

General Electric Company

Interim Measures Work Plan to Improve Offsite Soil Vapor through Groundwater Remediation

**GE Tell City Facility
1412 13th Street
Tell City, Indiana**

August 31, 2021

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Prepared By:

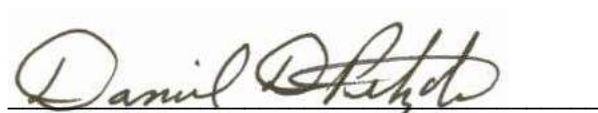
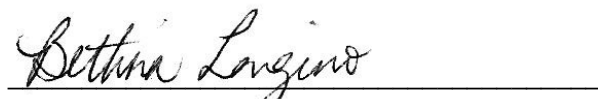

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1 Introduction

This Resource Conservation and Recovery Act (RCRA) Corrective Action Interim Measures Work Plan (“IM Work Plan”) has been prepared by Arcadis-US Inc. (Arcadis) on behalf of General Electric Company (GE) for the closed GE Tell City manufacturing facility located at 1412 13th Street in Tell City (the “City”), Perry County, Indiana (the “Site”; **Figure 1**).

This document is being submitted pursuant to Section 47.a of the Agreed Order between GE and the Indiana Department of Environmental Management (IDEM) dated December 19, 2019.

1.1 Site

The Site is a closed manufacturing facility that occupies approximately 16 acres of land to the east of 13th Street and south of Payne Street (State Road 37) on the northeastern side of Tell City. It is situated in a mixed industrial/commercial/residential area, with residential properties located to the west, northwest, and southwest (**Figure 2**). Land to the northeast is agricultural, and land to the southeast is a City park. A single residence is located immediately east of the Site, adjacent to the City park. Small commercial/industrial properties are situated immediately south of the Site, and commercial properties are situated along Payne Street and along 9th, 10th, and Main Streets to the west. A small stream (Windy Creek) flows from south to north near the eastern side of the Site, and land along both sides of the stream is owned by Tell City.

The Site is occupied by a large manufacturing building that was built in stages, starting in 1943 (**Figure 3**). Smaller outbuildings are situated to the east of the southern end of the building, near the southeastern corner of the Site. Onsite sampling has identified and delineated four principal areas of concern (AOCs; **Figure 3**) at the Site, discussed further in Section 2.

1.2 Geology and Hydrogeology

The Site lies at the boundary between bedrock uplands to the east and the Ohio River floodplain to the west. Bedrock uplands are characterized by interbedded Pennsylvanian sandstone, siltstone, shale, and limestone outcrops. The Ohio River floodplain is underlain by alluvial sand and gravel and overbank silt and clay, with the Pennsylvanian bedrock at depth.

Bedrock encountered in the investigation area includes: Pennsylvanian age shale at approximately 26 feet below ground surface (bgs) to the east of Windy Creek; highly weathered sandstone at about 30 feet bgs in the northeastern corner of the Site; and weathered sandstone at about 70 feet bgs near the northwestern corner of the Site.

The southeastern portion of the Site is underlain by up to 15 feet of fill (largely silt) overlying native fine-grained soils (silt and clay deposits) that extend to at least 55 feet bgs. Thin saturated sand lenses have been encountered within the native silt and clay, at depths of 28 feet bgs or deeper. The sand lenses appear to be discontinuous and groundwater yield from the lenses is limited. Groundwater flow within the fill appears to be influenced by the native ground surface topography (prior to fill placement) and Windy Creek to the east. The potential for groundwater migration to the west from this area is limited by the lack of alluvial sands and the influence of Windy Creek.

For the purpose of this evaluation, the planned IM is focused within the following hydrogeologic setting:

- The northwestern portion of the Site, which is underlain by an 8 to 12-foot clayey zone that overlies alluvial sand, which extends to 30 to 35 feet bgs. A thin (3- to 7-foot-thick) saturated zone is present at the base of the alluvial sand.
- The alluvial sand is underlain by gray silt and clay. This subsurface geology extends from the northwestern portion of the Site west to 11th Street.
- To the west of 11th Street, the alluvial sand thickens to 90 feet or more in proximity to the Ohio River and the saturated thickness within the sand increases to more than 50 feet. Groundwater flow within this portion of the alluvial sand is influenced by the Ohio River under both gaining and losing river conditions.
- Well construction logs for the City and foundry water supply wells located adjacent to the Ohio River indicate that the alluvial sand extends to over 100 feet bgs.

1.3 Constituents of Concern

In accordance with IDEM standards, the concentrations of constituents detected during the Site assessment are compared to screening levels published in the latest update to the IDEM Remediation Closure Guide (RCG). These screening levels include: direct contact exposure to soil for commercial/industrial and excavation worker scenarios; residential groundwater ingestion; and residential and commercial/industrial vapor exposure scenarios.

Initial investigations at the Site included onsite sampling of soil and/or groundwater for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) analyses. Only a small number of SVOC compounds have been detected in onsite soil samples, with no detections above the IDEM RCG commercial/industrial direct contact criteria. No metals have been detected in onsite soil samples at concentrations above the IDEM RCG commercial/industrial direct contact criteria. PCB detections have been largely limited to soils and groundwater in the AOC-1 area, with only one soil sample in an area outside of AOC-1 having a detection (below IDEM RCG criteria).

Several VOCs have been detected in onsite soil and groundwater samples and offsite groundwater samples to the west of the Site, with the following chlorinated VOCs (cVOCs) detections above IDEM RCG criteria: tetrachloroethene (PCE) and trichloroethene (TCE), and their degradation products cis-1,2-dichloroethene (cDCE), trans-1,2-dichloroethene (tDCE), and vinyl chloride. These cVOCs are considered the principal constituents of concern (COCs).

2 Current Conditions Summary

The Site and downgradient areas have been well-characterized through onsite soil and groundwater sampling and offsite groundwater and vapor sampling. Details of onsite and offsite characterization through April 2019 were presented in a *Current Conditions Report* dated May 2, 2019, and subsequent groundwater, soil, and vapor sampling work has been presented in quarterly *Groundwater Monitoring Reports*, *Offsite Vapor Intrusion Update Reports*, and *Supplemental Investigation Reports*.

As reflected in these reports, a network of 39 monitoring wells has been established to monitor onsite and offsite impacts to groundwater (**Figure 4**). These include onsite wells in the fill and clay-dominated southeastern corner of the Site (monitoring wells MW-1, MW-2, MW-3, MW-4, MW-7, and MW-15) and wells in the alluvial sand extending west from the Site to the western edge of Tell City. Several of the wells in the western part of the City where the alluvial sand thickens, are nested, with two or three wells within the same borehole screened at different depths within the alluvium.

Onsite sampling has identified and delineated four principal AOCs (**Figure 3**): the southeastern portion of the Site at which drums and totes of various chemicals were previously stored during plant operations (AOC-1); the area east of the southern portion of the building at which a TCE aboveground storage tank was once located (AOC-2); an area in the northeastern portion of the Site (AOC-3); and an area under the southwestern portion of the building (AOC-4). Groundwater characterization near these AOCs indicates that impacts at AOC-1 and AOC-2 are largely bound to the dominant fine-grained clayey soil matrix and are not migrating from the Site. By contrast, AOC-3 and AOC-4 are the principal sources of the impacted Site groundwater merging to form one area of offsite groundwater impact that migrates northwest from the Site and curves gradually toward the west with increasing distance from the Site. AOC-3 contributes degraded cVOCs, dominated by degradation products (cDCE and vinyl chloride) while AOC-4 contributes cVOCs dominated by TCE.

Between the Site and approximately 10th Street to the west, the offsite groundwater impacts contribute to the presence of cVOCs in soil vapor, which has been investigated and addressed as detailed in Section 3.1.

3 Interim Remedial Measures

This section summarizes GE's previously implemented IMs and next steps to improve offsite soil vapor through groundwater remediation, consistent with Section 47.a of the December 19, 2019 Agreed Order.

3.1 Previously Implemented Interim Measures to Address Offsite Vapor Intrusion

GE identified 78 offsite properties where concentrations of TCE in groundwater exceed IDEM's RCG soil vapor intrusion screening criteria. GE performed indoor air sampling within structures at 76 of these 78 properties (two owners refused entry), using paired sub-slab (or crawl space) vapor and indoor air sampling during both the summer cooling season and the winter heating season.

Based on the sampling results, GE installed vapor mitigation systems in 18 structures at 17 properties. Two of these systems were installed consistent with IDEM guidance. IDEM guidance did not require installation of the other 16 systems; however, GE offered vapor mitigation systems on a precautionary basis and the homeowners accepted GE's offer. Following installation, GE has operated and maintained these systems in accordance with IDEM *Vapor Remedy Selection and Implementation* guidance.

For the other 59 identified properties, IDEM concurred that no further sampling is required at 52 of them. GE has submitted no-further-sampling requests for IDEM review at 6 other properties in *Offsite Vapor Intrusion Update Reports* 4 and 5. The last residence was sold to an adjacent commercial property owner that demolished the structure. GE has coordinated with the new property owner to install a mitigation system during expansion of the existing adjacent commercial structure, anticipated during Fall 2021.

3.2 Interim Measures Implemented to Monitor Offsite Groundwater

To date, GE has installed a 39-well groundwater monitoring network that has been sampled quarterly since November 2018. The sampling has shown that concentrations of COCs in both the onsite and offsite wells are generally stable. Although offsite detections of cVOCs in groundwater exceed the tap water screening levels, these concentrations have not impacted drinking water quality. There are no water supply wells in the impacted area according to discussion with the Tell City Water Department, examination of the Indiana Department of Natural Resources well records database, and visual evaluation of the surrounding neighborhood. GE has also worked with the Tell City Water Department to obtain quarterly samples from four wells in the wellfield west of the Site, including two wells used by a local foundry for non-potable purposes and two wells that contribute to the City potable water supply. No City or foundry wellfield samples contain cVOCs at concentrations exceeding the IDEM RCG tap water screening levels.

3.3 Objective of Planned Interim Measure

The planned IM is targeted to improve the quality of soil vapor at offsite properties by reducing, to the extent practical, the offsite migration of cVOCs in groundwater, consistent with the IMs detailed in Section 47.a of the

Interim Measures Work Plan to Improve Offsite Soil Vapor through Groundwater Remediation

December 19, 2019, Agreed Order. The planned IM concept is discussed in Section 4 and design parameters are described in Section 5.

4 Interim Measure Concept

The cVOCs migrating in groundwater from the Tell City Site likely contribute to cVOC concentrations detected in soil vapor and indoor air at certain offsite locations. To improve these soil vapor/indoor air concentrations, GE has focused this planned IM on remedial methods to reduce cVOC concentrations in offsite groundwater and, thereby, in soil vapor.

To reduce groundwater cVOC concentrations, GE plans to implement a permeable reactive barrier (PRB), which is a passive “flux control” IM. Flux control in this context is a reduction in the mass of cVOCs migrating in groundwater from the Tell City Site as a result of the PRB. The PRB IM will degrade dissolved cVOCs in groundwater, allowing treated groundwater to exit the PRB and flow relatively unimpeded along the same flow paths followed by pre-remedy impacted groundwater. By retaining continuity of the natural flow system, the treated groundwater will displace impacted groundwater downgradient of the PRB, improving groundwater quality as clean groundwater flushes through formerly impacted areas.

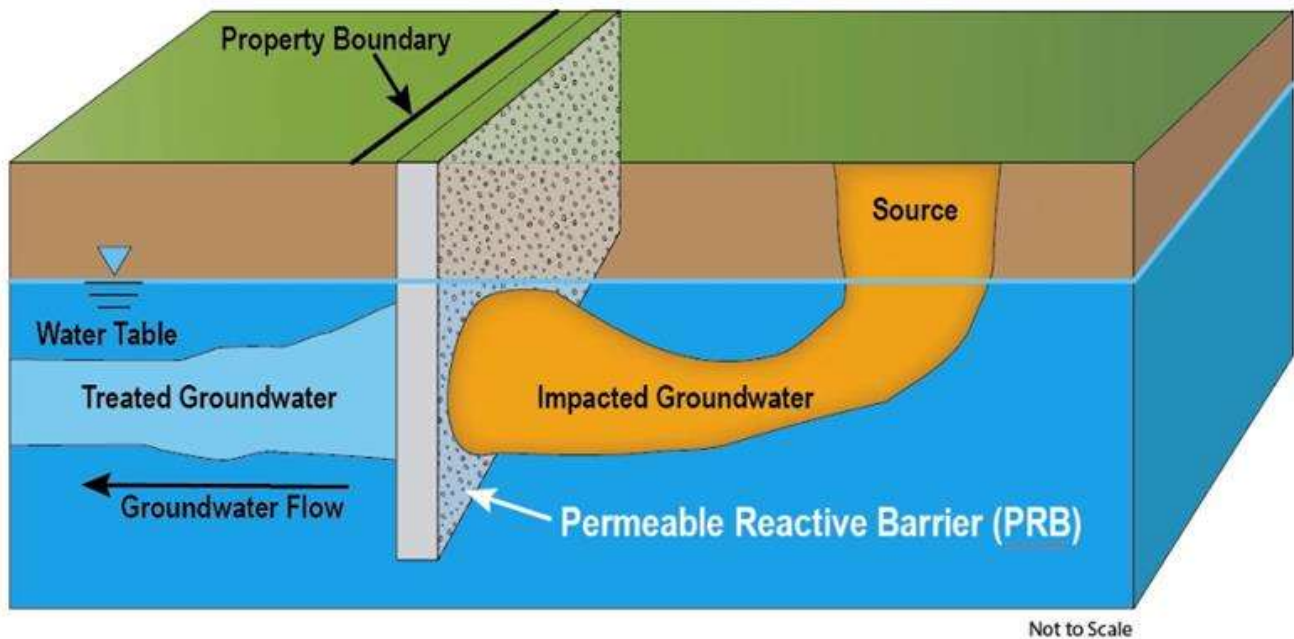
To determine where to locate the PRB at the Site so that treated groundwater will reach impacted offsite areas most rapidly, GE evaluated two of the most important factors: groundwater velocity and the distance between the targeted remediation zone and potential downgradient receptors. Based on onsite testing, groundwater near the downgradient boundary generally moves slowly, with a median velocity on the order of 0.44 foot per day (ft/day). This emphasizes that a PRB should be positioned as close as possible to the downgradient property boundary to minimize the travel distance and thereby the travel time for treated groundwater to reach offsite locations and improve groundwater quality.

A PRB, which treats impacted groundwater *in situ* as it flows through a reactive zone, located near the Site boundary was identified as the best onsite IM to improve downgradient groundwater quality and reduce vapor concentrations.

4.1 Permeable Reactive Barriers

The graphic below illustrates a conceptual PRB constructed across a volume of impacted groundwater. A common method of PRB construction is to excavate a trench perpendicular to the direction of groundwater flow into which solid treatment media (often mixed with inert materials such as sand and gravel) is placed. Emplacing a solid material in a trench affords a high degree of certainty regarding location, distribution, and amount of material emplaced. To prevent groundwater underflow, a PRB is typically “keyed in” or emplaced some distance into an underlying geological unit with substantially lower groundwater transmissivity relative to the overlying treatment zone.

Permeable Reactive Barrier (PRB) Cross-Section



4.2 PRB Remediation Media

The most appropriate remediation media for a PRB depends on the COCs to be treated. Because of the presence of cVOCs, a zero valent iron (ZVI)-based PRB is recommended for this Site.

ZVI is a readily available material that has been used in PRBs for approximately 25 years (ITRC 2011). More than 200 ZVI PRBs have been installed across North America as of 2010 (Vogan 2021), with multiple installations annually.

The ZVI used for PRB applications comes from solid iron pieces that are processed to remove residual fluids, oils, and greases, then milled to smaller sizes as shown in the photo below.



Example photo of Connelly-GPM, Inc. ZVI from www.connellygpm.com

The ZVI-based PRB is a mature and reliable technology for treating cVOCs. Iron in its metallic, zero valent state will corrode (oxidize) in groundwater and consume available oxidants such as oxygen and nitrate. In the presence of cVOCs such as TCE, this corrosion process is coupled with reduction of cVOCs, transforming them into non-hazardous reduced compounds and removing chlorine atoms. The cVOC transformation pathway in the presence of ZVI is described in more detail in **Appendix A**. ZVI is long-lasting reactive media with rapid reaction rates within PRBs typically ranging from hours to several days. ZVI can be effective for decades, with at least one ZVI PRB having achieved 25 years of effective operation without replenishment. A minimum design life of 10 years is often cited for a ZVI PRB; however, it is not unusual for ZVI to last significantly longer.

Design parameters for the ZVI PRB planned for the Site are discussed in Section 5.

5 Design Parameters for Planned Interim Measure

The planned IM is a trench-based PRB with ZVI as the reactive medium to degrade cVOC impacts in groundwater and thereby minimize the groundwater to soil vapor pathway.

To determine the required *combination of PRB width and iron content*, the following three key Site-specific inputs are needed: linear groundwater velocities in the area of the planned PRB; cVOC concentrations in groundwater in the vicinity of the planned PRB, which will be aligned along the north and west property boundaries consistent with the discussion in Section 4; and the reaction kinetics (i.e., degradation rates) for cVOCs specific to the ZVI-site groundwater combination. To design the *top and bottom depths for the reactive and non-reactive media* within the PRB, high resolution stratigraphic information is also needed along the planned PRB alignment. These various data needs have been met, as described below.

GE estimated linear groundwater velocities by performing single well tracer tests (SWTTs) in January 2021 at five site monitoring wells, including locations near the planned PRB alignment. These data were provided to IDEM in *Supplemental Investigation Report 2*. GE also measured current groundwater cVOC concentrations in samples from onsite monitoring wells as shown on **Figure 5** and provided the data to IDEM in the *First Quarter 2021 Groundwater Monitoring Report* dated June 21, 2021.

Additional site characterization activities to assess groundwater quality and lithology along the planned PRB alignment were performed in April 2021. A hydraulic profiling tool (HPT) was used to measure relative hydraulic conductivity throughout the saturated interval at 22 locations along the planned alignment of the PRB. The HPT profile allowed areas of relatively high (i.e., sand) and low (i.e., silt or clay) hydraulic conductivity to be determined. The areas of lowest conductivity indicate clay-rich areas where minimal groundwater flow occurs. The HPT data clearly show the contact between the alluvial sand and the underlying clay and will be used to define the bottom of the PRB treatment zone. Groundwater samples were collected from the highest hydraulic conductivity zone (as identified by the HPT profile) from temporary wells that were emplaced adjacent to 18 of the HPT locations to further assess groundwater quality along the planned PRB alignment. The lateral extent of impacts will be used to refine the final PRB length. The concentration data will be used to finalize the iron content for each section of the PRB. The results of the pre-design HPT testing and groundwater sampling are presented in Section 6.

Finally, to determine the required combination of PRB width and iron content for each section of PRB, the rate at which dissolved cVOCs are degraded by ZVI is also needed. This rate depends on the site-specific groundwater chemistry and the surface area of the ZVI. Two laboratory column studies to determine site-specific reaction rates have been completed. In each column study, groundwater from the Site was pumped through a column packed with the specific commercially available ZVI material planned for the use at the Site. Samples for cVOC analysis were collected weekly or bi-weekly (every two weeks) at various distances along the laboratory column to assess the rate of degradation of cVOCs for the ZVI-site groundwater combination particular to the planned full scale ZVI PRB. The results from the laboratory column studies are discussed in Section 6.

6 Results of Pre-Design Investigation

To develop the planned IM detailed herein, Arcadis submitted to IDEM the *Pre-Design Investigation Work Plan Related to Offsite Groundwater and Vapor Interim Measures* (Plan) (March 26, 2021). IDEM approved the Plan by electronic mail on April 8, 2021. Elements of the Plan included advancing HPT borings and collecting groundwater samples to provide the required data described above in Section 5. The results of these activities are discussed below. This pre-design data supplements existing geochemical and geologic data, supports appropriate final design alignment, and will be used to confirm means and methods for construction of the ZVI PRB.

6.1 HPT Results

The Plan proposed advancing HPT borings along the western and northern sides of the Site in order to characterize the higher permeability geologic zones and confirm the depth to the top of the low-permeability clay at each HPT location. Borings were advanced through the subsurface while continuously logging pressure, flow, hydraulic conductivity, and soil and groundwater electrical conductivity. Borings were advanced at least two feet into the lower confining clay, to approximately 40 feet bgs.

A total of 22 HPT borings were completed along the northern and western boundaries of the Site (**Figure 6**). The HPT output is presented in **Appendix B**. The logs confirm previous geological findings along these boundaries: the alluvial sand is below a surficial layer of clay-rich soil and has a sharp lower contact with the underlying clay (**Figure 7** and **Figure 8**). The eastern and southernmost locations show the transition between the alluvial sand and clay dominated areas of the Site. The eastern transition appears to be one where the alluvial sand thins and shallows into the clay, and the southern transition appears to be more of an interfingering of sand, silt, and clay.

The identified thickness of the saturated zone, the top of the low-permeability clay layer, and their depths with respect to the ground surface will be used to determine the final height of the zone of reactive media in the PRB.

6.2 Groundwater Sampling

The Plan also presented a scope of work for collecting groundwater samples from the HPT boring locations in order to obtain a lateral profile of cVOCs along the northern and western property lines. Additionally, groundwater samples were collected from five temporary piezometers for analysis of geochemical parameters to support the final PRB design.

6.2.1 VOCs

After each HPT boring was completed, a second boring was advanced at least five feet in the upgradient direction (southeast) relative to each HPT boring for collection of groundwater samples. A stainless-steel sampler was advanced into the saturated zone as identified from each HPT log. The sampler was then opened and Teflon tubing fitted with a check valve was inserted to push groundwater to the surface. After purging three screen interval volumes of water, a groundwater sample was collected in laboratory-supplied vials. Groundwater samples were submitted to SGS Analytical located in Dayton, New Jersey (SGS) for analysis of VOCs using USEPA Method 8260B. For Quality Assurance / Quality Control (QA/QC) purposes, one field duplicate and one equipment rinse blank was collected each day.

A total of 20 soil borings were advanced for collection of groundwater samples: 18 locations yielded enough water for collection of samples (HPT-1, HPT-5, and HPT-7 through HPT-22) and two locations had insufficient water for sampling (HPT-3 and HPT-4). Soil borings were not advanced for collection of groundwater samples at HPT-2 (based on little and no water at adjacent borings HPT-1 and HPT-3, respectively) or HPT-6 (a groundwater sample was previously collected from nearby location AB-29S). **Table 1** presents the soil boring groundwater sample results along with the results from previous sampling near the northern and western property lines. The results for PCE, TCE, cDCE, tDCE, and vinyl chloride are presented on **Figures 7 and 8**. Laboratory analytical reports are included in **Appendix C**.

The results show that the total concentrations of these cVOCs generally decline from west to east and from north to south along the two property lines; however, TCE concentrations increase from north to south relative to the other cVOCs, and the concentrations of the degradation products are greatest near the northwestern corner of the Site. Detections of cVOCs above RCG residential tap water screening levels extend to AP-35 to the south and to HPT-20 to the east. COC detections in groundwater along the northern property line extend from HPT-16 to the east and consist of relatively low-concentrations of TCE and vinyl chloride. The planned conceptual alignment of the PRB is shown on **Figure 6** and was determined based on these cVOC concentration data.

6.2.2 Geochemical Parameters

Groundwater samples were collected from temporary piezometers PZ-3 through PZ-7 on April 29, 2021 for geochemical analyses. The piezometers were installed as part of Supplemental Investigation 2 and remain at the Site. Samples were collected from each piezometer using low-flow techniques. These techniques included the use of a peristaltic pump, a multiparameter water quality meter with flow-through cell, and an electronic water level meter. Upon completion of low flow purging, groundwater samples were collected directly from the pump in laboratory-prepared sample containers and submitted to SGS for analysis of nitrate, calcium, alkalinity, and total inorganic carbon. Results of the analyses are presented in **Table 2** and **Figure 9**. Laboratory analytical reports are included in **Appendix C**.

6.3 Laboratory Treatability Testing

The final element of the Plan was collection of groundwater samples for laboratory treatability testing because reaction rate constants (i.e., reaction kinetics) for the groundwater-ZVI system are of primary importance in determining the required width of a ZVI-based PRB. Groundwater samples were collected from monitoring wells MW-5S and MW-6S to evaluate the efficacy of ZVI to treat the cVOCs present in Site groundwater. ZVI efficacy for treatment is dependent on cVOC concentrations and geochemical conditions at a site.

Samples were shipped to the SiREM laboratory in Guelph, Ontario, Canada and the Arcadis Treatability Laboratory in Durham, North Carolina. Two laboratories were used for treatability testing to provide both verification and flexibility in the testing program. The SiREM laboratory column test was conducted using groundwater from monitoring well MW-5S, which is representative of conditions along the planned north-south PRB installation alignment. The in-house Arcadis Treatability Laboratory column test was conducted using groundwater from monitoring well MW-6S, which is located closer to AOC-3 and contains higher cVOC concentrations. Use of groundwater from these two monitoring well locations provided maximum flexibility for simulation of various operational conditions during column testing.

The SiREM column study (referred to herein as Column 1) was initiated on May 11, 2021. The column was constructed of Plexiglas™ with a length of 1.8 feet and an internal diameter of 1.5 inches. Seven sampling ports were positioned along the length of the column for collection of aqueous samples for laboratory analysis. The column was packed to a final porosity of 0.53 with 100% ZVI (Connelly-GPM, Inc. CC-1004), and testing was performed at room temperature (approximately 22 degrees Celsius [°C]). The column was operated for a period of 65 days, with the final sampling event occurring on July 15, 2021. Between May 11 and June 14, flow through the column was set to simulate a linear groundwater velocity of approximately 0.60 feet/day. Between June 15 and July 15, the flow through the column was increased to simulate a linear groundwater velocity of approximately 1.1 feet/day. Sampling was performed at least once bi-weekly during the testing period. A summary of the cVOC treatability testing results for Column 1 is included as **Table 3**.

The Arcadis Treatability Laboratory column study (referred to herein as Column 2) was initiated on May 6, 2021. The column was constructed of glass with a length of 1.17 feet and an internal diameter of 2 inches. Six sampling ports were positioned along the length of the column for collection of aqueous samples for laboratory analysis. The column was packed to a final porosity of approximately 0.55 with 100% ZVI (Connelly-GPM, Inc. CC-1004), and testing was performed at room temperature (20-24°C). The column was operated for a period of 48 days, with the final sampling event occurring on June 23, 2021. Between May 11 and June 21, flow through the column was set to simulate a linear groundwater velocity of approximately 0.85 feet/day. Between June 21 and June 23, the flow through the column was increased to simulate a linear groundwater velocity of approximately 8.5 feet/day. Sampling was performed at least once weekly during the testing period. A summary of the cVOC treatability testing results for Column 2 is included as **Table 4**.

Reports summarizing the procedures and results of each laboratory column study are provided in **Appendix D**.

The treatability testing confirmed the degradation rates for those chlorinated ethenes that are present in Site groundwater using site-specific concentrations and simulated groundwater flow conditions. These degradation rates are the basis for the field design parameters used to determine: (i) the required residence time in the PRB to accomplish treatment to meet regulatory criteria; and, (ii) the optimal ratio of ZVI to non-reactive media for successful PRB implementation.

7 Interim Measure Design and Implementation

Using Site-specific data, the results of the recent pre-design investigation, the laboratory treatability testing data, and industry standard guidance, Arcadis has developed a preliminary IM design set forth below in this Section.

7.1 Design Parameters

Section 7.1 sets out the specific design parameters for the PRB. First, Arcadis developed a basis of design using assumptions from Site-specific and treatability testing data, PRB media parameters, and PRB reactive mix. As set out in Sections 7.1.1 – 7.1.3, this basis of design establishes the minimum PRB width for effective cVOC treatment. Next, Arcadis modified this preliminary design to account for field conditions using industry standard guidance and professional experience, as described in Section 7.1.4. Finally, Section 7.1.5 further adjusts the design to account for constructability and accommodate variability in underlying assumptions through addition of factors of safety.

7.1.1 PRB Residence Time

A critical design parameter for a PRB is residence time. This is the amount of time that the target constituent is in contact with the PRB reactive zone (i.e., the ZVI). Contact time depends on PRB permeability, which in turn is a function of both porosity and hydraulic conductivity within the PRB. Decreases in either porosity or hydraulic conductivity will change retention time for the target constituent within the PRB, or in a worst-case scenario, will affect the capacity for groundwater to travel through the PRB over time.

The change in concentration of the target constituent over time as it reacts with ZVI can be expressed as:

$$C = C_0 e^{-k_1 f_i t} \quad (1)$$

where C_0 is the initial concentration of dissolved constituent, C is the concentration of dissolved constituent after a specific contact time (t), t is the contact time between the dissolved constituent and iron particles, k_1 is the effective rate constant, and f_i is the fraction of iron in the PRB.

7.1.2 PRB Width

The width of a PRB (L) required to achieve a given residence time can be found using the relationship below:

$$L = \frac{v}{t} \quad (2)$$

Where t is the residence time and v is the estimated linear groundwater velocity within the PRB.

7.1.3 Basis of Design

As an initial design consideration, this section presents the assumptions used to establish the *minimum necessary PRB width* for effective treatment of Site groundwater. As detailed in Section 7.1.4, the minimum necessary PRB width is then adjusted in consideration of additional safety factors to achieve the final planned design criteria.

The following assumptions for potentiometric conditions were used:

- Groundwater flow is to the northwest in the vicinity of the northern and northwestern Site boundaries.

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- The velocity of groundwater entering the PRB is 0.44 ft/day, based on the median estimate from the SWTTs performed to measure groundwater flux and estimated groundwater velocity at wells along and near the western and northern Site boundaries. This estimate is based on an assumed 10% effective porosity for the native material.

Based on groundwater sampling data, the following assumptions for maximum cVOC concentrations in groundwater entering the PRB and target concentrations for groundwater exiting the PRB were used:

- A maximum PCE concentration in groundwater entering the PRB of 50 micrograms per liter (µg/L). The target PCE concentration in groundwater exiting the PRB is at or below the IDEM tap water screening level of 5 µg/L.
- A maximum TCE concentration in groundwater entering the PRB of 2,000 µg/L. The target TCE concentration in groundwater exiting the PRB is at or below the IDEM tap water screening level of 5 µg/L.
- A maximum cDCE concentration in groundwater entering the PRB of 12,000 µg/L. The target cDCE concentration in groundwater exiting the PRB is at or below the IDEM tap water screening level of 70 µg/L.
- A maximum tDCE concentration in groundwater entering the PRB of 70 µg/L. The target tDCE concentration in groundwater exiting the PRB is at or below the IDEM tap water screening level of 100 µg/L.
- A maximum vinyl chloride concentration in groundwater entering the PRB of 3,000 µg/L. The target vinyl chloride concentration in groundwater exiting the PRB is at or below the IDEM tap water screening level of 2 µg/L.

The following Site-specific hydrogeologic information was used:

- Depth to the low-permeability clay unit along the northern and western Site boundaries varies from approximately 30 to 35 feet bgs. Ground surface elevation varies by approximately 15 feet along these boundaries, so these depths correspond to elevations of approximately 375 to 390 feet above mean sea level (MSL).
- Depth to groundwater along the northern and western Site boundaries varies from approximately 8 to 29 feet bgs. These depths correspond to an elevation range of approximately 382 to 393 feet MSL.
- The zone of cVOC-impacted groundwater to be treated by the PRB extends from the water table to the low-permeability clay unit along the northern and western Site boundaries. This saturated zone ranges between approximately 3 and 7 feet thick in the area where the PRB will be located, depending on seasonal fluctuations and the topography of the underlying clay.

A 35% effective porosity was assumed for the PRB treatment zone based on professional experience, resulting in an assumed linear groundwater velocity within the PRB of 0.13 ft/day.

The minimum calculated rate constants for each target cVOCs used for the basis of design were developed from the Column 1 data. For this Column, the groundwater was used “as collected” for the first portion of the study, and then was spiked to approximate the assumed maximum PCE, TCE, cDCE, and vinyl chloride concentrations in groundwater entering the PRB listed previously. Based on an assumed minimum percentage of ZVI in the reactive zone of 25%, the minimum residence time and PRB width for each target constituent were also calculated. The rate constants and the results of the other calculations are summarized in the following table.

Text Table 1: Basis of Design Summary

Constituent	First Order Rate Constant from Column 1 (per hour) ¹	Assumed Maximum PRB Influent Concentration Based on Sampling Data (µg/L) ²	Assumed Maximum PRB Effluent Concentration (µg/L) ³	Minimum Residence Time with 25% ZVI (hours)	Minimum PRB Width with 25% ZVI (feet)
PCE	0.62	50	5	15	0.08
TCE	1.02	2000	5	24	0.13
cDCE	1.07	12000	70	19	0.10
tDCE	0.75	70	100	NA ⁴	NA
Vinyl Chloride	1.73	3000	2	17	0.09

Notes:

1. First Order Rate Constant is the minimum calculated for the constituent based on the Column 1 (SiREM) study results (Appendix D).
2. Assumed Maximum PRB Influent Concentration is the maximum result from the 2021 HPT data collection event, rounded up to the nearest 10 µg/L (PCE and trans-1,2-DCE) or 1000 µg/L (TCE, cis-1,2-DCE, and vinyl chloride).
3. IDEM RCG Residential Tap Water Screening Level.
4. NA = not applicable

7.1.4 Modification for Field Conditions

Modification of the preliminary design for field conditions accommodates differences in groundwater temperature between the laboratory and field conditions and field uncertainties (O'Hannesin et al., 2004; ITRC 2011). A factor of three was applied to the basis of design for the minimum PRB Width developed in Section 7.1.3 based on industry guidance and professional experience.

Text Table 2: Modification for Field Conditions

Constituent	Minimum PRB Width with 25% ZVI and Factor of 3 (feet)
PCE	0.24
TCE	0.39
cDCE	0.30
tDCE	NA
Vinyl Chloride	0.27

7.1.5 Preliminary Interim Measure Design and Factors of Safety

Because a ZVI PRB is not regularly amended during its active life, the design also considers constructability and accommodates variability in underlying assumptions such as groundwater flow velocity entering the PRB, constituent concentrations in groundwater entering and within the PRB, changes in ZVI reactivity over time, and minor variances in construction. For this reason, the planned width of the ZVI PRB IM has been adjusted to 2 feet. By comparison to the minimum PRB widths determined in Section 7.1.4 above, a 2-foot-wide PRB with a 25/75 ZVI/sand mixture will afford the following additional residence time factors of safety for each of the target constituents:

Text Table 3: Additional Factors of Safety Summary

Constituent	Additional Factors of Safety for a 2-Foot-Wide PRB with 25% ZVI
PCE	8.3
TCE	5.1
cDCE	6.7
tDCE	NA
Vinyl Chloride	7.4

As an added design modification, the percentage of ZVI in the reactive zone may be increased above 25% in some linear sections along the length of the PRB depending on the actual influent constituent concentrations anticipated in groundwater entering that section of the PRB.

Additionally, to account for seasonal water table variations and heterogeneities in the implementation area, a design modification is applied to the height of the reactive media zone. For this preliminary IM design, the reactive media installation zone will start approximately 2 feet above the seasonal high groundwater elevation to accommodate seasonal groundwater fluctuation and will extend approximately 2 feet below the identified clay surface to accommodate field heterogeneities in keying into this low transmissivity layer.

Finally, using the rates of reaction determined from results of the Column 1 study (See Section 7.1.3) already may impart additional factors of safety into the planned 2-foot-wide PRB design. The Column 2 study suggests that reaction rates for already-reduced groundwater entering the PRB may be more rapid than reflected in the data from Column 1. This is because groundwater for the Column 2 study was collected from well MW-6S, which is located in the interior area of the Site downgradient of AOC-3 (**Figure 6**). As noted in Section 2, AOC-3 is contributing degraded cVOCs (cDCE and vinyl chloride) to groundwater. Thus, the groundwater used for the Column 2 study had higher initial concentrations of cDCE and vinyl chloride and was more chemically reducing than the groundwater used for the Column 1 study. Column 2 was also operated at elevated flowrates to assess the effect on residence time for complete cVOC degradation. For the initial portion of the study, Column 2 was operated at an equivalent linear groundwater velocity of approximately 0.85 ft/day, or approximately twice the median linear groundwater velocity estimated to be entering the PRB. For the final 48 hours of the study, Column 2 was operated at an equivalent linear groundwater velocity of 8.5 ft/day.

Even under unrealistic velocity conditions, the minimum rate constants estimated from the Column 2 data were significantly higher (i.e., indicative of faster reaction times) than those estimated from the Column 1 data (See **Text**

Table 4). The more reduced state of the MW-6S groundwater appears to have imposed a lower natural reductant demand (i.e., demand in addition to cVOCs) on the ZVI than the MW-5S groundwater. Two examples of such natural reductant demand are dissolved oxygen and dissolved nitrate, both of which will be reduced by ZVI (He et al. 2020). The faster kinetics observed in the Column 2 study may have been due to the absence of, or lower concentrations of, dissolved oxygen and dissolved nitrate in the column feed water allowing for increased reaction rates for cVOCs.

Text Table 4: Comparison of Column 1 and Column 2 Rate Constants

Constituent	First Order Rate Constant from Column 1 (per hour) ¹	First Order Rate Constant from Column 2 (per hour) ²
PCE	0.62	NC ³
TCE	1.02	NC
cDCE	1.07	4.20
tDCE	0.75	NC
vinyl chloride	1.73	4.43

Notes:

1. First Order Rate Constant is the minimum calculated for the constituent based on the Column 1 (SiREM) study results.
2. First Order Rate Constant is the minimum calculated for the constituent based on the Column 2 (Arcadis) study results.
3. NC = Not calculable from the testing results.

7.2 Preliminary Interim Measure Design Summary

In summary, the preliminary IM design consists of approximately 1,400 linear feet of ZVI-based PRB installed in an L-shaped alignment along portions of the northern and western Site boundaries to an average depth of 37 feet bgs, with an average treatment height of 12 feet, and with an approximate treatment width of 2 feet. The final design ZVI/sand mixture may vary within linear sections along the length of the PRB depending on the actual influent constituent concentrations anticipated in groundwater entering that section of the PRB based on Site data. Details pertaining to this preliminary design are presented on **Figures 6, 10, 11, and 12**.

7.3 Monitoring and Maintenance

The PRB will be monitored for its impact on groundwater quality (i.e., how effectively it degrades cVOCs) as well as its impact on groundwater flow. It is anticipated that five series of monitoring wells will be installed to monitor PRB performance. (**Figure 10**). Each series of wells will consist of one upgradient groundwater monitoring well and one or two downgradient groundwater monitoring wells, depending on accessibility and pre-implementation cVOC concentrations. The wells will be positioned such that groundwater monitored by the upgradient well is expected to pass through the downgradient well(s) in the same series. Upgradient wells will be located approximately 5 to 15 feet upgradient of the PRB. It is anticipated that one downgradient well in each series will be located approximately 5 to 15 feet downgradient of the PRB, while a second well will be installed approximately 25 to 50 feet downgradient of the PRB in some or all of the monitoring well series. The upgradient wells will serve to monitor the groundwater

quality reaching the PRB over time as well as providing data for comparison with water quality results from downgradient monitoring wells.

Monitoring well samples will be analyzed for PCE, TCE, cDCE, tDCE, and vinyl chloride. Other naturally occurring groundwater constituents as well as groundwater geochemical properties will be monitored periodically. These additional measurements will be used to assess the potential for chemical precipitation to be occurring within the PRB. It is anticipated that performance monitoring will be conducted on a quarterly basis for the first two years, after which the program may be modified to a semi-annual or annual frequency based on the data collected during the first two years of operation.

