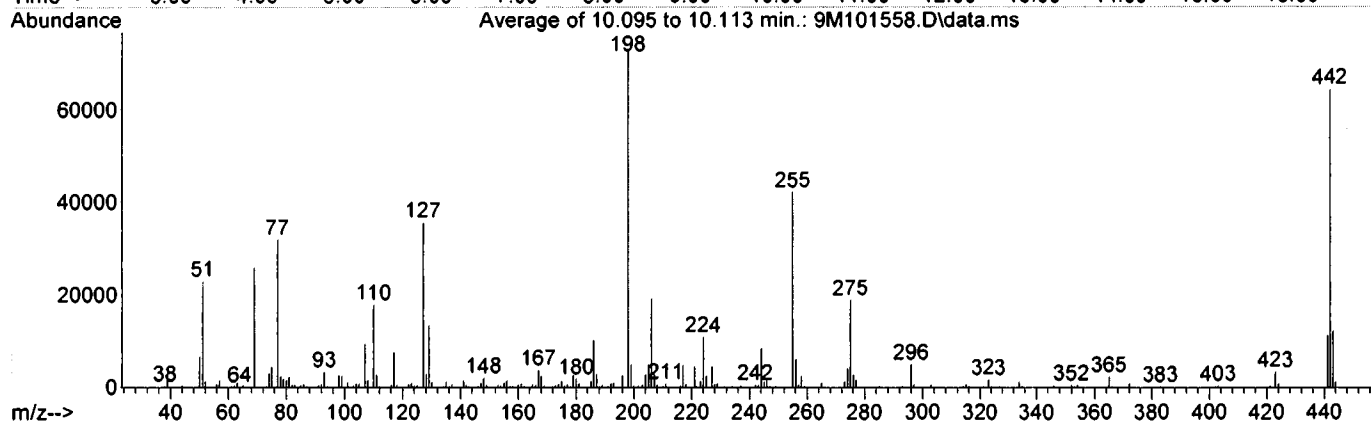
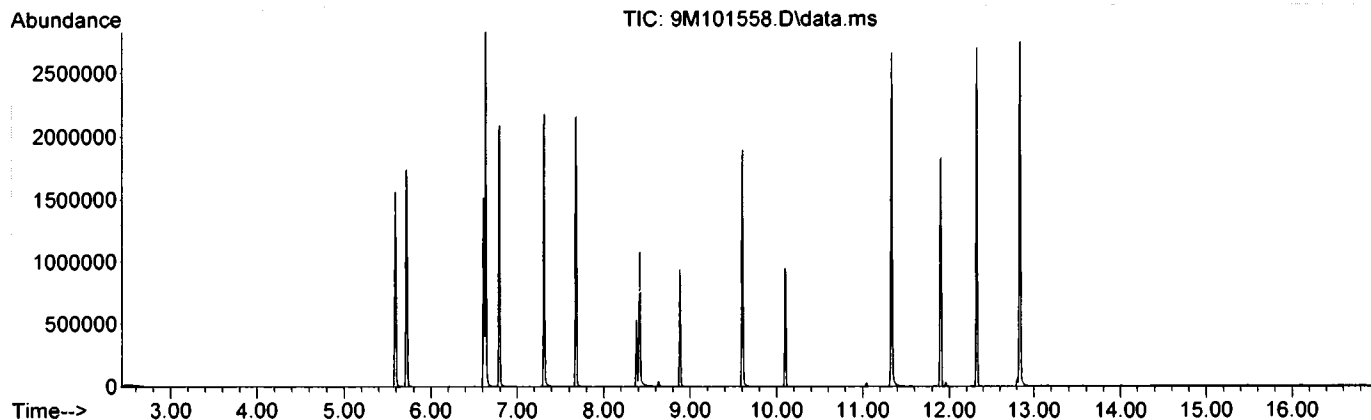
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30		60	31.5	22929	PASS
68	69	0.00		2	0.0	0	PASS
69	198	0.00		100	35.5	25889	PASS
70	69	0.00		2	0.2	52	PASS
127	198	40		60	48.9	35641	PASS
197	198	0.00		1	0.0	0	PASS
198	198	100		100	100.0	72864	PASS
199	198	5		9	6.8	4959	PASS
275	198	10		30	26.0	18925	PASS
365	198	1		100	3.1	2287	PASS
441	443	0.01		100	92.5	11291	PASS
442	198	40		100	88.1	64229	PASS
443	442	17		23	19.0	12200	PASS

Data File	Sample Number	Analysis Date:
9M101559.D	CAL BNA@50PPM	10/07/20 08:42
9M101560.D	WMB88174	10/07/20 09:06
9M101561.D	MBS-1	10/07/20 09:30
9M101562.D	MBS-2	10/07/20 09:53
9M101563.D	MBS-3	10/07/20 10:17
9M101564.D	MBS-4	10/07/20 10:40
9M101565.D	MBS-5	10/07/20 11:04
9M101566.D	SMB88134(MS)	10/07/20 12:04
9M101567.D	SMB88169(MS)	10/07/20 12:27
9M101568.D	SMB88134	10/07/20 12:51
9M101569.D	SMB88169	10/07/20 13:14
9M101570.D	AD19619-001	10/07/20 13:38
9M101571.D	AD19619-002	10/07/20 14:01
9M101572.D	AD19542-001(T)	10/07/20 14:46
9M101573.D	AD19543-001(T)	10/07/20 15:10
9M101574.D	AD19542-001(T)	10/07/20 15:33
9M101575.D	WMB88180	10/07/20 15:57

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-07-20\  
 Data File : 9M101558.D  
 Acq On : 7 Oct 2020 8:19  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.095 to 10.113 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.5	22929	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.5	25889	PASS
70	69	0.00	2	0.2	52	PASS
127	198	40	60	48.9	35641	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	72864	PASS
199	198	5	9	6.8	4959	PASS
275	198	10	30	26.0	18925	PASS
365	198	1	100	3.1	2287	PASS
441	443	0.01	100	92.5	11291	PASS
442	198	40	100	88.1	64229	PASS
443	442	17	23	19.0	12200	PASS

RR



## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 5

Data File: 5M114528.D  
Analysis Date: 10/07/20 08:21  
Method: EPA 8270E

Tune Scan/Time Range: Average of 9.970 to 9.991 min

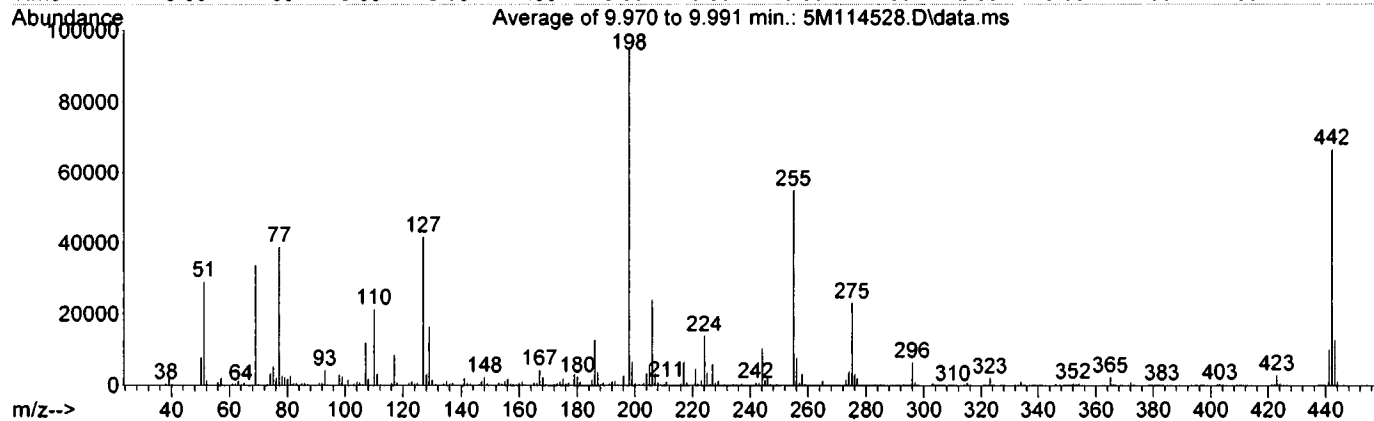
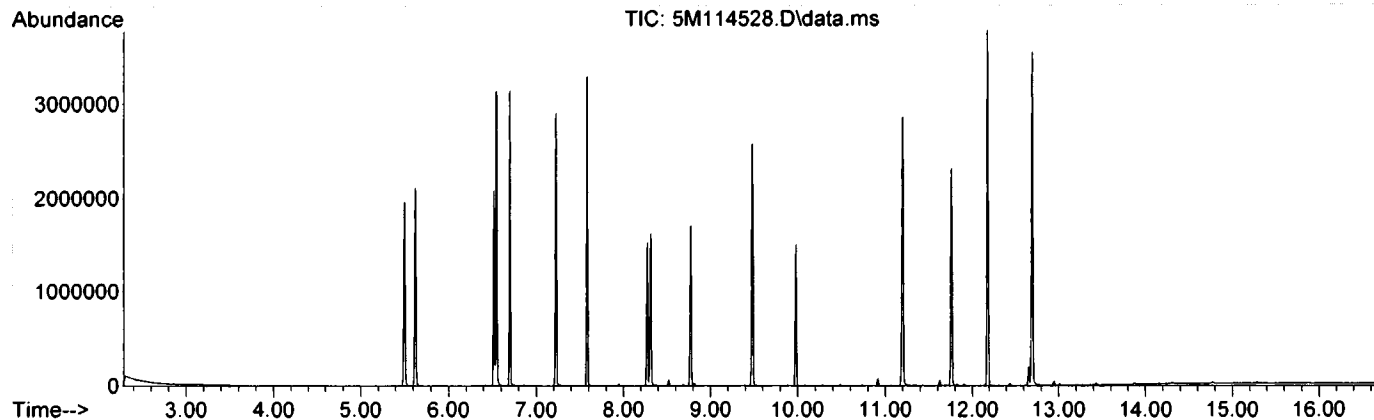
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	30.6	29214	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.5	33816	PASS
70	69	0.00	2	0.6	216	PASS
127	198	40	60	43.9	41858	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	95331	PASS
199	198	5	9	7.0	6714	PASS
275	198	10	30	24.5	23335	PASS
365	198	1	100	2.5	2368	PASS
441	443	0.01	100	79.8	10207	PASS
442	198	40	100	70.0	66738	PASS
443	442	17	23	19.2	12799	PASS

Data File	Sample Number	Analysis Date:
5M114529.D	CAL BNA@50PPM	10/07/20 08:45
5M114530.D	WMB88174	10/07/20 09:36
5M114531.D	MBS-1	10/07/20 12:09
5M114532.D	WMB88180	10/07/20 14:47
5M114533.D	WMB88180(MS)	10/07/20 15:10

Data Path : G:\GcMsData\2020\GCMS\_5\Data\10-07-20\  
 Data File : 5M114528.D  
 Acq On : 7 Oct 2020 8:21  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_5\METHODQT\5M\_EVALNX.M  
 Title : @GCMS\_5  
 Last Update : Fri Sep 25 08:56:06 2020



Spectrum Information: Average of 9.970 to 9.991 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.6	29214	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.5	33816	PASS
70	69	0.00	2	0.6	216	PASS
127	198	40	60	43.9	41858	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	95331	PASS
199	198	5	9	7.0	6714	PASS
275	198	10	30	24.5	23335	PASS
365	198	1	100	2.5	2368	PASS
441	443	0.01	100	79.8	10207	PASS
442	198	40	100	70.0	66738	PASS
443	442	17	23	19.2	12799	PASS

RR

## Form 5

Tune Name: CAL DFTPP

Data File: 9M101576.D

Instrument: GCMS 9

Analysis Date: 10/08/20 08:26

Method: EPA 8270E

Tune Scan/Time Range: Average of 10.095 to 10.107 min

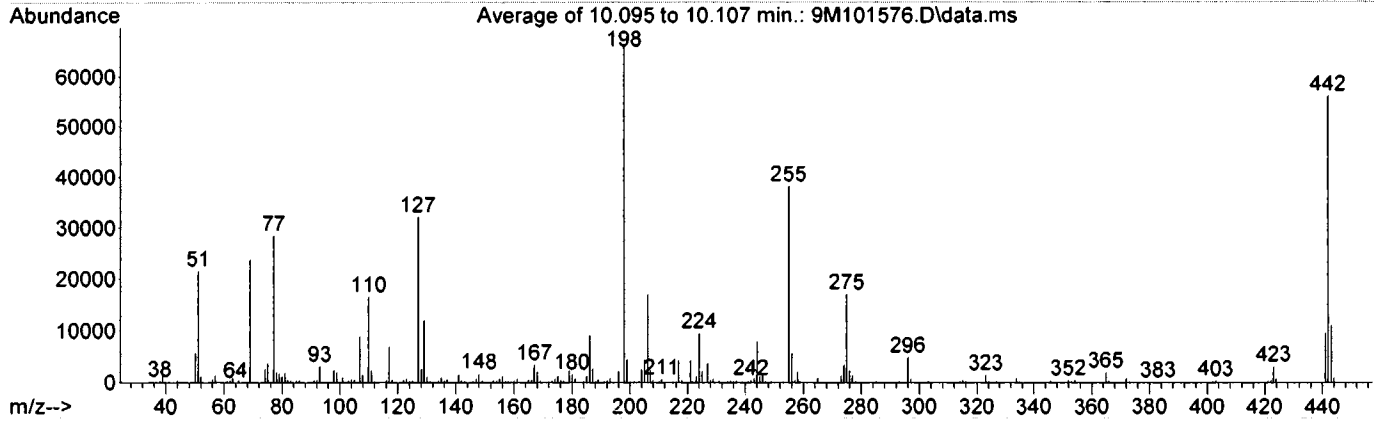
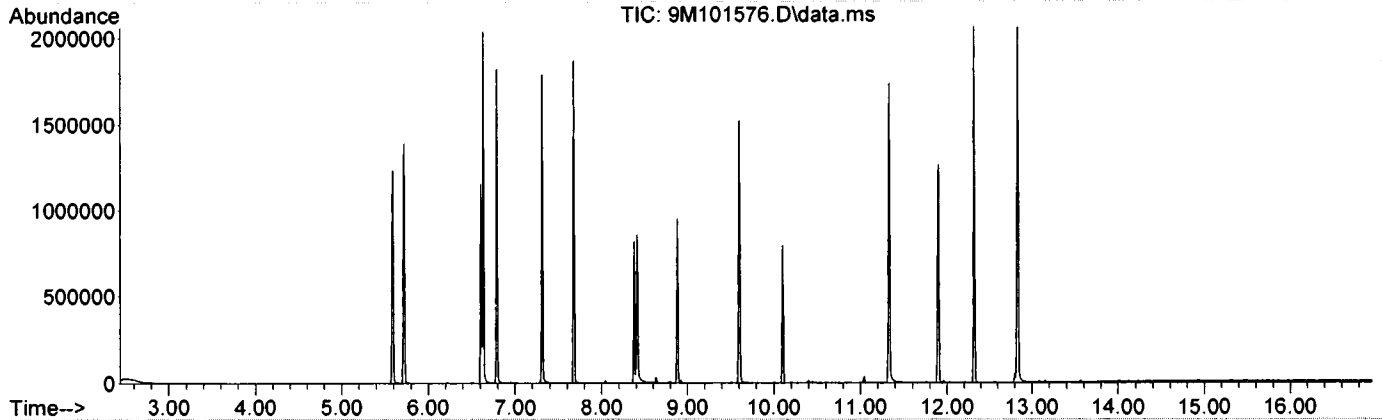
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund		Fail
51	198	30	60	32.6	21653		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	36.0	23907		PASS
70	69	0.00	2	0.5	121		PASS
127	198	40	60	48.6	32299		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	66480		PASS
199	198	5	9	6.8	4513		PASS
275	198	10	30	25.7	17100		PASS
365	198	1	100	3.1	2033		PASS
441	443	0.01	100	87.6	9658		PASS
442	198	40	100	84.7	56280		PASS
443	442	17	23	19.6	11029		PASS

Data File	Sample Number	Analysis Date:
9M101577.D	CAL BNA@50PPM	10/08/20 08:50
9M101578.D	AD19615-001	10/08/20 09:16
9M101579.D	AD19560-001(T)	10/08/20 09:39
9M101580.D	AD19595-013(T)	10/08/20 10:03
9M101581.D	19615-001	10/08/20 10:26
9M101582.D	AD19615-001	10/08/20 10:50
9M101583.D	AD19595-014(T)	10/08/20 11:13
9M101584.D	EF-1-V-335534(10/	10/08/20 11:37
9M101585.D	EF-1-V-335534(10/	10/08/20 12:01
9M101586.D	AD19593-003	10/08/20 12:24
9M101587.D	AD19593-004	10/08/20 12:47
9M101588.D	SMB88170(MS)	10/08/20 13:11
9M101589.D	SMB88171(MS)	10/08/20 13:34
9M101590.D	SMB88170	10/08/20 13:58
9M101591.D	SMB88171	10/08/20 14:21
9M101592.D	AD19593-006	10/08/20 14:45
9M101593.D	AD19542-001(T)/M	10/08/20 15:08
9M101594.D	AD19542-001(T)/M	10/08/20 15:32
9M101595.D	WMB88184	10/08/20 15:55
9M101596.D	AD19593-003(3X)	10/08/20 16:19
9M101597.D	AD19645-002	10/08/20 16:42
9M101598.D	AD19645-002(MS)	10/08/20 17:05
9M101599.D	AD19645-002(MSD)	10/08/20 17:29
9M101600.D	AD19645-001	10/08/20 17:52
9M101601.D	AD19640-001	10/08/20 18:16
9M101602.D	AD19644-001	10/08/20 18:39
9M101603.D	AD19644-003	10/08/20 19:02

Data Path : G:\GcMsData\2020\GCMS\_9\Data\10-08-20\  
 Data File : 9M101576.D  
 Acq On : 8 Oct 2020 8:26  
 Operator : AH/JKR/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2020\GCMS\_9\METHODQT\9M\_EVALN.M  
 Title : @GCMS\_9  
 Last Update : Tue Sep 15 10:50:50 2020



Spectrum Information: Average of 10.095 to 10.107 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	21653	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	36.0	23907	PASS
70	69	0.00	2	0.5	121	PASS
127	198	40	60	48.6	32299	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	66480	PASS
199	198	5	9	6.8	4513	PASS
275	198	10	30	25.7	17100	PASS
365	198	1	100	3.1	2033	PASS
441	443	0.01	100	87.6	9658	PASS
442	198	40	100	84.7	56280	PASS
443	442	17	23	19.6	11029	PASS

*RR*



Compound	Level #	Data File	Cal Identifier	Analysis Date/Time												Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations							
				RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AVGRT	RT	Corr1									Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6
Hexachlorocyclopenta	1	0	0.3481	0.2828	0.3280	0.3067	0.3608	0.3644	0.3566	0.3631	0.3397	5.9	1.00	1.00	8.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2,4,6-Trichlorophenol	1	0	0.3818	0.3248	0.4552	0.3448	0.3853	0.3923	0.3806	0.3812	0.3817	6.8	1.00	1.00	10	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2,4,5-Trichlorophenol	1	0	0.4023	0.3246	0.3934	0.3768	0.4135	0.4211	0.4052	0.3981	0.3927	7.7	0.20	0.999	7.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2-Fluorobiphenyl	1	0	1.3707	1.4571	1.4528	1.2908	1.3521	1.3636	1.3329	1.3300	1.3777	8.5	1.00	1.00	4.3	0.80	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	98.00						
2-Chloronaphthalene	1	0	1.2079	1.2899	1.3133	1.1381	1.1798	1.1686	1.1251	1.1160	1.1977	9.5	1.00	1.00	6.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
1,4-Dimethylnaphthalene	1	0	0.9255	1.0309	1.0294	0.8805	0.8951	0.8660	0.8244	0.7969	0.9068	10.0	1.00	1.00	9.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Dimethylnaphthalenes	1	0	0.9255	1.0309	1.0294	0.8805	0.8951	0.8660	0.8244	0.7969	0.9068	10.0	1.00	1.00	9.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Diphenyl Ether	1	0	0.8861	0.9916	0.9581	0.8489	0.8725	0.8651	0.8299	0.8203	0.8847	11.0	1.00	1.00	6.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2-Nitroaniline	1	0	0.3455	0.2687	0.3218	0.3181	0.3488	0.3541	0.3419	0.3389	0.3307	12.0	1.00	1.00	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Coumarin	1	0	0.4511	0.4731	0.4791	0.4300	0.4470	0.4410	0.4208	0.4099	0.4448	13.0	1.00	1.00	5.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Acenaphthylene	1	0	1.8381	1.8503	1.9043	1.7123	1.8061	1.7964	1.7130	1.6895	1.7982	14.0	1.00	1.00	4.3	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Dimethylphthalate	1	0	1.3525	1.4157	1.4280	1.2755	1.3394	1.3346	1.2880	1.2749	1.3480	15.0	1.00	1.00	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2,6-Dinitrotoluene	1	0	0.3044	0.2449	0.3025	0.2801	0.2964	0.2966	0.2777	0.2668	0.2848	16.0	1.00	1.00	7.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Acenaphthene	1	0	1.2402	1.4463	1.3577	1.1957	1.2207	1.1972	1.1275	1.1242	1.2483	17.0	1.00	1.00	9.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
3-Nitroaniline	1	0	0.3485	0.2526	0.3288	0.3132	0.3512	0.3507	0.3385	0.3339	0.3278	18.0	1.00	1.00	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2,4-Dinitrophenol	1	0	0.1451	0.1154	0.1019	0.1745	0.1875	0.1863	0.1848	0.1848	0.1578	19.0	0.20	0.996	2.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Dibenzofuran	1	0	1.7149	1.9669	1.8542	1.6174	1.6911	1.6830	1.6085	1.5976	1.7385	20.0	1.00	1.00	7.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50						
2,4-Dinitrotoluene	1	0	0.3988	0.2634	0.3715	0.3555	0.4106	0.4225	0.4123	0.4121	0.3818	21.0	1.00	1.00	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
4-Nitrophenol	1	0	0.2152	0.1023	0.2441	0.1898	0.2276	0.2348	0.2293	0.2277	0.2098	22.0	0.01	0.999	2.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2,3,4,6-Tetrachlorophenol	1	0	0.3563	0.3052	0.3476	0.3237	0.3660	0.3748	0.3546	0.3612	0.3498	23.0	0.01	0.999	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Fluorene	1	0	1.3868	1.5023	1.5050	1.3185	1.3438	1.3197	1.2672	1.2622	1.3688	24.0	1.00	1.00	7.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
4-Chlorophenyl-phenyl	1	0	0.6712	0.7592	0.7211	0.6296	0.6632	0.6608	0.6396	0.6304	0.6728	25.0	1.00	1.00	6.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Diethylphthalate	1	0	1.3019	1.3008	1.3220	1.1977	1.2888	1.3039	1.2566	1.2415	1.2887	26.0	1.00	1.00	3.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
4-Nitroaniline	1	0	0.3607	0.2379	0.3413	0.3283	0.3708	0.3753	0.3607	0.3617	0.3428	27.0	1.00	1.00	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Atrazine	1	0	0.4163	0.3187	0.3805	0.3762	0.4223	0.4277	0.4183	0.4117	0.3979	28.0	1.00	1.00	9.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
4,6-Dinitro-2-methylph	1	0	0.1223	0.1139	0.0958	0.1330	0.1407	0.1391	0.1378	0.1378	0.1268	29.0	1.00	1.00	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
n-Nitrosodiphenylamin	1	0	0.6288	0.6407	0.6630	0.6065	0.6239	0.6160	0.6038	0.5906	0.6282	30.0	1.00	1.00	3.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
2,4,6-Tribromophenol	1	0	0.0964	0.0626	0.0902	0.0859	0.1005	0.1016	0.1003	0.0991	0.0921	31.0	1.00	1.00	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
1,2-Dibromophthalazine	1	0	0.6311	0.6875	0.6713	0.6013	0.6269	0.6180	0.6524	0.6365	0.6419	32.0	1.00	1.00	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
4-Bromophenyl-phenyl	1	0	0.2038	0.2183	0.2079	0.1914	0.2055	0.2067	0.2060	0.2055	0.2069	33.0	1.00	1.00	3.5	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Hexachlorobenzene	1	0	0.2198	0.2662	0.2378	0.2107	0.2233	0.2263	0.2239	0.2213	0.2299	34.0	1.00	1.00	7.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
N-Octadecane	1	0	0.3090	0.2392	0.3093	0.2832	0.3054	0.2996	0.2828	0.2698	0.2879	35.0	1.00	1.00	8.4	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Pentachlorophenol	1	0	0.1414	0.1466	0.1187	0.1506	0.1575	0.1544	0.1549	0.1549	0.1469	36.0	1.00	1.00	9.1	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Phenanthrene	1	0	1.0499	1.2518	1.1464	1.0378	1.0254	1.0012	0.9849	0.9849	1.0698	37.0	1.00	1.00	8.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Anthracene	1	0	1.0753	1.1218	1.1276	1.0259	1.0713	1.0503	1.0307	0.9983	1.0698	38.0	1.00	1.00	4.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Carbazole	1	0	0.9801	0.9423	1.0058	0.9287	0.9786	0.9766	0.9442	0.9399	0.9621	39.0	1.00	1.00	2.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Di-n-butylphthalate	1	0	1.1066	0.7721	0.9731	0.9755	1.1298	1.1395	1.1174	1.0853	0.9871	40.0	1.00	1.00	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50						
Fluoranthene	1	0	1.1752	1.0345	1.1343	1.0740	1.1771	1.1804	1.1547	1.1440	1.1311	41.0	1.00	1.00	4.7	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Pyrene	1	0	1.1991	1.1646	1.2120	1.1032	1.1754	1.2103	1.1905	1.1796	1.1811	42.0	1.00	1.00	3.0	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Benzidine	1	0	0.6242	0.2647	0.5975	0.5110	0.6516	0.6623	0.6553	0.6510	0.5771	43.0	1.00	1.00	24	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0						
Temphenyl-d14	1	0	0.5839	0.5338	0.5769	0.5302	0.5876	0.6160	0.6119	0.6171	0.5821	44.0	1.00	1.00	5.9	0.01	25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	96.00						

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations															
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@20PPM	09/17/20 10:34	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9							
1	9M101321.D	CAL BNA@50PPM	09/17/20 13:22	2	9M101314.D	CAL BNA@20PPM	09/17/20 10:34	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0							
3	9M101313.D	CAL BNA@10PPM	09/17/20 10:10	4	9M101319.D	CAL BNA@20PPM	09/17/20 12:35	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0							
5	9M101318.D	CAL BNA@80PPM	09/17/20 12:12	6	9M101317.D	CAL BNA@120PPM	09/17/20 11:47	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0							
7	9M101316.D	CAL BNA@160PPM	09/17/20 11:24	8	9M101315.D	CAL BNA@196PPM	09/17/20 11:00	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0							
9	9M101320.D	CAL BNA@0.5PPM	09/17/20 12:58	8	9M101315.D	CAL BNA@196PPM	09/17/20 11:00	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0							
<b>Compound</b>																							
4,4'-DDE	1 0 Avg	0.3164	0.3085	0.3251	0.2870	0.3181	0.3368	0.3355	0.3357	0.320	11.57	0.999	1.00	5.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1 0 Avg	0.4676	0.3298	0.4118	0.4039	0.4696	0.4943	0.4859	0.4842	0.443	11.97	0.999	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1 0 Qua	0.4710	0.2384	0.3600	0.3840	0.4937	0.5153	0.5030	0.5012	0.433	12.23	0.999	0.999	23	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
4,4'-DDT	1 0 Avg	0.5607	0.4100	0.6178	0.5043	0.5646	0.5801	0.5774	0.5756	0.549	12.33	1.00	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1 0 Qua	0.3898	0.2240	0.4113	0.3352	0.4035	0.4225	0.4142	0.3995	0.375	12.85	0.999	0.999	18	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1 0 Avg	1.1262	1.1259	1.1404	1.0406	1.1448	1.1645	1.1679	1.1421	1.13	12.88	1.00	1.00	3.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Chrysene	1 0 Avg	1.1020	1.2634	1.1943	1.0445	1.0556	1.0822	1.0400	1.0496	1.10	12.92	1.00	1.00	7.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
bis(2-Ethylhexyl)phthalate	1 0 Qua	0.6559	0.3313	0.5540	0.5664	0.6633	0.6739	0.6511	0.6267	0.590	12.92	0.998	0.999	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
D,h-octylphthalate	1 0 Qua	1.0321	0.3373	0.6180	0.8050	1.0983	1.1633	1.1157	1.0860	0.907	13.68	0.998	0.999	33	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1 0 Avg	1.0627	0.8442	0.9841	0.9332	1.0674	1.1317	1.1321	1.1712	1.04	14.10	0.999	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1 0 Avg	1.1059	1.0441	1.1654	1.0308	1.0850	1.0826	1.0345	0.9585	1.06	14.13	0.994	0.999	5.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1 0 Avg	0.9862	0.7020	0.9358	0.8535	0.9952	1.0171	1.0027	0.9943	0.936	14.47	1.00	1.00	12	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Indenofl 1,2,3-cdipyren	1 0 Avg	1.1882	0.9198	1.0889	1.0476	1.2176	1.2755	1.2625	1.2526	1.16	15.89	1.00	1.00	11	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Dibenzofluoranthracene	1 0 Avg	1.0042	0.7706	0.9347	0.8922	1.0083	1.0517	1.0405	1.0286	0.966	15.92	1.00	1.00	9.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthracene	1 0 Avg	0.9795	0.8174	0.9208	0.8688	0.9875	1.0324	1.0163	1.0094	0.954	16.29	1.00	1.00	8.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0

**Flags**  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

**Note:**  
Avg Rsd: 8.313  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.





Level #	Data File:	Cal Identifier:	Analysis Date/Time	Level #	Data File:	Cal Identifier:	Analysis Date/Time	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9
1	5M114388.D	CAL BNA@50PPM	09/24/20 12:58	2	5M114381.D	CAL BNA@2PPM	09/24/20 10:15	0.4107	7.49	0.998	0.998	4.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
3	5M114382.D	CAL BNA@10PPM	09/24/20 10:38	4	5M114387.D	CAL BNA@20PPM	09/24/20 12:34	0.4407	7.58	0.999	0.999	7.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
5	5M114386.D	CAL BNA@80PPM	09/24/20 12:11	6	5M114385.D	CAL BNA@120PPM	09/24/20 11:48	0.4567	7.61	0.999	0.999	7.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
7	5M114384.D	CAL BNA@160PPM	09/24/20 11:25	8	5M114383.D	CAL BNA@196PPM	09/24/20 11:01	1.1977	7.65	0.999	0.999	5.1	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	98.00
9	5M114380.D	CAL BNA@0.5PPM	09/24/20 09:52					1.3177	7.76	0.998	0.998	6.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	196.0
1-Compound	Col Mr. Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9											
Hexachlorocyclopenta	1 0	0.4073	0.3755	0.4097	0.4173	0.4431	0.3988	0.4066	0.4226												
2,4,6-Trichlorophenol	1 0	0.4476	0.3696	0.4359	0.4868	0.4509	0.4287	0.4515	0.4464												
2,4,5-Trichlorophenol	1 0	0.4568	0.3797	0.4777	0.4594	0.4889	0.4548	0.4552	0.4705												
2-Fluorobiphenyl	1 0	1.4376	1.6049	1.5750	1.5132	1.4762	1.3876	1.4144	1.5090												
2-Chloronaphthalene	1 0	0.4879	0.4049	0.4119	0.3696	0.3139	0.1838	0.2338	0.2666												
1,4-Dimethylnaphthalene	1 0	0.9360	1.0622	1.0872	1.0240	0.9330	0.8343	0.8643	0.8913												
Dimethylnaphthalenes	1 0	0.9360	1.0622	1.0872	1.0240	0.9330	0.8343	0.8643	0.8913												
Diphenyl Ether	1 0	0.9006	1.0514	1.0302	0.9682	0.9468	0.8656	0.8360	0.9129												
2-Nitroaniline	1 0	0.4210	0.3219	0.4008	0.4267	0.4460	0.4213	0.4160	0.4457												
Coumarin	1 0	0.4780	0.5101	0.5221	0.5122	0.4828	0.4266	0.4454	0.4532												
Acenaphthylene	1 0	1.8343	1.9226	2.0619	1.9864	1.9285	1.7344	1.7791	1.8414												
Dimethylphthalate	1 0	1.4531	1.5016	1.5708	1.5207	1.4844	1.3613	1.3908	1.4501												
2,6-Dinitrotoluene	1 0	0.3230	0.2714	0.3397	0.3454	0.3252	0.2905	0.3008	0.3092												
Acenaphthene	1 0	1.2178	1.4016	1.3334	1.2920	1.2513	1.1167	1.1576	1.1869												
3-Nitroaniline	1 0	0.3586	0.2839	0.3440	0.3669	0.3738	0.3454	0.3491	0.3558												
2,4-Dinitrophenol	1 0	0.1736	0.1736	0.0792	0.1430	0.1982	0.2021	0.2041	0.2127												
Dibenzofuran	1 0	1.8089	2.1036	1.9754	1.8882	1.8400	1.6678	1.7145	1.7200	2.7684											
2,4-Dinitrotoluene	1 0	0.4260	0.2900	0.4049	0.4322	0.4695	0.4326	0.4494	0.4572												
4-Nitrophenol	1 0	0.2776	0.1394	0.2408	0.2708	0.2842	0.2863	0.2923	0.3027												
2,3,4,6-Tetrachlorophenol	1 0	0.4166	0.3360	0.4257	0.4216	0.4363	0.3975	0.4168	0.4271												
Fluorene	1 0	1.4043	1.5764	1.6121	1.5450	1.4561	1.3243	1.3424	1.4151												
4-Chlorophenyl-phenyl	1 0	0.7114	0.8148	0.8108	0.7825	0.7556	0.6913	0.6949	0.7303												
Diethylphthalate	1 0	1.4058	1.3220	1.4594	1.4616	1.4894	1.3562	1.3700	1.4359												
4-Nitroaniline	1 0	0.3689	0.2546	0.3448	0.3841	0.3898	0.3686	0.3755	0.3932												
Atrazine	1 0	0.4516	0.3811	0.4451	0.4754	0.4806	0.4413	0.4588	0.4766												
4,6-Dinitro-2-methylph	1 0	0.1351	0.0903	0.1189	0.1496	0.1477	0.1542	0.1560													
n-Nitrosodiphenylamin	1 0	0.6294	0.6547	0.6949	0.6809	0.6379	0.6156	0.6319	0.6288												
2,4,6-Tribromophenol	1 0	0.0973	0.0691	0.0888	0.1009	0.1008	0.0979	0.0992	0.1001												
1,2-Diphenylhydrazine	1 0	0.7091	0.7037	0.7892	0.7684	0.7369	0.6907	0.7841	0.7882												
4-Bromophenyl-phenyl	1 0	0.2228	0.2488	0.2484	0.2346	0.2341	0.2167	0.2279	0.2263												
Hexachlorobenzene	1 0	0.2312	0.2720	0.2615	0.2481	0.2503	0.2184	0.2341	0.2283												
N-Octadecane	1 0	0.3767	0.3585	0.4092	0.3916	0.3773	0.3347	0.3488	0.3411												
Pentachlorophenol	1 0	0.1538	0.1256	0.1497	0.1644	0.1567	0.1659	0.1641													
Phenanthrene	1 0	1.0559	1.2609	1.1693	1.1443	1.0922	1.0032	1.0592	1.0408												
Anthracene	1 0	1.1193	1.1270	1.1810	1.1684	1.1081	1.0370	1.0925	1.0911												
Carbazole	1 0	1.0096	1.0001	1.0942	1.0551	1.0140	0.9458	0.9817	0.9806												
Di-n-butylphthalate	1 0	1.2085	0.8746	1.1135	1.1856	1.2447	1.1486	1.2182	1.2094	1.0426											
Fluoranthene	1 0	1.2749	1.2140	1.3176	1.2918	1.2989	1.2075	1.2533	1.2290												
Pyrene	1 0	1.2933	1.2598	1.3881	1.3642	1.2874	1.2285	1.2943	1.3232												
Benzenidine	1 0	0.7240	0.3478	0.5535	0.6812	0.7290	0.6944	0.6858	0.7124												
Terphenyl-d14	1 0	0.6510	0.6053	0.6408	0.6740	0.6487	0.6509	0.6754	0.7064												

Flags  
a - failed the min rf criteria  
c - failed the minimum correlation coeff criteria (if applicable)

Note:  
Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Level #	Data File	Cal Identifier	Analysis Date/Time							Level #	Data File	Cal Identifier	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
			09/24/20 12:58	09/24/20 10:38	09/24/20 12:11	09/24/20 11:25	09/24/20 09:52	5M114381.D	CAL BNA@2PPM									09/24/20 10:15	5M114387.D	CAL BNA@20PPM	09/24/20 12:34	5M114385.D	CAL BNA@120PPM	09/24/20 11:48	5M114383.D	CAL BNA@196PPM
1	5M114388.D	CAL BNA@50PPM							2	5M114381.D	CAL BNA@2PPM	0.384	11.43	0.999	1.00	3.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
3	5M114382.D	CAL BNA@10PPM							4	5M114387.D	CAL BNA@20PPM	0.521	11.82	1.00	1.00	9.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
5	5M114386.D	CAL BNA@80PPM							6	5M114385.D	CAL BNA@120PPM	0.502	12.08	0.999	1.00	20	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
7	5M114384.D	CAL BNA@160PPM							8	5M114383.D	CAL BNA@196PPM	0.597	12.18	0.999	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
9	5M114380.D	CAL BNA@0.5PPM										0.406	12.69	1.00	1.00	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.3772	0.3651	0.3905	0.3907	0.3717	0.3827	0.3969	0.3989			1.26	12.72	0.999	0.999	2.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.5367	0.4102	0.4964	0.5450	0.5468	0.5325	0.5408	0.5562			1.21	12.76	0.999	0.999	5.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Qua	0.5383	0.2816	0.4289	0.5146	0.5588	0.5471	0.5672	0.5781			0.687	12.77	0.999	0.999	18	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.6285	0.4181	0.5736	0.6416	0.6288	0.6080	0.6407	0.6367			1.10	13.52	1.00	1.00	24	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Qua	0.4431	0.2589	0.3714	0.4373	0.4461	0.4303	0.4274	0.4294			1.15	13.93	0.998	0.998	5.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.2472	1.2341	1.2953	1.3169	1.2484	1.2038	1.2480	1.2867			1.15	13.96	0.997	0.997	8.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.1870	1.2973	1.2854	1.2803	1.1823	1.1401	1.1454	1.1779			1.05	14.28	1.00	1.00	4.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	0.7384	0.4006	0.6322	0.7332	0.7569	0.7213	0.7429	0.7697			1.28	15.64	0.999	0.999	4.2	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Qua	1.2076	0.5278	0.9020	1.1375	1.2561	1.2292	1.2795	1.2660			1.08	15.66	0.999	0.999	4.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.2133	1.0394	1.1971	1.1623	1.1692	1.0747	1.1378	1.2084									50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.1837	1.1615	1.3235	1.2030	1.1354	1.0118	1.1045	1.0717									50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.0697	0.9516	1.1080	1.0834	1.0531	1.0255	1.0559	1.0633									50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.2711	1.1876	1.3601	1.3324	1.2835	1.2312	1.2820	1.2954									50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.1080	1.0231	1.1643	1.1136	1.0814	1.0150	1.0744	1.0755									50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1	0 Avg	1.0644	1.0103	1.1180	1.1043	1.0681	1.0297	1.0676	1.0812			1.07	16.01	0.999	1.00	3.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

**Flags**  
*a* - failed the min rf criteria  
*c* - failed the minimum correlation coeff criteria (if applicable)

**Note:**  
 Corr 1 = Correlation Coefficient for linear Eq.  
 Corr 2 = Correlation Coefficient for quad Eq.  
 Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 8:42:00 AData File: 9M101559.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.71	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.74	47.65	50	**	1.057	1.007		4.69	
Pyridine	1	0		3.20	50.19	50	**	2.196	2.205		0.39	
N-Nitrosodimethylamine	1	0		3.14	52.94	50	**	1.391	1.473		5.88	
2-Fluorophenol	1	0	S	4.71	52.37	50	**	2.092	2.192		4.75	
Benzaldehyde	1	0		5.52	49.15	50	20	0.01	2.004	1.970	1.70	
Aniline	1	0		5.62	51.32	50	**	3.460	3.551		2.64	
Pentachloroethane	1	0		5.67	49.97	50	**	0.05	0.724	0.724	0.07	
bis(2-Chloroethyl)ether	1	0		5.68	52.85	50	20	0.7	2.274	2.404	5.71	
Phenol-d5	1	0	S	5.58	52.99	50	**	2.531	2.682		5.97	
Phenol	1	0		5.59	51.39	50	20	0.8	3.242	3.332	2.79	
2-Chlorophenol	1	0		5.72	50.99	50	20	0.8	2.529	2.579	1.97	
N-Decane	1	0		5.77	51.67	50	**	0.05	1.907	1.970	3.34	
1,3-Dichlorobenzene	1	0		5.85	50.43	50	**	2.771	2.795		0.86	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.92	51.27	50	20		1.496	1.534	2.54	
1,2-Dichlorobenzene	1	0		6.04	51.31	50	**	1.415	1.452		2.61	
Benzyl alcohol	1	0		6.01	51.79	50	**	0.812	0.841		3.58	
bis(2-chloroisopropyl)ether	1	0		6.12	53.65	50	20	0.01	1.260	1.352	7.29	
2-Methylphenol	1	0		6.10	53.90	50	20	0.7	1.157	1.247	7.80	
Acetophenone	1	0		6.22	52.50	50	20	0.01	1.702	1.787	4.99	
Hexachloroethane	1	0		6.32	51.85	50	20	0.3	0.526	0.546	3.71	
N-Nitroso-di-n-propylamine	1	0		6.22	54.06	50	20	0.5	0.741	0.801	8.13	
3&4-Methylphenol	1	0		6.22	53.87	50	20		1.136	1.223	7.73	
Naphthalene-d8	1	0	I	6.91	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.35	27.10	25	**	0.144	0.156		8.42	
Nitrobenzene	1	0		6.37	52.55	50	20	0.2	0.314	0.330	5.11	
Isophorone	1	0		6.55	52.96	50	20	0.4	0.574	0.608	5.92	
2-Nitrophenol	1	0		6.61	52.70	50	20	0.1	0.177	0.187	5.41	
2,4-Dimethylphenol	1	0		6.64	51.93	50	20	0.2	0.294	0.305	3.87	
Benzoic Acid	1	0		6.69	35.77	50	**	0.206	0.136		28.46	
bis(2-Chloroethoxy)methane	1	0		6.71	52.76	50	20	0.3	0.365	0.385	5.51	
2,4-Dichlorophenol	1	0		6.80	53.06	50	20	0.2	0.270	0.286	6.11	
1,2,4-Trichlorobenzene	1	0		6.86	50.44	50	**	0.312	0.315		0.87	
Naphthalene	1	0		6.92	50.49	50	20	0.7	1.062	1.073	0.98	
4-Chloroaniline	1	0		6.96	52.07	50	20	0.01	0.390	0.406	4.14	
Hexachlorobutadiene	1	0		7.01	48.72	50	20	0.01	0.175	0.170	2.56	
Caprolactam	1	0		7.22	54.26	50	20	0.01	0.105	0.114	8.52	
4-Chloro-3-methylphenol	1	0		7.32	51.07	50	20	0.2	0.276	0.282	2.14	
2-Methylnaphthalene	1	0		7.47	51.36	50	**	0.4	0.697	0.716	2.72	
1-Methylnaphthalene	1	0		7.54	51.19	50	**	0.4	0.666	0.682	2.39	
Methylnaphthalenes	1	0		7.54	102.70	50	**			1.400	105.40	
1,1'-Biphenyl	1	0		7.84	50.96	50	20	0.01	0.805	0.821	1.92	
Acenaphthene-d10	1	0	I	8.35	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.60	50.06	50	20	0.01	0.629	0.629	0.13	
Hexachlorocyclopentadiene	1	0		7.59	47.45	50	20	0.05	0.339	0.321	5.11	
2,4,6-Trichlorophenol	1	0		7.68	50.34	50	20	0.2	0.381	0.383	0.69	
2,4,5-Trichlorophenol	1	0		7.71	50.97	50	20	0.2	0.392	0.399	1.93	
2-Fluorobiphenyl	1	0	S	7.75	25.70	25	**	1.369	1.407		2.80	
2-Chloronaphthalene	1	0		7.87	51.32	50	20	0.8	1.192	1.224	2.65	
1,4-Dimethylnaphthalene	1	0		8.15	51.32	50	**	0.906	0.930		2.64	
Dimethylnaphthalenes	1	0		8.15	51.32	50	20			0.930	2.64	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 1 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 8:42:00 AData File: 9M101559.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	50.97	50	**		0.884	0.901	1.95	
2-Nitroaniline	1	0		7.94	55.35	50	20	0.01	0.330	0.365	10.71	
Coumarin	1	0		8.12	52.47		**		0.444			
Acenaphthylene	1	0		8.22	52.06	50	20	0.9	1.789	1.863	4.13	
Dimethylphthalate	1	0		8.08	51.17	50	20	0.01	1.339	1.370	2.35	
2,6-Dinitrotoluene	1	0		8.14	54.75	50	20	0.2	0.284	0.311	9.50	
Acenaphthene	1	0		8.38	51.26	50	20	0.9	1.239	1.270	2.53	
3-Nitroaniline	1	0		8.29	55.29	50	20	0.01	0.327	0.362	10.57	
2,4-Dinitrophenol	1	0		8.38	36.67	50	20	0.2	0.157	0.110	26.66	C1
Dibenzofuran	1	0		8.53	50.46	50	20	0.8	1.727	1.743	0.93	
2,4-Dinitrotoluene	1	0		8.50	55.24	50	20	0.2	0.381	0.421	10.48	
4-Nitrophenol	1	0		8.41	44.07	50	20	0.01	0.209	0.201	11.87	
2,3,4,6-Tetrachlorophenol	1	0		8.64	52.48	50	20	0.01	0.349	0.366	4.96	
Fluorene	1	0		8.86	51.47	50	20	0.9	1.363	1.403	2.95	
4-Chlorophenyl-phenylether	1	0		8.85	50.76	50	20	0.4	0.672	0.682	1.51	
Diethylphthalate	1	0		8.72	51.48	50	20	0.01	1.277	1.315	2.97	
4-Nitroaniline	1	0		8.86	55.45	50	20	0.01	0.342	0.379	10.90	
Atrazine	1	0		9.49	52.28	50	20	0.01	0.397	0.415	4.56	
Phenanthrene-d10	1	0	I	9.82	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.89	45.67	50	20	0.01	0.126	0.115	8.65	
n-Nitrosodiphenylamine	1	0		8.96	52.11	50	20	0.01	0.622	0.648	4.21	
2,4,6-Tribromophenol	1	0	S	9.09	53.16	50	**		0.092	0.098	6.32	
1,2-Diphenylhydrazine	1	0		9.00	51.84	50	**		0.641	0.664	3.67	
4-Bromophenyl-phenylether	1	0		9.34	50.96	50	20	0.1	0.206	0.210	1.92	
Hexachlorobenzene	1	0		9.41	49.13	50	20	0.1	0.229	0.225	1.75	
N-Octadecane	1	0		9.68	56.53	50	**	0.05	0.287	0.325	13.06	
Pentachlorophenol	1	0		9.61	49.00	50	20	0.05	0.146	0.143	2.01	
Phenanthrene	1	0		9.85	50.39	50	20	0.7	1.063	1.072	0.78	
Anthracene	1	0		9.90	51.99	50	20	0.7	1.063	1.105	3.99	
Carbazole	1	0		10.07	52.74	50	20	0.01	0.962	1.015	5.47	
Di-n-butylphthalate	1	0		10.45	49.73	50	20	0.01	0.987	1.137	0.54	
Fluoranthene	1	0		11.18	52.87	50	20	0.6	1.134	1.199	5.73	
Chrysene-d12	1	0	I	12.88	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.45	52.32	50	20	0.6	1.179	1.234	4.63	
Benzidine	1	0		11.33	43.93	50	**		0.577	0.541	12.14	
Terphenyl-d14	1	0	S	11.63	26.31	25	**		0.582	0.613	5.26	
4,4'-DDE	1	0		11.57	51.29		**		0.320			
4,4'-DDD	1	0		11.97	54.26		**		0.443			
Butylbenzylphthalate	1	0		12.22	50.39	50	20	0.01	0.433	0.497	0.78	
4,4'-DDT	1	0		12.32	52.86		**		0.549			
3,3'-Dichlorobenzidine	1	0		12.84	48.47	50	20	0.01	0.375	0.401	3.06	
Benzo[a]anthracene	1	0		12.87	51.96	50	20	0.8	1.132	1.176	3.93	
Chrysene	1	0		12.91	50.43	50	20	0.7	1.104	1.114	0.86	
bis(2-Ethylhexyl)phthalate	1	0		12.91	50.42	50	20	0.01	0.590	0.685	0.84	
Perylene-d12	1	0	I	14.52	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.66	48.57	50	20	0.01	0.907	1.082	2.86	
Benzo[b]fluoranthene	1	0		14.08	52.98	50	20	0.7	1.041	1.103	5.96	
Benzo[k]fluoranthene	1	0		14.12	52.98	50	20	0.7	1.063	1.127	5.97	
Benzo[a]pyrene	1	0		14.45	54.27	50	20	0.7	0.936	1.016	8.53	
Indeno[1,2,3-cd]pyrene	1	0		15.88	53.29	50	20	0.5	1.157	1.233	6.59	
Dibenzo[a,h]anthracene	1	0		15.89	53.24	50	20	0.4	0.966	1.029	6.48	
Benzo[g,h,i]perylene	1	0		16.27	52.77	50	20	0.5	0.954	1.007	5.55	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 8:42:00 AData File: 9M101559.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.681	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.906	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 3 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 8:45:00 AData File: 5M114529.D  
Method: EPA 8270E

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.60	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.63	54.25	50	**	1.136	1.232		8.50	
Pyridine	1	0		3.08	47.04	50	**	2.649	2.492		5.92	
N-Nitrosodimethylamine	1	0		3.01	51.77	50	**	1.678	1.737		3.54	
2-Fluorophenol	1	0	S	4.60	51.45	50	**	1.731	1.782		2.90	
Benzaldehyde	1	0		5.43	50.32	50	20	0.01	1.843	1.855	0.63	
Aniline	1	0		5.52	47.58	50	**	3.105	2.955		4.84	
Pentachloroethane	1	0		5.57	51.61	50	**	0.05	0.608	0.627	3.22	
bis(2-Chloroethyl)ether	1	0		5.58	51.46	50	20	0.7	2.089	2.026	2.91	
Phenol-d5	1	0	S	5.49	51.78	50	**	2.121	2.197		3.56	
Phenol	1	0		5.50	51.27	50	20	0.8	2.666	2.734	2.54	
2-Chlorophenol	1	0		5.63	51.13	50	20	0.8	1.949	1.993	2.25	
N-Decane	1	0		5.67	50.73	50	**	0.05	1.799	1.825	1.46	
1,3-Dichlorobenzene	1	0		5.75	50.17	50	**	2.270	2.278		0.33	
1,4-Dichlorobenzene-d4	1	0	I	5.80	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.82	48.94	50	20	1.622	1.588		2.11	
1,2-Dichlorobenzene	1	0		5.95	47.47	50	**	1.536	1.458		5.07	
Benzyl alcohol	1	0		5.92	49.32	50	**	0.879	0.867		1.37	
bis(2-chloroisopropyl)ether	1	0		6.03	49.32	50	20	0.01	1.710	1.687	1.35	
2-Methylphenol	1	0		6.01	48.03	50	20	0.7	1.299	1.248	3.94	
Acetophenone	1	0		6.13	50.42	50	20	0.01	1.906	1.922	0.83	
Hexachloroethane	1	0		6.22	51.48	50	20	0.3	0.593	0.611	2.96	
N-Nitroso-di-n-propylamine	1	0		6.13	50.71	50	20	0.5	0.943	0.957	1.42	
3&4-Methylphenol	1	0		6.13	47.02	50	20	1.299	1.222		5.96	
Naphthalene-d8	1	0	I	6.81	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.26	26.85	25	**	0.161	0.173		7.38	
Nitrobenzene	1	0		6.27	54.16	50	20	0.2	0.398	0.431	8.31	
Isophorone	1	0		6.46	52.69	50	20	0.4	0.701	0.739	5.38	
2-Nitrophenol	1	0		6.52	55.06	50	20	0.1	0.188	0.207	10.12	
2,4-Dimethylphenol	1	0		6.55	49.87	50	20	0.2	0.351	0.350	0.26	
Benzoic Acid	1	0		6.61	40.68	50	**	0.253	0.203		18.64	
bis(2-Chloroethoxy)methane	1	0		6.62	49.64	50	20	0.3	0.436	0.433	0.71	
2,4-Dichlorophenol	1	0		6.70	49.28	50	20	0.2	0.329	0.324	1.44	
1,2,4-Trichlorobenzene	1	0		6.77	50.07	50	**	0.366	0.367		0.13	
Naphthalene	1	0		6.83	50.96	50	20	0.7	1.195	1.111	1.91	
4-Chloroaniline	1	0		6.87	47.10	50	20	0.01	0.451	0.425	5.79	
Hexachlorobutadiene	1	0		6.92	51.13	50	20	0.01	0.224	0.230	2.26	
Caprolactam	1	0		7.14	48.12	50	20	0.01	0.114	0.118	3.76	
4-Chloro-3-methylphenol	1	0		7.23	52.10	50	20	0.2	0.318	0.331	4.20	
2-Methylnaphthalene	1	0		7.36	48.58	50	**	0.4	0.752	0.730	2.84	
1-Methylnaphthalene	1	0		7.44	48.75	50	**	0.4	0.715	0.698	2.49	
Methylnaphthalenes	1	0		7.36	97.24	50	**		1.423		94.47	
1,1'-Biphenyl	1	0		7.74	48.43	50	20	0.01	0.896	0.868	3.14	
Acenaphthene-d10	1	0	I	8.24	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.50	50.51	50	20	0.01	0.710	0.717	1.02	
Hexachlorocyclopentadiene	1	0		7.49	51.90	50	20	0.05	0.410	0.426	3.80	
2,4,6-Trichlorophenol	1	0		7.58	52.05	50	20	0.2	0.440	0.458	4.10	
2,4,5-Trichlorophenol	1	0		7.61	52.44	50	20	0.2	0.456	0.478	4.88	
2-Fluorobiphenyl	1	0	S	7.65	25.35	25	**	1.490	1.511		1.40	
2-Chloronaphthalene	1	0		7.76	48.76	50	20	0.8	1.308	1.276	2.48	
1,4-Dimethylnaphthalene	1	0		8.04	49.90	50	**	0.954	0.952		0.20	
Dimethylnaphthalenes	1	0		8.04	49.90	50	20		0.952		0.20	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits\*\* - No limit specified in method  
Page 1 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/7/2020 8:45:00 AData File: 5M114529.D  
Method: EPA 8270E

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.82	50.68	50	**		0.939	0.952	1.35	
2-Nitroaniline	1	0		7.84	56.21	50	20	0.01	0.412	0.464	12.42	
Coumarin	1	0		8.02	49.41		**		0.479			
Acenaphthylene	1	0		8.12	49.67	50	20	0.9	1.886	1.874	0.66	
Dimethylphthalate	1	0		7.98	50.22	50	20	0.01	1.467	1.473	0.45	
2,6-Dinitrotoluene	1	0		8.04	52.82	50	20	0.2	0.313	0.331	5.63	
Acenaphthene	1	0		8.27	49.90	50	20	0.9	1.245	1.242	0.20	
3-Nitroaniline	1	0		8.19	53.41	50	20	0.01	0.347	0.371	6.82	
2,4-Dinitrophenol	1	0		8.28	58.32	50	20	0.2	0.173	0.204	16.64	
Dibenzofuran	1	0		8.42	50.86	50	20	0.8	1.943	1.801	1.71	
2,4-Dinitrotoluene	1	0		8.39	55.29	50	20	0.2	0.420	0.465	10.59	
4-Nitrophenol	1	0		8.31	55.16	50	20	0.01	0.262	0.302	10.33	
2,3,4,6-Tetrachlorophenol	1	0		8.53	51.52	50	20	0.01	0.410	0.422	3.04	
Fluorene	1	0		8.74	49.96	50	20	0.9	1.460	1.458	0.08	
4-Chlorophenyl-phenylether	1	0		8.73	50.33	50	20	0.4	0.749	0.754	0.65	
Diethylphthalate	1	0		8.61	50.11	50	20	0.01	1.413	1.416	0.23	
4-Nitroaniline	1	0		8.75	52.43	50	20	0.01	0.360	0.377	4.85	
Atrazine	1	0		9.37	52.85	50	20	0.01	0.451	0.477	5.70	
Phenanthrene-d10	1	0	I	9.69	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.77	53.55	50	20	0.01	0.136	0.146	7.11	
n-Nitrosodiphenylamine	1	0		8.84	50.97	50	20	0.01	0.647	0.659	1.95	
2,4,6-Tribromophenol	1	0	S	8.97	54.59	50	**		0.094	0.103	9.18	
1,2-Diphenylhydrazine	1	0		8.88	50.56	50	**		0.746	0.755	1.12	
4-Bromophenyl-phenylether	1	0		9.22	51.03	50	20	0.1	0.232	0.237	2.07	
Hexachlorobenzene	1	0		9.29	50.35	50	20	0.1	0.241	0.242	0.69	
N-Octadecane	1	0		9.55	51.57	50	**	0.05	0.367	0.379	3.15	
Pentachlorophenol	1	0		9.48	51.56	50	20	0.05	0.154	0.159	3.12	
Phenanthrene	1	0		9.72	49.89	50	20	0.7	1.103	1.101	0.21	
Anthracene	1	0		9.77	50.57	50	20	0.7	1.116	1.128	1.14	
Carbazole	1	0		9.94	50.21	50	20	0.01	1.010	1.014	0.42	
Di-n-butylphthalate	1	0		10.32	54.10	50	20	0.01	1.138	1.232	8.20	
Fluoranthene	1	0		11.04	51.32	50	20	0.6	1.261	1.294	2.65	
Chrysene-d12	1	0	I	12.74	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.31	50.39	50	20	0.6	1.305	1.315	0.77	
Benzidine	1	0		11.20	39.29	50	**		0.641	0.543	21.42	
Terphenyl-d14	1	0	S	11.49	24.84	25	**		0.657	0.652	0.63	
4,4'-DDE	1	0		11.43	50.23		**		0.384			
4,4'-DDD	1	0		11.82	50.65		**		0.521			
Butylbenzylphthalate	1	0		12.08	51.09	50	20	0.01	0.502	0.548	2.18	
4,4'-DDT	1	0		12.18	54.41		**		0.597			
3,3'-Dichlorobenzidine	1	0		12.70	50.70	50	20	0.01	0.406	0.445	1.40	
Benzo[a]anthracene	1	0		12.73	48.82	50	20	0.8	1.260	1.230	2.35	
Chrysene	1	0		12.77	47.32	50	20	0.7	1.212	1.147	5.36	
bis(2-Ethylhexyl)phthalate	1	0		12.77	53.43	50	20	0.01	0.687	0.734	6.86	
Perylene-d12	1	0	I	14.35	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.52	51.00	50	20	0.01	1.101	1.246	2.00	
Benzo[b]fluoranthene	1	0		13.93	51.99	50	20	0.7	1.150	1.196	3.99	
Benzo[k]fluoranthene	1	0		13.97	48.54	50	20	0.7	1.149	1.116	2.91	
Benzo[a]pyrene	1	0		14.29	50.99	50	20	0.7	1.051	1.072	1.97	
Indeno[1,2,3-cd]pyrene	1	0		15.64	48.61	50	20	0.5	1.280	1.245	2.78	
Dibenzo[a,h]anthracene	1	0		15.67	49.14	50	20	0.4	1.082	1.063	1.72	
Benzo[g,h,i]perylene	1	0		16.02	49.25	50	20	0.5	1.068	1.052	1.50	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
 Cont Calibration Date/Time 10/7/2020 8:45:00 A

Data File: 5M114529.D  
 Method: EPA 8270E

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.732		0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.954		0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound  
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound  
 C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 3 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.  
 524.2 limits are compared against the %DIFF



## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/8/2020 8:50:00 AData File: 9M101577.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.70	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.73	49.10	50	**	1.057	1.038	1.038	1.81	
Pyridine	1	0		3.20	50.33	50	**	2.196	2.210	2.210	0.65	
N-Nitrosodimethylamine	1	0		3.13	55.87	50	**	1.391	1.554	1.554	11.74	
2-Fluorophenol	1	0	S	4.70	53.59	50	**	2.092	2.243	2.243	7.18	
Benzaldehyde	1	0		5.52	51.72	50	20	0.01	2.004	2.073	3.45	
Aniline	1	0		5.61	52.71	50	**	3.460	3.648	3.648	5.42	
Pentachloroethane	1	0		5.66	52.22	50	**	0.05	0.724	0.757	4.44	
bis(2-Chloroethyl)ether	1	0		5.67	53.62	50	20	0.7	2.274	2.439	7.24	
Phenol-d5	1	0	S	5.57	55.49	50	**	2.531	2.809	2.809	10.98	
Phenol	1	0		5.58	53.53	50	20	0.8	3.242	3.471	7.07	
2-Chlorophenol	1	0		5.72	53.48	50	20	0.8	2.529	2.705	6.95	
N-Decane	1	0		5.77	54.81	50	**	0.05	1.907	2.090	9.62	
1,3-Dichlorobenzene	1	0		5.85	52.28	50	**	2.771	2.898	2.898	4.57	
1,4-Dichlorobenzene-d4	1	0	I	5.90	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	52.77	50	20	1.496	1.579	1.579	5.54	
1,2-Dichlorobenzene	1	0		6.04	52.95	50	**	1.415	1.499	1.499	5.89	
Benzyl alcohol	1	0		6.01	54.08	50	**	0.812	0.878	0.878	8.15	
bis(2-chloroisopropyl)ether	1	0		6.12	57.02	50	20	0.01	1.260	1.437	14.04	
2-Methylphenol	1	0		6.10	56.42	50	20	0.7	1.157	1.306	12.84	
Acetophenone	1	0		6.22	54.88	50	20	0.01	1.702	1.869	9.77	
Hexachloroethane	1	0		6.31	53.28	50	20	0.3	0.526	0.561	6.56	
N-Nitroso-di-n-propylamine	1	0		6.22	58.30	50	20	0.5	0.741	0.864	16.61	
3&4-Methylphenol	1	0		6.22	57.58	50	20	1.136	1.308	1.308	15.17	
Naphthalene-d8	1	0	I	6.91	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	27.50	25	**	0.144	0.158	0.158	10.00	
Nitrobenzene	1	0		6.36	55.23	50	20	0.2	0.314	0.347	10.45	
Isophorone	1	0		6.55	56.21	50	20	0.4	0.574	0.645	12.42	
2-Nitrophenol	1	0		6.61	55.66	50	20	0.1	0.177	0.197	11.32	
2,4-Dimethylphenol	1	0		6.63	53.89	50	20	0.2	0.294	0.316	7.78	
Benzoic Acid	1	0		6.69	43.11	50	**	0.206	0.167	0.167	13.79	
bis(2-Chloroethoxy)methane	1	0		6.71	54.64	50	20	0.3	0.365	0.399	9.29	
2,4-Dichlorophenol	1	0		6.79	55.06	50	20	0.2	0.270	0.297	10.12	
1,2,4-Trichlorobenzene	1	0		6.86	51.82	50	**	0.312	0.324	0.324	3.63	
Naphthalene	1	0		6.92	52.80	50	20	0.7	1.062	1.122	5.60	
4-Chloroaniline	1	0		6.95	53.69	50	20	0.01	0.390	0.419	7.38	
Hexachlorobutadiene	1	0		7.01	50.55	50	20	0.01	0.175	0.177	1.10	
Caprolactam	1	0		7.22	56.93	50	20	0.01	0.105	0.120	13.87	
4-Chloro-3-methylphenol	1	0		7.32	54.06	50	20	0.2	0.276	0.298	8.12	
2-Methylnaphthalene	1	0		7.46	53.62	50	**	0.4	0.697	0.748	7.24	
1-Methylnaphthalene	1	0		7.54	53.45	50	**	0.4	0.666	0.712	6.89	
Methylnaphthalenes	1	0		7.46	107.23	50	**			1.461	114.45	
1,1'-Biphenyl	1	0		7.84	52.97	50	20	0.01	0.805	0.853	5.94	
Acenaphthene-d10	1	0	I	8.34	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.60	50.34	50	20	0.01	0.629	0.633	0.68	
Hexachlorocyclopentadiene	1	0		7.58	49.76	50	20	0.05	0.339	0.337	0.49	
2,4,6-Trichlorophenol	1	0		7.68	55.67	50	20	0.2	0.381	0.424	11.34	
2,4,5-Trichlorophenol	1	0		7.71	53.67	50	20	0.2	0.392	0.421	7.35	
2-Fluorobiphenyl	1	0	S	7.75	26.09	25	**	1.369	1.428	1.428	4.35	
2-Chloronaphthalene	1	0		7.86	52.43	50	20	0.8	1.192	1.250	4.86	
1,4-Dimethylnaphthalene	1	0		8.14	53.43	50	**	0.906	0.968	0.968	6.87	
Dimethylnaphthalenes	1	0		8.14	53.43	50	20			0.968	6.87	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/8/2020 8:50:00 AData File: 9M101577.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.92	51.77	50	**	0.884	0.915	3.54		
2-Nitroaniline	1	0		7.94	57.29	50	20	0.01 0.330	0.378	14.57		
Coumarin	1	0		8.12	54.00		**	0.444				
Acenaphthylene	1	0		8.22	53.31	50	20	0.9 1.789	1.907	6.63		
Dimethylphthalate	1	0		8.08	52.50	50	20	0.01 1.339	1.406	5.00		
2,6-Dinitrotoluene	1	0		8.14	55.74	50	20	0.2 0.284	0.316	11.47		
Acenaphthene	1	0		8.38	52.87	50	20	0.9 1.239	1.310	5.74		
3-Nitroaniline	1	0		8.29	56.59	50	20	0.01 0.327	0.370	13.17		
2,4-Dinitrophenol	1	0		8.38	58.68	50	20	0.2 0.157	0.183	17.35		
Dibenzofuran	1	0		8.53	52.24	50	20	0.8 1.727	1.804	4.48		
2,4-Dinitrotoluene	1	0		8.50	57.13	50	20	0.2 0.381	0.435	14.27		
4-Nitrophenol	1	0		8.41	52.13	50	20	0.01 0.209	0.238	4.25		
2,3,4,6-Tetrachlorophenol	1	0		8.64	53.47	50	20	0.01 0.349	0.373	6.94		
Fluorene	1	0		8.85	53.05	50	20	0.9 1.363	1.446	6.11		
4-Chlorophenyl-phenylether	1	0		8.84	52.39	50	20	0.4 0.672	0.704	4.77		
Diethylphthalate	1	0		8.72	52.66	50	20	0.01 1.277	1.345	5.31		
4-Nitroaniline	1	0		8.86	57.41	50	20	0.01 0.342	0.393	14.81		
Atrazine	1	0		9.49	53.04	50	20	0.01 0.397	0.421	6.09		
Phenanthrene-d10	1	0	I	9.82	40.00	40	**		0.000	0.00		
4,6-Dinitro-2-methylphenol	1	0		8.88	54.65	50	20	0.01 0.126	0.138	9.31		
n-Nitrosodiphenylamine	1	0		8.95	53.68	50	20	0.01 0.622	0.667	7.36		
2,4,6-Tribromophenol	1	0	S	9.09	54.57	50	**	0.092	0.101	9.14		
1,2-Diphenylhydrazine	1	0		9.00	54.07	50	**	0.641	0.693	8.14		
4-Bromophenyl-phenylether	1	0		9.34	51.84	50	20	0.1 0.206	0.213	3.68		
Hexachlorobenzene	1	0		9.41	50.36	50	20	0.1 0.229	0.230	0.72		
N-Octadecane	1	0		9.67	59.45	50	**	0.05 0.287	0.342	18.90		
Pentachlorophenol	1	0		9.60	52.06	50	20	0.05 0.146	0.152	4.13		
Phenanthrene	1	0		9.84	51.63	50	20	0.7 1.063	1.098	3.26		
Anthracene	1	0		9.90	53.39	50	20	0.7 1.063	1.135	6.78		
Carbazole	1	0		10.07	54.23	50	20	0.01 0.962	1.043	8.45		
Di-n-butylphthalate	1	0		10.45	52.17	50	20	0.01 0.987	1.192	4.34		
Fluoranthene	1	0		11.18	53.88	50	20	0.6 1.134	1.222	7.77		
Chrysene-d12	1	0	I	12.88	40.00	40	**		0.000	0.00		
Pyrene	1	0		11.44	54.11	50	20	0.6 1.179	1.276	8.23		
Benzidine	1	0		11.33	39.82	50	**	0.577	0.489	20.37		
Terphenyl-d14	1	0	S	11.62	27.07	25	**	0.582	0.630	8.28		
4,4'-DDE	1	0		11.56	53.82		**	0.320				
4,4'-DDD	1	0		11.96	57.75		**	0.443				
Butylbenzylphthalate	1	0		12.21	52.16	50	20	0.01 0.433	0.514	4.33		
4,4'-DDT	1	0		12.32	55.47		**	0.549				
3,3'-Dichlorobenzidine	1	0		12.84	50.35	50	20	0.01 0.375	0.416	0.71		
Benzo[a]anthracene	1	0		12.87	54.50	50	20	0.8 1.132	1.233	8.99		
Chrysene	1	0		12.91	51.04	50	20	0.7 1.104	1.127	2.07		
bis(2-Ethylhexyl)phthalate	1	0		12.91	52.88	50	20	0.01 0.590	0.717	5.76		
Perylene-d12	1	0	I	14.51	40.00	40	**		0.000	0.00		
Di-n-octylphthalate	1	0		13.66	52.03	50	20	0.01 0.907	1.158	4.07		
Benzo[b]fluoranthene	1	0		14.08	57.87	50	20	0.7 1.041	1.205	15.75		
Benzo[k]fluoranthene	1	0		14.11	51.64	50	20	0.7 1.063	1.098	3.28		
Benzo[a]pyrene	1	0		14.45	56.45	50	20	0.7 0.936	1.057	12.90		
Indeno[1,2,3-cd]pyrene	1	0		15.87	55.10	50	20	0.5 1.157	1.275	10.20		
Dibenzo[a,h]anthracene	1	0		15.89	54.93	50	20	0.4 0.966	1.062	9.86		
Benzo[g,h,i]perylene	1	0		16.26	54.27	50	20	0.5 0.954	1.036	8.55		

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 10/8/2020 8:50:00 AData File: 9M101577.D  
Method: EPA 8270E

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**	0.681		0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.906		0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 9M101321.D

Analysis Date/Time: 09/17/20 13:22

Lab File ID: CAL BNA@50PPM

Method: EPA 8270E

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Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area Limit:	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89	387414	14.53
Eval File RT Limit:	26070-104282		48526-194106		184986-739944		96780-387120		187272-749086		187988-751954		193707-774828	
	2-2-3-2		5-4-6-4		6-41-7-41		7-85-8-85		9-32-10-32		12-39-13-39		14-03-15-03	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101313.D	CAL BNA@10PPM	51565	2.70	94603	5.90	357644	6.91	186206	8.35	356949	9.82	362365	12.89
9M101314.D	CAL BNA@2PPM	57993	2.71	109516	5.90	415864	6.91	224715	8.35	427849	9.82	428070	12.89
9M101315.D	CAL BNA@196PPM	54800	2.71	98295	5.91	370914	6.91	198313	8.35	385348	9.83	372874	12.90
9M101316.D	CAL BNA@160PPM	54281	2.70	99671	5.91	380119	6.91	201097	8.35	386668	9.82	376869	12.90
9M101317.D	CAL BNA@120PPM	53716	2.70	100690	5.90	388633	6.91	204304	8.35	396990	9.82	389040	12.90
9M101318.D	CAL BNA@80PPM	50413	2.70	96900	5.90	367645	6.91	189022	8.35	364874	9.82	368614	12.89
9M101319.D	CAL BNA@20PPM	50283	2.70	98086	5.90	373409	6.91	195446	8.35	372145	9.82	381268	12.89
9M101320.D	CAL BNA@0.5PPM	54868	2.70	105764	5.90	401840	6.91	207520	8.35	400507	9.82	398325	12.89
9M101321.D	CAL BNA@50PPM	52141	2.70	97053	5.90	369972	6.91	193560	8.35	374543	9.82	375977	12.89
9M101322.D	ICV BNA@50PPM	46870	2.70	89922	5.90	342712	6.91	179589	8.35	348639	9.82	350075	12.89
9M101323.D	SMB88017	49284	2.68	94546	5.90	357728	6.91	185930	8.35	361831	9.82	347985	12.89
9M101324.D	SMB88018	45386	2.68	84733	5.90	321859	6.91	165009	8.35	323960	9.82	309160	12.88
9M101326.D	88018	51046	2.68	92137	5.91	348476	6.93	179935	8.38	346012	9.84	345538	12.91

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: SM114388.D

Analysis Date/Time: 09/24/20 12:58

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

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Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
77111	2.59	109580	5.80	396530	6.81	223894	8.24	444403	9.69	437240	12.74	464882	14.34
38556-154222		54790-219160		198265-793060		111947-447788		222202-888806		218620-874480		232441-929764	
Eval File Area Limit:													
Eval File Rt Limit:	2.09-3.09		5.3-6.3		6.31-7.31		7.74-8.74		9.19-10.19		12.24-13.24		13.84-14.84

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
SM114380.D	CAL BNA@0.5PPM	78973	2.59	115294	5.80	421917	6.81	234299	8.23	468369	9.69	454902	12.73
SM114381.D	CAL BNA@2PPM	78502	2.59	112971	5.80	411884	6.81	230136	8.23	455563	9.69	467091	12.73
SM114382.D	CAL BNA@10PPM	71040	2.60	100492	5.80	366300	6.81	199573	8.23	397529	9.69	401249	12.73
SM114383.D	CAL BNA@196PPM	75084	2.60	98638	5.81	364360	6.82	201188	8.24	405267	9.69	378471	12.74
SM114384.D	CAL BNA@160PPM	73452	2.59	103811	5.81	375520	6.82	214044	8.24	414032	9.69	397491	12.74
SM114385.D	CAL BNA@120PPM	103700	2.59	144033	5.81	532895	6.82	302489	8.24	597252	9.69	573262	12.74
SM114386.D	CAL BNA@80PPM	75429	2.59	104902	5.80	393980	6.81	213774	8.24	433839	9.69	429660	12.74
SM114387.D	CAL BNA@20PPM	73951	2.59	108704	5.80	395715	6.81	220741	8.23	438233	9.69	432497	12.73
SM114388.D	CAL BNA@50PPM	77111	2.59	109580	5.80	396530	6.81	223894	8.24	444403	9.69	437240	12.74
SM114389.D	ICV BNA@50PPM	68444	2.59	101348	5.80	384770	6.81	209903	8.23	428412	9.69	418978	12.74
SM114391.D	WMBS8059	75025	2.59	109033	5.80	402905	6.81	225740	8.23	444239	9.69	423587	12.73

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/870	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/860	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 9M101559.D

Analysis Date/Time: 10/07/20 08:42

Lab File ID: CAL BNA@50PPM

Method: EPA 8270E

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Eval File Area/RT:	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area Limit:	65703	2.71	122580	5.90	471230	6.91	247053	8.35	474840	9.82	470551	12.88	494669	14.52
Eval File Rt Limit:	32852-131406	2.21-3.21	61290-245160	5.4-6.4	235615-942460	6.41-7.41	123526-494106	7.85-8.85	237420-949680	9.32-10.32	235276-941102	12.38-13.38	247334-989338	14.02-15.02

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101560.D	WMB88174	51859	2.71	96681	5.90	370602	6.91	192855	8.34	370268	9.82	355669	12.88	349234	14.51
9M101561.D	MBS-1	51784	2.71	96199	5.90	368007	6.91	189216	8.34	363651	9.82	348678	12.88	342740	14.51
9M101562.D	MBS-2	53190	2.71	97626	5.90	373873	6.91	195068	8.34	373084	9.82	350792	12.88	346091	14.51
9M101563.D	MBS-3	53107	2.71	98466	5.90	376587	6.91	194860	8.34	377045	9.82	355326	12.88	347021	14.51
9M101564.D	MBS-4	54044	2.71	101202	5.90	389559	6.91	200623	8.34	384211	9.82	365450	12.88	358442	14.51
9M101565.D	MBS-5	51015	2.71	94085	5.90	360366	6.91	186561	8.34	358466	9.82	336777	12.88	331128	14.51
9M101566.D	SMB88134(MS)	51398	2.69	89630	5.90	337020	6.92	175852	8.36	333254	9.83	331552	12.88	329147	14.52
9M101567.D	SMB88169(MS)	54087	2.69	96412	5.90	364240	6.91	190757	8.35	364757	9.82	363421	12.88	362402	14.52
9M101568.D	SMB88134	51901	2.69	91733	5.90	346171	6.91	179222	8.34	347197	9.82	328023	12.88	324590	14.51
9M101569.D	SMB88169	52547	2.68	93840	5.90	350864	6.91	179853	8.34	351501	9.82	327059	12.88	321918	14.52
9M101570.D	AD19619-001	52886	2.68	95142	5.90	359932	6.91	188992	8.34	361565	9.82	346817	12.88	340088	14.51
9M101571.D	AD19619-002	51414	2.69	92526	5.90	347754	6.91	182132	8.34	345726	9.82	333089	12.88	340931	14.51
9M101572.D	AD19542-001(T)	52325	2.72	92784	5.90	347340	6.91	167188	8.35	339405	9.82	335691	12.88	221862	14.52
9M101573.D	AD19543-001(T)	48664	2.72	88895	5.90	334069	6.91	172752	8.35	329967	9.82	327874	12.88	328527	14.51
9M101574.D	AD19542-001(T)	51596	2.72	92007	5.90	349468	6.91	151166	8.34	341639	9.82	326895	12.88	134459	14.51
9M101575.D	WMB88180	56480	2.71	103213	5.90	386307	6.91	201535	8.34	384934	9.82	369425	12.88	373991	14.51

I1 =	1,4-Dioxane-d8(NNT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12	625/8370	Internal Standard concentration = 40 mg/L (in final extract)
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10			624/8260	Internal Standard concentration = 30mg/L
I3 =	Naphthalene-d8	I6 =	Chrysene-d12			524	Internal Standard concentration = 5ug/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 5M114529.D

Analysis Date/Time: 10/07/20 08:45

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

275  
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Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
95885	2.60	138471	5.80	495191	6.81	274197	8.24	540413	9.69	538379	12.74	561461	14.35	
Eval File Area Limit:	47942-191770		69236-276942		247596-990382		137098-548394		270206-1080826		269190-1076758		280730-1122922	
Eval File Rt Limit:	2.1-3.1		5.3-6.3		6.31-7.31		7.74-8.74		9.19-10.19		12.24-13.24		13.85-14.85	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
5M114530.D	WMIB88174	69032	2.58	104666	5.80	389448	6.81	221340	8.23	445079	9.69	439380	12.73
5M114531.D	MBS-1	75328	2.59	109612	5.80	394553	6.81	222858	8.24	457405	9.69	439644	12.74
5M114532.D	WMIB88180	78303	2.58	113634	5.80	413356	6.81	230540	8.24	459200	9.69	438002	12.73
5M114533.D	WMIB88180(MS)	67415	2.59	93451	5.80	335968	6.81	189124	8.24	379498	9.69	384426	12.74

11 =	1,4-Dioxane-d8(FNT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 µg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30µg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration =5µg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**FORM8**

Internal Standard Areas

Evaluation Std Data File: 9M101577.D

Analysis Date/Time: 10/08/20 08:50

Method: EPA 8270E

Lab File ID: CAL BNA@50PPM

01  
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Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
58928	2.70	109379	5.90	423895	6.91	226309	8.34	437035	9.82	431604	12.88	449373	14.51	
29464-117856		54690-218758		211948-847790		113154-452618		218518-874070		215802-863208		1238-1338	224686-898746	
Eval File RI Limit:	2.2-3.2		5.4-6.4		6.41-7.41		7.84-8.84		9.32-10.32		12.38-13.38		14.01-15.01	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M101579.D	AD19560-001(T)	50917	2.71	92894	5.90	352558	6.91	184443	8.34	353418	9.81	338281	12.88	345233	14.51
9M101580.D	AD19595-013(T)	45971	2.71	83150	5.90	314933	6.91	164226	8.34	316305	9.81	306957	12.88	310670	14.51
9M101581.D	19615-001	71421	2.70	130789	5.90	494112	6.91	129380	8.34	485054	9.81	452019	12.88	25779	14.51
9M101583.D	AD19595-014(T)	52105	2.71	89253	5.90	337358	6.91	175709	8.34	339284	9.81	331755	12.88	333322	14.51
9M101584.D	EF-1-V-335534(10/02)	46272	2.71	85028	5.90	317760	6.91	164093	8.34	317592	9.81	305530	12.88	307111	14.51
9M101585.D	EF-1-V-335534(10/06)	45662	2.71	83570	5.90	315648	6.91	162157	8.34	313887	9.81	299345	12.88	299570	14.51
9M101586.D	AD19593-003	46494	2.70	85379	5.90	321721	6.91	168837	8.34	325977	9.81	317769	12.87	320054	14.51
9M101587.D	AD19593-004	45751	2.70	83642	5.90	313762	6.91	164566	8.34	315257	9.81	302752	12.87	305409	14.51
9M101588.D	SMB88170(MS)	51993	2.67	92584	5.90	346650	6.91	181765	8.34	348173	9.82	346746	12.88	344394	14.51
9M101589.D	SMB88171(MS)	52835	2.67	95194	5.90	361634	6.91	191667	8.34	362772	9.81	362095	12.88	362875	14.51
9M101590.D	SMB88170	51525	2.67	92080	5.90	347775	6.90	181441	8.34	352739	9.81	333674	12.88	326805	14.51
9M101591.D	SMB88171	52751	2.68	94459	5.90	357950	6.90	187479	8.34	361171	9.81	344716	12.88	336181	14.51
9M101592.D	AD19593-006	52675	2.70	97382	5.90	367347	6.91	193974	8.34	370883	9.81	360288	12.87	366154	14.51
9M101593.D	AD19542-001(T)(MS)	49531	2.70	89656	5.90	341262	6.91	178431	8.34	340590	9.82	338126	12.88	345960	14.51
9M101594.D	AD19542-001(T)(MSD)	48808	2.71	87459	5.90	328088	6.91	173972	8.34	331075	9.82	324509	12.88	336253	14.51
9M101595.D	VMM88184	51112	2.70	93957	5.90	359756	6.91	188764	8.34	363587	9.81	349655	12.88	355450	14.51
9M101596.D	AD19593-003(3X)	54123	2.70	99380	5.90	373803	6.91	200448	8.34	383310	9.81	372456	12.88	372818	14.51
9M101597.D	AD19645-002	54381	2.67	100604	5.90	385871	6.90	199057	8.34	387529	9.81	372276	12.88	369063	14.51
9M101598.D	AD19645-002(MS)	53391	2.68	96164	5.90	368308	6.91	193096	8.34	371638	9.81	367410	12.88	366115	14.51
9M101599.D	AD19645-002(MSD)	51649	2.69	94627	5.90	357321	6.91	189788	8.34	366122	9.81	360075	12.88	361347	14.51
9M101600.D	AD19645-001	52640	2.68	98255	5.90	370151	6.91	198121	8.34	373146	9.81	367337	12.88	370564	14.51
9M101601.D	AD19640-001	53349	2.68	98292	5.90	370953	6.90	195715	8.34	373328	9.81	363883	12.88	366149	14.51
9M101602.D	AD19644-001	55158	2.68	103482	5.90	387813	6.90	203921	8.34	388147	9.81	378431	12.88	380386	14.51
9M101603.D	AD19644-003	58636	2.68	108208	5.90	410309	6.91	214611	8.34	412933	9.81	402525	12.88	408188	14.51

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	6258270	Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			6248260	Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524	Internal Standard concentration = 5mg/L

**Internal Standard Areas**

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

**Retention Times:**

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

**Flags:**

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.



## **PCB Data**

**Form1**  
ORGANICS PCB REPORT

Sample Number: AD19595-013

Client Id: HSI-WC-NH

Data File: 3G124631.D

Analysis Date: 10/07/20 14:04

Date Rec/Extracted: 10/02/20-10/06/20

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A

Matrix: Soil

Initial Vol: 20g

Final Vol: 10ml

Dilution: 1

Solids: 86

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.029	U	11097-69-1	Aroclor-1254	0.029	U
11104-28-2	Aroclor-1221	0.029	U	11096-82-5	Aroclor-1260	0.029	U
11141-16-5	Aroclor-1232	0.029	U	37324-23-5	Aroclor-1262	0.029	U
53469-21-9	Aroclor-1242	0.029	U	11100-14-4	Aroclor-1268	0.029	U
12672-29-6	Aroclor-1248	0.029	U	1336-36-3	Aroclor (Total)	0.029	U

Worksheet #: 569828

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

Data Path : G:\Gcdata\2020\GC\_3\Data\10-07-20\  
 Data File : 3G124631.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 7 Oct 2020 14:04  
 Operator : MS/MLC/ON  
 Sample : AD19595-013  
 Misc : S,PCB  
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Oct 07 14:22:25 2020  
 Quant Method : G:\GC\DATA\2020\GC\_3\METHODQT\3G\_C1001.M  
 Quant Title : @GC\_3,ug,608,8082  
 QLast Update : Thu Oct 01 15:12:16 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul  
 Signal #1 Phase : db-1701P Signal #2 Phase: db-17  
 Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
-----						
Target Compounds						
1)TCMX-Surrogate	3.937	3.972	2567894	2490269	139.620	138.650m
45)DCB-Surrogate	10.288	10.924	2801176	2268913	118.322	133.849
-----						

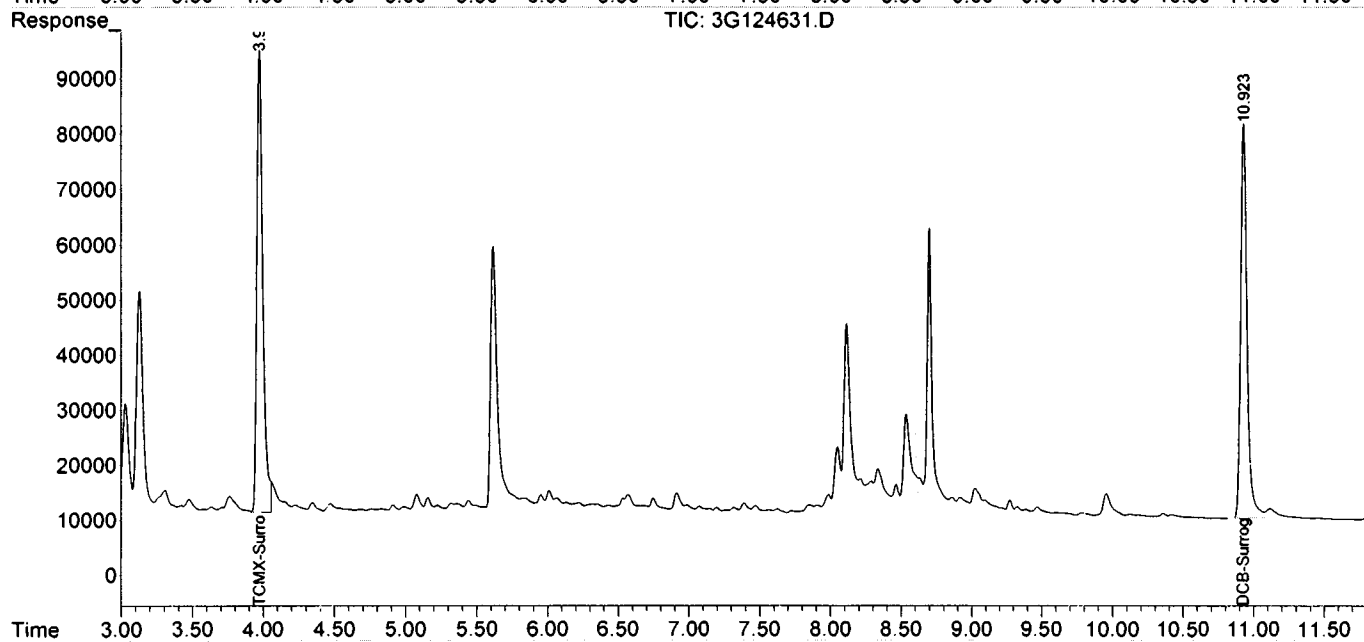
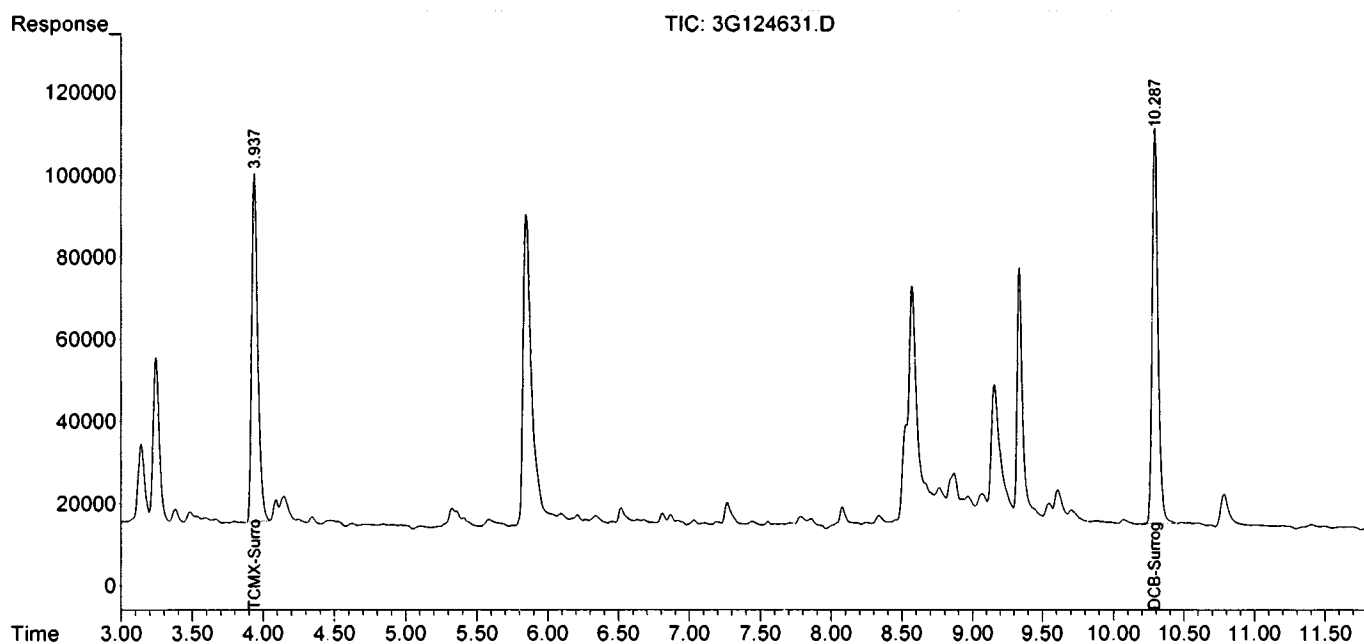
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.



Data Path : G:\Gcdata\2020\GC\_3\Data\10-07-20\  
Data File : 3G124631.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 7 Oct 2020 14:04  
Operator : MS/MLC/ON  
Sample : AD19595-013  
Misc : S,PCB  
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Oct 07 14:22:25 2020  
Quant Method : G:\GC\DATA\2020\GC\_3\METHODQT\3G\_C1001.M  
Quant Title : @GC\_3,ug,608,8082  
QLast Update : Thu Oct 01 15:12:16 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701P Signal #2 Phase: db-17  
Signal #1 Info : .32 Signal #2 Info : .32



**Form1**  
ORGANICS PCB REPORT

Sample Number: AD19595-014	Method: EPA 8082A
Client Id: HSI-WC-H	Matrix: Soil
Data File: 3G124632.D	Initial Vol: 20g
Analysis Date: 10/07/20 14:18	Final Vol: 10ml
Date Rec/Extracted: 10/02/20-10/06/20	Dilution: 1
Column: DB-17/1701P 30M 0.32mm ID 0.25um film	Solids: 83

		Units: mg/Kg					
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.030	U	11097-69-1	Aroclor-1254	0.030	U
11104-28-2	Aroclor-1221	0.030	U	11096-82-5	Aroclor-1260	0.030	U
11141-16-5	Aroclor-1232	0.030	U	37324-23-5	Aroclor-1262	0.030	U
53469-21-9	Aroclor-1242	0.030	U	11100-14-4	Aroclor-1268	0.030	U
12672-29-6	Aroclor-1248	0.030	U	1336-36-3	Aroclor (Total)	0.030	U

Worksheet #: 569828

**Total Target Concentration 0**

ColumnID: (\*) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

Data Path : G:\Gcdata\2020\GC\_3\Data\10-07-20\  
 Data File : 3G124632.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 7 Oct 2020 14:18  
 Operator : MS/MLC/ON  
 Sample : AD19595-014  
 Misc : S,PCB  
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Oct 08 10:03:25 2020  
 Quant Method : G:\GCDATA\2020\GC\_3\METHODQT\3G\_C1001.M  
 Quant Title : @GC\_3,ug,608,8082  
 QLast Update : Thu Oct 01 15:12:16 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul  
 Signal #1 Phase : db-1701P Signal #2 Phase: db-17  
 Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
-----						
Target Compounds						
1)TCMX-Surrogate	3.938	3.973	735551	713027	39.993	39.699m
45)DCB-Surrogate	10.289	10.924	1009103	884507	42.625	52.179m
-----						

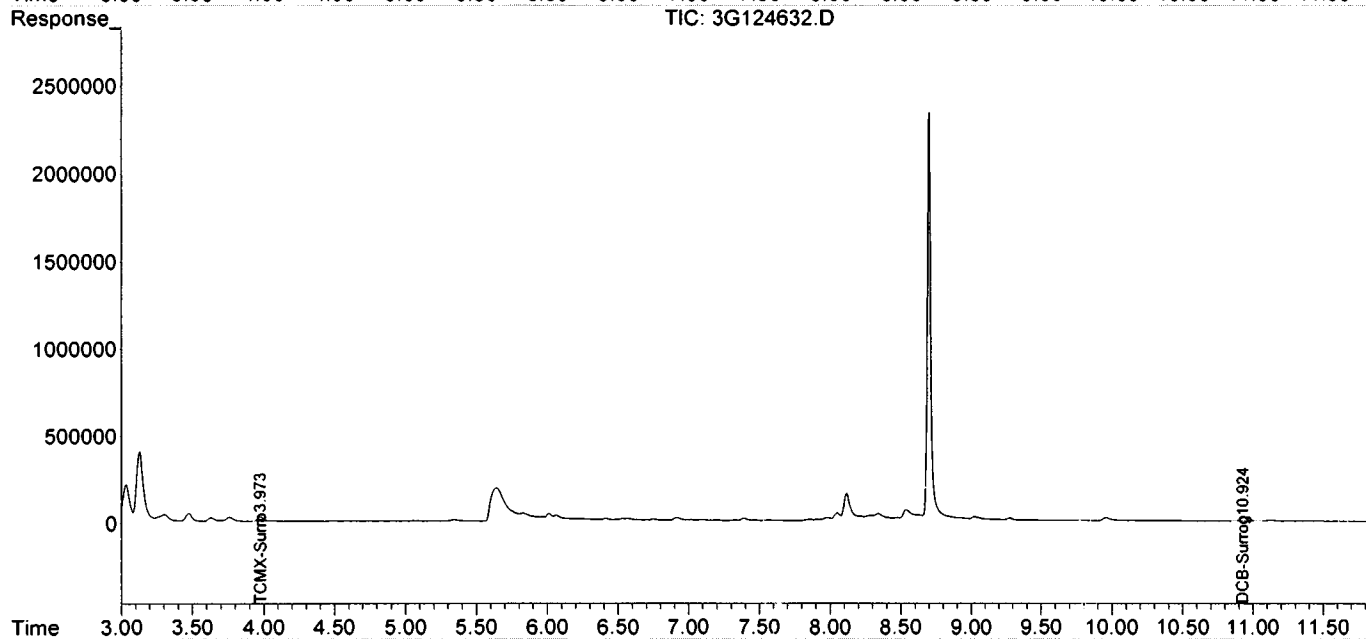
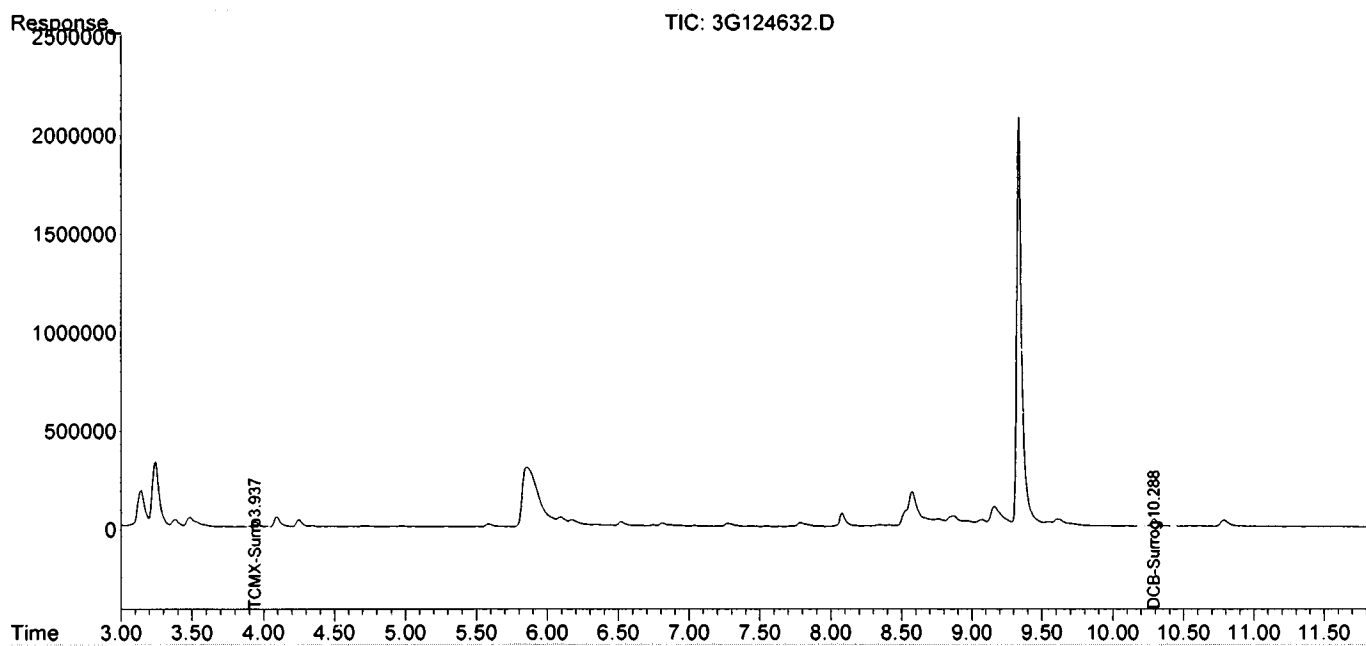
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.



Data Path : G:\Gcdata\2020\GC\_3\Data\10-07-20\  
Data File : 3G124632.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 7 Oct 2020 14:18  
Operator : MS/MLC/ON  
Sample : AD19595-014  
Misc : S,PCB  
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Oct 08 10:03:25 2020  
Quant Method : G:\GC DATA\2020\GC\_3\METHODQT\3G\_C1001.M  
Quant Title : @GC\_3,ug,608,8082  
QLast Update : Thu Oct 01 15:12:16 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701P Signal #2 Phase: db-17  
Signal #1 Info : .32 Signal #2 Info : .32



**Form1**  
ORGANICS PCB REPORT

Sample Number: SMB88173	Method: EPA 8082A
Client Id:	Matrix: Soil
Data File: 3G124629.D	Initial Vol: 20g
Analysis Date: 10/07/20 13:34	Final Vol: 10ml
Date Rec/Extracted: NA-10/06/20	Dilution: 1
Column: DB-17/1701P 30M 0.32mm ID 0.25um film	Solids: 100

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 569828

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*



Data Path : G:\Gcdata\2020\GC\_3\Data\10-07-20\  
 Data File : 3G124629.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 7 Oct 2020 13:34  
 Operator : MS/MLC/ON  
 Sample : SMB88173  
 Misc : S,PCB  
 ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Oct 07 13:53:28 2020  
 Quant Method : G:\GC\DATA\2020\GC\_3\METHODQT\3G\_C1001.M  
 Quant Title : @GC\_3,ug,608,8082  
 QLast Update : Thu Oct 01 15:12:16 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul  
 Signal #1 Phase : db-1701P Signal #2 Phase: db-17  
 Signal #1 Info : .32 Signal #2 Info : .32

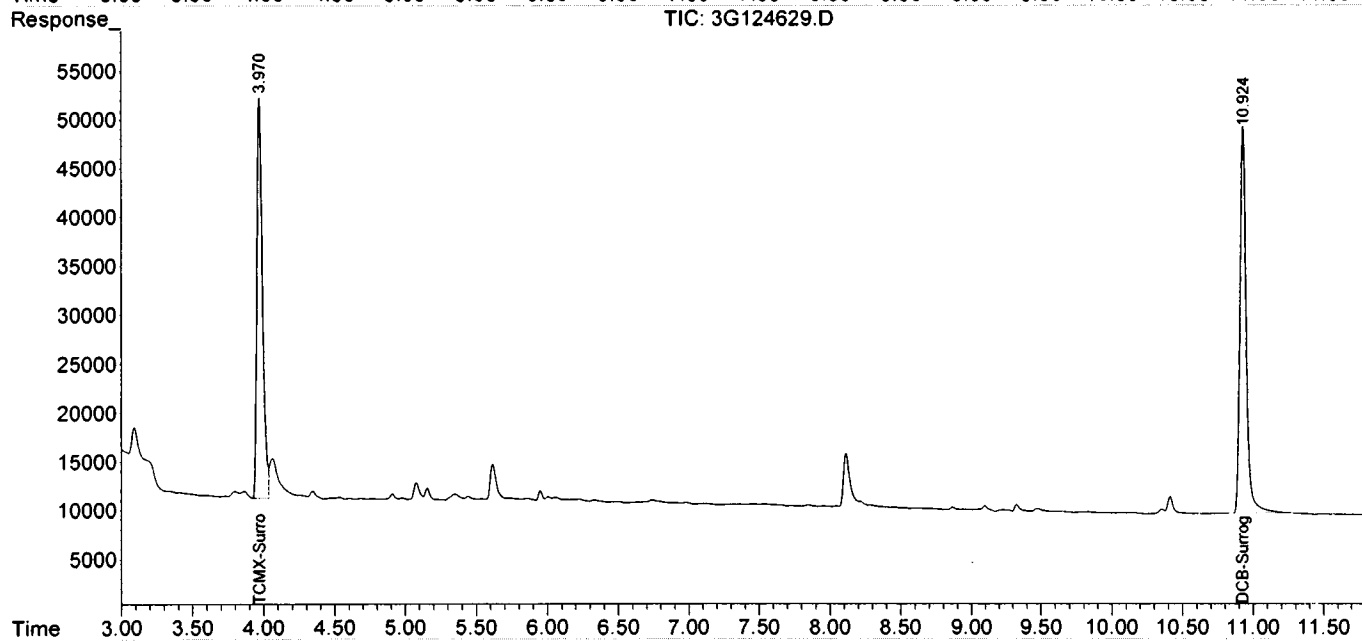
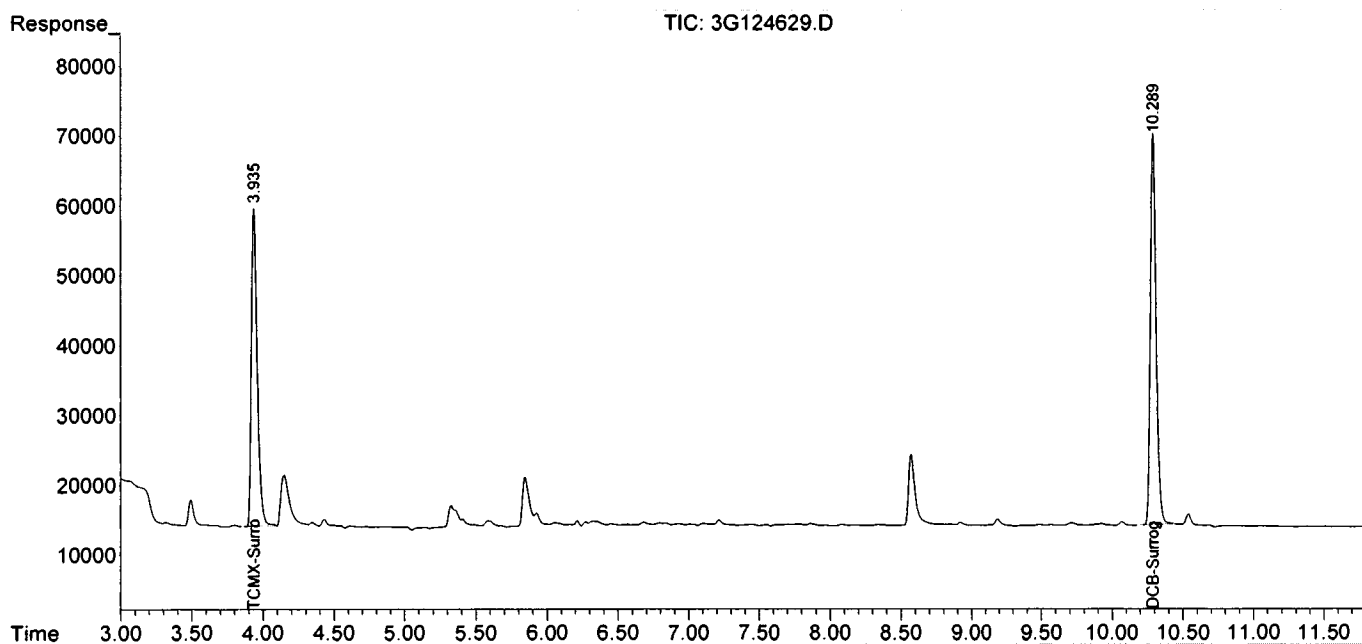
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
-----						
Target Compounds						
1)TCMX-Surrogate	3.936	3.971	1308927	1120340	71.168	62.377
45)DCB-Surrogate	10.289	10.924	1565066	1232455	66.108	72.706
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC\_3\Data\10-07-20\  
Data File : 3G124629.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 7 Oct 2020 13:34  
Operator : MS/MLC/ON  
Sample : SMB88173  
Misc : S,PCB  
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Oct 07 13:53:28 2020  
Quant Method : G:\GC DATA\2020\GC\_3\METHODQT\3G\_C1001.M  
Quant Title : @GC\_3,ug,608,8082  
QLast Update : Thu Oct 01 15:12:16 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701P Signal #2 Phase: db-17  
Signal #1 Info : .32 Signal #2 Info : .32



## FORM2

## Surrogate Recovery

Method: EPA 8082A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
3G124629.D	SMB88173	S	10/07/20 13:34	1		71	62	66	73		
3G124631.D	AD19595-013	S	10/07/20 14:04	1		140	139	118	134		
3G124632.D	AD19595-014	S	10/07/20 14:18	1		40	40	43	52		
2G149412.D	AD19563-024(MS:AD19	S	10/07/20 10:45	1		64	68	76	63		
2G149413.D	AD19563-026(MSD:AD1	S	10/07/20 11:00	1		93	101	103	86		
2G149414.D	AD19563-022	S	10/07/20 11:15	1		96	101	102	87		
3G124630.D	SMB88173(MS)	S	10/07/20 13:49	1		93	83	77	87		

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Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8082A

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88173

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3G124630.D		SMB88173(MS)		10/7/2020 1:49:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8082		Matrix: Soil		Units: mg/Kg		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	899.002	0	1000	90	30	163
Aroclor-1260 -Total	1	991.258	0	1000	99	25	166

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88173

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2G149412.D		AD19563-024(MS:AD19563-022)		10/7/2020 10:45:00 AM			
Non Spike(If applicable): 2G149414.D		AD19563-022		10/7/2020 11:15:00 AM			
Inst Blank(If applicable):							
Method: 8082		Matrix: Soil		Units: mg/Kg		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	631.208	0	1000	63	30	163
Aroclor-1260 -Total	1	708.534	0	1000	71	25	166

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2G149413.D		AD19563-026(MSD:AD19563-0)		10/7/2020 11:00:00 AM			
Non Spike(If applicable): 2G149414.D		AD19563-022		10/7/2020 11:15:00 AM			
Inst Blank(If applicable):							
Method: 8082		Matrix: Soil		Units: mg/Kg		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	951.494	0	1000	95	30	163
Aroclor-1260 -Total	1	1005.81	0	1000	101	25	166

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**RPD Data Laboratory Limits**

QC Batch: SMB88173

Data File	Sample ID:	Analysis Date
Spike or Dup: 2G149413.D	AD19563-026(MSD:AD19563-0	10/7/2020 11:00:00 AM
Duplicate(If applicable): 2G149412.D	AD19563-024(MS:AD19563-022	10/7/2020 10:45:00 AM
Inst Blank(If applicable):		

Method: 8082	Matrix: Soil	Units: mg/Kg	QC Type: MSD
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Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	951.494	631.208	40	40
Aroclor-1260 -Total	1	1005.81	708.534	35	37

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

**Bold and underline** - Indicates the compounds reported on form1

**FORM 4**  
Blank Summary

Blank Number: SMB88173  
Blank Data File: 3G124629.D  
Matrix: Soil

Blank Analysis Date: 10/07/20 13:34  
Blank Extraction Date: 10/06/20  
(If Applicable)  
Method: EPA 8082A

Sample Number	Data File	Analysis Date
AD19595-013	3G124631.D	10/07/20 14:04
AD19595-014	3G124632.D	10/07/20 14:18
SMB88173(MS)	3G124630.D	10/07/20 13:49
AD19563-022	2G149414.D	10/07/20 11:15
AD19563-026(MSD)	2G149413.D	10/07/20 11:00
AD19563-024(MS:	2G149412.D	10/07/20 10:45

## Form 5

Method: EPA 8082A

Instrument: GC\_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G124535	D 2154	10/01/20 11:35	Soil					
3G124536	D 1268	10/01/20 11:50	Soil					
3G124537	D CAL 1242@500PPB	10/01/20 12:05	Soil	3G12454	10.2885	0.0156	10.9199	0.0009
3G124538	D CAL 1248@500PPB	10/01/20 12:20	Soil	3G12454	10.2877	0.0078	10.9202	0.0037
3G124539	D CAL 2154@500PPB	10/01/20 12:35	Soil	3G12454	10.2889	0.0194	10.9193	0.0046
3G124540	D CAL 1262@500PPB	10/01/20 12:50	Soil	3G12454	10.2885	0.0156	10.9201	0.0028
3G124541	D CAL 1660@500PPB	10/01/20 13:05	Soil	3G12454	10.2880	0.0107	10.9206	0.0073
3G124542	D CAL 1660@200PPB	10/01/20 13:20	Soil	3G12454	10.2871	0.0019	10.9210	0.011
3G124543	D CAL 1660@50PPB	10/01/20 13:34	Soil	3G12454	10.2869	0	10.9198	0
3G124544	D CAL 1660@1000PPB	10/01/20 13:49	Soil	3G12454	10.2868	0.001	10.9204	0.0055
3G124545	D CAL 1660@2000PPB	10/01/20 14:04	Soil	3G12454	10.2876	0.0068	10.9204	0.0055
3G124546	D CAL 1660@4000PPB	10/01/20 14:19	Soil	3G12454	10.2878	0.0088	10.9204	0.0055
3G124547	D CAL 3268@500PPB	10/01/20 14:34	Soil	3G12454	10.2886	0.0165	10.9217	0.0174
3G124548	D ICV	10/01/20 14:52	Soil	3G12454	10.2927	0.0564	10.9231	0.0302
3G124549	D PEST WS	10/01/20 15:07	Soil	3G12454	0.0000	200*	0.0000	200*
3G124550	D AD19429-012(50X)	10/01/20 15:26	Soil	3G12454	0.0000	200*	0.0000	200*
3G124551	D AD19429-009(50X)	10/01/20 15:41	Soil	3G12454	0.0000	200*	0.0000	200*
3G124552	D AD19429-002(10X)	10/01/20 15:56	Soil	3G12454	10.2886	0.0165	10.9211	0.0119
3G124553	D AD19429-003(10X)	10/01/20 16:10	Soil	3G12454	10.2886	0.0165	10.9212	0.0128
3G124554	D AD19429-004(10X)	10/01/20 16:25	Soil	3G12454	10.2883	0.0136	10.9202	0.0037
3G124555	D AD19429-005(10X)	10/01/20 16:40	Soil	3G12454	10.2899	0.0292	10.9224	0.0238
3G124556	D AD19429-007(10X)	10/01/20 16:55	Soil	3G12454	10.2900	0.0301	10.9224	0.0238
3G124557	D CAL 1660@2000PPB	10/01/20 17:17	Soil	3G12454	10.2989	0.1166	10.9278	0.0732
3G124558	D AD1429-011(10X)	10/01/20 17:49	Soil	3G12455	10.3013	0.0233	10.9276	0.0018
3G124559	D AD19429-011(20X)	10/01/20 18:19	Soil	3G12455	10.3008	0.0185	10.9272	0.0055
3G124560	D CAL 1660@2000PPB	10/01/20 18:34	Soil	3G12455	10.2923	0.0641	10.9249	0.0265
3G124561	D SMB88119	10/01/20 18:53	Soil	3G12456	10.2974	0.0495	10.9265	0.0146
3G124562	D SMB88119(MS)	10/01/20 19:08	Soil	3G12456	10.2912	0.0107	10.9238	0.0101
3G124563	D AD19504-002(MS)	10/01/20 19:22	Soil	3G12456	10.2897	0.0253	10.9226	0.0211
3G124564	D AD19504-002(MSD)	10/01/20 19:37	Soil	3G12456	10.2899	0.0233	10.9233	0.0146
3G124565	D AD19504-002	10/01/20 19:52	Soil	3G12456	10.2906	0.0165	10.9233	0.0146
3G124566	D AD19504-004	10/01/20 20:08	Soil	3G12456	10.2903	0.0194	10.9227	0.0201
3G124567	D AD19504-006	10/01/20 20:22	Soil	3G12456	10.2903	0.0194	10.9231	0.0165
3G124568	D AD19505-002	10/01/20 20:37	Soil	3G12456	10.2893	0.0292	10.9239	0.0092
3G124569	D AD19505-004	10/01/20 20:52	Soil	3G12456	10.2912	0.0107	10.9249	0
3G124570	D AD19505-006	10/01/20 21:07	Soil	3G12456	10.2913	0.0097	10.9247	0.0018
3G124571	D AD19506-002	10/01/20 21:22	Soil	3G12456	10.2928	0.0049	10.9253	0.0037
3G124572	D AD19506-004	10/01/20 21:37	Soil	3G12456	10.2914	0.0087	10.9241	0.0073
3G124573	D AD19506-006	10/01/20 21:52	Soil	3G12456	10.2914	0.0087	10.9238	0.0101
3G124574	D AD19507-002	10/01/20 22:07	Soil	3G12456	10.2915	0.0078	10.9231	0.0165
3G124575	D AD19507-004	10/01/20 22:22	Soil	3G12456	10.2923	0	10.9255	0.0055
3G124576	D AD19507-006	10/01/20 22:38	Soil	3G12456	10.2919	0.0039	10.9240	0.0082
3G124577	D AD19495-001	10/01/20 22:52	Soil	3G12456	10.2907	0.0155	10.9246	0.0027
3G124578	D AD19510-002	10/01/20 23:08	Soil	3G12456	10.2922	0.001	10.9250	0.0009
3G124579	D AD19396-003(10X)	10/01/20 23:23	Soil	3G12456	10.2930	0.0068	10.9238	0.0101
3G124580	D CAL 1660@1000PPB	10/01/20 23:38	Soil	3G12456	10.2918	0.0049	10.9235	0.0128

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

\* - Values outside of limits for this column/run



## Form 5

Method: EPA 8082A

Instrument: GC\_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G149297.D	2154	10/01/20 17:17	Soil					
2G149298.D	CAL 3268@500PPB	10/01/20 17:32	Soil	2G14930	10.1377	0.0217	10.7087	0
2G149299.D	CAL 1242@500PPB	10/01/20 17:47	Soil	2G14930	10.1388	0.0109	10.7094	0.0065
2G149300.D	CAL 1248@500PPB	10/01/20 18:02	Soil	2G14930	10.1385	0.0138	10.7087	0
2G149301.D	CAL 2154@500PPB	10/01/20 18:17	Soil	2G14930	10.1390	0.0089	10.7105	0.0168
2G149302.D	CAL 1262@500PPB	10/01/20 18:35	Soil	2G14930	10.1420	0.0207	10.7111	0.0224
2G149303.D	CAL 1660@500PPB	10/01/20 18:50	Soil	2G14930	10.1390	0.0089	10.7091	0.0037
2G149304.D	CAL 1660@200PPB	10/01/20 19:05	Soil	2G14930	10.1388	0.0109	10.7091	0.0037
2G149305.D	CAL 1660@50PPB	10/01/20 19:20	Soil	2G14930	10.1399	0	10.7087	0
2G149306.D	CAL 1660@1000PPB	10/01/20 19:36	Soil	2G14930	10.1365	0.0335	10.7079	0.0075
2G149307.D	CAL 1660@2000PPB	10/01/20 19:51	Soil	2G14930	10.1380	0.0187	10.7094	0.0065
2G149308.D	CAL 1660@4000PPB	10/01/20 20:06	Soil	2G14930	10.1369	0.0296	10.7090	0.0028
2G149309.D	ICV	10/01/20 20:21	Soil	2G14930	10.1370	0.0286	10.7081	0.0056
2G149310.D	PEST WS	10/01/20 20:36	Soil	2G14930	0.0000	200*	0.0000	200*
2G149311.D	SMB88121	10/01/20 20:51	Soil	2G14930	10.1388	0.0109	10.7094	0.0065
2G149312.D	SMB88121(MS)	10/01/20 21:06	Soil	2G14930	10.1390	0.0089	10.7097	0.0093
2G149313.D	AD19501-001(MS)	10/01/20 21:21	Soil	2G14930	10.1376	0.0227	10.7081	0.0056
2G149314.D	AD19501-001(MSD)	10/01/20 21:36	Soil	2G14930	10.1373	0.0257	10.7078	0.0084
2G149315.D	AD19501-001	10/01/20 21:52	Soil	2G14930	10.1380	0.0187	10.7092	0.0047
2G149316.D	AD19501-003	10/01/20 22:07	Soil	2G14930	10.1381	0.0178	10.7087	0
2G149317.D	AD19510-004	10/01/20 22:22	Soil	2G14930	10.1393	0.0059	10.7101	0.0131
2G149318.D	AD19510-006	10/01/20 22:37	Soil	2G14930	10.1384	0.0148	10.7096	0.0084
2G149319.D	AD19511-002	10/01/20 22:52	Soil	2G14930	10.1394	0.0049	10.7119	0.0299
2G149320.D	AD19511-004	10/01/20 23:08	Soil	2G14930	10.1413	0.0138	10.7119	0.0299
2G149321.D	AD19511-006	10/01/20 23:23	Soil	2G14930	10.1384	0.0148	10.7106	0.0177
2G149322.D	AD19512-002	10/01/20 23:39	Soil	2G14930	10.1405	0.0059	10.7113	0.0243
2G149323.D	AD19512-004	10/01/20 23:54	Soil	2G14930	10.1412	0.0128	10.7116	0.0271
2G149324.D	AD19512-006	10/02/20 00:11	Soil	2G14930	10.1429	0.0296	10.7127	0.0373
2G149325.D	AD19508-002	10/02/20 00:26	Soil	2G14930	10.1411	0.0118	10.7118	0.0289
2G149326.D	AD19508-004	10/02/20 00:42	Soil	2G14930	10.1426	0.0266	10.7127	0.0373
2G149327.D	AD19508-006	10/02/20 00:58	Soil	2G14930	10.1433	0.0335	10.7145	0.0541
2G149328.D	AD19509-002	10/02/20 01:14	Soil	2G14930	10.1419	0.0197	10.7125	0.0355
2G149329.D	AD19509-004	10/02/20 01:30	Soil	2G14930	10.1426	0.0266	10.7128	0.0383
2G149330.D	AD19509-006	10/02/20 01:46	Soil	2G14930	10.1425	0.0256	10.7122	0.0327
2G149331.D	1000PPB	10/02/20 02:02	Soil	2G14930	10.1436	0.0365	10.7134	0.0439
2G149332.D	CAL 1660@2000PPB	10/02/20 02:17	Soil	2G14930	10.1410	0.0108	10.7121	0.0317

## Form 5

Method: EPA 8082A

Instrument: GC\_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G124615 D	1000PPB	10/07/20 09:16	Soil					
3G124616 D	CAL 1660@500PPB	10/07/20 09:35	Soil	3G12461	10.2934	0	10.9261	0
3G124617 D	WMB88176	10/07/20 10:26	Aqueous	3G12461	10.2987	0.0515	10.9271	0.0092
3G124618 D	WMB88176(MS)	10/07/20 10:41	Aqueous	3G12461	10.2905	0.0282	10.9241	0.0183
3G124619 D	AD19580-003(R)	10/07/20 10:55	Aqueous	3G12461	10.2877	0.0554	10.9224	0.0339
3G124620 D	AD19538-001(MS)	10/07/20 11:10	Aqueous	3G12461	10.2881	0.0515	10.9233	0.0256
3G124621 D	AD19538-001(MSD)	10/07/20 11:35	Aqueous	3G12461	10.2974	0.0389	10.9273	0.011
3G124622 D	AD19538-001	10/07/20 11:50	Aqueous	3G12461	10.2893	0.0398	10.9232	0.0265
3G124623 D	AD19538-002	10/07/20 12:05	Aqueous	3G12461	10.2890	0.0428	10.9252	0.0082
3G124624 D	AD19538-003	10/07/20 12:20	Aqueous	3G12461	10.2868	0.0641	10.9228	0.0302
3G124625 D	AD19538-004	10/07/20 12:34	Aqueous	3G12461	10.2885	0.0476	10.9237	0.022
3G124626 D	AD19538-005	10/07/20 12:49	Aqueous	3G12461	10.2878	0.0544	10.9234	0.0247
3G124627 D	AD19538-006	10/07/20 13:04	Aqueous	3G12461	10.2891	0.0418	10.9241	0.0183
3G124628 D	AD19538-007	10/07/20 13:19	Aqueous	3G12461	10.2888	0.0447	10.9245	0.0146
3G124629 D	SMB88173	10/07/20 13:34	Soil	3G12461	10.2895	0.0379	10.9245	0.0146
3G124630 D	SMB88173(MS)	10/07/20 13:49	Soil	3G12461	10.2879	0.0534	10.9241	0.0183
3G124631 D	AD19595-013	10/07/20 14:04	Soil	3G12461	10.2883	0.0496	10.9240	0.0192
3G124632 D	AD19595-014	10/07/20 14:18	Soil	3G12461	10.2889	0.0437	10.9240	0.0192
3G124633 D	CAL 1660@500PPB	10/07/20 15:23	Soil	3G12461	10.3021	0.0845	10.9282	0.0192
3G124634 D	1000PPB	10/07/20 15:38	Soil	3G12463	10.2916	0.102	10.9252	0.0274

## Form 5

Method: EPA 8082A

Instrument: GC\_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G149410.D	1000PPB	10/07/20 09:33	Soil					
2G149411.D	CAL 1660@1000PPB	10/07/20 10:21	Soil	2G14941	10.1443	0	10.7099	0
2G149412.D	AD19563-024(MS:AD19	10/07/20 10:45	Soil	2G14941	10.1430	0.0128	10.7092	0.0065
2G149413.D	AD19563-026(MSD:AD1	10/07/20 11:00	Soil	2G14941	10.1379	0.0631	10.7081	0.0168
2G149414.D	AD19563-022	10/07/20 11:15	Soil	2G14941	10.1364	0.0779	10.7074	0.0233
2G149415.D	AD19563-002	10/07/20 11:31	Soil	2G14941	10.1364	0.0779	10.7073	0.0243
2G149416.D	AD19563-004	10/07/20 11:46	Soil	2G14941	10.1369	0.073	10.7075	0.0224
2G149417.D	AD19563-006	10/07/20 12:01	Soil	2G14941	10.1374	0.068	10.7083	0.0149
2G149418.D	AD19563-008	10/07/20 12:16	Soil	2G14941	10.1368	0.074	10.7076	0.0215
2G149419.D	AD19563-010	10/07/20 12:31	Soil	2G14941	10.1377	0.0651	10.7090	0.0084
2G149420.D	AD19563-012	10/07/20 12:46	Soil	2G14941	10.1382	0.0602	10.7091	0.0075
2G149421.D	AD19563-014	10/07/20 13:01	Soil	2G14941	10.1370	0.072	10.7084	0.014
2G149422.D	AD19563-016	10/07/20 13:16	Soil	2G14941	10.1368	0.074	10.7079	0.0187
2G149423.D	AD19563-018	10/07/20 13:31	Soil	2G14941	10.1390	0.0523	10.7100	0.0009
2G149424.D	AD19563-020	10/07/20 13:46	Soil	2G14941	10.1385	0.0572	10.7095	0.0037
2G149425.D	AD19563-028	10/07/20 14:01	Soil	2G14941	10.1371	0.071	10.7092	0.0065
2G149426.D	AD19563-030	10/07/20 14:16	Soil	2G14941	10.1376	0.0661	10.7084	0.014
2G149427.D	AD19563-032	10/07/20 14:31	Soil	2G14941	10.1386	0.0562	10.7095	0.0037
2G149428.D	AD19563-034	10/07/20 14:46	Soil	2G14941	10.1395	0.0473	10.7105	0.0056
2G149429.D	AD19563-036	10/07/20 15:01	Soil	2G14941	10.1380	0.0621	10.7096	0.0028
2G149430.D	AD19563-038	10/07/20 15:17	Soil	2G14941	10.1379	0.0631	10.7088	0.0103
2G149431.D	AD19596-001	10/07/20 15:32	Soil	2G14941	10.1381	0.0611	10.7114	0.014
2G149432.D	CAL 1660@1000PPB	10/07/20 15:47	Soil	2G14941	10.1383	0.0592	10.7080	0.0177
2G149433.D	1000PPB	10/07/20 16:04	Soil	2G14943	10.1405	0.0217	10.7103	0.0215