During each performance monitoring event, depth to water will be measured in monitoring wells and piezometers installed upgradient and downgradient of the PRB. The existing piezometers will be used to supplement the depth to water data from the new monitoring wells for assessment of changes in groundwater flow after PRB installation, if any. The new monitoring wells and existing piezometers will be used together to maintain a detailed understanding of the hydraulic environment near the Site boundary during IM implementation.

7.4 Estimated Schedule

Following IDEM's approval of this IM Workplan, GE will finalize the design and drawings into a bid solicitation package for installation of the ZVI PRB. GE anticipates that numerous contractors will be required to perform the following IM tasks: site preparation, materials supply, soil management and handling, PRB installation, and general onsite management. GE will provide an estimated construction schedule to IDEM after contractors have been selected for this scope of work.

8 References

- Arnold, W. A. and A. L. Roberts, 2000. Pathways and Kinetics of Chlorinated Ethylene and Chlorinated Acetylene Reaction with Fe(0) Particles. *Environmental Science & Technology*. 34(9): 1794-1805.
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Tables

Table 1
Summary of Periphery Groundwater Volatile Organic Compound Analytical Results
GE Tell City Facility
1412 13th Street, Tell City, Indiana

Analyte	Tap Water Screening Level*	HPT-1	HPT-5	HPT-7	HPT-8	HPT-9	HPT-10	HPT-11	HPT-12	HPT-13	DUP-1 =HPT-13	HPT-14	HPT-15	DUP-2 =HPT-15	HPT-16
		4/30/2021	4/30/2021	4/30/2021	4/30/2021	4/30/2021	4/30/2021	4/29/2021	4/29/2021	4/29/2021	4/29/2021	4/29/2021	4/30/2021	4/30/2021	4/30/2021
Acetone	14000	21.4	<100	<100	<10	<50	<250	<200	<500	<10	<10	<10	<10	<10	<10
Benzene	5	<0.50	<5.0	<5.0	0.81	<2.5	<13	<10	<25	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromobenzene	62	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	83	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	80	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	80	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	7.5	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone (MEK)	5600	<10	<100	<100	<10	<50	<250	<200	<500	<10	<10	<10	<10	<10	<10
n-Butylbenzene	1000	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
sec-Butylbenzene	2000	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tert-Butylbenzene	690	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride	5	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	100	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	21000	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	80	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	190	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Chlorotoluene	240	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
p-Chlorotoluene	250	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane	0.2	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane	80	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	0.05	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	600	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	-	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	75	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	200	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	28	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	5	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	10.5	17	8.2 J	110	748	4550	2760	11800	<1.0	<1.0	104	66.9	65.2	25.8
trans-1,2-Dichloroethene	100	<1.0	<10	<10	3.5	31.6	35.4	26.6	65.6	<1.0	<1.0	2.7	1.8	1.9	0.95 J
1,2-Dichloropropane	5	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane	370	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	-	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene	-	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	-	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	-	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	1.4	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Isopropylbenzene	450	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	-	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Tert Butyl Ether	140	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Methyl-2-pentanone(MIBK)	6300	<5.0	<50	<50	<5.0	<25	<130	<100	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene bromide	8.3	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	5	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene	1.7	<5.0	<50	<50	<5.0	<25	<130	<100	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Propylbenzene	660	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	100	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	5.7	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	0.76	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5	<1.0	<10	11.5	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
Toluene	1000	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	7	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	70	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	5	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5	0.54 J	1230	1970	72.1	311	512	60.9	<50	3.0	2.9	131	20.4	18.3	11.4
Trichlorofluoromethane	5200	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	0.0075	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trimethylbenzene	56	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	60	<2.0	<20	<20	<2.0	<10	<50	<40	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl chloride	2	<1.0	<10	<10	2.6	79.9	193	151	2870	<1.0	<1.0	6.9	9.1	8.7	4.4
m,p-Xylene	190	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	190	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (total)	10000	<1.0	<10	<10	<1.0	<5.0	<25	<20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Results in Micrograms per Liter
 *202 Remediation Closure Guide Screening Levels
 NA=Not Available
 Bold Font Indicates detected Analyte
 Shaded Cell Indicates Tap Water Screening Level Exceedance
 J = Estimated Value

Table 1
Summary of Periphery Groundwater Volatile Organic Compound Analytical Results
GE Tell City Facility
1412 13th Street, Tell City, Indiana

Analyte	Tap Water Screening Level ^a	HPT-17 4/30/2021	HPT-18 4/30/2021	HPT-19 4/30/2021	HPT-20 4/30/2021	HPT-21 4/30/2021	HPT-22 4/30/2021	PZ-3 3/24/2021	PZ-4 3/24/2021	PZ-5 3/24/2021	PZ-6 3/24/2021	PZ-7 3/24/2021	PZ-8 3/24/2021	PZ-9 3/24/2021	PZ-10 3/24/2021	TB-1-KA Trip Blank 4/30/2021	EB-1 Equipment Blank 4/29/2021	EB-2 Equipment Blank 4/30/2021
Acetone	14000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 ^b	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromobenzene	62	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	83	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	7.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone (MEK)	5600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Butylbenzene	1000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
sec-Butylbenzene	2000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tert-Butylbenzene	690	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	21000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	190	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Chlorotoluene	240	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
p-Chlorotoluene	250	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane	0.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	0.05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	75	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	28	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	26	8.2	33.6	2.4	0.76 J	<1.0	3.7	56.8	21.9	802	<1.0	353	26.7	790	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	100	0.75 J	<1.0	1.1	<1.0	<1.0	<1.0	0.56 J	1	1.1	11.5	<1.0	4	1.4	8.3	<1.0	<1.0	<1.0
1,2-Dichloropropane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane	370	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-Dichloropropane	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	1.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Isopropylbenzene	450	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Tert Butyl Ether	140	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Methyl-2-pentanone (MIBK)	6300	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene bromide	8.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Naphthalene	1.7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Propylbenzene	660	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	5.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	0.76	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trachloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7	1.4	2.4	<1.0	1.3	2.8	4.2	<1.0	<1.0	<1.0	<1.0
Toluene	1000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	70	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.73 J	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5	8.2	5.0	30.2	8.2	0.86 J	<1.0	649	87.4	143	9.2	1.7	74.8	360	0.93 J	<1.0	<1.0	<1.0
Trichlorofluoromethane	5200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 ^c	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	0.0075	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trimethylbenzene	56	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	60	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl chloride	2	4.1	1.3	0.81 J	<1.0	<1.0												

Table 2
Summary of April 2021 Groundwater Geochemical Analytical Results
GE Tell City Facility
1412 13th Street, Tell City, Indiana

Analyte	PZ-3	PZ-4	PZ-5	PZ-6	PZ-7
	4/29/2021	4/29/2021	4/29/2021	4/29/2021	4/29/2021
Calcium	25.9	46.4	45.7	55.4	67.7
Alkalinity, Total as CaCO ₃	72.5	179	134	175	243
Inorganic Carbon	17.3	42	33.3	41.2	98.1
Nitrogen, Nitrate	3.4	0.28	5.1	1.3	2.0
Nitrogen, Nitrate + Nitrite	3.4	0.28	5.1	1.3	2.0
Nitrogen, Nitrite	<0.010	<0.010	<0.010	<0.010	<0.010
Total Carbon	17.3	42.8	33.3	41.2	98.1
Total Organic Carbon	<1.0	<1.0	<1.0	<1.0	<1.0

Results in milligrams per liter

Table 3
Summary of Laboratory VOC Treatability Test Results - Column 1 (SiREM)
GE Tell City Facility
1412 13th Street, Tell City, Indiana

Column Distance (feet)				Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port H	Port J	Effluent
				0.0	0.08	0.16	0.33	0.50	0.66	1.00	1.14	1.48	1.64
Analyte	Sample Date	Simulated Flow Rate (feet/day)	Pore Volumes	Concentration (milligrams per liter)									
PCE	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	--	--	--	--	--	--	--	--	--	--
	08-Jun-21	0.55	8.8	--	--	--	--	--	--	--	--	--	--
	22-Jun-21	1.01	15.0	0.063	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	29-Jun-21	1.01	19.4	0.043	0.007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	6-Jul-21	1.01	23.6	0.064	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	12-Jul-21	1.01	27.3	0.052	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	15-Jul-21	1.01	28.6	0.035	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
TCE	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	0.202	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	08-Jun-21	0.55	8.8	0.250	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	22-Jun-21	1.01	15.0	2.757	0.143	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	29-Jun-21	1.01	19.4	2.046	0.121	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	6-Jul-21	1.01	23.6	2.361	0.205	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	12-Jul-21	1.01	27.3	2.304	0.328	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	15-Jul-21	1.01	28.6	1.800	0.332	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
cDCE	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	0.040	<0.01	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01	0.010
	08-Jun-21	0.55	8.8	0.040	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	22-Jun-21	1.01	15.0	13.450	0.792	0.144	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	29-Jun-21	1.01	19.4	10.438	0.623	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	6-Jul-21	1.01	23.6	11.468	1.015	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	12-Jul-21	1.01	27.3	11.082	1.460	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	15-Jul-21	1.01	28.6	9.129	1.550	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
tDCE	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	--	--	--	--	--	--	--	--	--	--
	08-Jun-21	0.55	8.8	--	--	--	--	--	--	--	--	--	--
	22-Jun-21	1.01	15.0	0.173	0.008	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	29-Jun-21	1.01	19.4	0.259	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	6-Jul-21	1.01	23.6	0.147	0.006	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	12-Jul-21	1.01	27.3	0.146	0.007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	15-Jul-21	1.01	28.6	0.161	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
VC	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	08-Jun-21	0.55	8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	22-Jun-21	1.01	15.0	4.140	0.090	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	29-Jun-21	1.01	19.4	2.475	0.062	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	6-Jul-21	1.01	23.6	3.238	0.106	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	12-Jul-21	1.01	27.3	2.342	0.123	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	15-Jul-21	1.01	28.6	1.421	0.074	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
Ethene	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.010
	08-Jun-21	0.55	8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	22-Jun-21	1.01	15.0	<0.01	0.202	0.030	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	29-Jun-21	1.01	19.4	<0.01	0.115	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	6-Jul-21	1.01	23.6	<0.01	0.159	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	12-Jul-21	1.01	27.3	<0.01	0.011	0.010	0.016	0.016	0.016	0.018	0.017	--	0.022
	15-Jul-21	1.01	28.6	<0.01	0.131	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
Ethane	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	<0.01	0.060	0.050	0.060	0.090	0.080	0.080	0.060	0.040	0.050
	08-Jun-21	0.55	8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
	22-Jun-21	1.01	15.0	<0.01	<0.005	4.020	5.010	5.034	4.584	4.683	5.216	--	3.343
	29-Jun-21	1.01	19.4	<0.01	3.162	2.923	2.780	2.965	3.507	3.370	4.527	--	4.780
	6-Jul-21	1.01	23.6	<0.01	3.454	3.326	2.510	2.893	3.212	3.299	4.312	--	4.356
	12-Jul-21	1.01	27.3	0.019	2.820	2.262	2.389	2.571	2.646	3.085	3.037	--	4.056
	15-Jul-21	1.01	28.6	0.051	1.716	2.057	1.706	1.687	2.014	2.050	2.645	--	2.666
Methane	11-May-21	0.55	0	--	--	--	--	--	--	--	--	--	--
	25-May-21	0.55	4.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	08-Jun-21	0.55	8.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05
	22-Jun-21	1.01	15.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05
	29-Jun-21	1.01	19.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05
	6-Jul-21	1.01	23.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05
	12-Jul-21	1.01	27.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05
	15-Jul-21	1.01	28.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05

Notes:

Detections above the laboratory reporting limits are **bolded**.

On June 14, 2021, the column influent was spiked with TCE, cDCE, and VC to increased influent concentrations.

On June 15, 2021, the flowrate through the column was increased from approximately 0.55 feet/day to approximately 1.05 feet/day.

Abbreviations:

< = not detected, the associated value is quantitation limit

-- = not analyzed

cDCE = cis-1,2-dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

Table 4

Summary of Laboratory VOC Treatability Test Results - Column 2 (Arcadis)

GE Tell City Facility

1412 13th Street, Tell City, Indiana

Column Distance (feet)				Influent	Port #1	Port #2	Port #3	Port #4	Port #6	Effluent
				0.0	0.167	0.333	0.500	0.667	1.000	1.167
Analyte	Sample Date	Simulated Flow Rate (feet/day)	Pore Volumes	Concentration (milligrams per liter)						
TCE	6-May-21	0.85	0	--	--	--	--	--	--	--
	13-May-21	0.85	3.16	<0.0053	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
	20-May-21	0.85	8.05	0.0036 J	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
	28-May-21	0.85	12.62	0.0044 J	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
	03-Jun-21	0.85	16.77	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
	10-Jun-21	0.85	21.48	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
	21-Jun-21	8.5	28.24	0.0123	--	--	--	--	--	--
	22-Jun-21	8.5	35.05	0.0127	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
	23-Jun-21	8.5	41.79	0.0103	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
cDCE	6-May-21	0.85	0	--	--	--	--	--	--	--
	13-May-21	0.85	3.16	2.680	0.0036 J	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	20-May-21	0.85	8.05	2.740	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	28-May-21	0.85	12.62	2.490	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	03-Jun-21	0.85	16.77	1.430	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	10-Jun-21	0.85	21.48	1.990	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	21-Jun-21	8.5	28.24	4.780	--	--	--	--	--	--
	22-Jun-21	8.5	35.05	5.560	0.413	0.0483	<0.0025	<0.0025	0.0039 J	<0.0025
	23-Jun-21	8.5	41.79	4.050	0.578	0.0815	<0.0025	<0.0025	<0.0025	<0.0025
tDCE	6-May-21	0.85	0	--	--	--	--	--	--	--
	13-May-21	0.85	3.16	0.0057	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
	20-May-21	0.85	8.05	0.0059	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
	28-May-21	0.85	12.62	0.0069	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
	03-Jun-21	0.85	16.77	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
	10-Jun-21	0.85	21.48	0.0038 J	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
	21-Jun-21	8.5	28.24	0.0229	--	--	--	--	--	--
	22-Jun-21	8.5	35.05	0.0244	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
	23-Jun-21	8.5	41.79	0.0185	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027
VC	6-May-21	0.85	0	--	--	--	--	--	--	--
	13-May-21	0.85	3.16	0.405	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039
	20-May-21	0.85	8.05	0.346	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039
	28-May-21	0.85	12.62	0.485	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039
	03-Jun-21	0.85	16.77	0.0147	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039
	10-Jun-21	0.85	21.48	0.171	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039
	21-Jun-21	8.5	28.24	1.520	--	--	--	--	--	--
	22-Jun-21	8.5	35.05	2.330	0.0775	0.0113	<0.0039	<0.0039	<0.0039	<0.0039
	23-Jun-21	8.5	41.79	1.100	0.0976	0.0179	<0.0039	<0.0039	<0.0039	<0.0039

Notes:

Detections above the laboratory reporting limits are **bolded**.

On June 21, 2021, the flowrate through the column was increased from approximately 0.85 feet/day to approximately 8.5 feet/day.

Abbreviations:

< = not detected, the associated value is quantitation limit

-- = not analyzed

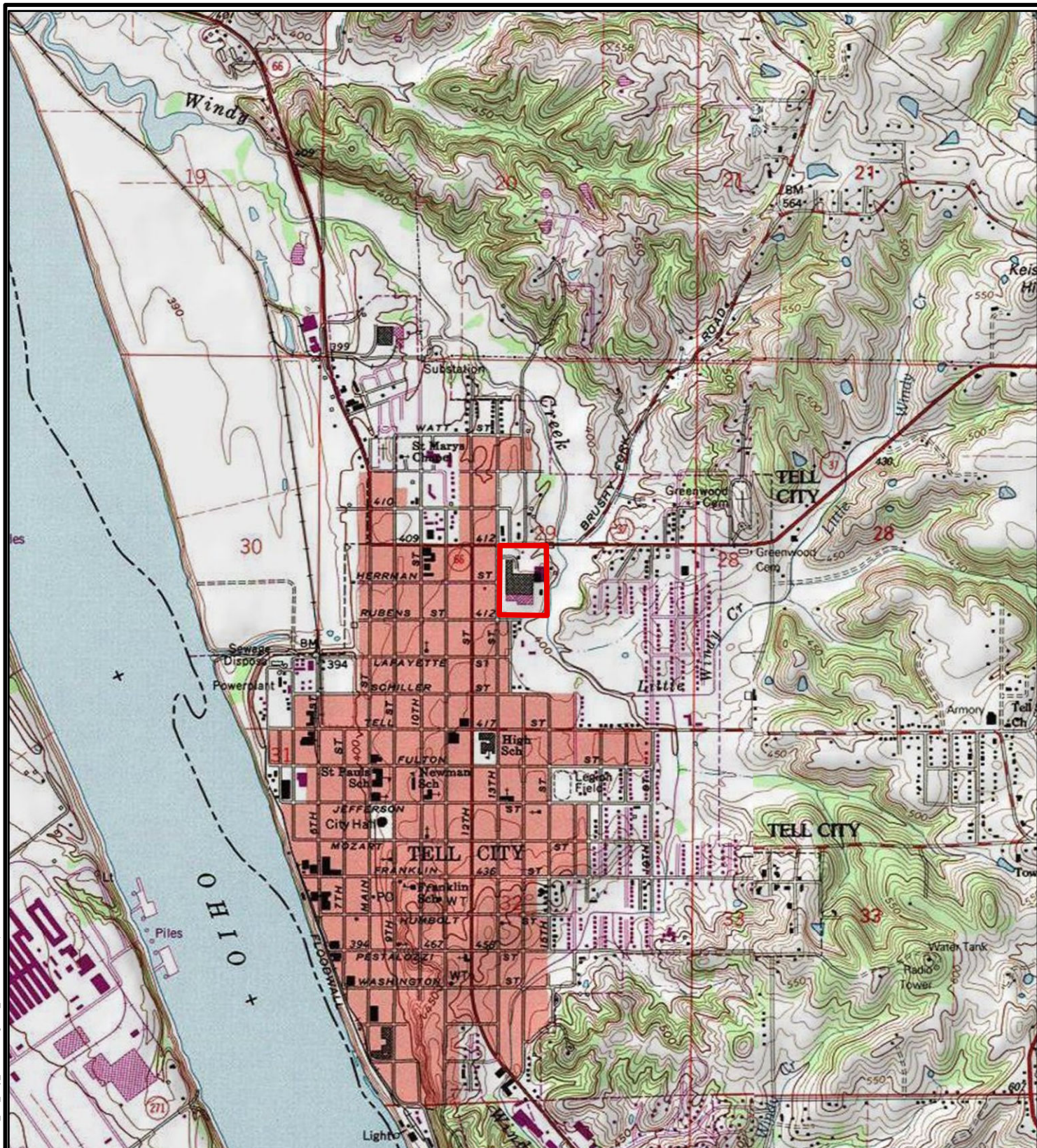
cDCE = cis-1,2-dichloroethene

TCE = trichloroethene

VC = vinyl chloride

VOC = volatile organic compound

Figures



LEGEND

 APPROXIMATE PROPERTY BOUNDARY



Service Layer Credits: Copyright:©
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cubed

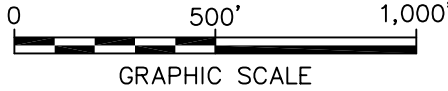
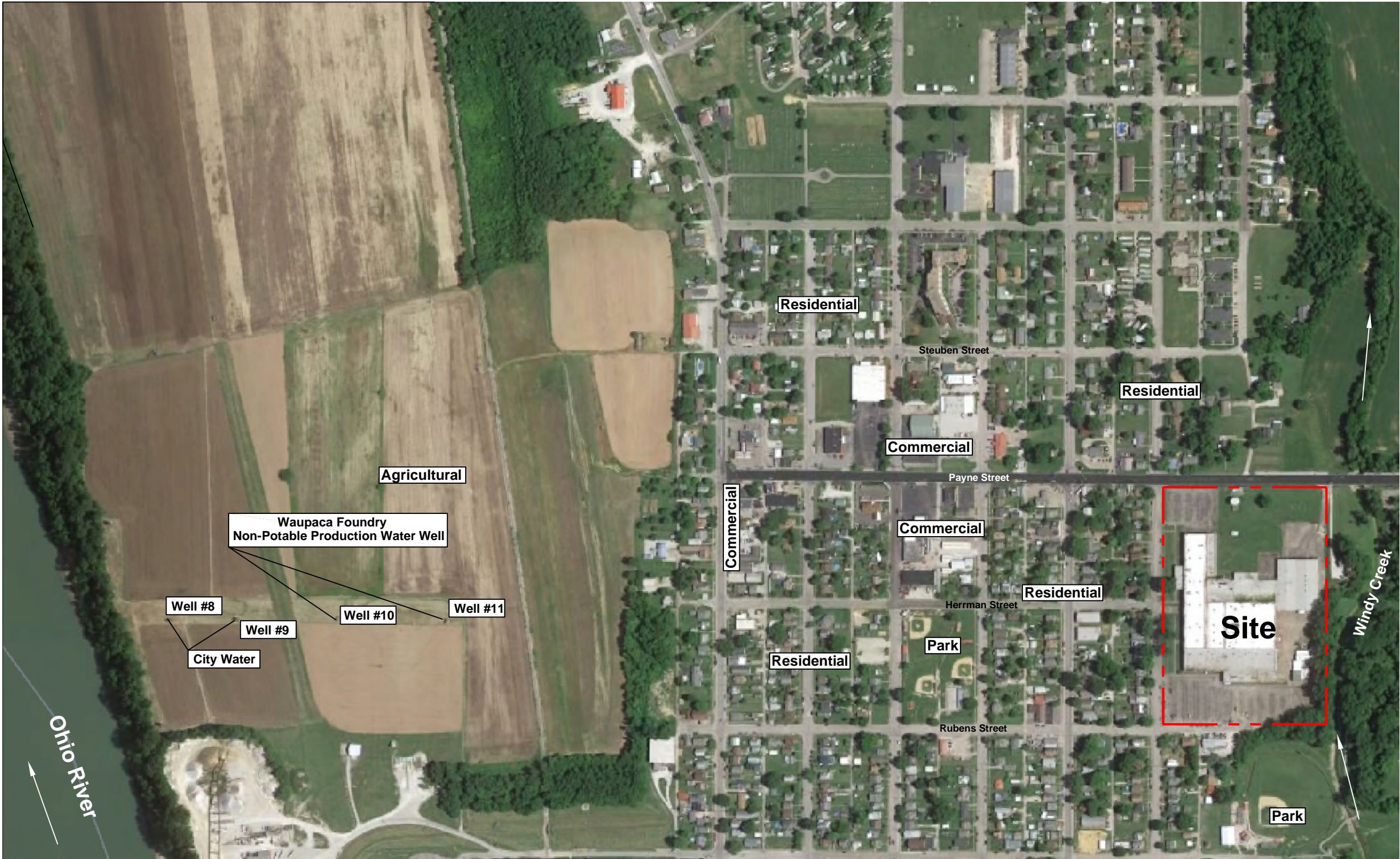
0 2,000 4,000
Feet

General Electric
Tell City Facility
1412 13th Street, Tell City, Indiana

SITE LOCATION MAP

 **ARCADIS**

FIGURE
1



GRAPHIC SCALE

7th Street

Main Street

9th Street

10th Street

11th Street

12th Street

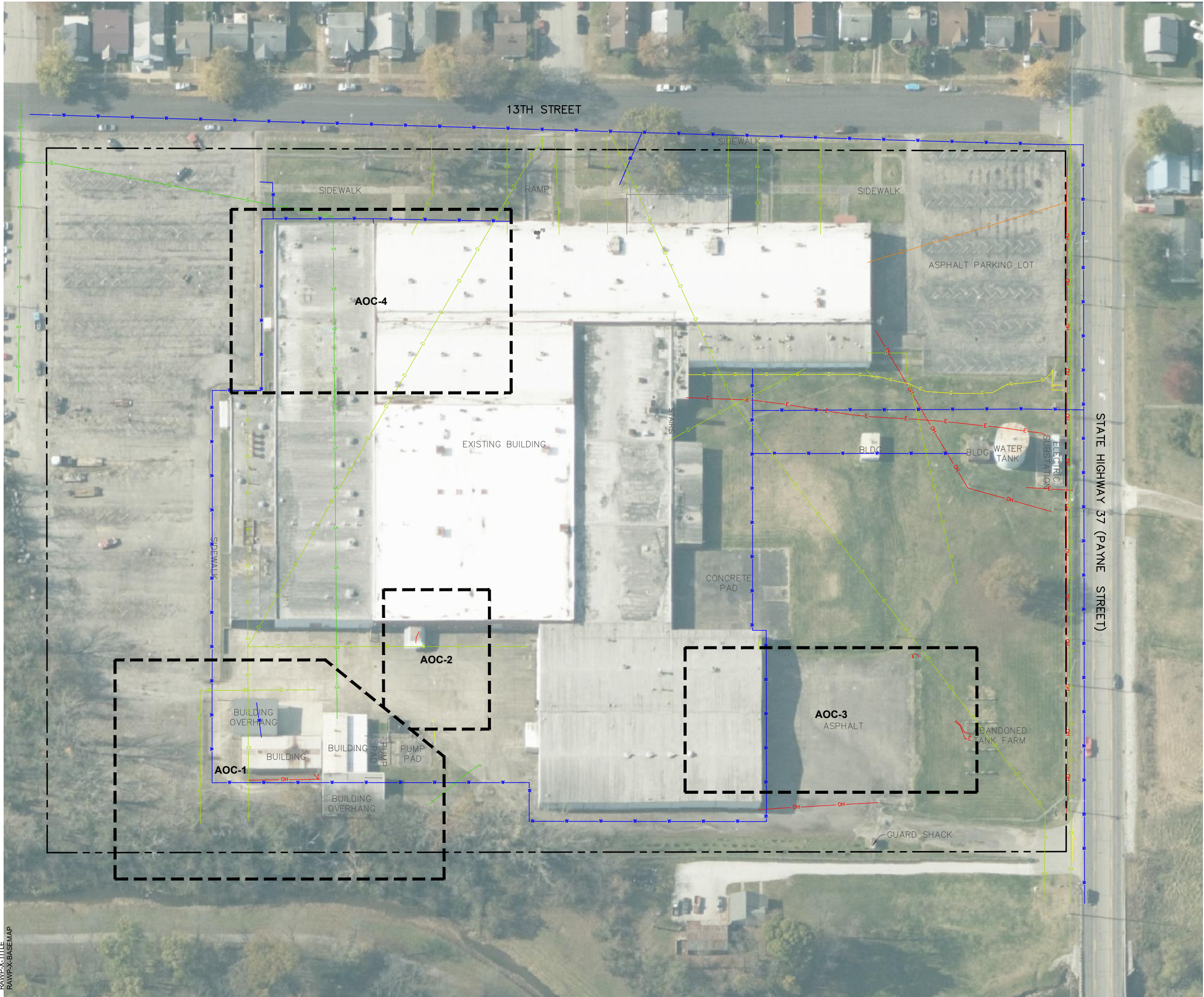
13th Street

--- Site Property Line

GENERAL ELECTRIC
TELL CITY FACILITY
1412 13th STREET, TELL CITY, INDIANA

Area Map





LEGEND:

- SITE BOUNDARY
- UNDERGROUND ELECTRIC
- UNDERGROUND FIBEROPTIC
- UNDERGROUND SANITARY SEWER
- UNDERGROUND STORM SEWER
- UNDERGROUND GAS
- UNDERGROUND WATER
- OVERHEAD ELECTRIC
- AREA OF CONCERN

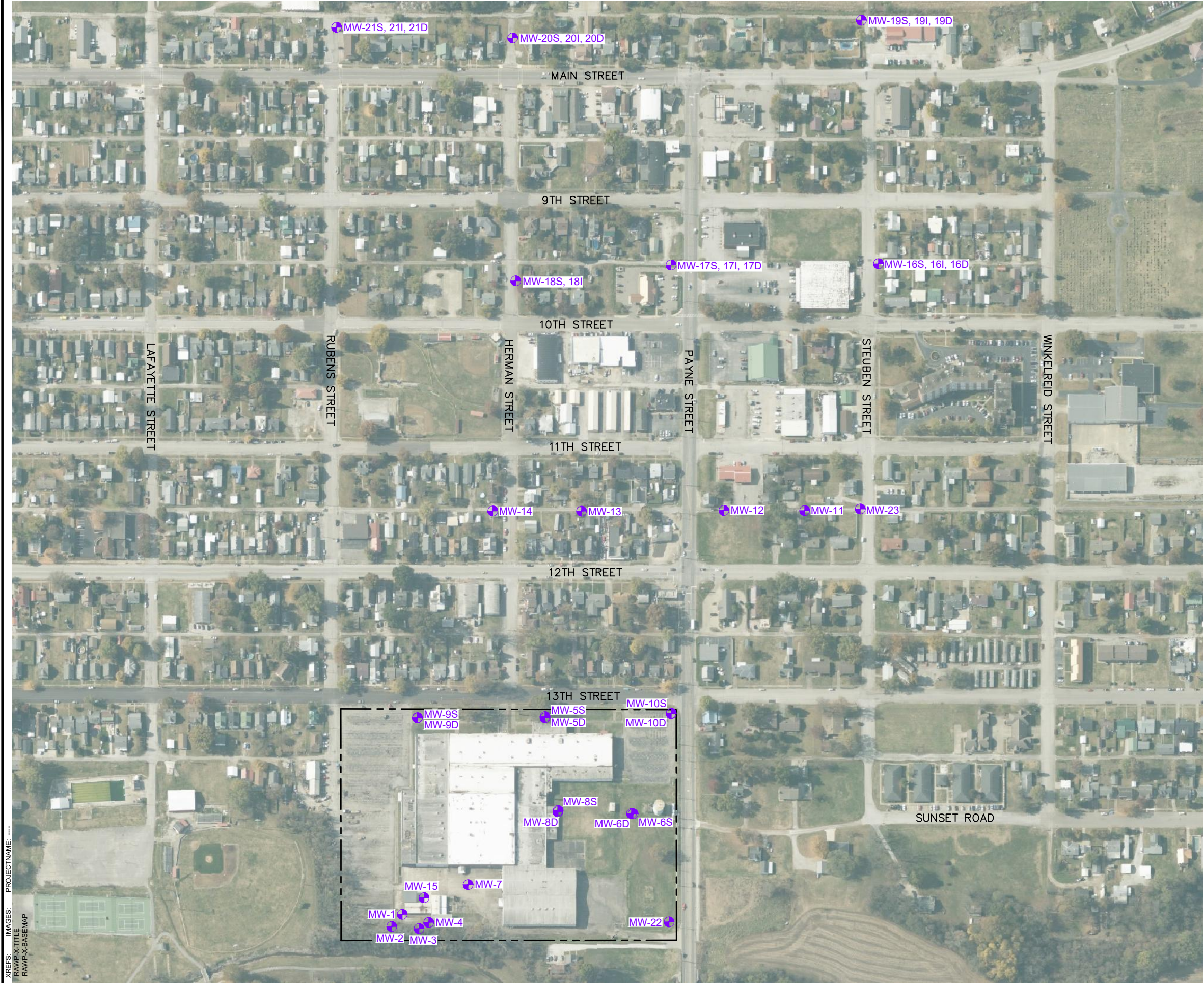
0 50' 100'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

SITE MAP WITH AOCs AND
UTILITY LOCATIONS

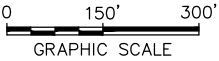


XREFS: IMAGES: PROJECTNAME: ---
RAWP-X-TITLE
RAWP-X-BASEMAP



LEGEND:

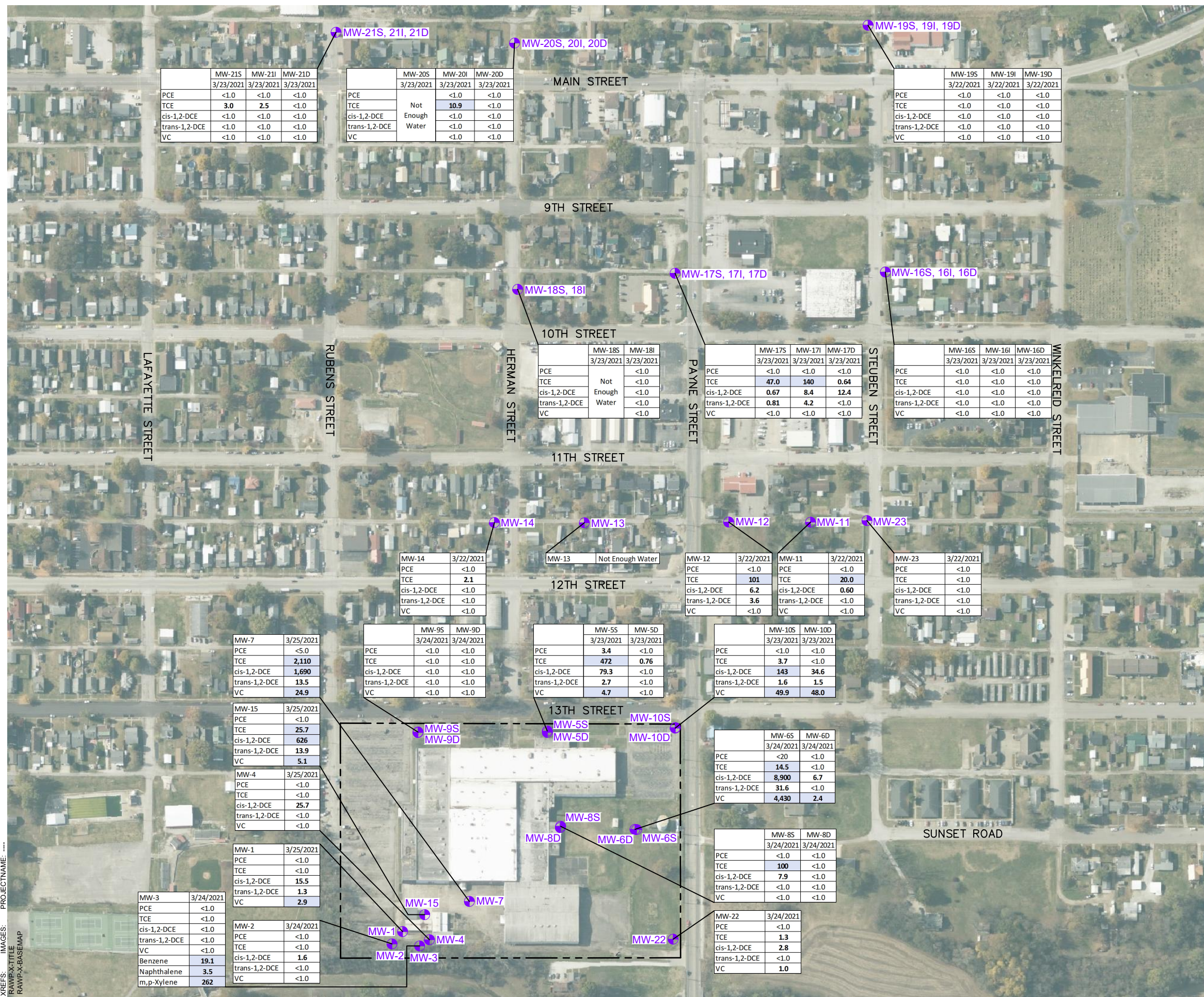
- SITE BOUNDARY
- GROUNDWATER MONITORING WELL



GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

**ONSITE AND OFFSITE
GROUNDWATER MONITORING
LOCATIONS**





LEGEND:

— SITE BOUNDARY

 GROUNDWATER MONITORING WELL

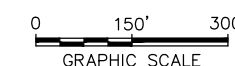
COMPOUNDS AND THEIR TAP WATER AND VAPOR INTRUSION
SCREENING LEVELS
(- INDICATES NO VAPOR INTRUSION SCREENING LEVEL)

	Compound	Tap Water	Vapor Intrusion
PCE	Tetrachloroethene	5	110
TCE	Trichloroethene	5	9.1
cis-DCE	cis-1,2-dichloroethene	70	-
trans-DCE	trans-1,2-dichloroethene	100	-
VC	Vinyl Chloride	2	2.1
Benzene	Benzene	5	28
Naphth.	Naphthalene	1.7	110
1,2,4-TMB	1,2,4-Trimethylbenzene	15	-

ONLY CHLORINATED VOLATILE ORGANIC COMPOUNDS AND
COMPOUNDS OVER SCREENING LEVELS REPORTED

RESULTS IN MICROGRAMS PER LITER

BLUE SHADING INDICATES SCREENING LEVEL EXCEEDANCE



GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

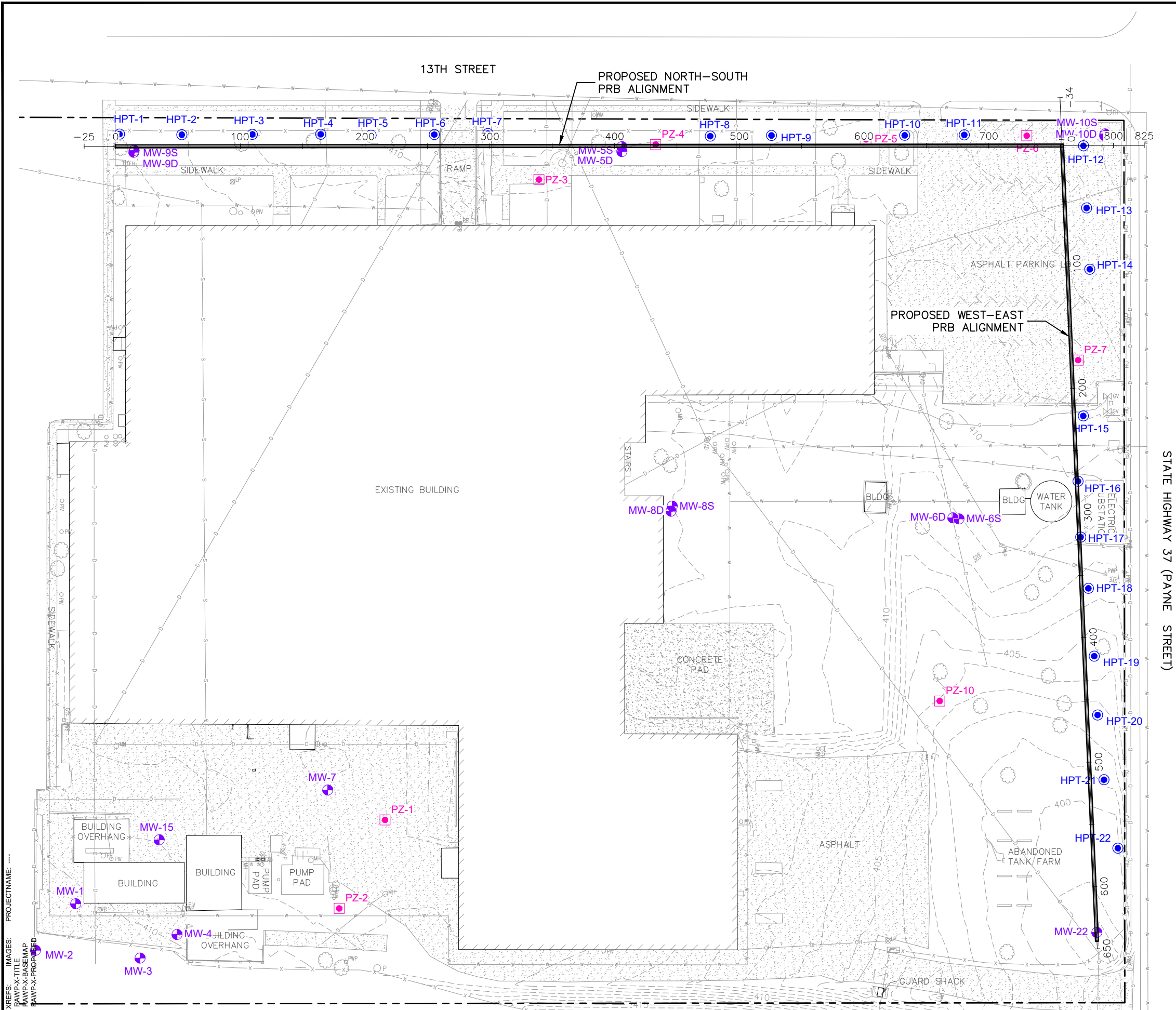
MARCH 2021 CVOC CONCENTRATIONS IN GROUNDWATER SAMPLES



FIGURE

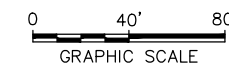
4

XREFS: IMAGES: PROJECTNAME: ----
RAWP-X-TITLE
RAWP-X-BASEMAP
RAWP-X-PROPOSED



LEGEND:

- SITE BOUNDARY
- E-E- UNDERGROUND ELECTRIC
- C-C- UNDERGROUND FIBEROPTIC
- S-S- UNDERGROUND SANITARY SEWER
- D-D- UNDERGROUND STORM SEWER
- G-G- UNDERGROUND GAS
- W-W- UNDERGROUND WATER
- OH- OVERHEAD ELECTRIC
- 405- EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- GROUNDWATER MONITORING WELL
- HYDRAULIC PROFILING TOOL BORING
- TEMPORARY PIEZOMETER

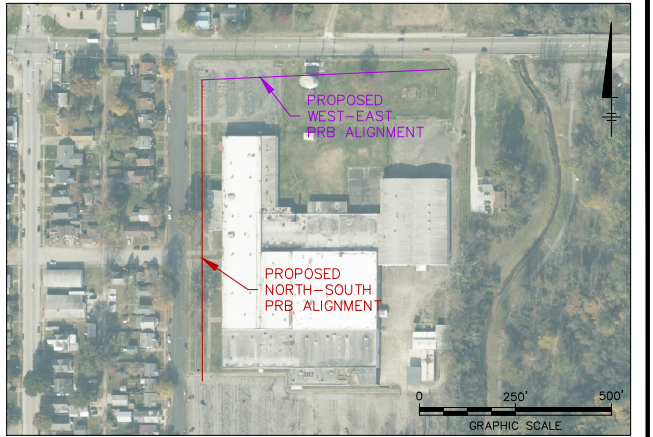
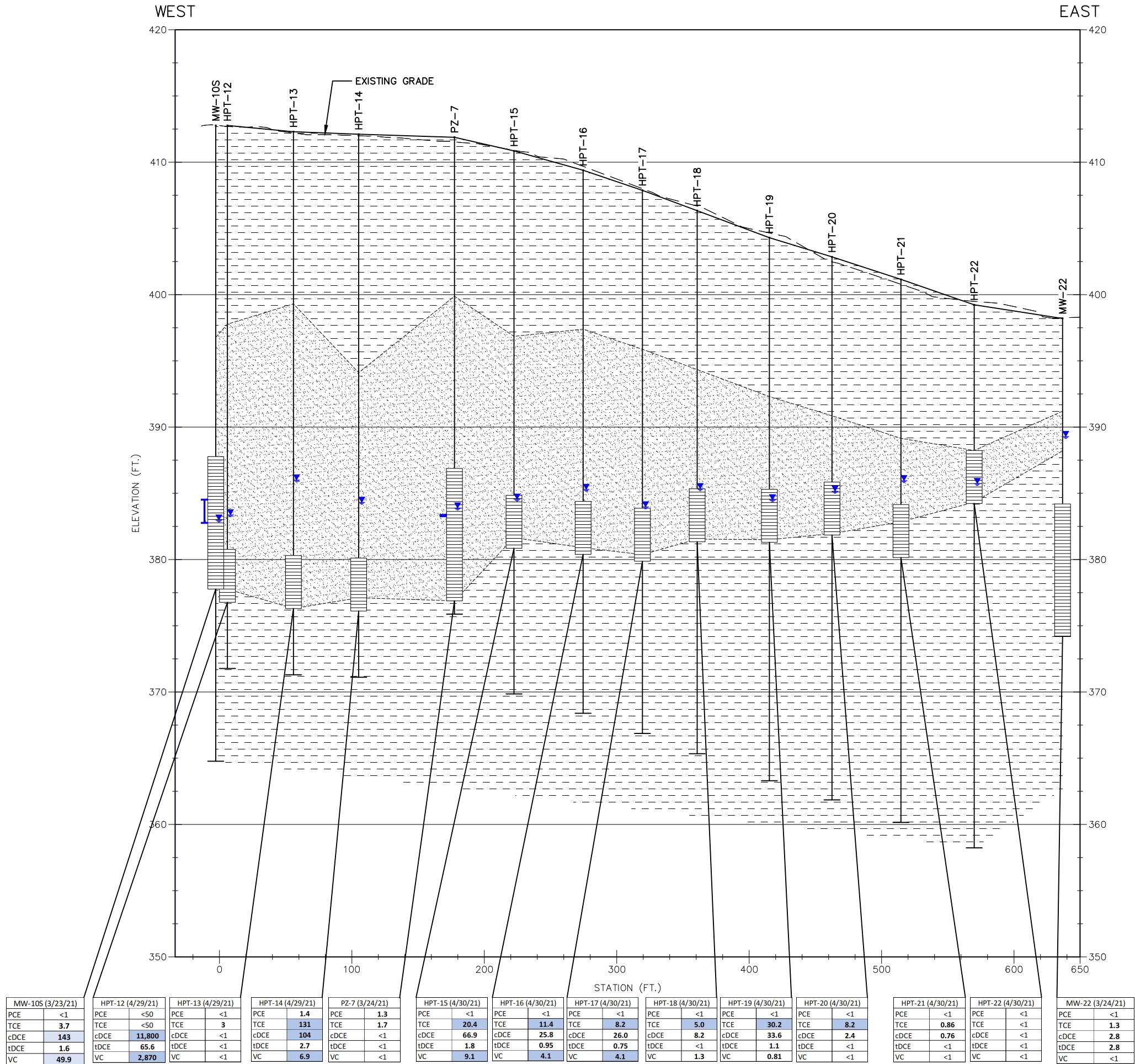


GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

**PLAN VIEW WITH PROPOSED
PERMEABLE REACTIVE BARRIER
ALIGNMENT**



XREFS: IMAGES: PROJECTNAME: ---
RAWP-X-TITLE
RAWP-X-PROPOSED



LEGEND:

SOIL BORING/MONITORING WELL IDENTIFICATION

MOST RECENT MEASURED WATER LEVEL

SAMPLE INTERVAL

BOTTOM OF BORING

OBSERVED WATER LEVEL RANGE (PZ LOCATIONS HAVE TWO OBSERVATIONS)

SAND

SILTY CLAY

cVOC = CHLORINATED VOLATILE ORGANIC COMPOUND

RESULTS IN MICROGRAMS PER LITER

BLUE SHADING INDICATES SCREENING LEVEL EXCEEDANCE

Abbreviation	Compound	TWSL*
PCE	Tetrachloroethene	5
TCE	Trichloroethene	5
cDCE	cis-1,2-Dichloroethene	70
tDCE	trans-1,2-Dichloroethene	100
VC	Vinyl Chloride	2

*Tap Water Screening Level

NOTE:

1. POSTED WATER LEVELS FOR PZ LOCATIONS ARE THE AVERAGE OF JANUARY 2021 AND MARCH 2021 OBSERVATIONS. THE RANGE IN THESE OBSERVATIONS IS TOO SMALL TO SHOW ON THE FIGURE.

HORIZONTAL GRAPHIC SCALE

VERTICAL GRAPHIC SCALE

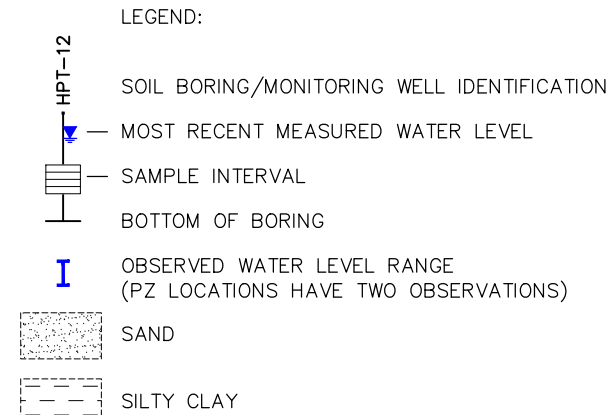
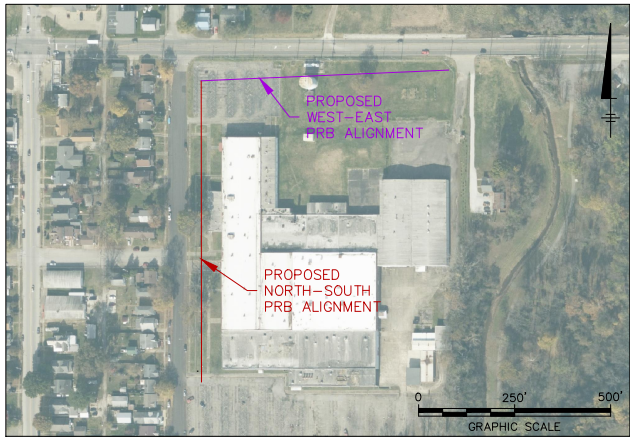
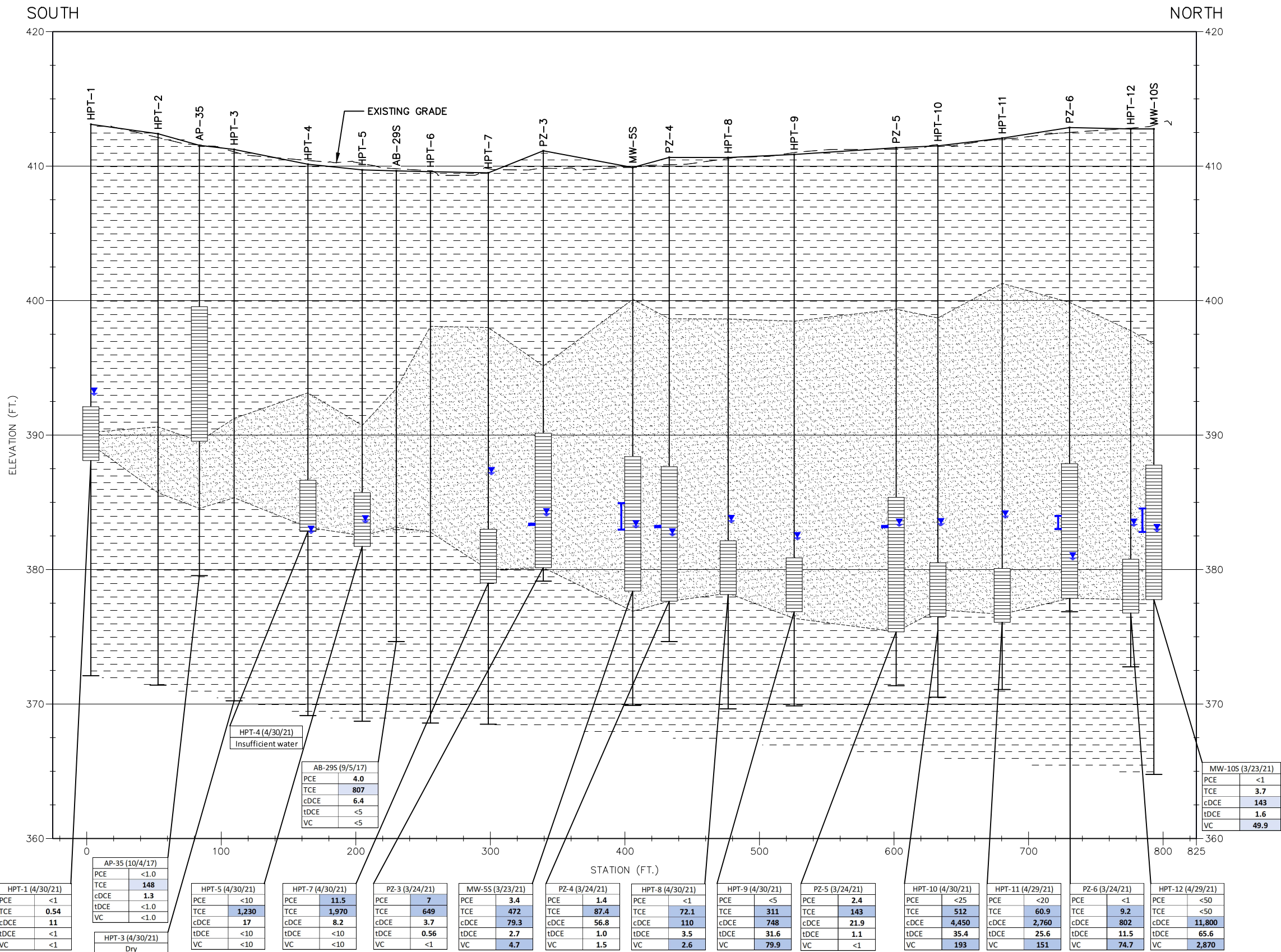
GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

WEST-EAST CROSS SECTION WITH
GROUNDWATER CVOC DATA

ARCADIS

FIGURE
7

XREFS: IMAGES: PROJECTNAME: ---
RAWP-X-TITLE
RAWP-X-PROPOSED



cVOC = CHLORINATED VOLATILE ORGANIC COMPOUND

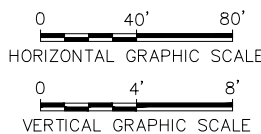
RESULTS IN MICROGRAMS PER LITER

BLUE SHADING INDICATES SCREENING LEVEL EXCEEDANCE

Abbreviation	Compound	TWSL*
PCE	Tetrachloroethene	5
TCE	Trichloroethene	5
cDCE	cis-1,2-Dichloroethene	70
tDCE	trans-1,2-Dichloroethene	100
VC	Vinyl Chloride	2

*Tap Water Screening Level

NOTE:
1. POSTED WATER LEVELS FOR PZ LOCATIONS ARE THE AVERAGE OF JANUARY 2021 AND MARCH 2021 OBSERVATIONS. THE RANGE IN THESE OBSERVATIONS IS TOO SMALL TO SHOW ON THE FIGURE.



GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

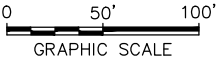
NORTH-SOUTH CROSS SECTION
WITH GROUNDWATER CVOC DATA

FIGURE
8



LEGEND:

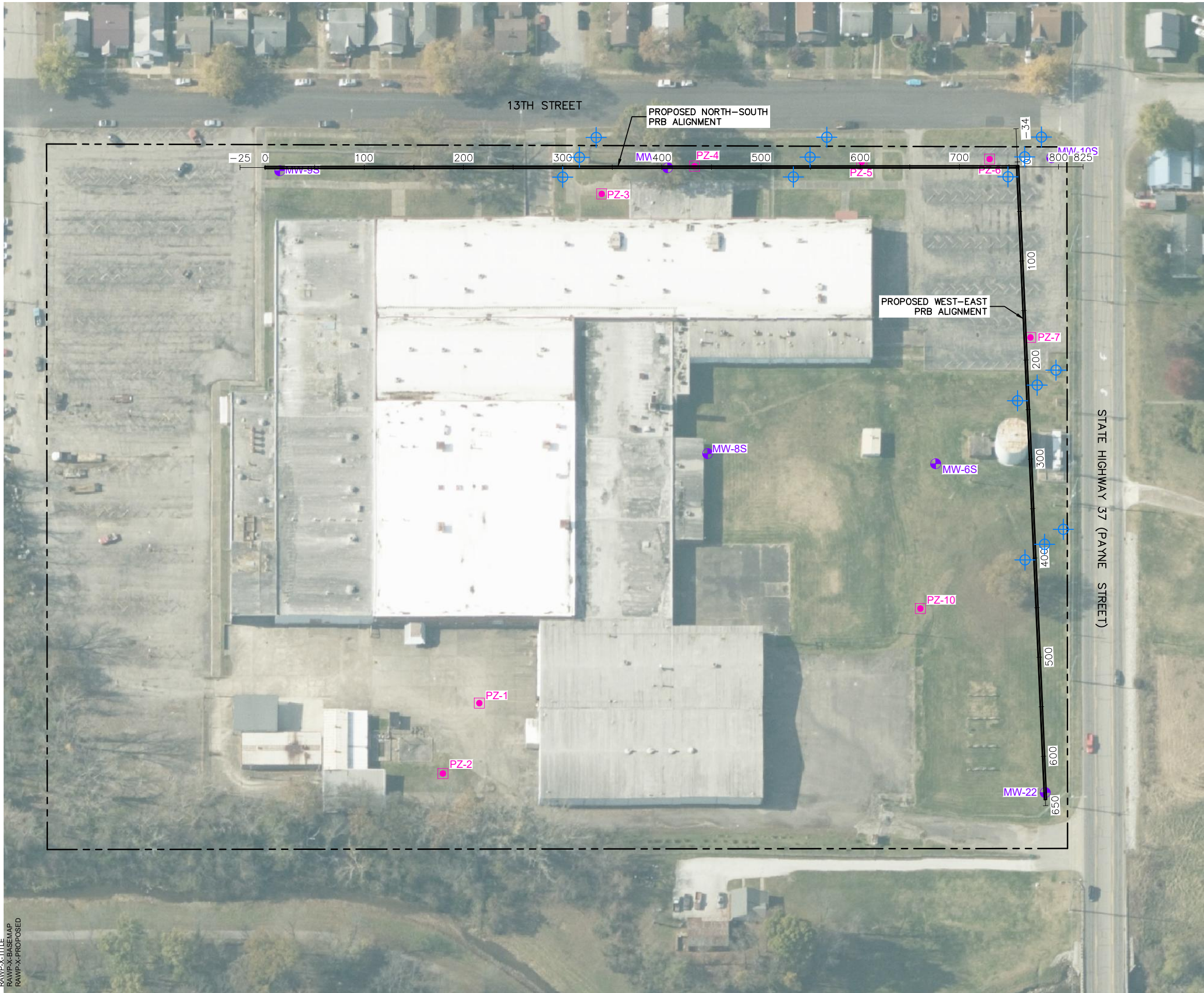
- SITE BOUNDARY
- █ TEMPORARY PIEZOMETER
- RESULTS IN MILLIGRAMS PER LITER



GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

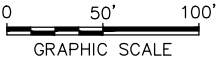
APRIL 2021 GEOCHEMICAL CONDITIONS
IN SITE GROUNDWATER SAMPLES





LEGEND:

- SITE BOUNDARY
- GROUNDWATER MONITORING WELL
- TEMPORARY PIEZOMETER
- ⊕ PLANNED PRB PERFORMANCE MONITORING WELL LOCATION

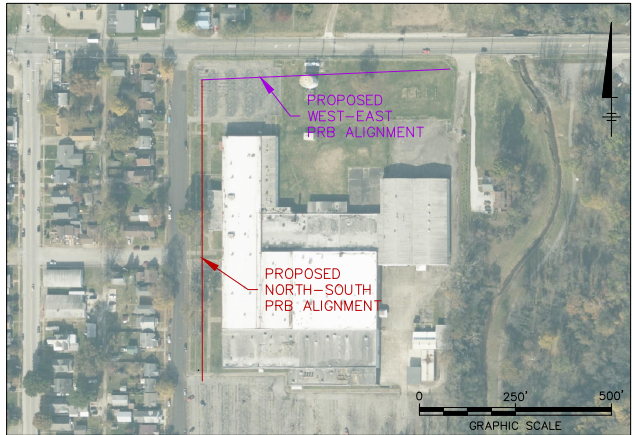
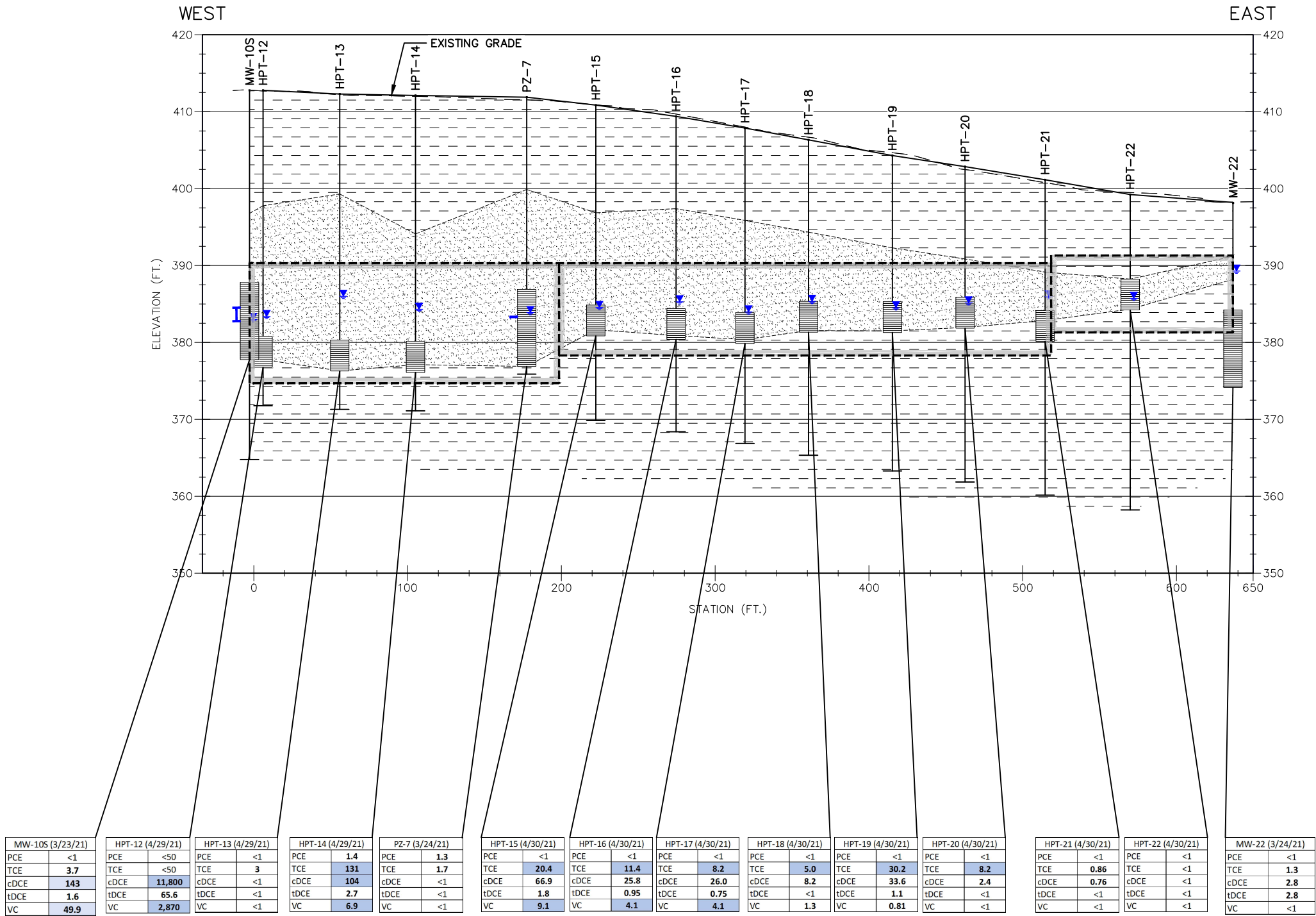


GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

CONCEPTUAL PRB ALIGNMENT
WITH PERFORMANCE
MONITORING LOCATIONS



XREFS: IMAGES: PROJECTNAME: RAWP-X-TITLE RAWP-X-PROPOSED



LEGEND:

- HPT-12 SOIL BORING/MONITORING WELL IDENTIFICATION
- MOST RECENT MEASURED WATER LEVEL
- SAMPLE INTERVAL
- BOTTOM OF BORING
- I OBSERVED WATER LEVEL RANGE (PZ LOCATIONS HAVE TWO OBSERVATIONS)
- SAND
- SILTY CLAY
- TARGET REACTIVE MEDIA INSTALLATION ZONE

cVOC = CHLORINATED VOLATILE ORGANIC COMPOUND

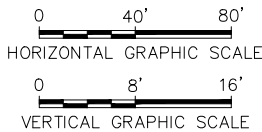
RESULTS IN MICROGRAMS PER LITER

BLUE SHADING INDICATES SCREENING LEVEL EXCEEDANCE

Abbreviation	Compound	TWSL*
PCE	Tetrachloroethene	5
TCE	Trichloroethene	5
cDCE	cis-1,2-Dichloroethene	70
tDCE	trans-1,2-Dichloroethene	100
VC	Vinyl Chloride	2

*Tap Water Screening Level

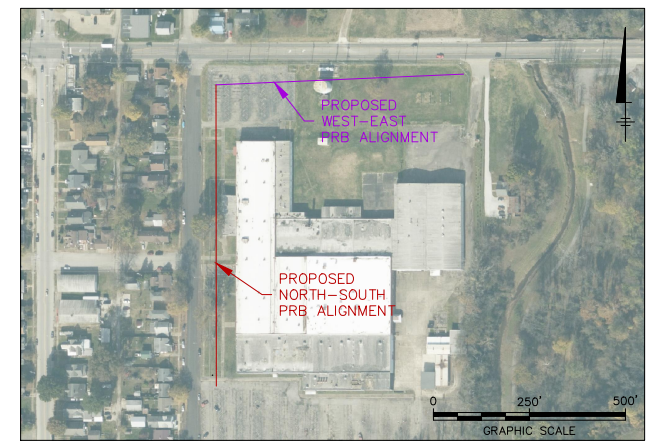
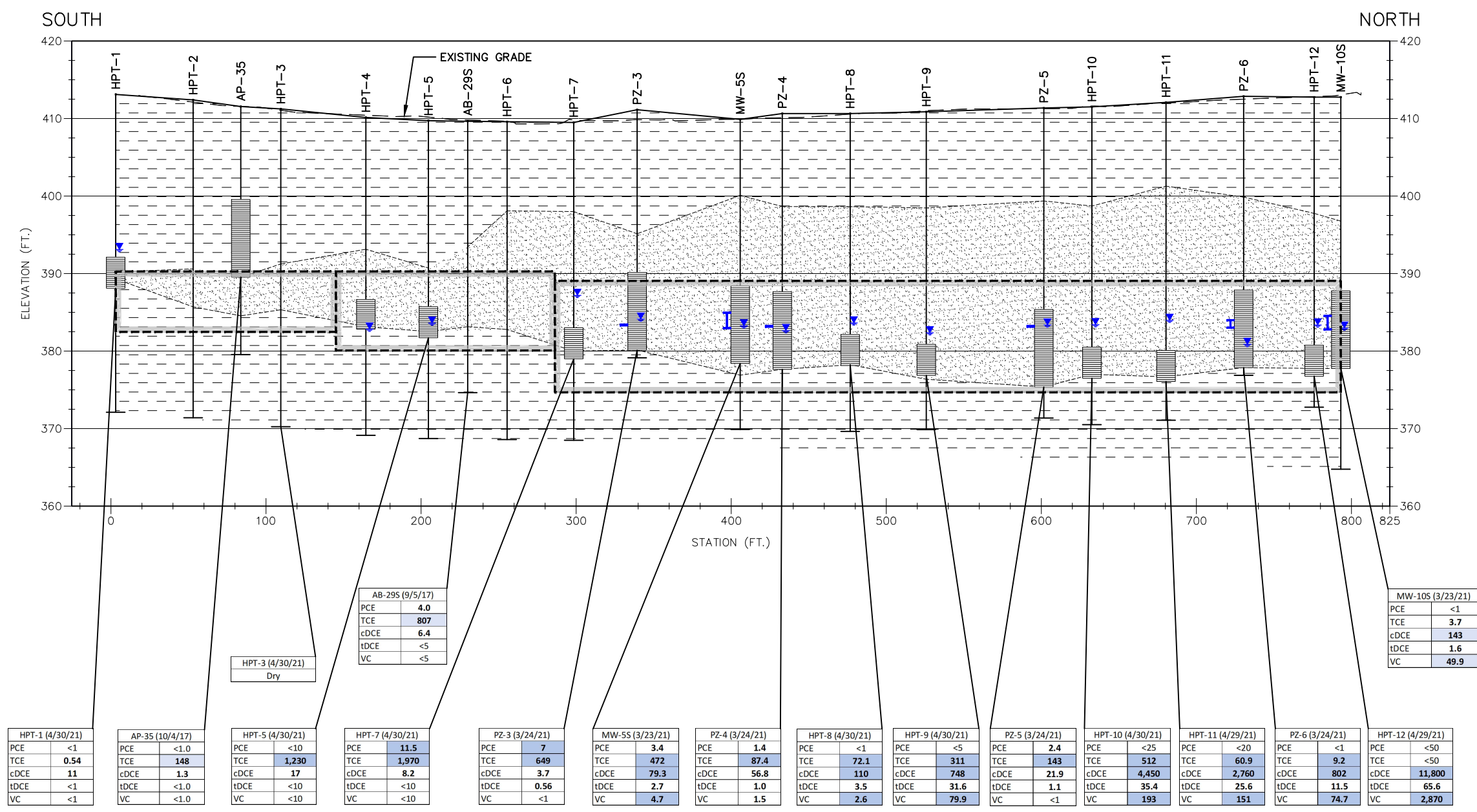
- NOTE:
- POSTED WATER LEVELS FOR PZ LOCATIONS ARE THE AVERAGE OF JANUARY 2021 AND MARCH 2021 OBSERVATIONS. THE RANGE IN THESE OBSERVATIONS IS TOO SMALL TO SHOW ON THE FIGURE.



GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

WEST-EAST CROSS SECTION
WITH PRB OVERLAY





LEGEND:

- HPT-12 SOIL BORING/MONITORING WELL IDENTIFICATION
- MOST RECENT MEASURED WATER LEVEL
- SAMPLE INTERVAL
- BOTTOM OF BORING
- I OBSERVED WATER LEVEL RANGE (PZ LOCATIONS HAVE TWO OBSERVATIONS)
- SAND
- SILTY CLAY
- TARGET REACTIVE MEDIA INSTALLATION ZONE

cVOC = CHLORINATED VOLATILE ORGANIC COMPOUND

RESULTS IN MICROGRAMS PER LITER

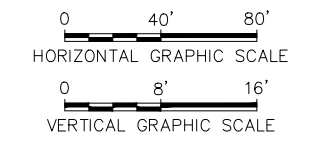
BLUE SHADING INDICATES SCREENING LEVEL EXCEEDANCE

Abbreviation	Compound	TWSL*
PCE	Tetrachloroethene	5
TCE	Trichloroethene	5
cDCE	cis-1,2-Dichloroethene	70
tDCE	trans-1,2-Dichloroethene	100
VC	Vinyl Chloride	2

*Tap Water Screening Level

NOTE:

1. POSTED WATER LEVELS FOR PZ LOCATIONS ARE THE AVERAGE OF JANUARY 2021 AND MARCH 2021 OBSERVATIONS. THE RANGE IN THESE OBSERVATIONS IS TOO SMALL TO SHOW ON THE FIGURE.



GENERAL ELECTRIC COMPANY
TELL CITY, INDIANA
INTERIM MEASURES WORK PLAN

**NORTH-SOUTH CROSS SECTION
WITH PRB OVERLAY**

ARCADIS

FIGURE
12

Appendix A

cVOC Transformation Pathway in the Presence of ZVI

cVOC Transformation Pathway in the Presence of ZVI

Most ZVI PRBs have been implemented for the remediation of cVOCs in groundwater (ITRC, 2011).

Iron in its metallic, zero valent state will corrode (oxidize) in groundwater and consume available oxidants such as oxygen and nitrate. In the presence of cVOCs such as TCE, this corrosion process will become coupled with reduction of cVOCs, transforming them into more reduced non-hazardous end products by promoting substitution of a chlorine atom in the cVOC molecule with a hydrogen atom. In this way, the ZVI serves as the electron donor for chemical reduction of cVOCs. While biological reduction of cVOCs follows a hydrogenolysis mechanism by which chlorinated intermediates are created along the reductive pathway, reductive dechlorination using ZVI predominantly follows a β -elimination pathway (Arnold and Roberts, 2000; Roberts et al., 1996). While chlorinated intermediates are created during the β -elimination pathway, they have very short half lives. The hydrogenolysis and β -elimination pathways and the potential products generated are shown below.

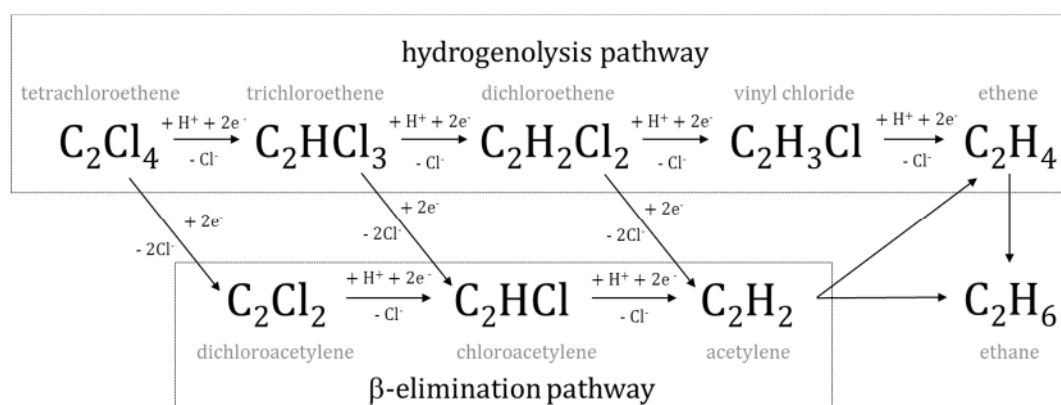


Figure A1 - Reductive Dechlorination using ZVI Predominantly Follows the β -elimination Pathway

The reductive dechlorination process using ZVI is well documented and reliable (ITRC, 2011). The primary products of the dechlorination reaction are ferrous iron, chloride (Cl^-), and nonchlorinated (or less chlorinated) hydrocarbons. TCE reaction with ZVI results in very minor production of intermediate degradation products such as vinyl chloride, which is subsequently reduced to ethene. The primary intermediates are chloroacetylenes, which rapidly reduce to ethene and ethane (Roberts et al., 1996). Chloride is dissolved into the groundwater and contributes minimally to the natural background present in groundwater passing through the PRB. The remaining products do not persist in soil or groundwater. Ethene and ethane are readily broken down into carbon dioxide and water by aerobic microorganisms naturally present in soil and groundwater. Ferrous iron is highly soluble but under the Site conditions will react quickly with oxygen in groundwater to form the much less soluble ferric iron, which is an abundant component of most natural soil systems. This reaction is the same process that occurs as iron metal rusts (or oxidizes).

Inorganic constituents in groundwater passing through the PRB also react with ZVI. Naturally present dissolved oxygen and nitrate act to oxidize the reactive iron surface. Calcium, carbonate, sulfate, and silicate are common, naturally occurring groundwater constituents that precipitate out, to some extent, on ZVI surfaces. Some precipitates, such as bivalent iron oxides, hydroxides, and carbonates, are generally characterized as conductive and do not diminish electron transfer between ZVI and target cVOCs; laboratory studies and field observations from PRB longevity monitoring indicate that these bivalent precipitates dominate in a PRB (ITRC, 2011). Some precipitates, like calcium carbonate, cause passivation or loss of reactivity of ZVI surfaces over time; however, modeling and PRB longevity observations have

cVOC Transformation Pathway in the Presence of ZVI

shown that in many cases, performance loss from precipitation occurs at relatively low rates (ITRC, 2011). Passivation and buildup on ZVI surfaces over time are unavoidable and expected. Thus, changes in geochemistry in the presence of ZVI are monitored during treatability studies to support the design and inform the longevity expectations of a ZVI PRB.

Appendix B

Hydraulic Profiling Tool Report

High Resolution Site Characterization Report – HPT Investigation

Client: Arcadis

Project Name: GE Tell City HPT/VAP

Location: Tell City, IN

Prepared by:

Dakota Technologies Company, LLC

5001 Boone Avenue N.

New Hope, MN 55428

763.424.4803

May 5, 2021

Project Number: 0149.21



www.dakotatechnologies.com
National and International Services

■ High Resolution Site Characterization Specialists ■

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1.0 HYDRAULIC PROFILING TOOL (HPT) SYSTEM DESCRIPTION

The Hydraulic Profiling Tool (HPT) is a logging tool that measures the pressure required to inject a flow of water into the soil as the probe is advanced into the subsurface. The injection pressure log is an excellent indicator of formation permeability. In addition to measurement of injection pressure, the HPT can also be used to measure hydrostatic pressure under the zero-flow condition. This allows the development of a hydrostatic pressure graph for the log and prediction of the position of the water table.

The probe is advanced into the ground at a rate of approximately 2 cm/sec. The pump in the HPT flow module draws water from the supply tank and pumps water down the trunk line at a constant flow rate (250-mL/min). An inline flow meter measures the flow rate. The downhole pressure sensor monitors the pressure generated by injecting water into the formation matrix. The HPT probe also includes a Wenner type array for measurement of soil electrical conductivity (EC) as the probe is advanced to depth. The HPT log provides graphs of the electrical conductance, HPT pressure and flow rate versus depth.

Prior to running an HPT log, quality assurance (QA) tests are run on the Wenner array and pressure sensor. The results of the QA tests are saved in an information file for later review and reporting. The Wenner array electrodes are placed on a test jig and the test load is used to verify the electrical continuity and isolation of the EC system. Next, a reference test is performed on the pressure sensor. This is accomplished by submerging the HPT probe a specified depth below the water level in a reference tube. A two-step test enables the operator to verify that the pressure sensor is providing the correct measurement for a defined length of water column. If the result is more than +/-10% out of range, the transducer fails the QA test. At completion of the field boring, another QA test is performed to verify proper probe performance during the logging event.

The HPT pressure log reveals observed pressure depending on the characteristics of the soil or sediment penetrated. It is apparent that higher pressure resulting from the injection of water into a sediment at a given flow rate indicates lower permeability and conversely, that lower pressure from injection of water at a given flow rate indicates higher permeability. This simple relationship allows you to evaluate changes in relative permeability of soils and sediments in an HPT log by reviewing the pressure versus depth log. High EC readings in general correlate with high pressure readings and conversely low EC readings usually correlate with low pressure readings. However, pressure plots frequently reveal hydraulic behavior of the soil not observed by the EC, and the EC may display responses associated with mineralogy and chemical conductance not observed by the pressure plot. Another important feature of the HPT pressure log is the increase in hydrostatic pressure as the probe is advanced below the water table. The increase in hydrostatic pressure results in a “rising baseline” on the pressure log. To obtain a quantitative determination of the local static water level a pressure dissipation test must be performed during the logging operation. To perform the dissipation test, the advancement of the probe is stopped, and the operator starts a time log. Water flow is turned off to observe and record the dissipation of the HPT

pressure versus time, until pressure stabilizes. The stabilized pressure is the absolute hydrostatic pressure at the depth of the test. Knowing the depth of the test, the absolute hydrostatic pressure and the atmospheric pressure the static water level may be calculated. Multiple dissipation tests may be performed at different depths during a single log to evaluate variations in piezometric head with depth and local vertical gradients in the aquifer.