# Form 6

Instrument: GC\_3

Method: EPA 8082A

Level #	Data File	Cal Identifier	Analysis Date/Time	Initial Calibration																				
				Level #	Data File	Cal Identifier	Analysis Date/Time	AvgRt	RT	Corr1	Corr2	%Rsd												
1	3G124543.D	CAL 1660@50PPB	10/01/20 13:34	2	3G124542.D	CAL 1660@200PPB	10/01/20 13:20																	
3	3G124541.D	CAL 1660@500PPB	10/01/20 13:05	4	3G124544.D	CAL 1660@1000PPB	10/01/20 13:49																	
5	3G124545.D	CAL 1660@2000PPB	10/01/20 14:04	6	3G124546.D	CAL 1660@4000PPB	10/01/20 14:19																	
7	3G124547.D	CAL 3268@500PPB	10/01/20 14:34	8	3G124537.D	CAL 1242@500PPB	10/01/20 12:05																	
9	3G124538.D	CAL 1248@500PPB	10/01/20 12:20	10	3G124539.D	CAL 2154@500PPB	10/01/20 12:35																	
11	3G124540.D	CAL 1262@500PPB	10/01/20 12:50																					
Compound	Col Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
Atroclor-1248	2	4	Avg	---	---	---	---	---	---	---	0.0687	6.22	-1	-1	LV=9	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	
Atroclor-1248	2	5	Avg	---	---	---	---	---	---	---	0.0789	6.35	-1	-1	LV=9									
Atroclor-1254	2	1	Avg	---	---	---	---	---	---	---	0.1096	6.57	-1	-1	LV=10									
Atroclor-1254	2	2	Avg	---	---	---	---	---	---	---	0.0345	6.92	-1	-1	LV=10									
Atroclor-1254	2	3	Avg	---	---	---	---	---	---	---	0.0911	7.31	-1	-1	LV=10									
Atroclor-1254	2	4	Avg	---	---	---	---	---	---	---	0.0492	7.82	-1	-1	LV=10									
Atroclor-1254	2	5	Avg	---	---	---	---	---	---	---	0.0436	8.52	-1	-1	LV=10									
Atroclor-1262	2	1	Avg	---	---	---	---	---	---	---	0.1017	7.89	-1	-1	LV=11									
Atroclor-1262	2	2	Avg	---	---	---	---	---	---	---	0.0822	9.06	-1	-1	LV=11									
Atroclor-1262	2	3	Avg	---	---	---	---	---	---	---	0.0831	9.17	-1	-1	LV=11									
Atroclor-1262	2	4	Avg	---	---	---	---	---	---	---	0.0940	9.78	-1	-1	LV=11									
Atroclor-1262	2	5	Avg	---	---	---	---	---	---	---	0.0286	10.35	-1	-1	LV=11									
Atroclor-1268	2	1	Avg	---	---	---	---	---	---	---	0.0166	8.56	-1	-1	LV=7									
Atroclor-1268	2	2	Avg	---	---	---	---	---	---	---	0.0292	8.60	-1	-1	LV=7									
Atroclor-1268	2	3	Avg	---	---	---	---	---	---	---	0.179	9.52	-1	-1	LV=7									
Atroclor-1268	2	4	Avg	---	---	---	---	---	---	---	0.0512	9.68	-1	-1	LV=7									
Atroclor-1268	2	5	Avg	---	---	---	---	---	---	---	0.522	10.35	-1	-1	LV=7									
DCB-Surrogate	2	0	LinF	2.8243	2.1901	1.9774	1.8232	1.6959	1.6810	---	2.03	10.92	1.00	1.00	21									

Avg Rsd Col 1: 16.24 Avg Rsd Col 2: 18.98

**Flags**  
 c - failed the initial calibration  
 criterial (if applicable)

**Note:**  
 Col = Column Number  
 Mr = MultiPeak Analyte 0=single peak analyte >0=multi peak analyte (i.e. nch/chlordane etc.)  
 Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound  
 Corr 1 = Correlation Coefficient for linear Fit  
 Corr 2 = Correlation Coefficient for quad Fit  
 ^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

All Response Factors = Response Factors / 10000  
 Initial Calibration Criteria: either %RSD <=20 or Corr >= .995  
 Columns: Signal #1 dh-1701 ; Signal #2 dh-608

# Form 6

Instrument: GC\_2

Method	EPA 8082A	Level #	Data File	Cal Identifier	Analysis Date/Time								Initial Calibration		Data File	Cal Identifier	Analysis Date/Time													
					RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT			Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8			
1	TCMX-Surrogate	1	0 Avg	0.6496	0.5939	0.5919	0.5676	0.5689	0.5563	---	---	---	0.588	3.85	1.00	1.00	5.7	5.00	20.00	50.00	100.0	200.0	400.0	500.0	20.00	20.00	50.00	100.0	200.0	400.0
2	Arcochlor-1016	1	1 Avg	0.0207	0.0178	0.0168	0.0157	0.0142	0.0131	---	---	---	0.0164	4.35	0.997	1.00	16	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
3	Arcochlor-1016	2	2 LinF	0.0403	0.0353	0.0318	0.0282	0.0250	0.0223	---	---	---	0.0305	4.72	0.995	0.999	22	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
4	Arcochlor-1016	3	3 Avg	0.0770	0.0671	0.0616	0.0544	0.0501	0.0458	---	---	---	0.0594	5.19	0.997	1.00	19	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
5	Arcochlor-1016	4	4 Avg	0.0230	0.0215	0.0205	0.0191	0.0180	0.0167	---	---	---	0.0198	5.44	0.998	1.00	12	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
6	Arcochlor-1260	1	5 Avg	0.0556	0.0496	0.0453	0.0401	0.0368	0.0332	---	---	---	0.0435	5.55	0.996	1.00	19	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
7	Arcochlor-1260	1	1 LinF	0.0518	0.0431	0.0374	0.0332	0.0297	0.0270	---	---	---	0.0371	7.07	0.997	1.00	25	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
8	Arcochlor-1260	1	2 LinF	0.0658	0.0500	0.0429	0.0380	0.0342	0.0315	---	---	---	0.0438	7.32	0.998	1.00	29	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
9	Arcochlor-1260	1	3 Avg	0.0269	0.0244	0.0226	0.0211	0.0200	0.0195	---	---	---	0.0224	7.52	1.00	1.00	13	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
10	Arcochlor-1260	1	4 Avg	0.0363	0.0324	0.0291	0.0271	0.0250	0.0237	---	---	---	0.0290	8.11	0.999	1.00	16	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
11	Arcochlor-1260	1	5 Avg	0.0517	0.0466	0.0442	0.0417	0.0397	0.0384	---	---	---	0.0438	8.83	1.00	1.00	11	50.00	200.0	500.0	1000.0	2000.0	4000.0	500.0	200.0	500.0	1000.0	2000.0	4000.0	500.0
12	Arcochlor-1221	1	1 Avg	---	---	---	---	---	---	---	---	0.0091	14.15	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
13	Arcochlor-1221	1	2 Avg	---	---	---	---	---	---	---	---	0.0066	14.29	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
14	Arcochlor-1221	1	3 Avg	---	---	---	---	---	---	---	---	0.0244	4.35	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
15	Arcochlor-1232	1	1 Avg	---	---	---	---	---	---	---	---	0.0163	4.35	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
16	Arcochlor-1232	1	2 Avg	---	---	---	---	---	---	---	---	0.0132	4.72	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
17	Arcochlor-1232	1	3 Avg	---	---	---	---	---	---	---	---	0.0268	5.19	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
18	Arcochlor-1232	1	4 Avg	---	---	---	---	---	---	---	---	0.0117	5.33	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
19	Arcochlor-1232	1	5 Avg	---	---	---	---	---	---	---	---	0.0135	5.79	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
20	Arcochlor-1242	1	1 Avg	---	---	---	---	---	---	---	---	0.0146	4.35	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
21	Arcochlor-1242	1	2 Avg	---	---	---	---	---	---	---	---	0.0259	4.72	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
22	Arcochlor-1242	1	3 Avg	---	---	---	---	---	---	---	---	0.0504	5.19	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
23	Arcochlor-1242	1	4 Avg	---	---	---	---	---	---	---	---	0.0351	5.55	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
24	Arcochlor-1242	1	5 Avg	---	---	---	---	---	---	---	---	0.0234	5.79	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
25	Arcochlor-1248	1	1 Avg	---	---	---	---	---	---	---	---	0.0132	4.72	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
26	Arcochlor-1248	1	2 Avg	---	---	---	---	---	---	---	---	0.0328	5.19	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
27	Arcochlor-1248	1	3 Avg	---	---	---	---	---	---	---	---	0.0552	5.54	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
28	Arcochlor-1248	1	4 Avg	---	---	---	---	---	---	---	---	0.0294	5.90	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
29	Arcochlor-1248	1	5 Avg	---	---	---	---	---	---	---	---	0.0344	6.50	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
30	Arcochlor-1254	1	1 Avg	---	---	---	---	---	---	---	---	0.0148	6.70	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
31	Arcochlor-1254	1	2 Avg	---	---	---	---	---	---	---	---	0.0447	6.90	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
32	Arcochlor-1254	1	3 Avg	---	---	---	---	---	---	---	---	0.0270	7.07	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
33	Arcochlor-1254	1	4 Avg	---	---	---	---	---	---	---	---	0.0413	7.19	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
34	Arcochlor-1254	1	5 Avg	---	---	---	---	---	---	---	---	0.0187	7.57	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
35	Arcochlor-1262	1	1 Avg	---	---	---	---	---	---	---	---	0.0467	7.75	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---
36	Arcochlor-1262	1	2 Avg	---	---	---	---	---	---	---	---	0.0300	8.76	-1	-1	---	---	500.0	---	---	---	---	---	---	---	---	---	---	---	---

Avg Rsd Col 1: 17.47 Avg Rsd Col 2: 18.13

**Flags**  
c - failed the initial calibration criteria(if applicable)

**Note:**  
Col = Column Number  
Mtr = MultiPeak Analyte 0=simple peak analyte >0=multi peak analyte (i.e. ncb/chlordane etc.)  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound  
Corr 1 = Correlation Coefficient for linear Fit  
Corr 2 = Correlation Coefficient for quad Fit  
Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

All Response Factors = Response Factors / 10000  
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995  
Columns: Signal #1 dh-1701 : Signal #2 dh-608

# Form 6

Method: EPA 8082A

Instrument: GC\_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Initial Calibration Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations
1	2G149305.D	CAL 1660@50PPB	10/01/20 19:20	2	2G149304.D	CAL 1660@200PPB	10/01/20 19:05	Lvl1 Lvl2 Lvl3 Lvl4 Lvl5 Lvl6 Lvl7 Lvl8
3	2G149303.D	CAL 1660@500PPB	10/01/20 18:50	4	2G149306.D	CAL 1660@1000PPB	10/01/20 19:36	
5	2G149307.D	CAL 1660@2000PPB	10/01/20 19:51	6	2G149308.D	CAL 1660@4000PPB	10/01/20 20:06	
7	2G149298.D	CAL 3268@500PPB	10/01/20 17:32	8	2G149299.D	CAL 1242@500PPB	10/01/20 17:47	
9	2G149300.D	CAL 1248@500PPB	10/01/20 18:02	10	2G149301.D	CAL 2154@500PPB	10/01/20 18:17	
11	2G149302.D	CAL 1262@500PPB	10/01/20 18:35					

Compound	Col Nr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	
Atroclor-1262	1	3 Avg	---	---	---	---	---	---	---	---	0.0565	8.83	-1	-1	Lvl=11	500.0								
Atroclor-1262	1	4 Avg	---	---	---	---	---	---	---	---	0.0282	9.55	-1	-1	Lvl=11	500.0								
Atroclor-1262	1	5 Avg	---	---	---	---	---	---	---	---	0.0107	9.92	-1	-1	Lvl=11	500.0								
Atroclor-1268	1	1 Avg	---	---	---	---	---	---	---	---	0.00745	8.11	-1	-1	Lvl=7	500.0								
Atroclor-1268	1	2 Avg	---	---	---	---	---	---	---	---	0.00852	8.42	-1	-1	Lvl=7	500.0								
Atroclor-1268	1	3 Avg	---	---	---	---	---	---	---	---	0.0627	9.01	-1	-1	Lvl=7	500.0								
Atroclor-1268	1	4 Avg	---	---	---	---	---	---	---	---	0.0176	9.11	-1	-1	Lvl=7	500.0								
Atroclor-1268	1	5 Avg	---	---	---	---	---	---	---	---	0.195	9.91	-1	-1	Lvl=7	500.0								
DCB-Surrogate	1	0 LinF	1.0296	0.8261	0.7450	0.6847	0.6277	0.5934	---	---	0.751	10.14	0.999	1.00	21	5.00	20.00	50.00	100.0	200.0	400.0			
TCMX-Surrogate	2	0 Avg	0.6833	0.6560	0.6629	0.6554	0.6377	0.6243	---	---	0.653	8.83	1.00	1.00	3.1	5.00	20.00	50.00	100.0	200.0	400.0			
Atroclor-1016	2	1 Avg	0.0217	0.0218	0.0197	0.0181	0.0165	0.0149	---	---	0.0188	4.43	0.996	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1016	2	2 LinF	0.0497	0.0412	0.0390	0.0346	0.0307	0.0274	---	---	0.0371	4.85	0.995	0.999	22	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1016	2	3 Avg	0.0942	0.0818	0.0758	0.0682	0.0619	0.0567	---	---	0.0732	5.23	0.997	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1016	2	4 LinF	0.0430	0.0353	0.0325	0.0293	0.0263	0.0237	---	---	0.0317	5.56	0.996	1.00	22	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1016	2	5 Avg	0.0296	0.0255	0.0235	0.0212	0.0193	0.0175	---	---	0.0228	5.93	0.997	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1260	2	1 LinF	0.0594	0.0491	0.0444	0.0399	0.0359	0.0328	---	---	0.0436	7.23	0.997	1.00	22	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1260	2	2 Avg	0.0614	0.0511	0.0476	0.0433	0.0397	0.0369	---	---	0.0467	7.33	0.998	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1260	2	3 LinF	0.0342	0.0282	0.0212	0.0203	0.0191	0.0179	---	---	0.0235	7.96	0.999	1.00	27	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1260	2	4 Avg	0.0532	0.0455	0.0409	0.0381	0.0357	0.0345	---	---	0.0414	8.32	1.00	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1260	2	5 Avg	0.0436	0.0364	0.0338	0.0322	0.0314	0.0301	---	---	0.0346	9.02	1.00	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.			
Atroclor-1221	2	1 Avg	---	---	---	---	---	---	---	---	0.0120	4.21	-1	-1	Lvl=10	500.0								
Atroclor-1221	2	2 Avg	---	---	---	---	---	---	---	---	0.00698	4.36	-1	-1	Lvl=10	500.0								
Atroclor-1221	2	3 Avg	---	---	---	---	---	---	---	---	0.0233	4.43	-1	-1	Lvl=10	500.0								
Atroclor-1232	2	1 Avg	---	---	---	---	---	---	---	---	0.0185	4.43	-1	-1	Lvl=7	500.0								
Atroclor-1232	2	2 Avg	---	---	---	---	---	---	---	---	0.0172	4.85	-1	-1	Lvl=7	500.0								
Atroclor-1232	2	3 Avg	---	---	---	---	---	---	---	---	0.0315	5.23	-1	-1	Lvl=7	500.0								
Atroclor-1232	2	4 Avg	---	---	---	---	---	---	---	---	0.0136	5.56	-1	-1	Lvl=7	500.0								
Atroclor-1232	2	5 Avg	---	---	---	---	---	---	---	---	0.0101	6.07	-1	-1	Lvl=7	500.0								
Atroclor-1242	2	1 Avg	---	---	---	---	---	---	---	---	0.0167	4.43	-1	-1	Lvl=8	500.0								
Atroclor-1242	2	2 Avg	---	---	---	---	---	---	---	---	0.0305	4.85	-1	-1	Lvl=8	500.0								
Atroclor-1242	2	3 Avg	---	---	---	---	---	---	---	---	0.0593	5.23	-1	-1	Lvl=8	500.0								
Atroclor-1242	2	4 Avg	---	---	---	---	---	---	---	---	0.0257	5.56	-1	-1	Lvl=8	500.0								
Atroclor-1242	2	5 Avg	---	---	---	---	---	---	---	---	0.0221	5.93	-1	-1	Lvl=8	500.0								
Atroclor-1248	2	1 Avg	---	---	---	---	---	---	---	---	0.0152	4.85	-1	-1	Lvl=9	500.0								
Atroclor-1248	2	2 Avg	---	---	---	---	---	---	---	---	0.0393	5.23	-1	-1	Lvl=9	500.0								
Atroclor-1248	2	3 Avg	---	---	---	---	---	---	---	---	0.0304	5.56	-1	-1	Lvl=9	500.0								

Avg Rsd Col 1: 17.47 Avg Rsd Col 2: 18.13

### Flags

c - failed the initial calibration criteria (if applicable)

### Note:

Col = Column Number  
 Mr = MultiPeak Analyte 0=single peak analyte >0=multi peak analyte (i.e. nch/chlordane etc.)  
 Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound  
 Corr 1 = Correlation Coefficient for linear Fit  
 Corr 2 = Correlation Coefficient for quad Fit

All Response Factors = Response Factors / 10000

Initial Calibration Criteria: either %RSD <=20 or Corr >= .995  
 Columns: Signal #1 dh-1701 : Signal #2 dh-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #





**Form7**  
 Continuing Calibration

Method: EPA 8082A

		Data File: 2G149411.D			2G149432.D			3G124616.D			3G124633.D							
		Method: 8082			8082			8082			8082							
		Calibration Name: CAL 1660@1000PP			CAL 1660@1000PP			CAL 1660@500PP			CAL 1660@500PP							
		Calibration Date/Time: 10/07/20 10:21			10/07/20 15:47			10/07/20 09:35			10/07/20 15:23							
Compound	Limit	Col	Mr	Conc			Conc			Conc			Conc			Conc		
				Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	20	1	0	98.67	100	1.3	96.73	100	3.3	53.71	50	7.4	53.55	50	7.1			
Aroclor-1016	20	1	1	921.7	1000	7.8	876.4	1000	12.4	591.3	500	18.3	568.2	500	13.6			
Aroclor-1016	20	1	2	1199	1000	19.9	1140	1000	14.0	551.3	500	10.3	546.7	500	9.3			
Aroclor-1016	20	1	3	891.9	1000	10.8	865.5	1000	13.5	542.4	500	8.5	537	500	7.4			
Aroclor-1016	20	1	4	925.1	1000	7.5	872	1000	12.8	545.1	500	9.0	533.1	500	6.6			
Aroclor-1016	20	1	5	891.1	1000	10.9	828.7	1000	17.1	543.6	500	8.7	526.3	500	5.3			
Aroclor-1260	20	1	1	1145	1000	14.5	1053	1000	5.3	677.7	500	35.5*	678.1	500	35.6*			
Aroclor-1260	20	1	2	1115	1000	11.5	1042	1000	4.2	662.9	500	32.6*	636.9	500	27.4*			
Aroclor-1260	20	1	3	893.6	1000	10.6	883.4	1000	11.7	529.4	500	5.9	583.6	500	16.7			
Aroclor-1260	20	1	4	877.0	1000	12.3	852.6	1000	14.7	520.1	500	4.0	505.3	500	1.1			
Aroclor-1260	20	1	5	881.9	1000	11.8	958.5	1000	4.1	476.2	500	4.8	443.9	500	11.2			
DCB-Surrogate	20	1	0	104.8	100	4.8	101.1	100	1.1	43.05	50	13.9	40.91	50	18.2			
Average Difference	20	1	0			10.3			9.5			13.2			13.3			
TCMX-Surrogate	20	2	0	102.4	100	2.4	102	100	2.0	41.23	50	17.5	43.66	50	12.7			
Aroclor-1016	20	2	1	861.6	1000	13.8	923.1	1000	7.7	407.7	500	18.5	474.3	500	5.1			
Aroclor-1016	20	2	2	1207	1000	20.7*	1187	1000	18.7	537.1	500	7.4	586.9	500	17.4			
Aroclor-1016	20	2	3	808.3	1000	19.2	899	1000	10.1	394	500	21.2*	440.8	500	11.8			
Aroclor-1016	20	2	4	1082	1000	8.2	1143	1000	14.3	525.3	500	5.1	569.5	500	13.9			
Aroclor-1016	20	2	5	865.9	1000	13.4	882.8	1000	11.7	533.5	500	6.7	549.8	500	10.0			
Aroclor-1260	20	2	1	1078	1000	7.8	1099	1000	9.9	526.4	500	5.3	544.3	500	8.9			
Aroclor-1260	20	2	2	866.7	1000	13.3	862.8	1000	13.7	494	500	1.2	527.0	500	5.4			
Aroclor-1260	20	2	3	1179	1000	17.9	961.8	1000	3.8	390.5	500	21.9*	448.8	500	10.2			
Aroclor-1260	20	2	4	835.5	1000	16.4	866.2	1000	13.4	402.3	500	19.5	438.2	500	12.4			
Aroclor-1260	20	2	5	822.3	1000	17.8	838.2	1000	16.2	412.3	500	17.5	422.1	500	15.6			
DCB-Surrogate	20	2	0	84.89	100	15.1	117.3	100	17.3	43.52	50	13.0	45.31	50	9.4			
Average Difference	20	2	0			13.8			11.6			12.9			11.1			

**Flags/Notes:** \* - Values outside of limits for this column/run

Form 7

RtWindow Summary

Method: EPA 8082A

Data File:		2G149305.D		3G124543.D		2G149411.D		3G124616.D			
Calibration Name:		CAL 1660@50PPB		CAL 1660@50PPB		CAL 1660@1000PPB		CAL 1660@500PPB			
Calibration Date/Time		10/1/2020 7:20:00 PM		10/1/2020 1:34:00 PM		10/7/2020 10:21:00 AM		10/7/2020 9:35:00 AM			
Compound	Col Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1 0	3.85	(3.79 - 3.91)	3.93	(3.87 - 3.99)	3.85	(3.79 - 3.91)	3.94	(3.88 - 4.00)		
Aroclor-1016	1 1	4.35	(4.31 - 4.39)	4.46	(4.42 - 4.50)	4.36	(4.32 - 4.40)	4.47	(4.43 - 4.51)		
Aroclor-1016	1 2	4.72	(4.68 - 4.76)	4.83	(4.79 - 4.87)	4.72	(4.68 - 4.76)	4.84	(4.80 - 4.88)		
Aroclor-1016	1 3	5.19	(5.15 - 5.23)	5.30	(5.26 - 5.34)	5.19	(5.15 - 5.23)	5.31	(5.27 - 5.35)		
Aroclor-1016	1 4	5.43	(5.39 - 5.47)	5.55	(5.51 - 5.59)	5.44	(5.40 - 5.48)	5.56	(5.52 - 5.60)		
Aroclor-1016	1 5	5.55	(5.51 - 5.59)	5.67	(5.63 - 5.71)	5.56	(5.52 - 5.60)	5.67	(5.63 - 5.71)		
Aroclor-1260	1 1	7.07	(7.03 - 7.11)	7.19	(7.15 - 7.23)	7.07	(7.03 - 7.11)	7.20	(7.16 - 7.24)		
Aroclor-1260	1 2	7.32	(7.28 - 7.36)	7.44	(7.40 - 7.48)	7.32	(7.28 - 7.36)	7.44	(7.40 - 7.48)		
Aroclor-1260	1 3	7.52	(7.48 - 7.56)	7.64	(7.60 - 7.68)	7.52	(7.48 - 7.56)	7.65	(7.61 - 7.69)		
Aroclor-1260	1 4	8.11	(8.07 - 8.15)	8.23	(8.19 - 8.27)	8.11	(8.07 - 8.15)	8.24	(8.20 - 8.28)		
Aroclor-1260	1 5	8.83	(8.79 - 8.87)	8.96	(8.92 - 9.00)	8.83	(8.79 - 8.87)	8.97	(8.93 - 9.01)		
Aroclor-1221	1 1	4.15	(4.11 - 4.19)	4.25	(4.21 - 4.29)						
Aroclor-1221	1 2	4.29	(4.25 - 4.33)	4.40	(4.36 - 4.44)						
Aroclor-1221	1 3	4.35	(4.31 - 4.39)	4.46	(4.42 - 4.50)						
Aroclor-1232	1 1	4.35	(4.31 - 4.39)	4.46	(4.42 - 4.50)						
Aroclor-1232	1 2	4.72	(4.68 - 4.76)	4.83	(4.79 - 4.87)						
Aroclor-1232	1 3	5.19	(5.15 - 5.23)	5.30	(5.26 - 5.34)						
Aroclor-1232	1 4	5.33	(5.29 - 5.37)	5.44	(5.40 - 5.48)						
Aroclor-1232	1 5	5.79	(5.75 - 5.83)	5.92	(5.88 - 5.96)						
Aroclor-1242	1 1	4.35	(4.31 - 4.39)	4.46	(4.42 - 4.50)						
Aroclor-1242	1 2	4.72	(4.68 - 4.76)	4.83	(4.79 - 4.87)						
Aroclor-1242	1 3	5.19	(5.15 - 5.23)	5.30	(5.26 - 5.34)						
Aroclor-1242	1 4	5.55	(5.51 - 5.59)	5.67	(5.63 - 5.71)						
Aroclor-1242	1 5	5.79	(5.75 - 5.83)	5.92	(5.88 - 5.96)						
Aroclor-1248	1 1	4.72	(4.68 - 4.76)	4.83	(4.79 - 4.87)						
Aroclor-1248	1 2	5.19	(5.15 - 5.23)	5.30	(5.26 - 5.34)						
Aroclor-1248	1 3	5.54	(5.50 - 5.58)	5.65	(5.61 - 5.69)						
Aroclor-1248	1 4	5.90	(5.86 - 5.94)	5.92	(5.88 - 5.96)						
Aroclor-1248	1 5	6.50	(6.46 - 6.54)	6.62	(6.58 - 6.66)						
Aroclor-1254	1 1	6.70	(6.66 - 6.74)	6.82	(6.78 - 6.86)						
Aroclor-1254	1 2	6.91	(6.87 - 6.95)	7.03	(6.99 - 7.07)						
Aroclor-1254	1 3	7.07	(7.03 - 7.11)	7.19	(7.15 - 7.23)						
Aroclor-1254	1 4	7.19	(7.15 - 7.23)	7.31	(7.27 - 7.35)						
Aroclor-1254	1 5	7.57	(7.53 - 7.61)	7.71	(7.67 - 7.75)						
Aroclor-1262	1 1	7.75	(7.71 - 7.79)	7.87	(7.83 - 7.91)						
Aroclor-1262	1 2	8.76	(8.72 - 8.80)	8.88	(8.84 - 8.92)						
Aroclor-1262	1 3	8.83	(8.79 - 8.87)	8.94	(8.90 - 8.98)						
Aroclor-1262	1 4	9.55	(9.51 - 9.59)	9.70	(9.66 - 9.74)						
Aroclor-1262	1 5	9.92	(9.88 - 9.96)	10.07	(10.03 - 10.11)						
Aroclor-1268	1 1	8.11	(8.07 - 8.15)	8.22	(8.18 - 8.26)						
Aroclor-1268	1 2	8.43	(8.39 - 8.47)	8.55	(8.51 - 8.59)						
Aroclor-1268	1 3	9.01	(8.97 - 9.05)	9.12	(9.08 - 9.16)						
Aroclor-1268	1 4	9.11	(9.07 - 9.15)	9.23	(9.19 - 9.27)						
Aroclor-1268	1 5	9.91	(9.87 - 9.95)	10.07	(10.03 - 10.11)						
DCB-Surrogate	1 0	10.14	(10.08 - 10.20)	10.29	(10.23 - 10.35)	10.14	(10.08 - 10.20)	10.29	(10.23 - 10.35)		
TCMX-Surrogate	2 0	3.83	(3.77 - 3.89)	3.96	(3.90 - 4.02)	3.83	(3.77 - 3.89)	3.97	(3.91 - 4.03)		
Aroclor-1016	2 1	4.43	(4.39 - 4.47)	4.56	(4.52 - 4.60)	4.43	(4.39 - 4.47)	4.57	(4.53 - 4.61)		
Aroclor-1016	2 2	4.85	(4.81 - 4.89)	4.99	(4.95 - 5.03)	4.85	(4.81 - 4.89)	4.99	(4.95 - 5.03)		
Aroclor-1016	2 3	5.23	(5.19 - 5.27)	5.37	(5.33 - 5.41)	5.23	(5.19 - 5.27)	5.37	(5.33 - 5.41)		
Aroclor-1016	2 4	5.56	(5.52 - 5.60)	5.70	(5.66 - 5.74)	5.56	(5.52 - 5.60)	5.70	(5.66 - 5.74)		
Aroclor-1016	2 5	5.93	(5.89 - 5.97)	6.07	(6.03 - 6.11)	5.93	(5.89 - 5.97)	6.08	(6.04 - 6.12)		
Aroclor-1260	2 1	7.24	(7.20 - 7.28)	7.39	(7.35 - 7.43)	7.25	(7.21 - 7.29)	7.39	(7.35 - 7.43)		
Aroclor-1260	2 2	7.33	(7.29 - 7.37)	7.47	(7.43 - 7.51)	7.33	(7.29 - 7.37)	7.47	(7.43 - 7.51)		
Aroclor-1260	2 3	7.96	(7.92 - 8.00)	8.10	(8.06 - 8.14)	7.96	(7.92 - 8.00)	8.10	(8.06 - 8.14)		
Aroclor-1260	2 4	8.32	(8.28 - 8.36)	8.46	(8.42 - 8.50)	8.32	(8.28 - 8.36)	8.47	(8.43 - 8.51)		
Aroclor-1260	2 5	9.02	(8.98 - 9.06)	9.17	(9.13 - 9.21)	9.02	(8.98 - 9.06)	9.17	(9.13 - 9.21)		
Aroclor-1221	2 1	4.21	(4.17 - 4.25)	4.34	(4.30 - 4.38)						
Aroclor-1221	2 2	4.36	(4.32 - 4.40)	4.50	(4.46 - 4.54)						
Aroclor-1221	2 3	4.43	(4.39 - 4.47)	4.56	(4.52 - 4.60)						
Aroclor-1232	2 1	4.43	(4.39 - 4.47)	4.56	(4.52 - 4.60)						
Aroclor-1232	2 2	4.85	(4.81 - 4.89)	4.99	(4.95 - 5.03)						
Aroclor-1232	2 3	5.23	(5.19 - 5.27)	5.37	(5.33 - 5.41)						
Aroclor-1232	2 4	5.56	(5.52 - 5.60)	6.22	(6.18 - 6.26)						
Aroclor-1232	2 5	6.07	(6.03 - 6.11)	6.29	(6.25 - 6.33)						
Aroclor-1242	2 1	4.43	(4.39 - 4.47)	4.56	(4.52 - 4.60)						
Aroclor-1242	2 2	4.85	(4.81 - 4.89)	4.99	(4.95 - 5.03)						
Aroclor-1242	2 3	5.23	(5.19 - 5.27)	5.37	(5.33 - 5.41)						
Aroclor-1242	2 4	5.56	(5.52 - 5.60)	5.70	(5.66 - 5.74)						
Aroclor-1242	2 5	5.93	(5.89 - 5.97)	6.07	(6.03 - 6.11)						
Aroclor-1248	2 1	4.85	(4.81 - 4.89)	4.99	(4.95 - 5.03)						
Aroclor-1248	2 2	5.23	(5.19 - 5.27)	5.37	(5.33 - 5.41)						
Aroclor-1248	2 3	5.56	(5.52 - 5.60)	5.70	(5.66 - 5.74)						
Aroclor-1248	2 4	6.07	(6.03 - 6.11)	6.22	(6.18 - 6.26)						
Aroclor-1248	2 5	6.21	(6.17 - 6.25)	6.35	(6.31 - 6.39)						
Aroclor-1254	2 1	6.43	(6.39 - 6.47)	6.57	(6.53 - 6.61)						
Aroclor-1254	2 2	6.78	(6.74 - 6.82)	6.92	(6.88 - 6.96)						
Aroclor-1254	2 3	7.17	(7.13 - 7.21)	7.31	(7.27 - 7.35)						
Aroclor-1254	2 4	7.69	(7.65 - 7.73)	7.82	(7.78 - 7.86)						
Aroclor-1254	2 5	8.38	(8.34 - 8.42)	8.52	(8.48 - 8.56)						
Aroclor-1262	2 1	7.75	(7.71 - 7.79)	7.89	(7.85 - 7.93)						
Aroclor-1262	2 2	8.92	(8.88 - 8.96)	9.06	(9.02 - 9.10)						
Aroclor-1262	2 3	9.02	(8.98 - 9.06)	9.17	(9.13 - 9.21)						
Aroclor-1262	2 4	9.62	(9.58 - 9.66)	9.78	(9.74 - 9.82)						
Aroclor-1262	2 5	10.16	(10.12 - 10.20)	10.35	(10.31 - 10.39)						
Aroclor-1268	2 1	8.42	(8.38 - 8.46)	8.56	(8.52 - 8.60)						
Aroclor-1268	2 2	8.46	(8.42 - 8.50)	8.60	(8.56 - 8.64)						
Aroclor-1268	2 3	9.36	(9.32 - 9.40)	9.52	(9.48 - 9.56)						
Aroclor-1268	2 4	9.52	(9.48 - 9.56)	9.68	(9.64 - 9.72)						
Aroclor-1268	2 5	10.16	(10.12 - 10.20)	10.35	(10.31 - 10.39)						
DCB-Surrogate	2 0	10.71	(10.65 - 10.77)	10.92	(10.86 - 10.98)	10.71	(10.65 - 10.77)	10.93	(10.87 - 10.99)		

## **DRO Data**

**Form1**

## ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AD19595-013      Method: EPA 8015D  
 Client Id: HSI-WC-NH      Matrix: Soil  
 Data File: 7G53147.D      Initial Vol: 5g  
 Analysis Date: 10/06/20 11:24      Final Vol: 1ml  
 Date Rec/Extracted: 10/02/20-10/05/20      Dilution: 1  
 Column: DB-5MS 30M 0.250mm ID 0.25um film      Solids: 86

**Units: mg/Kg**

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phchpd2	Diesel Range Organics	70	U				

Worksheet #: 569144

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
 Data File : 7G53147.D  
 Signal(s) : FID2B.CH  
 Acq On : 6 Oct 2020 11:24  
 Operator : ABM/AH/RR  
 Sample : AD19595-013  
 Misc : S,TPH  
 ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e  
 Quant Time: Oct 06 11:43:45 2020  
 Quant Method : G:\GC\DATA\2020\GC\_7\METHODQT\7G\_T0915.M  
 Quant Title : @GC\_7,mg,8015  
 QLast Update : Wed Sep 16 08:10:12 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal Phase :  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	d
2)mte C9	0.000	0	N.D.	d
3)mdte C10	0.000	0	N.D.	d
4)mdte C12	0.000	0	N.D.	d
5)mdte C14	0.000	0	N.D.	d
6)dte C16	0.000	0	N.D.	d
7)dte C17	0.000	0	N.D.	d
8)dte Pristane	0.000	0	N.D.	d
9)dte C18	0.000	0	N.D.	d
10)dte Phytane	0.000	0	N.D.	d
11)dte C20	0.000	0	N.D.	d
12)dte C22	0.000	0	N.D.	d
13)dte C24	0.000	0	N.D.	d
14)dte C26	0.000	0	N.D.	d
15)dte C28	0.000	0	N.D.	d
16)te C30	0.000	0	N.D.	d
17)te C32	0.000	0	N.D.	d
18)te C34	0.000	0	N.D.	d
19)te C36	0.000	0	N.D.	d
20)t C40	0.000	0	N.D.	d
21) Chlorobenzene	2.552	31036	7.886	m
22) O-Terphenyl	8.321	100857	13.646	m
23)d Diesel Range Organics(T	8.321f	698085	109.070	m
24)t Total Petroleum Hydroca	0.000	0	N.D.	d
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	d
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	d
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window

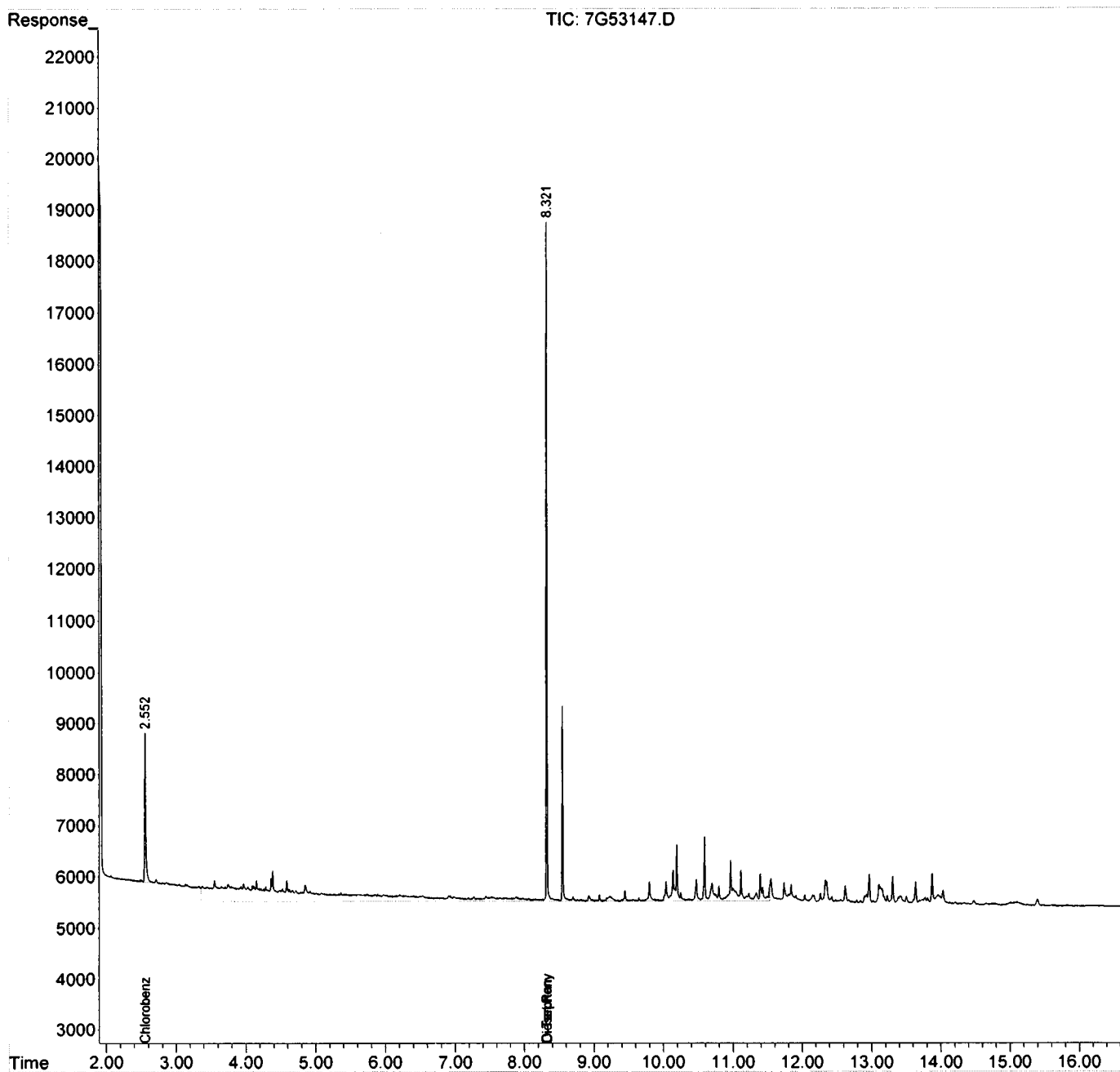
(m)=manual int.

RR

Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
Data File : 7G53147.D  
Signal(s) : FID2B.CH  
Acq On : 6 Oct 2020 11:24  
Operator : ABM/AH/RR  
Sample : AD19595-013  
Misc : S,TPH  
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 06 11:43:45 2020  
Quant Method : G:\GCDATA\2020\GC\_7\METHODQT\7G\_T0915.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Wed Sep 16 08:10:12 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



## Form1

## ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AD19595-014      Method: EPA 8015D  
 Client Id: HSI-WC-H      Matrix: Soil  
 Data File: 7G53148.D      Initial Vol: 5g  
 Analysis Date: 10/06/20 11:50      Final Vol: 1ml  
 Date Rec/Extracted: 10/02/20-10/05/20      Dilution: 1  
 Column: DB-5MS 30M 0.250mm ID 0.25um film      Solids: 83

## Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phchpd2	Diesel Range Organics	72	U				

Worksheet #: 569144

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.



Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
 Data File : 7G53148.D  
 Signal(s) : FID2B.CH  
 Acq On : 6 Oct 2020 11:50  
 Operator : ABM/AH/RR  
 Sample : AD19595-014  
 Misc : S,TPH  
 ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e  
 Quant Time: Oct 06 12:17:40 2020  
 Quant Method : G:\GCDATA\2020\GC\_7\METHODQT\7G\_T0915.M  
 Quant Title : @GC\_7,mg,8015  
 QLast Update : Wed Sep 16 08:10:12 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal Phase :  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	d
2)mt C9	0.000	0	N.D.	d
3)mdte C10	0.000	0	N.D.	d
4)mdte C12	0.000	0	N.D.	d
5)mdte C14	0.000	0	N.D.	d
6)dte C16	0.000	0	N.D.	d
7)dte C17	0.000	0	N.D.	d
8)dte Pristane	0.000	0	N.D.	d
9)dte C18	0.000	0	N.D.	d
10)dte Phytane	0.000	0	N.D.	d
11)dte C20	0.000	0	N.D.	d
12)dte C22	0.000	0	N.D.	d
13)dte C24	0.000	0	N.D.	d
14)dte C26	0.000	0	N.D.	d
15)dte C28	0.000	0	N.D.	d
16)te C30	0.000	0	N.D.	d
17)te C32	0.000	0	N.D.	d
18)te C34	0.000	0	N.D.	d
19)te C36	0.000	0	N.D.	d
20)t C40	0.000	0	N.D.	d
21) Chlorobenzene	2.552	91458	23.240	m
22) O-Terphenyl	8.322	101233	13.697	m
23)d Diesel Range Organics(T	8.572f	2629713	410.872	m
24)t Total Petroleum Hydroca	0.000	0	N.D.	d
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	d
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	d
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window

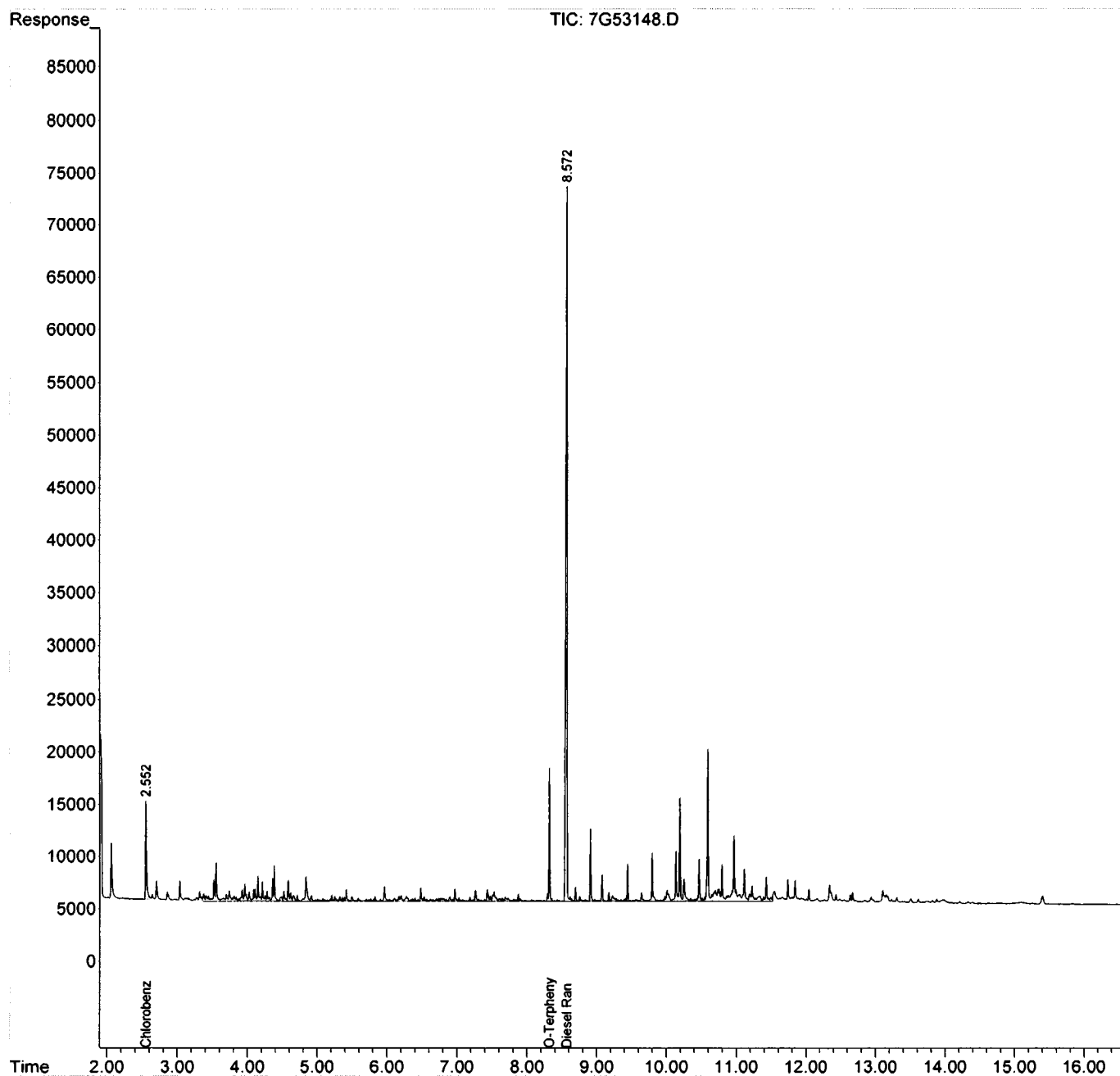
(m)=manual int.

RR

Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
Data File : 7G53148.D  
Signal(s) : FID2B.CH  
Acq On : 6 Oct 2020 11:50  
Operator : ABM/AH/RR  
Sample : AD19595-014  
Misc : S,TPH  
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 06 12:17:40 2020  
Quant Method : G:\GCDATA\2020\GC\_7\METHODQT\7G\_T0915.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Wed Sep 16 08:10:12 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



**Form1**

## ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: SMB88159	Method: EPA 8015D
Client Id:	Matrix: Soil
Data File: 7G53143.D	Initial Vol: 5g
Analysis Date: 10/06/20 09:40	Final Vol: 1ml
Date Rec/Extracted: NA-10/05/20	Dilution: 1
Column: DB-5MS 30M 0.250mm ID 0.25um film	Solids: 100

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phchpd2	Diesel Range Organics	60	U				

Worksheet #: 569144

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a**Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.*

Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
 Data File : 7G53143.D  
 Signal(s) : FID2B.CH  
 Acq On : 6 Oct 2020 9:40  
 Operator : ABM/AH/RR  
 Sample : SMB88159  
 Misc : S,TPH  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e  
 Quant Time: Oct 06 10:04:01 2020  
 Quant Method : G:\GC\DATA\2020\GC\_7\METHODQT\7G\_T0915.M  
 Quant Title : @GC\_7,mg,8015  
 QLast Update : Wed Sep 16 08:10:12 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal Phase :  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	d
2)mte C9	0.000	0	N.D.	d
3)mdte C10	0.000	0	N.D.	d
4)mdte C12	0.000	0	N.D.	d
5)mdte C14	0.000	0	N.D.	d
6)dte C16	0.000	0	N.D.	d
7)dte C17	0.000	0	N.D.	d
8)dte Pristane	0.000	0	N.D.	d
9)dte C18	0.000	0	N.D.	d
10)dte Phytane	0.000	0	N.D.	d
11)dte C20	0.000	0	N.D.	d
12)dte C22	0.000	0	N.D.	d
13)dte C24	0.000	0	N.D.	d
14)dte C26	0.000	0	N.D.	d
15)dte C28	0.000	0	N.D.	d
16)te C30	0.000	0	N.D.	d
17)te C32	0.000	0	N.D.	d
18)te C34	0.000	0	N.D.	d
19)te C36	0.000	0	N.D.	d
20)t C40	0.000	0	N.D.	d
21) Chlorobenzene	2.552	31134	7.911	m
22) O-Terphenyl	8.321	95380	12.905	m
23)d Diesel Range Organics(T	8.321f	1128928	176.386	m
24)t Total Petroleum Hydroca	8.321f	1687575	262.586	m
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	d
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	d
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window

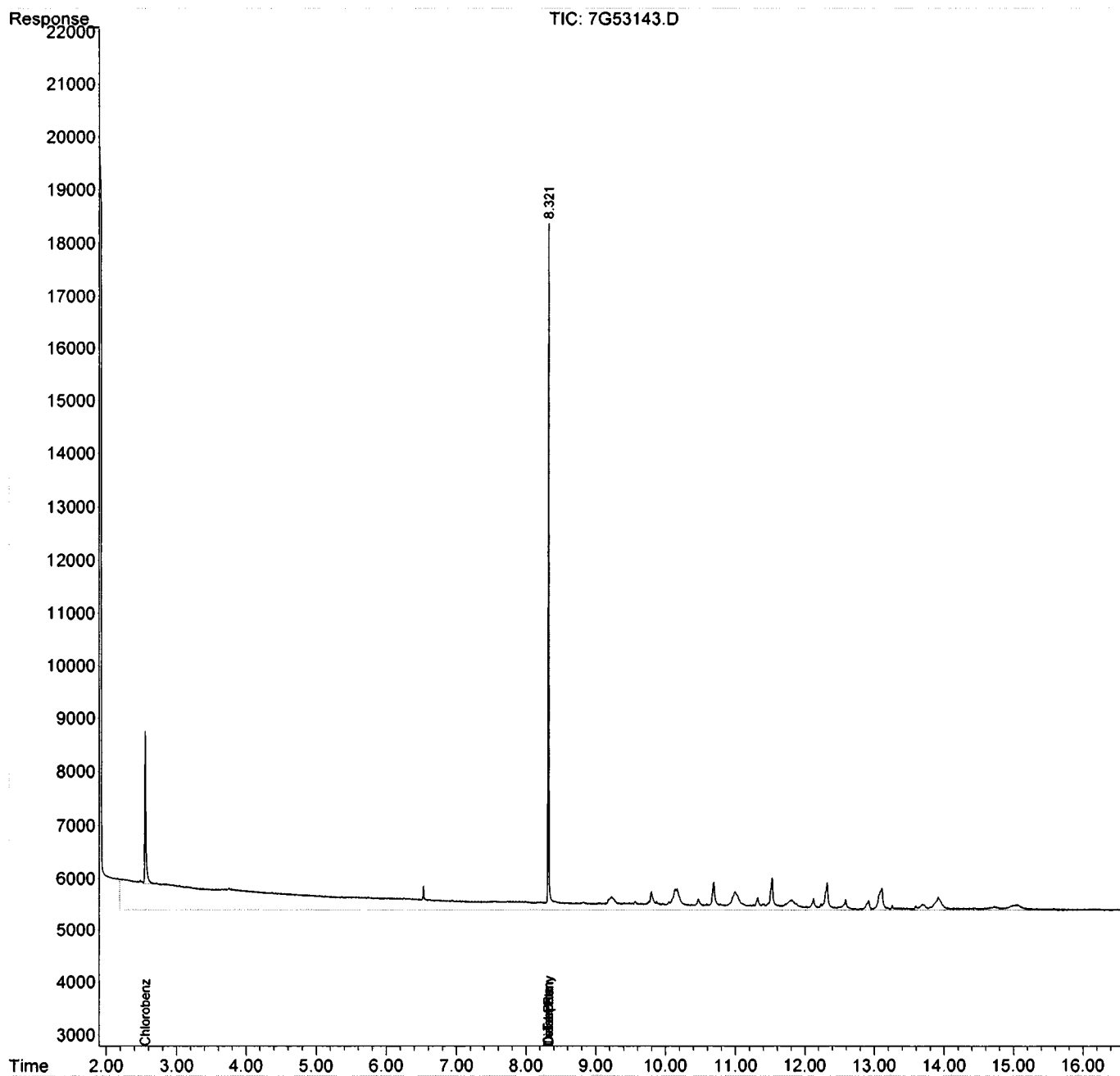
(m)=manual int.

RR

Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
Data File : 7G53143.D  
Signal(s) : FID2B.CH  
Acq On : 6 Oct 2020 9:40  
Operator : ABM/AH/RR  
Sample : SMB88159  
Misc : S,TPH  
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 06 10:04:01 2020  
Quant Method : G:\GC DATA\2020\GC\_7\METHODQT\7G\_T0915.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Wed Sep 16 08:10:12 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
 Data File : 7G53142.D  
 Signal(s) : FID2B.CH  
 Acq On : 6 Oct 2020 9:14  
 Operator : ABM/AH/RR  
 Sample : INST BLK  
 Misc : S,TPH  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e  
 Quant Time: Oct 06 09:57:18 2020  
 Quant Method : G:\GC\DATA\2020\GC\_7\METHODQT\7G\_T0915.M  
 Quant Title : @GC\_7,mg,8015  
 QLast Update : Wed Sep 16 08:10:12 2020  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal Phase :  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	d
2)mte C9	0.000	0	N.D.	d
3)mdte C10	0.000	0	N.D.	d
4)mdte C12	0.000	0	N.D.	d
5)mdte C14	0.000	0	N.D.	d
6)dte C16	0.000	0	N.D.	d
7)dte C17	0.000	0	N.D.	d
8)dte Pristane	0.000	0	N.D.	d
9)dte C18	0.000	0	N.D.	d
10)dte Phytane	0.000	0	N.D.	d
11)dte C20	0.000	0	N.D.	d
12)dte C22	0.000	0	N.D.	d
13)dte C24	0.000	0	N.D.	d
14)dte C26	0.000	0	N.D.	d
15)dte C28	0.000	0	N.D.	d
16)te C30	0.000	0	N.D.	d
17)te C32	0.000	0	N.D.	d
18)te C34	0.000	0	N.D.	d
19)te C36	0.000	0	N.D.	d
20)t C40	0.000	0	N.D.	d
21) Chlorobenzene	0.000	0	N.D.	d
22) O-Terphenyl	0.000	0	N.D.	d
23)d Diesel Range Organics(T	3.352	974862	152.315	m
24)t Total Petroleum Hydroca	2.197	1395870	217.197	m
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	d
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	d
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window

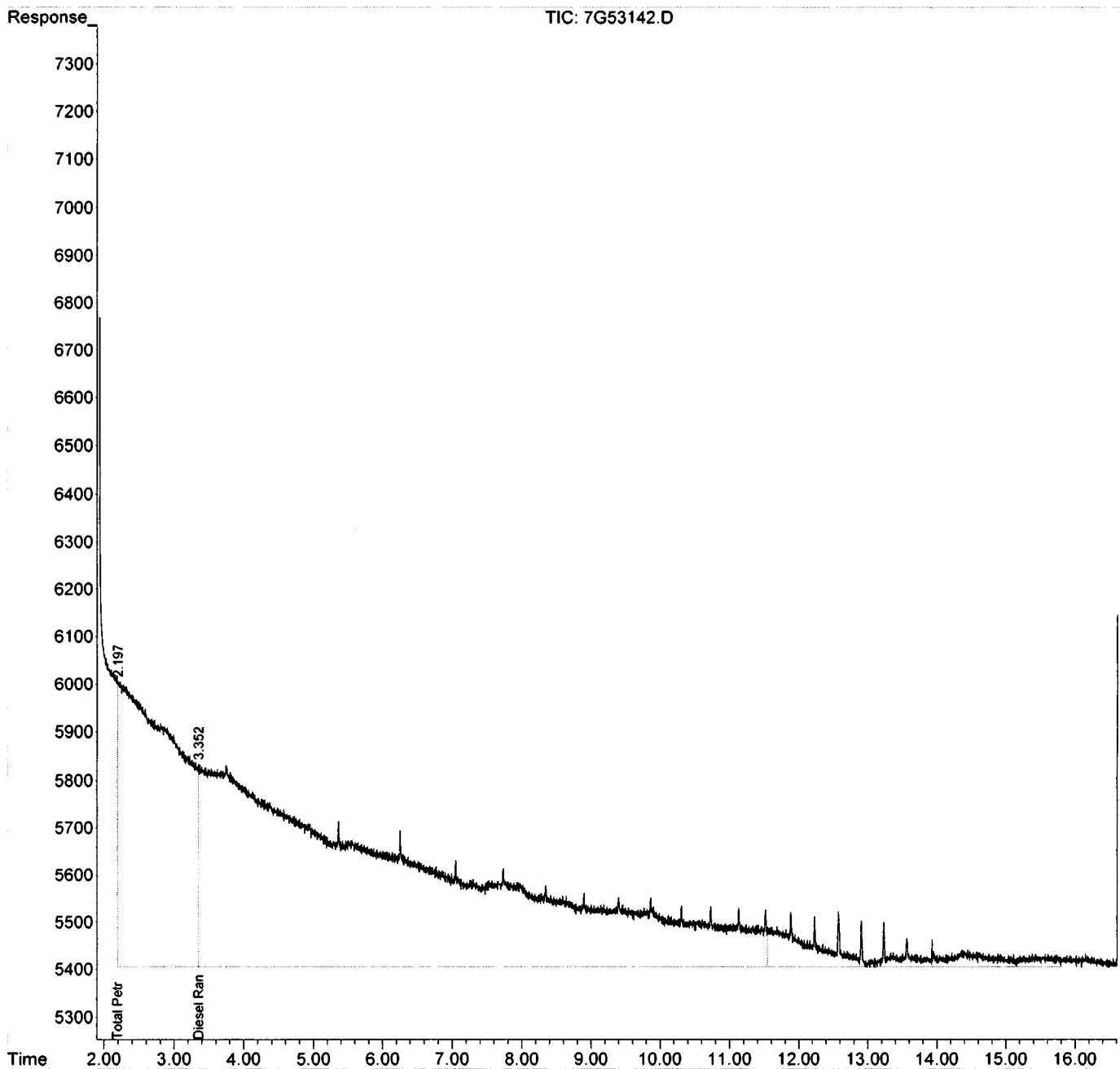
(m)=manual int.