Dissipation test data can be used in conjunction with the pressure and flow logs to estimate hydraulic conductivity (K) for the entire log after logging is completed. From Darcy's Law, K is proportional to the flow rate (Q) divided by the pressure (P) required to induce that flow rate in the given sediment or soil. The raw HPT pressure provided by the HPT log is the total pressure observed at the depth where the water is injected. This total pressure includes the ambient atmospheric pressure at the time of the log, the local hydrostatic pressure and the pressure required to inject the fluid into the formation:

$$P \text{ (total)} = P \text{ (atm)} + P \text{ (hydro)} + P \text{ (inj)}$$

As discussed above, the atmospheric pressure is determined from the pre and post log response tests and the hydrostatic pressure is defined by one or more dissipation tests obtained as the log is produced. The actual injection pressure [$P_{inj} = P_{total} - (P_{hydro} + P_{atm})$] that was required to inject the water into the formation is calculated for each depth increment of the log. The actual injection pressure (P_{inj}) and the measured flow rate (Q) are then used to model an estimated K value for each depth increment of the HPT log (Geoprobe 2010b).

2.0 ELECTRICAL CONDUCTIVITY (EC) DESCRIPTION

Electrical Conductivity (EC) is a measure of the soil's ability to conduct an electrical current using the Wenner array of the HPT/EC probe. Conductivity is the reciprocal of electrical resistivity and has the units (in our application) of millisiemens per meter (mS/m). Since soil is in the pathway of the charge flow, the grain size can be determined by comparing the EC log to a soil boring. Conductivity readings in the 100s indicate smaller grain (such as clay). Larger grain size (sand and gravels) are typically in the 10s of mS/m range. Prior to every log, the Wenner array of the HPT probe is checked for proper operation by performing a conductivity test with a Wenner array test jig. The probe is put through a check of isolation and continuity.

3.0 DISCUSSION AND COMMENTS

Dakota Technologies was contracted by Arcadis to determine the depth to a clay layer at the former GE facility. Arcadis will then use that data for the purpose of constructing a remediation barrier into the clay for the purpose of preventing the contaminant of concern from moving off site.

Dakota Technologies pushed a total of 22 HPT logs to a depth of 40 feet below ground surface and collected VAP water samples at 18 of the 22 HPT locations.

On HTP-21 the log was not ended properly and when the rod string was pulled out of the ground false logging continued past the target depth of 40 feet. The data collected to 40 feet is accurate. The data was not compromised.

Dissipation tests were attempted at each location for the purpose of calculating static water levels and hydraulic conductivity (estimated K) plots.

The transducer passed all QA testing for each log. The HPT system utilizes a transducer that produces pressure readings between 0 and 110 psi. The pressure data graph is set at 120 psi to capture all HPT readings, with a flat line at 110 psi resulting when the transducer maximum is reached (representing soil of small grain size, such as clay).

Electrical conductivity (EC) data was collected simultaneously at each HPT location. The EC was tested before and after each HPT log was performed and passed all QA checks in the normal manner.

4.0 LIMITATIONS

The HPT tool is limited to a working depth (max) of 120 feet below ground water and the pressure transducer operating range is 0-101 psi. Coarse (sandy), saturated soils are required for dissipation tests to be performed. Successful (fully stabilized) dissipations are required for water table and hydraulic conductivity (Est. K) calculations. The lower K boundary for Geoprobe's empirical calculation model is about 0.1 ft./day and the upper boundary is near 75 ft./day.

The analysis and opinions expressed in this report are based upon data obtained from the specific test locations and from other information discussed in this report. Exceptions, if any, are discussed in the accompanying comments section of this report. This report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted practices. Reported results shall not be reproduced, except in full, without written approval of Dakota. No warranties, expressed or implied are intended or made.

5.0 REFERENCES

Geoprobe 2006a. Hydrostratigraphic Characterization Using the Hydraulic Profiling Tool (HPT), Tech Bul. No. MK3099, Kejr Inc., Salina, KS; April 2006.

Geoprobe, 2007. Geoprobe Hydraulic Profiling Tool (HPT) System, Standard Operating System Procedure, Tech. Bul. No. MK3137, Kejr Inc., Salina, KS; March 2007.

Geoprobe, 2010b. Tech Guide for Calculation of Estimated Hydraulic Conductivity (Est. K) Log from HPT Data, Kejr Inc. Salina, KS; November 2010.

McCall, Wesley and Thomas Christy, 2010. Development of a Hydraulic Conductivity Estimate for the Hydraulic Profiling Tool (HPT): Abstract and Presentation; The 2010 North American Environmental Field Conference & Exposition, The Nielsen Environmental Field School, Las Cruces, NM; January 2010.

Appendix A

HPT Field Summary Log

HPT Field Summary Log

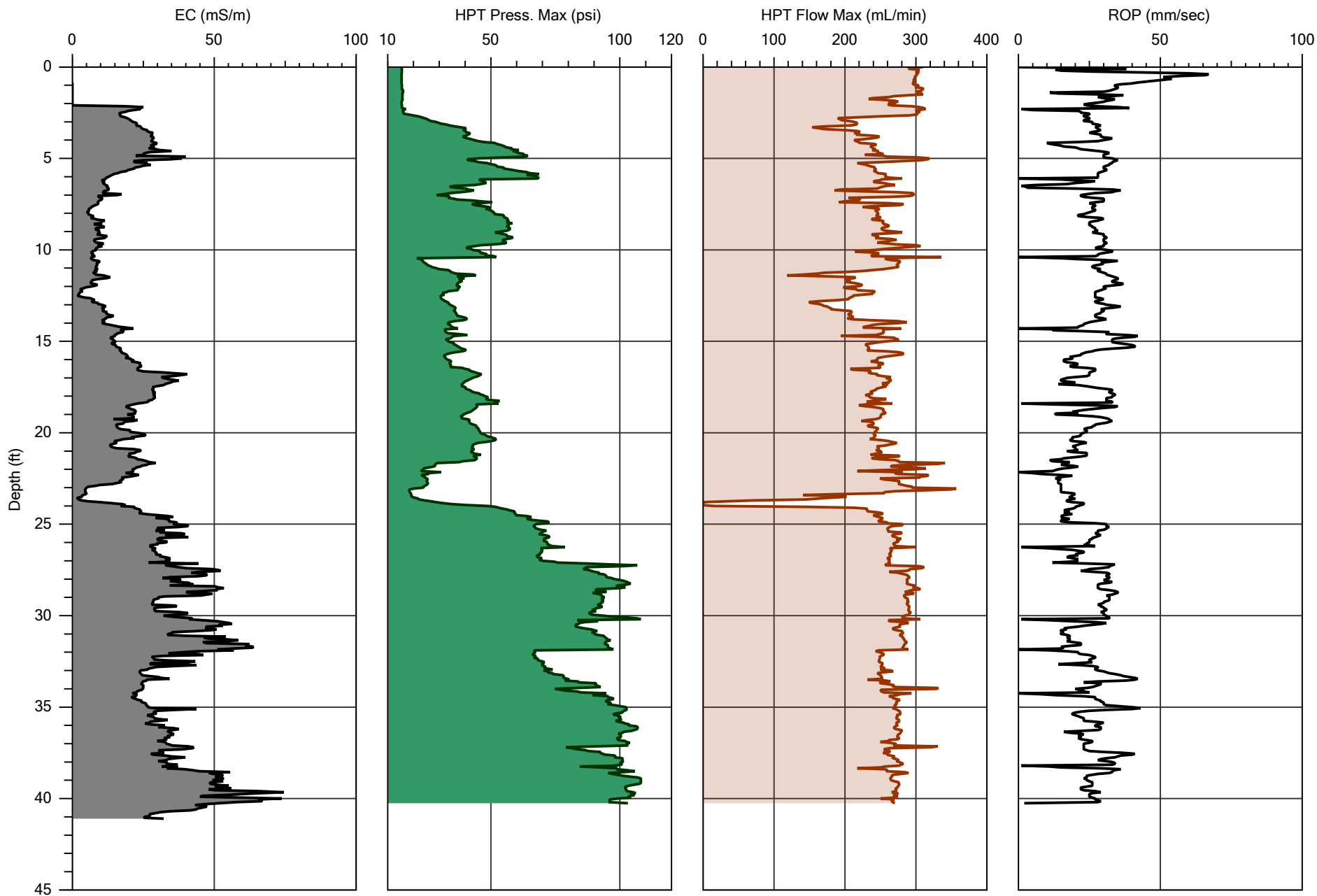
GE Tell City HPT/VAP

Tell City, IN

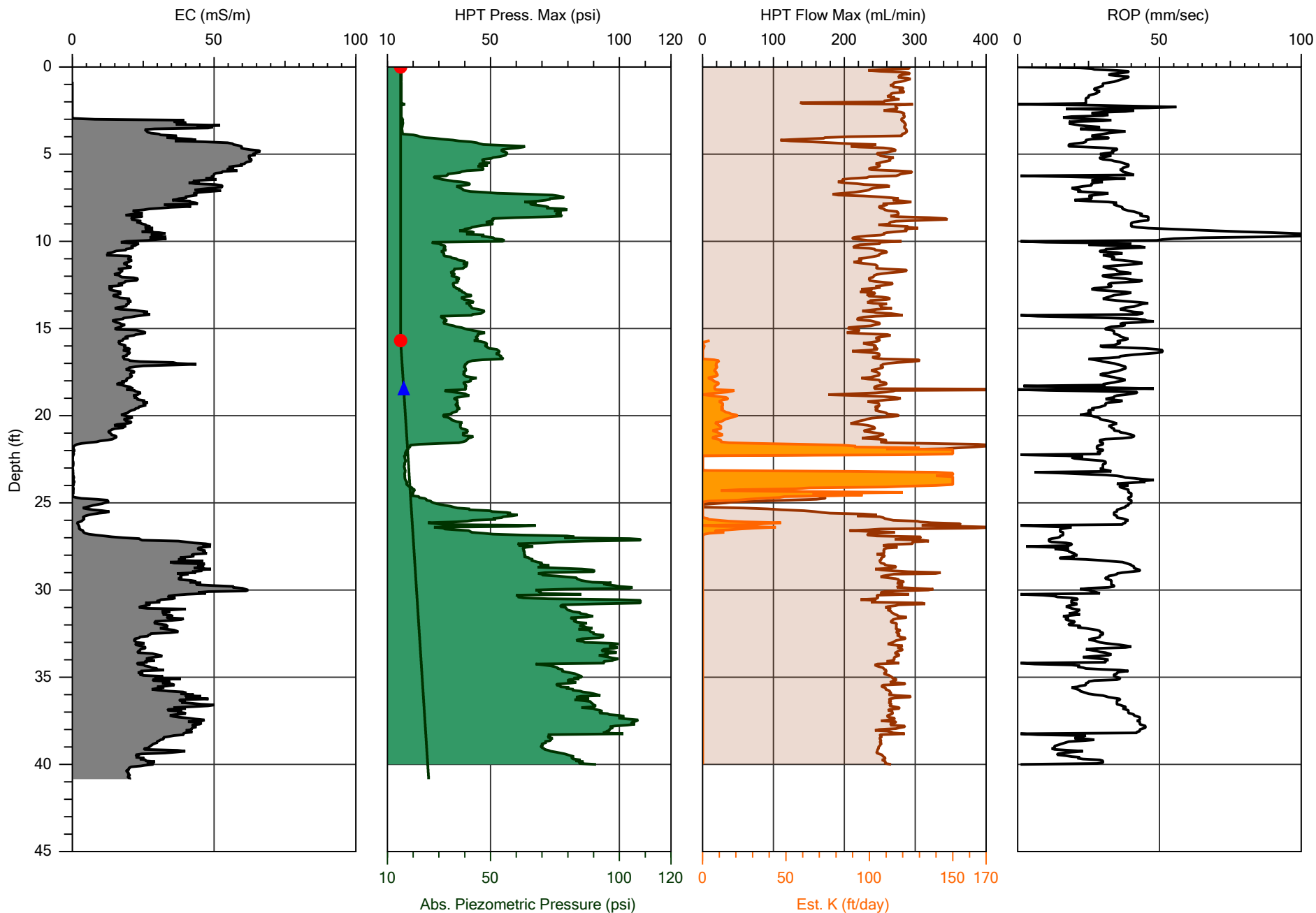
File Log IDDateTotal Depth (ft)Hand Auger Depth (ft)				QA/QC (pass / fail)				Static Water			Comments
				EC Results		Transducer Results		Level	Dissipation Test		
				Pre-Log pass / fail	Post-Log pass / fail	Pre-Log pass / fail	Post-Log pass / fail	based on dissipation (ft)	Depth (ft)	Stable? yes / no	
HPT-1	04/28/21	40.3	5	pass	pass	pass	pass	NA	NA	NA	No dissipation
HPT-2	04/28/21	40.0	5	pass	pass	pass	pass	15.7	18.5	yes	no comments
HPT-3	04/28/21	40.1	5	pass	pass	pass	pass	NA	21.2	no	no comments
HPT-4	04/28/21	40.1	5	pass	pass	pass	pass	NA	26.3	no	no comments
HPT-5	04/28/21	40.2	5	pass	pass	pass	pass	NA	NA	NA	No dissipation
HPT-6	04/28/21	40.1	5	pass	pass	pass	pass	24.7	28.3	yes	no comments
HPT-7	04/29/21	40.1	5	pass	pass	pass	pass	24.2	30.4	yes	no comments
HPT-8	04/29/21	40.4	5	pass	pass	pass	pass	27.1	28.4	yes	no comments
HPT-9	04/29/21	40.4	5	pass	pass	pass	pass	27.7	29.4	yes	no comments
HPT-10	04/29/21	40.1	5	pass	pass	pass	pass	27.7	30.2	yes	no comments
HPT-11	04/27/21	40.2	5	pass	pass	pass	pass	28.8	32.1	yes	no comments
HPT-12	04/27/21	40.3	5	pass	pass	pass	pass	29.5	30.3	yes	no comments
HPT-13	04/27/21	40.3	5	pass	pass	pass	pass	28.9	30.4	yes	no comments
HPT-14	04/27/21	40.2	5	pass	pass	pass	pass	28.3	29.9	yes	no comments
HPT-15	04/27/21	40.2	5	pass	pass	pass	pass	NA	16.6	no	no comments
HPT-16	04/27/21	40.6	5	pass	pass	pass	pass	NA	19.3	no	no comments
HPT-17	04/27/21	40.2	5	pass	pass	pass	pass	NA	18.3	no	no comments
HPT-18	04/27/21	40.1	5	pass	pass	pass	pass	NA	19.3	no	no comments
HPT-19	04/26/21	40.1	5	pass	pass	pass	pass	NA	18.2	no	no comments
HPT-20	04/26/21	40.2	5	pass	pass	pass	pass	NA	14.3	no	no comments
HPT-21	04/26/21	40.1	5	pass	pass	pass	pass	10.9	14.3	yes	Logging not stopped properly. Ignore data from 40 feet
HPT-22	04/26/21	40.1	5	pass	pass	pass	pass	NA	40.1	no	no comments
Total Depth		240.7									

Appendix B

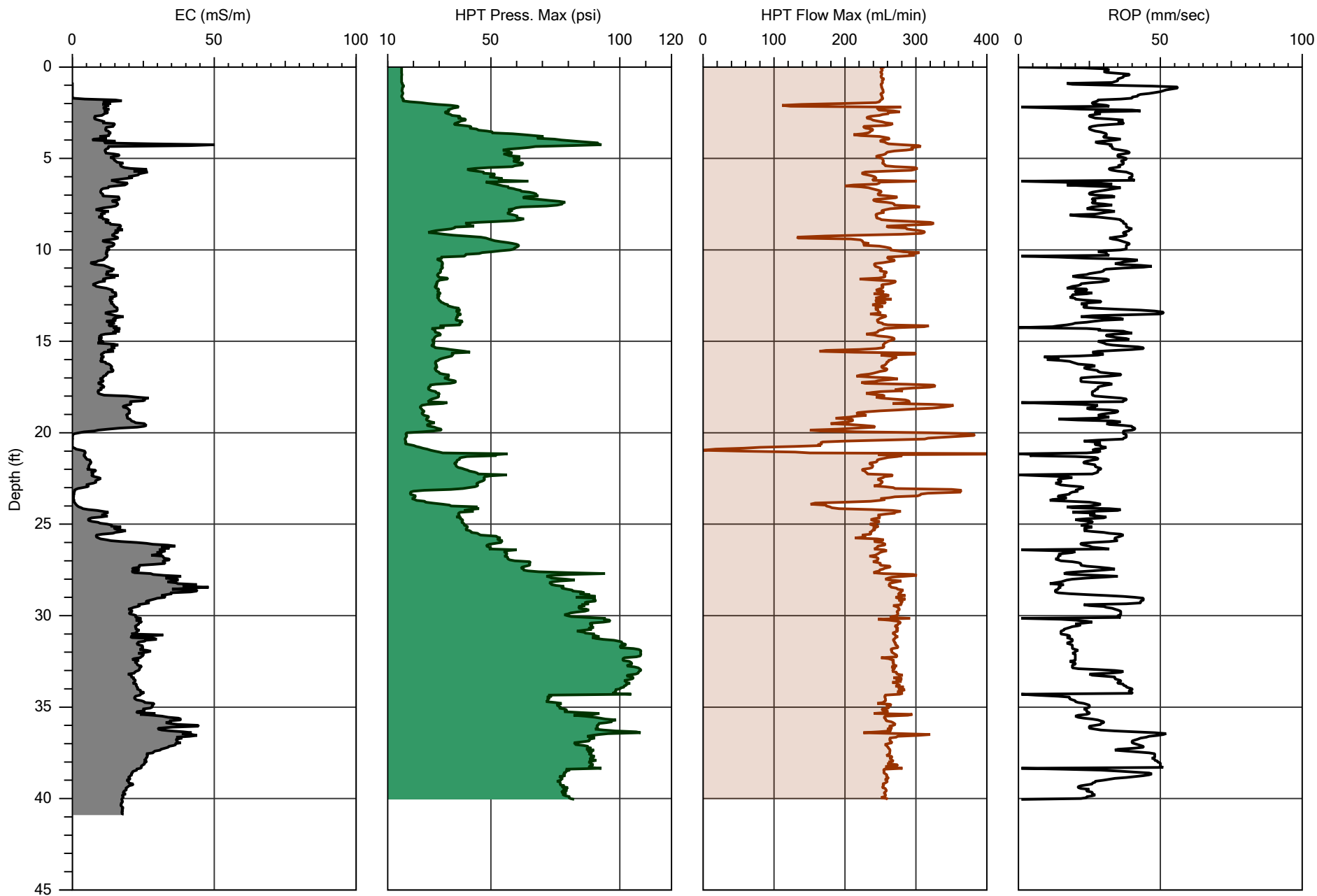
HPT Logs



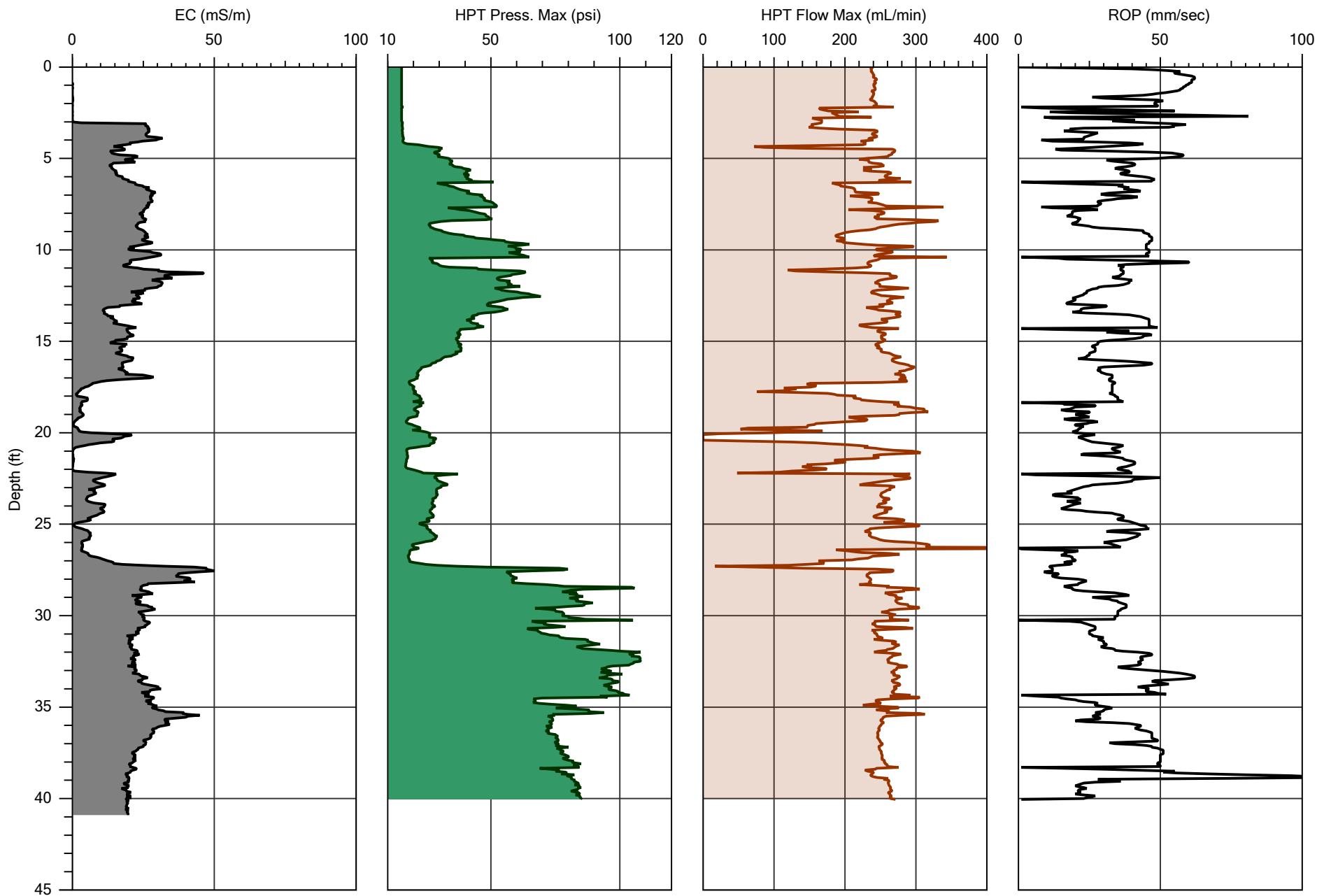
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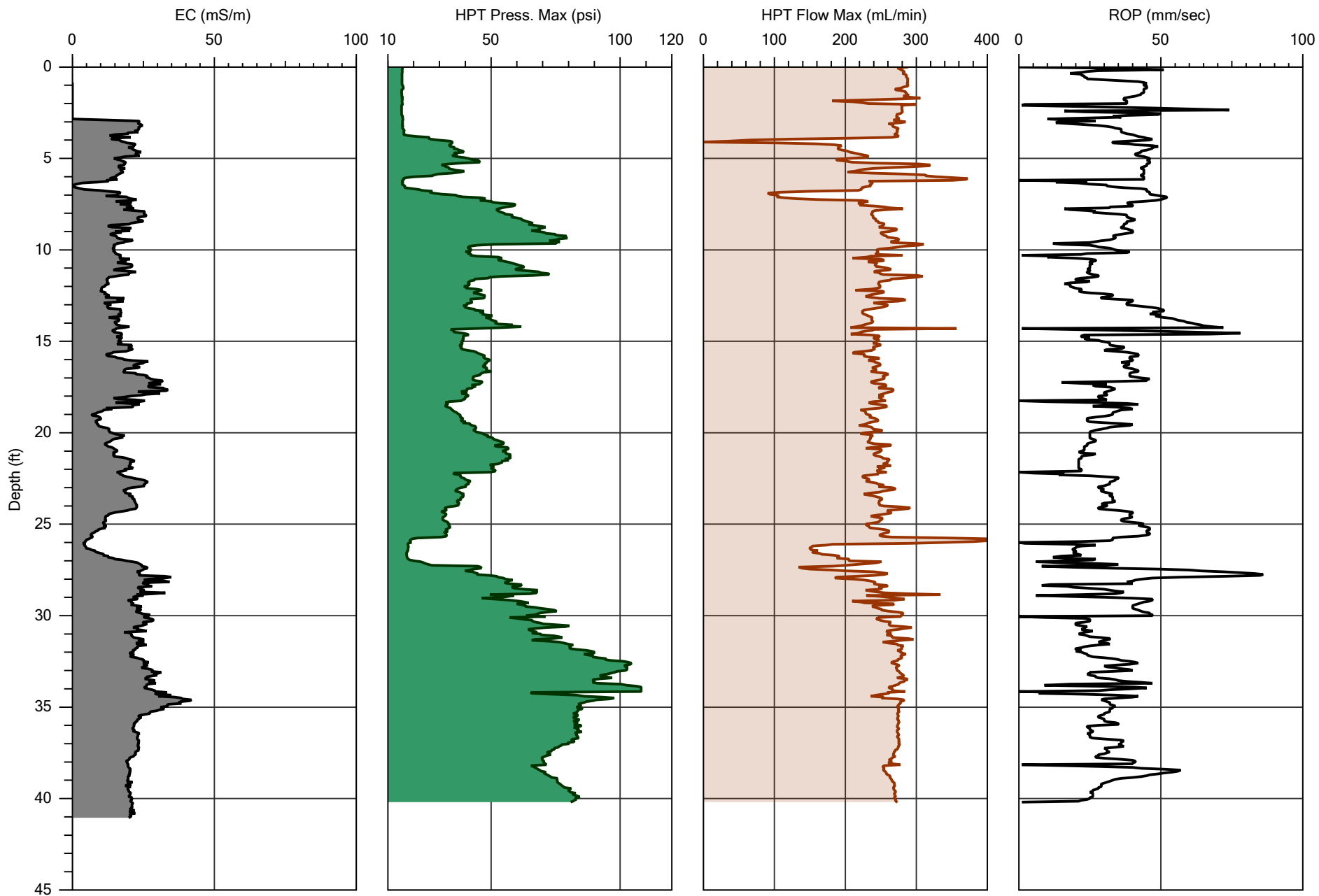
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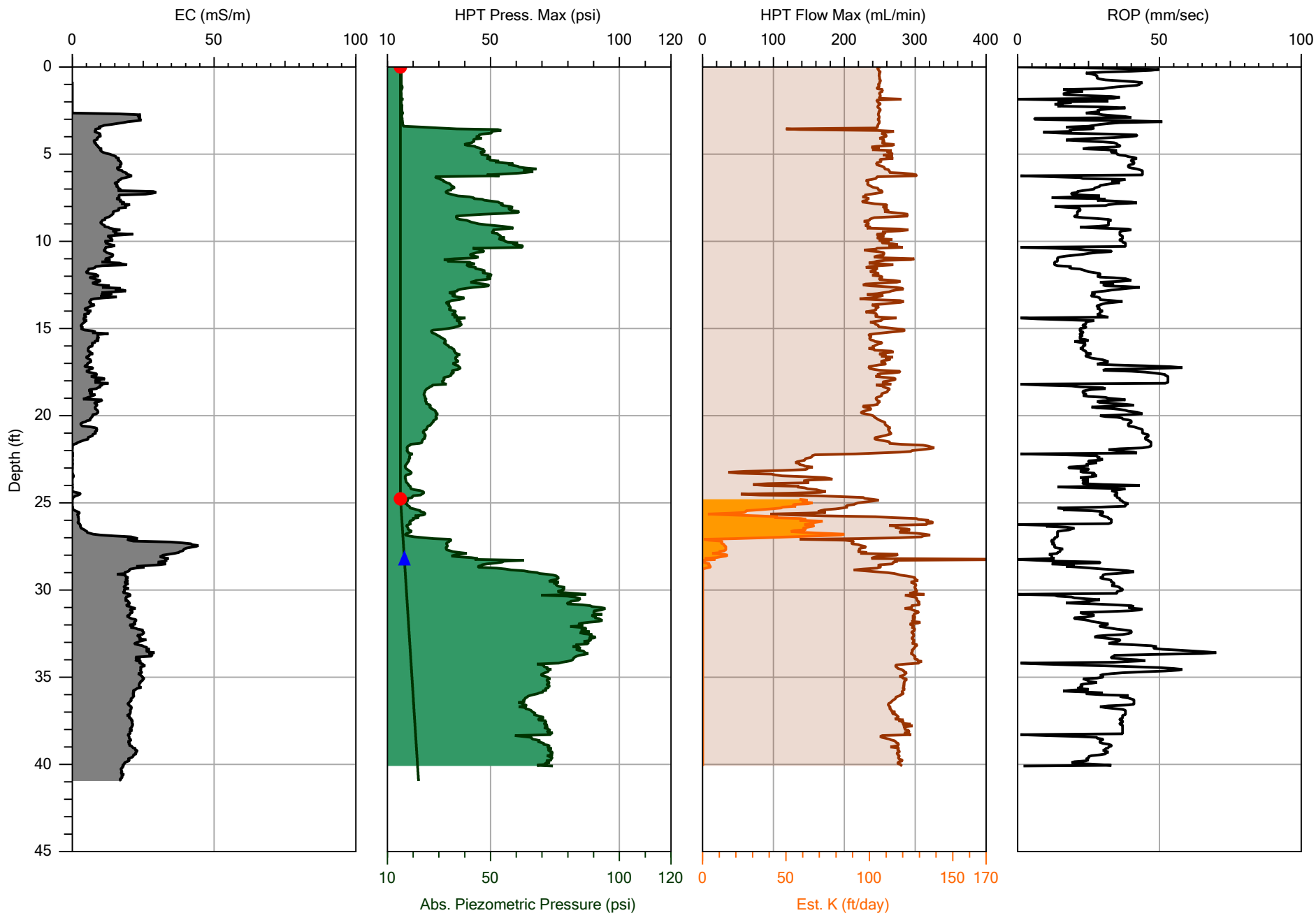
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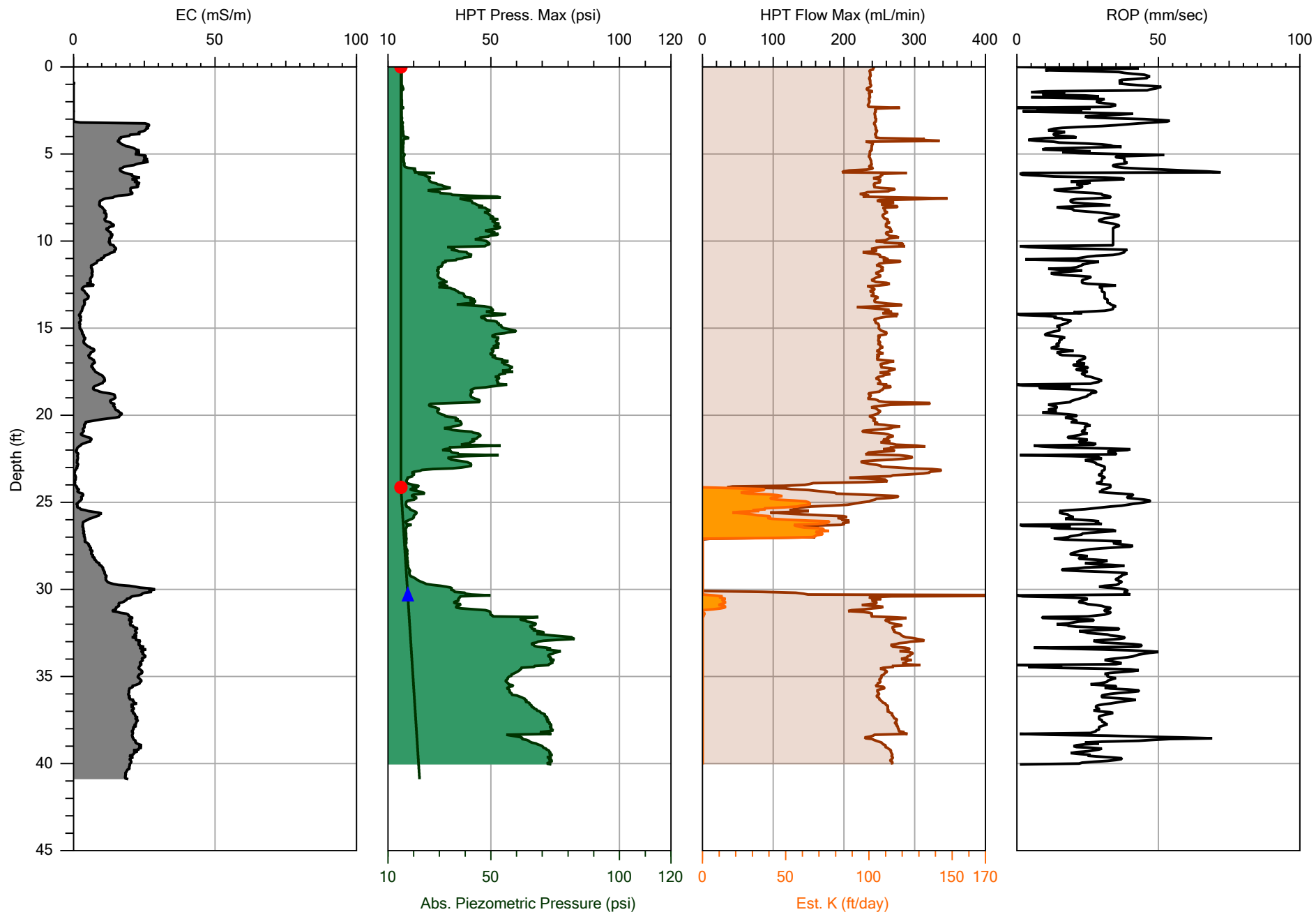
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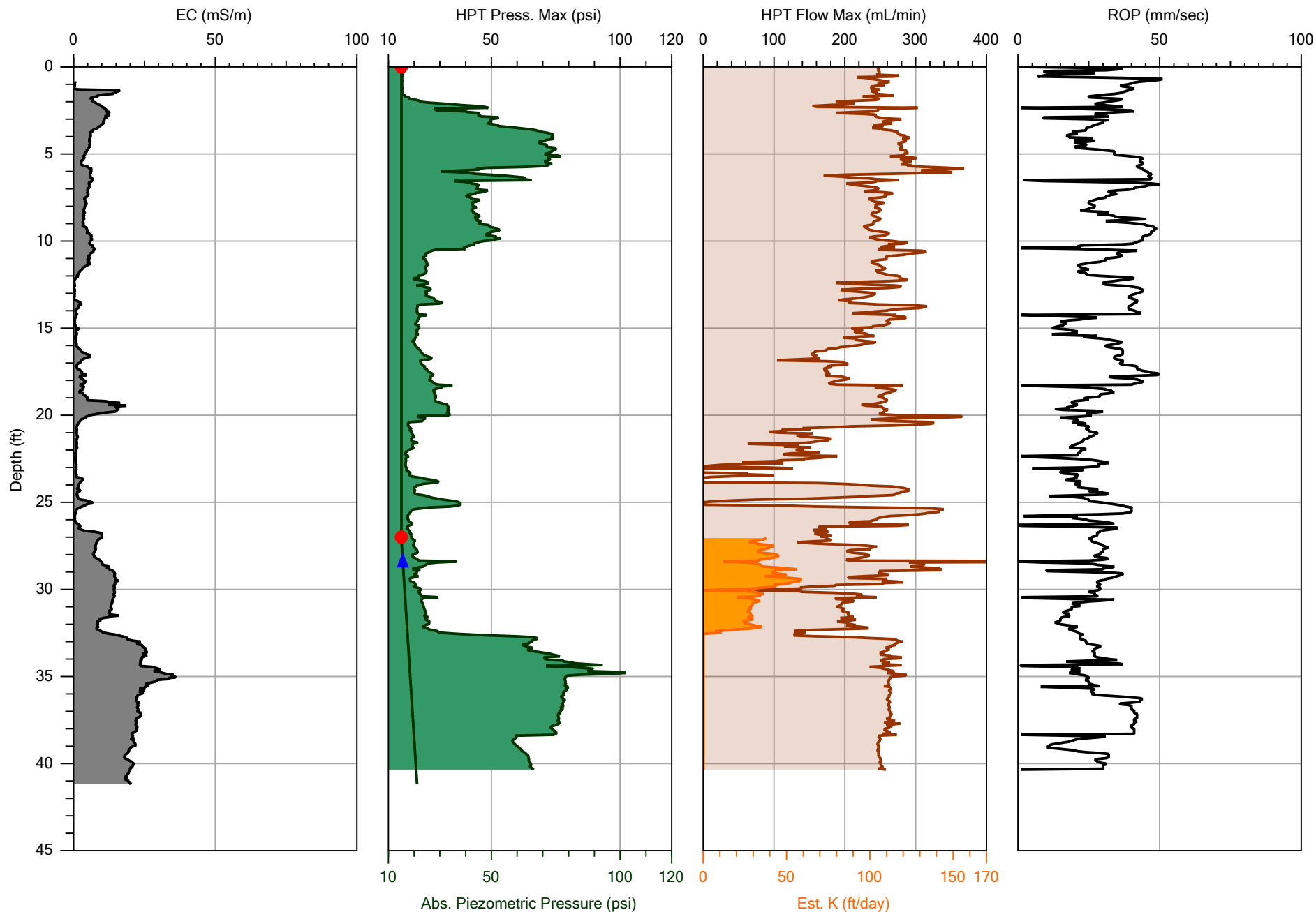
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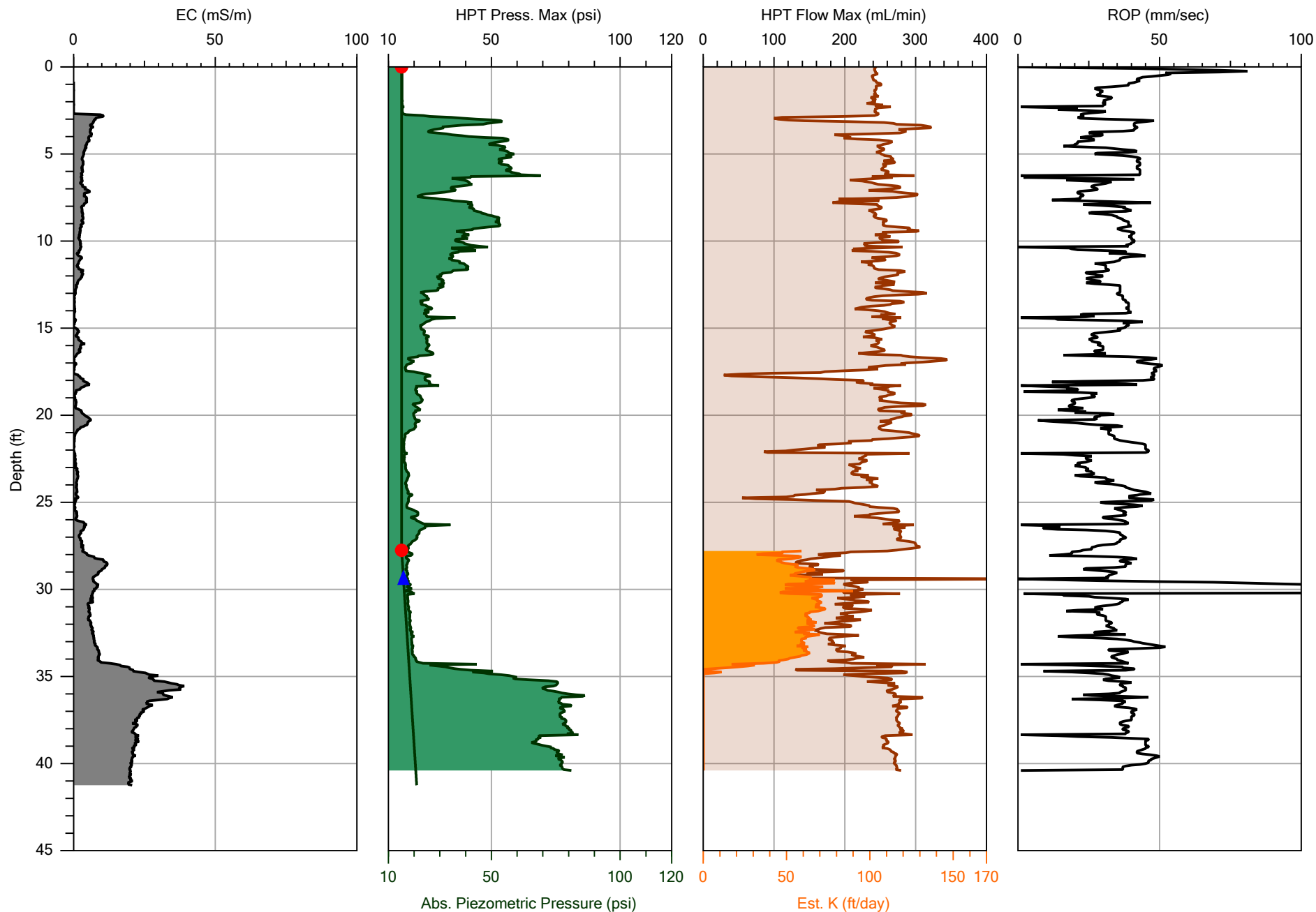
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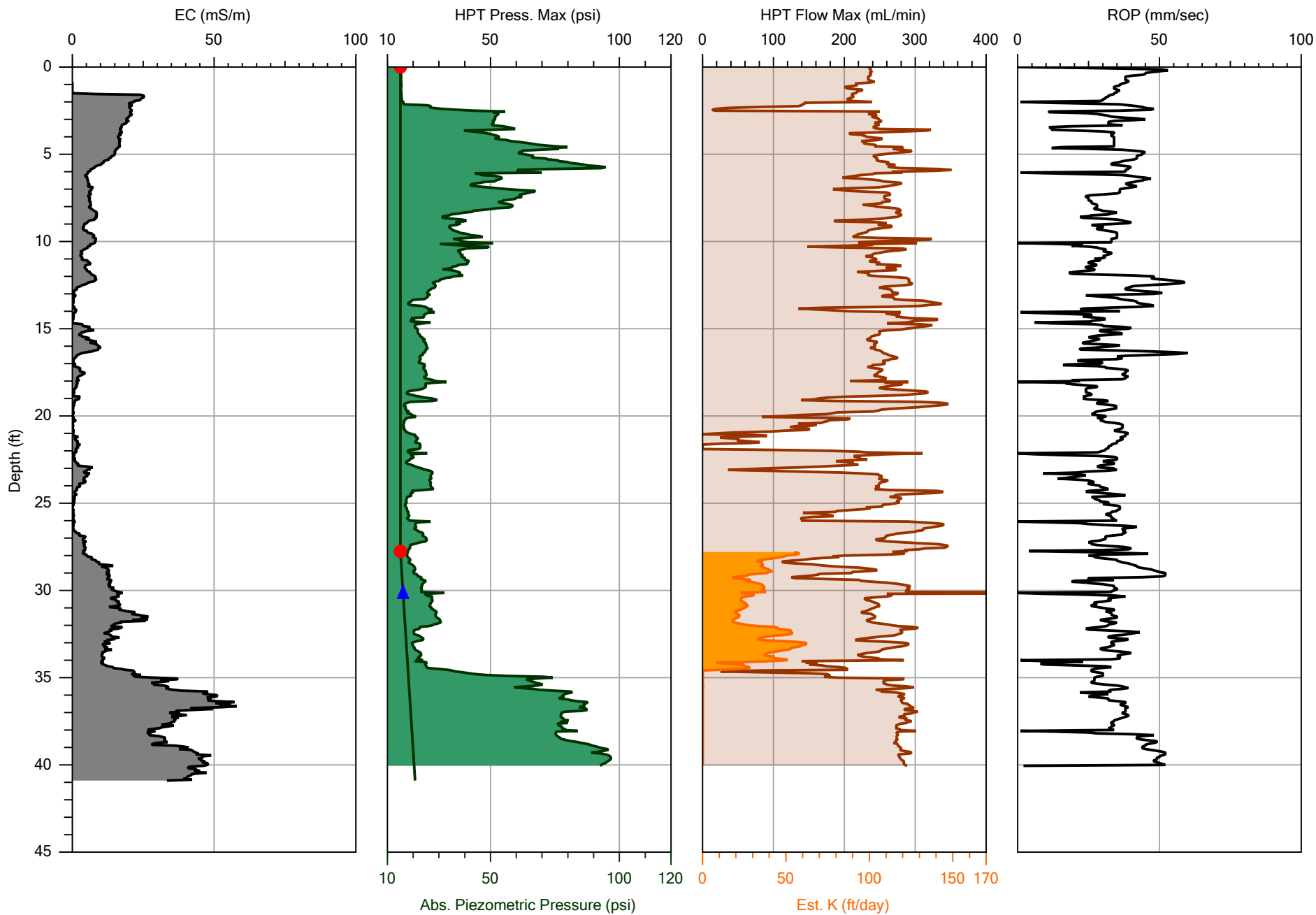
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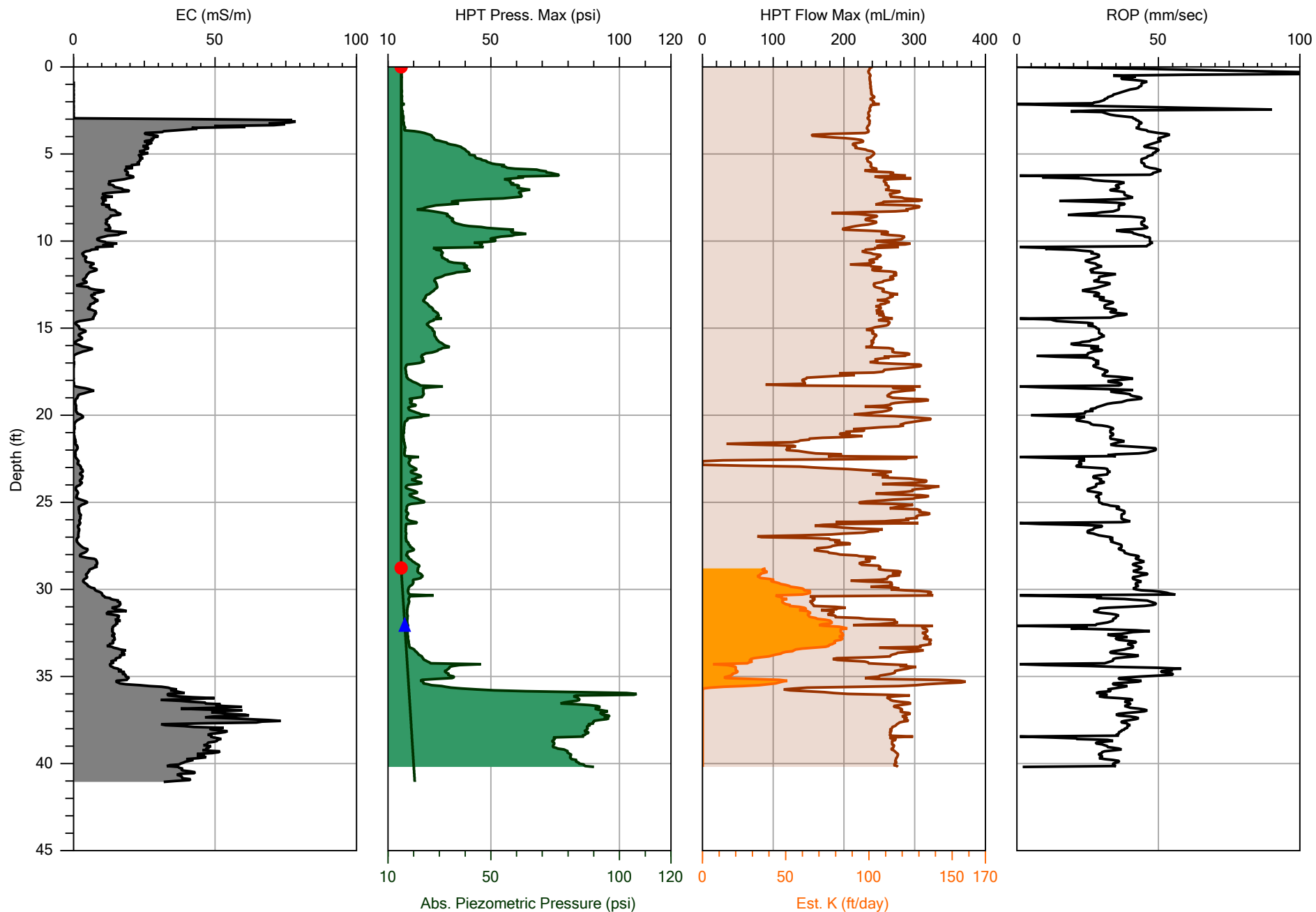
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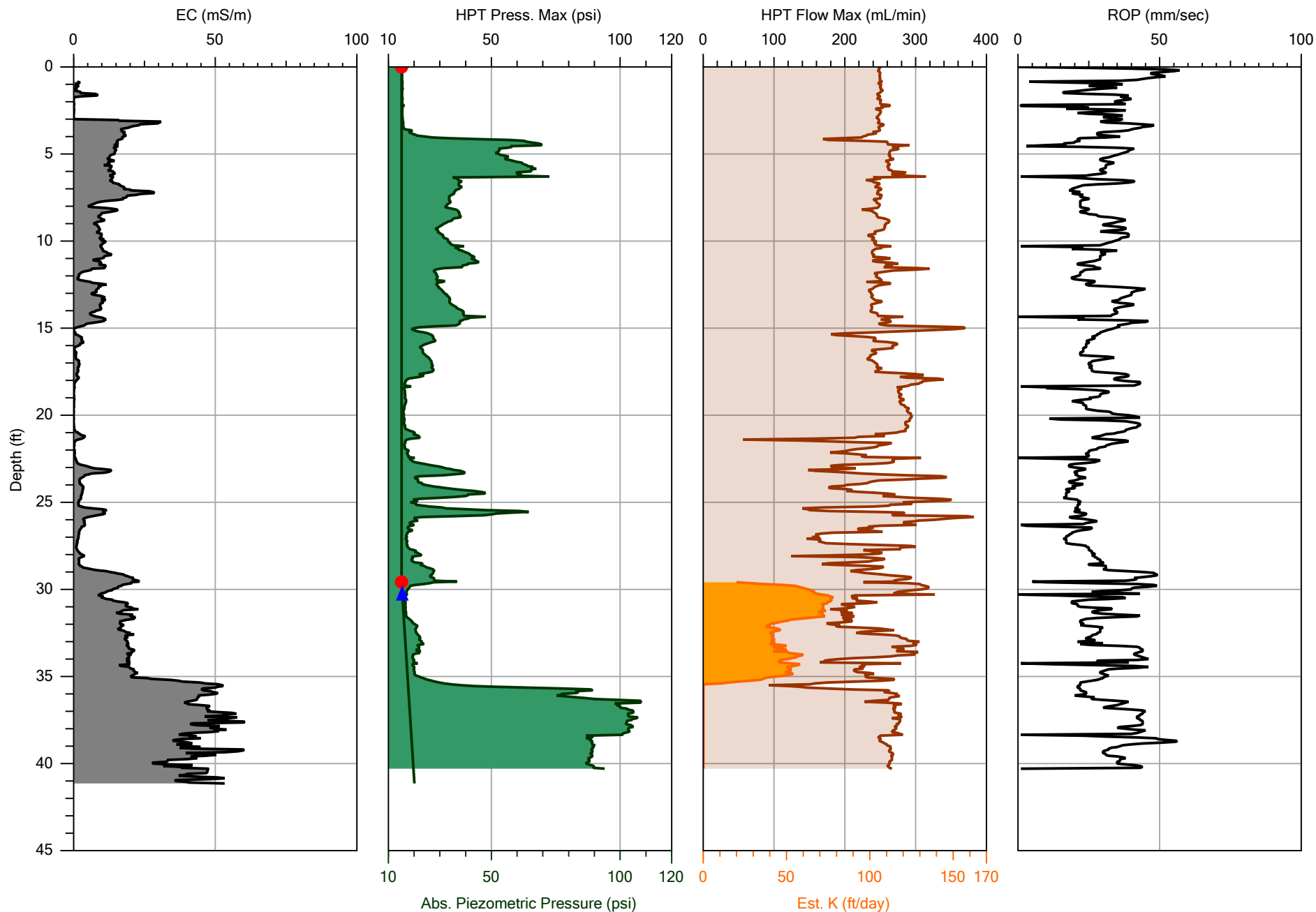
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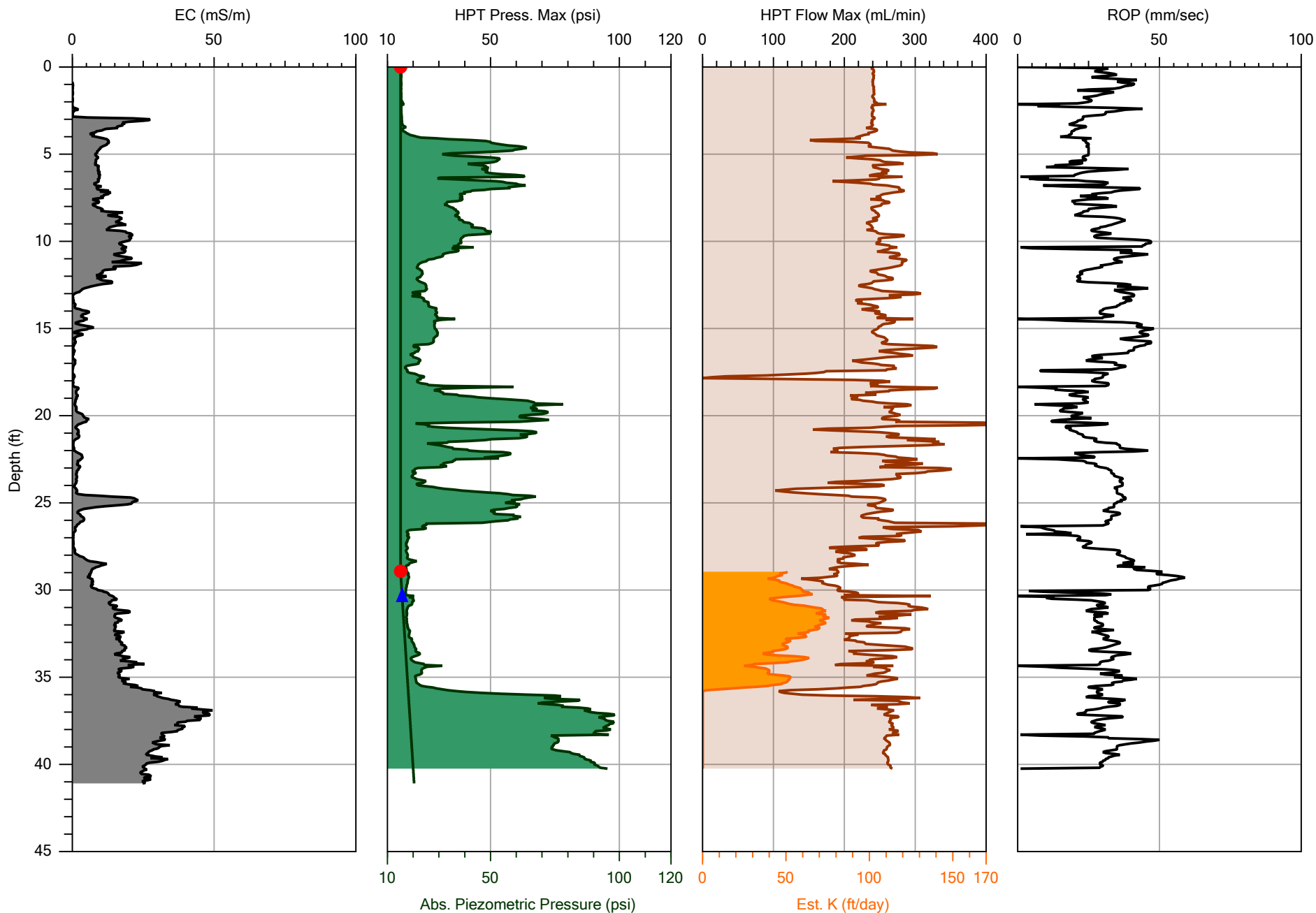
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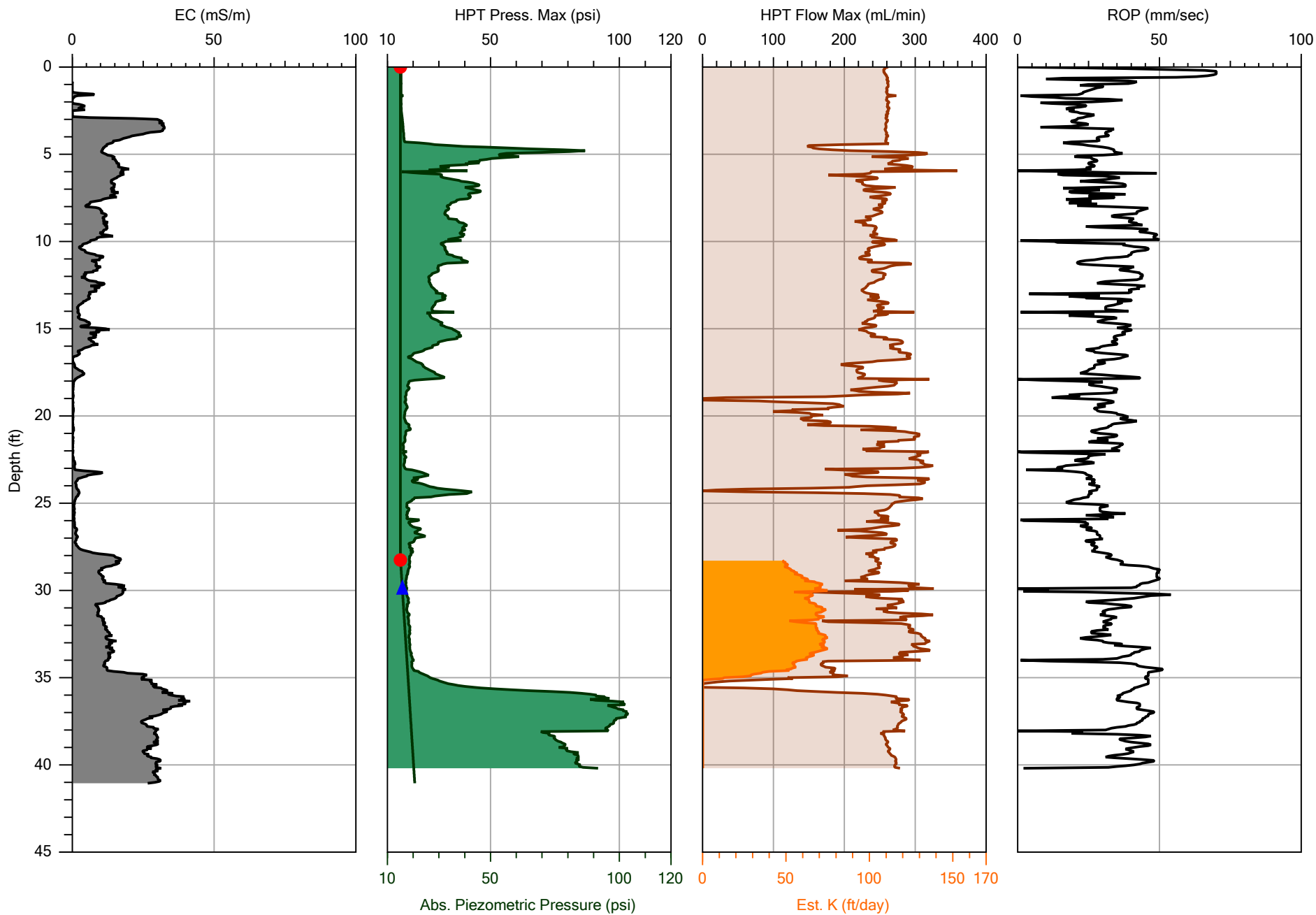
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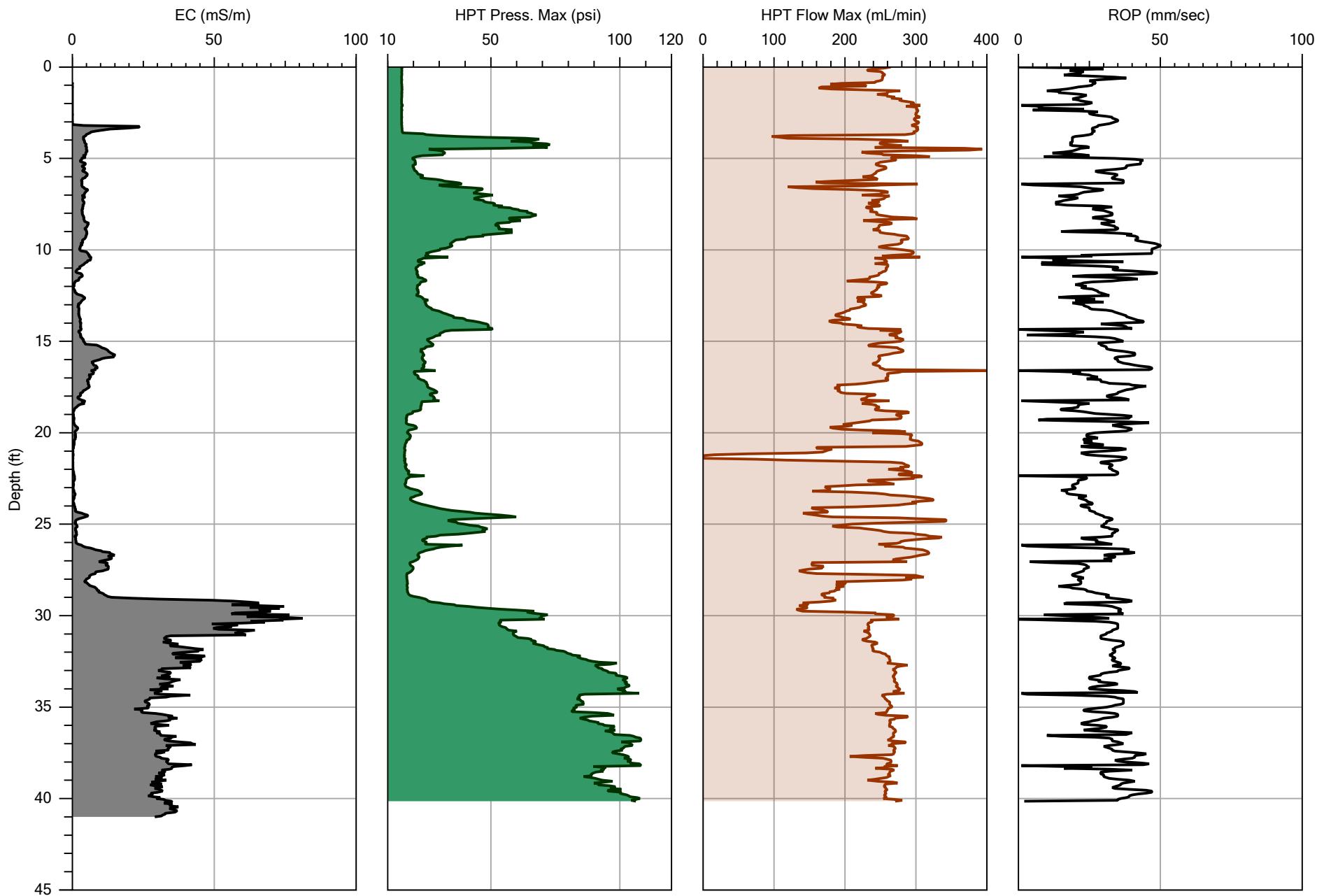
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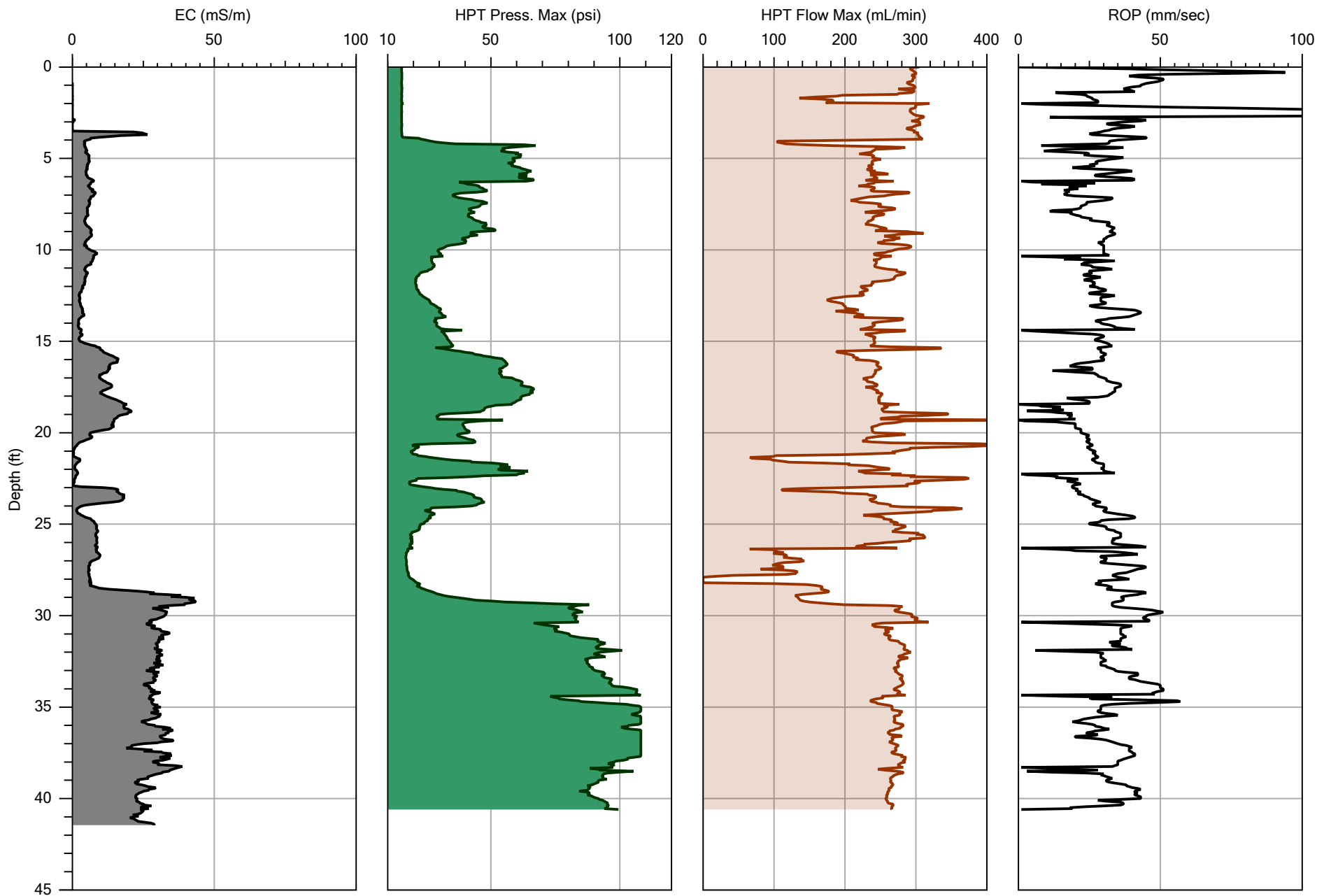
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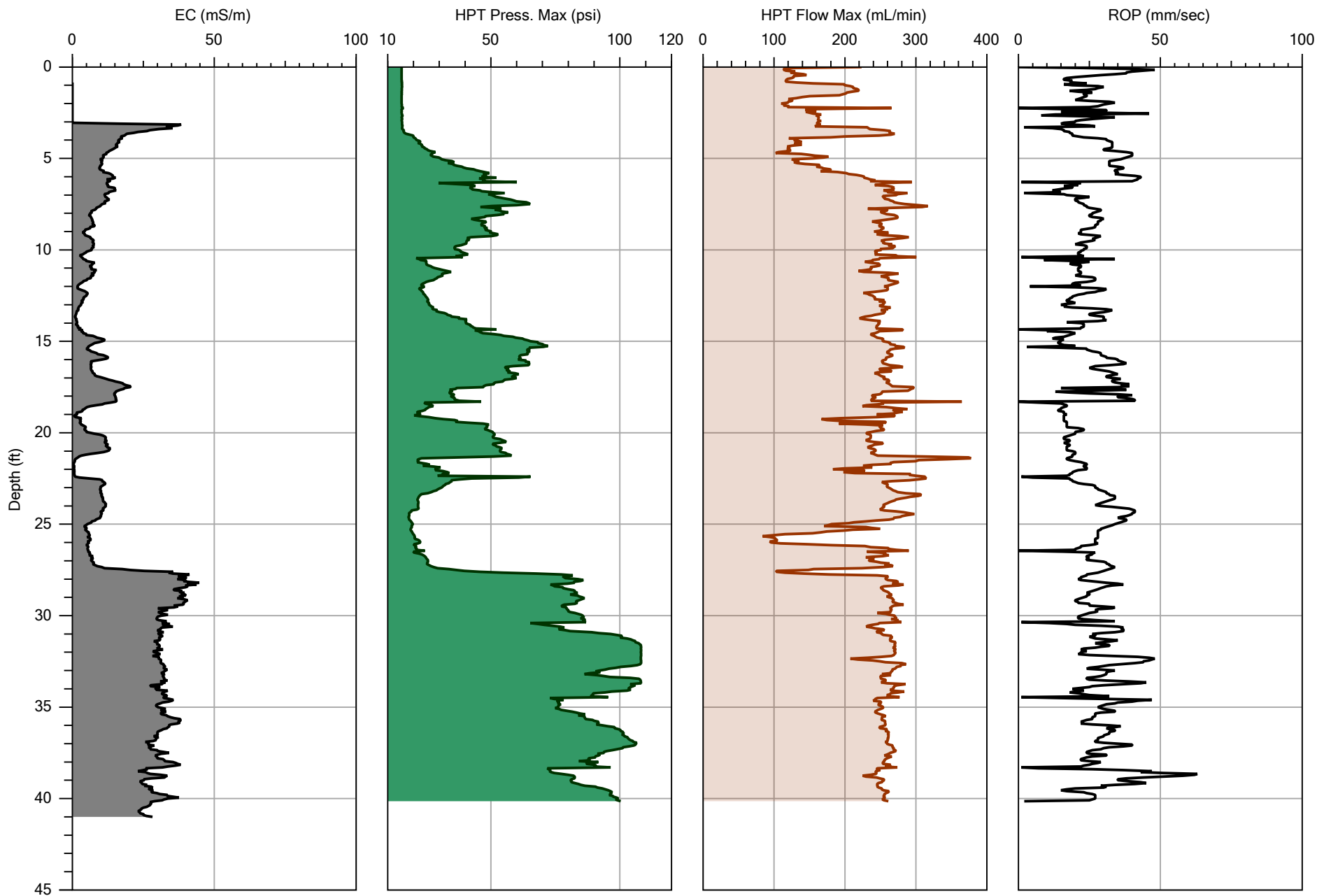
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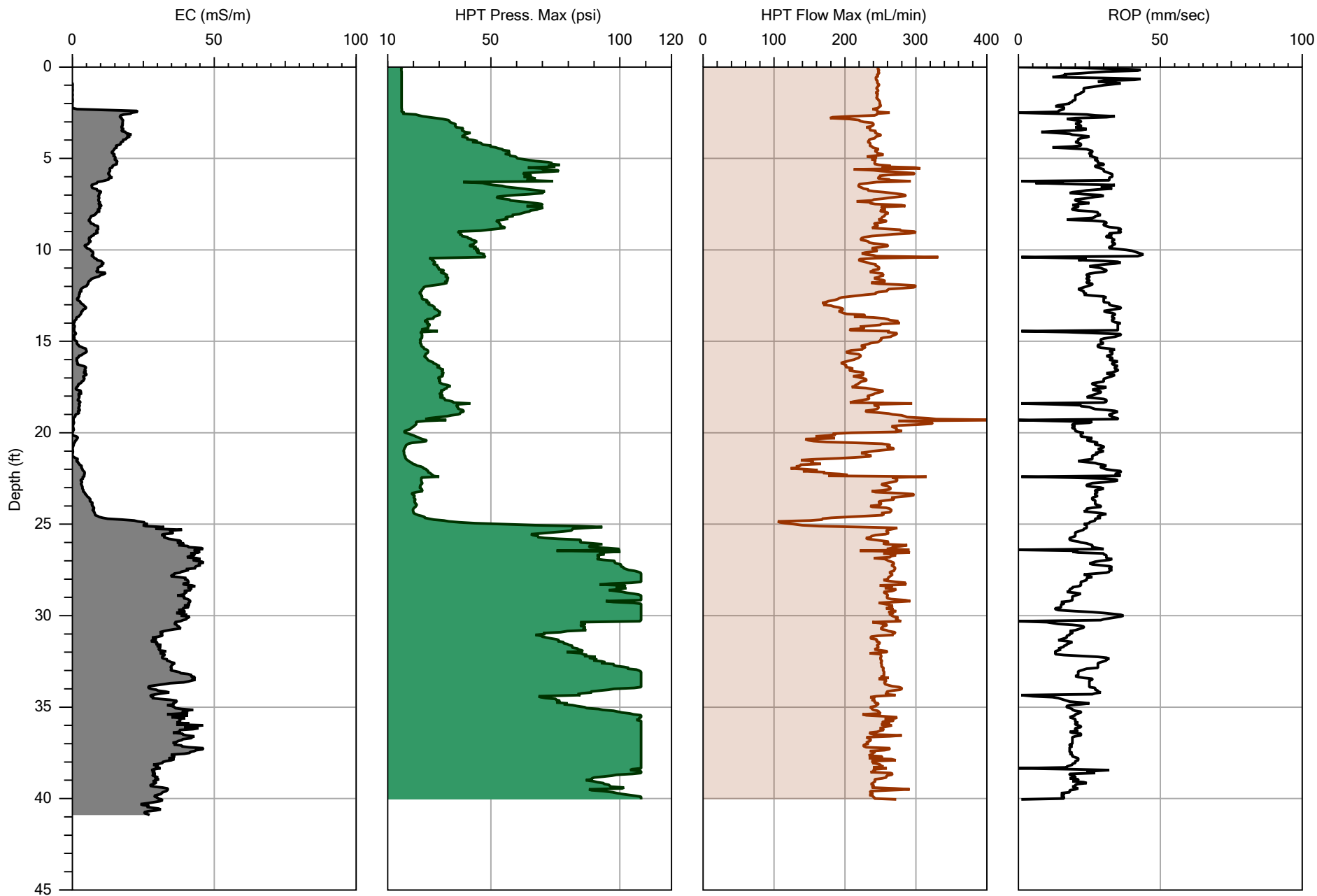
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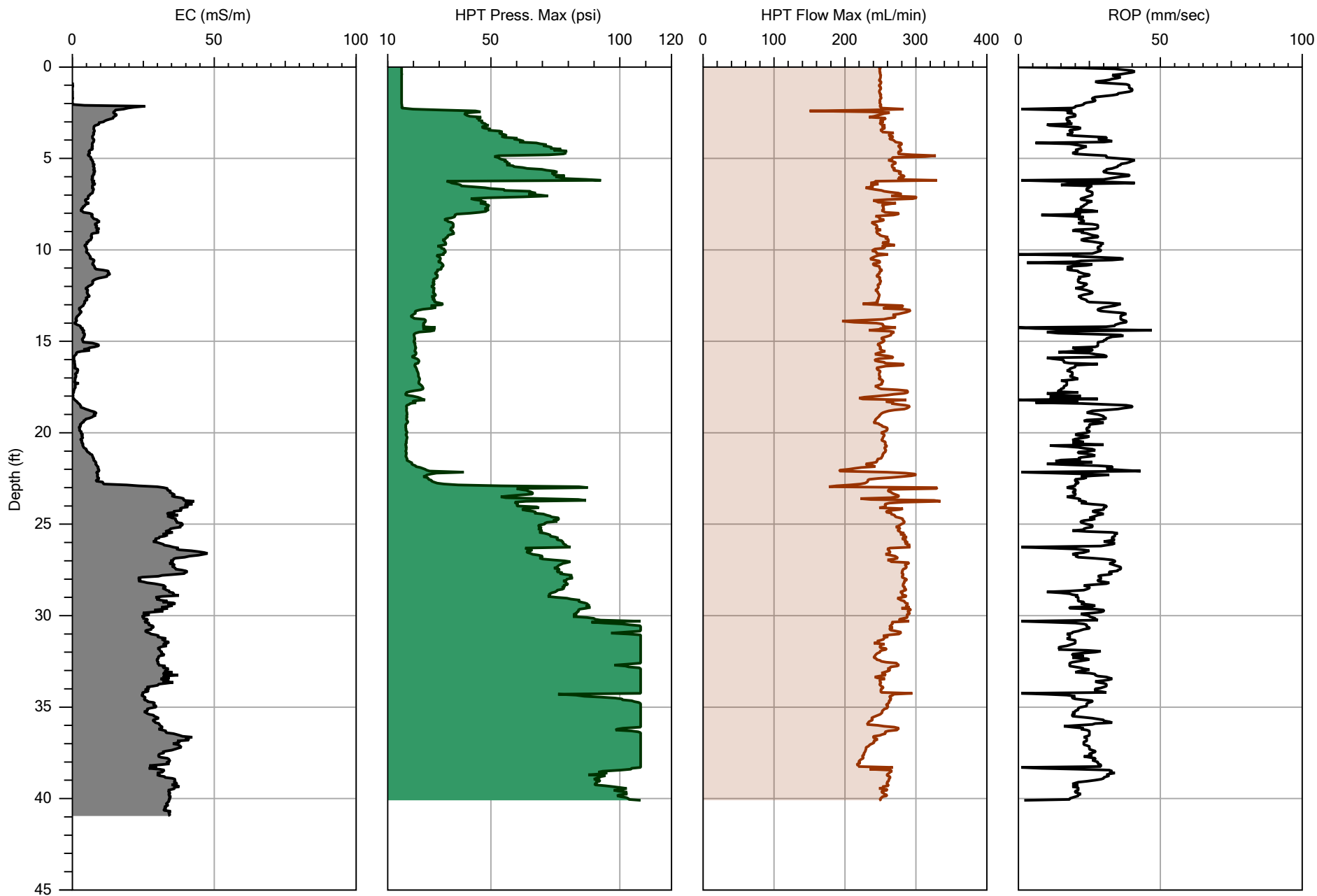
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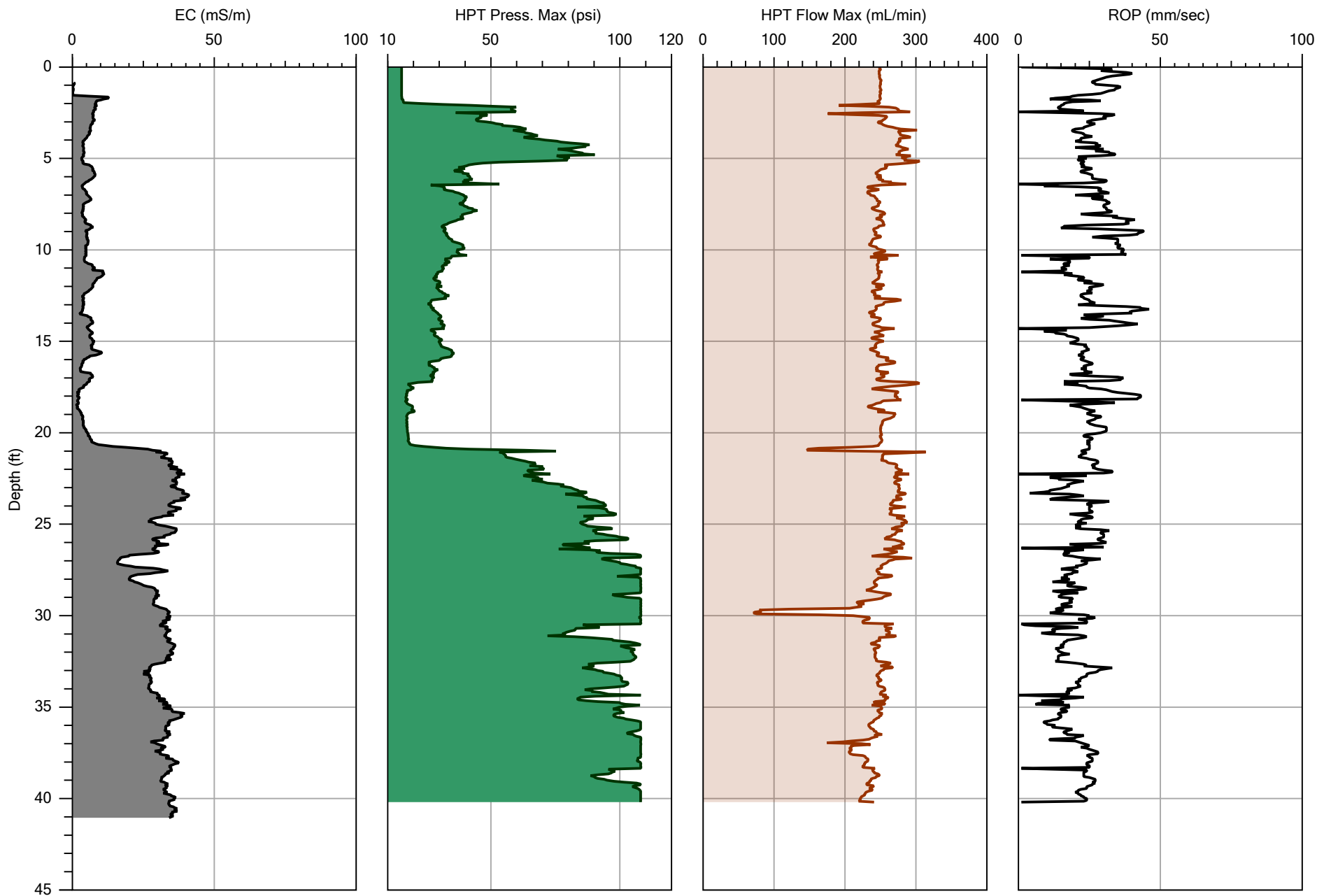
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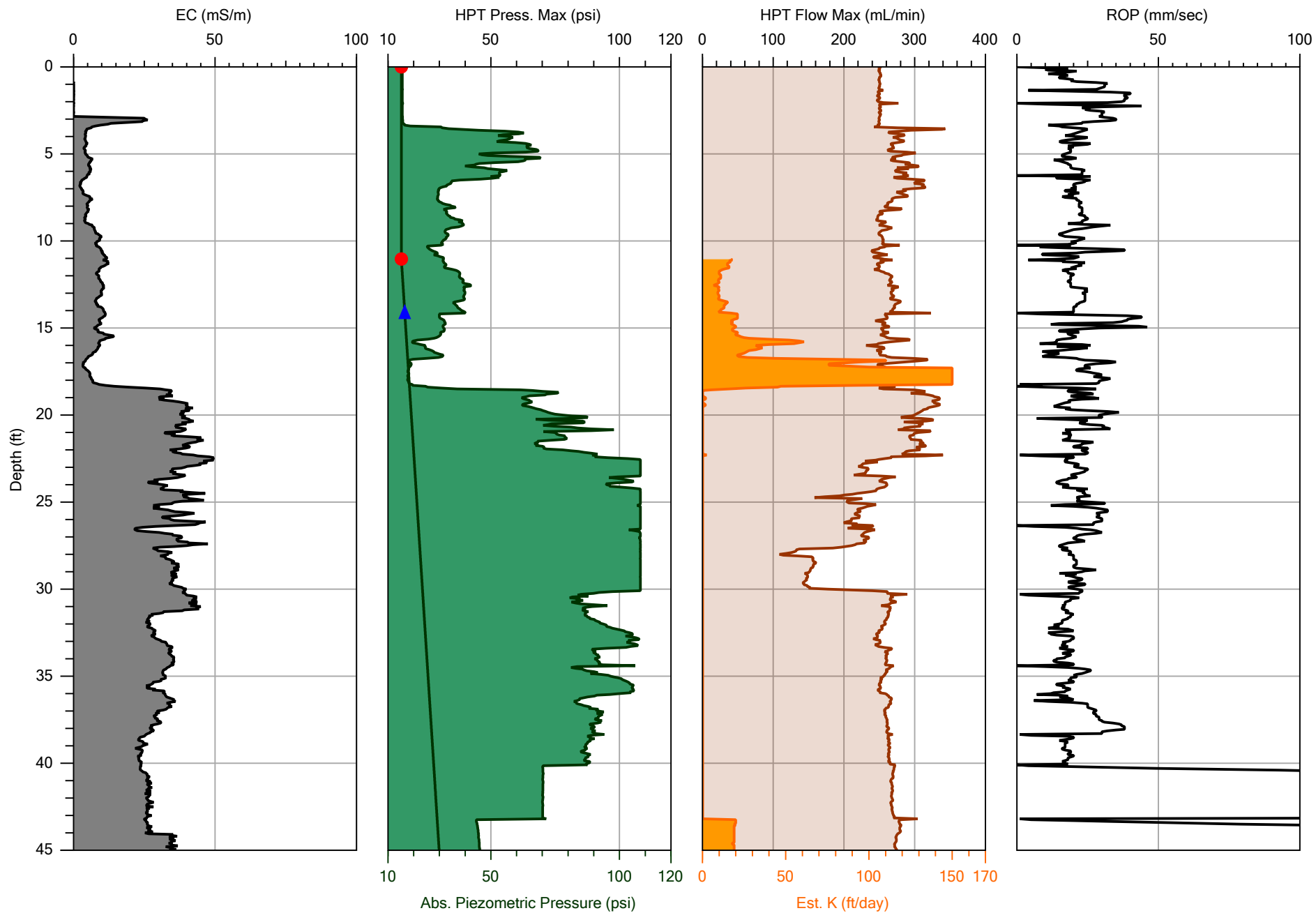
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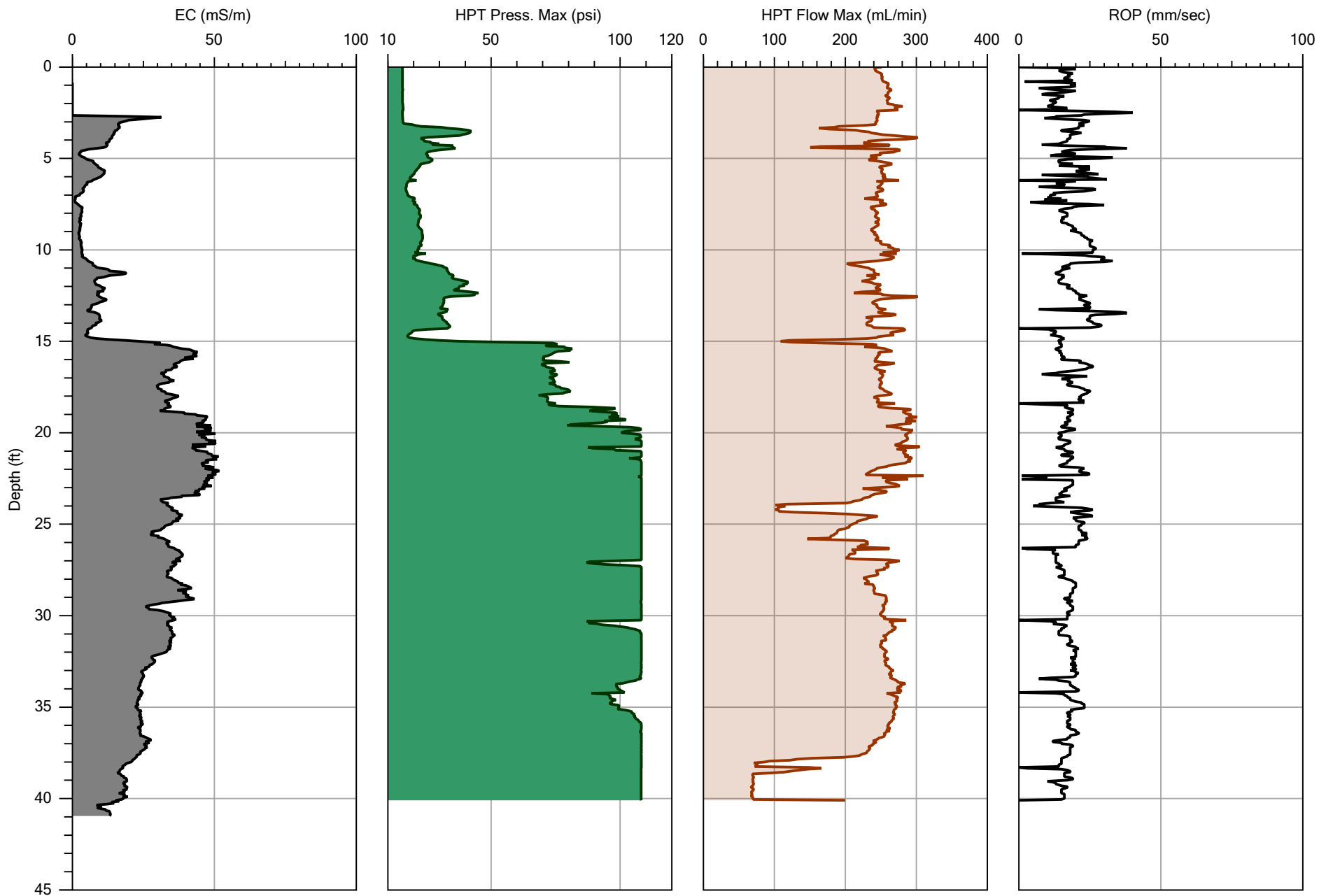
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			Location: Tell City, IN