RR

Data Path : G:\Gcdata\2020\GC\_7\Data\10-06-20\  
Data File : 7G53142.D  
Signal(s) : FID2B.CH  
Acq On : 6 Oct 2020 9:14  
Operator : ABM/AH/RR  
Sample : INST BLK  
Misc : S,TPH  
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 06 09:57:18 2020  
Quant Method : G:\GCDATA\2020\GC\_7\METHODQT\7G\_T0915.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Wed Sep 16 08:10:12 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



## FORM2

## Surrogate Recovery

Method: EPA 8015D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
7G53143.D	SMB88159	S	10/06/20 09:40	1		40	65				
7G53147.D	DAD19595-013	S	10/06/20 11:24	1		39	68				
7G53148.D	DAD19595-014	S	10/06/20 11:50	1		116	68				
7G53144.D	SMB88159(MS)	S	10/06/20 10:06	1		40	85				
7G53157.D	DAD19542-001(10X)	S	10/06/20 16:13	10	SD	0*	0*				
7G53158.D	DAD19542-001(10X)(MS)	S	10/06/20 16:43	10	SD	0*	0*				
7G53159.D	DAD19542-001(10X)(MS)	S	10/06/20 17:13	10	SD	0*	0*				

---

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8015D

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Chlorobenzene	20	20-117
S2=O-Terphenyl	20	30-146



**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88159

	<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>				
	Spike or Dup: 7G53144.D	SMB88159(MS)	10/6/2020 10:06:00 AM				
<b>Non Spike(If applicable):</b>							
	Inst Blank(If applicable): 7G53142.D	INST BLK	10/6/2020 9:14:00 AM				
<b>Method: 8015</b>		<b>Matrix: Soil</b>	<b>QC Type: MBS</b>				
<b>Analyte:</b>	<b>Col</b>	<b>Spike Conc</b>	<b>Sample Conc</b>	<b>Expected Conc</b>	<b>Recovery</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
<b><u>Diesel Range Organics</u></b>	<b><u>1</u></b>	<b><u>1833.26</u></b>	<b><u>0</u></b>	<b><u>3000</u></b>	<b><u>61</u></b>	<b><u>40</u></b>	<b><u>130</u></b>

\* - Indicates outside of limits    # - Indicates outside of standard limits but within method exceedance limits  
 Bold and underline - Indicates the compounds reported on form1

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB88159

Data File	Sample ID:	Analysis Date
Spike or Dup: 7G53158.D	AD19542-001(10X)(MS)	10/6/2020 4:43:00 PM
Non Spike(If applicable): 7G53157.D	AD19542-001(10X)	10/6/2020 4:13:00 PM
Inst Blank(If applicable): 7G53154.D	INST BLK	10/6/2020 2:41:00 PM
Method: 8015	Matrix: Soil	QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b><u>Diesel Range Organics</u></b>	<b><u>1</u></b>	<b><u>20438.2</u></b>	<b><u>24679.3</u></b>	<b><u>3000</u></b>	<b><u>-140*</u></b>	<b><u>40</u></b>	<b><u>130</u></b>

Data File	Sample ID:	Analysis Date
Spike or Dup: 7G53159.D	AD19542-001(10X)(MSD)	10/6/2020 5:13:00 PM
Non Spike(If applicable): 7G53157.D	AD19542-001(10X)	10/6/2020 4:13:00 PM
Inst Blank(If applicable): 7G53154.D	INST BLK	10/6/2020 2:41:00 PM
Method: 8015	Matrix: Soil	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
<b><u>Diesel Range Organics</u></b>	<b><u>1</u></b>	<b><u>24683.8</u></b>	<b><u>24679.3</u></b>	<b><u>3000</u></b>	<b><u>0.15*</u></b>	<b><u>40</u></b>	<b><u>130</u></b>

**Form3**  
**RPD Data Laboratory Limits**  
 QC Batch: SMB88159

Data File	Sample ID:	Analysis Date
Spike or Dup: 7G53159.D	AD19542-001(10X)(MSD)	10/6/2020 5:13:00 PM
Duplicate(If applicable): 7G53158.D	AD19542-001(10X)(MS)	10/6/2020 4:43:00 PM
Inst Blank(If applicable): 7G53154.D	INST BLK	10/6/2020 2:41:00 PM
Method: 8015	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
<b><u>Diesel Range Organics</u></b>	<b><u>1</u></b>	<b><u>24683.8</u></b>	<b><u>20438.2</u></b>	<b><u>19</u></b>	<b><u>40</u></b>

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

**FORM 4**  
Blank Summary

Blank Number: SMB88159  
Blank Data File: 7G53143.D  
Matrix: Soil

Blank Analysis Date: 10/06/20 09:40  
Blank Extraction Date: 10/05/20  
(If Applicable)  
Method: EPA 8015D

Sample Number	Data File	Analysis Date
AD19595-013	7G53147.D	10/06/20 11:24
AD19595-014	7G53148.D	10/06/20 11:50
AD19542-001(10X)	7G53157.D	10/06/20 16:13
AD19542-001(10X)	7G53159.D	10/06/20 17:13
AD19542-001(10X)	7G53158.D	10/06/20 16:43
SMB88159(MS)	7G53144.D	10/06/20 10:06

## Form 5

Method: EPA 8015D  
Instrument: GC\_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G52904.D	INST BLK	09/10/20 08:13	Soil					
7G52905.D	TPH@20PPM	09/10/20 09:41	Soil					
7G52906.D	CAL TPH@20PPM	09/10/20 10:19	Soil	7G52911	8.2914	0.1038		
7G52907.D	CAL TPH@500PPM	09/10/20 10:48	Soil	7G52911	8.3377	0.6606		
7G52908.D	CAL TPH@100PPM	09/10/20 11:18	Soil	7G52911	8.3024	0.2364		
7G52909.D	CAL TPH@40PPM	09/10/20 11:48	Soil	7G52911	8.2912	0.1014		
7G52910.D	CAL TPH@10PPM	09/10/20 12:18	Soil	7G52911	8.2840	0.0145		
7G52911.D	CAL TPH@5PPM	09/10/20 12:48	Soil	7G52911	8.2828	0		
7G52912.D	CAL TPH@20PPM	09/10/20 13:29	Soil	7G52911	8.2923	0.1146		
7G52913.D	ICV TPH@20PPM	09/10/20 13:59	Soil	7G52911	8.2884	0.0676		

## Form 5

Method: EPA 8015D  
Instrument: GC\_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G52957.D	INST BLK	09/15/20 08:33	Soil					
7G52966.D	CAL TPH@20PPM	09/15/20 14:21	Soil	7G52971.	8.2816	0.0967		
7G52967.D	CAL TPH@500PPM	09/15/20 14:46	Soil	7G52971.	8.3236	0.6025		
7G52968.D	CAL TPH@100PPM	09/15/20 15:12	Soil	7G52971.	8.2829	0.1123		
7G52969.D	CAL TPH@40PPM	09/15/20 15:38	Soil	7G52971.	8.2685	0.0617		
7G52970.D	CAL TPH@10PPM	09/15/20 16:04	Soil	7G52971.	8.2729	0.0085		
7G52971.D	CAL TPH@5PPM	09/15/20 16:30	Soil	7G52971.	8.2736	0		
7G52972.D	CAL TPH@20PPM	09/15/20 16:56	Soil	7G52971.	8.2745	0.0109		
7G52973.D	ICV TPH@20PPM	09/15/20 17:22	Soil	7G52971.	8.2659	0.0931		

## Form 5

Method: EPA 8015D

Instrument: GC\_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G53140.D	INST BLK	10/06/20 08:21	Soil					
7G53141.D	CAL TPH@20PPM	10/06/20 08:48	Soil	7G53141	8.3241	0		
7G53142.D	INST BLK	10/06/20 09:14	Soil	7G53141	0.0000	200		
7G53143.D	SMB88159	10/06/20 09:40	Soil	7G53141	8.3209	0.0384		
7G53144.D	SMB88159(MS)	10/06/20 10:06	Soil	7G53141	8.3242	0.0012		
7G53145.D	AD19498-002	10/06/20 10:32	Soil	7G53141	8.3366	0.1501		
7G53146.D	AD19575-002	10/06/20 10:58	Soil	7G53141	8.3220	0.0252		
7G53147.D	AD19595-013	10/06/20 11:24	Soil	7G53141	8.3210	0.0372		
7G53148.D	AD19595-014	10/06/20 11:50	Soil	7G53141	8.3216	0.03		
7G53149.D	AD19603-001	10/06/20 12:16	Soil	7G53141	8.3232	0.0108		
7G53150.D	AD19560-001	10/06/20 12:41	Soil	7G53141	8.3222	0.0228		
7G53151.D	CAL TPH@20PPM	10/06/20 13:07	Soil	7G53141	8.3234	0.0084		

## Form 5

Method: EPA 8015D  
Instrument: GC\_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G53152.D	INST BLK	10/06/20 13:41	Soil					
7G53153.D	CAL TPH@20PPM	10/06/20 14:11	Soil	7G53153.	8.3171	0		
7G53154.D	INST BLK	10/06/20 14:41	Soil	7G53153.	0.0000	200		
7G53155.D	SMB88159	10/06/20 15:11	Soil	7G53153.	8.3140	0.0373		
7G53156.D	AD19542-001	10/06/20 15:41	Soil	7G53153.	8.3172	0.0012		
7G53157.D	AD19542-001(10X)	10/06/20 16:13	Soil	7G53153.	0.0000	200		
7G53158.D	AD19542-001(10X)(MS)	10/06/20 16:43	Soil	7G53153.	0.0000	200		
7G53159.D	AD19542-001(10X)(MSD)	10/06/20 17:13	Soil	7G53153.	0.0000	200		
7G53160.D	TEST	10/06/20 18:42	Soil	7G53153.	0.0000	200		
7G53161.D	CAL TPH@20PPM	10/06/20 19:12	Soil	7G53153.	8.3156	0.018		
7G53162.D	CAL TPH@20PPM	10/06/20 19:42	Soil	7G53153.	8.3157	0.0168		



Level #	Data File	Cal Identifier	Analysis Date/Time	Initial Calibration Level #	Data File	Cal Identifier	Analysis Date/Time
1	7G52911.D	CAL TPH@5PPM	09/10/20 12:48	2	7G52910.D	CAL TPH@10PPM	09/10/20 12:18
3	7G52906.D	CAL TPH@20PPM	09/10/20 10:19	4	7G52909.D	CAL TPH@40PPM	09/10/20 11:48
5	7G52908.D	CAL TPH@100PPM	09/10/20 11:18	6	7G52907.D	CAL TPH@500PPM	09/10/20 10:48

Compound	Col Mtr. Fit.	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
C8	1	0	Avg	0.4464	0.4939	0.4666	0.4819	0.5012	0.5558	---	0.4912	2.20	1.00	1.00	7.6	5.00	10.00	20.00	40.00	100.0	500.0	
C9	1	0	Avg	0.4942	0.5494	0.5036	0.5182	0.5421	0.5861	---	0.5322	2.84	1.00	1.00	6.4	5.00	10.00	20.00	40.00	100.0	500.0	
C10	1	0	Avg	0.5028	0.5621	0.5240	0.5393	0.5729	0.6191	---	0.5433	3.82	1.00	1.00	7.4	5.00	10.00	20.00	40.00	100.0	500.0	
C12	1	0	Avg	0.3829	0.5369	0.5274	0.5566	0.6034	0.6511	---	0.5434	3.50	1.00	1.00	17	5.00	10.00	20.00	40.00	100.0	500.0	
C14	1	0	Avg	0.3982	0.5561	0.5587	0.5852	0.6340	0.6803	---	0.5695	5.93	1.00	1.00	17	5.00	10.00	20.00	40.00	100.0	500.0	
C16	1	0	Avg	0.4847	0.6063	0.5884	0.6069	0.6466	0.6853	---	0.6036	6.94	1.00	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0	
C17	1	0	Qua	0.6289	0.5536	0.5981	0.6307	0.7502	1.0339	---	0.6997	7.41	1.00	1.00	25	5.00	10.00	20.00	40.00	100.0	500.0	
Pristane	1	0	Qua	0.4119	0.7020	0.6298	0.5934	0.5801	0.3078	---	0.5387	7.41	1.00	1.00	27	5.00	10.00	20.00	40.00	100.0	500.0	
C18	1	0	Avg	0.5096	0.6477	0.6233	0.6407	0.6825	0.8158	---	0.6537	8.84	1.00	1.00	15	5.00	10.00	20.00	40.00	100.0	500.0	
Phytane	1	0	Avg	0.6432	0.6759	0.6001	0.5965	0.6170	0.5412	---	0.6127	8.87	1.00	1.00	7.5	5.00	10.00	20.00	40.00	100.0	500.0	
C20	1	0	Avg	0.5513	0.6742	0.6381	0.6553	0.6896	0.7202	---	0.6558	8.66	1.00	1.00	8.9	5.00	10.00	20.00	40.00	100.0	500.0	
C22	1	0	Avg	0.5759	0.6913	0.6520	0.6655	0.7018	0.7271	---	0.6699	9.41	1.00	1.00	7.9	5.00	10.00	20.00	40.00	100.0	500.0	
C24	1	0	Avg	0.6138	0.7290	0.6812	0.6900	0.7262	0.7497	---	0.6981	10.13	1.00	1.00	7.0	5.00	10.00	20.00	40.00	100.0	500.0	
C26	1	0	Avg	0.6263	0.7327	0.6854	0.6935	0.7277	0.7501	---	0.7031	10.81	1.00	1.00	6.4	5.00	10.00	20.00	40.00	100.0	500.0	
C28	1	0	Avg	0.6407	0.7518	0.6937	0.7012	0.7368	0.7555	---	0.7131	11.48	1.00	1.00	6.1	5.00	10.00	20.00	40.00	100.0	500.0	
C30	1	0	Avg	0.6447	0.7549	0.6966	0.7016	0.7418	0.7610	---	0.7171	12.14	1.00	1.00	6.2	5.00	10.00	20.00	40.00	100.0	500.0	
C32	1	0	Avg	0.6855	0.8020	0.7270	0.7111	0.7620	0.7835	---	0.7451	12.78	1.00	1.00	6.0	5.00	10.00	20.00	40.00	100.0	500.0	
C34	1	0	Avg	0.6376	0.7475	0.6881	0.6706	0.7224	0.7425	---	0.7011	13.42	1.00	1.00	6.2	5.00	10.00	20.00	40.00	100.0	500.0	
C36	1	0	Avg	0.6517	0.7741	0.7178	0.7001	0.7414	0.7530	---	0.7231	14.05	1.00	1.00	6.0	5.00	10.00	20.00	40.00	100.0	500.0	
C40	1	0	Avg	0.5789	0.7324	0.6832	0.6747	0.6808	0.6756	---	0.6711	15.85	1.00	1.00	7.5	5.00	10.00	20.00	40.00	100.0	500.0	
C44	1	0	Avg	0.5048	0.5515	0.5825	0.5802	0.5864	0.5599	---	0.5611	19.02	1.00	1.00	5.5	5.00	10.00	20.00	40.00	100.0	500.0	
Chlorobenzene	1	0	Avg	0.3549	0.4051	0.3754	0.3881	0.4024	0.4355	---	0.3942	2.58	1.00	1.00	7.0	5.00	10.00	20.00	40.00	100.0	500.0	
O-Terphenyl	1	0	Avg	0.7027	0.7893	0.7248	0.7275	0.7631	0.8026	---	0.7528	8.28	1.00	1.00	5.3	5.00	10.00	20.00	40.00	100.0	500.0	
Diesel Range Organics(TO	1	0	Avg	0.5362	0.6477	0.6154	0.6273	0.6668	0.6952	---	0.6313	3.52	1.00	1.00	8.7	5.00	10.00	20.00	40.00	100.0	500.0	
Total Petroleum Hydrocarb	1	0	Avg	0.5531	0.6583	0.6222	0.6282	0.6641	0.6883	---	0.6362	2.21	1.00	1.00	7.4	105.0	210.0	420.0	840.0	2100.	10500.	
Ext. Petroleum Hydrocarbo	1	0	Avg	0.5602	0.6693	0.6296	0.6365	0.6766	0.7035	---	0.6462	2.85	1.00	1.00	7.7	90.00	180.0	360.0	720.0	1800.	9000.	
Mineral Spirits(TOTAL)	1	0	Avg	0.4449	0.5397	0.5161	0.5363	0.5707	0.6185	---	0.5382	2.21	1.00	1.00	11	25.00	50.00	100.0	200.0	500.0	2500.	
Stoddard Solvent(TOTAL)	1	0	Avg	0.4449	0.5397	0.5161	0.5363	0.5707	0.6185	---	0.5382	2.21	1.00	1.00	11	25.00	50.00	100.0	200.0	500.0	2500.	

Avg Rsd Col 1: 9.89 Avg Rsd Col 2: -1.00

**Flags**  
 c - failed the initial calibration criteria(if applicable)

**Note:**  
 Col = Column Number  
 Mr = MultiPeak Analyte 0=simple peak analyte >0=multi peak analyte (i.e. nch/chlordane etc.)  
 Fit = Indicates whether Avg Rf: Linear or Quadratic Curve was used for compound.  
 Corr 1 = Correlation Coefficient for linear Fit.  
 Corr 2 = Correlation Coefficient for quad Fit.  
 \Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

All Response Factors = Response Factors / 10000  
 Initial Calibration Criteria: either %RSD <= 20 or Corr >= .995  
 Columns: Signal #1 db-1701 : Signal #2 db-608

Level #	Data File	Cal Identifier	Analysis Date/Time	Initial Calibration Level #	Data File	Cal Identifier	Analysis Date/Time
1	7G52971.D	CAL TPH@5PPM	09/15/20 16:30	2	7G52970.D	CAL TPH@10PPM	09/15/20 16:04
3	7G52966.D	CAL TPH@20PPM	09/15/20 14:21	4	7G52969.D	CAL TPH@40PPM	09/15/20 15:38
5	7G52968.D	CAL TPH@100PPM	09/15/20 15:12	6	7G52967.D	CAL TPH@500PPM	09/15/20 14:46

Compound	Col	Mr	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
C38	1	0	0.4494	0.4803	0.4900	0.4916	0.5051	0.5407	---	---	0.4932	19	1.00	1.00	6.1	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C9	1	0	0.5090	0.5207	0.5368	0.5358	0.5538	0.5854	---	---	0.5402	8.3	1.00	1.00	5.0	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C10	1	0	0.5096	0.5389	0.5510	0.5616	0.5829	0.6171	---	---	0.5603	5.0	0.999	1.00	6.6	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C12	1	0	0.4687	0.5334	0.5663	0.5915	0.6151	0.6444	---	---	0.5704	7.8	1.00	1.00	1.1	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C14	1	0	0.5137	0.5788	0.5993	0.6296	0.6502	0.6750	---	---	0.6085	9.2	1.00	1.00	9.5	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C16	1	0	0.5389	0.6069	0.6157	0.6421	0.6545	0.6741	---	---	0.6226	6.93	1.00	1.00	7.7	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C17	1	0	0.6308	0.5491	0.6828	0.7552	0.8127	0.7283	---	---	0.6937	7.40	0.999	1.00	14	5.00	10.00	20.00	40.00	100.0	500.0	---	---
Pristane	1	0	0.5511	0.7736	0.6171	0.6046	0.5159	0.5640	---	---	0.6047	7.40	0.999	1.00	15	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C18	1	0	0.5052	0.6023	0.6200	0.6549	0.6687	0.7938	---	---	0.6417	8.3	0.999	1.00	15	5.00	10.00	20.00	40.00	100.0	500.0	---	---
Phytane	1	0	0.6882	0.6734	0.6285	0.6361	0.6240	0.5609	---	---	0.6357	8.6	1.00	1.00	7.0	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C20	1	0	0.5999	0.6519	0.6428	0.6698	0.6754	0.6968	---	---	0.6568	8.65	1.00	1.00	5.1	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C22	1	0	0.6075	0.6702	0.6608	0.6865	0.6678	0.7108	---	---	0.6719	9.40	1.00	1.00	5.3	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C24	1	0	0.6451	0.6826	0.6761	0.7019	0.7037	0.7287	---	---	0.6901	10.10	1.00	1.00	4.1	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C26	1	0	0.6428	0.6762	0.6663	0.6886	0.6912	0.7175	---	---	0.6801	10.76	1.00	1.00	3.7	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C28	1	0	0.6344	0.6794	0.6823	0.7002	0.7078	0.7334	---	---	0.6901	11.41	1.00	1.00	4.8	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C30	1	0	0.6589	0.6972	0.6963	0.7226	0.7235	0.7514	---	---	0.7081	12.03	1.00	1.00	4.5	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C32	1	0	0.7171	0.7243	0.7018	0.7517	0.7267	0.7557	---	---	0.7301	12.65	1.00	1.00	2.8	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C34	1	0	0.6548	0.6735	0.6866	0.7101	0.7106	0.7411	---	---	0.6961	13.25	1.00	1.00	4.4	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C36	1	0	0.6300	0.6821	0.6861	0.7171	0.7167	0.7418	---	---	0.6961	13.86	1.00	1.00	5.6	5.00	10.00	20.00	40.00	100.0	500.0	---	---
C40	1	0	0.6648	0.6211	0.6361	0.7088	0.6894	0.6999	---	---	0.6701	15.64	1.00	1.00	5.3	5.00	10.00	20.00	40.00	100.0	500.0	---	---
Chlorobenzene	1	0	0.3647	0.3854	0.3896	0.3921	0.4052	0.4240	---	---	0.3942	2.51	1.00	1.00	5.1	5.00	10.00	20.00	40.00	100.0	500.0	---	---
O-Terphenyl	1	0	0.7075	0.7356	0.7233	0.7455	0.7481	0.7742	---	---	0.7398	8.27	1.00	1.00	3.1	5.00	10.00	20.00	40.00	100.0	500.0	---	---
Diesel Range Organics(TO	1	0	0.5797	0.6320	0.6315	0.6556	0.6608	0.6804	---	---	0.6403	3.51	1.00	1.00	5.4	65.00	130.0	260.0	520.0	1300.	6500.	---	---
Total Petroleum Hydrocarb	1	0	0.5910	0.6308	0.6321	0.6580	0.6608	0.6830	---	---	0.6432	2.20	1.00	1.00	5.0	100.0	200.0	400.0	800.0	2000.	10000	---	---
Ext. Petroleum Hydrocarb	1	0	0.5948	0.6397	0.6398	0.6644	0.6679	0.6900	---	---	0.6492	2.84	1.00	1.00	5.1	90.00	180.0	360.0	720.0	1800.	9000.	---	---
Mineral Spirits(TOTAL)	1	0	0.4901	0.5304	0.5487	0.5620	0.5814	0.6125	---	---	0.5542	2.24	1.00	1.00	7.6	25.00	50.00	100.0	200.0	500.0	2500.	---	---
Stoddard Solvent(TOTAL)	1	0	0.4901	0.5304	0.5487	0.5620	0.5814	0.6125	---	---	0.5542	2.24	1.00	1.00	7.6	25.00	50.00	100.0	200.0	500.0	2500.	---	---

Avg Rsd Col 1: 6.82 Avg Rsd Col 2: -1.00

**Flags**

c - failed the initial calibration criteria(if applicable)

**Note:**

Col = Column Number

Mr = MultiPeak Analyte 0=simple peak analyte >0=multi peak analyte (i.e. nch/chlordane etc.)

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound

Corr 1 = Correlation Coefficient for linear Fit

Corr 2 = Correlation Coefficient for quad Fit

∇Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

All Response Factors = Response Factors / 10000

Initial Calibration Criteria: either %RSD <=20 or Corr >= .995

Columns: Signal #1 dh-1701 : Signal #2 dh-608

## Form7

Continuing Calibration

Method: EPA 8015D

		Data File: 7G53141.D			7G53151.D			7G53153.D			7G53161.D							
		Method: 8015			8015			8015			8015							
		Calibration Name: CAL TPH@20PPM			CAL TPH@20PPM			CAL TPH@20PPM			CAL TPH@20PPM							
		Calibration Date/Time: 10/06/20 08:48			10/06/20 13:07			10/06/20 14:11			10/06/20 19:12							
Compound	Limit	Col	Mr	Conc			Conc			Conc			Conc			Conc		
				Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
C8	20	1	0	14.83	20	25.9*	16.37	20	18.2	15.93	20	20.4	15.49	20	22.6*			
C9	20	1	0	15.24	20	23.8*	17.25	20	13.8	16.31	20	18.5	15.76	20	21.2*			
C10	20	1	0	15.46	20	22.7*	18.07	20	9.7	16.72	20	16.4	16.01	20	20.0			
C12	20	1	0	17.17	20	14.2	19.91	20	0.5	18.42	20	7.9	17.58	20	12.1			
C14	20	1	0	18.66	20	6.7	20.83	20	4.2	19.52	20	2.4	18.64	20	6.8			
C16	20	1	0	19.4	20	3.0	21.24	20	6.2	20.12	20	0.6	19.34	20	3.3			
C17	20	1	0	18.11	20	9.4	20.54	20	2.7	18.57	20	7.2	18.62	20	6.9			
Pristane	20	1	0	22.42	20	12.1	22.73	20	13.7	19.36	20	3.2	20.45	20	2.3			
C18	20	1	0	19.65	20	1.8	21.21	20	6.0	19.73	20	1.4	19.14	20	4.3			
Phytane	20	1	0	19.47	20	2.7	20.47	20	2.3	19.24	20	3.8	19.63	20	1.9			
C20	20	1	0	19.79	20	1.0	21.12	20	5.6	19.3	20	3.5	19.73	20	1.4			
C22	20	1	0	20	20	0.0	21.3	20	6.5	19.15	20	4.3	19.74	20	1.3			
C24	20	1	0	20.06	20	0.3	21.3	20	6.5	18.99	20	5.1	19.75	20	1.3			
C26	20	1	0	20.1	20	0.5	21.37	20	6.9	18.95	20	5.2	19.72	20	1.4			
C28	20	1	0	20.21	20	1.0	21.73	20	8.6	18.81	20	6.0	19.64	20	1.8			
C30	20	1	0	20.14	20	0.7	21.7	20	8.5	18.79	20	6.0	19.63	20	1.9			
C32	20	1	0	19.88	20	0.6	21.15	20	5.7	18.76	20	6.2	19.77	20	1.1			
C34	20	1	0	19.86	20	0.7	21.3	20	6.5	18.9	20	5.5	20.05	20	0.2			
C36	20	1	0	20.08	20	0.4	20.81	20	4.0	19.24	20	3.8	20.11	20	0.6			
C40	20	1	0	18.76	20	6.2	18.23	20	8.9	18.92	20	5.4	19.61	20	1.9			
Chlorobenzene	20	1	0	15.37	20	23.2*	17.64	20	11.8	16.86	20	15.7	16.18	20	19.1			
O-Terphenyl	20	1	0	19.21	20	4.0	21.07	20	5.3	18.72	20	6.4	18.87	20	5.6			
Average Difference	20	1	0			7.3			7.4			7.5			6.7			

Flags/Notes: \* - Values outside of limits for this column/run

## **GRO Data**

**Form1**  
ORGANICS REPORT

Sample Number: AD19595-013	Method: EPA 8015D
Client Id: HSI-WC-NH	Matrix: Methanol
Data File: 13M19502.D	Initial Vol: 4.95g:10ml
Analysis Date: 10/08/20 12:43	Final Vol: NA
Date Rec/Extracted: 10/02/20-NA	Dilution: 101
Column: DB-624 25M 0.200mm ID 1.12um film	Solids: 86

		<b>Units: mg/Kg</b>					
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	29	U				

Worksheet #: 569776

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

*U* - Indicates the compound was analyzed but not detected.*B* - Indicates the analyte was found in the blank as well as in the sample.*E* - Indicates the analyte concentration exceeds the calibration range of the instrument.*R* - Retention Time Out*J* - Indicates an estimated value when a compound is detected at less than the specified detection limit.*d* - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Data Path : G:\GcMsData\2020\GC\_13\Data\10-08-20\  
Data File : 13M19502.D  
Signal(s) : FID1A.CH  
Acq On : 8 Oct 2020 12:43  
Operator : RL  
Sample : AD19595-013  
Misc : M,MEXT!5  
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 13 22:33:16 2020  
Quant Method : G:\GcMsData\2020\GC\_13\MethodQt\13M\_G0826.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Aug 27 11:30:35 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
System Monitoring Compounds				
1)S 1,4-Dichlorobenzene-d4	9.493	10138	35.526	m
Target Compounds				
-----				

(f)=RT Delta > 1/2 Window

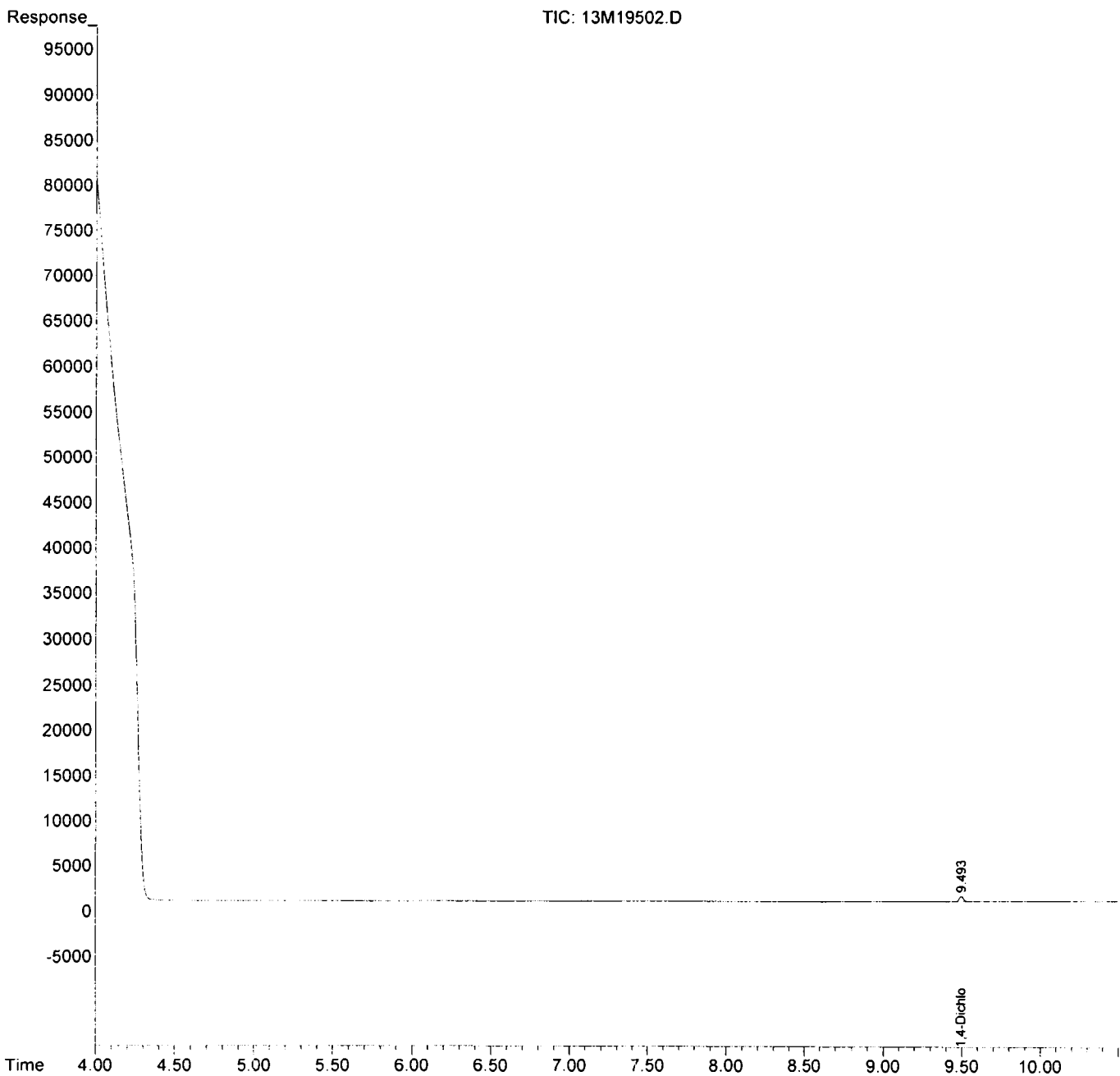
(m)=manual int.



Data Path : G:\GcMsData\2020\GC\_13\Data\10-00-20\  
Data File : 13M19502.D  
Signal(s) : FID1A.CH  
Acq On : 8 Oct 2020 12:43  
Operator : RL  
Sample : AD19595-013  
Misc : M,MEXT15  
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 13 22:33:16 2020  
Quant Method : G:\GcMsData\2020\GC\_13\MethodQt\13M\_G0826.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Aug 27 11:30:35 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



**Form1**  
ORGANICS REPORT

Sample Number: AD19595-014	Method: EPA 8015D
Client Id: HSI-WC-H	Matrix: Methanol
Data File: 13M19503.D	Initial Vol: 5.05g:10ml
Analysis Date: 10/08/20 13:00	Final Vol: NA
Date Rec/Extracted: 10/02/20-NA	Dilution: 99.0
Column: DB-624 25M 0.200mm ID 1.12um film	Solids: 83

		Units: mg/Kg					
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	30	94				

Worksheet #: 569776

**Total Target Concentration** 94

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used*



Data Path : G:\GcMsData\2020\GC\_13\Data\10-08-20\  
Data File : 13M19503.D  
Signal(s) : FID1A.CH  
Acq On : 8 Oct 2020 13:00  
Operator : RL  
Sample : AD19595-014  
Misc : M,MEXT!5  
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 13 22:33:57 2020  
Quant Method : G:\GcMsData\2020\GC\_13\MethodQt\13M\_G0826.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Aug 27 11:30:35 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
System Monitoring Compounds				
1)S 1,4-Dichlorobenzene-d4	9.490	9923	34.770	m
Target Compounds				
4)g Gasoline Range Organics	7.748	275825	786.082 ug/L	m
-----				

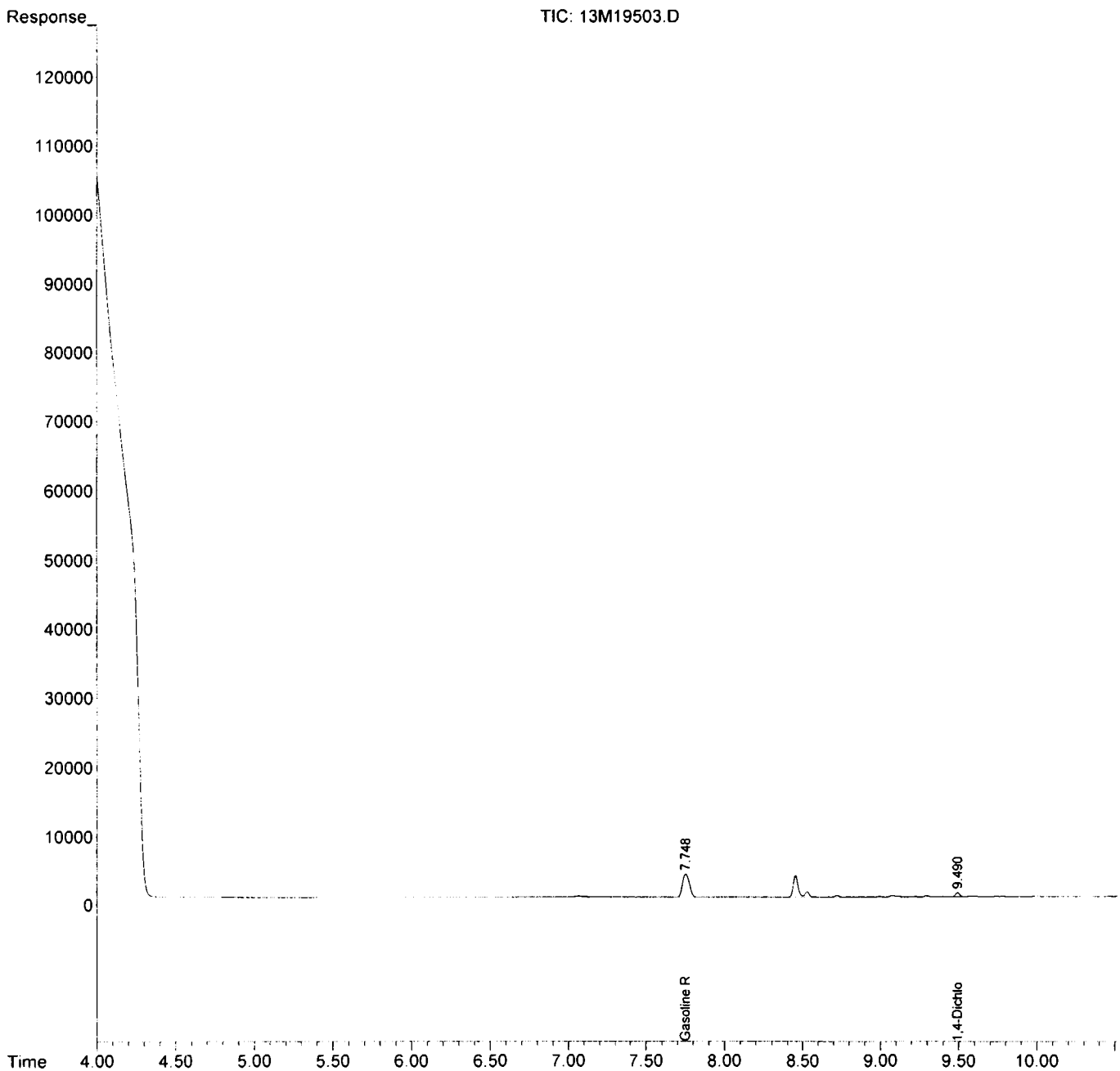
(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : G:\GcMsData\2020\GC\_13\Data\10-08-20\  
Data File : 13M19503.D  
Signal(s) : FID1A.CH  
Acq On : 8 Oct 2020 13:00  
Operator : RL  
Sample : AD19595-014  
Misc : M,MEXT!5  
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 13 22:33:57 2020  
Quant Method : G:\GcMsData\2020\GC\_13\MethodQt\13M\_G0826.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Aug 27 11:30:35 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



**Form1**  
ORGANICS REPORT

Sample Number: DAILY BLANK  
 Client Id:  
 Data File: 13M19493.D  
 Analysis Date: 10/08/20 10:14  
 Date Rec/Extracted:  
 Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D  
 Matrix: Methanol  
 Initial Vol: 5g:10ml  
 Final Vol: NA  
 Dilution: 100  
 Solids: 100

		<b>Units: mg/Kg</b>					
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
	phcg Gasoline Range Organics	25	U				

Worksheet #: 569776

**Total Target Concentration 0**

ColumnID:(^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.*

Data Path : G:\GcMsData\2020\GC\_13\Data\10-08-20\  
Data File : 13M19493.D  
Signal(s) : FID1A.CH  
Acq On : 8 Oct 2020 10:14  
Operator : RL  
Sample : DAILY BLANK  
Misc : M,MEOH  
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 13 22:35:17 2020  
Quant Method : G:\GcMsData\2020\GC\_13\MethodQt\13M\_G0826.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Aug 27 11:30:35 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
System Monitoring Compounds				
1)S 1,4-Dichlorobenzene-d4	9.484	6491	22.745	m
Target Compounds				
-----				

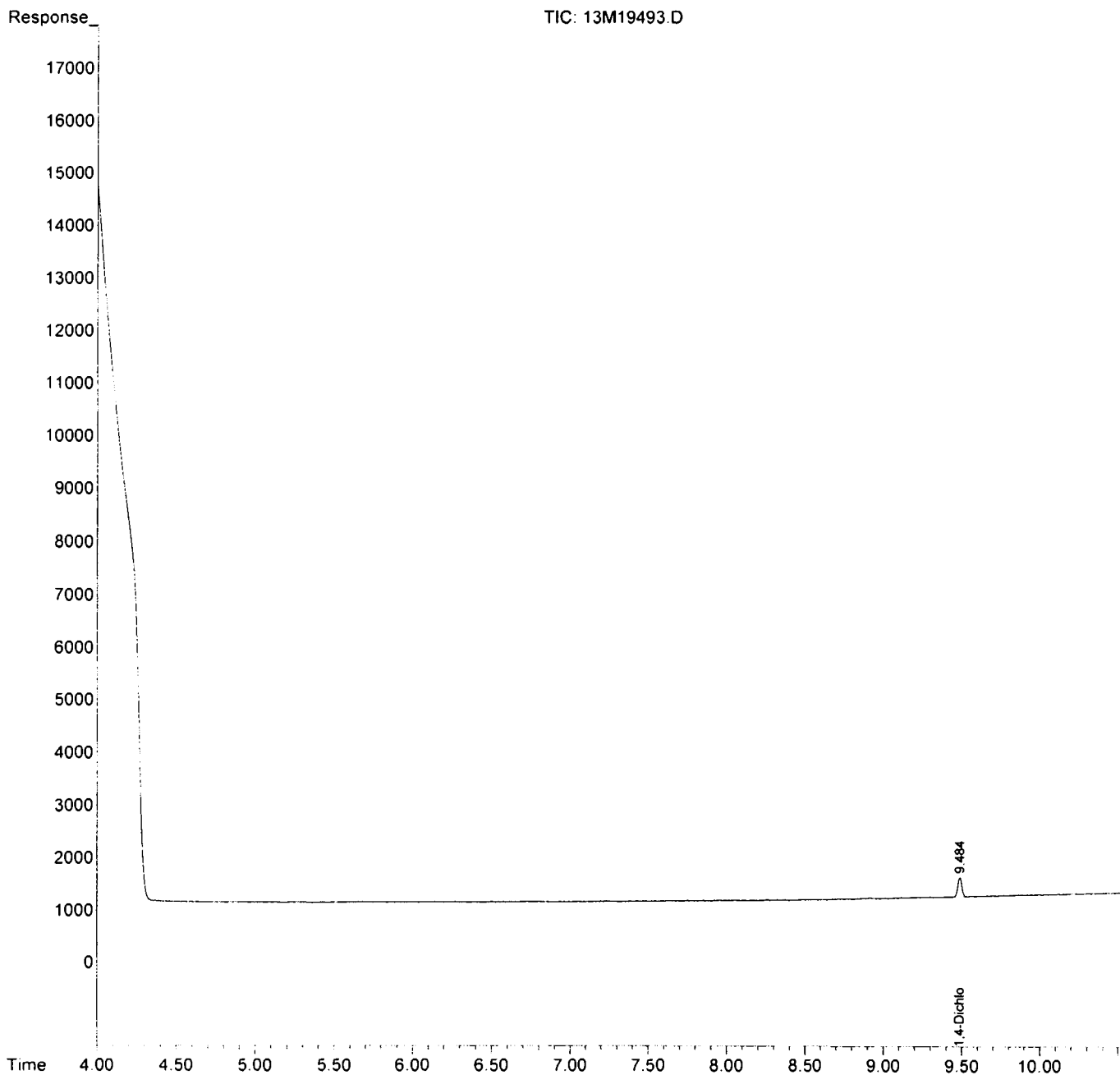
(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : G:\GcMsData\2020\GC\_13\Data\10-08-20\  
Data File : 13M19493.D  
Signal(s) : FID1A.CH  
Acq On : 8 Oct 2020 10:14  
Operator : RL  
Sample : DAILY BLANK  
Misc : M,MEOH  
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: Oct 13 22:35:17 2020  
Quant Method : G:\GcMsData\2020\GC\_13\MethodQt\13M\_G0826.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Aug 27 11:30:35 2020  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



## FORM2

## Surrogate Recovery

Method: EPA 8015D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
13M19493.D	DAILY BLANK	M	10/08/20 10:14	1		76					
13M19502.D	DAD19595-013	M	10/08/20 12:43	1		118					
13M19503.D	DAD19595-014	M	10/08/20 13:00	1		116					
13M19494.D	MBS89465	M	10/08/20 10:30	1		96					
13M19495.D	DAD19560-001(MS)	M	10/08/20 10:47	1		105					
13M19496.D	DAD19560-001(MSD)	M	10/08/20 11:04	1		123					
13M19499.D	DAD19560-001	M	10/08/20 11:53	1		94					

---

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8015D

Soil Limits

Compound	Spike Amt	Limits
S1=1,4-Dichlorobenzene-d4	30	50-150

**Form3**  
**Recovery Data**  
 QC Batch: MBS89465

0100230 0339

Data File	Sample ID:	Analysis Date
Spike or Dup: 13M19494.D	MBS89465	10/8/2020 10:30:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		
Method: 8015	Matrix: Methanol	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1686.38	0	2000	84	11	181

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data**  
 QC Batch: MBS89465

0100230 0340

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 13M19495.D	AD19560-001(MS)	10/8/2020 10:47:00 AM
Non Spike(If applicable): 13M19499.D	AD19560-001	10/8/2020 11:53:00 AM
Inst Blank(If applicable):		
<b>Method: 8015</b>	<b>Matrix: Methanol</b>	<b>QC Type: MS</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1904.36	0	2000	95	11	181

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 13M19496.D	AD19560-001(MSD)	10/8/2020 11:04:00 AM
Non Spike(If applicable): 13M19499.D	AD19560-001	10/8/2020 11:53:00 AM
Inst Blank(If applicable):		
<b>Method: 8015</b>	<b>Matrix: Methanol</b>	<b>QC Type: MSD</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	2086.12	0	2000	104	11	181

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits



**Form3  
RPD DATA**

0100230 0341

QC Batch: MBS89465

Data File	Sample ID:	Analysis Date
Spike or Dup: 13M19496.D	AD19560-001(MSD)	10/8/2020 11:04:00 AM
Duplicate(If applicable): 13M19495.D	AD19560-001(MS)	10/8/2020 10:47:00 AM
Inst Blank(If applicable):		
Method: 8015	Matrix: Methanol	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Gasoline Range Organics	1	2086.12	1904.36	9.1	40
* - Indicates outside of limits		NA - Both concentrations=0... no result can be calculated			

**FORM 4**  
Blank SummaryBlank Number: DAILY BLANK  
Blank Data File: 13M19493.D  
Matrix: MethanolBlank Analysis Date: 10/08/20 10:14  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8015D

Sample Number	Data File	Analysis Date
AD19595-013	13M19502.D	10/08/20 12:43
AD19595-014	13M19503.D	10/08/20 13:00
AD19560-001	13M19499.D	10/08/20 11:53
AD19560-001(MSD)	13M19496.D	10/08/20 11:04
AD19560-001(MS)	13M19495.D	10/08/20 10:47
MBS89465	13M19494.D	10/08/20 10:30

## Form 5

Method: EPA 8015D

Instrument: GC\_13

Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M19210	D BLK	08/26/20 12:48	Aqueous	13M1924	0.0000	200		
13M19214	D BLK	08/26/20 13:55	Aqueous	13M1924	9.4938	0.5545		
13M19215	D 250 PPB	08/26/20 14:15	Aqueous	13M1924	9.5004	0.624		
13M19216	D CAL @ 250 PPB	08/26/20 14:32	Aqueous	13M1922	9.4931	0.49		
13M19218	D CAL @ 500 PPB	08/26/20 15:06	Aqueous	13M1922	9.4967	0.5279		
13M19220	D CAL @ 750 PPB	08/26/20 15:40	Aqueous	13M1922	9.4779	0.3297		
13M19222	D CAL @ 1000 PPB	08/26/20 16:13	Aqueous	13M1922	9.4815	0.3677		
13M19224	D CAL @ 1500 PPB	08/26/20 16:47	Aqueous	13M1922	9.4641	0.184		
13M19226	D CAL @ 2000 PPB	08/26/20 17:20	Aqueous	13M1922	9.4565	0.1037		
13M19228	D CAL @ 4000 PPB	08/26/20 17:53	Aqueous	13M1922	9.4467	0		
13M19231	D ICV	08/26/20 18:42	Aqueous	13M1922	9.4516	0.0519		
13M19233	D DAILY BLANK	08/26/20 19:15	Methanol	13M1922	9.4454	0.0138		
13M19234	D DAILY BLANK	08/26/20 19:32	Aqueous	13M1922	9.4473	0.0063		
13M19235	D MBS87424	08/26/20 19:49	Aqueous	13M1922	9.4463	0.0042		
13M19236	D MBS87425	08/26/20 20:05	Aqueous	13M1922	9.4484	0.018		
13M19237	D MBS87426	08/26/20 20:21	Aqueous	13M1922	9.4481	0.0148		
13M19238	D MBS87427	08/26/20 20:38	Aqueous	13M1922	9.4483	0.0169		
13M19240	D MBS87428	08/26/20 21:11	Methanol	13M1922	9.4396	0.0752		
13M19241	D MBS87429	08/26/20 21:28	Methanol	13M1922	9.4421	0.0487		
13M19242	D MBS87430	08/26/20 21:44	Methanol	13M1922	9.4403	0.0678		
13M19243	D MBS87431	08/26/20 22:01	Methanol	13M1922	9.4417	0.0529		
13M19244	D CAL @ 2000 PPB	08/26/20 22:17	Aqueous	13M1922	9.4413	0.0572		

## Form 5

Method: EPA 8015D

Instrument: GC\_13

Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M19487	D BLK	10/08/20 08:34	Aqueous	13M1950	9.4970	0.1686		
13M19488	D BLK	10/08/20 08:51	Aqueous	13M1950	9.4825	0.0158		
13M19489	D BLK	10/08/20 09:08	Aqueous	13M1950	0.0000	200		
13M19490	D CAL @ 2000 PPB	10/08/20 09:24	Aqueous	13M1949	9.4827	0		
13M19491	D BLK	10/08/20 09:41	Aqueous	13M1949	9.4829	0.0021		
13M19492	D BLK	10/08/20 09:57	Aqueous	13M1949	9.4812	0.0158		
13M19493	D DAILY BLANK	10/08/20 10:14	Methanol	13M1949	9.4842	0.0158		
13M19494	D MBS89465	10/08/20 10:30	Methanol	13M1949	9.4863	0.038		
13M19495	D AD19560-001(MS)	10/08/20 10:47	Methanol	13M1949	9.4898	0.0748		
13M19496	D AD19560-001(MSD)	10/08/20 11:04	Methanol	13M1949	9.4923	0.1012		
13M19497	D BLK	10/08/20 11:20	Aqueous	13M1949	9.4926	0.1043		
13M19498	D BLK	10/08/20 11:37	Aqueous	13M1949	9.4879	0.0548		
13M19499	D AD19560-001	10/08/20 11:53	Methanol	13M1949	9.4921	0.0991		
13M19500	D BLK	10/08/20 12:10	Aqueous	13M1949	9.4863	0.038		
13M19501	D BLK	10/08/20 12:27	Aqueous	13M1949	9.4925	0.1033		
13M19502	D AD19595-013	10/08/20 12:43	Methanol	13M1949	9.4932	0.1107		
13M19503	D AD19595-014	10/08/20 13:00	Methanol	13M1949	9.4903	0.0801		
13M19504	D BLK	10/08/20 13:16	Aqueous	13M1949	9.4946	0.1254		
13M19505	D BLK	10/08/20 13:33	Aqueous	13M1949	9.4776	0.0538		
13M19506	D BLK	10/08/20 13:49	Aqueous	13M1949	9.4775	0.0549		
13M19507	D CAL @ 2000 PPB	10/08/20 14:06	Aqueous	13M1949	9.4810	0.0179		
13M19508	D BLK	10/08/20 14:22	Aqueous	13M1950	9.4727	0.0876		

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time
1	13M19228	CAL @ 4000 PPB	08/26/20 17:53	2	13M19226	CAL @ 2000 PPB	08/26/20 17:20
3	13M19224	CAL @ 1500 PPB	08/26/20 16:47	4	13M19222	CAL @ 1000 PPB	08/26/20 16:13
5	13M19220	CAL @ 750 PPB	08/26/20 15:40	6	13M19218	CAL @ 500 PPB	08/26/20 15:06
7	13M19216	CAL @ 250 PPB	08/26/20 14:32				

Compound	Col	Mr	Fit	Calibration Level Concentrations																				
				RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8
1.4-Dichlorobenzene-d4	1	0	Avg	0.0322	0.0311	0.0265	0.0289	0.0259	0.0280	0.0268	---	0.0285	9.45	-1	-1	8.4	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
2-Methylpentane	1	0	Avg	0.0003	0.0003	0.0003	0.0004	0.0003	0.0005	0.0003	---	0.0003	70.546	0.990	0.993	18	4000	2000	1500	1000	750.0	500.0	250.0	250.0
1,2,4-Trimethylbenzene	1	0	Avg	0.0005	0.0004	0.0004	0.0005	0.0004	0.0005	0.0007	---	0.0005	20.927	0.987	0.998	18	4000	2000	1500	1000	750.0	500.0	250.0	250.0
Gasoline Range Organics	1	0	Avg	0.0419	0.0332	0.0281	0.0361	0.0273	0.0330	0.0456	---	0.0351	8.50	0.976	0.997	19	4000	2000	1500	1000	750.0	500.0	250.0	250.0

Avg Rsd Col 1: 31.93      Avg Rsd Col 2: -1

**Flags**  
c - failed the initial calibration criteria(if applicable)

**Note:**  
Col = Column Number  
Mr = Molar Mass  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound  
Corr 1 = Correlation Coefficient for linear Fit  
Corr 2 = Correlation Coefficient for quad Fit  
LV# = These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

All Response Factors = Response Factors / 10000  
Initial Calibration Criteria: either %RSD <= 20 or Corr >= 995  
Columns: Signal #1 dh-1701 ; Signal #2 dh-608

**Form 7**  
Continuing Calibration

Method: EPA 8015D

0100230 0346

Compound	Limit	Col	Mr	13M19490.D			13M19507.D			Conc	Conc	Conc
				Conc	Exp	%Diff	Conc	Exp	%Diff			
Gasoline Range Orga	20	1	0	2065	2000	3.2	2004	2000	0.2			

**Flags/Notes:** \* - Values outside of limits for this column/run

## **Metal Data**

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19595-004  
Client Id: HSI-SB-08(3.5-4)  
Matrix: SOIL  
Level: LOW

% Solid: 87  
Units: MG/KG  
Date Rec: 10/3/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	19	230	4000	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7440-39-3	Barium	0.78	11	20	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7440-70-2	Calcium	120	1100	ND	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7440-47-3	Chromium	0.77	5.7	19	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7440-48-4	Cobalt	0.82	2.9	ND	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7440-50-8	Copper	0.71	5.7	10	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7439-89-6	Iron	15	230	8200	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7439-92-1	Lead	0.71	5.7	7.1	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7439-95-4	Magnesium	22	570	390JB	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7439-96-5	Manganese	0.74	11	16	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7439-97-6	Mercury	0.015	0.096	ND	1	0.15	25	10/05/20	85368	6308SMDL	30	CV	HGCV3A
7440-02-0	Nickel	1.3	5.7	3.3J	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A
7440-09-7	Potassium	110	570	150J	1	0.5	50	10/05/20	85368	308A4MDL	29	P	PEICPRAD4A
7440-23-5	Sodium	140	290	ND	1	0.5	50	10/05/20	85368	308A4MDL	29	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	7.7J	1	0.5	50	10/05/20	85368	308A3MDL	36	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - Cold Vapor  
MS - ICP-MS



**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19595-004	% Solid: 87	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-08(3.5-4)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/3/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.026	0.92	ND	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7440-38-2	Arsenic	0.020	0.23	3.7	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7440-41-7	Beryllium	0.018	0.23	0.18J	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7440-43-9	Cadmium	0.016	0.46	0.21J	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7782-49-2	Selenium	0.073	2.3	2.6	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7440-22-4	Silver	0.030	0.23	0.045JB	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7440-28-0	Thallium	0.020	0.46	0.021J	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.23	20B	1	0.5	100	10/05/20	85369	0520AMD	44		MSMS3_7700SWA

Comments: \_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19595-009  
Client Id: HSI-SB-10(5.5-6)  
Matrix: SOIL  
Level: LOW

% Solid: 89  
Units: MG/KG  
Date Rec: 10/3/2020

Lab Name: Veritech  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	19	220	5900	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7440-39-3	Barium	0.76	11	28	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7440-70-2	Calcium	110	1100	120J	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7440-47-3	Chromium	0.75	5.6	21	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7440-48-4	Cobalt	0.80	2.8	2.1J	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7440-50-8	Copper	0.69	5.6	8.1	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7439-89-6	Iron	15	220	6900	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7439-92-1	Lead	0.69	5.6	4.4J	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7439-95-4	Magnesium	22	560	940B	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7439-96-5	Manganese	0.72	11	36	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7439-97-6	Mercury	0.014	0.094	ND	1	0.15	25	10/05/20	85368	6308SMDL	31	CV	HGCV3A
7440-02-0	Nickel	1.2	5.6	7.6	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A
7440-09-7	Potassium	110	560	280J	1	0.5	50	10/05/20	85368	308A4MDL	30	P	PEICPRAD4A
7440-23-5	Sodium	140	280	ND	1	0.5	50	10/05/20	85368	308A4MDL	30	P	PEICPRAD4A
7440-66-6	Zinc	1.7	11	12	1	0.5	50	10/05/20	85368	308A3MDL	37	P	PEICP3A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19595-009	% Solid: 89	Lab Name: Veritech	Nras No:
Client Id: HSI-SB-10(5.5-6)	Units: MG/KG	Lab Code:	Sdg No:
Matrix: SOIL	Date Rec: 10/3/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.025	0.90	ND	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7440-38-2	Arsenic	0.020	0.22	1.5	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7440-41-7	Beryllium	0.018	0.22	0.22J	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7440-43-9	Cadmium	0.016	0.45	0.020J	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7782-49-2	Selenium	0.071	2.2	1.3J	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7440-22-4	Silver	0.029	0.22	0.042JB	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7440-28-0	Thallium	0.020	0.45	0.021J	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA
7440-62-2	Vanadium	0.012	0.22	20B	1	0.5	100	10/05/20	85369	0520AMD	45		MSMS3_7700SWA

Comments: \_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV - ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85368 (100)  
Client Id: MB 85368 (100)  
Matrix: SOIL  
Level: LOW

% Solid: 0  
Units: MG/KG

Lab Name: Veritech  
Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	8.4	200	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-39-3	Barium	0.34	10	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-70-2	Calcium	50	1000	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-47-3	Chromium	0.33	5.0	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-48-4	Cobalt	0.36	2.5	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-50-8	Copper	0.31	5.0	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7439-89-6	Iron	6.6	200	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7439-92-1	Lead	0.31	5.0	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7439-95-4	Magnesium	9.8	500	20J	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7439-96-5	Manganese	0.32	10	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7439-98-7	Tolybdenum	1.2	-10000	ND	1	0.5	50	10/05/20	85368	S26308A3	14	P	PEICP3A
7440-02-0	Nickel	0.55	5.0	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-09-7	Potassium	250	-10000	ND	1	0.5	50	10/05/20	85368	S26308A4	14	P	PEICPRAD4A
7440-23-5	Sodium	120	-10000	ND	1	0.5	50	10/05/20	85368	S26308A4	14	P	PEICPRAD4A
7440-62-2	Vanadium	0.48	10	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A
7440-66-6	Zinc	0.75	10	ND	1	0.5	50	10/05/20	85368	6308A3MDL	14	P	PEICP3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: MB 85368 (167)      % Solid: 0      Lab Name: Veritech  
Client Id: MB 85368 (167)      Units: MG/KG      Lab Code:  
Matrix: SOIL  
Level: LOW

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.013	0.083	ND	1	0.15	25	10/05/20	85368	26308SMDL	11	CV	HGCV3A

Comments: \_\_\_\_\_  
\_\_\_\_\_

**Flag Codes:**

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

Form1  
Inorganic Analysis Data Sheet

Sample ID: MB 85369  
Client Id: MB 85369  
Matrix: SOIL  
Level: LOW

% Solid: 0  
Units: MG/KG

Lab Name: Veritech  
Lab Code:

Cas No.	Analyte	MDL	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	0.79	100	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-36-0	Antimony	0.011	0.80	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-38-2	Arsenic	0.0087	0.20	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-39-3	Barium	0.028	1.0	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-41-7	Beryllium	0.0078	0.20	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-43-9	Cadmium	0.0071	0.40	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-70-2	Calcium	9.5	100	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-47-3	Chromium	0.043	0.40	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-48-4	Cobalt	0.0054	0.40	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-50-8	Copper	0.097	2.0	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7439-89-6	Iron	2.1	100	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7439-92-1	Lead	0.019	0.40	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7439-95-4	Magnesium	1.2	100	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7439-96-5	Manganese	0.12	1.2	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7439-98-7	Molybdenum	0.027	0.20	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-02-0	Nickel	0.026	0.60	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-09-7	Potassium	2.9	100	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7782-49-2	Selenium	0.032	2.0	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-22-4	Silver	0.013	0.20	0.027J	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-23-5	Sodium	8.9	100	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-28-0	Thallium	0.0088	0.40	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-62-2	Vanadium	0.0054	0.20	0.0080J	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	
7440-66-6	Zinc	0.73	4.0	ND	1	0.5	100	10/05/20	85369	00520AMDL	18	MSMS3_7700SWA	

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/05/20  
 Data File: S26308A3MDL  
 Prep Batch: 85368  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-333673-5		CCV V-333673-12		CCV V-333673-23		CCV V-333673-32		CCV V-333673-39		CCV V-333673-50		CCV V-333673-61		Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec			
Aluminum	10/5	5.10595	102	5.19249	104	5.01421	100	5.03458	101	5.05752	101	4.99727	100	4.98203	100	
Barium	1/5	0.49925	100	0.49508	99	0.49438	99	0.49528	99	0.49464	99	0.48975	98	0.48690	97	
Calcium	100/50	49.80450	100	49.99550	100	50.42450	101	50.70490	101	50.51610	101	49.89950	100	50.97660	102	
Chromium	1/5	0.52344	105	0.52171	104	0.52135	104	0.52234	104	0.52213	104	0.51936	104	0.51781	104	
Cobalt	1/5	0.49650	99	0.51119	102	0.51684	103	0.49342	99	0.49209	98	0.51427	103	0.51356	103	
Copper	1/5	0.52356	105	0.51619	103	0.51592	103	0.51579	103	0.51752	104	0.51238	102	0.51050	102	
Iron	10/5	5.07233	101	5.10998	102	5.07568	102	5.14792	103	5.17689	104	5.12744	103	5.12676	103	
Lead	1/5	0.51636	103	0.50809	102	0.51066	102	0.50948	102	0.51363	103	0.50673	101	0.50626	101	
Magnesium	100/50	49.20540	98	49.28760	99	49.67180	99	50.01220	100	49.77070	100	49.29020	99	49.73550	99	
Manganese	1/5	0.51397	103	0.51230	102	0.51220	102	0.51410	103	0.51490	103	0.51050	102	0.50851	102	
Nickel	1/5	0.50696	101	0.50373	101	0.50295	101	0.50200	100	0.50279	101	0.52947	106	0.49718	99	
Zinc	1/5	0.52260	105	0.51950	104	0.51922	104	0.52831	106	0.52427	105	0.52109	104	0.51836	104	

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/05/20  
 Data File: S26308A3MDL  
 Prep Batch: 85368  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-335934	Recovery	Low Limit	High Limit
Magnesium	5.0	5.40105	108	80	120	500	470.721	94	90	110
Silver	0.015	0.0163708	109	80	120	1	1.28626	129 a	90	110
Aluminum	2.0	2.03978	102	80	120	500	508.870	102	90	110
Arsenic	0.04	0.0420821	105	80	120	10	10.5417	105	90	110
Boron	0.2	0.185096	93	80	120	5	5.97337	119 a	90	110
Barium	0.1	0.103970	104	80	120	10	10.1371	101	90	110
Beryllium	0.012	0.0119108	99	80	120	5	4.99287	100	90	110
Calcium	10	10.3840	104	80	120	500	461.559	92	90	110
Cadmium	0.012	0.0156171	130 a	80	120	5	5.16562	103	90	110
Cobalt	0.025	0.0234428	94	80	120	5	4.77422	95	90	110
Chromium	0.05	0.0534814	107	80	120	10	10.0049	100	90	110
Copper	0.05	0.0500642	100	80	120	10	10.5509	106	90	110
Silicon	0.1	0.170683	171 a	80	120	25	26.0942	104	90	110
Potassium	NA	-52.0754		80	120	200	-2220.60	- a	90	110
Zinc	0.1	0.101503	102	80	120	10	9.80065	1100 98	90	110
Manganese	0.1	0.101863	102	80	120	10	9.97862	100	90	110
Molybdenum	0.025	0.0246002	98	80	120	10	9.66340	97	90	110
Sodium	NA	2.86149		80	120	1000	1194.44	119 a	90	110
Nickel	0.05	0.0550238	110	80	120	10	9.50895	95	90	110
Lead	0.05	0.0520545	104	80	120	10	9.87283	99	90	110
Antimony	0.04	0.0406460	102	80	120	5	5.51777	110	90	110
Selenium	0.05	0.0466278	93	80	120	5	5.12607	103	90	110
Tin	0.2	0.206468	103	80	120	10	10.6200	106	90	110
Titanium	0.1	0.0996679	100	80	120	10	10.2208	102	90	110
Thallium	0.05	0.0504698	101	80	120	5	4.97839	100	90	110
Vanadium	0.1	0.0968915	97	80	120	10	10.0380	100	90	110
Iron	2.0	2.04210	102	80	120	400	385.168	96	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria



## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/05/20  
 Data File: S26308A4MDL  
 Prep Batch: 85368  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 335864- 5		CCV V- 335864- 12		CCV V- 335864- 23		CCV V- 335864- 32		Rec	Rec	Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec								
Potassium	100/50	49.68480	99	50.24050	100	51.24270	102	50.55360	101						
Sodium	100/50	49.95960	100	51.63410	103	52.14320	104	51.70550	103						

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/05/20  
 Data File: S26308A4MDL  
 Prep Batch: 85368  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICPRAD4  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333671	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-333662	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0196851	79 a	80	120	10	9.86218	99	90	110
Boron	0.2	0.224043	112	80	120	5	4.62407	92	90	110
Barium	0.1	0.0943456	94	80	120	10	9.50223	95	90	110
Calcium	10.00	9.91851	99	80	120	500	487.009	97	90	110
Copper	0.05	0.0432261	86	80	120	10	9.65857	97	90	110
Iron	2.00	1.93052	97	80	120	400	380.201	95	90	110
Potassium	5.00	5.24393	105	80	120	200	209.847	105	90	110
Aluminum	2.00	1.92003	96	80	120	500	506.907	101	90	110
Manganese	0.10	0.0963975	96	80	120	10	9.30508	93	90	110
Zinc	0.1	0.0984939	98	80	120	10	10.1223	101	90	110
Sodium	2.50	2.80379	112	80	120	1000	931.174	93	90	110
Nickel	0.05	0.0429636	86	80	120	10	10.1752	102	90	110
Selenium	0.05	0.0564259	113	80	120	5	5.11979	102	90	110
Silicon	0.1	0.184283	184 a	80	120	25	24.9267	100	90	110
Tin	0.2	0.208269	104	80	120	10	11.0564	111 a	90	110
Titanium	0.1	0.0973944	97	80	120	10	9.50535	95	90	110
Vanadium	0.1	0.0916920	92	80	120	10	8.93250	89 a	90	110
Magnesium	5.00	4.97790	100	80	120	500	514.551	103	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/05/20  
 Data File: H26308SMDL  
 Prep Batch: 85368  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-21		CCV-33		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	
	Amt	Rec	Rec	Rec	Rec	Rec										
Mercury	20/10	20.58000	103	10.36000	104	10.35000	104									

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/05/20  
 Data File: S100520AMD  
 Prep Batch: 85369  
 Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Ventech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-336038-8		CCV V-336042-16		CCV V-336042-28		CCV V-336042-40		CCV V-336042-48		Rec	Rec	Rec	Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec							
Antimony	50/30	48.32000	97	49.03200	98	48.97300	98	47.28100	95	46.30200	93					
Arsenic	50/30	51.34800	103	49.21800	98	49.16200	98	48.77900	98	49.20500	98					
Beryllium	50/30	48.81000	98	49.13700	98	49.62600	99	48.40200	97	48.08500	96					
Cadmium	50/30	50.02300	100	48.82400	98	48.85000	98	47.54000	95	46.39900	93					
Selenium	50/30	49.78600	100	249.44000	100	245.19500	98	243.73500	97	242.89100	97					
Silver	10/6	9.78100	98	48.19400	96	48.44600	97	47.10600	94	46.07600	92					
Thallium	50/30	49.53600	99	50.99800	102	50.67100	101	49.84000	100	49.66200	99					
Vanadium	50/30	50.25800	101	49.32200	99	48.95100	98	49.16800	98	48.86200	98					