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Project ID: 0149.21		Client: Arcadis
		Location: Tell City, IN



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Project ID:	0149.21	Client:	Arcadis	Date:	4/26/2021
				Location:	Tell City, IN



Company: Dakota Technologies		File: HPT-22.HPT
Operator: Bob Giddings		Date: 4/26/2021
Project ID: 0149.21		Client: Arcadis
		Location: Tell City, IN

Appendix C

HPT Reference Log

Dakota Technologies

HPT Reference Log

Conductivity Plot:

The Electrical Conductivity (EC) of the soil is logged simultaneously with the HPT data utilizing an integrated Wenner array. EC often provides insight into the stratigraphy and correlates with the HPT pressure plot in many instances. Typically an increase in EC (and increase in pressure) is indicative of finer, tighter soil types.

HPT Pressure Plot:

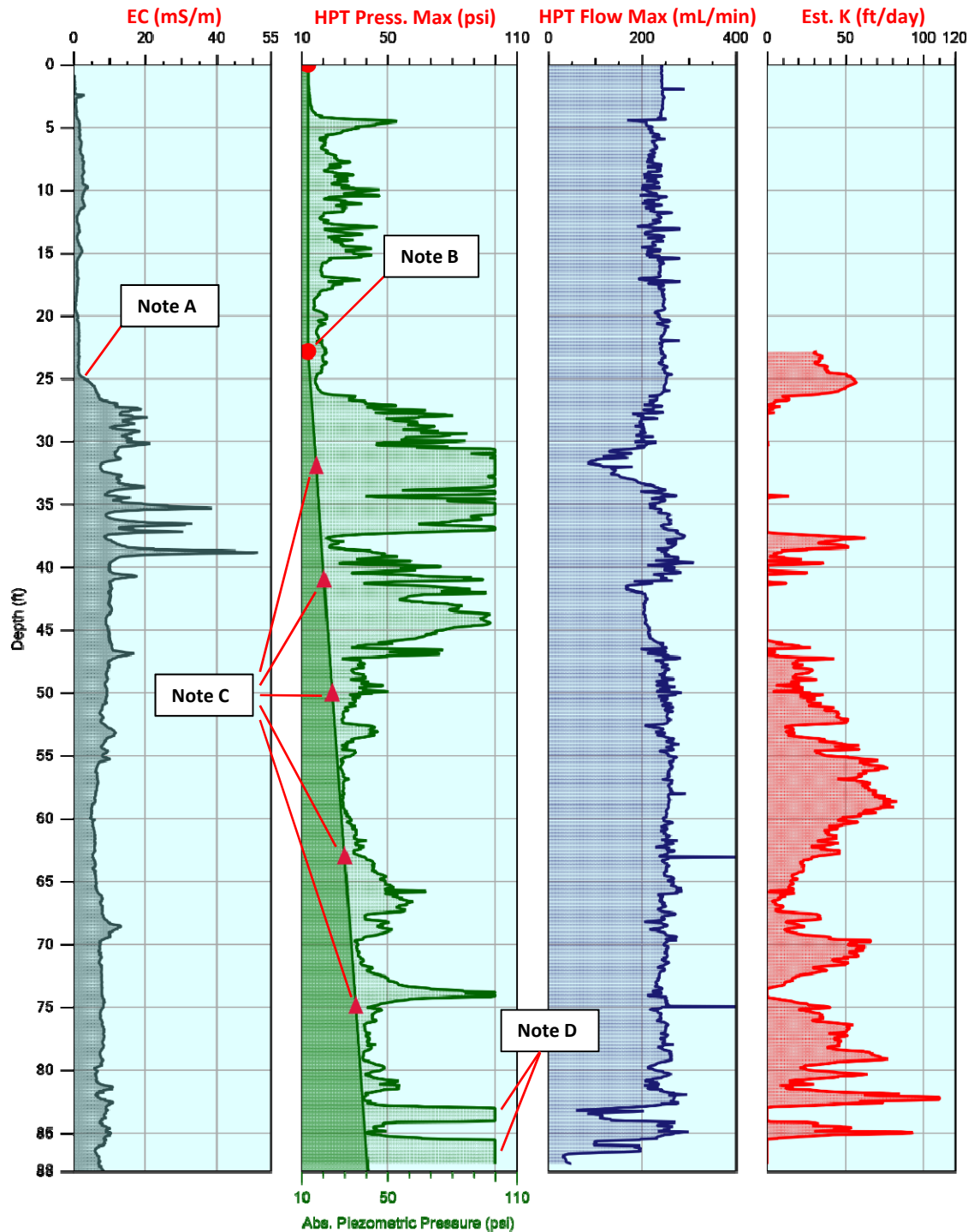
The HPT pressure gives insight into hydraulic properties of the soil as water is pumped into the formation at a constant rate. The pressure (unlike EC) is independent of certain factors such as pore water chemistry or mineralogy (contaminants, brines) and so further aids in defining soil/hydraulic properties of the area of investigation.

HPT Flow Plot:

Water is pumped out of the HPT probe and into the formation at a constant rate of typically 250 ml/min. A change in flow (usually accompanied by an inverse pressure change) is an indicator of the hydraulic properties of the soil.

Estimated K Plot:

The estimated hydraulic conductivity (K) is internally calculated by utilizing pressure and flow data in conjunction with dissipation tests performed at each location. This data is useful for directing sampling, remediation and slug testing protocols.



Note A:

Increasing EC readings starting at 25 feet indicate a transition to finer grain silt with clay stringers at 35 to 39 feet.

Note B:

The hydrostatic water level has been indicated with a round marker at 22.5 feet.

Note C:

The Absolute Piezometric pressure has been calculated and graphed with the individual dissipation test points indicated by triangular markers. The pressure increases relative to the head pressure as soon as the water table is encountered. Since these points form a straight line (no inflections) it can be inferred that the water table is hydraulically connected from the first to the last dissipation test.

Note D:

The significant pressure increase (transducer maxed out, 100 psi) and drop in flow at 83 to 88 feet is due to tight formation conditions discovered by HPT parameters (and not observed by EC measurements).

Appendix C

Laboratory Reports

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street, Tell City, IN

30006312

SGS Job Number: JD24188

Sampling Date: 04/29/21

Report to:

daniel.petzold@arcadis.com

ATTN: Distribution4

Total number of pages in report: 14



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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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

Sample Summary

Arcadis

Job No: JD24188

GE, 13th Street, Tell City, IN
Project No: 30006312

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD24188-1	04/29/21	08:01 DH	04/30/21	AQ	Ground Water	PZ-6(042921)
JD24188-2	04/29/21	09:16 DH	04/30/21	AQ	Ground Water	PZ-7(042921)
JD24188-3	04/29/21	10:46 DH	04/30/21	AQ	Ground Water	PZ-3(042921)
JD24188-4	04/29/21	11:56 DH	04/30/21	AQ	Ground Water	PZ-4(042921)
JD24188-5	04/29/21	13:56 DH	04/30/21	AQ	Ground Water	PZ-5(042921)

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-6(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-1	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	55400	5000	ug/l	1	05/04/21	05/05/21 LL	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA50486

(2) Prep QC Batch: MP26275

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-6(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-1	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	175	5.0	mg/l	1	05/03/21 23:17	TB	SM2320 B-11
Inorganic Carbon ^b	41.2	2.0	mg/l	1	05/06/21 09:39	LV	SM5310 B-11
Nitrogen, Nitrate ^c	1.3	0.11	mg/l	1	05/04/21 16:44	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	1.3	0.10	mg/l	1	05/04/21 16:44	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/30/21 22:30	EB	SM4500NO2 B-11
Total Carbon	41.2	1.0	mg/l	1	05/06/21 09:39	LV	SM5310 B-11
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/04/21 21:47	LV	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

(b) Calculated as: Total Carbon - Total Organic Carbon

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-7(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-2	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	67700	5000	ug/l	1	05/04/21	05/05/21 LL	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA50486

(2) Prep QC Batch: MP26275

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-7(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-2	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	243	5.0	mg/l	1	05/03/21 23:17	TB	SM2320 B-11
Inorganic Carbon ^b	98.1	3.0	mg/l	1	05/10/21 17:41	LV	SM5310 B-11
Nitrogen, Nitrate ^c	2.0	0.11	mg/l	1	05/04/21 16:45	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	2.0	0.10	mg/l	1	05/04/21 16:45	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/30/21 22:30	EB	SM4500NO2 B-11
Total Carbon	98.1	2.0	mg/l	2	05/10/21 17:41	LV	SM5310 B-11
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/04/21 21:23	LV	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

(b) Calculated as: Total Carbon - Total Organic Carbon

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-3(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-3	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	25900	5000	ug/l	1	05/04/21	05/05/21 LL	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA50486

(2) Prep QC Batch: MP26275

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-3(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-3	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	72.5	5.0	mg/l	1	05/03/21 23:17	TB	SM2320 B-11
Inorganic Carbon ^b	17.3	2.0	mg/l	1	05/06/21 10:24	LV	SM5310 B-11
Nitrogen, Nitrate ^c	3.4	0.11	mg/l	1	05/04/21 16:46	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	3.4	0.10	mg/l	1	05/04/21 16:46	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/30/21 22:30	EB	SM4500NO2 B-11
Total Carbon	17.3	1.0	mg/l	1	05/06/21 10:24	LV	SM5310 B-11
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/04/21 21:35	LV	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

(b) Calculated as: Total Carbon - Total Organic Carbon

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-4(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-4	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	46400	5000	ug/l	1	05/04/21	05/05/21 LL	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA50486

(2) Prep QC Batch: MP26275

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-4(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-4	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	179	5.0	mg/l	1	05/03/21 23:17	TB	SM2320 B-11
Inorganic Carbon ^b	42.0	2.0	mg/l	1	05/06/21 10:34	LV	SM5310 B-11
Nitrogen, Nitrate ^c	0.28	0.11	mg/l	1	05/04/21 16:47	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.28	0.10	mg/l	1	05/04/21 16:47	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/30/21 22:30	EB	SM4500NO2 B-11
Total Carbon	42.8	1.0	mg/l	1	05/06/21 10:34	LV	SM5310 B-11
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/04/21 20:51	LV	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

(b) Calculated as: Total Carbon - Total Organic Carbon

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-5(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-5	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	45700	5000	ug/l	1	05/05/21	05/06/21 ND	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA50496

(2) Prep QC Batch: MP26301

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	PZ-5(042921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24188-5	Date Received:	04/30/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	GE, 13th Street, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	134	5.0	mg/l	1	05/03/21 23:17	TB	SM2320 B-11
Inorganic Carbon ^b	33.3	2.0	mg/l	1	05/06/21 10:45	LV	SM5310 B-11
Nitrogen, Nitrate ^c	5.1	0.21	mg/l	1	05/04/21 17:35	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	5.1	0.20	mg/l	2	05/04/21 17:35	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/30/21 22:30	EB	SM4500NO2 B-11
Total Carbon	33.3	1.0	mg/l	1	05/06/21 10:45	LV	SM5310 B-11
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/04/21 22:01	LV	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

(b) Calculated as: Total Carbon - Total Organic Carbon

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit



SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

E

FED-EX Tracking # 9251 0902 2378	Bottle Order Control # KR-042621-125
SGS Quote #	SGS Job # ID 24188

JD24188: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD24188

Client: ARCADIS

Project: GE, 13TH STREET, TELL CITY, IN

Date / Time Received: 4/30/2021 10:20:00 AM

Delivery Method: FEDEX

Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.4);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 1 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Test Strip Lot #s:	pH 1-12: 212820	pH 12+: 203117A	Other: (Specify)
--------------------	-----------------	-----------------	------------------

Comments

SM089-03
Rev. Date 12/7/17

JD24188: Chain of Custody

Page 2 of 2

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street, Tell City, IN

IN000911

SGS Job Number: JD24427

Sampling Dates: 04/29/21 - 04/30/21

Report to:

Arcadis
150 West Market Suite 728
Indianapolis, IN 46204
Daniel.Petzold@Arcadis.com

ATTN: Daniel Petzold

Total number of pages in report: 108



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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JD24427

GE, 13th Street, Tell City, IN
Project No: IN000911

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD24427-1	04/30/21	16:35	KA	05/04/21	AQ	Trip Blank Water	TB-1-KA(42921)
JD24427-2	04/29/21	15:50	KA	05/04/21	AQ	Water	HPT-12(42921)
JD24427-3	04/29/21	16:15	KA	05/04/21	AQ	Water	HPT-13(42921)
JD24427-4	04/29/21	16:40	KA	05/04/21	AQ	Water	HPT-14(42921)
JD24427-5	04/29/21	17:25	KA	05/04/21	AQ	Water	HPT-11(42921)
JD24427-6	04/30/21	07:20	KA	05/04/21	AQ	Water	HPT-1(43021)
JD24427-7	04/30/21	08:50	KA	05/04/21	AQ	Water	HPT-15(43021)
JD24427-8	04/30/21	00:00	KA	05/04/21	AQ	Water	DUP-2(43021)
JD24427-9	04/30/21	09:00	KA	05/04/21	AQ	Equipment Blank	EB-2(43021)
JD24427-10	04/29/21	00:00	KA	05/04/21	AQ	Water	DUP-1(42921)
JD24427-11	04/29/21	16:25	KA	05/04/21	AQ	Equipment Blank	EB-1(42921)
JD24427-12	04/30/21	09:15	KA	05/04/21	AQ	Water	HPT-16(43021)



Sample Summary
(continued)

Arcadis

Job No: JD24427

GE, 13th Street, Tell City, IN
Project No: IN000911

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD24427-13	04/30/21	09:45 KA	05/04/21	AQ	Water	HPT-17(43021)
JD24427-14	04/30/21	10:30 KA	05/04/21	AQ	Water	HPT-18(43021)
JD24427-15	04/30/21	10:45 KA	05/04/21	AQ	Water	HPT-19(43021)
JD24427-16	04/30/21	11:05 KA	05/04/21	AQ	Water	HPT-20(43021)
JD24427-17	04/30/21	11:35 KA	05/04/21	AQ	Water	HPT-21(43021)
JD24427-18	04/30/21	13:30 KA	05/04/21	AQ	Water	HPT-22(43021)
JD24427-18D	04/30/21	13:30 KA	05/04/21	AQ	Water Dup/MSD	HPT-22(43021)
JD24427-18S	04/30/21	13:30 KA	05/04/21	AQ	Water Matrix Spike	HPT-22(43021)
JD24427-19	04/30/21	14:45 KA	05/04/21	AQ	Water	HPT-5(43021)
JD24427-20	04/30/21	15:15 KA	05/04/21	AQ	Water	HPT-7(43021)
JD24427-21	04/30/21	15:45 KA	05/04/21	AQ	Water	HPT-10(43021)
JD24427-22	04/30/21	16:15 KA	05/04/21	AQ	Water	HPT-8(43021)
JD24427-23	04/30/21	16:35 KA	05/04/21	AQ	Water	HPT-9(43021)

Summary of Hits

Job Number: JD24427
 Account: Arcadis
 Project: GE, 13th Street, Tell City, IN
 Collected: 04/29/21 thru 04/30/21

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

JD24427-1 TB-1-KA(42921)

No hits reported in this sample.

JD24427-2 HPT-12(42921)

cis-1,2-Dichloroethene ^a	11800	500	250	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^b	65.6	50	27	ug/l	SW846 8260D
Vinyl chloride ^b	2870	50	39	ug/l	SW846 8260D

JD24427-3 HPT-13(42921)

Trichloroethene	3.0	1.0	0.53	ug/l	SW846 8260D
-----------------	-----	-----	------	------	-------------

JD24427-4 HPT-14(42921)

cis-1,2-Dichloroethene	104	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene	2.7	1.0	0.54	ug/l	SW846 8260D
Tetrachloroethene	1.4	1.0	0.90	ug/l	SW846 8260D
Trichloroethene	131	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride	6.9	1.0	0.79	ug/l	SW846 8260D

JD24427-5 HPT-11(42921)

cis-1,2-Dichloroethene ^c	2760	20	10	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^c	26.6	20	11	ug/l	SW846 8260D
Trichloroethene ^c	60.9	20	11	ug/l	SW846 8260D
Vinyl chloride ^c	151	20	16	ug/l	SW846 8260D

JD24427-6 HPT-1(43021)

Acetone ^d	21.4	10	3.1	ug/l	SW846 8260D
cis-1,2-Dichloroethene ^d	10.5	1.0	0.51	ug/l	SW846 8260D
Trichloroethene ^d	0.54 J	1.0	0.53	ug/l	SW846 8260D

JD24427-7 HPT-15(43021)

cis-1,2-Dichloroethene	66.9	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene	1.8	1.0	0.54	ug/l	SW846 8260D
Trichloroethene	20.4	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride	9.1	1.0	0.79	ug/l	SW846 8260D

JD24427-8 DUP-2(43021)

cis-1,2-Dichloroethene	65.2	1.0	0.51	ug/l	SW846 8260D
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Summary of Hits

Job Number: JD24427
Account: Arcadis
Project: GE, 13th Street, Tell City, IN
Collected: 04/29/21 thru 04/30/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						
trans-1,2-Dichloroethene		1.9	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		18.3	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		8.7	1.0	0.79	ug/l	SW846 8260D
JD24427-9	EB-2(43021)					
No hits reported in this sample.						
JD24427-10	DUP-1(42921)					
Trichloroethene		2.9	1.0	0.53	ug/l	SW846 8260D
JD24427-11	EB-1(42921)					
No hits reported in this sample.						
JD24427-12	HPT-16(43021)					
cis-1,2-Dichloroethene		25.8	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		0.95 J	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		11.4	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		4.1	1.0	0.79	ug/l	SW846 8260D
JD24427-13	HPT-17(43021)					
cis-1,2-Dichloroethene		26.0	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		0.75 J	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		8.2	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		4.1	1.0	0.79	ug/l	SW846 8260D
JD24427-14	HPT-18(43021)					
cis-1,2-Dichloroethene		8.2	1.0	0.51	ug/l	SW846 8260D
Trichloroethene		5.0	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		1.3	1.0	0.79	ug/l	SW846 8260D
JD24427-15	HPT-19(43021)					
cis-1,2-Dichloroethene		33.6	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		1.1	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		30.2	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		0.81 J	1.0	0.79	ug/l	SW846 8260D

Summary of Hits

Job Number: JD24427
 Account: Arcadis
 Project: GE, 13th Street, Tell City, IN
 Collected: 04/29/21 thru 04/30/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD24427-16	HPT-20(43021)					
cis-1,2-Dichloroethene		2.4	1.0	0.51	ug/l	SW846 8260D
Trichloroethene		8.2	1.0	0.53	ug/l	SW846 8260D
JD24427-17	HPT-21(43021)					
cis-1,2-Dichloroethene		0.76 J	1.0	0.51	ug/l	SW846 8260D
Trichloroethene		0.86 J	1.0	0.53	ug/l	SW846 8260D
JD24427-18	HPT-22(43021)					
No hits reported in this sample.						
JD24427-19	HPT-5(43021)					
cis-1,2-Dichloroethene ^e		17.0	10	5.1	ug/l	SW846 8260D
Trichloroethene ^e		1230	10	5.3	ug/l	SW846 8260D
JD24427-20	HPT-7(43021)					
cis-1,2-Dichloroethene ^f		8.2 J	10	5.1	ug/l	SW846 8260D
Tetrachloroethene ^f		11.5	10	9.0	ug/l	SW846 8260D
Trichloroethene ^f		1970	10	5.3	ug/l	SW846 8260D
JD24427-21	HPT-10(43021)					
cis-1,2-Dichloroethene ^f		4550	25	13	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^f		35.4	25	13	ug/l	SW846 8260D
Trichloroethene ^f		512	25	13	ug/l	SW846 8260D
Vinyl chloride ^f		193	25	20	ug/l	SW846 8260D
JD24427-22	HPT-8(43021)					
Benzene		0.81	0.50	0.43	ug/l	SW846 8260D
cis-1,2-Dichloroethene		110	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		3.5	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		72.1	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		2.6	1.0	0.79	ug/l	SW846 8260D
JD24427-23	HPT-9(43021)					
cis-1,2-Dichloroethene ^c		748	5.0	2.5	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^c		31.6	5.0	2.7	ug/l	SW846 8260D
Trichloroethene ^c		311	5.0	2.6	ug/l	SW846 8260D

Summary of Hits

Job Number: JD24427
Account: Arcadis
Project: GE, 13th Street, Tell City, IN
Collected: 04/29/21 thru 04/30/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Vinyl chloride ^c		79.9	5.0	3.9	ug/l	SW846 8260D
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- (a) (pH= 4)Sample pH did not satisfy field preservation criteria.
- (b) (pH= 4)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.
- (c) (pH= 3)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.
- (d) (pH= 7)Sample pH did not satisfy field preservation criteria.
- (e) (pH= 7)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.
- (f) Dilution required due to high concentration of target compound.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TB-1-KA(42921)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-1	Date Received:	05/04/21
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165498.D	1	05/11/21 02:49	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-1-KA(42921)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-1	Date Received:	05/04/21
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-12(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-2	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165509.D	50	05/11/21 08:05	BK	n/a	n/a	V3B7451
Run #2 ^b	3B165497.D	500	05/11/21 02:21	BK	n/a	n/a	V3B7451

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	150	ug/l	
71-43-2	Benzene	ND	25	21	ug/l	
108-86-1	Bromobenzene	ND	50	27	ug/l	
74-97-5	Bromochloromethane	ND	50	24	ug/l	
75-27-4	Bromodichloromethane	ND	50	23	ug/l	
75-25-2	Bromoform	ND	50	32	ug/l	
74-83-9	Bromomethane	ND	100	82	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	340	ug/l	
104-51-8	n-Butylbenzene	ND	100	26	ug/l	
135-98-8	sec-Butylbenzene	ND	100	31	ug/l	
98-06-6	tert-Butylbenzene	ND	100	34	ug/l	
56-23-5	Carbon tetrachloride	ND	50	28	ug/l	
108-90-7	Chlorobenzene	ND	50	28	ug/l	
75-00-3	Chloroethane	ND	50	36	ug/l	
67-66-3	Chloroform	ND	50	25	ug/l	
74-87-3	Chloromethane	ND	50	38	ug/l	
95-49-8	o-Chlorotoluene	ND	100	32	ug/l	
106-43-4	p-Chlorotoluene	ND	100	30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	26	ug/l	
124-48-1	Dibromochloromethane	ND	50	28	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	24	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	50	27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	50	27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	28	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	30	ug/l	
75-35-4	1,1-Dichloroethene	ND	50	30	ug/l	
156-59-2	cis-1,2-Dichloroethene	11800 ^c	500	250	ug/l	
156-60-5	trans-1,2-Dichloroethene	65.6	50	27	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	25	ug/l	
142-28-9	1,3-Dichloropropane	ND	50	21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-12(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-2	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	50	26	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	24	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	22	ug/l	
100-41-4	Ethylbenzene	ND	50	30	ug/l	
87-68-3	Hexachlorobutadiene	ND	100	27	ug/l	
98-82-8	Isopropylbenzene	ND	50	32	ug/l	
99-87-6	p-Isopropyltoluene	ND	100	33	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	93	ug/l	
74-95-3	Methylene bromide	ND	50	24	ug/l	
75-09-2	Methylene chloride	ND	100	50	ug/l	
91-20-3	Naphthalene	ND	250	130	ug/l	
103-65-1	n-Propylbenzene	ND	100	30	ug/l	
100-42-5	Styrene	ND	50	24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	33	ug/l	
127-18-4	Tetrachloroethene	ND	50	45	ug/l	
108-88-3	Toluene	ND	50	27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	25	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	27	ug/l	
79-01-6	Trichloroethene	ND	50	26	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	100	35	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	100	50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	100	50	ug/l	
75-01-4	Vinyl chloride	2870	50	39	ug/l	
	m,p-Xylene	ND	50	39	ug/l	
95-47-6	o-Xylene	ND	50	30	ug/l	
1330-20-7	Xylene (total)	ND	50	30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	106%	85-118%
17060-07-0	1,2-Dichloroethane-D4	103%	95%	80-121%
2037-26-5	Toluene-D8	97%	96%	80-120%
460-00-4	4-Bromofluorobenzene	92%	93%	80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-12(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-2	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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- (a) (pH= 4)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.
- (b) (pH= 4)Sample pH did not satisfy field preservation criteria.
- (c) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	HPT-13(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-3	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165501.D	1	05/11/21 04:14	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-13(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-3	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	3.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		85-118%
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-14(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-4	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165502.D	1	05/11/21 04:43	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	104	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.7	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-14(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-4	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	1.4	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	131	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	6.9	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		85-118%
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-11(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-5	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165505.D	20	05/11/21 06:10	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	61	ug/l	
71-43-2	Benzene	ND	10	8.5	ug/l	
108-86-1	Bromobenzene	ND	20	11	ug/l	
74-97-5	Bromochloromethane	ND	20	9.6	ug/l	
75-27-4	Bromodichloromethane	ND	20	9.0	ug/l	
75-25-2	Bromoform	ND	20	13	ug/l	
74-83-9	Bromomethane	ND	40	33	ug/l	
78-93-3	2-Butanone (MEK)	ND	200	140	ug/l	
104-51-8	n-Butylbenzene	ND	40	10	ug/l	
135-98-8	sec-Butylbenzene	ND	40	12	ug/l	
98-06-6	tert-Butylbenzene	ND	40	14	ug/l	
56-23-5	Carbon tetrachloride	ND	20	11	ug/l	
108-90-7	Chlorobenzene	ND	20	11	ug/l	
75-00-3	Chloroethane	ND	20	15	ug/l	
67-66-3	Chloroform	ND	20	10	ug/l	
74-87-3	Chloromethane	ND	20	15	ug/l	
95-49-8	o-Chlorotoluene	ND	40	13	ug/l	
106-43-4	p-Chlorotoluene	ND	40	12	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	40	11	ug/l	
124-48-1	Dibromochloromethane	ND	20	11	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	9.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	11	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	11	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	40	11	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	11	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	12	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	12	ug/l	
156-59-2	cis-1,2-Dichloroethene	2760	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	26.6	20	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	10	ug/l	
142-28-9	1,3-Dichloropropane	ND	20	8.5	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-11(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-5	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	20	10	ug/l	
563-58-6	1,1-Dichloropropene	ND	20	8.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	9.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	8.6	ug/l	
100-41-4	Ethylbenzene	ND	20	12	ug/l	
87-68-3	Hexachlorobutadiene	ND	40	11	ug/l	
98-82-8	Isopropylbenzene	ND	20	13	ug/l	
99-87-6	p-Isopropyltoluene	ND	40	13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	10	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	37	ug/l	
74-95-3	Methylene bromide	ND	20	9.6	ug/l	
75-09-2	Methylene chloride	ND	40	20	ug/l	
91-20-3	Naphthalene	ND	100	50	ug/l	
103-65-1	n-Propylbenzene	ND	40	12	ug/l	
100-42-5	Styrene	ND	20	9.7	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	13	ug/l	
127-18-4	Tetrachloroethene	ND	20	18	ug/l	
108-88-3	Toluene	ND	20	11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	10	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	11	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	11	ug/l	
79-01-6	Trichloroethene	60.9	20	11	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	8.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	40	14	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	40	20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	40	20	ug/l	
75-01-4	Vinyl chloride	151	20	16	ug/l	
	m,p-Xylene	ND	20	16	ug/l	
95-47-6	o-Xylene	ND	20	12	ug/l	
1330-20-7	Xylene (total)	ND	20	12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		85-118%
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-11(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-5	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) (pH= 3)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.

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

Report of Analysis

Client Sample ID:	HPT-1(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-6	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165503.D	1	05/11/21 05:12	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	21.4	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	10.5	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-1(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-6	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	0.54	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-1(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-6	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) (pH= 7)Sample pH did not satisfy field preservation criteria.

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

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

Report of Analysis

Client Sample ID:	HPT-15(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-7	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165504.D	1	05/11/21 05:41	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	66.9	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.8	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-15(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-7	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	20.4	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	9.1	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		85-118%
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-8	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165516.D	1	05/11/21 11:55	BK	n/a	n/a	V3B7452
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	65.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.9	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-8	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	18.3	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	8.7	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		85-118%
17060-07-0	1,2-Dichloroethane-D4	104%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-8	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

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



Report of Analysis

Client Sample ID:	EB-2(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-9	Date Received:	05/04/21
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165499.D	1	05/11/21 03:18	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-2(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-9	Date Received:	05/04/21
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		85-118%
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-1(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-10	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A210327.D	1	05/11/21 04:40	BK	n/a	n/a	V2A9144
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK) ^a	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-1(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-10	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	2.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-1(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-10	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	EB-1(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-11	Date Received:	05/04/21
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165500.D	1	05/11/21 03:46	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-1(42921)	Date Sampled:	04/29/21
Lab Sample ID:	JD24427-11	Date Received:	05/04/21
Matrix:	AQ - Equipment Blank	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-16(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-12	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A210328.D	1	05/11/21 05:08	BK	n/a	n/a	V2A9144
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK) ^a	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	25.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.95	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-16(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-12	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	11.4	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	4.1	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%
17060-07-0	1,2-Dichloroethane-D4	102%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-16(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-12	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	HPT-17(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-13	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A210329.D	1	05/11/21 05:37	BK	n/a	n/a	V2A9144
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK) ^a	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	26.0	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-17(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-13	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	8.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	4.1	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%
17060-07-0	1,2-Dichloroethane-D4	102%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-17(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-13	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	HPT-18(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-14	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165531.D	1	05/11/21 19:15	BK	n/a	n/a	V3B7452
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	8.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-18(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-14	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	5.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	1.3	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%
17060-07-0	1,2-Dichloroethane-D4	97%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HPT-18(43021)

Lab Sample ID: JD24427-14

Matrix: AQ - Water

Method: SW846 8260D

Project: GE, 13th Street, Tell City, IN

Date Sampled: 04/30/21

Date Received: 05/04/21

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-19(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-15	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165532.D	1	05/11/21 19:44	BK	n/a	n/a	V3B7452
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	33.6	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.1	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-19(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-15	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	30.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	0.81	1.0	0.79	ug/l	J
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-19(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-15	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	HPT-20(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-16	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165533.D	1	05/11/21 20:13	BK	n/a	n/a	V3B7452
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.4	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-20(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-16	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	8.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HPT-20(43021)

Lab Sample ID: JD24427-16

Matrix: AQ - Water

Method: SW846 8260D

Project: GE, 13th Street, Tell City, IN

Date Sampled: 04/30/21

Date Received: 05/04/21

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-21(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-17	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165534.D	1	05/11/21 20:42	BK	n/a	n/a	V3B7452
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.76	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-21(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-17	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	0.86	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		85-118%
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HPT-21(43021)

Lab Sample ID: JD24427-17

Matrix: AQ - Water

Method: SW846 8260D

Project: GE, 13th Street, Tell City, IN

Date Sampled: 04/30/21

Date Received: 05/04/21

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-22(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-18	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165494.D	1	05/11/21 00:54	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-22(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-18	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-5(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-19	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165506.D	10	05/11/21 06:38	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.0	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-5(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-19	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	1230	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
75-01-4	Vinyl chloride	ND	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		85-118%
17060-07-0	1,2-Dichloroethane-D4	102%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-5(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-19	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) (pH= 7)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.

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

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

Report of Analysis

Client Sample ID:	HPT-7(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-20	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2A210319.D	10	05/11/21 00:52	BK	n/a	n/a	V2A9144
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK) ^b	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	8.2	10	5.1	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-7(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-20	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	11.5	10	9.0	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	1970	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
75-01-4	Vinyl chloride	ND	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-7(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-20	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Dilution required due to high concentration of target compound.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-10(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-21	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165507.D	25	05/11/21 07:07	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	76	ug/l	
71-43-2	Benzene	ND	13	11	ug/l	
108-86-1	Bromobenzene	ND	25	14	ug/l	
74-97-5	Bromochloromethane	ND	25	12	ug/l	
75-27-4	Bromodichloromethane	ND	25	11	ug/l	
75-25-2	Bromoform	ND	25	16	ug/l	
74-83-9	Bromomethane	ND	50	41	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	170	ug/l	
104-51-8	n-Butylbenzene	ND	50	13	ug/l	
135-98-8	sec-Butylbenzene	ND	50	16	ug/l	
98-06-6	tert-Butylbenzene	ND	50	17	ug/l	
56-23-5	Carbon tetrachloride	ND	25	14	ug/l	
108-90-7	Chlorobenzene	ND	25	14	ug/l	
75-00-3	Chloroethane	ND	25	18	ug/l	
67-66-3	Chloroform	ND	25	13	ug/l	
74-87-3	Chloromethane	ND	25	19	ug/l	
95-49-8	o-Chlorotoluene	ND	50	16	ug/l	
106-43-4	p-Chlorotoluene	ND	50	15	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	13	ug/l	
124-48-1	Dibromochloromethane	ND	25	14	ug/l	
106-93-4	1,2-Dibromoethane	ND	25	12	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	25	13	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	25	14	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	25	13	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	25	14	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	15	ug/l	
75-35-4	1,1-Dichloroethene	ND	25	15	ug/l	
156-59-2	cis-1,2-Dichloroethene	4550	25	13	ug/l	
156-60-5	trans-1,2-Dichloroethene	35.4	25	13	ug/l	
78-87-5	1,2-Dichloropropane	ND	25	13	ug/l	
142-28-9	1,3-Dichloropropane	ND	25	11	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-10(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-21	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	25	13	ug/l	
563-58-6	1,1-Dichloropropene	ND	25	11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	25	11	ug/l	
100-41-4	Ethylbenzene	ND	25	15	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	13	ug/l	
98-82-8	Isopropylbenzene	ND	25	16	ug/l	
99-87-6	p-Isopropyltoluene	ND	50	16	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	25	13	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	130	46	ug/l	
74-95-3	Methylene bromide	ND	25	12	ug/l	
75-09-2	Methylene chloride	ND	50	25	ug/l	
91-20-3	Naphthalene	ND	130	63	ug/l	
103-65-1	n-Propylbenzene	ND	50	15	ug/l	
100-42-5	Styrene	ND	25	12	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	15	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	16	ug/l	
127-18-4	Tetrachloroethene	ND	25	22	ug/l	
108-88-3	Toluene	ND	25	13	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	25	13	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	13	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	25	13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	25	13	ug/l	
79-01-6	Trichloroethene	512	25	13	ug/l	
75-69-4	Trichlorofluoromethane	ND	50	10	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	17	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	50	25	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	50	25	ug/l	
75-01-4	Vinyl chloride	193	25	20	ug/l	
	m,p-Xylene	ND	25	20	ug/l	
95-47-6	o-Xylene	ND	25	15	ug/l	
1330-20-7	Xylene (total)	ND	25	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%
17060-07-0	1,2-Dichloroethane-D4	102%		80-121%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-10(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-21	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Dilution required due to high concentration of target compound.

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

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

Report of Analysis

Client Sample ID:	HPT-8(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-22	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B165535.D	1	05/11/21 21:10	BK	n/a	n/a	V3B7452
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	0.81	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	110	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	3.5	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-8(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-22	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	72.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	2.6	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		85-118%
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-8(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-22	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	HPT-9(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-23	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165508.D	5	05/11/21 07:36	BK	n/a	n/a	V3B7451
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	748	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	31.6	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-9(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-23	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	311	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	79.9	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		85-118%
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HPT-9(43021)	Date Sampled:	04/30/21
Lab Sample ID:	JD24427-23	Date Received:	05/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) (pH= 3)Sample pH did not satisfy field preservation criteria. Dilution required due to high concentration of target compound.

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

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

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

GW
TB
EB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

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PM

EHSA-QAC-0023-02-FORM-Standard COC

[illegible]

JD24427: Chain of Custody

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SGS

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JD24427



CHAIN OF CUSTODY

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SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSQA-QAC-0023-02-FORM-Standard COC

Client / Reporting Information		Project Information		Requested Analysis										Matrix Codes			
Company Name: Breadis	Project Name: Le Tell City	<div>VOCs</div>										<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank</div>					
Street Address: 150 W Market	Street: 1412 13th																
City: Indianapolis	City: Le Tell City																
State: IN	State: IN																
Zip: 46204	Zip: 46204																
Project Contact: Dan Petzold	Project #:																
E-mail: dan.petzold@breadis.com	Client Purchase Order #:																
Phone #: 317 709 0081	City: Le Tell City																
State: IN	State: IN																
Zip: 46204	Zip: 46204																
Sample Name: B. Antell	Phone #:																
Phone #:	Attention:																
Collection		Number of preserved Bottles										LAB USE ONLY					
SGS Sample #	Field ID / Point of Collection	MECH/ID Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Q1	NaOH	HNO3	H2SO4	NONE	D1 Water	MECH	ENCORE	
12	HPT-16 (43021)		4-30	915	K	G	W	3	X								
13	HPT-17 (43021)		4-30	945	K	G	W	3	X								
14	HPT-18 (43021)		4-30	1030	K	G	W	3	X								
15	HPT-19 (43021)		4-30	1045	K	G	W	3	X								
16	HPT-20 (43021)		4-30	1105	K	G	W	3	X								
17	HPT-21 (43021)		4-30	1135	K	G	W	3	X								
18	HPT-22 (43021)	*	4-30	1330	K	G	W	10	X								
19	HPT-5 (43021)		4-30	1445	K	G	W	3	X								
20	HPT-7 (43021)		4-30	1515	K	G	W	3	X								
21	HPT-10 (43021)		4-30	1545	K	G	W	3	X								
22	HPT-8 (43021)		4-30	1615	K	G	W	3	X								
23	HPT-9 (43021)		4-30	1635	K	G	W	3	X								
Turn Around Time (Business Days)		Deliverable										Comments / Special Instructions					
Approved By (SGS PM): / Date:		Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> Full Tier 1 (Level 4) <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ DKQP <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> MA MCP Criteria <input type="checkbox"/> CT RCP Criteria <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> DOD-QSM5 <input type="checkbox"/>										http://www.sgs.com/en/terms-and-conditions					
<input type="checkbox"/> 10 Business Days <input type="checkbox"/> 5 Business Days <input type="checkbox"/> 3 Business Days <input type="checkbox"/> 2 Business Days <input type="checkbox"/> 1 Business Day <input type="checkbox"/> Other _____ All data available via Lablink		Commercial "A" = Results only; Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data															
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished By: 1	Date / Time: 5/3/2021	Received By: 1	Date / Time: 5/3/2021	Relinquished By: 2	Date / Time: 5/4/2021	Received By: 2	Date / Time: 5/4/2021	Relinquished By: 3	Date / Time: 5/4/2021	Received By: 3	Date / Time: 5/4/2021	Relinquished By: 4	Date / Time: 5/4/2021	Received By: 4	Date / Time: 5/4/2021	Relinquished By: 5	Date / Time: 5/4/2021
Custody Seal # 25618		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Preserved where applicable <input type="checkbox"/> Absent		Therm. ID: <input type="checkbox"/>		On Ice <input type="checkbox"/>		Cooler Temp. °C <input type="checkbox"/>							

JD24427: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD24427

Client: ARCADIS

Project: GE, 13TH STREET, TELL CITY, IN

Date / Time Received: 5/4/2021 3:07:00 AM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.7);

Cooler Temps (Corrected) °C: Cooler 1: (3.0);

Cooler Security

Y or N

1. Custody Seals Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐

Y or N

3. COC Present: ☒ ☐
4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature

Y or N

1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: IR Gun
3. Cooler media: Ice (Bag)
4. No. Coolers: 1

Quality Control Preservation

Y or N N/A

1. Trip Blank present / cooler: ☒ ☐ ☐
2. Trip Blank listed on COC: ☒ ☐ ☐
3. Samples preserved properly: ☒ ☐ ☐
4. VOCs headspace free: ☒ ☐ ☐

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition

Y or N

1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: Intact

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear: ☒ ☐
2. Bottles received for unspecified tests: ☐ ☒
3. Sufficient volume recvd for analysis: ☒ ☐
4. Compositing instructions clear: ☐ ☐ ☒
5. Filtering instructions clear: ☐ ☐ ☒

Test Strip Lot #s:

pH 1-12: 212820

pH 12+: 203117A

Other: (Specify)

Comments 1). Sample -18 Received MS/MSD volume not requested on COC. Please verify.

SM089-03
Rev. Date 12/7/17

JD24427: Chain of Custody

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MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Instrument Performance Checks (BFB)**
- **Surrogate Recovery Summaries**

Method Blank Summary

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A9144-MB	2A210318.D	1	05/11/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A9144-MB	2A210318.D	1	05/11/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 85-118%
17060-07-0	1,2-Dichloroethane-D4	103% 80-121%
2037-26-5	Toluene-D8	98% 80-120%
460-00-4	4-Bromofluorobenzene	100% 80-120%

Method Blank Summary

Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A9144-MB	2A210318.D	1	05/11/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples: Method:

JD24427-10, JD24427-12, JD24427-13, JD24427-20

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

Method Blank Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7451-MB	3B165493.D	1	05/11/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7451-MB	3B165493.D	1	05/11/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 85-118%
17060-07-0	1,2-Dichloroethane-D4	97% 80-121%
2037-26-5	Toluene-D8	95% 80-120%
460-00-4	4-Bromofluorobenzene	93% 80-120%

Method Blank Summary

Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7451-MB	3B165493.D	1	05/11/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method:

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

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

Method Blank Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7452-MB	3B165515.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7452-MB	3B165515.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	112% 85-118%
17060-07-0	1,2-Dichloroethane-D4	104% 80-121%
2037-26-5	Toluene-D8	98% 80-120%
460-00-4	4-Bromofluorobenzene	91% 80-120%

Method Blank Summary

Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7452-MB	3B165515.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples: Method:

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

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

Blank Spike Summary

Page 1 of 2

Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A9144-BS	2A210316.D	1	05/10/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	234	117	63-137
71-43-2	Benzene	50	51.1	102	78-117
108-86-1	Bromobenzene	50	51.4	103	82-121
74-97-5	Bromochloromethane	50	53.4	107	83-124
75-27-4	Bromodichloromethane	50	52.2	104	83-123
75-25-2	Bromoform	50	55.5	111	80-140
74-83-9	Bromomethane	50	54.4	109	26-167
78-93-3	2-Butanone (MEK)	200	247	124	73-135
104-51-8	n-Butylbenzene	50	52.6	105	78-126
135-98-8	sec-Butylbenzene	50	50.8	102	78-122
98-06-6	tert-Butylbenzene	50	51.1	102	77-122
56-23-5	Carbon tetrachloride	50	54.1	108	75-127
108-90-7	Chlorobenzene	50	50.6	101	83-115
75-00-3	Chloroethane	50	55.3	111	61-135
67-66-3	Chloroform	50	50.8	102	76-118
74-87-3	Chloromethane	50	57.4	115	46-144
95-49-8	o-Chlorotoluene	50	52.0	104	80-120
106-43-4	p-Chlorotoluene	50	50.1	100	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	52.5	105	75-135
124-48-1	Dibromochloromethane	50	52.6	105	84-128
106-93-4	1,2-Dibromoethane	50	53.8	108	82-129
95-50-1	1,2-Dichlorobenzene	50	50.7	101	85-117
541-73-1	1,3-Dichlorobenzene	50	50.1	100	83-116
106-46-7	1,4-Dichlorobenzene	50	51.0	102	82-115
75-71-8	Dichlorodifluoromethane	50	56.5	113	49-153
75-34-3	1,1-Dichloroethane	50	54.3	109	75-122
107-06-2	1,2-Dichloroethane	50	50.8	102	74-116
75-35-4	1,1-Dichloroethene	50	52.5	105	68-129
156-59-2	cis-1,2-Dichloroethene	50	51.3	103	78-120
156-60-5	trans-1,2-Dichloroethene	50	52.4	105	74-125
78-87-5	1,2-Dichloropropane	50	53.2	106	80-120
142-28-9	1,3-Dichloropropane	50	51.0	102	82-116
594-20-7	2,2-Dichloropropane	50	50.9	102	70-128
563-58-6	1,1-Dichloropropene	50	54.8	110	75-121
10061-01-5	cis-1,3-Dichloropropene	50	52.4	105	84-123
10061-02-6	trans-1,3-Dichloropropene	50	51.6	103	84-124

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A9144-BS	2A210316.D	1	05/10/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	50.6	101	80-115
87-68-3	Hexachlorobutadiene	50	47.0	94	68-137
98-82-8	Isopropylbenzene	50	51.2	102	79-120
99-87-6	p-Isopropyltoluene	50	51.2	102	80-122
1634-04-4	Methyl Tert Butyl Ether	50	51.9	104	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	218	109	77-129
74-95-3	Methylene bromide	50	52.0	104	83-121
75-09-2	Methylene chloride	50	52.9	106	74-125
91-20-3	Naphthalene	50	54.8	110	73-138
103-65-1	n-Propylbenzene	50	50.3	101	78-117
100-42-5	Styrene	50	52.8	106	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	51.8	104	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	51.2	102	78-122
127-18-4	Tetrachloroethene	50	50.7	101	75-125
108-88-3	Toluene	50	50.7	101	80-115
87-61-6	1,2,3-Trichlorobenzene	50	52.2	104	73-140
120-82-1	1,2,4-Trichlorobenzene	50	52.5	105	77-137
71-55-6	1,1,1-Trichloroethane	50	53.1	106	77-124
79-00-5	1,1,2-Trichloroethane	50	51.6	103	83-118
79-01-6	Trichloroethene	50	52.6	105	80-123
75-69-4	Trichlorofluoromethane	50	52.3	105	71-134
96-18-4	1,2,3-Trichloropropane	50	50.4	101	80-121
95-63-6	1,2,4-Trimethylbenzene	50	51.1	102	81-119
108-67-8	1,3,5-Trimethylbenzene	50	50.6	101	79-120
75-01-4	Vinyl chloride	50	58.1	116	56-138
	m,p-Xylene	100	102	102	81-118
95-47-6	o-Xylene	50	50.7	101	81-119
1330-20-7	Xylene (total)	150	153	102	81-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	85-118%
17060-07-0	1,2-Dichloroethane-D4	102%	80-121%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	100%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7451-BS	3B165491.D	1	05/10/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	235	118	63-137
71-43-2	Benzene	50	50.5	101	78-117
108-86-1	Bromobenzene	50	48.8	98	82-121
74-97-5	Bromochloromethane	50	53.1	106	83-124
75-27-4	Bromodichloromethane	50	49.3	99	83-123
75-25-2	Bromoform	50	50.1	100	80-140
74-83-9	Bromomethane	50	51.8	104	26-167
78-93-3	2-Butanone (MEK)	200	215	108	73-135
104-51-8	n-Butylbenzene	50	51.6	103	78-126
135-98-8	sec-Butylbenzene	50	51.4	103	78-122
98-06-6	tert-Butylbenzene	50	51.5	103	77-122
56-23-5	Carbon tetrachloride	50	52.9	106	75-127
108-90-7	Chlorobenzene	50	51.2	102	83-115
75-00-3	Chloroethane	50	53.6	107	61-135
67-66-3	Chloroform	50	50.0	100	76-118
74-87-3	Chloromethane	50	49.7	99	46-144
95-49-8	o-Chlorotoluene	50	49.8	100	80-120
106-43-4	p-Chlorotoluene	50	48.6	97	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	45.4	91	75-135
124-48-1	Dibromochloromethane	50	51.1	102	84-128
106-93-4	1,2-Dibromoethane	50	51.5	103	82-129
95-50-1	1,2-Dichlorobenzene	50	51.5	103	85-117
541-73-1	1,3-Dichlorobenzene	50	49.9	100	83-116
106-46-7	1,4-Dichlorobenzene	50	48.7	97	82-115
75-71-8	Dichlorodifluoromethane	50	45.4	91	49-153
75-34-3	1,1-Dichloroethane	50	54.0	108	75-122
107-06-2	1,2-Dichloroethane	50	44.3	89	74-116
75-35-4	1,1-Dichloroethene	50	52.5	105	68-129
156-59-2	cis-1,2-Dichloroethene	50	50.7	101	78-120
156-60-5	trans-1,2-Dichloroethene	50	51.6	103	74-125
78-87-5	1,2-Dichloropropane	50	49.1	98	80-120
142-28-9	1,3-Dichloropropane	50	49.2	98	82-116
594-20-7	2,2-Dichloropropane	50	47.4	95	70-128
563-58-6	1,1-Dichloropropene	50	51.4	103	75-121
10061-01-5	cis-1,3-Dichloropropene	50	49.0	98	84-123
10061-02-6	trans-1,3-Dichloropropene	50	49.0	98	84-124

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7451-BS	3B165491.D	1	05/10/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	49.8	100	80-115
87-68-3	Hexachlorobutadiene	50	46.6	93	68-137
98-82-8	Isopropylbenzene	50	52.7	105	79-120
99-87-6	p-Isopropyltoluene	50	50.9	102	80-122
1634-04-4	Methyl Tert Butyl Ether	50	49.2	98	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	193	97	77-129
74-95-3	Methylene bromide	50	49.4	99	83-121
75-09-2	Methylene chloride	50	53.6	107	74-125
91-20-3	Naphthalene	50	51.0	102	73-138
103-65-1	n-Propylbenzene	50	51.0	102	78-117
100-42-5	Styrene	50	51.7	103	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	51.1	102	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	48.4	97	78-122
127-18-4	Tetrachloroethene	50	45.8	92	75-125
108-88-3	Toluene	50	50.9	102	80-115
87-61-6	1,2,3-Trichlorobenzene	50	49.8	100	73-140
120-82-1	1,2,4-Trichlorobenzene	50	50.1	100	77-137
71-55-6	1,1,1-Trichloroethane	50	53.3	107	77-124
79-00-5	1,1,2-Trichloroethane	50	51.3	103	83-118
79-01-6	Trichloroethene	50	51.1	102	80-123
75-69-4	Trichlorofluoromethane	50	49.5	99	71-134
96-18-4	1,2,3-Trichloropropane	50	47.8	96	80-121
95-63-6	1,2,4-Trimethylbenzene	50	51.9	104	81-119
108-67-8	1,3,5-Trimethylbenzene	50	49.8	100	79-120
75-01-4	Vinyl chloride	50	52.3	105	56-138
	m,p-Xylene	100	102	102	81-118
95-47-6	o-Xylene	50	50.6	101	81-119
1330-20-7	Xylene (total)	150	152	101	81-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	85-118%
17060-07-0	1,2-Dichloroethane-D4	92%	80-121%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7452-BS	3B165513.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	214	107	63-137
71-43-2	Benzene	50	48.7	97	78-117
108-86-1	Bromobenzene	50	44.8	90	82-121
74-97-5	Bromochloromethane	50	49.8	100	83-124
75-27-4	Bromodichloromethane	50	47.5	95	83-123
75-25-2	Bromoform	50	47.3	95	80-140
74-83-9	Bromomethane	50	54.2	108	26-167
78-93-3	2-Butanone (MEK)	200	199	100	73-135
104-51-8	n-Butylbenzene	50	51.0	102	78-126
135-98-8	sec-Butylbenzene	50	49.3	99	78-122
98-06-6	tert-Butylbenzene	50	48.5	97	77-122
56-23-5	Carbon tetrachloride	50	53.1	106	75-127
108-90-7	Chlorobenzene	50	47.2	94	83-115
75-00-3	Chloroethane	50	55.8	112	61-135
67-66-3	Chloroform	50	47.6	95	76-118
74-87-3	Chloromethane	50	50.6	101	46-144
95-49-8	o-Chlorotoluene	50	47.1	94	80-120
106-43-4	p-Chlorotoluene	50	47.0	94	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	43.6	87	75-135
124-48-1	Dibromochloromethane	50	47.6	95	84-128
106-93-4	1,2-Dibromoethane	50	47.2	94	82-129
95-50-1	1,2-Dichlorobenzene	50	49.1	98	85-117
541-73-1	1,3-Dichlorobenzene	50	48.3	97	83-116
106-46-7	1,4-Dichlorobenzene	50	45.8	92	82-115
75-71-8	Dichlorodifluoromethane	50	46.0	92	49-153
75-34-3	1,1-Dichloroethane	50	52.1	104	75-122
107-06-2	1,2-Dichloroethane	50	42.5	85	74-116
75-35-4	1,1-Dichloroethene	50	52.3	105	68-129
156-59-2	cis-1,2-Dichloroethene	50	49.2	98	78-120
156-60-5	trans-1,2-Dichloroethene	50	49.4	99	74-125
78-87-5	1,2-Dichloropropane	50	46.8	94	80-120
142-28-9	1,3-Dichloropropane	50	44.3	89	82-116
594-20-7	2,2-Dichloropropane	50	50.8	102	70-128
563-58-6	1,1-Dichloropropene	50	50.8	102	75-121
10061-01-5	cis-1,3-Dichloropropene	50	46.5	93	84-123
10061-02-6	trans-1,3-Dichloropropene	50	45.6	91	84-124

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7452-BS	3B165513.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	46.7	93	80-115
87-68-3	Hexachlorobutadiene	50	45.9	92	68-137
98-82-8	Isopropylbenzene	50	50.2	100	79-120
99-87-6	p-Isopropyltoluene	50	48.9	98	80-122
1634-04-4	Methyl Tert Butyl Ether	50	46.3	93	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	181	91	77-129
74-95-3	Methylene bromide	50	46.5	93	83-121
75-09-2	Methylene chloride	50	50.6	101	74-125
91-20-3	Naphthalene	50	48.8	98	73-138
103-65-1	n-Propylbenzene	50	49.3	99	78-117
100-42-5	Styrene	50	48.0	96	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	49.1	98	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	48.3	97	78-122
127-18-4	Tetrachloroethene	50	44.5	89	75-125
108-88-3	Toluene	50	47.8	96	80-115
87-61-6	1,2,3-Trichlorobenzene	50	46.6	93	73-140
120-82-1	1,2,4-Trichlorobenzene	50	48.3	97	77-137
71-55-6	1,1,1-Trichloroethane	50	52.8	106	77-124
79-00-5	1,1,2-Trichloroethane	50	46.9	94	83-118
79-01-6	Trichloroethene	50	46.5	93	80-123
75-69-4	Trichlorofluoromethane	50	53.5	107	71-134
96-18-4	1,2,3-Trichloropropane	50	43.9	88	80-121
95-63-6	1,2,4-Trimethylbenzene	50	49.6	99	81-119
108-67-8	1,3,5-Trimethylbenzene	50	47.6	95	79-120
75-01-4	Vinyl chloride	50	53.8	108	56-138
	m,p-Xylene	100	96.2	96	81-118
95-47-6	o-Xylene	50	48.2	96	81-119
1330-20-7	Xylene (total)	150	144	96	81-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	85-118%
17060-07-0	1,2-Dichloroethane-D4	96%	80-121%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	95%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24551-1MS	3B165526.D	1	05/11/21	BK	n/a	n/a	V3B7452
JD24551-1	3B165519.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	JD24551-1 ug/l	Spike Q	MS ug/l	MS %	Limits
67-64-1	Acetone	ND	200	138	69	52-133
71-43-2	Benzene	ND	50	56.8	114	55-129
108-86-1	Bromobenzene	ND	50	54.3	109	73-120
74-97-5	Bromochloromethane	ND	50	58.1	116	75-122
75-27-4	Bromodichloromethane	ND	50	55.8	112	74-123
75-25-2	Bromoform	ND	50	56.0	112	69-135
74-83-9	Bromomethane	ND	50	59.5	119	11-167
78-93-3	2-Butanone (MEK)	ND	200	182	91	64-131
104-51-8	n-Butylbenzene	ND	50	61.4	123	69-130
135-98-8	sec-Butylbenzene	ND	50	61.1	122	70-125
98-06-6	tert-Butylbenzene	ND	50	59.5	119	68-125
56-23-5	Carbon tetrachloride	ND	50	62.7	125	68-132
108-90-7	Chlorobenzene	ND	50	57.4	115	71-119
75-00-3	Chloroethane	ND	50	60.7	121	50-146
67-66-3	Chloroform	ND	50	56.1	112	67-120
74-87-3	Chloromethane	ND	50	55.4	111	42-146
95-49-8	o-Chlorotoluene	ND	50	57.7	115	71-120
106-43-4	p-Chlorotoluene	ND	50	55.9	112	71-117
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	48.1	96	65-130
124-48-1	Dibromochloromethane	ND	50	55.6	111	74-125
106-93-4	1,2-Dibromoethane	ND	50	55.9	112	74-125
95-50-1	1,2-Dichlorobenzene	ND	50	57.3	115	73-117
541-73-1	1,3-Dichlorobenzene	ND	50	56.9	114	73-117
106-46-7	1,4-Dichlorobenzene	ND	50	53.7	107	70-117
75-71-8	Dichlorodifluoromethane	ND	50	51.9	104	46-169
75-34-3	1,1-Dichloroethane	ND	50	60.2	120	66-124
107-06-2	1,2-Dichloroethane	ND	50	48.8	98	66-115
75-35-4	1,1-Dichloroethene	ND	50	63.8	128	60-136
156-59-2	cis-1,2-Dichloroethene	ND	50	57.5	115	55-133
156-60-5	trans-1,2-Dichloroethene	ND	50	61.1	122	67-127
78-87-5	1,2-Dichloropropane	ND	50	56.1	112	72-120
142-28-9	1,3-Dichloropropane	ND	50	52.6	105	72-115
594-20-7	2,2-Dichloropropane	ND	50	61.7	123	61-133
563-58-6	1,1-Dichloropropene	ND	50	61.0	122	68-127
10061-01-5	cis-1,3-Dichloropropene	ND	50	56.3	113	75-123
10061-02-6	trans-1,3-Dichloropropene	ND	50	54.4	109	73-122

* = Outside of Control Limits.

Matrix Spike Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24551-1MS	3B165526.D	1	05/11/21	BK	n/a	n/a	V3B7452
JD24551-1	3B165519.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	JD24551-1 ug/l	Spike Q	MS ug/l	MS %	Limits
100-41-4	Ethylbenzene	ND	50	56.5	113	44-136
87-68-3	Hexachlorobutadiene	ND	50	56.7	113	55-143
98-82-8	Isopropylbenzene	ND	50	61.7	123* a	71-122
99-87-6	p-Isopropyltoluene	ND	50	59.9	120	72-124
1634-04-4	Methyl Tert Butyl Ether	ND	50	52.8	106	64-122
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	200	198	99	68-128
74-95-3	Methylene bromide	ND	50	53.4	107	74-118
75-09-2	Methylene chloride	ND	50	59.8	120	65-126
91-20-3	Naphthalene	ND	50	53.6	107	58-140
103-65-1	n-Propylbenzene	ND	50	59.6	119	64-123
100-42-5	Styrene	ND	50	57.8	116	73-124
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	56.3	113	74-123
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	53.9	108	68-120
127-18-4	Tetrachloroethene	ND	50	54.9	110	61-134
108-88-3	Toluene	ND	50	58.3	117	54-130
87-61-6	1,2,3-Trichlorobenzene	ND	50	54.1	108	64-135
120-82-1	1,2,4-Trichlorobenzene	ND	50	55.9	112	67-134
71-55-6	1,1,1-Trichloroethane	ND	50	64.2	128	66-130
79-00-5	1,1,2-Trichloroethane	ND	50	54.4	109	73-117
79-01-6	Trichloroethene	ND	50	56.2	112	56-139
75-69-4	Trichlorofluoromethane	ND	50	59.3	119	63-150
96-18-4	1,2,3-Trichloropropane	ND	50	51.0	102	71-118
95-63-6	1,2,4-Trimethylbenzene	ND	50	59.0	118	45-139
108-67-8	1,3,5-Trimethylbenzene	ND	50	57.6	115	60-128
75-01-4	Vinyl chloride	ND	50	59.9	120	48-148
	m,p-Xylene	ND	100	116	116	42-140
95-47-6	o-Xylene	ND	50	57.9	116	54-133
1330-20-7	Xylene (total)	ND	150	174	116	46-138

CAS No.	Surrogate Recoveries	MS	JD24551-1	Limits
1868-53-7	Dibromofluoromethane	108%	107%	85-118%
17060-07-0	1,2-Dichloroethane-D4	92%	94%	80-121%
2037-26-5	Toluene-D8	99%	95%	80-120%
460-00-4	4-Bromofluorobenzene	97%	92%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24551-1MS	3B165526.D	1	05/11/21	BK	n/a	n/a	V3B7452
JD24551-1	3B165519.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24427-20MS	2A210320.D	10	05/11/21	BK	n/a	n/a	V2A9144
JD24427-20MSD	2A210321.D	10	05/11/21	BK	n/a	n/a	V2A9144
JD24427-20 ^a	2A210319.D	10	05/11/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

CAS No.	Compound	JD24427-20 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	ND		2000	1400	70	2000	1370	69	2	52-133/18
71-43-2	Benzene	ND		500	506	101	500	512	102	1	55-129/11
108-86-1	Bromobenzene	ND		500	502	100	500	509	102	1	73-120/11
74-97-5	Bromochloromethane	ND		500	518	104	500	527	105	2	75-122/10
75-27-4	Bromodichloromethane	ND		500	519	104	500	521	104	0	74-123/11
75-25-2	Bromoform	ND		500	547	109	500	543	109	1	69-135/12
74-83-9	Bromomethane	ND		500	532	106	500	544	109	2	11-167/43
78-93-3	2-Butanone (MEK)	ND		2000	1910	96	2000	1890	95	1	64-131/15
104-51-8	n-Butylbenzene	ND		500	511	102	500	520	104	2	69-130/11
135-98-8	sec-Butylbenzene	ND		500	498	100	500	505	101	1	70-125/12
98-06-6	tert-Butylbenzene	ND		500	506	101	500	511	102	1	68-125/12
56-23-5	Carbon tetrachloride	ND		500	524	105	500	544	109	4	68-132/11
108-90-7	Chlorobenzene	ND		500	497	99	500	500	100	1	71-119/10
75-00-3	Chloroethane	ND		500	534	107	500	552	110	3	50-146/18
67-66-3	Chloroform	ND		500	483	97	500	493	99	2	67-120/11
74-87-3	Chloromethane	ND		500	553	111	500	566	113	2	42-146/17
95-49-8	o-Chlorotoluene	ND		500	507	101	500	518	104	2	71-120/12
106-43-4	p-Chlorotoluene	ND		500	490	98	500	493	99	1	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	538	108	500	539	108	0	65-130/15
124-48-1	Dibromochloromethane	ND		500	517	103	500	519	104	0	74-125/10
106-93-4	1,2-Dibromoethane	ND		500	535	107	500	530	106	1	74-125/9
95-50-1	1,2-Dichlorobenzene	ND		500	499	100	500	502	100	1	73-117/10
541-73-1	1,3-Dichlorobenzene	ND		500	488	98	500	491	98	1	73-117/10
106-46-7	1,4-Dichlorobenzene	ND		500	502	100	500	506	101	1	70-117/10
75-71-8	Dichlorodifluoromethane	ND		500	524	105	500	555	111	6	46-169/17
75-34-3	1,1-Dichloroethane	ND		500	526	105	500	536	107	2	66-124/13
107-06-2	1,2-Dichloroethane	ND		500	507	101	500	502	100	1	66-115/10
75-35-4	1,1-Dichloroethene	ND		500	509	102	500	524	105	3	60-136/15
156-59-2	cis-1,2-Dichloroethene	8.2	J	500	506	100	500	514	101	2	55-133/12
156-60-5	trans-1,2-Dichloroethene	ND		500	509	102	500	524	105	3	67-127/13
78-87-5	1,2-Dichloropropane	ND		500	521	104	500	529	106	2	72-120/11
142-28-9	1,3-Dichloropropane	ND		500	513	103	500	510	102	1	72-115/10
594-20-7	2,2-Dichloropropane	ND		500	478	96	500	492	98	3	61-133/12
563-58-6	1,1-Dichloropropene	ND		500	529	106	500	540	108	2	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		500	517	103	500	512	102	1	75-123/12
10061-02-6	trans-1,3-Dichloropropene	ND		500	511	102	500	512	102	0	73-122/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24427-20MS	2A210320.D	10	05/11/21	BK	n/a	n/a	V2A9144
JD24427-20MSD	2A210321.D	10	05/11/21	BK	n/a	n/a	V2A9144
JD24427-20 ^a	2A210319.D	10	05/11/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

CAS No.	Compound	JD24427-20 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	500	497	99	500	505	101	2	44-136/10
87-68-3	Hexachlorobutadiene	ND	500	459	92	500	466	93	2	55-143/15
98-82-8	Isopropylbenzene	ND	500	505	101	500	510	102	1	71-122/11
99-87-6	p-Isopropyltoluene	ND	500	499	100	500	506	101	1	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND	500	513	103	500	518	104	1	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2000	2150	108	2000	2110	106	2	68-128/13
74-95-3	Methylene bromide	ND	500	525	105	500	514	103	2	74-118/10
75-09-2	Methylene chloride	ND	500	512	102	500	523	105	2	65-126/13
91-20-3	Naphthalene	ND	500	556	111	500	552	110	1	58-140/16
103-65-1	n-Propylbenzene	ND	500	494	99	500	495	99	0	64-123/11
100-42-5	Styrene	ND	500	515	103	500	515	103	0	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	508	102	500	520	104	2	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	537	107	500	532	106	1	68-120/15
127-18-4	Tetrachloroethene	11.5	500	502	98	500	511	100	2	61-134/11
108-88-3	Toluene	ND	500	500	100	500	509	102	2	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND	500	524	105	500	526	105	0	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND	500	528	106	500	526	105	0	67-134/14
71-55-6	1,1,1-Trichloroethane	ND	500	520	104	500	535	107	3	66-130/12
79-00-5	1,1,2-Trichloroethane	ND	500	522	104	500	517	103	1	73-117/11
79-01-6	Trichloroethene	1970	500	2190	44* ^b	500	2190	44* ^b	0	56-139/11
75-69-4	Trichlorofluoromethane	ND	500	510	102	500	529	106	4	63-150/16
96-18-4	1,2,3-Trichloropropane	ND	500	496	99	500	494	99	0	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND	500	503	101	500	508	102	1	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND	500	497	99	500	503	101	1	60-128/12
75-01-4	Vinyl chloride	ND	500	556	111	500	578	116	4	48-148/17
	m,p-Xylene	ND	1000	994	99	1000	1010	101	2	42-140/10
95-47-6	o-Xylene	ND	500	503	101	500	506	101	1	54-133/11
1330-20-7	Xylene (total)	ND	1500	1500	100	1500	1510	101	1	46-138/10

CAS No.	Surrogate Recoveries	MS	MSD	JD24427-20	Limits
1868-53-7	Dibromofluoromethane	102%	102%	102%	85-118%
17060-07-0	1,2-Dichloroethane-D4	102%	101%	101%	80-121%
2037-26-5	Toluene-D8	100%	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	98%	99%	102%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24427-20MS	2A210320.D	10	05/11/21	BK	n/a	n/a	V2A9144
JD24427-20MSD	2A210321.D	10	05/11/21	BK	n/a	n/a	V2A9144
JD24427-20 ^a	2A210319.D	10	05/11/21	BK	n/a	n/a	V2A9144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-10, JD24427-12, JD24427-13, JD24427-20

- (a) Dilution required due to high concentration of target compound.
- (b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24427-18MS	3B165495.D	1	05/11/21	BK	n/a	n/a	V3B7451
JD24427-18MSD	3B165496.D	1	05/11/21	BK	n/a	n/a	V3B7451
JD24427-18	3B165494.D	1	05/11/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