**Notes:** a-indicates analyte failed the ICV limits for 6010B, 6020  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)  
 ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/05/20  
 Data File: S100520AMD  
 Prep Batch: 85369  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: MS3\_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICVV-336043	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-336041	Recovery	Low Limit	High Limit
Magnesium	500	499.585	100	80	120	50000	52398.693	105	90	110
Aluminum	500	501.357	100	80	120	15000	15817.919	105	90	110
Chromium	2	1.933	97	80	120	500	527.289	105	90	110
Copper	10	10.069	101	80	120	500	511.174	102	90	110
Iron	500	516.761	103	80	120	50000	52072.570	104	90	110
Arsenic	1	0.996	100	80	120	500	515.782	103	90	110
Barium	5	4.820	96	80	120	500	513.211	103	90	110
Beryllium	1	0.954	95	80	120	500	462.784	93	90	110
Calcium	500	510.476	102	80	120	50000	54821.293	110	90	110
Cadmium	2	1.936	97	80	120	500	507.985	102	90	110
Silver	1	0.935	94	80	120	500	1591.980	318 a	90	110
Potassium	500	500.113	100	80	120	50000	52989.063	106	90	110
Zinc	20	19.989	100	80	120	500	493.038	99	90	110
Manganese	6	5.924	99	80	120	500	535.770	107	90	110
Molybdenum	1	1.040	104	80	120	500	521.235	104	90	110
Sodium	500	477.831	96	80	120	50000	52729.615	105	90	110
Nickel	3	3.011	100	80	120	500	515.438	103	90	110
Lead	2	1.855	93	80	120	500	477.906	96	90	110
Antimony	4	3.729	93	80	120	500	498.781	100	90	110
Selenium	10	9.674	97	80	120	2500	2535.332	101	90	110
Thallium	2	1.855	93	80	120	500	482.984	97	90	110
Vanadium	1	0.939	94	80	120	500	534.723	107	90	110
Cobalt	2	2.009	100	80	120	500	519.119	104	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/05/20

Data File: S26308A3MDL

Prep Batch: 85368

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0100230

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-24	CCB V-333667-33	CCB V-333667-40	CCB V-333667-51	CCB V-333667-62	MB 85368 (100)-14
Aluminum	.0835 U	.167 U	.167 U	.167 U	.167 U	.167 U	.167 U	8.4 U
Barium	-.00489 a	.00676 U	.00676 U	.00676 U	.00676 U	.00676 U	.00676 U	.34 U
Calcium	.505 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	1.01 U	51 U
Chromium	-.00399 a	.0067 U	.0067 U	.0067 U	.0067 U	.0067 U	.0067 U	.34 U
Cobalt	.00356 U	.00713 U	.00713 U	.00713 U	.00713 U	.00713 U	.00713 U	.36 U
Copper	.00308 U	.00616 U	.00616 U	.00616 U	.00616 U	.00616 U	.00616 U	.31 U
Iron	.066 U	.132 U	.132 U	.132 U	.132 U	.132 U	.132 U	6.6 U
Lead	.00308 U	.00616 U	-.00827 a	-.00675 a	-.00921 a	-.00992 a	-.00711 a	.31 U
Magnesium	.225 a	.225 a	.205 a	.23 a	.232 a	.225 a	.227 a	20 a
Manganese	-.00353 a	.00642 U	.00642 U	.00642 U	.00642 U	.00642 U	.00642 U	.32 U
Nickel	.0055 U	.011 U	.011 U	.011 U	.011 U	.011 U	.011 U	.55 U
Zinc	.00755 U	.0151 U	.0151 U	.0151 U	.0151 U	.0151 U	.0151 U	.76 U

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

## FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/05/20

Data File: S26308A4MDL

Prep Batch: 85368

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: PEICPRAD4A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0100230

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-333667- 6	CCB V-333667- 13	CCB V-333667- 24	CCB V-333667- 33	MB 85368 (100)-14			
Potassium	.493 U	.987 U	.987 U	.987 U	49 U			
Sodium	.628 U	1.26 U	1.26 U	1.26 U	63 U			

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

## FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/05/20  
 Data File: H26308SMDL  
 Prep Batch: 85368  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB-10	CCB-22	CCB-34	MB 85368 (167)-11			
Mercury	-093 a	-089 a	-089 a	13 U			

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
 u-indicates result below reporting limit



## FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/05/20

Data File: S100520AMD

Prep Batch: 85369

Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020

Instrument: MS3\_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 0100230

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-336039-10	CCB V-336039-17	CCB V-336039-29	CCB V-336039-41	CCB V-336039-49	MB 85369-18		
Antimony	-.1 a	.112 U	.112 U	.112 U	.112 U	-.114 a	11U	
Arsenic	.0437 U	.0874 U	.0874 U	.0874 U	.0874 U	.0874 U	8.7U	
Beryllium	.0391 U	.0783 U	.0783 U	.0783 U	.0783 U	.0783 U	7.8U	
Cadmium	.0353 U	.0706 U	.0706 U	.0706 U	.0706 U	.0706 U	7.1U	
Selenium	.159 U	.318 U	.318 U	.318 U	.318 U	.318 U	32U	
Silver	.0652 U	.13 U	.159 a	.15 a	.156 a	.156 a	27a	
Thallium	.0441 U	.0882 U	.0882 U	.0882 U	.0882 U	.0882 U	8.8U	
Vanadium	.0271 U	.0542 U	.0542 U	.0542 U	.0542 U	.0542 U	8a	

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/05/20  
 Data File: S26308A3MDL  
 Prep Batch: 85368  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	576.097	115							
Barium	0	U								
Calcium	500	522.737	105							
Chromium	0	.0107203b								
Cobalt	0	U								
Copper	0	.0318594a								
Iron	200	209.924	105							
Lead	0	.0499659a								
Magnesium	500	531.547	106							
Manganese	0	.0076229b								
Nickel	0	U								
Zinc	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/05/20  
 Data File: S26308A4MDL  
 Prep Batch: 85368  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: PEICPRAD4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-333668-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	522.414	104							
Calcium	500	524.706	105							
Iron	200	189.742	95							
Magnesium	500	518.193	104							
Potassium	0	U								
Sodium	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/05/20  
 Data File: S100520AMD  
 Prep Batch: 85369  
 Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020  
 Instrument: MS3\_7700SWA  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-336040-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	50000	50298.74	101							
Antimony	0	.231a								
Arsenic	0	.249a								
Beryllium	0	U								
Cadmium	0	1.298a								
Calcium	150000	156675.1	104							
Iron	125000	125559.4	100							
Magnesium	50000	50061.34	100							
Selenium	0	U								
Silver	0	.144b								
Thallium	0	U								
Vanadium	0	.074b								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85368

0100230 0369

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85368							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Aluminum	85368	1	S26308A3	16	90.8841	110	83	55	152		
Barium	85368	1	S26308A3	16	7.6647	8.92	86	65	110		
Calcium	85368	1	S26308A3	16	182.3180	207.00	88	69	110		
Chromium	85368	1	S26308A3	16	1.9169	2.27	84	61	114		
Cobalt	85368	1	S26308A3	16	2.3308	2.87	81	64	110		
Copper	85368	1	S26308A3	16	1.8178	2.09	87	66	110		
Iron	85368	1	S26308A3	16	145.5280	192.00	76	34	138		
Lead	85368	1	S26308A3	16	1.3744	1.63	84	62	110		
Magnesium	85368	1	S26308A3	16	61.4373	74.60	82	26	114		
Manganese	85368	1	S26308A3	16	5.1575	6.03	86	68	110		
Mercury	85368	4	H26308SM	15	6.7310	41.64	65	39	110		
Nickel	85368	1	S26308A3	16	0.4740	.553	86	61	114		
Potassium	85368	1	S26308A4	16	17.5202	22.60	78	61	140		
Sodium	85368	1	S26308A4	16	7.0692	8.67	82	57	125		
Zinc	85368	1	S26308A3	16	5.8858	7.13	83	60	112		

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 85368							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Aluminum	85368	1	S26308A3	15	90.8748	110	83	55	152		
Barium	85368	1	S26308A3	15	6.9128	8.92	77	65	110		
Calcium	85368	1	S26308A3	15	181.7200	207.00	88	69	110		
Chromium	85368	1	S26308A3	15	1.9278	2.27	85	61	114		
Cobalt	85368	1	S26308A3	15	2.3410	2.87	82	64	110		
Copper	85368	1	S26308A3	15	1.8227	2.09	87	66	110		
Iron	85368	1	S26308A3	15	145.0060	192.00	76	34	138		
Lead	85368	1	S26308A3	15	1.3770	1.63	84	62	110		
Magnesium	85368	1	S26308A3	15	61.6209	74.60	83	26	114		
Manganese	85368	1	S26308A3	15	5.1676	6.03	86	68	110		
Mercury	85368	4	H26308SM	14	6.6710	41.64	64	39	110		
Nickel	85368	1	S26308A3	15	0.4895	.553	89	61	114		
Potassium	85368	1	S26308A4	15	17.5468	22.60	78	61	140		
Sodium	85368	1	S26308A4	15	7.0388	8.67	81	57	125		
Zinc	85368	1	S26308A3	15	5.8754	7.13	82	60	112		

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19581-003									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85368	1	S26308A3	20	S26308A3	17	33.7213	28.6732	5.0	101	75	125	
Barium	85368	1	S26308A3	20	S26308A3	17	0.8816	0.4564	0.5	85	75	125	
Calcium	85368	1	S26308A3	20	S26308A3	17	58.2570	11.4995	50	94	75	125	
Chromium	85368	1	S26308A3	20	S26308A3	17	0.5739	0.0616	0.5	102	75	125	
Cobalt	85368	1	S26308A3	20	S26308A3	17	0.5212	0.0327	0.5	98	75	125	
Copper	85368	1	S26308A3	20	S26308A3	17	0.5700	0.1227	0.5	89	75	125	
Iron	85368	1	S26308A3	20	S26308A3	17	83.7637	83.0147	5.0	15	b	75	125
Lead	85368	1	S26308A3	20	S26308A3	17	0.5574	0.0741	0.5	97	75	125	
Magnesium	85368	1	S26308A3	20	S26308A3	17	59.2965	12.1653	50	94	75	125	
Manganese	85368	1	S26308A3	20	S26308A3	17	3.1822	2.6884	0.5	99	75	125	
Mercury	85368	1	H26308SM	19	H26308SM	16	10.5400	0.2960	10	102	75	125	
Nickel	85368	1	S26308A3	20	S26308A3	17	0.5665	0.0755	0.5	98	75	125	
Potassium	85368	1	S26308A4	20	S26308A4	17	51.6774	4.6787	50	94	75	125	
Sodium	85368	1	S26308A4	20	S26308A4	17	48.4577	1.255852743U	50	97	75	125	
Zinc	85368	1	S26308A3	20	S26308A3	17	0.6524	0.1791	0.5	95	75	125	

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85368

0100230 0370

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS		Matrix: SOIL			SampleID: AD19581-003								
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	85368	1	S26308A3	19	S26308A3	17	30.2062	28.6732	5.0	31	b	75	125
Barium	85368	1	S26308A3	19	S26308A3	17	0.9373	0.4564	0.5	96		75	125
Calcium	85368	1	S26308A3	19	S26308A3	17	56.7409	11.4995	50	90		75	125
Chromium	85368	1	S26308A3	19	S26308A3	17	0.5366	0.0616	0.5	95		75	125
Cobalt	85368	1	S26308A3	19	S26308A3	17	0.5280	0.0327	0.5	99		75	125
Copper	85368	1	S26308A3	19	S26308A3	17	0.5630	0.1227	0.5	88		75	125
Iron	85368	1	S26308A3	19	S26308A3	17	76.7038	83.0147	5.0	-130	b	75	125
Lead	85368	1	S26308A3	19	S26308A3	17	0.5722	0.0741	0.5	100		75	125
Magnesium	85368	1	S26308A3	19	S26308A3	17	55.5469	12.1653	50	87		75	125
Manganese	85368	1	S26308A3	19	S26308A3	17	3.6469	2.6884	0.5	192	b	75	125
Mercury	85368	1	H26308SM	18	H26308SM	16	10.4700	0.2960	10	102		75	125
Nickel	85368	1	S26308A3	19	S26308A3	17	0.5348	0.0755	0.5	92		75	125
Potassium	85368	1	S26308A4	19	S26308A4	17	51.6579	4.6787	50	94		75	125
Sodium	85368	1	S26308A4	19	S26308A4	17	48.4144	1.255852743U	50	97		75	125
Zinc	85368	1	S26308A3	19	S26308A3	17	0.6230	0.1791	0.5	89		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85368

0100230 0371

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD19581-003								
Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S26308A3	21	S26308A3	17	32.7314	28.6732	5.0	81		75	125
Barium	1	S26308A3	21	S26308A3	17	0.9122	0.4564	0.50	91		75	125
Calcium	1	S26308A3	21	S26308A3	17	55.4773	11.4995	50	88		75	125
Chromium	1	S26308A3	21	S26308A3	17	0.5332	0.0616	0.50	94		75	125
Cobalt	1	S26308A3	21	S26308A3	17	0.5192	0.0327	0.50	97		75	125
Copper	1	S26308A3	21	S26308A3	17	0.5983	0.1227	0.50	95		75	125
Iron	1	S26308A3	21	S26308A3	17	82.3740	83.0147	5.0	-13	b	75	125
Lead	1	S26308A3	21	S26308A3	17	0.5392	0.0741	0.50	93		75	125
Magnesium	1	S26308A3	21	S26308A3	17	55.1177	12.1653	50	86		75	125
Manganese	1	S26308A3	21	S26308A3	17	2.9349	2.6884	0.50	49	b	75	125
Nickel	1	S26308A3	21	S26308A3	17	0.5340	0.0755	0.50	92		75	125
Potassium	1	S26308A4	21	S26308A4	17	50.1234	4.6787	50	91		75	125
Sodium	1	S26308A4	21	S26308A4	17	46.6136	1.255852743U	50	93		75	125
Zinc	1	S26308A3	21	S26308A3	17	0.6358	0.1791	0.50	91		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85369

0100230 0372

Instrument Type: ICPMS  
 Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85369							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Antimony	85369	1	S100520A	20	49.4770	117	42	10	110		
Arsenic	85369	1	S100520A	20	44.3110	49.4	90	61	113		
Beryllium	85369	1	S100520A	20	148.5350	187	79	66	110		
Cadmium	85369	1	S100520A	20	174.4600	197	89	64	110		
Selenium	85369	1	S100520A	20	325.3400	364	89	60	112		
Silver	85369	1	S100520A	20	86.5530	94.0	92	61	111		
Thallium	85369	1	S100520A	20	189.2950	229	83	61	110		
Vanadium	85369	1	S100520A	20	266.8060	300	89	66	110		

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 85369							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Antimony	85369	1	S100520A	19	49.3810	117	42	10	110		
Arsenic	85369	1	S100520A	19	44.2170	49.4	90	61	113		
Beryllium	85369	1	S100520A	19	152.3550	187	81	66	110		
Cadmium	85369	1	S100520A	19	176.5930	197	90	64	110		
Selenium	85369	1	S100520A	19	323.2110	364	89	60	112		
Silver	85369	1	S100520A	19	87.4660	94.0	93	61	111		
Thallium	85369	1	S100520A	19	190.6530	229	83	61	110		
Vanadium	85369	1	S100520A	19	266.3560	300	89	66	110		

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19581-003									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85369	1	S100520A	25	S100520A	21	156.7290	0.4300	250	63	a	75	125
Arsenic	85369	1	S100520A	25	S100520A	21	227.9810	3.7270	250	90		75	125
Beryllium	85369	1	S100520A	25	S100520A	21	194.1230	0.9020	250	77		75	125
Cadmium	85369	1	S100520A	25	S100520A	21	212.2410	0.1240	250	85		75	125
Selenium	85369	1	S100520A	25	S100520A	21	208.6960	3.0900	250	82		75	125
Silver	85369	1	S100520A	25	S100520A	21	41.6090	0.1990	50	83		75	125
Thallium	85369	1	S100520A	25	S100520A	21	202.7410	0.3630	250	81		75	125
Vanadium	85369	1	S100520A	25	S100520A	21	260.7980	26.6180	250	94		75	125

TxtQcType: MS		Matrix: SOIL		SampleID: AD19581-003									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	85369	1	S100520A	24	S100520A	21	156.7680	0.4300	250	63	a	75	125
Arsenic	85369	1	S100520A	24	S100520A	21	226.5170	3.7270	250	89		75	125
Beryllium	85369	1	S100520A	24	S100520A	21	203.6500	0.9020	250	81		75	125
Cadmium	85369	1	S100520A	24	S100520A	21	219.8270	0.1240	250	88		75	125
Selenium	85369	1	S100520A	24	S100520A	21	210.1810	3.0900	250	83		75	125
Silver	85369	1	S100520A	24	S100520A	21	43.1000	0.1990	50	86		75	125
Thallium	85369	1	S100520A	24	S100520A	21	209.8590	0.3630	250	84		75	125
Vanadium	85369	1	S100520A	24	S100520A	21	260.1790	26.6180	250	93		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount



**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85369

**0100230 0373**

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD19581-003								
Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S100520A	26	S100520A	21	47.8730	0.4300	50	95	75	125	
Arsenic	1	S100520A	26	S100520A	21	52.6890	3.7270	50	98	75	125	
Beryllium	1	S100520A	26	S100520A	21	43.6890	0.9020	50	86	75	125	
Cadmium	1	S100520A	26	S100520A	21	48.2860	0.1240	50	96	75	125	
Selenium	1	S100520A	26	S100520A	21	239.2590	3.0900	250	94	75	125	
Silver	1	S100520A	26	S100520A	21	47.8170	0.1990	50	95	75	125	
Thallium	1	S100520A	26	S100520A	21	48.2150	0.3630	50	96	75	125	
Vanadium	1	S100520A	26	S100520A	21	76.8490	26.6180	50	100	75	125	

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 85368

0100230 0374

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85368					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85368	S26308A3	16	S26308A3	15	90.8841	90.8748	.01	20
Barium	85368	S26308A3	16	S26308A3	15	7.6647	6.9128	10	20
Calcium	85368	S26308A3	16	S26308A3	15	182.3180	181.7200	.33	20
Chromium	85368	S26308A3	16	S26308A3	15	1.9169	1.9278	.56	20
Cobalt	85368	S26308A3	16	S26308A3	15	2.3308	2.3410	.43	20
Copper	85368	S26308A3	16	S26308A3	15	1.8178	1.8227	.27	20
Iron	85368	S26308A3	16	S26308A3	15	145.5280	145.0060	.36	20
Lead	85368	S26308A3	16	S26308A3	15	1.3744	1.3770	.19	20
Magnesium	85368	S26308A3	16	S26308A3	15	61.4373	61.6209	.3	20
Manganese	85368	S26308A3	16	S26308A3	15	5.1575	5.1676	.2	20
Mercury	85368	H26308SM	15	H26308SM	14	6.7310	6.6710	.9	20
Nickel	85368	S26308A3	16	S26308A3	15	0.4740	0.4895	3.2	20
Potassium	85368	S26308A4	16	S26308A4	15	17.5202	17.5468	.15	20
Sodium	85368	S26308A4	16	S26308A4	15	7.0692	7.0388	.43	20
Zinc	85368	S26308A3	16	S26308A3	15	5.8858	5.8754	.18	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD19581-003					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85368	S26308A3	18	S26308A3	17	24.3914	28.6732	16	20
Barium	85368	S26308A3	18	S26308A3	17	0.3862	0.4564	17	20
Calcium	85368	S26308A3	18	S26308A3	17	11.3463	11.4995	1.3	20
Chromium	85368	S26308A3	18	S26308A3	17	0.0564	0.0616	8.9	20
Cobalt	85368	S26308A3	18	S26308A3	17	0.0320	0.0327	2.1	20
Copper	85368	S26308A3	18	S26308A3	17	0.0732	0.1227	51	a 20
Iron	85368	S26308A3	18	S26308A3	17	76.5966	83.0147	8	20
Lead	85368	S26308A3	18	S26308A3	17	0.0781	0.0741	5.3	20
Magnesium	85368	S26308A3	18	S26308A3	17	10.8467	12.1653	11	20
Manganese	85368	S26308A3	18	S26308A3	17	2.4724	2.6884	8.4	20
Mercury	85368	H26308SM	17	H26308SM	16	0.5050	0.2960	52	a 20
Nickel	85368	S26308A3	18	S26308A3	17	0.0736	0.0755	2.6	20
Potassium	85368	S26308A4	18	S26308A4	17	4.2383	4.6787	9.9	20
Sodium	85368	S26308A4	18	S26308A4	17	1.255852743U	1.255852743U	---	20
Zinc	85368	S26308A3	18	S26308A3	17	0.1500	0.1791	18	20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19581-003					
Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	85368	S26308A3	20	S26308A3	19	33.7213	30.2062	11	20
Barium	85368	S26308A3	20	S26308A3	19	0.8816	0.9373	6.1	20
Calcium	85368	S26308A3	20	S26308A3	19	58.2570	56.7409	2.6	20
Chromium	85368	S26308A3	20	S26308A3	19	0.5739	0.5366	6.7	20
Cobalt	85368	S26308A3	20	S26308A3	19	0.5212	0.5280	1.3	20
Copper	85368	S26308A3	20	S26308A3	19	0.5700	0.5630	1.2	20
Iron	85368	S26308A3	20	S26308A3	19	83.7637	76.7038	8.8	20
Lead	85368	S26308A3	20	S26308A3	19	0.5574	0.5722	2.6	20
Magnesium	85368	S26308A3	20	S26308A3	19	59.2965	55.5469	6.5	20
Manganese	85368	S26308A3	20	S26308A3	19	3.1822	3.6469	14	20
Mercury	85368	H26308SM	19	H26308SM	18	10.5400	10.4700	.67	20
Nickel	85368	S26308A3	20	S26308A3	19	0.5665	0.5348	5.7	20
Potassium	85368	S26308A4	20	S26308A4	19	51.6774	51.6579	.038	20
Sodium	85368	S26308A4	20	S26308A4	19	48.4577	48.4144	.089	20
Zinc	85368	S26308A3	20	S26308A3	19	0.6524	0.6230	4.6	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5\*RL

c-Serial dilution Out but conc < 10 \* IDL

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH:85368

**0100230 0375**

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD		Matrix: SOIL		SampleID: AD19581-003						
Analyte	BatchId	Data File	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff		Limit
Aluminum	85368	S26308A3	22	S26308A3	17 5	5.9845	28.6732	4.4		10
Barium	85368	S26308A3	22	S26308A3	17 5	0.0953	0.4564	4.4		10
Calcium	85368	S26308A3	22	S26308A3	17 5	2.4909	11.4995	8.3		10
Chromium	85368	S26308A3	22	S26308A3	17 5	0.0092	0.0616	25	a	10
Cobalt	85368	S26308A3	22	S26308A3	17 5	0.0047	0.0327	28	c	10
Copper	85368	S26308A3	22	S26308A3	17 5	0.0239	0.1227	2.8		10
Iron	85368	S26308A3	22	S26308A3	17 5	17.6341	83.0147	6.2		10
Lead	85368	S26308A3	22	S26308A3	17 5	0.0107	0.0741	28	c	10
Magnesium	85368	S26308A3	22	S26308A3	17 5	2.7640	12.1653	14	c	10
Manganese	85368	S26308A3	22	S26308A3	17 5	0.5668	2.6884	5.4		10
Nickel	85368	S26308A3	22	S26308A3	17 5	0.0149	0.0755	1.1		10
Potassium	85368	S26308A4	22	S26308A4	17 5	1.1925	4.6787	27	c	10
Sodium	85368	S26308A4	22	S26308A4	17 5	-0.1730	0.3911	---		10
Zinc	85368	S26308A3	22	S26308A3	17 5	0.0330	0.1791	7.9		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5\*RL

c-Serial dilution Out but conc < 10 \* IDL

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 85369

0100230 0376

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 85369					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85369	S100520A	20	S100520A	19	49.4770	49.3810	.19	20
Arsenic	85369	S100520A	20	S100520A	19	44.3110	44.2170	.21	20
Beryllium	85369	S100520A	20	S100520A	19	148.5350	152.3550	2.5	20
Cadmium	85369	S100520A	20	S100520A	19	174.4600	176.5930	1.2	20
Selenium	85369	S100520A	20	S100520A	19	325.3400	323.2110	.66	20
Silver	85369	S100520A	20	S100520A	19	86.5530	87.4660	1	20
Thallium	85369	S100520A	20	S100520A	19	189.2950	190.6530	.71	20
Vanadium	85369	S100520A	20	S100520A	19	266.8060	266.3560	.17	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD19581-003					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85369	S100520A	22	S100520A	21	0.3400	0.4300	23 b	20
Arsenic	85369	S100520A	22	S100520A	21	6.5030	3.7270	54 a	20
Beryllium	85369	S100520A	22	S100520A	21	1.0290	0.9020	13	20
Cadmium	85369	S100520A	22	S100520A	21	0.2460	0.1240	66 b	20
Selenium	85369	S100520A	22	S100520A	21	3.7690	3.0900	20	20
Silver	85369	S100520A	22	S100520A	21	0.3020	0.1990	41 b	20
Thallium	85369	S100520A	22	S100520A	21	0.1360	0.3630	91 b	20
Vanadium	85369	S100520A	22	S100520A	21	32.3300	26.6180	19	20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD19581-003					
Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	85369	S100520A	25	S100520A	24	156.7290	156.7680	.025	20
Arsenic	85369	S100520A	25	S100520A	24	227.9810	226.5170	.64	20
Beryllium	85369	S100520A	25	S100520A	24	194.1230	203.6500	4.8	20
Cadmium	85369	S100520A	25	S100520A	24	212.2410	219.8270	3.5	20
Selenium	85369	S100520A	25	S100520A	24	208.6960	210.1810	.71	20
Silver	85369	S100520A	25	S100520A	24	41.6090	43.1000	3.5	20
Thallium	85369	S100520A	25	S100520A	24	202.7410	209.8590	3.5	20
Vanadium	85369	S100520A	25	S100520A	24	260.7980	260.1790	.24	20

TxtQcType: SD		Matrix: SOIL		SampleID: AD19581-003						
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	85369	S100520A	23	S100520A	21	5	-0.0800	0.4300	---	20
Arsenic	85369	S100520A	23	S100520A	21	5	0.7960	3.7270	6.8	20
Beryllium	85369	S100520A	23	S100520A	21	5	0.2110	0.9020	17 c	20
Cadmium	85369	S100520A	23	S100520A	21	5	0.0260	0.1240	---	20
Selenium	85369	S100520A	23	S100520A	21	5	0.5300	3.0900	14 c	20
Silver	85369	S100520A	23	S100520A	21	5	0.0430	0.1990	8	20
Thallium	85369	S100520A	23	S100520A	21	5	0.0050	0.3630	---	20
Vanadium	85369	S100520A	23	S100520A	21	5	5.3680	26.6180	0.83	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5\*RL

c-Serial dilution Out but conc < 10 \* IDL

Hampton-Clarke

**ICP SAMPLE PREPARATION LOG**

ANALYTICAL METHOD: 3010A 3005A ~~3050B~~ 200.7/200.8 OTHER \_\_\_\_\_

Batch No.: 26308. Analyst: ANS  
 QC Number: 85368 Prep Date: 10/5/20  
 Matrix: sail 6010 Reviewed By: AK

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD						--	
1. AD19581-003							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR ↓ -003							
MS ↓ -003							Balance used: 032
MSD ↓ -003							Pipettes used: 141, 155
2. 19560-001							
3. 19581-001							Hot Block used: 4
4. ↓ -007							
5. ↓ -008							
6. ↓ -011							
7. 19582-001							
8. 19587-007							
9. 19575-002							
10. 19595-004							
11. ↓ -009							
12. 19596-001	↓	↓					
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 99.1 C (90-95° C) Start Time: 9:00am End Time: 11:30am

	Volume mL	Lot #	Acid	Vol mL	Lot#	Acid	Vol mL	Lot#
LCS, LCSD	0.5g	V-13005	HNO <sub>3</sub>	2.5	V-13457	1:1 HNO <sub>3</sub>	5.0	V-336092
LLCS, LLLCSD		V-	HCl	5.0	V-13392	1:1 HCl		V-
MS, MSD	0.25ml	V-13177, 13178	H <sub>2</sub> O <sub>2</sub>	1.5	V-13067			
LLMS, LLMSD		V-335926						

Relinquished By ANS Date 10/5/20  
 Received By AK Date 10/05/2020

Hampton-Clarke

**ICP SAMPLE PREPARATION LOG**

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER \_\_\_\_\_

Batch No.: 26309

Analyst: ANS

QC Number: 85369

Prep Date: 10/5/20

Matrix: soil 6020

Reviewed By: R

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	25ml	50ml		--	
LCS	0.1g					--	
LCSD	0.1g					--	
1. <u>AD19581-003</u>	0.5g						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR ↓ -003							
MS ↓ -003							Balance used: 032
MSD ↓ -003							Pipettes used: 149, 155
2. <u>19560-001</u>							
3. <u>19571-001</u>							Hot Block used: 5
4. ↓ -002							
5. ↓ -003							
6. <u>19581-001</u>							
7. ↓ -007							
8. ↓ -008							
9. ↓ -011							
10. <u>19582-001</u>							
11. <u>19587-007</u>							
12. <u>19575-002</u>							
13. <u>19595-004</u>							
14. ↓ -009							
15. <u>19596-001</u>	↓	↓	↓	↓			
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 97.1 C (90-95° C) Start Time: 8:00am End Time: 11:00am

	Volume mL	Lot #
LCS, LCSD	0.1g	V-13005
LLCS, LLLCSD		V-
MS, MSD	0.25ml	V-13177, 13178
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO <sub>3</sub>	2.5	V-13457
HCl		V-
H <sub>2</sub> O <sub>2</sub>	1.5	V-13067

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>	5.0	V-336092
1:1 HCl		V-

Relinquished By ANS Date 10/5/20  
 Received By R Date 10/5/20

HG SAMPLE PREPARATION LOG

Hampton-Clerke/Vertech

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER \_\_\_\_\_

Batch No.: 26308

Analyst: ANS

QC Number: 85368

Prep Date: 10/5/20

Matrix: soil

Review By: DL

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK Oppb V- 336084
ICS	0.15g			
ICSD				STD 0.2 ppb V- 336085
AD19581-003				STD 0.5 ppb V- 336086
MR   -003				STD 1.0 ppb V- 336087
MS   -003				STD 2.0 ppb V- 336088
MSD ↓ -003				STD 5.0 ppb V- 336089
19560-001				STD 10.0 ppb V- 336090
19581-001				STD 25.0 ppb V- 336091
-007				ICV 10.0 ppb V- 336082
-008				CCV 20.0 ppb V- 336083
↓ -011				
19582-001				
19587-007				Balance used: 032
19575-002				Pipettes used: 143, 151, 155
19595-004				
19595-009				Hot Block used: 6
19596-001	↓	↓		

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
IC: V- 335298	3.75	HNO3		V-
IC: V-		HCl		V-
IC: V- 334567	1.5	H2SO4		V-
		Aqua Regia	1.25	V- 336081

**Block Temp: °C	92.4
Time In Block:	8:30 am
Time Out of Block:	9:00 am

Volume & Lot #  
 ICS v. 13005 (0.13 / 0.25 ml)  
 MS v. 336047 (0.250 ml)  
 Standards/Control Batch B- 29790

Start time: 8:00 am End Time: 9:30 am

\*\*Temperature  
 245.1 / 7470A: 90-95C  
 7471B: 92-98C

Relinquished By: ANS

25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriproq using the standard batch number and the corresponding V #s.

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\IS26308A3MDL.txt

Analysis Date: 10/05/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	13:35	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	13:39	2							V-333671(LLICV/LLCCV soil)
CALST3 V-333666	1	CAL	13:43	3							V-333666(ICS3 - Middle Std)
CALST4 V-333665	1	CAL	13:47	4							V-333665(ICS4 High std)
ICV V-333673	1	ICV	13:51	5							V-333673(CCV)
ICB V-333667	1	ICB	13:55	6							V-333667(ICB/CCB)
LRS V-335934	1	LRS	13:59	7	MET-TAL6010S	SOIL	SOIL	SW846	85368		V-335934(LRS)
ICS3 V-333666	1	ICS	14:03	8							V-333666(ICS3 - Middle Std)
RINSE	1	NA	14:07	9	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
LLICV V-333671	1	LLICV	14:11	10	MET-TAL6010S	SOIL	SOIL	SW846	85368		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	14:15	11							V-333668(ICSA)
CCV V-333673	1	CCV	14:20	12							V-333673(CCV)
CCB V-333667	1	CCB	14:24	13							V-333667(ICB/CCB)
MB 85368 (100)	1	MB	14:28	14	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
LCS 85368	1	LCS	14:32	15	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
LCS MR 85368	1	LCS	14:37	16	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	SMP	14:42	17	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MR	14:45	18	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MS	14:49	19	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MSD	14:53	20	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	PS	14:57	21	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	5	SD	15:02	22	MET-PP6010S	SOIL	SOIL	SW846	85368		0
CCV V-333673	1	CCV	15:05	23							V-333673(CCV)
CCB V-333667	1	CCB	15:09	24							V-333667(ICB/CCB)
AD19560-001	1	SMP	15:13	25	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19581-001	1	SMP	15:18	26	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-007	1	SMP	15:23	27	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-008	1	SMP	15:27	28	SRSMETALS-S	SOIL	SOIL	SW846	85368		0
AD19581-011	1	SMP	15:31	29	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19582-001	1	SMP	15:36	30	MET-TAL6010S	SOIL	SOIL	SW846	85368	Zn NOT reported (Zn> LR)	0
AD19582-001	2	SMP	15:41	31	MET-TAL6010S	SOIL	SOIL	SW846	85368	Zn reported	0
CCV V-333673	1	CCV	15:45	32							V-333673(CCV)
CCB V-333667	1	CCB	15:49	33							V-333667(ICB/CCB)
AD19587-007	1	SMP	15:53	34	MET-TAL6010S	SOIL	SOIL	SW846	85368	Co NOT reported (Ti> LR)	0
AD19575-002	1	SMP	15:58	35	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19595-004	1	SMP	16:02	36	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19595-009	1	SMP	16:06	37	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19596-001	1	SMP	16:10	38	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
CCV V-333673	1	CCV	16:15	39							V-333673(CCV)
CCB V-333667	1	CCB	16:19	40							V-333667(ICB/CCB)
LCS 85365	1	LCS	16:23	41	MET-TAL6010S	SOIL	SOIL	SW846	85365	Al, V, Cu reported	0
LCS MR 85365	1	LCS	16:28	42	MET-TAL6010S	SOIL	SOIL	SW846	85365	Al, V, Cu reported	0
AD19563-002	1	SMP	16:33	43	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-004	1	SMP	16:37	44	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-006	1	SMP	16:42	45	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-008	1	SMP	16:46	46	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-010	1	SMP	16:51	47	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-012	1	SMP	16:55	48	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-014	1	SMP	16:59	49	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
CCV V-333673	1	CCV	17:03	50							V-333673(CCV)
CCB V-333667	1	CCB	17:08	51							V-333667(ICB/CCB)
AD19563-016	1	SMP	17:11	52	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-018	1	SMP	17:16	53	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-020	1	SMP	17:20	54	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-028	1	SMP	17:23	55	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-030	1	SMP	17:28	56	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-032	1	SMP	17:32	57	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-034	1	SMP	17:36	58	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-036	1	SMP	17:41	59	MET-TAL6010S	SOIL	SOIL	SW846	85365		0
AD19563-038	1	SMP	17:45	60	MET-TAL6010S	SOIL	SOIL	SW846	85365		0

Comments/Reviewedby:

olufemi  
192.168.1.105 10/14/2020 6:42:53 PM

RUN IS OK  
26308/85368: All elements reported, except Na, K  
26305/85365: Al reported, unless otherwise reported

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

*e 10/16/20*



## Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\IS26308A3MDL.txt

Analysis Date: 10/05/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CCV V-333673	1	CCV	17:49	61							V-333673(CCV)
CCB V-333667	1	CCB	17:53	62							V-333667(ICB/CCB)

## Comments/Reviewedby:

olufemi  
192.168.1.105 10/14/2020 6:42:53 PM

RUN IS OK  
26308/85368: All elements reported, except Na, K  
26305/85365: AJ reported, unless otherwise reported

*R* 10/18/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\IS26308A4MDL.txt

Analysis Date: 10/05/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	16:03	1							V-333667(ICB/CCB)
CALST2 V-333671	1	CAL	16:07	2							V-333671(LLICV/LLCCV soil)
CALST3 V-335982	1	CAL	16:11	3							V-335982(ICS3 - Middle Std)
CALST4 V-335863	1	CAL	16:15	4							V-335863(ICS4 High std)
ICV V-335864	1	ICV	16:20	5							V-335864(CCV)
ICB V-333667	1	ICB	16:24	6							V-333667(ICB/CCB)
LRS V-333662	1	LRS	16:28	7		SOIL	SOIL	SW846	85368		V-333662(LRS)
ICS3 V-335982	1	ICS	16:33	8							V-335982(ICS3 - Middle Std)
RINSE	1	NA	16:37	9		SOIL	SOIL	SW846	85368		0
LLICV V-333671	1	LLICV	16:41	10		SOIL	SOIL	SW846	85368		V-333671(LLICV/LLCCV soil)
ICSA V-333668	1	ICSA	16:46	11							V-333668(ICSA)
CCV V-335864	1	CCV	16:50	12							V-335864(CCV)
CCB V-333667	1	CCB	16:54	13							V-333667(ICB/CCB)
MB 85368 (100)	1	MB	16:58	14		SOIL	SOIL	SW846	85368		0
LCS 85368	1	LCS	17:03	15		SOIL	SOIL	SW846	85368		0
LCS MR 85368	1	LCS	17:06	16		SOIL	SOIL	SW846	85368		0
AD19581-003	1	SMP	17:10	17	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MR	17:14	18	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MS	17:18	19	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MSD	17:23	20	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	1	PS	17:27	21	MET-PP6010S	SOIL	SOIL	SW846	85368		0
AD19581-003	5	SD	17:32	22	MET-PP6010S	SOIL	SOIL	SW846	85368		0
CCV V-335864	1	CCV	17:36	23							V-335864(CCV)
CCB V-333667	1	CCB	17:40	24							V-333667(ICB/CCB)
AD19560-001	1	SMP	17:45	25	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19582-001	1	SMP	17:48	26	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19587-007	1	SMP	17:52	27	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19575-002	1	SMP	17:55	28	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19595-004	1	SMP	18:00	29	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19595-009	1	SMP	18:04	30	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
AD19596-001	1	SMP	18:08	31	MET-TAL6010S	SOIL	SOIL	SW846	85368		0
CCV V-335864	1	CCV	18:13	32							V-335864(CCV)
CCB V-333667	1	CCB	18:17	33							V-333667(ICB/CCB)

Comments/Reviewedby:

olufermi  
192.168.1.105 10/15/2020 12:04:48 PM

RUN IS OK  
Na, K reported

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

CO 115720

# Run Log

Data File: W\METALS\FRM\ICPDATA\New\HGCV3A\H26308SMDL.txt

Analysis Date: 10/05/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	15:29	1							0
2 PPB	1	CAL	15:30	2							0
.5 PPB	1	CAL	15:32	3							0
1 PPB	1	CAL	15:33	4							0
2 PPB	1	CAL	15:34	5							0
5 PPB	1	CAL	15:36	6							0
10 PPB	1	CAL	15:37	7							0
25 PPB	1	CAL	15:39	8							0
ICV (2)	1	ICV	15:40	9							0
ICB	1	ICB	15:42	10							0
MB 85368 (167)	1	MB	15:43	11		SOIL	SOIL	SW846	85368		0
LCS 85368	1	NA	15:45	12		SOIL	SOIL	SW846	85368	conc. Is greater than calibration limit	0
LCS MR 85368	1	NA	15:46	13		SOIL	SOIL	SW846	85368	conc. Is greater than calibration limit	0
LCS 4D	4	LCS	15:48	14		SOIL	SOIL	SW846	85368		0
LCS 4D MR	4	LCS	15:50	15		SOIL	SOIL	SW846	85368		0
AD19581-003	1	SMP	15:51	16	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MR	15:52	17	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MS	15:54	18	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19581-003	1	MSD	15:55	19	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19560-001	1	SMP	15:57	20	HG-SOIL	SOIL	SOIL	SW846	85368		0
CCV	1	CCV	15:58	21							0
CCB	1	CCB	16:00	22							0
AD19581-001	1	SMP	16:01	23	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19581-007	1	SMP	16:03	24	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19581-008	1	SMP	16:04	25	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19581-011	1	SMP	16:06	26	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19582-001	1	SMP	16:07	27	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19587-007	1	SMP	16:08	28	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19575-002	1	SMP	16:10	29	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19595-004	1	SMP	16:11	30	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19595-009	1	SMP	16:12	31	HG-SOIL	SOIL	SOIL	SW846	85368		0
AD19596-001	1	SMP	16:14	32	HG-SOIL	SOIL	SOIL	SW846	85368		0
CCV	1	CCV	16:15	33							0
CCB	1	CCB	16:17	34							0

Comments/Reviewed by:

olufemi  
192.168.1.105 10/15/2020 12:14:23 PM

RUN IS OK

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

10/15/20

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3\_7700SWA\S100520AMD.L.txt

Analysis Date: 10/05/20

Instrument: MS3\_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	11:00	1		SOIL	SOIL	SW846	85369		0
CalBlk V-336032	1	ISBLK	11:05	2		SOIL	SOIL				V-336032(Cal Blk WARNING)
CalStd1 V-336033	1	CAL	11:09	3							V-336033(Cal Std-1 WARNING)
CalStd2 V-336034	1	CAL	11:14	4							V-336034(Cal Std-2 WARNING)
CalStd3 V-336035	1	CAL	11:18	5							V-336035(Cal Std-3 WARNING)
CalStd4 V-336036	1	CAL	11:23	6							V-336036(Cal Std-4 WARNING)
CalStd5 V-336037	1	CAL	11:27	7							V-336037(Cal Std-5 WARNING)
ICV V-336038	1	ICV	11:32	8							V-336038(ICV WARNING)
LLICV V-336043	1	LLICV	11:36	9		SOIL	SOIL	SW846	85369		V-336043(LL-ICV/CCV SOIL WARNING)
ICB V-336039	1	ICB	11:41	10							V-336039(ICB/CCB WARNING)
ICSA V-336040	1	ICSA	11:45	11							V-336040(ICSA WARNING)
RINSE	1	NA	11:50	12		SOIL	SOIL	SW846	85369		0
LRS V-336041	1	LRS	11:54	13		SOIL	SOIL	SW846	85369	Ag fail.	V-336041(LRS WARNING)
RINSE	1	NA	11:59	14		SOIL	SOIL	SW846	85369		0
RINSE	1	NA	12:03	15		SOIL	SOIL	SW846	85369		0
CCV V-336042	1	CCV	12:08	16							V-336042(CCV WARNING)
CCB V-336039	1	CCB	12:12	17							V-336039(ICB/CCB WARNING)
MB 85369	1	MB	12:17	18		SOIL	SOIL	SW846	85369		0
LCS 85369	1	LCS	12:21	19		SOIL	SOIL	SW846	85369		0
LCS MR 85369	1	LCS	12:25	20		SOIL	SOIL	SW846	85369		0
AD19581-003	1	SMP	12:30	21	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-003	1	MR	12:34	22	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-003	5	SD	12:39	23	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-003	1	MS	12:43	24	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-003	1	MSD	12:47	25	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-003	1	PS	12:52	26	MET-PP6020S	SOIL	SOIL	SW846	85369		0
RINSE	1	NA	12:56	27		SOIL	SOIL	SW846	85369		0
CCV V-336042	1	CCV	13:01	28							V-336042(CCV WARNING)
CCB V-336039	1	CCB	13:05	29							V-336039(ICB/CCB WARNING)
AD19560-001	1	NA	13:10	30	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
AD19571-001	1	NA	13:14	31	MET-2-6020	SOIL	SOIL	SW846	85369		0
AD19571-002	1	NA	13:19	32	MET-2-6020	SOIL	SOIL	SW846	85369		0
AD19571-003	1	NA	13:23	33	MET-2-6020	SOIL	SOIL	SW846	85369		0
AD19581-001	1	NA	13:27	34	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-007	1	NA	13:32	35	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19581-008	1	NA	13:36	36	MET-5-6020	SOIL	SOIL	SW846	85369		0
AD19581-011	1	NA	13:41	37	MET-PP6020S	SOIL	SOIL	SW846	85369		0
AD19582-001	1	NA	13:45	38	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
RINSE	1	NA	13:49	39		SOIL	SOIL	SW846	85369		0
CCV V-336042	1	CCV	13:54	40							V-336042(CCV WARNING)
CCB V-336039	1	CCB	13:58	41							V-336039(ICB/CCB WARNING)
AD19587-007	1	NA	14:03	42	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
AD19575-002	1	NA	14:07	43	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
AD19595-004	1	SMP	14:12	44	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
AD19595-009	1	SMP	14:16	45	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
AD19596-001	1	NA	14:21	46	MET-TAL6020S	SOIL	SOIL	SW846	85369		0
RINSE	1	NA	14:25	47		SOIL	SOIL	SW846	85369		0
CCV V-336042	1	CCV	14:29	48							V-336042(CCV WARNING)
CCB V-336039	1	CCB	14:34	49							V-336039(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau  
192.168.1.87 10/15/2020 10:12:45 AM

Run ok Report Ag, As, Be, Cd, Sb, Se, Ti, V to MDL for 19595-004, 009.  
LRS fail for Ag. Ag LR =100ppb. PC.

*pcousineau* 10/15/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 10 10/12

Standard/Batch/SnCl2 Lot #:

## ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S100520AMS Sample ID: CalBlk V-336032 Sample Date 10/05/20 Sample Time: 11:05

IS ID:	Area	Area Limit
Ho-1	1902737.12	1331915.984 - 2473558.256
In-1	1296426.13	907498.291 - 1685353.969
Sc-1	985898.02	690128.614 - 1281667.426
Tb-1	1969423.46	1378596.422 - 2560250.498

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-336032	2	1902737.	1296426.	985898.0	1969423.				
SMP	RINSE	1	1899671.	1292094.	989967.7	1970974.				
CAL	CalStd1 V-33603	3	1935317.	1328857.	997627.3	1990566.				
CAL	CalStd2 V-33603	4	1922015.	1338152.	1005119.	2002051.				
CAL	CalStd3 V-33603	5	1958450.	1320523.	1015681.	2011363.				
CAL	CalStd4 V-33603	6	1920971.	1309190.	1011119.	1998032.				
CAL	CalStd5 V-33603	7	1927638.	1290031.	992664.9	2003316.				
ICV	ICV V-336038	8	1930051.	1292771.	975199.1	1992752.				
LLICV	LLICV V-336043	9	1927506.	1293370.	973774.3	1986915.				
ICB	ICB V-336039	10	1913660.	1291734.	972590.2	1970482.				
ICSA	ICSA V-336040	11	1967689.	1249683.	996188.5	2044022.				
SMP	RINSE	12	2062587.	1473972.	1039594.	2124069.				
LRS	LRS V-336041	13	1959991.	1282534.	999474.9	2023035.				
SMP	RINSE	14	2031387.	1441418.	1031771.	2098821.				
SMP	RINSE	15	2011461.	1452665.	1028037.	2089216.				
CCV	CCV V-336042	16	1985450.	1329814.	991895.8	2045657.				
CCB	CCB V-336039	17	1949857.	1334999.	967194.4	2016541.				
MB	MB 85369	18	1984532.	1338146.	979811.3	2021975.				
LCS	LCS 85369	19	2028130.	1310733.	1085199.	2087562.				
MR	LCS MR 85369	20	2020595.	1304964.	1047608.	2088938.				
SMP	AD19581-003	21	2099917.	1356031.	1263990.	2173502.				
MR	AD19581-003	22	2047417.	1301758.	1261837.	2129421.				
SD	AD19581-003	23	1950713.	1271647.	985934.0	2022170.				
MS	AD19581-003	24	2021964.	1303296.	1298994.	* 2115221.				
MSD	AD19581-003	25	2064106.	1323335.	1283102.	* 2122903.				
PS	AD19581-003	26	2062269.	1306015.	1274755.	2138176.				
SMP	RINSE	27	1899875.	1271604.	943952.7	1968380.				
CCV	CCV V-336042	28	1874910.	1242540.	934895.6	1937560.				
CCB	CCB V-336039	29	1866676.	1247596.	924964.6	1937479.				
SMP	AD19560-001	30	2072452.	1271465.	1225997.	2126003.				
SMP	AD19571-001	31	2070414.	1318899.	1260724.	2135308.				
SMP	AD19571-002	32	2032174.	1287328.	1290705.	* 2080791.				
SMP	AD19571-003	33	2071967.	1302860.	1364008.	* 2146254.				
SMP	AD19581-001	34	2106575.	1312429.	1534209.	* 2170665.				
SMP	AD19581-007	35	2100692.	1386938.	1336503.	* 2186925.				
SMP	AD19581-008	36	2103643.	1458575.	1365989.	* 2182825.				
SMP	AD19581-011	37	2107923.	1426849.	1464722.	* 2186373.				
SMP	AD19582-001	38	2143268.	1481022.	1525279.	* 2217944.				
SMP	RINSE	39	2010779.	1418868.	1007359.	2079329.				
CCV	CCV V-336042	40	1972707.	1339637.	996479.6	2025131.				
CCB	CCB V-336039	41	2002505.	1403663.	1025716.	2062973.				
SMP	AD19587-007	42	2176816.	1425106.	1426964.	* 2223463.				
SMP	AD19575-002	43	2100695.	1454722.	1634060.	* 2167297.				
SMP	AD19595-004	44	2402266.	1418690.	1632172.	* 2432993.				
SMP	AD19595-009	45	2201807.	1386985.	1592209.	* 2272452.				
SMP	AD19596-001	46	2125004.	1439311.	1370760.	* 2201814.				
SMP	RINSE	47	2005813.	1400114.	1020700.	2085587.				
CCV	CCV V-336042	48	1978356.	1370714.	1003153.	2014881.				

\* Indicates Internal Standard Area outside of limits

# ICPMS Internal Standard Summary Report

0100230 0386

TuneID: 1

CCB CCB V-336039 49 1945430. 1310471. 975509.0 1984584.

\* Indicates Internal Standard Area outside of limits

# ICPMS Internal Standard Summary Report

0100230 0387

TuneID: 2

Batch/FileID: S100520AMS Sample ID: CalBlk V-336032 Sample Date 10/05/20 Sample Time: 11:05

IS ID: Area	Area Limit
Ho-2 883259.25	618281.475 - 1148237.025
In-2 286457.80	200520.46 - 372395.14
Sc-2 49290.53	34503.371 - 64077.689
Tb-2 891716.80	624201.76 - 1159231.84

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-336032	2	883259.2	286457.8	49290.53	891716.8				
SMP	RINSE	1	869952.0	282905.2	48614.31	880067.4				
CAL	CalStd1 V-33603	3	892280.7	289473.0	49603.71	896747.7				
CAL	CalStd2 V-33603	4	902801.1	292687.6	50645.34	914287.8				
CAL	CalStd3 V-33603	5	905977.3	291718.4	50096.03	912127.3				
CAL	CalStd4 V-33603	6	902914.2	286411.9	49719.68	909513.5				
CAL	CalStd5 V-33603	7	904727.9	284071.9	49496.80	904185.8				
ICV	ICV V-336038	8	895704.7	281925.7	48705.75	901009.5				
LLICV	LLICV V-336043	9	896790.8	285358.4	48809.37	907562.4				
ICB	ICB V-336039	10	885549.1	284119.3	49339.57	893433.8				
ICSA	ICSA V-336040	11	903473.8	276527.9	51290.63	906000.9				
SMP	RINSE	12	934526.6	301719.7	52555.19	944698.6				
LRS	LRS V-336041	13	898450.9	279210.1	51617.04	907677.6				
SMP	RINSE	14	924396.8	301838.4	51975.61	937463.2				
SMP	RINSE	15	906907.2	291312.0	50241.95	916541.6				
CCV	CCV V-336042	16	905224.8	286357.1	50111.72	911112.8				
CCB	CCB V-336039	17	895629.0	286147.1	48740.48	904337.0				
MB	MB 85369	18	884805.7	279714.5	47774.50	893273.8				
LCS	LCS 85369	19	885124.6	272287.5	49877.80	895898.3				
MR	LCS MR 85369	20	880865.2	268132.7	49011.95	887261.0				
SMP	AD19581-003	21	920157.3	268754.5	57259.54	928363.0				
MR	AD19581-003	22	921294.3	272900.3	58536.81	932166.0				
SD	AD19581-003	23	886151.9	274738.5	48442.74	890936.5				
MS	AD19581-003	24	913050.9	272871.8	58141.24	919448.3				
MSD	AD19581-003	25	908680.4	271110.2	58337.16	915827.2				
PS	AD19581-003	26	922636.6	270663.2	58554.63	929642.2				
SMP	RINSE	27	866333.1	274055.5	47051.73	871314.1				
CCV	CCV V-336042	28	865165.5	272248.1	46621.76	876717.0				
CCB	CCB V-336039	29	856058.4	273531.4	46739.69	864675.7				
SMP	AD19560-001	30	902529.0	261071.7	54823.62	907902.1				
SMP	AD19571-001	31	920150.1	274756.4	58162.17	924926.4				
SMP	AD19571-002	32	919868.1	269607.1	61037.72	914715.1				
SMP	AD19571-003	33	930646.6	270801.1	63105.58	926996.8				
SMP	AD19581-001	34	935125.2	273006.3	72768.92	* 943022.8				
SMP	AD19581-007	35	932707.4	276436.3	61529.46	948421.8				
SMP	AD19581-008	36	932350.0	285075.7	62356.60	940782.7				
SMP	AD19581-011	37	938801.7	277629.6	66896.55	* 952204.2				
SMP	AD19582-001	38	945153.3	289272.7	68719.76	* 945104.2				
SMP	RINSE	39	906762.3	290731.2	49695.15	908325.0				
CCV	CCV V-336042	40	892874.8	283779.9	48928.53	900952.0				
CCB	CCB V-336039	41	914869.1	295198.0	50645.36	916615.6				
SMP	AD19587-007	42	963985.0	279189.6	66119.27	* 960607.9				
SMP	AD19575-002	43	945731.6	288067.4	76033.07	* 952005.0				
SMP	AD19595-004	44	1092801.	283863.0	77194.01	* 1071426.				
SMP	AD19595-009	45	984414.0	282647.6	75928.93	* 986062.5				
SMP	AD19596-001	46	941856.7	280872.9	63148.21	949425.3				
SMP	RINSE	47	913380.4	295473.0	49772.97	917380.7				
CCV	CCV V-336042	48	895735.5	285825.7	48898.66	901204.6				

\* Indicates Internal Standard Area outside of limits

# ICPMS Internal Standard Summary Report

0100230 0388

TuneID: 2

CCB CCB V-336039 49 891388.1 283705.3 48311.44 897019.5

\* Indicates Internal Standard Area outside of limits



## **TCLP Metal Data**

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19595-013  
Client Id: HSI-WC-NH  
Matrix: TCLP  
Level: LOW

% Solid: 0  
Units: MG/L  
Date Rec: 10/3/2020

Lab Name: Hampton-Clarke  
Lab Code:  
Contract:

Nras No:  
Sdg No:  
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A
7440-39-3	Barium	0.25	ND	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	10/07/20	85367	T26307B4	29	P	PEICP4A
7439-92-1	Lead	0.050	0.10	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	10/08/20	85367	H26307T	20	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	10/07/20	85367	T26307A4	29	P	PEICP4A

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

**Form1**  
**Inorganic Analysis Data Sheet**

Sample ID: AD19595-014	% Solid: 0	Lab Name: Hampton-Clarke	Nras No:
Client Id: HSI-WC-H	Units: MG/L	Lab Code:	Sdg No:
Matrix: TCLP	Date Rec: 10/3/2020	Contract:	Case No:
Level: LOW			

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A
7440-39-3	Barium	0.25	ND	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A
7440-43-9	Cadmium	0.050	ND	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A
7440-47-3	Chromium	0.10	ND	1	50	50	10/07/20	85367	T26307B4	30	P	PEICP4A
7439-92-1	Lead	0.050	0.21	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	10/08/20	85367	H26307T	23	CV	HGCV3A
7440-02-0	Nickel	0.10	ND	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A
7782-49-2	Selenium	0.10	ND	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A
7440-22-4	Silver	0.050	ND	1	50	50	10/07/20	85367	T26307A4	30	P	PEICP4A

Comments: \_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

Form1  
Inorganic Analysis Data Sheet

Sample ID: MB 85367 (1)  
Client Id: MB 85367 (1)  
Matrix: TCLP  
Level: LOW

% Solid: 0  
Units: MG/L

Lab Name: Hampton-Clarke  
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7440-38-2	Arsenic	0.050	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7440-39-3	Barium	0.12	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7440-41-7	Beryllium	0.0060	ND	1	50	50	10/07/20	85367	T26307B4	14	P	PEICP4A
7440-43-9	Cadmium	0.025	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7440-47-3	Chromium	0.050	ND	1	50	50	10/07/20	85367	T26307B4	14	P	PEICP4A
7440-50-8	Copper	0.050	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7439-92-1	Lead	0.025	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7439-97-6	Mercury	0.00050	ND	1	25	25	10/08/20	85367	H26307T	11	CV	HGCV3A
7440-02-0	Nickel	0.050	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7782-49-2	Selenium	0.050	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7440-22-4	Silver	0.025	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A
7440-66-6	Zinc	0.050	ND	1	50	50	10/07/20	85367	T26307A4	14	P	PEICP4A

Comments: \_\_\_\_\_  
\_\_\_\_\_

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
P - ICP-AES  
CV -ColdVapor  
MS - ICP-MS

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/07/20  
 Data File: T26307A4  
 Prep Batch: 85367  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V- 336236-5		CCV V- 336236-12		CCV V- 336236-24		CCV V- 336236-32		CCV V- 336236-43		CCV V- 336236-50		Rec	Rec
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec				
Arsenic	5/5	0.49394	99	0.48121	96	0.49196	98	0.47851	96	0.49829	100	0.48444	97		
Barium	5/5	0.50694	101	0.50851	102	0.50600	101	0.50419	101	0.49929	100	0.51987	104		
Cadmium	5/5	0.51103	102	0.50970	102	0.50216	100	0.50146	100	0.49852	100	0.50891	102		
Copper	5/5	0.53067	106	0.53308	107	0.52657	105	0.53243	106	0.52759	106	0.54348	109		
Lead	5/5	0.53386	107	0.52534	105	0.52379	105	0.52295	105	0.53252	107	0.54301	109		
Nickel	5/5	0.53382	107	0.52978	106	0.52350	105	0.51660	103	0.51325	103	0.52174	104		
Selenium	5/5	0.52466	105	0.52171	104	0.53362	107	0.54036	108	0.54288	109	0.53368	107		
Silver	0.1/0.1	0.10438	104	0.10452	105	0.10286	103	0.10331	103	0.10454	105	0.10693	107		
Zinc	5/5	0.53433	107	0.53197	106	0.53043	106	0.52369	105	0.52450	105	0.53512	107		

**Notes:** a-indicates analyte failed the ICV limits for 6010D, 6020B  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B  
 d-indicates analyte failed the CCV limits Hg 7470A/7471B

**Qc Limits:** ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)  
 CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/07/20  
 Data File: T26307A4  
 Prep Batch: 85367  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333672	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-335291	Recovery	Low Limit	High Limit
Magnesium	5.0	4.47233	89	80	120	500	491.128	98	90	110
Silver	0.05	0.0497710	100	80	120	1	0.974831	97	90	110
Aluminum	1.0	1.01775	102	80	120	500	513.052	103	90	110
Arsenic	0.1	0.0849063	65	80	120	10	9.72760	97	90	110
Boron	0.2	0.219650	110	80	120	5	4.68746	94	90	110
Barium	0.25	0.260374	104	80	120	10	9.82616	98	90	110
Beryllium	0.012	0.0056594	47 a	80	120	5	4.65217	93	90	110
Calcium	5.0	4.20547	84	80	120	500	468.588	94	90	110
Cadmium	0.05	0.0487083	97	80	120	5	4.87009	97	90	110
Cobalt	0.1	0.0969040	97	80	120	5	4.27608	86 a	90	110
Chromium	0.1	0.0934880	93	80	120	10	9.32143	93	90	110
Copper	0.1	0.102418	102	80	120	10	10.7793	108	90	110
Silicon	0.1	0.119127	119	80	120	25	25.0428	100	90	110
Iron	1.0	0.981032	98	80	120	200	194.482	97	90	110
Zinc	0.1	0.0960553	96	80	120	10	8.69899	87 a	90	110
Manganese	0.1	0.103894	104	80	120	10	8.88581	89 a	90	110
Molybdenum	0.1	0.0946193	95	80	120	10	8.93166	89 a	90	110
Sodium	NA	22.9569		80	120	1000	1364.78	136 a	90	110
Nickel	0.1	0.0974934	97	80	120	10	8.56923	86 a	90	110
Lead	0.05	0.0464737	93	80	120	10	9.39877	94	90	110
Antimony	0.07	0.0674778	96	80	120	5	5.29142	106	90	110
Selenium	0.1	0.0914668	91	80	120	5	5.12248	102	90	110
Tin	0.1	0.101924	102	80	120	10	9.99586	100	90	110
Titanium	0.1	0.0983451	98	80	120	10	9.11194	91	90	110
Thallium	0.1	0.0949268	95	80	120	5	4.36734	87 a	90	110
Vanadium	0.1	0.0958925	96	80	120	10	9.17714	92	90	110
Potassium	NA	-8.05255		80	120	200	-1847.92	-920 a	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/07/20  
 Data File: T26307B4  
 Prep Batch: 85367  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: SCP Science

Analyte	ICV V- 336236-5		CCV V- 336236-12		CCV V- 336236- 24		CCV V- 336236- 32		CCV V- 336236- 39		Rec	Rec	Rec	Rec	
	Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec							
Beryllium	.5/5	0.50459	101	0.51522	103	0.50133	100	0.49737	99	0.48693	97				
Chromium	.5/5	0.53068	106	0.54366	109	0.52660	105	0.52623	105	0.51494	103				

**Notes:** a-indicates analyte failed the ICV limits for 6010D, 6020B  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B  
 d-indicates analyte failed the CCV limits Hg 7470A/7471B

**Qc Limits:** ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)  
 CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

## FORM 2 LLQCS/LRS Summary)

Date Analyzed: 10/07/20  
 Data File: T26307B4  
 Prep Batch: 85367  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-333872	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-335291	Recovery	Low Limit	High Limit
Magnesium	5.0	5.23269	105	80	120	500	483.428	97	90	110
Silver	0.05	0.0513416	103	80	120	1	0.950021	95	90	110
Aluminum	1.0	1.08207	108	80	120	500	522.921	105	90	110
Arsenic	0.1	0.103101	103	80	120	10	9.70855	97	90	110
Boron	0.2	0.223217	112	80	120	5	4.79964	96	90	110
Barium	0.25	0.269275	108	80	120	10	9.67514	97	90	110
Beryllium	0.012	0.0138899	116	80	120	5	4.58682	92	90	110
Calcium	5.0	5.15180	103	80	120	500	463.458	93	90	110
Cadmium	0.05	0.0539009	108	80	120	5	4.74775	95	90	110
Cobalt	0.1	0.102949	103	80	120	5	4.67626	94	90	110
Chromium	0.1	0.101631	102	80	120	10	8.80746	88 a	90	110
Copper	0.1	0.107780	108	80	120	10	10.6141	106	90	110
Silicon	0.1	0.122466	122 a	80	120	25	25.8648	103	90	110
Iron	1.0	0.928340	93	80	120	200	188.599	94	90	110
Zinc	0.1	0.104320	104	80	120	10	8.47585	85 a	90	110
Manganese	0.1	0.109866	110	80	120	10	9.16557	92	90	110
Molybdenum	0.1	0.101517	102	80	120	10	8.73613	87 a	90	110
Sodium	NA	23.1042		80	120	1000	1311.37	131 a	90	110
Nickel	0.1	0.102585	103	80	120	10	8.29996	83 a	90	110
Lead	0.05	0.0482782	97	80	120	10	9.22347	92	90	110
Antimony	0.07	0.0761319	109	80	120	5	5.19908	104	90	110
Selenium	0.1	0.111244	111	80	120	5	5.03493	101	90	110
Tin	0.1	0.103019	103	80	120	10	9.56392	96	90	110
Titanium	0.1	0.102916	103	80	120	10	9.44527	94	90	110
Thallium	0.1	0.0989551	99	80	120	5	4.35147	87 a	90	110
Vanadium	0.1	0.101993	102	80	120	10	8.89621	89 a	90	110
Potassium	NA	-6.97020		80	120	200	-1789.62	-890 a	90	110

**Notes:** a-indicates analyte is outside the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria



## FORM 2 (ICV/CCV Summary)

Date Analyzed: 10/08/20  
 Data File: H26307T  
 Prep Batch: 85367  
 Analytical Method: 6010D, 6020B, 7470A, 7471B  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: SCP Science

Analyte	ICV (2)-9		CCV-21		CCV-32		Rec	Rec	Rec	Rec	Rec
	Amt	Rec	Rec	Rec	Rec	Rec					
Mercury	20/10	20.12000	101	10.06000	101	10.08000	101				

**Notes:** a-indicates analyte failed the ICV limits for 6010D, 6020B  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B  
 d-indicates analyte failed the CCV limits Hg 7470A/7471B

**Qc Limits:** ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)  
 CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/07/20  
 Data File: T26307A4  
 Prep Batch: 85367  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-25	CCB V-333667-33	CCB V-333667-44	CCB V-333667-51	MB 85367 (1)-14	EF-V-335534-22
Arsenic	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Barium	.125U	.25U	.25U	.25U	.25U	.25U	.13U	.25U
Cadmium	.025U	.05U	.05U	.05U	.05U	.05U	.025U	.05U
Copper	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Lead	.025U	.05U	.05U	.05U	.05U	.05U	.025U	.05U
Nickel	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Selenium	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U
Silver	.025U	.05U	.05U	.05U	.05U	.05U	.025U	.05U
Zinc	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.1U

Analyte	EF-V-336139-23
Arsenic	.1U
Barium	.25U
Cadmium	.05U
Copper	.1U
Lead	.05U
Nickel	.1U
Selenium	.1U
Silver	.05U
Zinc	.1U

**Notes:** a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.  
 for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/07/20  
 Data File: T26307B4  
 Prep Batch: 85367  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB V-333667-6	CCB V-333667-13	CCB V-333667-25	CCB V-333667-33	CCB V-333667-40	MB 85367 (1)-14	EF-V-335534-22	EF-V-336139-23
Beryllium	.006 U	.012 U	.012 U	.012 U	.012 U	.006 U	.012 U	.012 U
Chromium	.05 U	.1 U	.1 U	.1 U	.1 U	.05 U	.1 U	.1 U

**Notes:** a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.  
 for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

### FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/08/20  
 Data File: H26307T  
 Prep Batch: 85367  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: HGCV3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:

Analyte	ICB-10	CCB-22	CCB-33	MB 85367 (1)- 11	EF V-335534- 30	EF V-336139- 31
Mercury	.5U	.5U	.5U	.5U	.5U	.5U

**Notes:** a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.  
 for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/07/20  
 Data File: T26307A4  
 Prep Batch: 85367  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V- 336303-11		Rec	Rec	Rec	Rec	Rec	Rec	Rec
			Rec							
Aluminum	500	543.026	109							
Arsenic	0	U								
Barium	0	U								
Cadmium	0	U								
Calcium	500	501.664	100							
Copper	0	U								
Iron	200	204.65	102							
Lead	0	U								
Magnesium	500	530.257	106							
Nickel	0	U								
Selenium	0	U								
Silver	0	U								
Zinc	0	U								

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

**Qc Limits:** 200.7, 6020B < 2 \* Reporting Limit  
 6010D < Reporting Limit

## FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 10/07/20  
 Data File: T26307B4  
 Prep Batch: 85367  
 Reporting Limits Used: 6010D, 6020B, 7470A, 7471B  
 Instrument: PEICP4A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 0100230

Lab Name: Hampton-Clarke  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V- 336303-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	538.706	108						
Beryllium	0	U							
Calcium	500	478.335	96						
Chromium	0	U							
Iron	200	179.524	90						
Magnesium	500	504.694	101						

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits In the ICSA  
 b-indicates absolute value of the concentration above Reporting Limits but < 2 \* Reporting Limits in the ICSA  
 c-indicates the recovery failed the Qc Criteria in the ICSAB  
 u-indicates the absolute value of the concentration was below the reporting limit

**Qc Limits:** 200.7, 6020B < 2 \* Reporting Limit  
 6010D < Reporting Limit

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85367

**0100230 0403**

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: TCLP		SampleID: LCSW MR 85367						
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85367	1	T26307A4	16	0.5023	0.50	100	80	120	
Barium	85367	1	T26307A4	16	0.5268	0.50	105	80	120	
Cadmium	85367	1	T26307A4	16	0.5192	0.50	104	80	120	
Chromium	85367	1	T26307B4	16	0.5433	0.50	109	80	120	
Lead	85367	1	T26307A4	16	0.5341	0.50	107	80	120	
Mercury	85367	1	H26307T	13	10.8500	10	108	80	120	
Nickel	85367	1	T26307A4	16	0.5346	0.50	107	80	120	
Selenium	85367	1	T26307A4	16	0.5440	0.50	109	80	120	
Silver	85367	1	T26307A4	16	0.1057	0.100	106	80	120	

TxtQcType: LCS		Matrix: TCLP		SampleID: LCSW 85367						
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85367	1	T26307A4	15	0.5176	0.50	104	80	120	
Barium	85367	1	T26307A4	15	0.5311	0.50	106	80	120	
Cadmium	85367	1	T26307A4	15	0.5229	0.50	105	80	120	
Chromium	85367	1	T26307B4	15	0.5446	0.50	109	80	120	
Lead	85367	1	T26307A4	15	0.5415	0.50	108	80	120	
Mercury	85367	1	H26307T	12	10.9100	10	109	80	120	
Nickel	85367	1	T26307A4	15	0.5395	0.50	108	80	120	
Selenium	85367	1	T26307A4	15	0.5562	0.50	111	80	120	
Silver	85367	1	T26307A4	15	0.1064	0.100	106	80	120	

TxtQcType: MS		Matrix: TCLP		SampleID: AD19560-001									
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	85367	1	T26307A4	19	T26307A4	17	0.5259	0.1U	0.50	105	50		
Barium	85367	1	T26307A4	19	T26307A4	17	0.8250	0.3334	0.50	98	50		
Cadmium	85367	1	T26307A4	19	T26307A4	17	0.5416	0.05U	0.50	108	50		
Chromium	85367	1	T26307B4	19	T26307B4	17	0.5072	0.1U	0.50	101	50		
Lead	85367	1	T26307A4	19	T26307A4	17	0.4989	0.05U	0.50	100	50		
Mercury	85367	1	H26307T	16	H26307T	14	11.0500	0.50U	10	110	50		
Nickel	85367	1	T26307A4	19	T26307A4	17	0.5141	0.1U	0.50	103	50		
Selenium	85367	2	T26307A4	47	T26307A4	45	0.3028	0.1U	0.50	121	50		
Silver	85367	1	T26307A4	19	T26307A4	17	0.1301	0.05U	0.100	130	50		

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 85367

**0100230 0404**

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: TCLP		SampleID: AD19560-001								
Analyte	DF	Data File	Seq#	NS Data File	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T26307A4	20	T26307A4	17	0.5149	0.1U	0.5	103	75	125	
Barium	1	T26307A4	20	T26307A4	17	0.7944	0.3334	0.5	92	75	125	
Cadmium	1	T26307A4	20	T26307A4	17	0.5172	0.05U	0.5	103	75	125	
Chromium	1	T26307B4	20	T26307B4	17	0.4845	0.1U	0.5	97	75	125	
Lead	1	T26307A4	20	T26307A4	17	0.4780	0.05U	0.5	96	75	125	
Nickel	1	T26307A4	20	T26307A4	17	0.4939	0.1U	0.5	99	75	125	
Selenium	2	T26307A4	48	T26307A4	45	0.5880	0.1U	0.5	118	75	125	
Silver	1	T26307A4	20	T26307A4	17	0.1074	0.05U	0.1	107	75	125	

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4\*spike amount



**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 85367

**0100230 0405**

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: TCLP		SampleID: LCSW MR 85367					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85367	T26307A4	16	T26307A4	15	0.5023	0.5176	3	20
Barium	85367	T26307A4	16	T26307A4	15	0.5268	0.5311	.8	20
Cadmium	85367	T26307A4	16	T26307A4	15	0.5192	0.5229	.73	20
Chromium	85367	T26307B4	16	T26307B4	15	0.5433	0.5446	.23	20
Lead	85367	T26307A4	16	T26307A4	15	0.5341	0.5415	1.4	20
Mercury	85367	H26307T	13	H26307T	12	10.8500	10.9100	.55	20
Nickel	85367	T26307A4	16	T26307A4	15	0.5346	0.5395	.91	20
Selenium	85367	T26307A4	16	T26307A4	15	0.5440	0.5562	2.2	20
Silver	85367	T26307A4	16	T26307A4	15	0.1057	0.1064	.67	20

TxtQcType: MR		Matrix: TCLP		SampleID: AD19560-001					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	85367	T26307A4	18	T26307A4	17	0.1U	0.1U	---	20
Barium	85367	T26307A4	18	T26307A4	17	0.3305	0.3334	0.86	20
Cadmium	85367	T26307A4	18	T26307A4	17	0.05U	0.05U	---	20
Chromium	85367	T26307B4	18	T26307B4	17	0.1U	0.1U	---	20
Lead	85367	T26307A4	18	T26307A4	17	0.05U	0.05U	---	20
Mercury	85367	H26307T	15	H26307T	14	0.50U	0.50U	---	20
Nickel	85367	T26307A4	18	T26307A4	17	0.1U	0.1U	---	20
Selenium	85367	T26307A4	46	T26307A4	45	0.1U	0.1U	---	20
Silver	85367	T26307A4	18	T26307A4	17	0.05U	0.05U	---	20

TxtQcType: SD		Matrix: TCLP		SampleID: AD19560-001						
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Arsenic	85367	T26307A4	21	T26307A4	17	5	-0.0010	-0.0196	---	10
Barium	85367	T26307A4	21	T26307A4	17	5	0.0498	0.3334	25 a	10
Cadmium	85367	T26307A4	21	T26307A4	17	5	-0.0005	0.0009	---	10
Chromium	85367	T26307B4	21	T26307B4	17	5	0.0004	0.0012	---	10
Lead	85367	T26307A4	21	T26307A4	17	5	-0.0034	-0.0117	---	10
Nickel	85367	T26307A4	21	T26307A4	17	5	-0.0046	0.0096	---	10
Selenium	85367	T26307A4	49	T26307A4	45	5	-0.0144	0.0213	---	10
Silver	85367	T26307A4	21	T26307A4	17	5	0.0026	0.0155	15 c	10

a-Indicates Rpd Failed the criteria  
 b-Method Rep Out but concentrations < 5\*RL  
 c-Serial dilution Out but conc < 10 \* IDL

Hampton-Clarke

**ICP SAMPLE PREPARATION LOG**

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER

Batch No.: 26307  
 QC Number: 85367  
 Matrix: TCLP

Analyst: ANS  
 Prep Date: 10/7/20  
 Reviewed By: [Signature]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	↓	↓				--	
LCSD	↓	↓				--	
1. AD 19560-001					V-335534	19560-001	Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR ↓ -001	↓	↓			↓	↓	
MS ↓ -001	↓	↓			↓	↓	Balance used: N/A
MSD —	—	—			—	—	Pipettes used: 149, 155
2. 19582-001	50ml	50ml			V-335534	19560-001	
3. 19587-007	↓	↓			↓	↓	Hot Block used: 9
4. 19575-002	↓	↓			↓	↓	
5. 19595-013	↓	↓			↓	↓	
6. ↓ -014	↓	↓			↓	↓	
7. 19596-001	↓	↓			↓	↓	
8. 19605-002	↓	↓			V-336139	↓	
9. ↓ -003	10ml	↓			↓	↓	
10. 19601-001	50ml	↓			↓	↓	
11. ↓ -002	↓	↓			↓	↓	
12. ↓ -003	↓	↓			↓	↓	
13. Cf. V-335534 <sup>10/6</sup>	↓	↓					
14. Cf. V-336139 <sup>10/6</sup>	↓	↓					
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94.7 C (90-95° C) Start Time: 11:00am End Time: 2:00pm

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-13177, 13178
LLCS, LLLCSD		V- 335926
MS, MSD	0.25ml	V-13177, 13178
LLMS, LLMSD		V- 335926

Acid	Vol mL	Lot#
HNO <sub>3</sub>	30	V-13457
HCl		V-
H <sub>2</sub> O <sub>2</sub>		V-

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>		V-
1:1 HCl	5.0	V-331024

Relinquished By: ANS Date: 10/7/20  
 Received By: [Signature] Date: 10/8/2020

HG SAMPLE PREPARATION LOG

Hampton-Clark/Veritech

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER \_\_\_\_\_

Batch No.: 26307

Analyst: AVS

QC Number: 85367

Prep Date: 10/7/20

Matrix: TCLP

Review By: BR

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	25ml	25ml		CAL CURVE BLK Oppb V- 336260
LCS	↓	↓		
LCSD	↓	↓		STD 0.2 ppb V- 336261
1 AD19560-001	↓	↓		STD 0.5 ppb V- 336262
MR ↓ -001	↓	↓		STD 1.0 ppb V- 336263
MS ↓ -001	↓	↓		STD 2.0 ppb V- 336264
MSD —	—	—		STD 5.0 ppb V- 336265
2 19582-001	25ml	25ml		STD 10.0 ppb V- 336266
3 19587-007	↓	↓		STD 25.0 ppb V- 336267
4 19575-002	↓	↓		ICV 10.0 ppb V- 336258
5 19595-013	↓	↓		CCV 20.0 ppb V- 336259
6 ↓ -014	↓	↓		
7 19596-001	↓	↓		
8 19605-002	↓	↓		Balance used: N/A
9 ↓ -003	5ml	↓		Pipettes used: 159, 143
10 19601-001	25ml	↓		
11 ↓ -002	↓	↓		Hot Block used: 6
12 ↓ -003	↓	↓		
13 EF.V-335534 <sup>10/6</sup>	↓	↓		
14 EF.V-336139 <sup>10/6</sup>	↓	↓		
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
KmnO <sub>4</sub> V- 335298	3.75	HNO <sub>3</sub>	0.625	V- 13427
K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> V- 324154	2.0	HCl		V-
NH <sub>4</sub> OH V- 334567	1.5	H <sub>2</sub> SO <sub>4</sub>	1.25	V- 13444
		Aqua Regia		V-

\*\*Block Temp: 32.9 °C  
 Time In Block: 11:30am  
 Time Out of Block: 1:30pm

Spike Volume & Lot #  
 LCS v. 336217 0.15ml (0.2ml)  
 MS v. 336217 0.250ml  
 Standards/Control Batch B- 29803

Start time: 11:00am End Time: 2:00pm

\*\*Temperature  
 245.1/7470A: 90-95C  
 7471B: 92-98C

Relinquished By: AVS

\*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriproq using the standard batch number and the corresponding V #s.

# Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\T26307A4.txt

Analysis Date: 10/07/20

Instrument: PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	1	CAL	15:27	1							V-333667(ICB/CCB)
CALST2 V-333672	1	CAL	15:31	2							V-333672(LLICV/CCV leachate)
CALST3 V-336234	1	CAL	15:35	3							V-336234(ICS3 - Middle Std)
CALST4 V-336235	1	CAL	15:39	4							V-336235(ICS4 High std)
ICV V-336236	1	ICV	15:44	5						Cr FAILED	V-336236(CCV)
ICB V-333667	1	ICB	15:48	6							V-333667(ICB/CCB)
LRS V-335291	1	LRS	15:52	7	METALS-TCLP	TCLP	TCLP	SW846	85367		V-335291(LRS 1/2 Fe)
ICS3 V-336234	1	ICS	15:56	8							V-336234(ICS3 - Middle Std)
RINSE	1	SMP	16:00	9		TCLP	TCLP	SW846	85367		0
LLICV V-333672	1	LLICV	16:04	10	METALS-TCLP	TCLP	TCLP	SW846	85367	Be FAILED	V-333672(LLICV/CCV leachate)
ICSA V-336303	1	ICSA	16:08	11							V-336303(ICSA)
CCV V-336236	1	CCV	16:13	12							V-336236(CCV)
CCB V-333667	1	CCB	16:17	13							V-333667(ICB/CCB)
MB 85367 (1)	1	MB	16:20	14	METALS-TCLP	TCLP	TCLP	SW846	85367		0
LCSW 85367	1	LCS	16:24	15	METALS-TCLP	TCLP	TCLP	SW846	85367		0
LCSW MR 85367	1	LCS	16:28	16	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	1	SMP	16:32	17	METALS-TCLP	TCLP	TCLP	SW846	85367	Se,Zn NOT REPORTED>LR	0
AD19560-001	1	MR	16:36	18	METALS-TCLP	TCLP	TCLP	SW846	85367	Se,Zn NOT REPORTED>LR	0
AD19560-001	1	MS	16:40	19	METALS-TCLP	TCLP	TCLP	SW846	85367	Se,Zn NOT REPORTED>LR	0
AD19560-001	1	PS	16:45	20	METALS-TCLP	TCLP	TCLP	SW846	85367	Se,Zn NOT REPORTED>LR	0
AD19560-001	5	SD	16:50	21	METALS-TCLP	TCLP	TCLP	SW846	85367	Se,Zn NOT REPORTED>LR	0
EF-V-335534	1	EF	16:54	22	METALS-TCLP	TCLP	TCLP	SW846	85367		V-335534(EF-1 WARNING)
EF-V-336139	1	EF	16:58	23	METALS-TCLP	TCLP	TCLP	SW846	85367		V-336139(EF-1 WARNING)
CCV V-336236	1	CCV	17:02	24							V-336236(CCV)
CCB V-333667	1	CCB	17:06	25							V-333667(ICB/CCB)
AD19582-001	1	SMP	17:10	26	METALS-TCLP	TCLP	TCLP	SW846	85367	Se,Zn NOT REPORTED>LR	0
AD19587-007	1	SMP	17:14	27	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn NOT REPORTED>LR	0
AD19575-002	1	SMP	17:18	28	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19595-013	1	SMP	17:22	29	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19595-014	1	SMP	17:26	30	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19596-001	1	SMP	17:30	31	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn NOT REPORTED>LR	0
CCV V-336236	1	CCV	17:35	32							V-336236(CCV)
CCB V-333667	1	CCB	17:39	33							V-333667(ICB/CCB)
AD19605-002	1	SMP	17:43	34	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19605-003	1	SMP	17:47	35	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-001	1	SMP	17:51	36	METALS-TCLP	TCLP	TCLP	SW846	85367	Pb NOT REPORTED>LR	0
AD19601-002	1	SMP	17:55	37	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-003	1	SMP	18:00	38	METALS-TCLP	TCLP	TCLP	SW846	85367	Pb NOT REPORTED>LR	0
AD19601-001	5	SMP	18:04	39	METALS-TCLP	TCLP	TCLP	SW846	85367	Pb REPORTED	0
AD19601-003	100	NA	18:08	40	METALS-TCLP	TCLP	TCLP	SW846	85367	MISSED CUP	0
AD19601-003	100	SMP	18:12	41	METALS-TCLP	TCLP	TCLP	SW846	85367	Pb REPORTED	0
AD19582-001	2	SMP	18:16	42	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn,Se REPORTED	0
CCV V-336236	1	CCV	18:20	43							V-336236(CCV)
CCB V-333667	1	CCB	18:24	44							V-333667(ICB/CCB)
AD19560-001	2	SMP	18:28	45	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn,Se REPORTED	0
AD19560-001	2	MR	18:32	46	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn,Se REPORTED	0
AD19560-001	2	MS	18:37	47	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn,Se REPORTED	0
AD19560-001	2	PS	18:41	48	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn,Se REPORTED	0
AD19560-001	2	SD	18:45	49	METALS-TCLP	TCLP	TCLP	SW846	85367	Zn,Se REPORTED	0
CCV V-336236	1	CCV	18:49	50							V-336236(CCV)
CCB V-333667	1	CCB	18:53	51							V-333667(ICB/CCB)

Comments/Reviewedby:

carmela  
192.168.1.89 10/8/2020 6:24:45 AM

OK  
ALL ELEMENTS REPORTED  
Cr,Be NOT REPORTED

*carmela 10/8/20*

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

# Run Log

Data File: W\METALS.FRM\ICPDATA\New\PEICP4A\T26307B4.txt

Analysis Date: 10/07/20

Instrument: PEICP4A

Sample Id	Qc DF Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-333667	I CAL	18:56	1							V-333667(ICB/CCB)
CALST2 V-333672	I CAL	19:00	2							V-333672(LLICV/CCV leachate)
CALST3 V-336234	I CAL	19:04	3							V-336234(ICS3 - Middle Std)
CALST4 V-336235	I CAL	19:08	4							V-336235(ICS4 High std)
ICV V-336236	I ICV	19:12	5							V-336236(CCV)
ICB V-333667	I ICB	19:16	6							V-333667(ICB/CCB)
LRS V-335291	I LRS	19:20	7		TCLP	TCLP	SW846	85367		V-335291(LRS 1/2 Fe)
ICS3 V-336234	I ICS	19:25	8							V-336234(ICS3 - Middle Std)
RINSE	I SMP	19:29	9		TCLP	TCLP	SW846	85367		0
LLICV V-333672	I LLICV	19:33	10		TCLP	TCLP	SW846	85367		V-333672(LLICV/CCV leachate)
ICSA V-336303	I ICSA	19:37	11							V-336303(ICSA)
CCV V-336236	I CCV	19:41	12							V-336236(CCV)
CCB V-333667	I CCB	19:45	13							V-333667(ICB/CCB)
MB 85367 (1)	I MB	19:49	14		TCLP	TCLP	SW846	85367		0
LCSW 85367	I LCS	19:53	15		TCLP	TCLP	SW846	85367		0
LCSW MR 85367	I LCS	19:57	16		TCLP	TCLP	SW846	85367		0
AD19560-001	I SMP	20:01	17	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	I MR	20:05	18	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	I MS	20:09	19	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	I PS	20:13	20	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	5 SD	20:17	21	METALS-TCLP	TCLP	TCLP	SW846	85367		0
EF-V-335534	I EF	20:22	22		TCLP	TCLP	SW846	85367		V-335534(EF-1 WARNING)
EF-V-336139	I EF	20:25	23		TCLP	TCLP	SW846	85367		V-336139(EF-1 WARNING)
CCV V-336236	I CCV	20:29	24							V-336236(CCV)
CCB V-333667	I CCB	20:33	25							V-333667(ICB/CCB)
AD19582-001	I SMP	20:37	26	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19587-007	I SMP	20:41	27	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19575-002	I SMP	20:45	28	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19595-013	I SMP	20:49	29	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19595-014	I SMP	20:53	30	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19596-001	I SMP	20:57	31	METALS-TCLP	TCLP	TCLP	SW846	85367		0
CCV V-336236	I CCV	21:01	32							V-336236(CCV)
CCB V-333667	I CCB	21:05	33							V-333667(ICB/CCB)
AD19605-002	I SMP	21:09	34	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19605-003	I SMP	21:14	35	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-001	I SMP	21:17	36	METALS-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-002	I SMP	21:22	37	METALS-TCLP	TCLP	TCLP	SW846	85367	Cr NOT REPORTED>LR	0
AD19601-003	I SMP	21:27	38	METALS-TCLP	TCLP	TCLP	SW846	85367		0
CCV V-336236	I CCV	21:31	39							V-336236(CCV)
CCB V-333667	I CCB	21:35	40							V-333667(ICB/CCB)

Comments/Reviewedby:

carabela  
192.168.1.89 10/8/2020 6:53:09 AM

OK  
Cr,Be REPORTED

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

10/8/20

## Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H26307T.txt

Analysis Date: 10/08/20

Instrument: HGCV3A

Sample Id	Qc DF	Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:23	1							0
2 PPB	1	CAL	12:24	2							0
5 PPB	1	CAL	12:26	3							0
1 PPB	1	CAL	12:27	4							0
2 PPB	1	CAL	12:28	5							0
5 PPB	1	CAL	12:30	6							0
10 PPB	1	CAL	12:31	7							0
25 PPB	1	CAL	12:33	8							0
ICV (2)	1	ICV	12:35	9							0
ICB	1	ICB	12:36	10							0
MB 85367 (1)	1	MB	12:38	11	HG-TCLP	TCLP	TCLP	SW846	85367		0
LCS 85367	1	LCS	12:39	12	HG-TCLP	TCLP	TCLP	SW846	85367		0
LCS 85367 MR	1	LCS	12:41	13	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	1	SMP	12:42	14	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	1	MR	12:44	15	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19560-001	1	MS	12:45	16	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19582-001	1	SMP	12:47	17	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19587-007	1	SMP	12:48	18	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19575-002	1	SMP	12:49	19	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19595-013	1	SMP	12:51	20	HG-TCLP	TCLP	TCLP	SW846	85367		0
CCV	1	CCV	12:52	21							0
CCB	1	CCB	12:54	22							0
AD19595-014	1	SMP	12:55	23	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19596-001	1	SMP	12:57	24	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19605-002	1	SMP	12:58	25	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19605-003	1	SMP	12:59	26	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-001	1	SMP	13:01	27	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-002	1	SMP	13:02	28	HG-TCLP	TCLP	TCLP	SW846	85367		0
AD19601-003	1	SMP	13:03	29	HG-TCLP	TCLP	TCLP	SW846	85367		0
EF V-335534	1	EF	13:04	30	HG-TCLP	TCLP	TCLP	SW846	85367		V-335534(EF-1 WARNING)
EF V-336139	1	EF	13:06	31	HG-TCLP	TCLP	TCLP	SW846	85367		V-336139(EF-1 WARNING)
CCV	1	CCV	13:07	32							0
CCB	1	CCB	13:09	33							0

Comments/Reviewedby:


bransaw  
192 168 1 120 10/8/2020 1:23:59 PM

OK

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

v-336364



## **Wet Chemistry Data**

**VERITECH Wet Chem Form1 Analysis Summary**  
**% Solids**

**TestGroupName: % Solids SM2540G**

**Project #: 0100230**

**TestGroup: %SOLIDS**

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD19595-001	HSI-SB-05(4.5-5)	Soil/Terracore	1	86	Percent			10/05/20	10/02/20	09/30/20
AD19595-002	HSI-SB-06(4.5-5)	Soil/Terracore	1	85	Percent			10/05/20	10/02/20	09/30/20
AD19595-003	HSI-SB-07(4.5-5)	Soil/Terracore	1	86	Percent			10/05/20	10/02/20	09/30/20
AD19595-004	HSI-SB-08(3.5-4)	Soil/Terracore	1	87	Percent			10/05/20	10/02/20	10/01/20
AD19595-005	HSI-SB-08(8-8.5)	Soil/Terracore	1	82	Percent			10/05/20	10/02/20	10/01/20
AD19595-006	HSI-SB-08(12-13)	Soil/Terracore	1	76	Percent			10/05/20	10/02/20	10/01/20
AD19595-007	HSI-SB-08(13-13)	Soil/Terracore	1	77	Percent			10/05/20	10/02/20	10/01/20
AD19595-008	HSI-SB-09(14-14)	Soil/Terracore	1	80	Percent			10/05/20	10/02/20	10/01/20
AD19595-009	HSI-SB-10(5.5-6)	Soil/Terracore	1	89	Percent			10/05/20	10/02/20	10/01/20
AD19595-010	HSI-SB-10(7-7.5)	Soil/Terracore	1	83	Percent			10/05/20	10/02/20	10/01/20
AD19595-011	HSI-SB-10(8-8.5)	Soil/Terracore	1	82	Percent			10/05/20	10/02/20	10/01/20
AD19595-012	HSI-SB-D2	Soil/Terracore	1	76	Percent			10/05/20	10/02/20	10/01/20
AD19595-013	HSI-WC-NH	Soil	1	86	Percent			10/05/20	10/02/20	10/01/20
AD19595-014	HSI-WC-H	Soil	1	83	Percent			10/05/20	10/02/20	10/01/20



## % Solids Report

Analysis Type: SOLIDS-SS  
BatchID: SOLIDS-SS-11039

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD19575-001	85	84.83965	Percent	1.35	15.07	12.99	10/05/20	BEENA	0.063	5
Sample	AD19575-001	85	84.89270	Percent	1.34	12.99	11.23	10/05/20	BEENA		
Sample	AD19575-002	85	84.95238	Percent	1.35	11.85	10.27	10/05/20	BEENA		
Sample	AD19582-001	87	87.45946	Percent	1.35	10.60	9.44	10/05/20	BEENA		
Sample	AD19587-007	97	97.30216	Percent	1.34	6.90	6.75	10/05/20	BEENA		
Sample	AD19595-001	86	86.00605	Percent	1.34	14.56	12.71	10/05/20	BEENA		
Sample	AD19595-002	85	84.95575	Percent	1.35	12.65	10.95	10/05/20	BEENA		
Sample	AD19595-003	86	85.76481	Percent	1.35	12.66	11.05	10/05/20	BEENA		
Sample	AD19595-004	87	86.74569	Percent	1.36	10.64	9.41	10/05/20	BEENA		
Sample	AD19595-005	82	82.12670	Percent	1.36	14.62	12.25	10/05/20	BEENA		
Sample	AD19595-006	76	75.68523	Percent	1.35	12.66	9.91	10/05/20	BEENA		
Sample	AD19595-007	77	77.10938	Percent	1.35	14.15	11.23	10/05/20	BEENA		
Sample	AD19595-008	80	80.25751	Percent	1.35	10.67	8.84	10/05/20	BEENA		
Sample	AD19595-009	89	88.56640	Percent	1.34	12.71	11.41	10/05/20	BEENA		
Sample	AD19595-010	83	83.33333	Percent	1.36	17.38	14.71	10/05/20	BEENA		
Sample	AD19595-011	82	81.58436	Percent	1.34	11.06	9.27	10/05/20	BEENA		
Sample	AD19595-012	76	75.99143	Percent	1.35	10.68	8.43	10/05/20	BEENA		
Sample	AD19595-013	86	86.06742	Percent	1.35	14.70	12.84	10/05/20	BEENA		
Sample	AD19595-014	83	83.46526	Percent	1.36	12.73	10.85	10/05/20	BEENA		
Sample	AD19596-001	86	86.36771	Percent	1.34	12.49	10.97	10/05/20	BEENA		
Sample	AD19596-002	83	82.50444	Percent	1.35	12.61	10.64	10/05/20	BEENA		

\* - Indicates Failed Rpd Criteria

## **Miscellaneous Data**

ZERO HEADSPACE EXTRACTION- SAMPLE ENTRY

Sample ID	Vessel #	Initial Pressure	Final Pressure	Ext. Fluid #	Wt/Vol. Of Sample	Start Date	Start Time	Finish Date	Finish Time	Ext. Type	pH of HCl preserv vial	Analys (s)	Transfer To**	Transfer To**	Comments
AD19587	# 33	10	10	13084	25.8 500ml	10/02/00	9:57 pm	10/03/00	12:15 pm	SRP	OK				
AD19587	# 04				26.2 500ml										
AD19587	# 10				24.4 500ml										
AD19587	# 24				24.4 500ml										
AD19587	# 02				26.8 500ml										
AD19587	# 05				20.3 500ml										
AD19587	# 22	10	10	135534	25.8 500ml	10/02/00	10:49 pm	10/06/00	10:42 pm	TCLP	L2	JP			
AD19587	# 18				25.8 500ml										
AD19587	# 11														
AD19587	# 13														
AD19587	# 9														
AD19587	# 37														
AD19587	# 19														AD19587-05

\*Ext. Type TCLP-T ASTM-A SPLP-S MEP - M  
 \*\* Initials of person taking custody of extractions

LEACHATE PREPARATION LOG  
(TCCLP, SPLP)

Start Date: 10/5/00 TIME: 14:33 Finish Date: 10/6/00

\*\*\*TCCLP Ext. Fluid #1 pH: 4.90 (criteria: 4.83 ± 0.05)  
 \*\*\*TCCLP Ext. Fluid #2 pH: \_\_\_\_\_ (criteria: 2.88 ± 0.05)  
 \*\*\*SPLP Ext. Fluid #3 pH: \_\_\_\_\_ (criteria: 4.20 ± 0.05)

Sample #	pH (units)	pH in HCl (units)	Final pH (units)	Ext. Fluid (number)	WR/Vol of Sample (g or mL)	Start Time	Finish Time	Fiber Time	Analyst (s)	Ext. Type*	Comments
19560 - 001	8.83	1.33	6.05	335534	150g/3L	16:10	9:10	9:45	EF	T	Balance ID: 037 pH Meter ID: B-38168 MET + DRG
19595 - 013	5.38	1.34	4.86								
↓ - 014	5.26	1.35	4.84					10:25			Pipette ID: 155 MET
19582 - 001	9.17	1.61	5.99		100g/2L						MET
19587 - 007	10.13	1.39	5.02					10:45			
19595 - 003	6.48	1.33	4.89					10:55			
19596 - 001	9.61	1.47	5.23								
EF1335534	4.90	-	4.86		3L						
19B05-003.	7.54	1.51	4.89	336139	150g/3L	18:40	11:00	11:30			Net/org sludge 50% solid 50% liquid
-D02	7.39	1.49	4.90					12:00			
19601 - 001	7.77	1.53	4.91		100g/2L			11:50			MET
↓ - 002	10.62	1.67	10.44								
↓ - 003	10.44	1.77	7.77		50g/1L			12:00			
EF1336139	4.97	-	4.85		3L			11:30			

\*Ext. Type: TCCLP = T (Method 1311) LAMP-L (Methods 1311 / ANSINEMA CRILL 1258-2003)  
 SPLP = P (Method 1312) MEP-M (Method 1320)  
 ZIE = Z (Method 1311/1312)

\*\* The pH of the extraction fluid must be checked prior to use and must be within limits specified above



Last Page of Report

**ATTACHMENT H**

**CRAWL SPACE AIR, OUTDOOR AIR, AND SOIL VAPOR SAMPLE LABORATORY  
ANALYTICAL REPORT**

## Certificate of Analysis

### *Final Report*

Laboratory Order ID 2011167

Client Name:	Chesapeake Geosciences, Inc.	Date Received:	October 8, 2020 14:02
	5405 Twin Knolls Rd., Suite 1	Date Issued:	October 22, 2020 14:22
	Columbia, MD 21045	Project Number:	CG-09-0423.10
Submitted To:	Nancy Love	Purchase Order:	CG09042310MS

Client Site I.D.: Montgomery Brothers

Enclosed are the results of analyses for samples received by the laboratory on 10/08/2020 14:02. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,



Ted Soyars  
Technical Director

#### End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Enthalpy Analytical, Inc.



## Certificate of Analysis

### Final Report

Laboratory Order ID 201167

Client Name:	Chesapeake Geosciences, Inc.	Date Received:	October 8, 2020 14:02
	5405 Twin Knolls Rd., Suite 1	Date Issued:	October 22, 2020 14:22
	Columbia, MD 21045	Project Number:	CG-09-0423.10
Submitted To:	Nancy Love	Purchase Order:	CG09042310MS
Client Site I.D.:	Montgomery Brothers		

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SMP-VMP-10	201167-01	Air	10/07/2020 15:16	10/08/2020 14:02
SMP-VMP-D	201167-03	Air	10/07/2020 05:00	10/08/2020 14:02
SMP-VMP-11	201167-04	Air	10/07/2020 16:07	10/08/2020 14:02
SMP-VMP-12	201167-05	Air	10/07/2020 13:58	10/08/2020 14:02
SMP-VMP-13	201167-06	Air	10/07/2020 15:05	10/08/2020 14:02
HSI-105M-CSA	201167-07	Air	10/07/2020 12:00	10/08/2020 14:02
HSI-105R-CSA	201167-08	Air	10/07/2020 12:06	10/08/2020 14:02
HSI-107M-CSA	201167-09	Air	10/07/2020 12:35	10/08/2020 14:02
HIS-107R-CSA	201167-10	Air	10/07/2020 16:17	10/08/2020 14:02
HSI-OAA	201167-11	Air	10/07/2020 14:58	10/08/2020 14:02



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## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-10**  
  
**Sample ID: 20I1167-01**  
Sample Matrix: Air  
Sampled: 10/7/2020 15:16  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 18171  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 2  
Receipt Vacuum(in Hg): 2  
Flow Controller Type: Passive  
Flow Controller ID: 2710

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.40		ND	1.1	2.2	2	1	10/14/20 18:35	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.40		ND	1.4	2.7	2	1	10/14/20 18:35	DFH
1,1,2,2-Tetrachloroethane	17.9	0.20	0.40		120	1.4	2.7	2	1	10/14/20 18:35	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.40		ND	1.5	3.1	2	1	10/14/20 18:35	DFH
1,1,2-Trichloroethane	0.59	0.20	0.40		3.2	1.1	2.2	2	1	10/14/20 18:35	DFH
1,1-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/14/20 18:35	DFH
1,1-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/14/20 18:35	DFH
1,2,4-Trichlorobenzene	ND	0.20	1.00		ND	1.5	7.4	2	1	10/14/20 18:35	DFH
1,2,4-Trimethylbenzene	0.81	0.20	0.40		4.0	0.98	2.0	2	1	10/14/20 18:35	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.40		ND	1.5	3.1	2	1	10/14/20 18:35	DFH
1,2-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/14/20 18:35	DFH
1,2-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/14/20 18:35	DFH
1,2-Dichloropropane	ND	0.20	0.40		ND	0.92	1.8	2	1	10/14/20 18:35	DFH
1,2-Dichlorotetrafluoroethane	0.34	0.20	0.40	J	2.4	1.4	2.8	2	1	10/14/20 18:35	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/14/20 18:35	DFH
1,3-Butadiene	ND	0.20	0.40		ND	0.44	0.88	2	1	10/14/20 18:35	DFH
1,3-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/14/20 18:35	DFH
1,4-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/14/20 18:35	DFH
1,4-Dioxane	ND	0.20	0.40		ND	0.72	1.4	2	1	10/14/20 18:35	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/14/20 18:35	DFH
2-Butanone (MEK)	0.50	0.20	0.40		1.5	0.59	1.2	2	1	10/14/20 18:35	DFH
2-Chlorotoluene	ND	0.20	0.40		ND	1.0	2.1	2	1	10/14/20 18:35	DFH
2-Hexanone (MBK)	ND	0.20	0.40		ND	0.82	1.6	2	1	10/14/20 18:35	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.40		ND	2.3	4.6	2	1	10/14/20 18:35	DFH
Acetone	2.92	0.20	1.00		6.9	0.48	2.4	2	1	10/14/20 18:35	DFH
Acrolein	ND	0.20	0.40		ND	0.46	0.92	2	1	10/14/20 18:35	DFH
Allyl chloride	ND	0.20	0.40		ND	0.63	1.3	2	1	10/14/20 18:35	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-10**  
  
**Sample ID: 201167-01**  
Sample Matrix: Air  
Sampled: 10/7/2020 15:16  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 18171  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 2  
Receipt Vacuum(in Hg): 2  
Flow Controller Type: Passive  
Flow Controller ID: 2710

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	ND	0.20	0.40		ND	0.64	1.3	2	1	10/14/20 18:35	DFH
Benzyl Chloride	ND	0.20	0.40		ND	1.0	2.1	2	1	10/14/20 18:35	DFH
Bromodichloromethane	0.87	0.20	0.40		5.8	1.3	2.7	2	1	10/14/20 18:35	DFH
Bromoform	ND	0.20	0.40		ND	2.1	4.1	2	1	10/14/20 18:35	DFH
Bromomethane	ND	0.20	0.40		ND	0.78	1.6	2	1	10/14/20 18:35	DFH
Carbon Disulfide	1.52	0.20	1.00		4.7	0.62	3.1	2	1	10/14/20 18:35	DFH
Carbon Tetrachloride	ND	0.20	0.40		ND	1.3	2.5	2	1	10/14/20 18:35	DFH
Chlorobenzene	ND	0.20	0.40		ND	0.92	1.8	2	1	10/14/20 18:35	DFH
Chloroethane	ND	0.20	0.40		ND	0.53	1.1	2	1	10/14/20 18:35	DFH
Chloroform	6.34	0.20	0.40		31	0.98	2.0	2	1	10/14/20 18:35	DFH
Chloromethane	ND	0.20	0.40		ND	0.41	0.83	2	1	10/14/20 18:35	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/14/20 18:35	DFH
cis-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/14/20 18:35	DFH
Cyclohexane	ND	0.20	0.40		ND	0.69	1.4	2	1	10/14/20 18:35	DFH
Dibromochloromethane	ND	0.20	0.40		ND	1.7	3.4	2	1	10/14/20 18:35	DFH
Dichlorodifluoromethane	0.31	0.20	1.00	J	1.5	0.99	4.9	2	1	10/14/20 18:35	DFH
Ethanol	1.34	0.20	1.00		2.5	0.38	1.9	2	1	10/14/20 18:35	DFH
Ethyl acetate	ND	0.20	0.40		ND	0.72	1.4	2	1	10/14/20 18:35	DFH
Ethylbenzene	0.28	0.20	0.40	J	1.2	0.87	1.7	2	1	10/14/20 18:35	DFH
Heptane	ND	0.20	0.40		ND	0.82	1.6	2	1	10/14/20 18:35	DFH
Hexachlorobutadiene	ND	0.20	1.00		ND	2.1	11	2	1	10/14/20 18:35	DFH
Hexane	ND	0.20	0.40		ND	0.70	1.4	2	1	10/14/20 18:35	DFH
Isooctane	ND	0.20	0.40		ND	0.93	1.9	2	1	10/14/20 18:35	DFH
Isopropyl alcohol	ND	0.20	1.00		ND	0.49	2.5	2	1	10/14/20 18:35	DFH
Isopropylbenzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/14/20 18:35	DFH
m+p-Xylenes	0.92	0.20	0.80		4.0	0.87	3.5	2	1	10/14/20 18:35	DFH
Methyl methacrylate	ND	0.20	0.40		ND	0.82	1.6	2	1	10/14/20 18:35	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-10**  
  
**Sample ID: 201167-01**  
Sample Matrix: Air  
Sampled: 10/7/2020 15:16  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 18171  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 2  
Receipt Vacuum(in Hg): 2  
Flow Controller Type: Passive  
Flow Controller ID: 2710

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	ND	0.20	2.00		ND	0.69	6.9	2	1	10/14/20 18:35	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.40		ND	0.72	1.4	2	1	10/14/20 18:35	DFH
Naphthalene	0.45	0.20	0.40		2.3	1.0	2.1	2	1	10/14/20 18:35	DFH
n-Nonane (C9)	ND	0.20	0.40		ND	1.0	2.1	2	1	10/14/20 18:35	DFH
n-Propylbenzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/14/20 18:35	DFH
o-Xylene	0.85	0.20	0.40		3.7	0.87	1.7	2	1	10/14/20 18:35	DFH
n-Pentane (C5)	0.30	0.20	0.40	J	0.89	0.59	1.2	2	1	10/14/20 18:35	DFH
Propylene	ND	0.20	0.40		ND	0.34	0.69	2	1	10/14/20 18:35	DFH
Styrene	ND	0.20	0.40		ND	0.85	1.7	2	1	10/14/20 18:35	DFH
TBA	0.64	0.20	1.00	J	1.9	0.61	3.0	2	1	10/14/20 18:35	DFH
Tetrachloroethylene (PCE)	86.9	2.00	4.00		590	14	27	20	1	10/14/20 15:24	DFH
Tetrahydrofuran	0.81	0.20	0.40		2.4	0.59	1.2	2	1	10/14/20 18:35	DFH
Toluene	0.53	0.20	0.40		2.0	0.75	1.5	2	1	10/14/20 18:35	DFH
trans-1,2-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/14/20 18:35	DFH
trans-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/14/20 18:35	DFH
Trichloroethylene	3.49	0.20	0.40		19	1.1	2.1	2	1	10/14/20 18:35	DFH
Trichlorofluoromethane	0.21	0.20	0.40	J	1.2	1.1	2.2	2	1	10/14/20 18:35	DFH
Vinyl acetate	ND	0.20	0.40		ND	0.70	1.4	2	1	10/14/20 18:35	DFH
Vinyl bromide	ND	0.20	0.40		ND	0.87	1.7	2	1	10/14/20 18:35	DFH
Vinyl chloride	ND	0.20	0.40		ND	0.51	1.0	2	1	10/14/20 18:35	DFH
Xylenes, Total	1.77	0.20	1.20		7.7	0.87	5.2	2	1	10/14/20 18:35	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	87.4				80-120					10/14/20 15:24	
4-Bromofluorobenzene (Surr)	93.9				80-120					10/14/20 18:35	

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## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-D**  
  
**Sample ID: 20I1167-03**  
Sample Matrix: Air  
Sampled: 10/7/2020 05:00  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 20588  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 1  
Receipt Vacuum(in Hg): 1  
Flow Controller Type: Passive  
Flow Controller ID: 3477

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.40		ND	1.1	2.2	2	1	10/15/20 3:00	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.40		ND	1.4	2.7	2	1	10/15/20 3:00	DFH
1,1,2,2-Tetrachloroethane	4.49	0.20	0.40		31	1.4	2.7	2	1	10/15/20 3:00	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.40		ND	1.5	3.1	2	1	10/15/20 3:00	DFH
1,1,2-Trichloroethane	0.26	0.20	0.40	J	1.4	1.1	2.2	2	1	10/15/20 3:00	DFH
1,1-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/15/20 3:00	DFH
1,1-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20 3:00	DFH
1,2,4-Trichlorobenzene	0.26	0.20	1.00	J	1.9	1.5	7.4	2	1	10/15/20 3:00	DFH
1,2,4-Trimethylbenzene	1.61	0.20	0.40		7.9	0.98	2.0	2	1	10/15/20 3:00	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.40		ND	1.5	3.1	2	1	10/15/20 3:00	DFH
1,2-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/15/20 3:00	DFH
1,2-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/15/20 3:00	DFH
1,2-Dichloropropane	ND	0.20	0.40		ND	0.92	1.8	2	1	10/15/20 3:00	DFH
1,2-Dichlorotetrafluoroethane	0.33	0.20	0.40	J	2.3	1.4	2.8	2	1	10/15/20 3:00	DFH
1,3,5-Trimethylbenzene	0.67	0.20	0.40		3.3	0.98	2.0	2	1	10/15/20 3:00	DFH
1,3-Butadiene	ND	0.20	0.40		ND	0.44	0.88	2	1	10/15/20 3:00	DFH
1,3-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/15/20 3:00	DFH
1,4-Dichlorobenzene	0.49	0.20	0.40		2.9	1.2	2.4	2	1	10/15/20 3:00	DFH
1,4-Dioxane	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 3:00	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/15/20 3:00	DFH
2-Butanone (MEK)	0.80	0.20	0.40		2.3	0.59	1.2	2	1	10/15/20 3:00	DFH
2-Chlorotoluene	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 3:00	DFH
2-Hexanone (MBK)	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 3:00	DFH
4-Methyl-2-pentanone (MIBK)	0.36	0.20	0.40	J	4.1	2.3	4.6	2	1	10/15/20 3:00	DFH
Acetone	5.20	0.20	1.00		12	0.48	2.4	2	1	10/15/20 3:00	DFH
Acrolein	0.25	0.20	0.40	J	0.58	0.46	0.92	2	1	10/15/20 3:00	DFH
Allyl chloride	ND	0.20	0.40		ND	0.63	1.3	2	1	10/15/20 3:00	DFH

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-D**  
  
**Sample ID: 201167-03**  
Sample Matrix: Air  
Sampled: 10/7/2020 05:00  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 20588  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 1  
Receipt Vacuum(in Hg): 1  
Flow Controller Type: Passive  
Flow Controller ID: 3477

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	ND	0.20	0.40		ND	0.64	1.3	2	1	10/15/20 3:00	DFH
Benzyl Chloride	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 3:00	DFH
Bromodichloromethane	3.19	0.20	0.40		21	1.3	2.7	2	1	10/15/20 3:00	DFH
Bromoform	ND	0.20	0.40		ND	2.1	4.1	2	1	10/15/20 3:00	DFH
Bromomethane	ND	0.20	0.40		ND	0.78	1.6	2	1	10/15/20 3:00	DFH
Carbon Disulfide	2.00	0.20	1.00		6.2	0.62	3.1	2	1	10/15/20 3:00	DFH
Carbon Tetrachloride	ND	0.20	0.40		ND	1.3	2.5	2	1	10/15/20 3:00	DFH
Chlorobenzene	0.51	0.20	0.40		2.3	0.92	1.8	2	1	10/15/20 3:00	DFH
Chloroethane	ND	0.20	0.40		ND	0.53	1.1	2	1	10/15/20 3:00	DFH
Chloroform	27.9	0.20	0.40		140	0.98	2.0	2	1	10/15/20 3:00	DFH
Chloromethane	ND	0.20	0.40		ND	0.41	0.83	2	1	10/15/20 3:00	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20 3:00	DFH
cis-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/15/20 3:00	DFH
Cyclohexane	ND	0.20	0.40		ND	0.69	1.4	2	1	10/15/20 3:00	DFH
Dibromochloromethane	0.23	0.20	0.40	J	2.0	1.7	3.4	2	1	10/15/20 3:00	DFH
Dichlorodifluoromethane	0.35	0.20	1.00	J	1.7	0.99	4.9	2	1	10/15/20 3:00	DFH
Ethanol	1.26	0.20	1.00		2.4	0.38	1.9	2	1	10/15/20 3:00	DFH
Ethyl acetate	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 3:00	DFH
Ethylbenzene	1.39	0.20	0.40		6.0	0.87	1.7	2	1	10/15/20 3:00	DFH
Heptane	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 3:00	DFH
Hexachlorobutadiene	ND	0.20	1.00		ND	2.1	11	2	1	10/15/20 3:00	DFH
Hexane	ND	0.20	0.40		ND	0.70	1.4	2	1	10/15/20 3:00	DFH
Isooctane	ND	0.20	0.40		ND	0.93	1.9	2	1	10/15/20 3:00	DFH
Isopropyl alcohol	0.86	0.20	1.00	J	2.1	0.49	2.5	2	1	10/15/20 3:00	DFH
Isopropylbenzene	0.38	0.20	0.40	J	1.9	0.98	2.0	2	1	10/15/20 3:00	DFH
m+p-Xylenes	5.82	0.20	0.80		25	0.87	3.5	2	1	10/15/20 3:00	DFH
Methyl methacrylate	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 3:00	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-D**  
  
**Sample ID: 201167-03**  
Sample Matrix: Air  
Sampled: 10/7/2020 05:00  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 20588  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 1  
Receipt Vacuum(in Hg): 1  
Flow Controller Type: Passive  
Flow Controller ID: 3477

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed		Analyst
	Results	MDL	LOQ		Results	MDL	LOQ					
Methylene chloride	0.32	0.20	2.00	J	1.1	0.69	6.9	2	1	10/15/20	3:00	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20	3:00	DFH
Naphthalene	1.00	0.20	0.40		5.2	1.0	2.1	2	1	10/15/20	3:00	DFH
n-Nonane (C9)	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20	3:00	DFH
n-Propylbenzene	0.31	0.20	0.40	J	1.5	0.98	2.0	2	1	10/15/20	3:00	DFH
o-Xylene	2.31	0.20	0.40		10	0.87	1.7	2	1	10/15/20	3:00	DFH
n-Pentane (C5)	0.59	0.20	0.40		1.8	0.59	1.2	2	1	10/15/20	3:00	DFH
Propylene	0.60	0.20	0.40		1.0	0.34	0.69	2	1	10/15/20	3:00	DFH
Styrene	ND	0.20	0.40		ND	0.85	1.7	2	1	10/15/20	3:00	DFH
TBA	0.24	0.20	1.00	J	0.73	0.61	3.0	2	1	10/15/20	3:00	DFH
Tetrachloroethylene (PCE)	78.7	2.00	4.00		530	14	27	20	1	10/14/20	16:08	DFH
Tetrahydrofuran	2.88	0.20	0.40		8.5	0.59	1.2	2	1	10/15/20	3:00	DFH
Toluene	1.81	0.20	0.40		6.8	0.75	1.5	2	1	10/15/20	3:00	DFH
trans-1,2-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20	3:00	DFH
trans-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/15/20	3:00	DFH
Trichloroethylene	2.70	0.20	0.40		15	1.1	2.1	2	1	10/15/20	3:00	DFH
Trichlorofluoromethane	0.31	0.20	0.40	J	1.8	1.1	2.2	2	1	10/15/20	3:00	DFH
Vinyl acetate	ND	0.20	0.40		ND	0.70	1.4	2	1	10/15/20	3:00	DFH
Vinyl bromide	ND	0.20	0.40		ND	0.87	1.7	2	1	10/15/20	3:00	DFH
Vinyl chloride	ND	0.20	0.40		ND	0.51	1.0	2	1	10/15/20	3:00	DFH
Xylenes, Total	8.14	0.20	1.20		35	0.87	5.2	2	1	10/15/20	3:00	DFH
Surrogate(s)	% Recovery				% Recovery Limits							
4-Bromofluorobenzene (Surr)	97.0				80-120					10/14/20	16:08	
4-Bromofluorobenzene (Surr)	110				80-120					10/15/20	3:00	

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-11**  
  
**Sample ID: 201167-04**  
Sample Matrix: Air  
Sampled: 10/7/2020 16:07  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 29400  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 3  
Receipt Vacuum(in Hg): 3  
Flow Controller Type: Passive  
Flow Controller ID: 3953

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.40		ND	1.1	2.2	2	1	10/15/20 4:38	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.40		ND	1.4	2.7	2	1	10/15/20 4:38	DFH
1,1,2,2-Tetrachloroethane	4.07	0.20	0.40		28	1.4	2.7	2	1	10/15/20 4:38	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.40		ND	1.5	3.1	2	1	10/15/20 4:38	DFH
1,1,2-Trichloroethane	0.27	0.20	0.40	J	1.5	1.1	2.2	2	1	10/15/20 4:38	DFH
1,1-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/15/20 4:38	DFH
1,1-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20 4:38	DFH
1,2,4-Trichlorobenzene	ND	0.20	1.00		ND	1.5	7.4	2	1	10/15/20 4:38	DFH
1,2,4-Trimethylbenzene	1.59	0.20	0.40		7.8	0.98	2.0	2	1	10/15/20 4:38	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.40		ND	1.5	3.1	2	1	10/15/20 4:38	DFH
1,2-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/15/20 4:38	DFH
1,2-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/15/20 4:38	DFH
1,2-Dichloropropane	ND	0.20	0.40		ND	0.92	1.8	2	1	10/15/20 4:38	DFH
1,2-Dichlorotetrafluoroethane	0.31	0.20	0.40	J	2.2	1.4	2.8	2	1	10/15/20 4:38	DFH
1,3,5-Trimethylbenzene	0.72	0.20	0.40		3.5	0.98	2.0	2	1	10/15/20 4:38	DFH
1,3-Butadiene	ND	0.20	0.40		ND	0.44	0.88	2	1	10/15/20 4:38	DFH
1,3-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/15/20 4:38	DFH
1,4-Dichlorobenzene	0.21	0.20	0.40	J	1.2	1.2	2.4	2	1	10/15/20 4:38	DFH
1,4-Dioxane	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 4:38	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/15/20 4:38	DFH
2-Butanone (MEK)	0.37	0.20	0.40	J	1.1	0.59	1.2	2	1	10/15/20 4:38	DFH
2-Chlorotoluene	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 4:38	DFH
2-Hexanone (MBK)	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 4:38	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.40		ND	2.3	4.6	2	1	10/15/20 4:38	DFH
Acetone	3.06	0.20	1.00		7.3	0.48	2.4	2	1	10/15/20 4:38	DFH
Acrolein	ND	0.20	0.40		ND	0.46	0.92	2	1	10/15/20 4:38	DFH
Allyl chloride	ND	0.20	0.40		ND	0.63	1.3	2	1	10/15/20 4:38	DFH

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-11**  
  
**Sample ID: 201167-04**  
Sample Matrix: Air  
Sampled: 10/7/2020 16:07  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 29400  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 3  
Receipt Vacuum(in Hg): 3  
Flow Controller Type: Passive  
Flow Controller ID: 3953

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	ND	0.20	0.40		ND	0.64	1.3	2	1	10/15/20 4:38	DFH
Benzyl Chloride	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 4:38	DFH
Bromodichloromethane	3.09	0.20	0.40		21	1.3	2.7	2	1	10/15/20 4:38	DFH
Bromoform	ND	0.20	0.40		ND	2.1	4.1	2	1	10/15/20 4:38	DFH
Bromomethane	ND	0.20	0.40		ND	0.78	1.6	2	1	10/15/20 4:38	DFH
Carbon Disulfide	2.05	0.20	1.00		6.4	0.62	3.1	2	1	10/15/20 4:38	DFH
Carbon Tetrachloride	ND	0.20	0.40		ND	1.3	2.5	2	1	10/15/20 4:38	DFH
Chlorobenzene	0.49	0.20	0.40		2.3	0.92	1.8	2	1	10/15/20 4:38	DFH
Chloroethane	ND	0.20	0.40		ND	0.53	1.1	2	1	10/15/20 4:38	DFH
Chloroform	29.4	0.20	0.40		140	0.98	2.0	2	1	10/15/20 4:38	DFH
Chloromethane	ND	0.20	0.40		ND	0.41	0.83	2	1	10/15/20 4:38	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20 4:38	DFH
cis-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/15/20 4:38	DFH
Cyclohexane	ND	0.20	0.40		ND	0.69	1.4	2	1	10/15/20 4:38	DFH
Dibromochloromethane	0.23	0.20	0.40	J	1.9	1.7	3.4	2	1	10/15/20 4:38	DFH
Dichlorodifluoromethane	0.31	0.20	1.00	J	1.5	0.99	4.9	2	1	10/15/20 4:38	DFH
Ethanol	0.73	0.20	1.00	J	1.4	0.38	1.9	2	1	10/15/20 4:38	DFH
Ethyl acetate	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 4:38	DFH
Ethylbenzene	1.09	0.20	0.40		4.7	0.87	1.7	2	1	10/15/20 4:38	DFH
Heptane	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 4:38	DFH
Hexachlorobutadiene	ND	0.20	1.00		ND	2.1	11	2	1	10/15/20 4:38	DFH
Hexane	ND	0.20	0.40		ND	0.70	1.4	2	1	10/15/20 4:38	DFH
Isooctane	ND	0.20	0.40		ND	0.93	1.9	2	1	10/15/20 4:38	DFH
Isopropyl alcohol	0.32	0.20	1.00	J	0.80	0.49	2.5	2	1	10/15/20 4:38	DFH
Isopropylbenzene	0.33	0.20	0.40	J	1.6	0.98	2.0	2	1	10/15/20 4:38	DFH
m+p-Xylenes	5.09	0.20	0.80		22	0.87	3.5	2	1	10/15/20 4:38	DFH
Methyl methacrylate	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 4:38	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-11**  
  
**Sample ID: 201167-04**  
Sample Matrix: Air  
Sampled: 10/7/2020 16:07  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 29400  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 3  
Receipt Vacuum(in Hg): 3  
Flow Controller Type: Passive  
Flow Controller ID: 3953

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.32	0.20	2.00	J	1.1	0.69	6.9	2	1	10/15/20 4:38	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 4:38	DFH
Naphthalene	0.74	0.20	0.40		3.9	1.0	2.1	2	1	10/15/20 4:38	DFH
n-Nonane (C9)	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 4:38	DFH
n-Propylbenzene	0.22	0.20	0.40	J	1.1	0.98	2.0	2	1	10/15/20 4:38	DFH
o-Xylene	2.10	0.20	0.40		9.1	0.87	1.7	2	1	10/15/20 4:38	DFH
n-Pentane (C5)	0.57	0.20	0.40		1.7	0.59	1.2	2	1	10/15/20 4:38	DFH
Propylene	0.52	0.20	0.40		0.90	0.34	0.69	2	1	10/15/20 4:38	DFH
Styrene	ND	0.20	0.40		ND	0.85	1.7	2	1	10/15/20 4:38	DFH
TBA	0.22	0.20	1.00	J	0.67	0.61	3.0	2	1	10/15/20 4:38	DFH
Tetrachloroethylene (PCE)	73.8	2.00	4.00		500	14	27	20	1	10/14/20 16:55	DFH
Tetrahydrofuran	3.32	0.20	0.40		9.8	0.59	1.2	2	1	10/15/20 4:38	DFH
Toluene	1.36	0.20	0.40		5.1	0.75	1.5	2	1	10/15/20 4:38	DFH
trans-1,2-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20 4:38	DFH
trans-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/15/20 4:38	DFH
Trichloroethylene	2.17	0.20	0.40		12	1.1	2.1	2	1	10/15/20 4:38	DFH
Trichlorofluoromethane	0.31	0.20	0.40	J	1.8	1.1	2.2	2	1	10/15/20 4:38	DFH
Vinyl acetate	ND	0.20	0.40		ND	0.70	1.4	2	1	10/15/20 4:38	DFH
Vinyl bromide	ND	0.20	0.40		ND	0.87	1.7	2	1	10/15/20 4:38	DFH
Vinyl chloride	ND	0.20	0.40		ND	0.51	1.0	2	1	10/15/20 4:38	DFH
Xylenes, Total	7.20	0.20	1.20		31	0.87	5.2	2	1	10/15/20 4:38	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	90.4				80-120					10/14/20 16:55	
4-Bromofluorobenzene (Surr)	98.2				80-120					10/15/20 4:38	

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-12**  
  
**Sample ID: 201167-05**  
Sample Matrix: Air  
Sampled: 10/7/2020 13:58  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36976  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 26  
Receipt Vacuum(in Hg): 26  
Flow Controller Type: Passive  
Flow Controller ID: 10114

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.67	1.33		ND	3.6	7.3	6.67	1	10/14/20 23:42	DFH
1,1,1,2-Tetrachloroethane	ND	0.67	1.33		ND	4.6	9.2	6.67	1	10/14/20 23:42	DFH
1,1,2,2-Tetrachloroethane	ND	0.67	1.33		ND	4.6	9.2	6.67	1	10/14/20 23:42	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.67	1.33		ND	5.1	10	6.67	1	10/14/20 23:42	DFH
1,1,2-Trichloroethane	ND	0.67	1.33		ND	3.6	7.3	6.67	1	10/14/20 23:42	DFH
1,1-Dichloroethane	ND	0.67	1.33		ND	2.7	5.4	6.67	1	10/14/20 23:42	DFH
1,1-Dichloroethylene	ND	0.67	1.33		ND	2.6	5.3	6.67	1	10/14/20 23:42	DFH
1,2,4-Trichlorobenzene	ND	0.67	3.34		ND	4.9	25	6.67	1	10/14/20 23:42	DFH
1,2,4-Trimethylbenzene	1.29	0.67	1.33	J	6.3	3.3	6.6	6.67	1	10/14/20 23:42	DFH
1,2-Dibromoethane (EDB)	ND	0.67	1.33		ND	5.1	10	6.67	1	10/14/20 23:42	DFH
1,2-Dichlorobenzene	ND	0.67	1.33		ND	4.0	8.0	6.67	1	10/14/20 23:42	DFH
1,2-Dichloroethane	1.13	0.67	1.33	J	4.6	2.7	5.4	6.67	1	10/14/20 23:42	DFH
1,2-Dichloropropane	ND	0.67	1.33		ND	3.1	6.2	6.67	1	10/14/20 23:42	DFH
1,2-Dichlorotetrafluoroethane	ND	0.67	1.33		ND	4.7	9.3	6.67	1	10/14/20 23:42	DFH
1,3,5-Trimethylbenzene	ND	0.67	1.33		ND	3.3	6.6	6.67	1	10/14/20 23:42	DFH
1,3-Butadiene	ND	0.67	1.33		ND	1.5	3.0	6.67	1	10/14/20 23:42	DFH
1,3-Dichlorobenzene	ND	0.67	1.33		ND	4.0	8.0	6.67	1	10/14/20 23:42	DFH
1,4-Dichlorobenzene	ND	0.67	1.33		ND	4.0	8.0	6.67	1	10/14/20 23:42	DFH
1,4-Dioxane	ND	0.67	1.33		ND	2.4	4.8	6.67	1	10/14/20 23:42	DFH
1-Ethyl-4-methyl benzene	2.38	0.67	1.33		12	3.3	6.6	6.67	1	10/14/20 23:42	DFH
2-Butanone (MEK)	0.95	0.67	1.33	J	2.8	2.0	3.9	6.67	1	10/14/20 23:42	DFH
2-Chlorotoluene	ND	0.67	1.33		ND	3.5	6.9	6.67	1	10/14/20 23:42	DFH
2-Hexanone (MBK)	ND	0.67	1.33		ND	2.7	5.5	6.67	1	10/14/20 23:42	DFH
4-Methyl-2-pentanone (MIBK)	1.47	0.67	1.33		17	7.6	15	6.67	1	10/14/20 23:42	DFH
Acetone	ND	0.67	3.34		ND	1.6	7.9	6.67	1	10/14/20 23:42	DFH
Acrolein	ND	0.67	1.33		ND	1.5	3.1	6.67	1	10/14/20 23:42	DFH
Allyl chloride	ND	0.67	1.33		ND	2.1	4.2	6.67	1	10/14/20 23:42	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-12**  
  
**Sample ID: 201167-05**  
Sample Matrix: Air  
Sampled: 10/7/2020 13:58  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36976  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 26  
Receipt Vacuum(in Hg): 26  
Flow Controller Type: Passive  
Flow Controller ID: 10114

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	2.37	0.67	1.33		7.6	2.1	4.3	6.67	1	10/14/20 23:42	DFH
Benzyl Chloride	ND	0.67	1.33		ND	3.5	6.9	6.67	1	10/14/20 23:42	DFH
Bromodichloromethane	0.67	0.67	1.33	J	4.5	4.5	8.9	6.67	1	10/14/20 23:42	DFH
Bromoform	ND	0.67	1.33		ND	6.9	14	6.67	1	10/14/20 23:42	DFH
Bromomethane	ND	0.67	1.33		ND	2.6	5.2	6.67	1	10/14/20 23:42	DFH
Carbon Disulfide	1.69	0.67	3.34	J	5.3	2.1	10	6.67	1	10/14/20 23:42	DFH
Carbon Tetrachloride	ND	0.67	1.33		ND	4.2	8.4	6.67	1	10/14/20 23:42	DFH
Chlorobenzene	0.85	0.67	1.33	J	3.9	3.1	6.1	6.67	1	10/14/20 23:42	DFH
Chloroethane	ND	0.67	1.33		ND	1.8	3.5	6.67	1	10/14/20 23:42	DFH
Chloroform	25.5	0.67	1.33		120	3.3	6.5	6.67	1	10/14/20 23:42	DFH
Chloromethane	ND	0.67	1.33		ND	1.4	2.8	6.67	1	10/14/20 23:42	DFH
cis-1,2-Dichloroethylene	8.73	0.67	1.33		35	2.6	5.3	6.67	1	10/14/20 23:42	DFH
cis-1,3-Dichloropropene	ND	0.67	1.33		ND	3.0	6.1	6.67	1	10/14/20 23:42	DFH
Cyclohexane	ND	0.67	1.33		ND	2.3	4.6	6.67	1	10/14/20 23:42	DFH
Dibromochloromethane	ND	0.67	1.33		ND	5.7	11	6.67	1	10/14/20 23:42	DFH
Dichlorodifluoromethane	ND	0.67	3.34		ND	3.3	16	6.67	1	10/14/20 23:42	DFH
Ethanol	1.11	0.67	3.34	J	2.1	1.3	6.3	6.67	1	10/14/20 23:42	DFH
Ethyl acetate	ND	0.67	1.33		ND	2.4	4.8	6.67	1	10/14/20 23:42	DFH
Ethylbenzene	4.22	0.67	1.33		18	2.9	5.8	6.67	1	10/14/20 23:42	DFH
Heptane	0.94	0.67	1.33	J	3.9	2.7	5.5	6.67	1	10/14/20 23:42	DFH
Hexachlorobutadiene	ND	0.67	3.34		ND	7.1	36	6.67	1	10/14/20 23:42	DFH
Hexane	4.86	0.67	1.33		17	2.4	4.7	6.67	1	10/14/20 23:42	DFH
Isooctane	0.78	0.67	1.33	J	3.6	3.1	6.2	6.67	1	10/14/20 23:42	DFH
Isopropyl alcohol	ND	0.67	3.34		ND	1.6	8.2	6.67	1	10/14/20 23:42	DFH
Isopropylbenzene	ND	0.67	1.33		ND	3.3	6.6	6.67	1	10/14/20 23:42	DFH
m+p-Xylenes	9.57	0.67	2.67		42	2.9	12	6.67	1	10/14/20 23:42	DFH
Methyl methacrylate	ND	0.67	1.33		ND	2.7	5.5	6.67	1	10/14/20 23:42	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-12**  
  
**Sample ID: 201167-05**  
Sample Matrix: Air  
Sampled: 10/7/2020 13:58  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36976  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 26  
Receipt Vacuum(in Hg): 26  
Flow Controller Type: Passive  
Flow Controller ID: 10114

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	3.40	0.67	6.67	J	12	2.3	23	6.67	1	10/14/20 23:42	DFH
Methyl-t-butyl ether (MTBE)	3.19	0.67	1.33		12	2.4	4.8	6.67	1	10/14/20 23:42	DFH
Naphthalene	1.57	0.67	1.33		8.3	3.5	7.0	6.67	1	10/14/20 23:42	DFH
n-Nonane (C9)	ND	0.67	1.33		ND	3.5	7.0	6.67	1	10/14/20 23:42	DFH
n-Propylbenzene	ND	0.67	1.33		ND	3.3	6.6	6.67	1	10/14/20 23:42	DFH
o-Xylene	2.62	0.67	1.33		11	2.9	5.8	6.67	1	10/14/20 23:42	DFH
n-Pentane (C5)	14.9	0.67	1.33		44	2.0	3.9	6.67	1	10/14/20 23:42	DFH
Propylene	41.4	0.67	1.33		71	1.1	2.3	6.67	1	10/14/20 23:42	DFH
Styrene	ND	0.67	1.33		ND	2.8	5.7	6.67	1	10/14/20 23:42	DFH
TBA	ND	0.67	3.34		ND	2.0	10	6.67	1	10/14/20 23:42	DFH
Tetrachloroethylene (PCE)	0.91	0.67	1.33	J	6.2	4.5	9.0	6.67	1	10/14/20 23:42	DFH
Tetrahydrofuran	1.06	0.67	1.33	J	3.1	2.0	3.9	6.67	1	10/14/20 23:42	DFH
Toluene	6.68	0.67	1.33		25	2.5	5.0	6.67	1	10/14/20 23:42	DFH
trans-1,2-Dichloroethylene	0.75	0.67	1.33	J	3.0	2.6	5.3	6.67	1	10/14/20 23:42	DFH
trans-1,3-Dichloropropene	ND	0.67	1.33		ND	3.0	6.1	6.67	1	10/14/20 23:42	DFH
Trichloroethylene	1.31	0.67	1.33	J	7.0	3.6	7.2	6.67	1	10/14/20 23:42	DFH
Trichlorofluoromethane	ND	0.67	1.33		ND	3.7	7.5	6.67	1	10/14/20 23:42	DFH
Vinyl acetate	ND	0.67	1.33		ND	2.3	4.7	6.67	1	10/14/20 23:42	DFH
Vinyl bromide	ND	0.67	1.33		ND	2.9	5.8	6.67	1	10/14/20 23:42	DFH
Vinyl chloride	1.13	0.67	1.33	J	2.9	1.7	3.4	6.67	1	10/14/20 23:42	DFH
Xylenes, Total	12.2	0.67	4.00		53	2.9	17	6.67	1	10/14/20 23:42	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	95.6				80-120					10/14/20 23:42	

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-13**  
  
**Sample ID: 201167-06**  
Sample Matrix: Air  
Sampled: 10/7/2020 15:05  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36978  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 2  
Receipt Vacuum(in Hg): 2  
Flow Controller Type: Passive  
Flow Controller ID: 10116

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.40		ND	1.1	2.2	2	1	10/15/20 6:15	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.40		ND	1.4	2.7	2	1	10/15/20 6:15	DFH
1,1,2,2-Tetrachloroethane	57.6	2.00	4.00		400	14	27	20	1	10/14/20 17:41	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.40		ND	1.5	3.1	2	1	10/15/20 6:15	DFH
1,1,2-Trichloroethane	3.15	0.20	0.40		17	1.1	2.2	2	1	10/15/20 6:15	DFH
1,1-Dichloroethane	ND	0.20	0.40		ND	0.81	1.6	2	1	10/15/20 6:15	DFH
1,1-Dichloroethylene	ND	0.20	0.40		ND	0.79	1.6	2	1	10/15/20 6:15	DFH
1,2,4-Trichlorobenzene	ND	0.20	1.00		ND	1.5	7.4	2	1	10/15/20 6:15	DFH
1,2,4-Trimethylbenzene	0.35	0.20	0.40	J	1.7	0.98	2.0	2	1	10/15/20 6:15	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.40		ND	1.5	3.1	2	1	10/15/20 6:15	DFH
1,2-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/15/20 6:15	DFH
1,2-Dichloroethane	0.31	0.20	0.40	J	1.3	0.81	1.6	2	1	10/15/20 6:15	DFH
1,2-Dichloropropane	ND	0.20	0.40		ND	0.92	1.8	2	1	10/15/20 6:15	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.40		ND	1.4	2.8	2	1	10/15/20 6:15	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/15/20 6:15	DFH
1,3-Butadiene	ND	0.20	0.40		ND	0.44	0.88	2	1	10/15/20 6:15	DFH
1,3-Dichlorobenzene	ND	0.20	0.40		ND	1.2	2.4	2	1	10/15/20 6:15	DFH
1,4-Dichlorobenzene	0.28	0.20	0.40	J	1.7	1.2	2.4	2	1	10/15/20 6:15	DFH
1,4-Dioxane	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 6:15	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/15/20 6:15	DFH
2-Butanone (MEK)	0.74	0.20	0.40		2.2	0.59	1.2	2	1	10/15/20 6:15	DFH
2-Chlorotoluene	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 6:15	DFH
2-Hexanone (MBK)	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20 6:15	DFH
4-Methyl-2-pentanone (MIBK)	0.27	0.20	0.40	J	3.1	2.3	4.6	2	1	10/15/20 6:15	DFH
Acetone	18.6	0.20	1.00		44	0.48	2.4	2	1	10/15/20 6:15	DFH
Acrolein	0.38	0.20	0.40	J	0.87	0.46	0.92	2	1	10/15/20 6:15	DFH
Allyl chloride	ND	0.20	0.40		ND	0.63	1.3	2	1	10/15/20 6:15	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-13**  
  
**Sample ID: 201167-06**  
Sample Matrix: Air  
Sampled: 10/7/2020 15:05  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36978  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 2  
Receipt Vacuum(in Hg): 2  
Flow Controller Type: Passive  
Flow Controller ID: 10116

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed		Analyst
	Results	MDL	LOQ		Results	MDL	LOQ					
Benzene	0.97	0.20	0.40		3.1	0.64	1.3	2	1	10/15/20	6:15	DFH
Benzyl Chloride	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20	6:15	DFH
Bromodichloromethane	2.59	0.20	0.40		17	1.3	2.7	2	1	10/15/20	6:15	DFH
Bromoform	ND	0.20	0.40		ND	2.1	4.1	2	1	10/15/20	6:15	DFH
Bromomethane	ND	0.20	0.40		ND	0.78	1.6	2	1	10/15/20	6:15	DFH
Carbon Disulfide	1.98	0.20	1.00		6.2	0.62	3.1	2	1	10/15/20	6:15	DFH
Carbon Tetrachloride	ND	0.20	0.40		ND	1.3	2.5	2	1	10/15/20	6:15	DFH
Chlorobenzene	ND	0.20	0.40		ND	0.92	1.8	2	1	10/15/20	6:15	DFH
Chloroethane	ND	0.20	0.40		ND	0.53	1.1	2	1	10/15/20	6:15	DFH
Chloroform	23.8	0.20	0.40		120	0.98	2.0	2	1	10/15/20	6:15	DFH
Chloromethane	ND	0.20	0.40		ND	0.41	0.83	2	1	10/15/20	6:15	DFH
cis-1,2-Dichloroethylene	5.97	0.20	0.40		24	0.79	1.6	2	1	10/15/20	6:15	DFH
cis-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/15/20	6:15	DFH
Cyclohexane	ND	0.20	0.40		ND	0.69	1.4	2	1	10/15/20	6:15	DFH
Dibromochloromethane	ND	0.20	0.40		ND	1.7	3.4	2	1	10/15/20	6:15	DFH
Dichlorodifluoromethane	0.38	0.20	1.00	J	1.9	0.99	4.9	2	1	10/15/20	6:15	DFH
Ethanol	1.37	0.20	1.00		2.6	0.38	1.9	2	1	10/15/20	6:15	DFH
Ethyl acetate	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20	6:15	DFH
Ethylbenzene	0.57	0.20	0.40		2.5	0.87	1.7	2	1	10/15/20	6:15	DFH
Heptane	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20	6:15	DFH
Hexachlorobutadiene	ND	0.20	1.00		ND	2.1	11	2	1	10/15/20	6:15	DFH
Hexane	ND	0.20	0.40		ND	0.70	1.4	2	1	10/15/20	6:15	DFH
Isooctane	ND	0.20	0.40		ND	0.93	1.9	2	1	10/15/20	6:15	DFH
Isopropyl alcohol	0.66	0.20	1.00	J	1.6	0.49	2.5	2	1	10/15/20	6:15	DFH
Isopropylbenzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/15/20	6:15	DFH
m+p-Xylenes	1.59	0.20	0.80		6.9	0.87	3.5	2	1	10/15/20	6:15	DFH
Methyl methacrylate	ND	0.20	0.40		ND	0.82	1.6	2	1	10/15/20	6:15	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: SMP-VMP-13**  
  
**Sample ID: 201167-06**  
Sample Matrix: Air  
Sampled: 10/7/2020 15:05  
  
Sample Type: SG

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36978  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 2  
Receipt Vacuum(in Hg): 2  
Flow Controller Type: Passive  
Flow Controller ID: 10116

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.40	0.20	2.00	J	1.4	0.69	6.9	2	1	10/15/20 6:15	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.40		ND	0.72	1.4	2	1	10/15/20 6:15	DFH
Naphthalene	0.54	0.20	0.40		2.9	1.0	2.1	2	1	10/15/20 6:15	DFH
n-Nonane (C9)	ND	0.20	0.40		ND	1.0	2.1	2	1	10/15/20 6:15	DFH
n-Propylbenzene	ND	0.20	0.40		ND	0.98	2.0	2	1	10/15/20 6:15	DFH
o-Xylene	0.61	0.20	0.40		2.6	0.87	1.7	2	1	10/15/20 6:15	DFH
n-Pentane (C5)	1.09	0.20	0.40		3.2	0.59	1.2	2	1	10/15/20 6:15	DFH
Propylene	2.02	0.20	0.40		3.5	0.34	0.69	2	1	10/15/20 6:15	DFH
Styrene	ND	0.20	0.40		ND	0.85	1.7	2	1	10/15/20 6:15	DFH
TBA	5.23	0.20	1.00		16	0.61	3.0	2	1	10/15/20 6:15	DFH
Tetrachloroethylene (PCE)	18.3	0.20	0.40		120	1.4	2.7	2	1	10/15/20 6:15	DFH
Tetrahydrofuran	4.01	0.20	0.40		12	0.59	1.2	2	1	10/15/20 6:15	DFH
Toluene	2.27	0.20	0.40		8.6	0.75	1.5	2	1	10/15/20 6:15	DFH
trans-1,2-Dichloroethylene	6.79	0.20	0.40		27	0.79	1.6	2	1	10/15/20 6:15	DFH
trans-1,3-Dichloropropene	ND	0.20	0.40		ND	0.91	1.8	2	1	10/15/20 6:15	DFH
Trichloroethylene	45.8	2.00	4.00		250	11	21	20	1	10/14/20 17:41	DFH
Trichlorofluoromethane	0.21	0.20	0.40	J	1.2	1.1	2.2	2	1	10/15/20 6:15	DFH
Vinyl acetate	ND	0.20	0.40		ND	0.70	1.4	2	1	10/15/20 6:15	DFH
Vinyl bromide	ND	0.20	0.40		ND	0.87	1.7	2	1	10/15/20 6:15	DFH
Vinyl chloride	ND	0.20	0.40		ND	0.51	1.0	2	1	10/15/20 6:15	DFH
Xylenes, Total	2.19	0.20	1.20		9.5	0.87	5.2	2	1	10/15/20 6:15	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	92.3				80-120					10/14/20 17:41	
4-Bromofluorobenzene (Surr)	97.4				80-120					10/15/20 6:15	

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-105M-CSA**  
  
**Sample ID: 201167-07**  
Sample Matrix: Air  
Sampled: 10/7/2020 12:00  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 20254  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 2667

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 14:21	DFH
1,1,1,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 14:21	DFH
1,1,2,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 14:21	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 14:21	DFH
1,1,2-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 14:21	DFH
1,1-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 14:21	DFH
1,1-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 14:21	DFH
1,2,4-Trichlorobenzene	ND	0.12	0.62		ND	0.93	4.6	1.25	1	10/15/20 14:21	DFH
1,2,4-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 14:21	DFH
1,2-Dibromoethane (EDB)	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 14:21	DFH
1,2-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 14:21	DFH
1,2-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 14:21	DFH
1,2-Dichloropropane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 14:21	DFH
1,2-Dichlorotetrafluoroethane	ND	0.12	0.25		ND	0.87	1.7	1.25	1	10/15/20 14:21	DFH
1,3,5-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 14:21	DFH
1,3-Butadiene	ND	0.12	0.25		ND	0.28	0.55	1.25	1	10/15/20 14:21	DFH
1,3-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 14:21	DFH
1,4-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 14:21	DFH
1,4-Dioxane	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 14:21	DFH
1-Ethyl-4-methyl benzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 14:21	DFH
2-Butanone (MEK)	0.23	0.12	0.25	J	0.68	0.37	0.74	1.25	1	10/15/20 14:21	DFH
2-Chlorotoluene	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 14:21	DFH
2-Hexanone (MBK)	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 14:21	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.12	0.25		ND	1.4	2.9	1.25	1	10/15/20 14:21	DFH
Acetone	3.45	0.12	0.62		8.2	0.30	1.5	1.25	1	10/15/20 14:21	DFH
Acrolein	ND	0.12	0.25		ND	0.29	0.57	1.25	1	10/15/20 14:21	DFH
Allyl chloride	ND	0.12	0.25		ND	0.39	0.78	1.25	1	10/15/20 14:21	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-105M-CSA**  
  
**Sample ID: 201167-07**  
Sample Matrix: Air  
Sampled: 10/7/2020 12:00  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 20254  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 2667

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	ND	0.12	0.25		ND	0.40	0.80	1.25	1	10/15/20 14:21	DFH
Benzyl Chloride	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 14:21	DFH
Bromodichloromethane	ND	0.12	0.25		ND	0.84	1.7	1.25	1	10/15/20 14:21	DFH
Bromoform	ND	0.12	0.25		ND	1.3	2.6	1.25	1	10/15/20 14:21	DFH
Bromomethane	ND	0.12	0.25		ND	0.49	0.97	1.25	1	10/15/20 14:21	DFH
Carbon Disulfide	0.14	0.12	0.62	J	0.44	0.39	1.9	1.25	1	10/15/20 14:21	DFH
Carbon Tetrachloride	ND	0.12	0.25		ND	0.79	1.6	1.25	1	10/15/20 14:21	DFH
Chlorobenzene	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 14:21	DFH
Chloroethane	ND	0.12	0.25		ND	0.33	0.66	1.25	1	10/15/20 14:21	DFH
Chloroform	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 14:21	DFH
Chloromethane	0.48	0.12	0.25		0.99	0.26	0.52	1.25	1	10/15/20 14:21	DFH
cis-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 14:21	DFH
cis-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 14:21	DFH
Cyclohexane	ND	0.12	0.25		ND	0.43	0.86	1.25	1	10/15/20 14:21	DFH
Dibromochloromethane	ND	0.12	0.25		ND	1.1	2.1	1.25	1	10/15/20 14:21	DFH
Dichlorodifluoromethane	0.46	0.12	0.62	J	2.3	0.62	3.1	1.25	1	10/15/20 14:21	DFH
Ethanol	1.69	0.12	0.62		3.2	0.24	1.2	1.25	1	10/15/20 14:21	DFH
Ethyl acetate	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 14:21	DFH
Ethylbenzene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 14:21	DFH
Heptane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 14:21	DFH
Hexachlorobutadiene	ND	0.12	0.62		ND	1.3	6.7	1.25	1	10/15/20 14:21	DFH
Hexane	0.14	0.12	0.25	J	0.49	0.44	0.88	1.25	1	10/15/20 14:21	DFH
Isooctane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 14:21	DFH
Isopropyl alcohol	0.22	0.12	0.62	J	0.55	0.31	1.5	1.25	1	10/15/20 14:21	DFH
Isopropylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 14:21	DFH
m+p-Xylenes	ND	0.12	0.50		ND	0.54	2.2	1.25	1	10/15/20 14:21	DFH
Methyl methacrylate	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 14:21	DFH

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## Certificate of Analysis

Final Report

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5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
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Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
Field Sample #: HSI-105M-CSA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 20254  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 2667

Sample ID: 201167-07  
Sample Matrix: Air  
Sampled: 10/7/2020 12:00

Sample Type: AA

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.34	0.12	1.25	J	1.2	0.43	4.3	1.25	1	10/15/20 14:21	DFH
Methyl-t-butyl ether (MTBE)	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 14:21	DFH
Naphthalene	0.21	0.12	0.25	J	1.1	0.66	1.3	1.25	1	10/15/20 14:21	DFH
n-Nonane (C9)	ND	0.12	0.25		ND	0.66	1.3	1.25	1	10/15/20 14:21	DFH
n-Propylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 14:21	DFH
o-Xylene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 14:21	DFH
n-Pentane (C5)	0.37	0.12	0.25		1.1	0.37	0.74	1.25	1	10/15/20 14:21	DFH
Propylene	ND	0.12	0.25		ND	0.22	0.43	1.25	1	10/15/20 14:21	DFH
Styrene	ND	0.12	0.25		ND	0.53	1.1	1.25	1	10/15/20 14:21	DFH
TBA	ND	0.12	0.62		ND	0.38	1.9	1.25	1	10/15/20 14:21	DFH
Tetrachloroethylene (PCE)	ND	0.12	0.25		ND	0.85	1.7	1.25	1	10/15/20 14:21	DFH
Tetrahydrofuran	ND	0.12	0.25		ND	0.37	0.74	1.25	1	10/15/20 14:21	DFH
Toluene	0.23	0.12	0.25	J	0.88	0.47	0.94	1.25	1	10/15/20 14:21	DFH
trans-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 14:21	DFH
trans-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 14:21	DFH
Trichloroethylene	ND	0.12	0.25		ND	0.67	1.3	1.25	1	10/15/20 14:21	DFH
Trichlorofluoromethane	0.21	0.12	0.25	J	1.2	0.70	1.4	1.25	1	10/15/20 14:21	DFH
Vinyl acetate	ND	0.12	0.25		ND	0.44	0.88	1.25	1	10/15/20 14:21	DFH
Vinyl bromide	ND	0.12	0.25		ND	0.55	1.1	1.25	1	10/15/20 14:21	DFH
Vinyl chloride	ND	0.12	0.25		ND	0.32	0.64	1.25	1	10/15/20 14:21	DFH
Xylenes, Total	ND	0.12	0.75		ND	0.54	3.3	1.25	1	10/15/20 14:21	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	90.1				80-120					10/15/20 14:21	

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
Field Sample #: HSI-105R-CSA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 29398  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 2714

Sample ID: 201167-08  
Sample Matrix: Air  
Sampled: 10/7/2020 12:06

Sample Type: AA

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 15:13	DFH
1,1,1,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 15:13	DFH
1,1,2,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 15:13	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 15:13	DFH
1,1,2-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 15:13	DFH
1,1-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 15:13	DFH
1,1-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 15:13	DFH
1,2,4-Trichlorobenzene	ND	0.12	0.62		ND	0.93	4.6	1.25	1	10/15/20 15:13	DFH
1,2,4-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 15:13	DFH
1,2-Dibromoethane (EDB)	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 15:13	DFH
1,2-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 15:13	DFH
1,2-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 15:13	DFH
1,2-Dichloropropane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 15:13	DFH
1,2-Dichlorotetrafluoroethane	ND	0.12	0.25		ND	0.87	1.7	1.25	1	10/15/20 15:13	DFH
1,3,5-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 15:13	DFH
1,3-Butadiene	ND	0.12	0.25		ND	0.28	0.55	1.25	1	10/15/20 15:13	DFH
1,3-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 15:13	DFH
1,4-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 15:13	DFH
1,4-Dioxane	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 15:13	DFH
1-Ethyl-4-methyl benzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 15:13	DFH
2-Butanone (MEK)	0.24	0.12	0.25	J	0.72	0.37	0.74	1.25	1	10/15/20 15:13	DFH
2-Chlorotoluene	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 15:13	DFH
2-Hexanone (MBK)	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 15:13	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.12	0.25		ND	1.4	2.9	1.25	1	10/15/20 15:13	DFH
Acetone	4.63	0.12	0.62		11	0.30	1.5	1.25	1	10/15/20 15:13	DFH
Acrolein	0.17	0.12	0.25	J	0.40	0.29	0.57	1.25	1	10/15/20 15:13	DFH
Allyl chloride	ND	0.12	0.25		ND	0.39	0.78	1.25	1	10/15/20 15:13	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
Field Sample #: HSI-105R-CSA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 29398  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 2714

Sample ID: 20I1167-08  
Sample Matrix: Air  
Sampled: 10/7/2020 12:06

Sample Type: AA

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	ND	0.12	0.25		ND	0.40	0.80	1.25	1	10/15/20 15:13	DFH
Benzyl Chloride	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 15:13	DFH
Bromodichloromethane	ND	0.12	0.25		ND	0.84	1.7	1.25	1	10/15/20 15:13	DFH
Bromoform	ND	0.12	0.25		ND	1.3	2.6	1.25	1	10/15/20 15:13	DFH
Bromomethane	ND	0.12	0.25		ND	0.49	0.97	1.25	1	10/15/20 15:13	DFH
Carbon Disulfide	0.73	0.12	0.62		2.3	0.39	1.9	1.25	1	10/15/20 15:13	DFH
Carbon Tetrachloride	ND	0.12	0.25		ND	0.79	1.6	1.25	1	10/15/20 15:13	DFH
Chlorobenzene	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 15:13	DFH
Chloroethane	ND	0.12	0.25		ND	0.33	0.66	1.25	1	10/15/20 15:13	DFH
Chloroform	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 15:13	DFH
Chloromethane	0.48	0.12	0.25		0.99	0.26	0.52	1.25	1	10/15/20 15:13	DFH
cis-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 15:13	DFH
cis-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 15:13	DFH
Cyclohexane	ND	0.12	0.25		ND	0.43	0.86	1.25	1	10/15/20 15:13	DFH
Dibromochloromethane	ND	0.12	0.25		ND	1.1	2.1	1.25	1	10/15/20 15:13	DFH
Dichlorodifluoromethane	0.45	0.12	0.62	J	2.2	0.62	3.1	1.25	1	10/15/20 15:13	DFH
Ethanol	0.87	0.12	0.62		1.6	0.24	1.2	1.25	1	10/15/20 15:13	DFH
Ethyl acetate	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 15:13	DFH
Ethylbenzene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 15:13	DFH
Heptane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 15:13	DFH
Hexachlorobutadiene	ND	0.12	0.62		ND	1.3	6.7	1.25	1	10/15/20 15:13	DFH
Hexane	0.17	0.12	0.25	J	0.59	0.44	0.88	1.25	1	10/15/20 15:13	DFH
Isooctane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 15:13	DFH
Isopropyl alcohol	0.42	0.12	0.62	J	1.0	0.31	1.5	1.25	1	10/15/20 15:13	DFH
Isopropylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 15:13	DFH
m+p-Xylenes	ND	0.12	0.50		ND	0.54	2.2	1.25	1	10/15/20 15:13	DFH
Methyl methacrylate	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 15:13	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
Field Sample #: HSI-105R-CSA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 29398  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 2714

Sample ID: 201167-08  
Sample Matrix: Air  
Sampled: 10/7/2020 12:06  
Sample Type: AA

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.41	0.12	1.25	J	1.4	0.43	4.3	1.25	1	10/15/20 15:13	DFH
Methyl-t-butyl ether (MTBE)	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 15:13	DFH
Naphthalene	0.23	0.12	0.25	J	1.2	0.66	1.3	1.25	1	10/15/20 15:13	DFH
n-Nonane (C9)	ND	0.12	0.25		ND	0.66	1.3	1.25	1	10/15/20 15:13	DFH
n-Propylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 15:13	DFH
o-Xylene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 15:13	DFH
n-Pentane (C5)	0.44	0.12	0.25		1.3	0.37	0.74	1.25	1	10/15/20 15:13	DFH
Propylene	0.65	0.12	0.25		1.1	0.22	0.43	1.25	1	10/15/20 15:13	DFH
Styrene	ND	0.12	0.25		ND	0.53	1.1	1.25	1	10/15/20 15:13	DFH
TBA	ND	0.12	0.62		ND	0.38	1.9	1.25	1	10/15/20 15:13	DFH
Tetrachloroethylene (PCE)	ND	0.12	0.25		ND	0.85	1.7	1.25	1	10/15/20 15:13	DFH
Tetrahydrofuran	ND	0.12	0.25		ND	0.37	0.74	1.25	1	10/15/20 15:13	DFH
Toluene	0.22	0.12	0.25	J	0.83	0.47	0.94	1.25	1	10/15/20 15:13	DFH
trans-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 15:13	DFH
trans-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 15:13	DFH
Trichloroethylene	ND	0.12	0.25		ND	0.67	1.3	1.25	1	10/15/20 15:13	DFH
Trichlorofluoromethane	0.21	0.12	0.25	J	1.2	0.70	1.4	1.25	1	10/15/20 15:13	DFH
Vinyl acetate	ND	0.12	0.25		ND	0.44	0.88	1.25	1	10/15/20 15:13	DFH
Vinyl bromide	ND	0.12	0.25		ND	0.55	1.1	1.25	1	10/15/20 15:13	DFH
Vinyl chloride	ND	0.12	0.25		ND	0.32	0.64	1.25	1	10/15/20 15:13	DFH
Xylenes, Total	ND	0.12	0.75		ND	0.54	3.3	1.25	1	10/15/20 15:13	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	92.5				80-120					10/15/20 15:13	

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## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-107M-CSA**  
  
**Sample ID: 20I1167-09**  
Sample Matrix: Air  
Sampled: 10/7/2020 12:35  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36448  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 3476

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 16:49	DFH
1,1,1,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 16:49	DFH
1,1,2,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 16:49	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 16:49	DFH
1,1,2-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 16:49	DFH
1,1-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 16:49	DFH
1,1-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 16:49	DFH
1,2,4-Trichlorobenzene	ND	0.12	0.62		ND	0.93	4.6	1.25	1	10/15/20 16:49	DFH
1,2,4-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 16:49	DFH
1,2-Dibromoethane (EDB)	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 16:49	DFH
1,2-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 16:49	DFH
1,2-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 16:49	DFH
1,2-Dichloropropane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 16:49	DFH
1,2-Dichlorotetrafluoroethane	ND	0.12	0.25		ND	0.87	1.7	1.25	1	10/15/20 16:49	DFH
1,3,5-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 16:49	DFH
1,3-Butadiene	ND	0.12	0.25		ND	0.28	0.55	1.25	1	10/15/20 16:49	DFH
1,3-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 16:49	DFH
1,4-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 16:49	DFH
1,4-Dioxane	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 16:49	DFH
1-Ethyl-4-methyl benzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 16:49	DFH
2-Butanone (MEK)	0.27	0.12	0.25		0.81	0.37	0.74	1.25	1	10/15/20 16:49	DFH
2-Chlorotoluene	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 16:49	DFH
2-Hexanone (MBK)	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 16:49	DFH
4-Methyl-2-pentanone (MIBK)	0.14	0.12	0.25	J	1.6	1.4	2.9	1.25	1	10/15/20 16:49	DFH
Acetone	8.88	0.12	0.62		21	0.30	1.5	1.25	1	10/15/20 16:49	DFH
Acrolein	0.20	0.12	0.25	J	0.46	0.29	0.57	1.25	1	10/15/20 16:49	DFH
Allyl chloride	ND	0.12	0.25		ND	0.39	0.78	1.25	1	10/15/20 16:49	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-107M-CSA**  
  
**Sample ID: 201167-09**  
Sample Matrix: Air  
Sampled: 10/7/2020 12:35  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36448  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 3476

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	ND	0.12	0.25		ND	0.40	0.80	1.25	1	10/15/20 16:49	DFH
Benzyl Chloride	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 16:49	DFH
Bromodichloromethane	ND	0.12	0.25		ND	0.84	1.7	1.25	1	10/15/20 16:49	DFH
Bromoform	ND	0.12	0.25		ND	1.3	2.6	1.25	1	10/15/20 16:49	DFH
Bromomethane	ND	0.12	0.25		ND	0.49	0.97	1.25	1	10/15/20 16:49	DFH
Carbon Disulfide	ND	0.12	0.62		ND	0.39	1.9	1.25	1	10/15/20 16:49	DFH
Carbon Tetrachloride	ND	0.12	0.25		ND	0.79	1.6	1.25	1	10/15/20 16:49	DFH
Chlorobenzene	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 16:49	DFH
Chloroethane	ND	0.12	0.25		ND	0.33	0.66	1.25	1	10/15/20 16:49	DFH
Chloroform	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 16:49	DFH
Chloromethane	0.52	0.12	0.25		1.1	0.26	0.52	1.25	1	10/15/20 16:49	DFH
cis-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 16:49	DFH
cis-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 16:49	DFH
Cyclohexane	ND	0.12	0.25		ND	0.43	0.86	1.25	1	10/15/20 16:49	DFH
Dibromochloromethane	ND	0.12	0.25		ND	1.1	2.1	1.25	1	10/15/20 16:49	DFH
Dichlorodifluoromethane	0.44	0.12	0.62	J	2.2	0.62	3.1	1.25	1	10/15/20 16:49	DFH
Ethanol	2.99	0.12	0.62		5.6	0.24	1.2	1.25	1	10/15/20 16:49	DFH
Ethyl acetate	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 16:49	DFH
Ethylbenzene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 16:49	DFH
Heptane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 16:49	DFH
Hexachlorobutadiene	ND	0.12	0.62		ND	1.3	6.7	1.25	1	10/15/20 16:49	DFH
Hexane	0.16	0.12	0.25	J	0.58	0.44	0.88	1.25	1	10/15/20 16:49	DFH
Isooctane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 16:49	DFH
Isopropyl alcohol	1.29	0.12	0.62		3.2	0.31	1.5	1.25	1	10/15/20 16:49	DFH
Isopropylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 16:49	DFH
m+p-Xylenes	ND	0.12	0.50		ND	0.54	2.2	1.25	1	10/15/20 16:49	DFH
Methyl methacrylate	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 16:49	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-107M-CSA**  
  
**Sample ID: 201167-09**  
Sample Matrix: Air  
Sampled: 10/7/2020 12:35  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36448  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 0  
Receipt Vacuum(in Hg): 0  
Flow Controller Type: Passive  
Flow Controller ID: 3476

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.36	0.12	1.25	J	1.3	0.43	4.3	1.25	1	10/15/20 16:49	DFH
Methyl-t-butyl ether (MTBE)	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 16:49	DFH
Naphthalene	0.23	0.12	0.25	J	1.2	0.66	1.3	1.25	1	10/15/20 16:49	DFH
n-Nonane (C9)	ND	0.12	0.25		ND	0.66	1.3	1.25	1	10/15/20 16:49	DFH
n-Propylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 16:49	DFH
o-Xylene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 16:49	DFH
n-Pentane (C5)	0.47	0.12	0.25		1.4	0.37	0.74	1.25	1	10/15/20 16:49	DFH
Propylene	0.20	0.12	0.25	J	0.34	0.22	0.43	1.25	1	10/15/20 16:49	DFH
Styrene	ND	0.12	0.25		ND	0.53	1.1	1.25	1	10/15/20 16:49	DFH
TBA	4.66	0.12	0.62		14	0.38	1.9	1.25	1	10/15/20 16:49	DFH
Tetrachloroethylene (PCE)	ND	0.12	0.25		ND	0.85	1.7	1.25	1	10/15/20 16:49	DFH
Tetrahydrofuran	ND	0.12	0.25		ND	0.37	0.74	1.25	1	10/15/20 16:49	DFH
Toluene	0.23	0.12	0.25	J	0.86	0.47	0.94	1.25	1	10/15/20 16:49	DFH
trans-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 16:49	DFH
trans-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 16:49	DFH
Trichloroethylene	ND	0.12	0.25		ND	0.67	1.3	1.25	1	10/15/20 16:49	DFH
Trichlorofluoromethane	0.20	0.12	0.25	J	1.2	0.70	1.4	1.25	1	10/15/20 16:49	DFH
Vinyl acetate	ND	0.12	0.25		ND	0.44	0.88	1.25	1	10/15/20 16:49	DFH
Vinyl bromide	ND	0.12	0.25		ND	0.55	1.1	1.25	1	10/15/20 16:49	DFH
Vinyl chloride	ND	0.12	0.25		ND	0.32	0.64	1.25	1	10/15/20 16:49	DFH
Xylenes, Total	ND	0.12	0.75		ND	0.54	3.3	1.25	1	10/15/20 16:49	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	91.1				80-120					10/15/20 16:49	



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## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HIS-107R-CSA**  
  
**Sample ID: 20I1167-10**  
Sample Matrix: Air  
Sampled: 10/7/2020 16:17  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36449  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 4  
Receipt Vacuum(in Hg): 4  
Flow Controller Type: Passive  
Flow Controller ID: 3958

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 17:42	DFH
1,1,1,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 17:42	DFH
1,1,2,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 17:42	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 17:42	DFH
1,1,2-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 17:42	DFH
1,1-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 17:42	DFH
1,1-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 17:42	DFH
1,2,4-Trichlorobenzene	ND	0.12	0.62		ND	0.93	4.6	1.25	1	10/15/20 17:42	DFH
1,2,4-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 17:42	DFH
1,2-Dibromoethane (EDB)	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 17:42	DFH
1,2-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 17:42	DFH
1,2-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 17:42	DFH
1,2-Dichloropropane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 17:42	DFH
1,2-Dichlorotetrafluoroethane	ND	0.12	0.25		ND	0.87	1.7	1.25	1	10/15/20 17:42	DFH
1,3,5-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 17:42	DFH
1,3-Butadiene	ND	0.12	0.25		ND	0.28	0.55	1.25	1	10/15/20 17:42	DFH
1,3-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 17:42	DFH
1,4-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 17:42	DFH
1,4-Dioxane	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 17:42	DFH
1-Ethyl-4-methyl benzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 17:42	DFH
2-Butanone (MEK)	0.40	0.12	0.25		1.2	0.37	0.74	1.25	1	10/15/20 17:42	DFH
2-Chlorotoluene	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 17:42	DFH
2-Hexanone (MBK)	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 17:42	DFH
4-Methyl-2-pentanone (MIBK)	0.28	0.12	0.25		3.3	1.4	2.9	1.25	1	10/15/20 17:42	DFH
Acetone	13.8	0.12	0.62		33	0.30	1.5	1.25	1	10/15/20 17:42	DFH
Acrolein	0.20	0.12	0.25	J	0.46	0.29	0.57	1.25	1	10/15/20 17:42	DFH
Allyl chloride	ND	0.12	0.25		ND	0.39	0.78	1.25	1	10/15/20 17:42	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HIS-107R-CSA**  
  
**Sample ID: 201167-10**  
Sample Matrix: Air  
Sampled: 10/7/2020 16:17  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36449  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 4  
Receipt Vacuum(in Hg): 4  
Flow Controller Type: Passive  
Flow Controller ID: 3958

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	0.16	0.12	0.25	J	0.50	0.40	0.80	1.25	1	10/15/20 17:42	DFH
Benzyl Chloride	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 17:42	DFH
Bromodichloromethane	ND	0.12	0.25		ND	0.84	1.7	1.25	1	10/15/20 17:42	DFH
Bromoform	ND	0.12	0.25		ND	1.3	2.6	1.25	1	10/15/20 17:42	DFH
Bromomethane	ND	0.12	0.25		ND	0.49	0.97	1.25	1	10/15/20 17:42	DFH
Carbon Disulfide	ND	0.12	0.62		ND	0.39	1.9	1.25	1	10/15/20 17:42	DFH
Carbon Tetrachloride	ND	0.12	0.25		ND	0.79	1.6	1.25	1	10/15/20 17:42	DFH
Chlorobenzene	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 17:42	DFH
Chloroethane	ND	0.12	0.25		ND	0.33	0.66	1.25	1	10/15/20 17:42	DFH
Chloroform	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 17:42	DFH
Chloromethane	0.50	0.12	0.25		1.0	0.26	0.52	1.25	1	10/15/20 17:42	DFH
cis-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 17:42	DFH
cis-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 17:42	DFH
Cyclohexane	ND	0.12	0.25		ND	0.43	0.86	1.25	1	10/15/20 17:42	DFH
Dibromochloromethane	ND	0.12	0.25		ND	1.1	2.1	1.25	1	10/15/20 17:42	DFH
Dichlorodifluoromethane	0.44	0.12	0.62	J	2.2	0.62	3.1	1.25	1	10/15/20 17:42	DFH
Ethanol	4.04	0.12	0.62		7.6	0.24	1.2	1.25	1	10/15/20 17:42	DFH
Ethyl acetate	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 17:42	DFH
Ethylbenzene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 17:42	DFH
Heptane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 17:42	DFH
Hexachlorobutadiene	ND	0.12	0.62		ND	1.3	6.7	1.25	1	10/15/20 17:42	DFH
Hexane	0.21	0.12	0.25	J	0.74	0.44	0.88	1.25	1	10/15/20 17:42	DFH
Isooctane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 17:42	DFH
Isopropyl alcohol	2.03	0.12	0.62		5.0	0.31	1.5	1.25	1	10/15/20 17:42	DFH
Isopropylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 17:42	DFH
m+p-Xylenes	0.16	0.12	0.50	J	0.69	0.54	2.2	1.25	1	10/15/20 17:42	DFH
Methyl methacrylate	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 17:42	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
Field Sample #: HIS-107R-CSA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36449  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 4  
Receipt Vacuum(in Hg): 4  
Flow Controller Type: Passive  
Flow Controller ID: 3958

Sample ID: 201167-10  
Sample Matrix: Air  
Sampled: 10/7/2020 16:17  
Sample Type: AA

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.57	0.12	1.25	J	2.0	0.43	4.3	1.25	1	10/15/20 17:42	DFH
Methyl-t-butyl ether (MTBE)	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 17:42	DFH
Naphthalene	0.36	0.12	0.25		1.9	0.66	1.3	1.25	1	10/15/20 17:42	DFH
n-Nonane (C9)	ND	0.12	0.25		ND	0.66	1.3	1.25	1	10/15/20 17:42	DFH
n-Propylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 17:42	DFH
o-Xylene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 17:42	DFH
n-Pentane (C5)	0.47	0.12	0.25		1.4	0.37	0.74	1.25	1	10/15/20 17:42	DFH
Propylene	0.35	0.12	0.25		0.60	0.22	0.43	1.25	1	10/15/20 17:42	DFH
Styrene	ND	0.12	0.25		ND	0.53	1.1	1.25	1	10/15/20 17:42	DFH
TBA	13.4	0.12	0.62		41	0.38	1.9	1.25	1	10/15/20 17:42	DFH
Tetrachloroethylene (PCE)	ND	0.12	0.25		ND	0.85	1.7	1.25	1	10/15/20 17:42	DFH
Tetrahydrofuran	ND	0.12	0.25		ND	0.37	0.74	1.25	1	10/15/20 17:42	DFH
Toluene	0.31	0.12	0.25		1.2	0.47	0.94	1.25	1	10/15/20 17:42	DFH
trans-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 17:42	DFH
trans-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 17:42	DFH
Trichloroethylene	ND	0.12	0.25		ND	0.67	1.3	1.25	1	10/15/20 17:42	DFH
Trichlorofluoromethane	0.21	0.12	0.25	J	1.2	0.70	1.4	1.25	1	10/15/20 17:42	DFH
Vinyl acetate	ND	0.12	0.25		ND	0.44	0.88	1.25	1	10/15/20 17:42	DFH
Vinyl bromide	ND	0.12	0.25		ND	0.55	1.1	1.25	1	10/15/20 17:42	DFH
Vinyl chloride	ND	0.12	0.25		ND	0.32	0.64	1.25	1	10/15/20 17:42	DFH
Xylenes, Total	ND	0.12	0.75		ND	0.54	3.3	1.25	1	10/15/20 17:42	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	90.9				80-120					10/15/20 17:42	

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-OAA**  
**Sample ID: 201167-11**  
Sample Matrix: Air  
Sampled: 10/7/2020 14:58  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36957  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 8  
Receipt Vacuum(in Hg): 8  
Flow Controller Type: Passive  
Flow Controller ID: 7189

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 20:04	DFH
1,1,1,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 20:04	DFH
1,1,2,2-Tetrachloroethane	ND	0.12	0.25		ND	0.86	1.7	1.25	1	10/15/20 20:04	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 20:04	DFH
1,1,2-Trichloroethane	ND	0.12	0.25		ND	0.68	1.4	1.25	1	10/15/20 20:04	DFH
1,1-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 20:04	DFH
1,1-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 20:04	DFH
1,2,4-Trichlorobenzene	ND	0.12	0.62		ND	0.93	4.6	1.25	1	10/15/20 20:04	DFH
1,2,4-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 20:04	DFH
1,2-Dibromoethane (EDB)	ND	0.12	0.25		ND	0.96	1.9	1.25	1	10/15/20 20:04	DFH
1,2-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 20:04	DFH
1,2-Dichloroethane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 20:04	DFH
1,2-Dichloropropane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 20:04	DFH
1,2-Dichlorotetrafluoroethane	ND	0.12	0.25		ND	0.87	1.7	1.25	1	10/15/20 20:04	DFH
1,3,5-Trimethylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 20:04	DFH
1,3-Butadiene	ND	0.12	0.25		ND	0.28	0.55	1.25	1	10/15/20 20:04	DFH
1,3-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 20:04	DFH
1,4-Dichlorobenzene	ND	0.12	0.25		ND	0.75	1.5	1.25	1	10/15/20 20:04	DFH
1,4-Dioxane	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 20:04	DFH
1-Ethyl-4-methyl benzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 20:04	DFH
2-Butanone (MEK)	0.32	0.12	0.25		0.95	0.37	0.74	1.25	1	10/15/20 20:04	DFH
2-Chlorotoluene	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 20:04	DFH
2-Hexanone (MBK)	0.18	0.12	0.25	J	0.72	0.51	1.0	1.25	1	10/15/20 20:04	DFH
4-Methyl-2-pentanone (MIBK)	0.18	0.12	0.25	J	2.0	1.4	2.9	1.25	1	10/15/20 20:04	DFH
Acetone	8.89	0.12	0.62		21	0.30	1.5	1.25	1	10/15/20 20:04	DFH
Acrolein	0.16	0.12	0.25	J	0.37	0.29	0.57	1.25	1	10/15/20 20:04	DFH
Allyl chloride	ND	0.12	0.25		ND	0.39	0.78	1.25	1	10/15/20 20:04	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-OAA**  
  
**Sample ID: 201167-11**  
Sample Matrix: Air  
Sampled: 10/7/2020 14:58  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36957  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 8  
Receipt Vacuum(in Hg): 8  
Flow Controller Type: Passive  
Flow Controller ID: 7189

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Benzene	0.14	0.12	0.25	J	0.45	0.40	0.80	1.25	1	10/15/20 20:04	DFH
Benzyl Chloride	ND	0.12	0.25		ND	0.65	1.3	1.25	1	10/15/20 20:04	DFH
Bromodichloromethane	ND	0.12	0.25		ND	0.84	1.7	1.25	1	10/15/20 20:04	DFH
Bromoform	ND	0.12	0.25		ND	1.3	2.6	1.25	1	10/15/20 20:04	DFH
Bromomethane	ND	0.12	0.25		ND	0.49	0.97	1.25	1	10/15/20 20:04	DFH
Carbon Disulfide	ND	0.12	0.62		ND	0.39	1.9	1.25	1	10/15/20 20:04	DFH
Carbon Tetrachloride	ND	0.12	0.25		ND	0.79	1.6	1.25	1	10/15/20 20:04	DFH
Chlorobenzene	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 20:04	DFH
Chloroethane	ND	0.12	0.25		ND	0.33	0.66	1.25	1	10/15/20 20:04	DFH
Chloroform	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 20:04	DFH
Chloromethane	0.52	0.12	0.25		1.1	0.26	0.52	1.25	1	10/15/20 20:04	DFH
cis-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 20:04	DFH
cis-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 20:04	DFH
Cyclohexane	ND	0.12	0.25		ND	0.43	0.86	1.25	1	10/15/20 20:04	DFH
Dibromochloromethane	ND	0.12	0.25		ND	1.1	2.1	1.25	1	10/15/20 20:04	DFH
Dichlorodifluoromethane	0.42	0.12	0.62	J	2.1	0.62	3.1	1.25	1	10/15/20 20:04	DFH
Ethanol	2.69	0.12	0.62		5.1	0.24	1.2	1.25	1	10/15/20 20:04	DFH
Ethyl acetate	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 20:04	DFH
Ethylbenzene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 20:04	DFH
Heptane	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 20:04	DFH
Hexachlorobutadiene	ND	0.12	0.62		ND	1.3	6.7	1.25	1	10/15/20 20:04	DFH
Hexane	0.20	0.12	0.25	J	0.72	0.44	0.88	1.25	1	10/15/20 20:04	DFH
Isooctane	ND	0.12	0.25		ND	0.58	1.2	1.25	1	10/15/20 20:04	DFH
Isopropyl alcohol	0.46	0.12	0.62	J	1.1	0.31	1.5	1.25	1	10/15/20 20:04	DFH
Isopropylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 20:04	DFH
m+p-Xylenes	0.19	0.12	0.50	J	0.84	0.54	2.2	1.25	1	10/15/20 20:04	DFH
Methyl methacrylate	ND	0.12	0.25		ND	0.51	1.0	1.25	1	10/15/20 20:04	DFH

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## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### ANALYTICAL RESULTS

Project Location:  
**Field Sample #: HSI-OAA**  
  
**Sample ID: 201167-11**  
Sample Matrix: Air  
Sampled: 10/7/2020 14:58  
  
Sample Type: AA

Sample Description/Location:  
Sub Description/Location:  
Canister ID: 36957  
Canister Size: 6L

Initial Vacuum(in Hg): 30  
Final Vacuum(in Hg): 8  
Receipt Vacuum(in Hg): 8  
Flow Controller Type: Passive  
Flow Controller ID: 7189

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Methylene chloride	0.44	0.12	1.25	J	1.5	0.43	4.3	1.25	1	10/15/20 20:04	DFH
Methyl-t-butyl ether (MTBE)	ND	0.12	0.25		ND	0.45	0.90	1.25	1	10/15/20 20:04	DFH
Naphthalene	0.22	0.12	0.25	J	1.2	0.66	1.3	1.25	1	10/15/20 20:04	DFH
n-Nonane (C9)	ND	0.12	0.25		ND	0.66	1.3	1.25	1	10/15/20 20:04	DFH
n-Propylbenzene	ND	0.12	0.25		ND	0.61	1.2	1.25	1	10/15/20 20:04	DFH
o-Xylene	ND	0.12	0.25		ND	0.54	1.1	1.25	1	10/15/20 20:04	DFH
n-Pentane (C5)	0.51	0.12	0.25		1.5	0.37	0.74	1.25	1	10/15/20 20:04	DFH
Propylene	0.31	0.12	0.25		0.54	0.22	0.43	1.25	1	10/15/20 20:04	DFH
Styrene	ND	0.12	0.25		ND	0.53	1.1	1.25	1	10/15/20 20:04	DFH
TBA	34.5	0.50	2.50		100	1.5	7.6	5	1	10/16/20 14:27	DFH
Tetrachloroethylene (PCE)	ND	0.12	0.25		ND	0.85	1.7	1.25	1	10/15/20 20:04	DFH
Tetrahydrofuran	ND	0.12	0.25		ND	0.37	0.74	1.25	1	10/15/20 20:04	DFH
Toluene	0.31	0.12	0.25		1.2	0.47	0.94	1.25	1	10/15/20 20:04	DFH
trans-1,2-Dichloroethylene	ND	0.12	0.25		ND	0.50	0.99	1.25	1	10/15/20 20:04	DFH
trans-1,3-Dichloropropene	ND	0.12	0.25		ND	0.57	1.1	1.25	1	10/15/20 20:04	DFH
Trichloroethylene	ND	0.12	0.25		ND	0.67	1.3	1.25	1	10/15/20 20:04	DFH
Trichlorofluoromethane	0.20	0.12	0.25	J	1.1	0.70	1.4	1.25	1	10/15/20 20:04	DFH
Vinyl acetate	ND	0.12	0.25		ND	0.44	0.88	1.25	1	10/15/20 20:04	DFH
Vinyl bromide	ND	0.12	0.25		ND	0.55	1.1	1.25	1	10/15/20 20:04	DFH
Vinyl chloride	ND	0.12	0.25		ND	0.32	0.64	1.25	1	10/15/20 20:04	DFH
Xylenes, Total	ND	0.12	0.75		ND	0.54	3.3	1.25	1	10/15/20 20:04	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	89.8				80-120					10/16/20 14:27	
4-Bromofluorobenzene (Surr)	92.2				80-120					10/15/20 20:04	

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
20I1167-01	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-01RE1	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-03	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-03RE1	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-04	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-04RE1	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-05	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-06	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-06RE1	400 mL / 400 mL	EPA TO-15	BDJ0409	SDJ0354	AH00105
20I1167-07	400 mL / 400 mL	EPA TO-15	BDJ0447	SDJ0397	AH00105
20I1167-08	400 mL / 400 mL	EPA TO-15	BDJ0447	SDJ0397	AH00105
20I1167-09	400 mL / 400 mL	EPA TO-15	BDJ0447	SDJ0397	AH00105
20I1167-10	400 mL / 400 mL	EPA TO-15	BDJ0447	SDJ0397	AH00105
20I1167-11	400 mL / 400 mL	EPA TO-15	BDJ0447	SDJ0397	AH00105
20I1167-11RE1	400 mL / 400 mL	EPA TO-15	BDJ0497	SDJ0442	AH00105

### Certificate of Analysis

Final Report

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Columbia, MD 21045

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Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

#### Volatile Organic Compounds by GCMS - Quality Control

#### Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source		%REC		RPD		Qual
	Result	Limit		Units	Result	%REC	Limits	RPD	Limit	

#### Batch BDJ0409 - No Prep VOC Air

#### Blank (BDJ0409-BLK1)

Prepared & Analyzed: 10/14/2020

1,1,1-Trichloroethane	<	0.20	ppbv
1,1,1,2-Tetrachloroethane	<	0.20	ppbv
1,1,2,2-Tetrachloroethane	<	0.20	ppbv
1,1,2-Trichloro-1,2,2-trifluoroethane	<	0.20	ppbv
1,1,2-Trichloroethane	<	0.20	ppbv
1,1-Dichloroethane	<	0.20	ppbv
1,1-Dichloroethylene	<	0.20	ppbv
1,2,4-Trichlorobenzene	<	0.50	ppbv
1,2,4-Trimethylbenzene	<	0.20	ppbv
1,2-Dibromoethane (EDB)	<	0.20	ppbv
1,2-Dichlorobenzene	<	0.20	ppbv
1,2-Dichloroethane	<	0.20	ppbv
1,2-Dichloropropane	<	0.20	ppbv
1,2-Dichlorotetrafluoroethane	<	0.20	ppbv
1,3,5-Trimethylbenzene	<	0.20	ppbv
1,3-Butadiene	<	0.20	ppbv
1,3-Dichlorobenzene	<	0.20	ppbv
1,4-Dichlorobenzene	<	0.20	ppbv
1,4-Dioxane	<	0.20	ppbv
1-Ethyl-4-methyl benzene	<	0.20	ppbv
2-Butanone (MEK)	<	0.20	ppbv
2-Chlorotoluene	<	0.20	ppbv
2-Hexanone (MBK)	<	0.20	ppbv
4-Methyl-2-pentanone (MIBK)	<	0.20	ppbv
Acrolein	<	0.20	ppbv
Allyl chloride	<	0.20	ppbv
Benzene	<	0.20	ppbv
Benzyl Chloride	<	0.20	ppbv
Bromodichloromethane	<	0.20	ppbv
Bromoform	<	0.20	ppbv
Bromomethane	<	0.20	ppbv



## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

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Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

**Volatile Organic Compounds by GCMS - Quality Control**  
**Air Water & Soil Laboratories, Inc.**

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

**Batch BDJ0409 - No Prep VOC Air**

**Blank (BDJ0409-BLK1)**

Prepared & Analyzed: 10/14/2020

Carbon Tetrachloride	<	0.20	ppbv
Chlorobenzene	<	0.20	ppbv
Chloroethane	<	0.20	ppbv
Chloroform	<	0.20	ppbv
Chloromethane	<	0.20	ppbv
cis-1,2-Dichloroethylene	<	0.20	ppbv
cis-1,3-Dichloropropene	<	0.20	ppbv
Cyclohexane	<	0.20	ppbv
Dibromochloromethane	<	0.20	ppbv
Dichlorodifluoromethane	<	0.50	ppbv
Ethanol	<	0.50	ppbv
Ethyl acetate	<	0.20	ppbv
Ethylbenzene	<	0.20	ppbv
Heptane	<	0.20	ppbv
Hexachlorobutadiene	<	0.50	ppbv
Hexane	<	0.20	ppbv
Isooctane	<	0.20	ppbv
Isopropylbenzene	<	0.20	ppbv
m+p-Xylenes	<	0.40	ppbv
Methyl methacrylate	<	0.20	ppbv
Methylene chloride	<	1.00	ppbv
Methyl-t-butyl ether (MTBE)	<	0.20	ppbv
Naphthalene	0.12	0.20	ppbv
n-Nonane (C9)	<	0.20	ppbv
n-Propylbenzene	<	0.20	ppbv
o-Xylene	<	0.20	ppbv
n-Pentane (C5)	<	0.20	ppbv
Propylene	<	0.20	ppbv
Styrene	<	0.20	ppbv
TBA	<	0.50	ppbv
Tetrachloroethylene (PCE)	<	0.20	ppbv
Tetrahydrofuran	<	0.20	ppbv
Toluene	<	0.20	ppbv
trans-1,2-Dichloroethylene	<	0.20	ppbv

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
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Columbia, MD 21045

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Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0409 - No Prep VOC Air

##### Blank (BDJ0409-BLK1)

Prepared & Analyzed: 10/14/2020

trans-1,3-Dichloropropene	<	0.20	ppbv						
Trichloroethylene	<	0.20	ppbv						
Trichlorofluoromethane	<	0.20	ppbv						
Vinyl acetate	<	0.20	ppbv						
Vinyl bromide	<	0.20	ppbv						
Vinyl chloride	<	0.20	ppbv						
Xylenes, Total	<	0.60	ppbv						

Surr: 4-Bromofluorobenzene  
(Surr)

4.81 ppbv 5.00 96.2 80-120

##### LCS (BDJ0409-BS1)

Prepared & Analyzed: 10/14/2020

1,1,1-Trichloroethane	4.98	0.2	ppbv	5.00	99.6	70-130
1,1,1,2-Tetrachloroethane	4.87	0.2	ppbv	5.00	97.5	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane	5.35	0.2	ppbv	5.00	107	70-130
1,1,2-Trichloroethane	5.30	0.2	ppbv	5.00	106	70-130
1,1-Dichloroethane	5.34	0.2	ppbv	5.00	107	70-130
1,1-Dichloroethylene	5.39	0.2	ppbv	5.00	108	70-130
1,2,4-Trichlorobenzene	4.34	0.5	ppbv	5.00	86.8	60-140
1,2,4-Trimethylbenzene	5.09	0.2	ppbv	5.00	102	70-130
1,2-Dibromoethane (EDB)	5.16	0.2	ppbv	5.00	103	70-130
1,2-Dichlorobenzene	4.59	0.2	ppbv	5.00	91.8	70-130
1,2-Dichloroethane	5.24	0.2	ppbv	5.00	105	70-130
1,2-Dichloropropane	5.36	0.2	ppbv	5.00	107	70-130
1,2-Dichlorotetrafluoroethane	5.03	0.2	ppbv	5.00	101	70-130
1,3,5-Trimethylbenzene	5.22	0.2	ppbv	5.00	104	70-130
1,3-Butadiene	5.07	0.2	ppbv	5.00	101	70-130
1,3-Dichlorobenzene	4.80	0.2	ppbv	5.00	96.1	70-130
1,4-Dichlorobenzene	5.04	0.2	ppbv	5.00	101	70-130
1,4-Dioxane	4.76	0.2	ppbv	5.00	95.3	70-130
1-Ethyl-4-methyl benzene	4.68	0.2	ppbv	5.00	93.7	70-130
2-Butanone (MEK)	5.06	0.2	ppbv	5.00	101	70-130
2-Chlorotoluene	5.13	0.2	ppbv	5.00	103	70-130
2-Hexanone (MBK)	4.72	0.2	ppbv	5.00	94.4	70-130
4-Methyl-2-pentanone (MIBK)	5.04	0.2	ppbv	5.00	101	70-130

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

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5405 Twin Knolls Rd., Suite 1

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Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

**Volatile Organic Compounds by GCMS - Quality Control**  
**Air Water & Soil Laboratories, Inc.**

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	RPD	Limit	Qual
	Result	Limit			Units	%REC				

**Batch BDJ0409 - No Prep VOC Air**

**LCS (BDJ0409-BS1)**

Prepared & Analyzed: 10/14/2020

Allyl chloride	5.70	0.2	ppbv	5.00	114	70-130
Benzene	5.20	0.2	ppbv	5.00	104	70-130
Benzyl Chloride	4.72	0.2	ppbv	5.00	94.5	70-130
Bromodichloromethane	4.88	0.2	ppbv	5.00	97.6	70-130
Bromoform	4.43	0.2	ppbv	5.00	88.7	70-130
Bromomethane	5.24	0.2	ppbv	5.00	105	70-130
Carbon Tetrachloride	5.31	0.2	ppbv	5.00	106	70-130
Chlorobenzene	5.03	0.2	ppbv	5.00	101	70-130
Chloroethane	5.26	0.2	ppbv	5.00	105	70-130
Chloroform	5.17	0.2	ppbv	5.00	103	70-130
Chloromethane	5.54	0.2	ppbv	5.00	111	70-130
cis-1,2-Dichloroethylene	5.30	0.2	ppbv	5.00	106	70-130
cis-1,3-Dichloropropene	5.30	0.2	ppbv	5.00	106	70-130
Cyclohexane	5.62	0.2	ppbv	5.00	112	70-130
Dibromochloromethane	5.04	0.2	ppbv	5.00	101	70-130
Dichlorodifluoromethane	5.43	0.5	ppbv	5.00	109	70-130
Ethanol	3.44	0.5	ppbv	3.95	87.2	70-130
Ethyl acetate	5.41	0.2	ppbv	5.00	108	70-130
Ethylbenzene	5.31	0.2	ppbv	5.00	106	70-130
Heptane	5.06	0.2	ppbv	5.00	101	70-130
Hexachlorobutadiene	4.49	0.5	ppbv	5.00	89.8	60-140
Hexane	5.81	0.2	ppbv	5.00	116	70-130
Isooctane	5.50	0.2	ppbv	5.00	110	70-130
m+p-Xylenes	10.4	0.4	ppbv	10.0	104	70-130
Methylene chloride	5.09	1	ppbv	5.00	102	70-130
Methyl-t-butyl ether (MTBE)	6.11	0.2	ppbv	5.00	122	70-130
Naphthalene	3.87	0.2	ppbv	5.00	77.5	60-140
n-Nonane (C9)	5.16	0.2	ppbv	5.00	103	70-130
n-Propylbenzene	5.06	0.2	ppbv	5.00	101	70-130
o-Xylene	5.28	0.2	ppbv	5.00	106	70-130
n-Pentane (C5)	5.74	0.2	ppbv	5.00	115	70-130
Propylene	5.59	0.2	ppbv	5.00	112	70-130
Styrene	5.18	0.2	ppbv	5.00	104	70-130
Tetrachloroethylene (PCE)	5.10	0.2	ppbv	5.00	102	70-130

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0409 - No Prep VOC Air

##### LCS (BDJ0409-BS1)

Prepared & Analyzed: 10/14/2020

Tetrahydrofuran	5.97	0.2	ppbv	5.00	119	70-130			
Toluene	5.27	0.2	ppbv	5.00	105	70-130			
trans-1,2-Dichloroethylene	5.93	0.2	ppbv	5.00	119	70-130			
trans-1,3-Dichloropropene	5.26	0.2	ppbv	5.00	105	70-130			
Trichloroethylene	5.33	0.2	ppbv	5.00	107	70-130			
Trichlorofluoromethane	5.27	0.2	ppbv	5.00	105	70-130			
Vinyl acetate	5.91	0.2	ppbv	5.00	118	70-130			
Vinyl bromide	5.52	0.2	ppbv	5.00	110	70-130			
Vinyl chloride	5.12	0.2	ppbv	5.00	102	70-130			
Surr: 4-Bromofluorobenzene (Surr)	5.01		ppbv	5.00	100	70-130			

##### LCS Dup (BDJ0409-BSD1)

Prepared & Analyzed: 10/14/2020

1,1,1-Trichloroethane	5.39	0.2	ppbv	5.00	108	70-130	7.93	25	
1,1,2,2-Tetrachloroethane	5.10	0.2	ppbv	5.00	102	70-130	4.49	25	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.43	0.2	ppbv	5.00	109	70-130	1.48	25	
1,1,2-Trichloroethane	5.08	0.2	ppbv	5.00	102	70-130	4.30	25	
1,1-Dichloroethane	5.34	0.2	ppbv	5.00	107	70-130	0.112	25	
1,1-Dichloroethylene	5.56	0.2	ppbv	5.00	111	70-130	3.10	25	
1,2,4-Trichlorobenzene	4.72	0.5	ppbv	5.00	94.4	60-140	8.48	25	
1,2,4-Trimethylbenzene	4.80	0.2	ppbv	5.00	95.9	70-130	5.93	25	
1,2-Dibromoethane (EDB)	5.19	0.2	ppbv	5.00	104	70-130	0.696	25	
1,2-Dichlorobenzene	4.48	0.2	ppbv	5.00	89.6	70-130	2.45	25	
1,2-Dichloroethane	5.75	0.2	ppbv	5.00	115	70-130	9.12	25	
1,2-Dichloropropane	5.14	0.2	ppbv	5.00	103	70-130	4.10	25	
1,2-Dichlorotetrafluoroethane	5.06	0.2	ppbv	5.00	101	70-130	0.496	25	
1,3,5-Trimethylbenzene	4.78	0.2	ppbv	5.00	95.5	70-130	8.88	25	
1,3-Butadiene	4.86	0.2	ppbv	5.00	97.2	70-130	4.17	25	
1,3-Dichlorobenzene	4.56	0.2	ppbv	5.00	91.3	70-130	5.12	25	
1,4-Dichlorobenzene	4.76	0.2	ppbv	5.00	95.1	70-130	5.72	25	
1,4-Dioxane	5.16	0.2	ppbv	5.00	103	70-130	7.96	25	
1-Ethyl-4-methyl benzene	5.07	0.2	ppbv	5.00	101	70-130	7.88	25	
2-Butanone (MEK)	5.25	0.2	ppbv	5.00	105	70-130	3.70	25	
2-Chlorotoluene	5.17	0.2	ppbv	5.00	103	70-130	0.835	25	

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0409 - No Prep VOC Air

#### LCS Dup (BDJ0409-BSD1)

Prepared & Analyzed: 10/14/2020

2-Hexanone (MBK)	4.82	0.2	ppbv	5.00	96.5	70-130	2.16	25	
4-Methyl-2-pentanone (MIBK)	5.62	0.2	ppbv	5.00	112	70-130	10.8	25	
Allyl chloride	5.71	0.2	ppbv	5.00	114	70-130	0.158	25	
Benzene	5.40	0.2	ppbv	5.00	108	70-130	3.75	25	
Benzyl Chloride	4.52	0.2	ppbv	5.00	90.4	70-130	4.35	25	
Bromodichloromethane	5.22	0.2	ppbv	5.00	104	70-130	6.70	25	
Bromoform	4.06	0.2	ppbv	5.00	81.2	70-130	8.76	25	
Bromomethane	5.31	0.2	ppbv	5.00	106	70-130	1.23	25	
Carbon Tetrachloride	5.44	0.2	ppbv	5.00	109	70-130	2.47	25	
Chlorobenzene	5.15	0.2	ppbv	5.00	103	70-130	2.36	25	
Chloroethane	5.09	0.2	ppbv	5.00	102	70-130	3.31	25	
Chloroform	5.20	0.2	ppbv	5.00	104	70-130	0.636	25	
Chloromethane	5.09	0.2	ppbv	5.00	102	70-130	8.49	25	
cis-1,2-Dichloroethylene	5.35	0.2	ppbv	5.00	107	70-130	0.920	25	
cis-1,3-Dichloropropene	4.96	0.2	ppbv	5.00	99.3	70-130	6.51	25	
Cyclohexane	5.33	0.2	ppbv	5.00	107	70-130	5.26	25	
Dibromochloromethane	5.16	0.2	ppbv	5.00	103	70-130	2.39	25	
Dichlorodifluoromethane	4.99	0.5	ppbv	5.00	99.8	70-130	8.50	25	
Ethanol	3.11	0.5	ppbv	3.95	78.7	70-130	10.2	25	
Ethyl acetate	5.30	0.2	ppbv	5.00	106	70-130	2.00	25	
Ethylbenzene	5.35	0.2	ppbv	5.00	107	70-130	0.751	25	
Heptane	5.57	0.2	ppbv	5.00	111	70-130	9.62	25	
Hexachlorobutadiene	5.07	0.5	ppbv	5.00	101	60-140	12.2	25	
Hexane	5.81	0.2	ppbv	5.00	116	70-130	0.0344	25	
Isooctane	5.30	0.2	ppbv	5.00	106	70-130	3.78	25	
m+p-Xylenes	9.39	0.4	ppbv	10.0	93.9	70-130	10.5	25	
Methylene chloride	5.09	1	ppbv	5.00	102	70-130	0.0197	25	
Methyl-t-butyl ether (MTBE)	6.14	0.2	ppbv	5.00	123	70-130	0.425	25	
Naphthalene	4.35	0.2	ppbv	5.00	87.0	60-140	11.6	25	
n-Nonane (C9)	5.55	0.2	ppbv	5.00	111	70-130	7.19	25	
n-Propylbenzene	5.23	0.2	ppbv	5.00	105	70-130	3.32	25	
o-Xylene	5.45	0.2	ppbv	5.00	109	70-130	3.24	25	
n-Pentane (C5)	5.82	0.2	ppbv	5.00	116	70-130	1.26	25	
Propylene	4.64	0.2	ppbv	5.00	92.9	70-130	18.5	25	

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			Result	Limits	RPD	Limit	

#### Batch BDJ0409 - No Prep VOC Air

##### LCS Dup (BDJ0409-BSD1)

Prepared & Analyzed: 10/14/2020

Styrene	5.38	0.2	ppbv	5.00	108	70-130	3.85	25	
Tetrachloroethylene (PCE)	5.16	0.2	ppbv	5.00	103	70-130	1.03	25	
Tetrahydrofuran	6.57	0.2	ppbv	5.00	131	70-130	9.57	25	L
Toluene	5.67	0.2	ppbv	5.00	113	70-130	7.39	25	
trans-1,2-Dichloroethylene	6.02	0.2	ppbv	5.00	120	70-130	1.56	25	
trans-1,3-Dichloropropene	5.59	0.2	ppbv	5.00	112	70-130	6.16	25	
Trichloroethylene	5.79	0.2	ppbv	5.00	116	70-130	8.24	25	
Trichlorofluoromethane	5.09	0.2	ppbv	5.00	102	70-130	3.46	25	
Vinyl acetate	6.01	0.2	ppbv	5.00	120	70-130	1.63	25	
Vinyl bromide	5.50	0.2	ppbv	5.00	110	70-130	0.363	25	
Vinyl chloride	5.21	0.2	ppbv	5.00	104	70-130	1.67	25	
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	5.20		ppbv	5.00	104	70-130			

#### Batch BDJ0447 - No Prep VOC Air

##### Blank (BDJ0447-BLK1)

Prepared & Analyzed: 10/15/2020

1,1,1-Trichloroethane	<	0.20	ppbv						
1,1,1,2-Tetrachloroethane	<	0.20	ppbv						
1,1,2,2-Tetrachloroethane	<	0.20	ppbv						
1,1,2-Trichloro-1,2,2-trifluoroethane	<	0.20	ppbv						
1,1,2-Trichloroethane	<	0.20	ppbv						
1,1-Dichloroethane	<	0.20	ppbv						
1,1-Dichloroethylene	<	0.20	ppbv						
1,2,4-Trichlorobenzene	<	0.50	ppbv						
1,2,4-Trimethylbenzene	<	0.20	ppbv						
1,2-Dibromoethane (EDB)	<	0.20	ppbv						
1,2-Dichlorobenzene	<	0.20	ppbv						
1,2-Dichloroethane	<	0.20	ppbv						
1,2-Dichloropropane	<	0.20	ppbv						
1,2-Dichlorotetrafluoroethane	<	0.20	ppbv						
1,3,5-Trimethylbenzene	<	0.20	ppbv						
1,3-Butadiene	<	0.20	ppbv						
1,3-Dichlorobenzene	<	0.20	ppbv						

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

**Volatile Organic Compounds by GCMS - Quality Control**  
**Air Water & Soil Laboratories, Inc.**

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

**Batch BDJ0447 - No Prep VOC Air**

**Blank (BDJ0447-BLK1)**

Prepared & Analyzed: 10/15/2020

1,4-Dichlorobenzene	<	0.20	ppbv
1,4-Dioxane	<	0.20	ppbv
1-Ethyl-4-methyl benzene	<	0.20	ppbv
2-Butanone (MEK)	<	0.20	ppbv
2-Chlorotoluene	<	0.20	ppbv
2-Hexanone (MBK)	<	0.20	ppbv
4-Methyl-2-pentanone (MIBK)	<	0.20	ppbv
Acetone	0.29	0.50	ppbv
Acrolein	<	0.20	ppbv
Allyl chloride	<	0.20	ppbv
Benzene	<	0.20	ppbv
Benzyl Chloride	<	0.20	ppbv
Bromodichloromethane	<	0.20	ppbv
Bromoform	<	0.20	ppbv
Bromomethane	<	0.20	ppbv
Carbon Disulfide	0.12	0.50	ppbv
Carbon Tetrachloride	<	0.20	ppbv
Chlorobenzene	<	0.20	ppbv
Chloroethane	<	0.20	ppbv
Chloroform	<	0.20	ppbv
Chloromethane	<	0.20	ppbv
cis-1,2-Dichloroethylene	<	0.20	ppbv
cis-1,3-Dichloropropene	<	0.20	ppbv
Cyclohexane	<	0.20	ppbv
Dibromochloromethane	<	0.20	ppbv
Dichlorodifluoromethane	<	0.50	ppbv
Ethanol	<	0.50	ppbv
Ethyl acetate	<	0.20	ppbv
Ethylbenzene	<	0.20	ppbv
Heptane	<	0.20	ppbv
Hexachlorobutadiene	<	0.50	ppbv
Hexane	<	0.20	ppbv
Isooctane	<	0.20	ppbv
Isopropyl alcohol	0.17	0.50	ppbv

1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

## Certificate of Analysis

Final Report

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Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

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Columbia, MD 21045

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Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	RPD	Limit	Qual
	Result	Limit			Units	%REC				

#### Batch BDJ0447 - No Prep VOC Air

##### Blank (BDJ0447-BLK1)

Prepared & Analyzed: 10/15/2020

Isopropylbenzene	<	0.20	ppbv							
m+p-Xylenes	<	0.40	ppbv							
Methyl methacrylate	<	0.20	ppbv							
Methylene chloride	<	1.00	ppbv							
Methyl-t-butyl ether (MTBE)	<	0.20	ppbv							
Naphthalene	0.11	0.20	ppbv							
n-Nonane (C9)	<	0.20	ppbv							
n-Propylbenzene	<	0.20	ppbv							
o-Xylene	<	0.20	ppbv							
n-Pentane (C5)	<	0.20	ppbv							
Propylene	0.11	0.20	ppbv							
Styrene	<	0.20	ppbv							
TBA	<	0.50	ppbv							
Tetrachloroethylene (PCE)	<	0.20	ppbv							
Tetrahydrofuran	<	0.20	ppbv							
Toluene	<	0.20	ppbv							
trans-1,2-Dichloroethylene	<	0.20	ppbv							
trans-1,3-Dichloropropene	<	0.20	ppbv							
Trichloroethylene	<	0.20	ppbv							
Trichlorofluoromethane	<	0.20	ppbv							
Vinyl acetate	<	0.20	ppbv							
Vinyl bromide	<	0.20	ppbv							
Vinyl chloride	<	0.20	ppbv							
Xylenes, Total	<	0.60	ppbv							

Surr: 4-Bromofluorobenzene 4.47 ppbv 5.00 89.3 80-120  
(Surr)

##### LCS (BDJ0447-BS1)

Prepared & Analyzed: 10/15/2020

1,1,1-Trichloroethane	5.11	0.2	ppbv	5.00	102	70-130
1,1,2,2-Tetrachloroethane	5.16	0.2	ppbv	5.00	103	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane	5.50	0.2	ppbv	5.00	110	70-130
1,1,2-Trichloroethane	5.56	0.2	ppbv	5.00	111	70-130
1,1-Dichloroethane	5.45	0.2	ppbv	5.00	109	70-130
1,1-Dichloroethylene	5.60	0.2	ppbv	5.00	112	70-130



## Certificate of Analysis

Final Report

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Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0447 - No Prep VOC Air

#### LCS (BDJ0447-BS1)

Prepared & Analyzed: 10/15/2020

1,2,4-Trichlorobenzene	4.72	0.5	ppbv	5.00	94.4	60-140			
1,2,4-Trimethylbenzene	5.43	0.2	ppbv	5.00	109	70-130			
1,2-Dibromoethane (EDB)	5.31	0.2	ppbv	5.00	106	70-130			
1,2-Dichlorobenzene	5.23	0.2	ppbv	5.00	105	70-130			
1,2-Dichloroethane	5.43	0.2	ppbv	5.00	109	70-130			
1,2-Dichloropropane	5.52	0.2	ppbv	5.00	110	70-130			
1,2-Dichlorotetrafluoroethane	5.23	0.2	ppbv	5.00	105	70-130			
1,3,5-Trimethylbenzene	5.37	0.2	ppbv	5.00	107	70-130			
1,3-Butadiene	5.29	0.2	ppbv	5.00	106	70-130			
1,3-Dichlorobenzene	5.43	0.2	ppbv	5.00	109	70-130			
1,4-Dichlorobenzene	5.46	0.2	ppbv	5.00	109	70-130			
1,4-Dioxane	4.82	0.2	ppbv	5.00	96.3	70-130			
1-Ethyl-4-methyl benzene	5.20	0.2	ppbv	5.00	104	70-130			
2-Butanone (MEK)	5.27	0.2	ppbv	5.00	105	70-130			
2-Chlorotoluene	5.40	0.2	ppbv	5.00	108	70-130			
2-Hexanone (MBK)	4.86	0.2	ppbv	5.00	97.3	70-130			
4-Methyl-2-pentanone (MIBK)	5.24	0.2	ppbv	5.00	105	70-130			
Acetone	5.14	0.5	ppbv	5.00	103	70-130			
Allyl chloride	5.84	0.2	ppbv	5.00	117	70-130			
Benzene	5.36	0.2	ppbv	5.00	107	70-130			
Benzyl Chloride	5.28	0.2	ppbv	5.00	106	70-130			
Bromodichloromethane	5.02	0.2	ppbv	5.00	100	70-130			
Bromoform	4.54	0.2	ppbv	5.00	90.9	70-130			
Bromomethane	5.47	0.2	ppbv	5.00	109	70-130			
Carbon Disulfide	6.09	0.5	ppbv	5.00	122	70-130			
Carbon Tetrachloride	5.41	0.2	ppbv	5.00	108	70-130			
Chlorobenzene	5.17	0.2	ppbv	5.00	103	70-130			
Chloroethane	5.56	0.2	ppbv	5.00	111	70-130			
Chloroform	5.24	0.2	ppbv	5.00	105	70-130			
Chloromethane	5.81	0.2	ppbv	5.00	116	70-130			
cis-1,2-Dichloroethylene	5.37	0.2	ppbv	5.00	107	70-130			
cis-1,3-Dichloropropene	5.50	0.2	ppbv	5.00	110	70-130			
Cyclohexane	5.77	0.2	ppbv	5.00	115	70-130			
Dibromochloromethane	5.21	0.2	ppbv	5.00	104	70-130			

## Certificate of Analysis

Final Report

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Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0447 - No Prep VOC Air

#### LCS (BDJ0447-BS1)

Prepared & Analyzed: 10/15/2020

Dichlorodifluoromethane	5.56	0.5	ppbv	5.00	111	70-130			
Ethanol	3.65	0.5	ppbv	3.95	92.3	70-130			
Ethyl acetate	5.41	0.2	ppbv	5.00	108	70-130			
Ethylbenzene	5.46	0.2	ppbv	5.00	109	70-130			
Heptane	5.28	0.2	ppbv	5.00	106	70-130			
Hexachlorobutadiene	5.18	0.5	ppbv	5.00	104	60-140			
Hexane	5.89	0.2	ppbv	5.00	118	70-130			
Isooctane	5.61	0.2	ppbv	5.00	112	70-130			
Isopropyl alcohol	4.98	0.5	ppbv	5.00	99.6	70-130			
m+p-Xylenes	10.7	0.4	ppbv	10.0	107	70-130			
Methylene chloride	5.16	1	ppbv	5.00	103	70-130			
Methyl-t-butyl ether (MTBE)	6.13	0.2	ppbv	5.00	123	70-130			
Naphthalene	4.26	0.2	ppbv	5.00	85.2	60-140			
n-Nonane (C9)	5.55	0.2	ppbv	5.00	111	70-130			
n-Propylbenzene	5.44	0.2	ppbv	5.00	109	70-130			
o-Xylene	5.46	0.2	ppbv	5.00	109	70-130			
n-Pentane (C5)	5.86	0.2	ppbv	5.00	117	70-130			
Propylene	5.75	0.2	ppbv	5.00	115	70-130			
Styrene	5.36	0.2	ppbv	5.00	107	70-130			
Tetrachloroethylene (PCE)	5.21	0.2	ppbv	5.00	104	70-130			
Tetrahydrofuran	6.23	0.2	ppbv	5.00	125	70-130			
Toluene	5.45	0.2	ppbv	5.00	109	70-130			
trans-1,2-Dichloroethylene	6.11	0.2	ppbv	5.00	122	70-130			
trans-1,3-Dichloropropene	5.46	0.2	ppbv	5.00	109	70-130			
Trichloroethylene	5.53	0.2	ppbv	5.00	111	70-130			
Trichlorofluoromethane	5.39	0.2	ppbv	5.00	108	70-130			
Vinyl acetate	6.02	0.2	ppbv	5.00	120	70-130			
Vinyl bromide	5.64	0.2	ppbv	5.00	113	70-130			
Vinyl chloride	5.31	0.2	ppbv	5.00	106	70-130			
Surr: 4-Bromofluorobenzene (Surr)	5.24		ppbv	5.00	105	70-130			

### Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc. Date Received: October 8, 2020 14:02  
 5405 Twin Knolls Rd., Suite 1 Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers Purchase Order: CG09042310MS

#### Volatile Organic Compounds by GCMS - Quality Control

#### Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			Result	%REC	RPD	Limit	

#### Batch BDJ0447 - No Prep VOC Air

#### LCS Dup (BDJ0447-BSD1)

Prepared & Analyzed: 10/15/2020

1,1,1-Trichloroethane	5.14	0.2	ppbv	5.00	103	70-130	0.527	25	
1,1,1,2-Tetrachloroethane	5.34	0.2	ppbv	5.00	107	70-130	3.43	25	
1,1,1,2-Trichloro-1,2,2-trifluoroethane	5.53	0.2	ppbv	5.00	111	70-130	0.490	25	
1,1,2-Trichloroethane	5.60	0.2	ppbv	5.00	112	70-130	0.825	25	
1,1-Dichloroethane	5.51	0.2	ppbv	5.00	110	70-130	1.08	25	
1,1-Dichloroethylene	5.59	0.2	ppbv	5.00	112	70-130	0.161	25	
1,2,4-Trichlorobenzene	5.16	0.5	ppbv	5.00	103	60-140	8.96	25	
1,2,4-Trimethylbenzene	5.57	0.2	ppbv	5.00	111	70-130	2.47	25	
1,2-Dibromoethane (EDB)	5.41	0.2	ppbv	5.00	108	70-130	1.92	25	
1,2-Dichlorobenzene	5.39	0.2	ppbv	5.00	108	70-130	3.05	25	
1,2-Dichloroethane	5.46	0.2	ppbv	5.00	109	70-130	0.661	25	
1,2-Dichloropropane	5.67	0.2	ppbv	5.00	113	70-130	2.65	25	
1,2-Dichlorotetrafluoroethane	5.27	0.2	ppbv	5.00	105	70-130	0.686	25	
1,3,5-Trimethylbenzene	5.52	0.2	ppbv	5.00	110	70-130	2.72	25	
1,3-Butadiene	5.23	0.2	ppbv	5.00	105	70-130	1.27	25	
1,3-Dichlorobenzene	5.54	0.2	ppbv	5.00	111	70-130	2.01	25	
1,4-Dichlorobenzene	5.63	0.2	ppbv	5.00	113	70-130	3.16	25	
1,4-Dioxane	5.00	0.2	ppbv	5.00	100	70-130	3.83	25	
1-Ethyl-4-methyl benzene	5.32	0.2	ppbv	5.00	106	70-130	2.24	25	
2-Butanone (MEK)	5.34	0.2	ppbv	5.00	107	70-130	1.28	25	
2-Chlorotoluene	5.49	0.2	ppbv	5.00	110	70-130	1.80	25	
2-Hexanone (MBK)	5.00	0.2	ppbv	5.00	99.9	70-130	2.72	25	
4-Methyl-2-pentanone (MIBK)	5.24	0.2	ppbv	5.00	105	70-130	0.00	25	
Acetone	5.17	0.5	ppbv	5.00	103	70-130	0.543	25	
Allyl chloride	5.93	0.2	ppbv	5.00	119	70-130	1.55	25	
Benzene	5.39	0.2	ppbv	5.00	108	70-130	0.670	25	
Benzyl Chloride	5.53	0.2	ppbv	5.00	111	70-130	4.61	25	
Bromodichloromethane	5.04	0.2	ppbv	5.00	101	70-130	0.258	25	
Bromoform	4.60	0.2	ppbv	5.00	92.0	70-130	1.27	25	
Bromomethane	5.43	0.2	ppbv	5.00	109	70-130	0.789	25	
Carbon Disulfide	6.13	0.5	ppbv	5.00	123	70-130	0.671	25	
Carbon Tetrachloride	5.40	0.2	ppbv	5.00	108	70-130	0.203	25	
Chlorobenzene	5.24	0.2	ppbv	5.00	105	70-130	1.40	25	

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0447 - No Prep VOC Air

##### LCS Dup (BDJ0447-BSD1)

Prepared & Analyzed: 10/15/2020

Chloroethane	5.57	0.2	ppbv	5.00	111	70-130	0.108	25	
Chloroform	5.33	0.2	ppbv	5.00	107	70-130	1.65	25	
Chloromethane	5.91	0.2	ppbv	5.00	118	70-130	1.72	25	
cis-1,2-Dichloroethylene	5.47	0.2	ppbv	5.00	109	70-130	1.81	25	
cis-1,3-Dichloropropene	5.55	0.2	ppbv	5.00	111	70-130	1.03	25	
Cyclohexane	5.80	0.2	ppbv	5.00	116	70-130	0.467	25	
Dibromochloromethane	5.24	0.2	ppbv	5.00	105	70-130	0.555	25	
Dichlorodifluoromethane	5.66	0.5	ppbv	5.00	113	70-130	1.80	25	
Ethanol	3.60	0.5	ppbv	3.95	91.1	70-130	1.32	25	
Ethyl acetate	5.36	0.2	ppbv	5.00	107	70-130	0.854	25	
Ethylbenzene	5.60	0.2	ppbv	5.00	112	70-130	2.64	25	
Heptane	5.34	0.2	ppbv	5.00	107	70-130	1.21	25	
Hexachlorobutadiene	5.45	0.5	ppbv	5.00	109	60-140	5.06	25	
Hexane	6.02	0.2	ppbv	5.00	120	70-130	2.18	25	
Isooctane	5.68	0.2	ppbv	5.00	114	70-130	1.26	25	
Isopropyl alcohol	5.08	0.5	ppbv	5.00	102	70-130	1.91	25	
m+p-Xylenes	11.0	0.4	ppbv	10.0	110	70-130	2.79	25	
Methylene chloride	5.31	1	ppbv	5.00	106	70-130	2.87	25	
Methyl-t-butyl ether (MTBE)	6.27	0.2	ppbv	5.00	125	70-130	2.31	25	
Naphthalene	4.59	0.2	ppbv	5.00	91.7	60-140	7.32	25	
n-Nonane (C9)	5.75	0.2	ppbv	5.00	115	70-130	3.51	25	
n-Propylbenzene	5.53	0.2	ppbv	5.00	111	70-130	1.79	25	
o-Xylene	5.57	0.2	ppbv	5.00	111	70-130	2.01	25	
n-Pentane (C5)	5.92	0.2	ppbv	5.00	118	70-130	0.933	25	
Propylene	5.97	0.2	ppbv	5.00	119	70-130	3.72	25	
Styrene	5.51	0.2	ppbv	5.00	110	70-130	2.76	25	
Tetrachloroethylene (PCE)	5.32	0.2	ppbv	5.00	106	70-130	1.96	25	
Tetrahydrofuran	6.19	0.2	ppbv	5.00	124	70-130	0.692	25	
Toluene	5.46	0.2	ppbv	5.00	109	70-130	0.220	25	
trans-1,2-Dichloroethylene	6.17	0.2	ppbv	5.00	123	70-130	0.912	25	
trans-1,3-Dichloropropene	5.58	0.2	ppbv	5.00	112	70-130	2.17	25	
Trichloroethylene	5.53	0.2	ppbv	5.00	111	70-130	0.0181	25	
Trichlorofluoromethane	5.43	0.2	ppbv	5.00	109	70-130	0.721	25	
Vinyl acetate	6.11	0.2	ppbv	5.00	122	70-130	1.37	25	

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0447 - No Prep VOC Air

##### LCS Dup (BDJ0447-BSD1)

Prepared & Analyzed: 10/15/2020

Vinyl bromide	5.62	0.2	ppbv	5.00	112	70-130	0.444	25	
Vinyl chloride	5.44	0.2	ppbv	5.00	109	70-130	2.46	25	
<i>Surr: 4-Bromofluorobenzene (Surr)</i>	5.31		ppbv	5.00	106	70-130			

#### Batch BDJ0497 - No Prep VOC Air

##### Blank (BDJ0497-BLK1)

Prepared & Analyzed: 10/16/2020

1,1,1-Trichloroethane	<	0.20	ppbv						
1,1,1,2-Tetrachloroethane	<	0.20	ppbv						
1,1,2,2-Tetrachloroethane	<	0.20	ppbv						
1,1,2-Trichloro-1,2,2-trifluoroethane	<	0.20	ppbv						
1,1,2-Trichloroethane	<	0.20	ppbv						
1,1-Dichloroethane	<	0.20	ppbv						
1,1-Dichloroethylene	<	0.20	ppbv						
1,2,4-Trichlorobenzene	<	0.50	ppbv						
1,2,4-Trimethylbenzene	<	0.20	ppbv						
1,2-Dibromoethane (EDB)	<	0.20	ppbv						
1,2-Dichlorobenzene	<	0.20	ppbv						
1,2-Dichloroethane	<	0.20	ppbv						
1,2-Dichloropropane	<	0.20	ppbv						
1,2-Dichlorotetrafluoroethane	<	0.20	ppbv						
1,3,5-Trimethylbenzene	<	0.20	ppbv						
1,3-Butadiene	<	0.20	ppbv						
1,3-Dichlorobenzene	<	0.20	ppbv						
1,4-Dichlorobenzene	<	0.20	ppbv						
1,4-Dioxane	<	0.20	ppbv						
1-Ethyl-4-methyl benzene	<	0.20	ppbv						
2-Butanone (MEK)	<	0.20	ppbv						
2-Chlorotoluene	<	0.20	ppbv						
2-Hexanone (MBK)	<	0.20	ppbv						
4-Methyl-2-pentanone (MIBK)	<	0.20	ppbv						
Acetone	0.31	0.50	ppbv						
Acrolein	<	0.20	ppbv						

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0497 - No Prep VOC Air

##### Blank (BDJ0497-BLK1)

Prepared & Analyzed: 10/16/2020

Allyl chloride	<	0.20	ppbv
Benzene	<	0.20	ppbv
Benzyl Chloride	<	0.20	ppbv
Bromodichloromethane	<	0.20	ppbv
Bromoform	<	0.20	ppbv
Bromomethane	<	0.20	ppbv
Carbon Disulfide	0.12	0.50	ppbv
Carbon Tetrachloride	<	0.20	ppbv
Chlorobenzene	<	0.20	ppbv
Chloroethane	<	0.20	ppbv
Chloroform	<	0.20	ppbv
Chloromethane	<	0.20	ppbv
cis-1,2-Dichloroethylene	<	0.20	ppbv
cis-1,3-Dichloropropene	<	0.20	ppbv
Cyclohexane	<	0.20	ppbv
Dibromochloromethane	<	0.20	ppbv
Dichlorodifluoromethane	<	0.50	ppbv
Ethanol	<	0.50	ppbv
Ethyl acetate	<	0.20	ppbv
Ethylbenzene	<	0.20	ppbv
Heptane	<	0.20	ppbv
Hexachlorobutadiene	<	0.50	ppbv
Hexane	<	0.20	ppbv
Isooctane	<	0.20	ppbv
Isopropyl alcohol	0.16	0.50	ppbv
Isopropylbenzene	<	0.20	ppbv
m+p-Xylenes	<	0.40	ppbv
Methyl methacrylate	<	0.20	ppbv
Methylene chloride	<	1.00	ppbv
Methyl-t-butyl ether (MTBE)	<	0.20	ppbv
Naphthalene	0.10	0.20	ppbv
n-Nonane (C9)	<	0.20	ppbv
n-Propylbenzene	<	0.20	ppbv
o-Xylene	<	0.20	ppbv

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	RPD	Limit	Qual
	Result	Limit			Units	%REC				

#### Batch BDJ0497 - No Prep VOC Air

##### Blank (BDJ0497-BLK1)

Prepared & Analyzed: 10/16/2020

n-Pentane (C5)	<	0.20	ppbv							
Propylene	0.11	0.20	ppbv							
Styrene	<	0.20	ppbv							
TBA	<	0.50	ppbv							
Tetrachloroethylene (PCE)	<	0.20	ppbv							
Tetrahydrofuran	<	0.20	ppbv							
Toluene	<	0.20	ppbv							
trans-1,2-Dichloroethylene	<	0.20	ppbv							
trans-1,3-Dichloropropene	<	0.20	ppbv							
Trichloroethylene	<	0.20	ppbv							
Trichlorofluoromethane	<	0.20	ppbv							
Vinyl acetate	<	0.20	ppbv							
Vinyl bromide	<	0.20	ppbv							
Vinyl chloride	<	0.20	ppbv							
Xylenes, Total	<	0.60	ppbv							

Surr: 4-Bromofluorobenzene 4.27 ppbv 5.00 85.4 80-120  
(Surr)

##### LCS (BDJ0497-BS1)

Prepared & Analyzed: 10/16/2020

1,1,1-Trichloroethane	5.16	0.2	ppbv	5.00	103	70-130				
1,1,2,2-Tetrachloroethane	5.31	0.2	ppbv	5.00	106	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane	5.08	0.2	ppbv	5.00	102	70-130				
1,1,2-Trichloroethane	5.55	0.2	ppbv	5.00	111	70-130				
1,1-Dichloroethane	4.85	0.2	ppbv	5.00	97.1	70-130				
1,1-Dichloroethylene	5.66	0.2	ppbv	5.00	113	70-130				
1,2,4-Trichlorobenzene	5.56	0.5	ppbv	5.00	111	60-140				
1,2,4-Trimethylbenzene	5.86	0.2	ppbv	5.00	117	70-130				
1,2-Dibromoethane (EDB)	5.86	0.2	ppbv	5.00	117	70-130				
1,2-Dichlorobenzene	6.13	0.2	ppbv	5.00	123	70-130				
1,2-Dichloroethane	5.58	0.2	ppbv	5.00	112	70-130				
1,2-Dichloropropane	5.60	0.2	ppbv	5.00	112	70-130				
1,2-Dichlorotetrafluoroethane	5.60	0.2	ppbv	5.00	112	70-130				
1,3,5-Trimethylbenzene	6.56	0.2	ppbv	5.00	131	70-130				L
1,3-Butadiene	4.75	0.2	ppbv	5.00	94.9	70-130				

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	RPD Limit	Qual
	Result	Limit			Units	%REC			

#### Batch BDJ0497 - No Prep VOC Air

#### LCS (BDJ0497-BS1)

Prepared & Analyzed: 10/16/2020

1,3-Dichlorobenzene	6.57	0.2	ppbv	5.00	131	70-130			L
1,4-Dichlorobenzene	6.55	0.2	ppbv	5.00	131	70-130			L
1,4-Dioxane	4.94	0.2	ppbv	5.00	98.7	70-130			
1-Ethyl-4-methyl benzene	5.84	0.2	ppbv	5.00	117	70-130			
2-Butanone (MEK)	4.63	0.2	ppbv	5.00	92.6	70-130			
2-Chlorotoluene	5.76	0.2	ppbv	5.00	115	70-130			
2-Hexanone (MBK)	4.79	0.2	ppbv	5.00	95.8	70-130			
4-Methyl-2-pentanone (MIBK)	5.69	0.2	ppbv	5.00	114	70-130			
Acetone	4.96	0.5	ppbv	5.00	99.3	70-130			
Allyl chloride	5.22	0.2	ppbv	5.00	104	70-130			
Benzene	5.23	0.2	ppbv	5.00	105	70-130			
Benzyl Chloride	6.53	0.2	ppbv	5.00	131	70-130			L
Bromodichloromethane	5.08	0.2	ppbv	5.00	102	70-130			
Bromoform	4.93	0.2	ppbv	5.00	98.5	70-130			
Bromomethane	5.30	0.2	ppbv	5.00	106	70-130			
Carbon Disulfide	5.36	0.5	ppbv	5.00	107	70-130			
Carbon Tetrachloride	5.55	0.2	ppbv	5.00	111	70-130			
Chlorobenzene	5.37	0.2	ppbv	5.00	107	70-130			
Chloroethane	5.07	0.2	ppbv	5.00	101	70-130			
Chloroform	4.85	0.2	ppbv	5.00	97.0	70-130			
Chloromethane	5.35	0.2	ppbv	5.00	107	70-130			
cis-1,2-Dichloroethylene	4.81	0.2	ppbv	5.00	96.2	70-130			
cis-1,3-Dichloropropene	6.25	0.2	ppbv	5.00	125	70-130			
Cyclohexane	5.72	0.2	ppbv	5.00	114	70-130			
Dibromochloromethane	5.30	0.2	ppbv	5.00	106	70-130			
Dichlorodifluoromethane	5.39	0.5	ppbv	5.00	108	70-130			
Ethanol	2.91	0.5	ppbv	3.95	73.6	70-130			
Ethyl acetate	5.00	0.2	ppbv	5.00	100	70-130			
Ethylbenzene	5.71	0.2	ppbv	5.00	114	70-130			
Heptane	5.08	0.2	ppbv	5.00	102	70-130			
Hexachlorobutadiene	5.84	0.5	ppbv	5.00	117	60-140			
Hexane	5.65	0.2	ppbv	5.00	113	70-130			
Isooctane	5.35	0.2	ppbv	5.00	107	70-130			
Isopropyl alcohol	4.39	0.5	ppbv	5.00	87.8	70-130			



## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0497 - No Prep VOC Air

##### LCS (BDJ0497-BS1)

Prepared & Analyzed: 10/16/2020

m+p-Xylenes	11.4	0.4	ppbv	10.0	114	70-130		
Methylene chloride	5.24	1	ppbv	5.00	105	70-130		
Methyl-t-butyl ether (MTBE)	5.58	0.2	ppbv	5.00	112	70-130		
Naphthalene	4.67	0.2	ppbv	5.00	93.5	60-140		
n-Nonane (C9)	5.55	0.2	ppbv	5.00	111	70-130		
n-Propylbenzene	5.97	0.2	ppbv	5.00	119	70-130		
o-Xylene	5.82	0.2	ppbv	5.00	116	70-130		
n-Pentane (C5)	5.02	0.2	ppbv	5.00	100	70-130		
Propylene	5.12	0.2	ppbv	5.00	102	70-130		
Styrene	6.18	0.2	ppbv	5.00	124	70-130		
Tetrachloroethylene (PCE)	5.56	0.2	ppbv	5.00	111	70-130		
Tetrahydrofuran	6.02	0.2	ppbv	5.00	120	70-130		
Toluene	5.50	0.2	ppbv	5.00	110	70-130		
trans-1,2-Dichloroethylene	5.51	0.2	ppbv	5.00	110	70-130		
trans-1,3-Dichloropropene	5.58	0.2	ppbv	5.00	112	70-130		
Trichloroethylene	5.63	0.2	ppbv	5.00	113	70-130		
Trichlorofluoromethane	5.00	0.2	ppbv	5.00	99.9	70-130		
Vinyl acetate	5.18	0.2	ppbv	5.00	104	70-130		
Vinyl bromide	5.55	0.2	ppbv	5.00	111	70-130		
Vinyl chloride	5.72	0.2	ppbv	5.00	114	70-130		

Surr: 4-Bromofluorobenzene  
(Surr)

105 70-130

##### LCS Dup (BDJ0497-BSD1)

Prepared & Analyzed: 10/16/2020

1,1,1-Trichloroethane	5.46	0.2	ppbv	5.00	109	70-130	5.65	25
1,1,2,2-Tetrachloroethane	6.05	0.2	ppbv	5.00	121	70-130	13.0	25
1,1,2-Trichloro-1,2,2-trifluoroethane	5.68	0.2	ppbv	5.00	114	70-130	11.1	25
1,1,2-Trichloroethane	5.58	0.2	ppbv	5.00	112	70-130	0.467	25
1,1-Dichloroethane	5.58	0.2	ppbv	5.00	112	70-130	14.0	25
1,1-Dichloroethylene	6.39	0.2	ppbv	5.00	128	70-130	12.2	25
1,2,4-Trichlorobenzene	4.87	0.5	ppbv	5.00	97.4	60-140	13.3	25
1,2,4-Trimethylbenzene	5.91	0.2	ppbv	5.00	118	70-130	0.850	25
1,2-Dibromoethane (EDB)	5.42	0.2	ppbv	5.00	108	70-130	7.66	25
1,2-Dichlorobenzene	5.30	0.2	ppbv	5.00	106	70-130	14.6	25

### Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

#### Volatile Organic Compounds by GCMS - Quality Control

#### Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			%REC	Limits	RPD	Limit	

#### Batch BDJ0497 - No Prep VOC Air

#### LCS Dup (BDJ0497-BSD1)

Prepared & Analyzed: 10/16/2020

1,2-Dichloroethane	5.59	0.2	ppbv	5.00	112	70-130	0.143	25	
1,2-Dichloropropane	6.79	0.2	ppbv	5.00	136	70-130	19.2	25	L
1,2-Dichlorotetrafluoroethane	5.98	0.2	ppbv	5.00	120	70-130	6.68	25	
1,3,5-Trimethylbenzene	5.36	0.2	ppbv	5.00	107	70-130	20.2	25	
1,3-Butadiene	5.95	0.2	ppbv	5.00	119	70-130	22.5	25	
1,3-Dichlorobenzene	5.58	0.2	ppbv	5.00	112	70-130	16.2	25	
1,4-Dichlorobenzene	5.57	0.2	ppbv	5.00	111	70-130	16.1	25	
1,4-Dioxane	5.70	0.2	ppbv	5.00	114	70-130	14.4	25	
1-Ethyl-4-methyl benzene	5.14	0.2	ppbv	5.00	103	70-130	12.8	25	
2-Butanone (MEK)	5.68	0.2	ppbv	5.00	114	70-130	20.5	25	
2-Chlorotoluene	5.41	0.2	ppbv	5.00	108	70-130	6.27	25	
2-Hexanone (MBK)	5.06	0.2	ppbv	5.00	101	70-130	5.52	25	
4-Methyl-2-pentanone (MIBK)	5.31	0.2	ppbv	5.00	106	70-130	7.00	25	
Acetone	5.00	0.5	ppbv	5.00	100	70-130	0.843	25	
Allyl chloride	5.96	0.2	ppbv	5.00	119	70-130	13.4	25	
Benzene	5.44	0.2	ppbv	5.00	109	70-130	3.99	25	
Benzyl Chloride	5.44	0.2	ppbv	5.00	109	70-130	18.3	25	
Bromodichloromethane	5.90	0.2	ppbv	5.00	118	70-130	15.0	25	
Bromoform	4.72	0.2	ppbv	5.00	94.4	70-130	4.23	25	
Bromomethane	6.27	0.2	ppbv	5.00	125	70-130	16.8	25	
Carbon Disulfide	6.02	0.5	ppbv	5.00	120	70-130	11.5	25	
Carbon Tetrachloride	5.77	0.2	ppbv	5.00	115	70-130	3.92	25	
Chlorobenzene	5.25	0.2	ppbv	5.00	105	70-130	2.26	25	
Chloroethane	6.89	0.2	ppbv	5.00	138	70-130	30.3	25	L, P
Chloroform	5.48	0.2	ppbv	5.00	110	70-130	12.2	25	
Chloromethane	6.34	0.2	ppbv	5.00	127	70-130	16.9	25	
cis-1,2-Dichloroethylene	5.90	0.2	ppbv	5.00	118	70-130	20.3	25	
cis-1,3-Dichloropropene	5.54	0.2	ppbv	5.00	111	70-130	12.1	25	
Cyclohexane	6.06	0.2	ppbv	5.00	121	70-130	5.77	25	
Dibromochloromethane	5.54	0.2	ppbv	5.00	111	70-130	4.38	25	
Dichlorodifluoromethane	5.88	0.5	ppbv	5.00	118	70-130	8.80	25	
Ethanol	3.24	0.5	ppbv	3.95	82.0	70-130	10.7	25	
Ethyl acetate	5.61	0.2	ppbv	5.00	112	70-130	11.4	25	
Ethylbenzene	5.54	0.2	ppbv	5.00	111	70-130	3.01	25	

1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Volatile Organic Compounds by GCMS - Quality Control Air Water & Soil Laboratories, Inc.

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BDJ0497 - No Prep VOC Air

#### LCS Dup (BDJ0497-BSD1)

Prepared & Analyzed: 10/16/2020

Heptane	5.62	0.2	ppbv	5.00	112	70-130	10.2	25	
Hexachlorobutadiene	5.28	0.5	ppbv	5.00	106	60-140	10.0	25	
Hexane	6.40	0.2	ppbv	5.00	128	70-130	12.5	25	
Isooctane	6.51	0.2	ppbv	5.00	130	70-130	19.6	25	L
Isopropyl alcohol	5.02	0.5	ppbv	5.00	100	70-130	13.4	25	
m+p-Xylenes	11.0	0.4	ppbv	10.0	110	70-130	4.19	25	
Methylene chloride	5.30	1	ppbv	5.00	106	70-130	1.01	25	
Methyl-t-butyl ether (MTBE)	6.85	0.2	ppbv	5.00	137	70-130	20.4	25	L
Naphthalene	4.43	0.2	ppbv	5.00	88.7	60-140	5.25	25	
n-Nonane (C9)	5.62	0.2	ppbv	5.00	112	70-130	1.20	25	
n-Propylbenzene	5.27	0.2	ppbv	5.00	105	70-130	12.4	25	
o-Xylene	6.31	0.2	ppbv	5.00	126	70-130	8.18	25	
n-Pentane (C5)	5.85	0.2	ppbv	5.00	117	70-130	15.2	25	
Propylene	5.48	0.2	ppbv	5.00	110	70-130	6.87	25	
Styrene	6.27	0.2	ppbv	5.00	125	70-130	1.38	25	
Tetrachloroethylene (PCE)	6.04	0.2	ppbv	5.00	121	70-130	8.23	25	
Tetrahydrofuran	7.26	0.2	ppbv	5.00	145	70-130	18.8	25	L
Toluene	5.62	0.2	ppbv	5.00	112	70-130	2.14	25	
trans-1,2-Dichloroethylene	6.28	0.2	ppbv	5.00	126	70-130	13.1	25	
trans-1,3-Dichloropropene	5.56	0.2	ppbv	5.00	111	70-130	0.377	25	
Trichloroethylene	6.50	0.2	ppbv	5.00	130	70-130	14.3	25	L
Trichlorofluoromethane	5.60	0.2	ppbv	5.00	112	70-130	11.4	25	
Vinyl acetate	7.02	0.2	ppbv	5.00	140	70-130	30.3	25	L, P
Vinyl bromide	5.56	0.2	ppbv	5.00	111	70-130	0.0900	25	
Vinyl chloride	6.20	0.2	ppbv	5.00	124	70-130	8.00	25	
Surr: 4-Bromofluorobenzene (Surr)	5.09		ppbv	5.00	102	70-130			

## Certificate of Analysis

Final Report

Laboratory Order ID 201167

Client Name: Chesapeake Geosciences, Inc.  
5405 Twin Knolls Rd., Suite 1

Date Received: October 8, 2020 14:02  
Date Issued: October 22, 2020 14:22

Columbia, MD 21045

Submitted To: Nancy Love

Project Number: CG-09-0423.10

Client Site I.D.: Montgomery Brothers

Purchase Order: CG09042310MS

### Certified Analytes included in this Report

Analyte	Certifications	Analyte	Certifications
<i>EPA TO-15 in Air</i>		Cyclohexane	VELAP
1,1,1-Trichloroethane	VELAP	Dibromochloromethane	VELAP
1,1,1,2-Tetrachloroethane	VELAP	Dichlorodifluoromethane	VELAP
1,1,2,2-Tetrachloroethane	VELAP	Ethanol	VELAP
1,1,2-Trichloro-1,2,2-trifluoroethane	VELAP	Ethyl acetate	VELAP
1,1,2-Trichloroethane	VELAP	Ethylbenzene	VELAP
1,1-Dichloroethane	VELAP	Heptane	VELAP
1,1-Dichloroethylene	VELAP	Hexachlorobutadiene	VELAP
1,2,4-Trichlorobenzene	VELAP	Hexane	VELAP
1,2,4-Trimethylbenzene	VELAP	Isooctane	VELAP
1,2-Dibromoethane (EDB)	VELAP	Isopropyl alcohol	VELAP
1,2-Dichlorobenzene	VELAP	Isopropylbenzene	VELAP
1,2-Dichloroethane	VELAP	m+p-Xylenes	VELAP
1,2-Dichloropropane	VELAP	Methyl methacrylate	VELAP
1,2-Dichlorotetrafluoroethane	VELAP	Methylene chloride	VELAP
1,3,5-Trimethylbenzene	VELAP	Methyl-t-butyl ether (MTBE)	VELAP
1,3-Butadiene	VELAP	Naphthalene	VELAP
1,3-Dichlorobenzene	VELAP	n-Nonane (C9)	VELAP
1,4-Dichlorobenzene	VELAP	n-Propylbenzene	VELAP
1,4-Dioxane	VELAP	o-Xylene	VELAP
1-Ethyl-4-methyl benzene	VELAP	n-Pentane (C5)	VELAP
2-Butanone (MEK)	VELAP	Propylene	VELAP
2-Chlorotoluene	VELAP	Styrene	VELAP
2-Hexanone (MBK)	VELAP	TBA	VELAP
4-Methyl-2-pentanone (MIBK)	VELAP	Tetrachloroethylene (PCE)	VELAP
Acetone	VELAP	Tetrahydrofuran	VELAP
Acrolein	VELAP	Toluene	VELAP
Allyl chloride	VELAP	trans-1,2-Dichloroethylene	VELAP
Benzene	VELAP	trans-1,3-Dichloropropene	VELAP
Benzyl Chloride	VELAP	Trichloroethylene	VELAP
Bromodichloromethane	VELAP	Trichlorofluoromethane	VELAP
Bromoform	VELAP	Vinyl acetate	VELAP
Bromomethane	VELAP	Vinyl bromide	VELAP
Carbon Disulfide	VELAP	Vinyl chloride	VELAP
Carbon Tetrachloride	VELAP	Xylenes, Total	VELAP
Chlorobenzene	VELAP		
Chloroethane	VELAP		
Chloroform	VELAP		
Chloromethane	VELAP		
cis-1,2-Dichloroethylene	VELAP		
cis-1,3-Dichloropropene	VELAP		

## Certificate of Analysis

Final Report

Laboratory Order ID 20I1167

Client Name:	Chesapeake Geosciences, Inc. 5405 Twin Knolls Rd., Suite 1 Columbia, MD 21045	Date Received:	October 8, 2020 14:02
		Date Issued:	October 22, 2020 14:22
Submitted To:	Nancy Love	Project Number:	CG-09-0423.10
Client Site I.D.:	Montgomery Brothers	Purchase Order:	CG09042310MS

Code	Description	Laboratory ID	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2020
NC	North Carolina DENR	495	12/31/2020
NJDEP	NELAC-New Jersey DEP	VA015	06/30/2021
NYDOH	New York DOH Drinking Water	12096	04/01/2021
PADEP	NELAC-Pennsylvania Certificate #005	68-03503	10/31/2020
VELAP	NELAC-Virginia Certificate #11064	460021	06/14/2021
WVDEP	West Virginia DEP	350	11/30/2020

### Qualifiers and Definitions

J	The reported result is an estimated value.
L	LCS recovery is outside of established acceptance limits
P	Duplicate analysis does not meet the acceptance criteria for precision
RPD	Relative Percent Difference
Qual	Qualifiers
-RE	Denotes sample was re-analyzed
PF	Preparation Factor
MDL	Method Detection Limit
LOQ	Limit of Quantitation
ppbv	parts per billion by volume
TIC	Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.

All EPA method 3C results are reported as normalized values when the sum total of all evaluated constituents is outside  $\pm 10\%$  of the absolute.



## AIR ANALYSIS CHAIN OF CUSTODY

Equipment Due 10/16/20

COMPANY NAME: Chesapeake Geosciences, Inc.	INVOICE TO: Same	PROJECT NAME: Hot Spot Investigation
CONTACT: Nancy Love	INVOICE CONTACT:	SITE NAME: Montgomery Brothers
ADDRESS: 5405 Twin Knolls Rd, Suite 1	INVOICE ADDRESS:	PROJECT NUMBER: CG-02-0423.10
PHONE #: 410-740-1911	INVOICE PHONE #:	P.O. #: CG02042310MS
FAX #: 410-740-3299	EMAIL: Nlove@cgs.us.com	Pretreatment Program:
Is sample for compliance reporting? YES NO	Regulatory State:	Is sample from a chlorinated supply? YES (NO) PWS I.D. #:
SAMPLER NAME (PRINT): Meg Staines	SAMPLER SIGNATURE:	Turn Around Time: Circle: 10 5 Other _____
Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other _____		WO 2011167

CLIENT SAMPLE I.D.	Regulator Info		Canister Information					Sampling Start Information				Sampling Stop Information				Matrix (See Codes)	ANALYSIS	
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):	Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)		Ending Sample Temp °F	VOC TO-15
1) SMP-VMP-10	2710	4 HR	18171	6.0L	IC200924-01E	30	2	29.8	10/7/20	10:56	30	67	10/7/20	15:16	3.5	78	CG	X
2) NA	3475	4 HR	20574	6.0L	IC200924-01E	30	22	29.7	10/7/20	11:11	27	68	10/7/20	11:31	21.5	70	CG	X
3) SMP-VMP-D	3477	4 HR	20588	6.0L	IC200923-01E	30	1		10/7/20	00:00	30	68	10/7/20	05:00	5	78	CG	X
4) SMP-VMP-11	3953	4 HR	29400	6.0L	IC200923-01E	30	3		10/7/20	11:52	30	70	10/7/20	16:07	4	78	CG	X

21.1°C sealed, no ice

REQUISITIONED:	DATE / TIME: 10/8/20 11:09	RECEIVED:	DATE / TIME: 10/8/20 11:09	QC Data Package	LAB USE ONLY
REQUISITIONED:	DATE / TIME: 10/8/20 2:02	RECEIVED:	DATE / TIME: 10/8/20 14:02	Level I <input type="checkbox"/>	MDE RMS 2014 Contract Rates
REQUISITIONED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level II <input checked="" type="checkbox"/>	
REQUISITIONED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level III <input type="checkbox"/>	
REQUISITIONED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level IV <input type="checkbox"/>	

CGS 2011167  
Montgomery Brothers - TO15  
Recd: 10/08/2020 Due: 10/22/2020

Box 3 of 3



**AIR ANALYSIS  
CHAIN OF CUSTODY**

Equipment Due 10/16/20

COMPANY NAME: Chesapeake Geosciences, Inc.	INVOICE TO: Same	PROJECT NAME: Hot Spot Investigation
CONTACT: Nancy Love	INVOICE CONTACT:	SITE NAME: Montgomery Brothers
ADDRESS: 5405 Twin Knolls Rd, Suite 1	INVOICE ADDRESS:	PROJECT NUMBER: EG-09-0423.10
PHONE #: 410-740-1911	INVOICE PHONE #:	P.O. #: CG09042310MS
FAX #: 410-740-3299	EMAIL: Nlove@cgs.us.com	Pretreatment Program:
Is sample for compliance reporting? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Regulatory State: MD	Is sample from a chlorinated supply? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
SAMPLER NAME (PRINT): Mag Staines		SAMPLER SIGNATURE: <i>[Signature]</i>
		Turn Around Time: Circle: 10 <sup>5</sup> Other _____
Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other _____		WO 2011167

CLIENT SAMPLE I.D.	Regulator Info		Canister Information					Sampling Start Information				Sampling Stop Information				Matrix (See Codes)	ANALYSIS	
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):	Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)		Ending Sample Temp °F	VOC TO-15
5) SMP-VMP-12	10114	4 HR	36976	6.0L	IC200923-01E	30	26	30.1	10/7/20	10:05	27.5	63	10/7/20	14:06	24	76	SG	X
6) SMP-VMP-13	10116	4 HR	36978	6.0L	IC200924-02E	30	2	29.7	10/7/20	10:25	27.5	63	10/7/20	15:05	1	78	SG	X
7) HSI-105M-CSA	2667	24 HR	20254	6.0L	IC200924-01E	30	0		10/6/20	11:39	30	66	10/7/20	12:00	2	72	AA	X
8) HSI-105R-CSA	2714	24 HR	29398	6.0L	IC200924-01E	30	0		10/6/20	11:54	30	66	10/7/20	12:06	3	72	AA	X

21.1°C sealed, noise

RELINQUISHED: <i>[Signature]</i>	DATE / TIME: 10/8/20 11:09	RECEIVED: <i>[Signature]</i>	DATE / TIME: 10/8/20 11:09	QC Data Package	LAB USE ONLY
RELINQUISHED: <i>[Signature]</i>	DATE / TIME: 10/8/20 2:02	RECEIVED: <i>[Signature]</i>	DATE / TIME: 10/8/20 14:02	Level I <input type="checkbox"/>	
RELINQUISHED:				Level II <input checked="" type="checkbox"/>	
				Level III <input type="checkbox"/>	
				Level IV <input type="checkbox"/>	MDE RMS Contract Rates 2014

CGS 2011167  
Montgomery Brothers - TO15  
Recd: 10/08/2020 Due: 10/22/2020

Box 1 of 3

10/10/10



10/10/10  
10/10/10  
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10/10/10

10/10/10

10/10/10

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10/10/10

10/10/10



**AIR ANALYSIS**  
**CHAIN OF CUSTODY**

Equipment Due 10/16/20

COMPANY NAME: Chesapeake Geosciences, Inc.	INVOICE TO: Same	PROJECT NAME: Hot Spot Investigation
CONTACT: Nancy Love	INVOICE CONTACT:	SITE NAME: Montgomery Brothers
ADDRESS: 5405 Twin Knolls Rd, Suite 1	INVOICE ADDRESS:	PROJECT NUMBER: CG-09-0423.10
PHONE #: 410-740-1911	INVOICE PHONE #:	P.O. #: CG09042310MS
FAX #: 410-740-3299	EMAIL: Nlove@cgs.us.com	Pretreatment Program:
Is sample for compliance reporting? YES <input type="radio"/> NO <input checked="" type="radio"/>	Regulatory State: MD	Is sample from a chlorinated supply? YES <input type="radio"/> NO <input checked="" type="radio"/>
SAMPLER NAME (PRINT): Meg Staines		SAMPLER SIGNATURE: <i>[Signature]</i>
		Turn Around Time: Circle: 10 5 Other _____
Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other _____		WO 2011167

CLIENT SAMPLE I.D.	Regulator Info		Canister Information					Sampling Start Information				Sampling Stop Information				Matrix (See Codes)	ANALYSIS	
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg)	LAB Receiving Canister Vacuum (in Hg)	Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F		VOC TO-15	LL VOC TO15
9) HSI-107M-CSA	3476	24 HR	36448	6.0L	IC200922-01	30	0	10/6/20	12:39	30	67	10/7/20	12:35	1	73	AA	X	
10) HSI-107R-CSA	3958	24 HR	36449	6.0L	IC200922-01	30	4	10/6/20	12:16	28	66	10/7/20	16:17	3.5	77	AA	X	
11) HSI-OAA	7189	24 HR	36957	6.0L	IC200820-02	30	8	10/6/20	12:49	28.5	67	10/7/20	11:58	4	78	AA	X	
12)	13291	24 HR	36962	6.0L	IC200820-02	30	30	Not used								AA	X	

21.1°C sealed, no ice

RELINQUISHED: <i>[Signature]</i>	DATE / TIME: 10/8/20 11:09	RECEIVED: <i>[Signature]</i>	DATE / TIME: 10/8/20 11:09	QC Data Package	LAB USE ONLY
RELINQUISHED: <i>[Signature]</i>	DATE / TIME: 10/8/20 2:05	RECEIVED: <i>[Signature]</i>	DATE / TIME: 10/8/20 14:02	Level I <input type="checkbox"/>	
RELINQUISHED: <i>[Signature]</i>	DATE / TIME: 10/8/20 2:05	RECEIVED: <i>[Signature]</i>	DATE / TIME: 10/8/20 14:02	Level II <input checked="" type="checkbox"/>	
RELINQUISHED: <i>[Signature]</i>	DATE / TIME: 10/8/20 2:05	RECEIVED: <i>[Signature]</i>	DATE / TIME: 10/8/20 14:02	Level III <input type="checkbox"/>	
				Level IV <input type="checkbox"/>	MDE RMS 2014 Contract Rates

**CGS** 2011167  
**Montgomery Brothers - TO15**  
**Recd: 10/08/2020 Due: 10/22/2020**

Box 2 of 3

**Certificate of Analysis**  
Final Report

Laboratory Order ID 20I1167

Client Name:	Chesapeake Geosciences, Inc. 5405 Twin Knolls Rd., Suite 1 Columbia, MD 21045	Date Received:	October 8, 2020 14:02
		Date Issued:	October 22, 2020 14:22
Submitted To:	Nancy Love	Project Number:	CG-09-0423.10
Client Site I.D.:	Montgomery Brothers	Purchase Order:	CG09042310MS

**Sample Conditions Checklist**

Samples Received at:	21.10°C
How were samples received?	Logistics Courier
Were Custody Seals used? If so, were they received intact?	Yes
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits or received on ice, and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

**Work Order Comments**