CAS No.	Compound	JD24427-18 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	200	147	74	200	137	69	7	52-133/18
71-43-2	Benzene	ND	50	48.7	97	50	49.7	99	2	55-129/11
108-86-1	Bromobenzene	ND	50	44.0	88	50	46.2	92	5	73-120/11
74-97-5	Bromochloromethane	ND	50	50.2	100	50	51.0	102	2	75-122/10
75-27-4	Bromodichloromethane	ND	50	46.7	93	50	48.6	97	4	74-123/11
75-25-2	Bromoform	ND	50	46.3	93	50	47.9	96	3	69-135/12
74-83-9	Bromomethane	ND	50	55.5	111	50	56.9	114	2	11-167/43
78-93-3	2-Butanone (MEK)	ND	200	174	87	200	172	86	1	64-131/15
104-51-8	n-Butylbenzene	ND	50	48.0	96	50	50.4	101	5	69-130/11
135-98-8	sec-Butylbenzene	ND	50	48.2	96	50	51.6	103	7	70-125/12
98-06-6	tert-Butylbenzene	ND	50	47.7	95	50	51.0	102	7	68-125/12
56-23-5	Carbon tetrachloride	ND	50	52.4	105	50	53.5	107	2	68-132/11
108-90-7	Chlorobenzene	ND	50	46.5	93	50	48.7	97	5	71-119/10
75-00-3	Chloroethane	ND	50	58.7	117	50	58.9	118	0	50-146/18
67-66-3	Chloroform	ND	50	47.1	94	50	46.7	93	1	67-120/11
74-87-3	Chloromethane	ND	50	52.3	105	50	59.6	119	13	42-146/17
95-49-8	o-Chlorotoluene	ND	50	46.1	92	50	48.0	96	4	71-120/12
106-43-4	p-Chlorotoluene	ND	50	44.5	89	50	47.2	94	6	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	43.7	87	50	44.9	90	3	65-130/15
124-48-1	Dibromochloromethane	ND	50	47.6	95	50	48.3	97	1	74-125/10
106-93-4	1,2-Dibromoethane	ND	50	47.7	95	50	50.6	101	6	74-125/9
95-50-1	1,2-Dichlorobenzene	ND	50	46.2	92	50	48.4	97	5	73-117/10
541-73-1	1,3-Dichlorobenzene	ND	50	44.7	89	50	48.1	96	7	73-117/10
106-46-7	1,4-Dichlorobenzene	ND	50	43.7	87	50	45.9	92	5	70-117/10
75-71-8	Dichlorodifluoromethane	ND	50	48.2	96	50	56.5	113	16	46-169/17
75-34-3	1,1-Dichloroethane	ND	50	53.0	106	50	51.8	104	2	66-124/13
107-06-2	1,2-Dichloroethane	ND	50	42.7	85	50	42.4	85	1	66-115/10
75-35-4	1,1-Dichloroethene	ND	50	53.8	108	50	54.1	108	1	60-136/15
156-59-2	cis-1,2-Dichloroethene	ND	50	50.4	101	50	50.0	100	1	55-133/12
156-60-5	trans-1,2-Dichloroethene	ND	50	52.4	105	50	52.6	105	0	67-127/13
78-87-5	1,2-Dichloropropane	ND	50	47.2	94	50	47.8	96	1	72-120/11
142-28-9	1,3-Dichloropropane	ND	50	46.2	92	50	46.6	93	1	72-115/10
594-20-7	2,2-Dichloropropane	ND	50	45.7	91	50	45.6	91	0	61-133/12
563-58-6	1,1-Dichloropropene	ND	50	50.5	101	50	50.2	100	1	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND	50	45.6	91	50	47.6	95	4	75-123/12
10061-02-6	trans-1,3-Dichloropropene	ND	50	46.4	93	50	47.1	94	1	73-122/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24427-18MS	3B165495.D	1	05/11/21	BK	n/a	n/a	V3B7451
JD24427-18MSD	3B165496.D	1	05/11/21	BK	n/a	n/a	V3B7451
JD24427-18	3B165494.D	1	05/11/21	BK	n/a	n/a	V3B7451

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-1, JD24427-2, JD24427-3, JD24427-4, JD24427-5, JD24427-6, JD24427-7, JD24427-9, JD24427-11, JD24427-18, JD24427-19, JD24427-21, JD24427-23

CAS No.	Compound	JD24427-18 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	50	46.7	93	50	47.6	95	2	44-136/10
87-68-3	Hexachlorobutadiene	ND	50	42.0	84	50	44.1	88	5	55-143/15
98-82-8	Isopropylbenzene	ND	50	49.3	99	50	50.4	101	2	71-122/11
99-87-6	p-Isopropyltoluene	ND	50	47.0	94	50	49.6	99	5	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND	50	47.1	94	50	47.4	95	1	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	200	184	92	200	188	94	2	68-128/13
74-95-3	Methylene bromide	ND	50	47.0	94	50	47.5	95	1	74-118/10
75-09-2	Methylene chloride	ND	50	51.9	104	50	52.2	104	1	65-126/13
91-20-3	Naphthalene	ND	50	44.4	89	50	47.4	95	7	58-140/16
103-65-1	n-Propylbenzene	ND	50	47.7	95	50	50.3	101	5	64-123/11
100-42-5	Styrene	ND	50	44.3	89	50	46.4	93	5	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	47.8	96	50	48.0	96	0	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	48.3	97	50	50.4	101	4	68-120/15
127-18-4	Tetrachloroethene	ND	50	44.7	89	50	44.7	89	0	61-134/11
108-88-3	Toluene	ND	50	49.0	98	50	49.8	100	2	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND	50	42.8	86	50	45.1	90	5	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND	50	43.5	87	50	45.8	92	5	67-134/14
71-55-6	1,1,1-Trichloroethane	ND	50	52.8	106	50	54.0	108	2	66-130/12
79-00-5	1,1,2-Trichloroethane	ND	50	49.3	99	50	48.9	98	1	73-117/11
79-01-6	Trichloroethene	ND	50	48.7	97	50	47.9	96	2	56-139/11
75-69-4	Trichlorofluoromethane	ND	50	54.1	108	50	55.1	110	2	63-150/16
96-18-4	1,2,3-Trichloropropane	ND	50	45.0	90	50	47.7	95	6	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND	50	47.8	96	50	49.6	99	4	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND	50	46.8	94	50	48.6	97	4	60-128/12
75-01-4	Vinyl chloride	ND	50	56.3	113	50	63.1	126	11	48-148/17
	m,p-Xylene	ND	100	95.2	95	100	98.6	99	4	42-140/10
95-47-6	o-Xylene	ND	50	47.7	95	50	48.1	96	1	54-133/11
1330-20-7	Xylene (total)	ND	150	143	95	150	147	98	3	46-138/10

CAS No.	Surrogate Recoveries	MS	MSD	JD24427-18	Limits
1868-53-7	Dibromofluoromethane	109%	107%	107%	85-118%
17060-07-0	1,2-Dichloroethane-D4	92%	92%	98%	80-121%
2037-26-5	Toluene-D8	101%	98%	95%	80-120%
460-00-4	4-Bromofluorobenzene	95%	98%	94%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 2

Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24551-2DUP	3B165528.D	1	05/11/21	BK	n/a	n/a	V3B7452
JD24551-2	3B165520.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	JD24551-2 ug/l	DUP Q ug/l	Q	RPD	Limits
67-64-1	Acetone	ND	ND		nc	17
71-43-2	Benzene	ND	ND		nc	11
108-86-1	Bromobenzene	ND	ND		nc	20
74-97-5	Bromochloromethane	ND	ND		nc	20
75-27-4	Bromodichloromethane	ND	ND		nc	10
75-25-2	Bromoform	ND	ND		nc	10
74-83-9	Bromomethane	ND	ND		nc	10
78-93-3	2-Butanone (MEK)	ND	ND		nc	10
104-51-8	n-Butylbenzene	ND	ND		nc	9
135-98-8	sec-Butylbenzene	ND	ND		nc	5
98-06-6	tert-Butylbenzene	ND	ND		nc	10
56-23-5	Carbon tetrachloride	ND	ND		nc	8
108-90-7	Chlorobenzene	ND	ND		nc	10
75-00-3	Chloroethane	ND	ND		nc	10
67-66-3	Chloroform	ND	ND		nc	8
74-87-3	Chloromethane	ND	ND		nc	10
95-49-8	o-Chlorotoluene	ND	ND		nc	10
106-43-4	p-Chlorotoluene	ND	ND		nc	10
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND		nc	20
124-48-1	Dibromochloromethane	ND	ND		nc	10
106-93-4	1,2-Dibromoethane	ND	ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	10
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	10
75-71-8	Dichlorodifluoromethane	ND	ND		nc	20
75-34-3	1,1-Dichloroethane	ND	ND		nc	6
107-06-2	1,2-Dichloroethane	ND	ND		nc	10
75-35-4	1,1-Dichloroethene	ND	ND		nc	10
156-59-2	cis-1,2-Dichloroethene	ND	ND		nc	13
156-60-5	trans-1,2-Dichloroethene	ND	ND		nc	10
78-87-5	1,2-Dichloropropane	ND	ND		nc	20
142-28-9	1,3-Dichloropropane	ND	ND		nc	20
594-20-7	2,2-Dichloropropane	ND	ND		nc	20
563-58-6	1,1-Dichloropropene	ND	ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND	ND		nc	20
10061-02-6	trans-1,3-Dichloropropene	ND	ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Page 2 of 2

Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD24551-2DUP	3B165528.D	1	05/11/21	BK	n/a	n/a	V3B7452
JD24551-2	3B165520.D	1	05/11/21	BK	n/a	n/a	V3B7452

The QC reported here applies to the following samples:

Method: SW846 8260D

JD24427-8, JD24427-14, JD24427-15, JD24427-16, JD24427-17, JD24427-22

CAS No.	Compound	JD24551-2 ug/l	DUP Q ug/l	Q	RPD	Limits
100-41-4	Ethylbenzene	ND	ND		nc	7
87-68-3	Hexachlorobutadiene	ND	ND		nc	20
98-82-8	Isopropylbenzene	ND	ND		nc	8
99-87-6	p-Isopropyltoluene	ND	ND		nc	10
1634-04-4	Methyl Tert Butyl Ether	1.4	1.3		7	12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	ND		nc	10
74-95-3	Methylene bromide	ND	ND		nc	20
75-09-2	Methylene chloride	ND	ND		nc	10
91-20-3	Naphthalene	ND	ND		nc	7
103-65-1	n-Propylbenzene	ND	ND		nc	9
100-42-5	Styrene	ND	ND		nc	20
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	10
127-18-4	Tetrachloroethene	ND	ND		nc	10
108-88-3	Toluene	ND	ND		nc	10
87-61-6	1,2,3-Trichlorobenzene	ND	ND		nc	10
120-82-1	1,2,4-Trichlorobenzene	ND	ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND	ND		nc	10
79-01-6	Trichloroethene	ND	ND		nc	12
75-69-4	Trichlorofluoromethane	ND	ND		nc	20
96-18-4	1,2,3-Trichloropropane	ND	ND		nc	20
95-63-6	1,2,4-Trimethylbenzene	ND	ND		nc	10
108-67-8	1,3,5-Trimethylbenzene	ND	ND		nc	10
75-01-4	Vinyl chloride	ND	ND		nc	6
	m,p-Xylene	ND	ND		nc	6
95-47-6	o-Xylene	ND	ND		nc	4
1330-20-7	Xylene (total)	ND	ND		nc	8

CAS No.	Surrogate Recoveries	DUP	JD24551-2	Limits
1868-53-7	Dibromofluoromethane	112%	110%	85-118%
17060-07-0	1,2-Dichloroethane-D4	101%	99%	80-121%
2037-26-5	Toluene-D8	97%	97%	80-120%
460-00-4	4-Bromofluorobenzene	91%	92%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample: V2A9140-BFB
Lab File ID: 2A210220.D
Instrument ID: GCMS2A
Injection Date: 05/06/21
Injection Time: 17:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	32213	19.6	Pass
75	30.0 - 60.0% of mass 95	78920	48.0	Pass
95	Base peak, 100% relative abundance	164458	100.0	Pass
96	5.0 - 9.0% of mass 95	11450	6.96	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	134229	81.6	Pass
175	5.0 - 9.0% of mass 174	10326	6.28 (7.69) ^a	Pass
176	95.0 - 101.0% of mass 174	131914	80.2 (98.3) ^a	Pass
177	5.0 - 9.0% of mass 176	8910	5.42 (6.75) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2A9140-IC9140	2A210221.D	05/06/21	18:26	00:29	Initial cal 0.2
V2A9140-IC9140	2A210222.D	05/06/21	18:55	00:58	Initial cal 0.5
V2A9140-IC9140	2A210223.D	05/06/21	19:23	01:26	Initial cal 1
V2A9140-IC9140	2A210224.D	05/06/21	19:51	01:54	Initial cal 2
V2A9140-IC9140	2A210225.D	05/06/21	20:20	02:23	Initial cal 4
V2A9140-IC9140	2A210226.D	05/06/21	20:49	02:52	Initial cal 8
V2A9140-IC9140	2A210227.D	05/06/21	21:17	03:20	Initial cal 20
V2A9140-ICC9140	2A210228.D	05/06/21	21:46	03:49	Initial cal 50
V2A9140-IC9140	2A210229.D	05/06/21	22:15	04:18	Initial cal 100
V2A9140-IC9140	2A210230.D	05/06/21	22:43	04:46	Initial cal 200
V2A9140-ICV9140	2A210233.D	05/07/21	00:09	06:12	Initial cal verification 50
V2A9140-ICV9140	2A210234.D	05/07/21	00:38	06:41	Initial cal verification 50

Instrument Performance Check (BFB)

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample: V2A9144-BFB Injection Date: 05/10/21
Lab File ID: 2A210314.D Injection Time: 22:29
Instrument ID: GCMS2A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	39728	20.8	Pass
75	30.0 - 60.0% of mass 95	95576	50.1	Pass
95	Base peak, 100% relative abundance	190827	100.0	Pass
96	5.0 - 9.0% of mass 95	12269	6.43	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	154376	80.9	Pass
175	5.0 - 9.0% of mass 174	12355	6.47 (8.00) ^a	Pass
176	95.0 - 101.0% of mass 174	151544	79.4 (98.2) ^a	Pass
177	5.0 - 9.0% of mass 176	10774	5.65 (7.11) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2A9144-CC9140	2A210314.D	05/10/21	22:29	00:00	Continuing cal 50
V2A9144-BS	2A210316.D	05/10/21	23:26	00:57	Blank Spike
V2A9144-MB	2A210318.D	05/11/21	00:23	01:54	Method Blank
JD24427-20	2A210319.D	05/11/21	00:52	02:23	HPT-7(43021)
JD24427-20MS	2A210320.D	05/11/21	01:20	02:51	Matrix Spike
JD24427-20MSD	2A210321.D	05/11/21	01:49	03:20	Matrix Spike Duplicate
ZZZZZZ	2A210322.D	05/11/21	02:17	03:48	(unrelated sample)
ZZZZZZ	2A210323.D	05/11/21	02:46	04:17	(unrelated sample)
ZZZZZZ	2A210325.D	05/11/21	03:43	05:14	(unrelated sample)
JD24427-10	2A210327.D	05/11/21	04:40	06:11	DUP-1(42921)
JD24427-12	2A210328.D	05/11/21	05:08	06:39	HPT-16(43021)
JD24427-13	2A210329.D	05/11/21	05:37	07:08	HPT-17(43021)
ZZZZZZ	2A210330.D	05/11/21	06:05	07:36	(unrelated sample)
ZZZZZZ	2A210331.D	05/11/21	06:34	08:05	(unrelated sample)
ZZZZZZ	2A210332.D	05/11/21	07:02	08:33	(unrelated sample)
ZZZZZZ	2A210333.D	05/11/21	07:30	09:01	(unrelated sample)

Instrument Performance Check (BFB)

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample: V3B7429-BFB Injection Date: 04/22/21
Lab File ID: 3B164950.D Injection Time: 17:46
Instrument ID: GCMS3B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	9739	18.9	Pass
75	30.0 - 60.0% of mass 95	24437	47.4	Pass
95	Base peak, 100% relative abundance	51552	100.0	Pass
96	5.0 - 9.0% of mass 95	3625	7.03	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	48269	93.6	Pass
175	5.0 - 9.0% of mass 174	3815	7.40 (7.90) ^a	Pass
176	95.0 - 101.0% of mass 174	46952	91.1 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	3111	6.03 (6.63) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B7429-IC7429	3B164951.D	04/22/21	18:23	00:37	Initial cal 0.2
V3B7429-IC7429	3B164952.D	04/22/21	18:52	01:06	Initial cal 0.5
V3B7429-IC7429	3B164953.D	04/22/21	19:20	01:34	Initial cal 1
V3B7429-IC7429	3B164954.D	04/22/21	19:49	02:03	Initial cal 2
V3B7429-IC7429	3B164955.D	04/22/21	20:18	02:32	Initial cal 4
V3B7429-IC7429	3B164956.D	04/22/21	20:47	03:01	Initial cal 8
V3B7429-IC7429	3B164957.D	04/22/21	21:15	03:29	Initial cal 20
V3B7429-ICC7429	3B164958.D	04/22/21	21:44	03:58	Initial cal 50
V3B7429-IC7429	3B164959.D	04/22/21	22:13	04:27	Initial cal 100
V3B7429-IC7429	3B164960.D	04/22/21	22:41	04:55	Initial cal 200
V3B7429-ICV7429	3B164963.D	04/23/21	00:08	06:22	Initial cal verification 50
V3B7429-ICV7429	3B164964.D	04/23/21	00:37	06:51	Initial cal verification 50

Instrument Performance Check (BFB)

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample: V3B7451-BFB Injection Date: 05/10/21
Lab File ID: 3B165489.D Injection Time: 22:30
Instrument ID: GCMS3B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	10966	18.7	Pass
75	30.0 - 60.0% of mass 95	27715	47.3	Pass
95	Base peak, 100% relative abundance	58589	100.0	Pass
96	5.0 - 9.0% of mass 95	3918	6.69	Pass
173	Less than 2.0% of mass 174	294	0.50 (0.56) ^a	Pass
174	50.0 - 150.0% of mass 95	52061	88.9	Pass
175	5.0 - 9.0% of mass 174	4118	7.03 (7.91) ^a	Pass
176	95.0 - 101.0% of mass 174	50261	85.8 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	3430	5.85 (6.82) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B7451-CC7429	3B165489.D	05/10/21	22:30	00:00	Continuing cal 50
V3B7451-BS	3B165491.D	05/10/21	23:28	00:58	Blank Spike
V3B7451-MB	3B165493.D	05/11/21	00:25	01:55	Method Blank
JD24427-18	3B165494.D	05/11/21	00:54	02:24	HPT-22(43021)
JD24427-18MS	3B165495.D	05/11/21	01:23	02:53	Matrix Spike
JD24427-18MSD	3B165496.D	05/11/21	01:52	03:22	Matrix Spike Duplicate
JD24427-2	3B165497.D	05/11/21	02:21	03:51	HPT-12(42921)
JD24427-1	3B165498.D	05/11/21	02:49	04:19	TB-1-KA(42921)
JD24427-9	3B165499.D	05/11/21	03:18	04:48	EB-2(43021)
JD24427-11	3B165500.D	05/11/21	03:46	05:16	EB-1(42921)
JD24427-3	3B165501.D	05/11/21	04:14	05:44	HPT-13(42921)
JD24427-4	3B165502.D	05/11/21	04:43	06:13	HPT-14(42921)
JD24427-6	3B165503.D	05/11/21	05:12	06:42	HPT-1(43021)
JD24427-7	3B165504.D	05/11/21	05:41	07:11	HPT-15(43021)
JD24427-5	3B165505.D	05/11/21	06:10	07:40	HPT-11(42921)
JD24427-19	3B165506.D	05/11/21	06:38	08:08	HPT-5(43021)
JD24427-21	3B165507.D	05/11/21	07:07	08:37	HPT-10(43021)
JD24427-23	3B165508.D	05/11/21	07:36	09:06	HPT-9(43021)
JD24427-2	3B165509.D	05/11/21	08:05	09:35	HPT-12(42921)

Instrument Performance Check (BFB)

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Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Sample: V3B7452-BFB Injection Date: 05/11/21
Lab File ID: 3B165512.D Injection Time: 09:54
Instrument ID: GCMS3B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	8549	17.6	Pass
75	30.0 - 60.0% of mass 95	23325	47.9	Pass
95	Base peak, 100% relative abundance	48648	100.0	Pass
96	5.0 - 9.0% of mass 95	3358	6.90	Pass
173	Less than 2.0% of mass 174	150	0.31 (0.36) ^a	Pass
174	50.0 - 150.0% of mass 95	41611	85.5	Pass
175	5.0 - 9.0% of mass 174	3420	7.03 (8.22) ^a	Pass
176	95.0 - 101.0% of mass 174	41669	85.7 (100.1) ^a	Pass
177	5.0 - 9.0% of mass 176	3089	6.35 (7.41) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B7452-CC7429	3B165512.D	05/11/21	09:54	00:00	Continuing cal 20
V3B7452-BS	3B165513.D	05/11/21	10:29	00:35	Blank Spike
V3B7452-MB	3B165515.D	05/11/21	11:26	01:32	Method Blank
JD24427-8	3B165516.D	05/11/21	11:55	02:01	DUP-2(43021)
ZZZZZZ	3B165517.D	05/11/21	12:23	02:29	(unrelated sample)
ZZZZZZ	3B165518.D	05/11/21	12:52	02:58	(unrelated sample)
JD24551-1	3B165519.D	05/11/21	13:21	03:27	(used for QC only; not part of job JD24427)
JD24551-2	3B165520.D	05/11/21	13:50	03:56	(used for QC only; not part of job JD24427)
ZZZZZZ	3B165521.D	05/11/21	14:18	04:24	(unrelated sample)
ZZZZZZ	3B165522.D	05/11/21	14:47	04:53	(unrelated sample)
ZZZZZZ	3B165523.D	05/11/21	15:16	05:22	(unrelated sample)
ZZZZZZ	3B165524.D	05/11/21	15:45	05:51	(unrelated sample)
ZZZZZZ	3B165525.D	05/11/21	16:14	06:20	(unrelated sample)
JD24551-1MS	3B165526.D	05/11/21	16:43	06:49	Matrix Spike
JD24551-2DUP	3B165528.D	05/11/21	17:41	07:47	Duplicate
ZZZZZZ	3B165529.D	05/11/21	18:10	08:16	(unrelated sample)
ZZZZZZ	3B165530.D	05/11/21	18:47	08:53	(unrelated sample)
JD24427-14	3B165531.D	05/11/21	19:15	09:21	HPT-18(43021)
JD24427-15	3B165532.D	05/11/21	19:44	09:50	HPT-19(43021)
JD24427-16	3B165533.D	05/11/21	20:13	10:19	HPT-20(43021)
JD24427-17	3B165534.D	05/11/21	20:42	10:48	HPT-21(43021)
JD24427-22	3B165535.D	05/11/21	21:10	11:16	HPT-8(43021)

Surrogate Recovery Summary

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Job Number: JD24427

Account: AGMINI Arcadis

Project: GE, 13th Street, Tell City, IN

Method: SW846 8260D

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD24427-1	3B165498.D	107	99	98	91
JD24427-2	3B165509.D	112	103	97	92
JD24427-2	3B165497.D	106	95	96	93
JD24427-3	3B165501.D	111	100	99	91
JD24427-4	3B165502.D	109	99	96	92
JD24427-5	3B165505.D	111	101	98	93
JD24427-6	3B165503.D	108	99	98	93
JD24427-7	3B165504.D	110	101	99	93
JD24427-8	3B165516.D	115	104	98	92
JD24427-9	3B165499.D	106	98	97	93
JD24427-10	2A210327.D	98	101	100	101
JD24427-11	3B165500.D	108	98	97	91
JD24427-12	2A210328.D	98	102	99	102
JD24427-13	2A210329.D	98	102	100	100
JD24427-14	3B165531.D	107	97	97	94
JD24427-15	3B165532.D	108	98	98	94
JD24427-16	3B165533.D	108	99	97	94
JD24427-17	3B165534.D	109	101	98	91
JD24427-18	3B165494.D	107	98	95	94
JD24427-19	3B165506.D	109	102	96	93
JD24427-20	2A210319.D	102	101	99	102
JD24427-21	3B165507.D	108	102	95	91
JD24427-22	3B165535.D	109	100	99	91
JD24427-23	3B165508.D	110	99	98	93
JD24427-18MS	3B165495.D	109	92	101	95
JD24427-18MSD	3B165496.D	107	92	98	98
JD24427-20MS	2A210320.D	102	102	100	98
JD24427-20MSD	2A210321.D	102	101	100	99
JD24551-1MS	3B165526.D	108	92	99	97
JD24551-2DUP	3B165528.D	112	101	97	91
V2A9144-BS	2A210316.D	104	102	99	100
V2A9144-MB	2A210318.D	100	103	98	100
V3B7451-BS	3B165491.D	107	92	98	97
V3B7451-MB	3B165493.D	106	97	95	93
V3B7452-BS	3B165513.D	109	96	98	95
V3B7452-MB	3B165515.D	112	104	98	91

Surrogate
Compounds

Recovery
Limits

Surrogate Recovery Summary

Job Number: JD24427
Account: AGMINI Arcadis
Project: GE, 13th Street, Tell City, IN

Method: SW846 8260D	Matrix: AQ
---------------------	------------

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

5.7.1
5

Appendix D

Laboratory Treatability Test Summary Reports

Prepared for:

Arcadis of New York, Inc.
855 Route 146, Suite 210,
Clifton Park, NY, 12065

FINAL

Treatability Study Report

Column Study to Evaluate Remediation of Chlorinated Volatile Organic Compounds in Groundwater Using Zero Valent Iron

GE Tell City, Indiana Site

Prepared by:



130 Stone Rd W.
Guelph, Ontario N1G 3Z2

SiREM Ref: TL0334

27 August 2021

siremlab.com

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LIST OF ABBREVIATIONS

°C	degrees Celsius
°C/min	degrees Celsius per minute
°F	degrees Fahrenheit
%	percent
µg/L	micrograms per liter
µL	microliters
Arcadis	Arcadis of New York, Inc.
β	beta
CaCO ₃	calcium carbonate
cm	centimeters
cDCE	cis 1,2-dichloroethene
cVOC	chlorinated volatile organic compound
DHG	dissolved hydrocarbon gases
Fe	iron
ft	feet
ft/day	feet per day
GC	gas chromatograph
g	grams
hrs	hours
IC	ion chromatograph
L	liter
mg/L	milligrams per liter
mL	milliliters
mL/min	milliliters per minute
min	minute
mm	millimeters
mM	millimolar
mV	millivolts
ORP	oxidation reduction potential
PCE	tetrachloroethene
PRB	permeable reactive barrier
PV	pore volume
QL	quantitation limit
r ²	coefficient of determination
SGS Lakefield	SGS Lakefield, Lakefield, Ontario
SiREM	SiREM Laboratories
tDCE	trans 1,2-dichloroethene
TCE	trichloroethene
TDS	total dissolved solids
TOC	total organic carbon
VC	vinyl chloride
VOA	volatile organic compound analysis
VOC	volatile organic compound
ZVI	zero valent iron

1 Introduction

SiREM Laboratory (SiREM) was retained by Arcadis of New York, Inc (Arcadis) to perform a bench scale treatability column study to assess the use of the zero-valent iron (ZVI) permeable reactive barrier (PRB) technology for the remediation of chlorinated volatile organic compounds (cVOCs) in groundwater from a site located in Tell City, Indiana (the site).

This report contains the study objectives and scope of work (Section 2); experimental methods (Section 3); cVOC results and discussion including calculation of cVOC degradation half-lives (Section 4); discussion of inorganic chemistry changes during the column study (Section 5); and the study conclusions (Section 6). Report references are provided in Section 7.

2 Objectives and Scope of Work

This section provides the study objectives and scope of work.

2.1 Objectives

The primary objectives of the laboratory ZVI column study were to:

- Determine degradation rates for the cVOCs present in groundwater at the site, including tetrachloroethene [PCE], trichloroethene [TCE], cis 1,2-dichloroethene [cDCE], trans 1,2-dichloroethene [tDCE] and vinyl chloride [VC]; and
- Evaluate changes in inorganic geochemistry caused by ZVI corrosion chemistry, including possible mineral precipitation.

2.2 Scope of Work

A single ZVI column was set up and operated using 100 percent (%) granular ZVI (Connelly GPM, Chicago, IL) and site groundwater containing cVOCs. On 7 May 2021 the granular ZVI was packed into the column. The column and ZVI material specifications are provided in Table 1. A schematic of the column is provided in Figure 1.

Groundwater for this study was collected by Arcadis from the site on 24 April 2021 and was received by SiREM on 29 April 2021 at 12 degrees Celsius (°C) in good condition. The groundwater was stored at 4 °C until it was used for the study. The site groundwater was transferred to a 20 liter (L) Tedlar® reservoir bag on 6 May 2021. A sample of the influent reservoir water was analyzed to establish initial cVOC concentrations to the column.

On 11 May 2021, the test was initiated by starting the pump to feed the water from the influent reservoir vertically upward through the column. A flow velocity of approximately 0.6 feet/day (ft/day) was initially selected in consultation with Arcadis. After review of initial column results for two monitoring events, the flow velocity was increased in consultation with Arcadis to approximately 1.1 ft/day on 15 June 2021. This increased flow rate allowed additional groundwater to pass through the column within the test period to assess potential long-term changes in reactivity and treatment efficacy. In addition, the influent reservoir water was amended with 3.16 milliliters (mL) of a saturated solution of PCE, 13 microliters (µL) of neat TCE, 90 µL of neat cDCE, and 10.9 mL of VC gas to target concentrations of 0.05, 2.0, 12, and 3.0 milligrams per liter (mg/L), respectively.

Water samples were collected from seven sampling ports located along the column length as well as from the column influent and effluent for analysis of pH, oxidation-reduction potential (ORP), cVOCs, dissolved hydrocarbon gases (DHGs), cations, anions, alkalinity, and total organic carbon (TOC), according to the schedule presented in Table 2.

The cVOC concentration trends from the column study were used to calculate the degradation rates, expressed as half-lives, for each compound detected using a multicomponent first-order kinetic model. The column water chemistry data were used to assess the potential effects of water chemistry on the long-term reactivity of ZVI under site conditions.

3 Study Methods and Materials

This section describes the methods used to construct and operate the ZVI column, and to collect water samples for analysis during the ZVI column treatability study.

3.1 Column Construction

The column test consisted of one column containing 100% granular ZVI material obtained from Connelly GPM of Chicago, IL (source CC-1004). This commercial ZVI source has been used for numerous ZVI PRB applications (Gillham et al., 2010). Based on the manufacturer's specifications, the granular ZVI materials used in the column test had a particle size range from 0.25 to 2.0 millimeters (mm; 8 to 50 US Mesh).

The column was constructed of Plexiglas™ with a length of 1.80 feet (ft) (55 centimeters [cm]) and an internal diameter of 0.12 ft (1.5 inches, 3.8 cm) (Figure 1). Seven sampling ports were positioned vertically along the central axis of the columns at distances of 0.08, 0.16, 0.33, 0.50, 0.66, 1.0 and 1.14 ft from the influent end. The column influent and effluent ports were positioned on the bottom and top of the column, respectively. All sampling ports within the columns (excluding influent and effluent) were constructed using a nylon Swagelok compression fitting tapped into the column. A 16-gauge needle was positioned through the fitting and secured by tightening the ferrule. Glass wool was threaded through the needle to ensure minimal particulates from entering the samples. Each sample port was then fitted with a Luer-Lock™ fitting so that a glass syringe could be attached to the port for collection of water samples.

To ensure a homogeneous column material bed, the ZVI was packed vertically in the columns in 100 gram (g) increments. Values of bulk density, porosity, and pore volume were determined by weight and are provided in Table 1. The column experiment was performed at room temperature (22±1 degrees Celsius [°C]).

A Masterflex® peristaltic pump was used to feed site water vertically upwards through the column. The pump tubing consisted of Viton® 2-stop tubing. All other tubing was 1/8 inch inside diameter Teflon® tubing.

3.2 Site Groundwater Storage and Usage

Six 4 L jugs of site groundwater were received by SiREM personnel and stored in cold storage (4°C) until study commencement. A Chain of Custody for the water received from the site is provided in Appendix A. The site water was removed from cold storage and siphoned into the 20 L Tedlar® bag with minimal headspace. The influent reservoir contained two Swagelok fittings with Teflon® septa. This allowed for sampling, as required, while minimizing cVOC losses during the test.

3.3 Sampling Procedure

After removing the stagnant water from the sampling needles, 4.0 mL samples were collected from the sampling ports using glass on glass syringes. A 250 µL to 2 mL water sample (depending on the sample location and dilution required) was removed from the glass syringe and transferred

immediately into an autosampler vial for gas chromatograph (GC) analysis of cVOCs/DHGs. The remaining sample volume was transferred into a 5 mL plastic vial for ORP and pH measurement. When anion sample collection was required, a 0.5 mL sample was transferred to 1.5 mL Eppendorf Tubes®, which were stored frozen until time of analysis.

Water samples for cation, alkalinity, and TOC analyses were collected from the column influent and effluent only. For cations, 40 mL unfiltered samples were collected into 110 mL bottles and acidified to a pH of 2 with nitric acid. For alkalinity, 40 mL unfiltered samples were collected into volatile organic compound analysis (VOA) vials with zero headspace and left unpreserved. For TOC, 40 mL unfiltered samples were collected into VOA vials with zero headspace and preserved with sulfuric acid to a pH of 2. For VOCs, 40 mL unfiltered samples were collected into VOA vials with zero headspace and preserved with sodium bisulfite.

Water samples for cations, TOC, alkalinity, VOCs, and total dissolved solids (TDS) analyses were placed in coolers with ice packs and shipped under chain of custody to SGS, Lakefield, Ontario (SGS) for analysis.

3.4 Analytical Methods

This section describes the methods of analysis for pH, ORP, cVOCs, DHGs, cations, anions, and alkalinity. Measurement of pH, ORP, cVOCs, DHGs, and anions were performed by SiREM. Cation, TOC, TDS and alkalinity analyses were performed by SGS Lakefield.

3.4.1 Analysis of ORP and pH

The ORP measurements were performed using an Orion 250A meter with double junction ORP electrode. A 2.5 mL sample was collected and the ORP probe was inserted into the sample vial on the lab bench. A single point calibration of the meter was performed at each sampling event with Zobell's ORP calibration solution according to the manufacturer's instructions.

The pH measurements were performed using an Orion 250A meter with an Orion combination pH electrode. Immediately after ORP measurement the pH probe was inserted into the same sample vial on the lab bench for pH measurement. The pH meter was calibrated daily using pH 4.0, 7.0 and 10 pH standards and checked using the pH 7.0 calibration standard before every sampling session.

3.4.2 Analysis of cVOCs and Dissolved Hydrocarbon Gases

Water sample cVOC and DHG (i.e., ethene, ethane and methane) analyses were performed at SiREM using a Hewlett-Packard (Hewlett Packard 7890) gas chromatograph (GC) equipped with an auto sampler (Hewlett Packard G1888) programmed to heat each sample vial to 75°C for 45 minutes (min) prior to headspace injection into a GS-Q Plot column (0.53 millimeters x 30 meters, J&W) and a flame ionization detector. Sample vials were heated to partition VOCs in the aqueous sample into the headspace. The injector temperature was 200°C, and the detector temperature was 250°C. The oven temperature was programmed as follows: 35°C for 2 min, increased to 100°C at 50 degrees Celsius per minute (°C/min), then increased to 185°C at 25°C/min and held

at 185°C for 6.80 min. The carrier gas was helium at a flow rate of 11 milliliters per minute (mL/min).

After withdrawing a 1.0 - 2.0 mL sample, the sample was injected into a 10 mL auto sampler vial containing 5.0 mL of acidified deionized water (pH ~2). The water was acidified to inhibit microbial activity between column sampling and GC analysis. The vial was sealed with an inert Teflon®-lined septum and aluminum crimp cap for automated injection of 3 mL of headspace onto the GC. One cVOC standard was analyzed with each set of samples to verify the instrument five-point calibration curve using methanolic stock solutions containing known concentrations of the target analytes. Calibration was performed using external standards purchased as standard solutions (Sigma, St Louis, Missouri), where known volumes of standard solutions were added to acidified water in auto sampler vials and analyzed as described above for column samples. Data were integrated using Chemstation Software (Agilent Technologies, Santa Clara, California).

The method quantitation limits (QLs) in micrograms per liter (µg/L) achieved at SiREM were as follows:

<u>Organic Compound</u>	<u>QL for 1 mL samples (µg/L)</u>	<u>QL for 2 mL samples (µg/L)</u>
Vinyl Chloride (VC)	10	5
1,1-dichloroethene (1,1-DCE)	10	5
cis 1,2-Dichloroethene (cDCE)	10	5
trans 1,2-Dichloroethene (tDCE)	10	5
Trichloroethene (TCE)	10	5
Tetrachloroethene (PCE)	10	5
Methane	50	25
Ethene	10	5
Ethane	10	5

3.4.3 Analysis of Major Anions

For anion (chloride, nitrate-nitrogen [nitrate], nitrite-nitrogen [nitrite], phosphate and sulfate) analyses, a 0.5 mL sample was removed and added to a plastic 5 mL Dionex ion chromatograph (IC) autosampler vial. Anion analysis was performed on a Thermo-Fisher ICS-2100 IC equipped with a Thermo-Fisher AS-DV autosampler and an AS18 column and sample loop volume of 25 µL. An isocratic separation was performed using 33 millimolar (mM) reagent grade sodium hydroxide eluent generator cartridge (Thermo Scientific, Burlington, ON) eluent for 13 minutes (min). One standard was analyzed with each set of samples tested in order to verify the seven-point calibration using external standards of known concentrations. External standards were prepared gravimetrically using chemicals of the highest purity available (Sigma St Louis, MO or Bioshop, Burlington, ON). Data were integrated using Chromeleon 7® Chromatography software (Thermo-Fisher, Burlington, ON). The QLs were as follows: 0.07 mg/L chloride, 0.09 mg/L nitrite, 0.09 mg/L nitrate, 0.07 mg/L sulfate, and 0.07 mg/L phosphate.

3.4.4 Analysis of Cations, Alkalinity and TOC

Water sample cation analyses including iron, sodium, magnesium, calcium, potassium, and manganese were performed by SGS Lakefield using inductively coupled plasma atomic emission spectroscopy (US EPA Method 6010C). Carbonate alkalinity (expressed as milligrams calcium carbonate per liter) in water was determined by SGS using method US EPA Method SM 2320B. TOC analyses were performed by SGS using US EPA Method 9060A.

4 VOC Results, Reaction Pathways and Degradation Parameters

This section discusses the observed water cVOC concentration trends. The column data are then quantified in terms of anticipated cVOC degradation pathways and kinetic rates.

4.1 VOC Results

A total of approximately 29 pore volumes (PVs) of groundwater passed through the ZVI column during the test. After increasing the flow rate to 1.1 ft/day on 15 June 2021, one pore volume of groundwater passing through the ZVI column corresponded to an average residence time of 35.1 hrs. Analytical results for cVOC compounds (PCE, TCE, cDCE, tDCE and VC) as well as dechlorination products (ethene and ethane) and methane are provided in Table 3A. Concentration trends for cVOCs and DHGs from the last complete sampling event are presented in Figure 2.

In the last sampling event, the influent groundwater contained PCE, TCE, cDCE, tDCE, and VC at concentrations of 0.035, 1.80, 9.13, 0.161, and 1.42 mg/L, respectively. All these cVOCs were reduced to non-detectable values within a residence time of 3.4 hours (hrs) (Table 3A, Figure 2). As a result of the complete dechlorination of cVOCs present in the site groundwater up to 5.22 mg/L of ethane and up to 0.02 mg/L of ethene were created in the column (Table 3A, Figure 2).

Table 3B presents results of confirmatory cVOC analyses performed by an external laboratory (SGS, Lakefield) on column influent and effluent samples collected as part of the final sampling event. The results showed the effluent cVOC concentrations were all below the laboratory detection limits (ranging from 0.005 VC to 0.03 mg/L for cDCE).

4.2 cVOC Reaction Pathways and Kinetic Expressions

Two dominant pathways of degradation of chlorinated hydrocarbon compounds by ZVI include hydrogenolysis and reductive beta-elimination (β -elimination) (Gillham et al., 2010). In the hydrogenolysis reaction, a chlorine atom is replaced by a hydrogen atom, accompanied by the addition of two electrons (from the iron). Reductive β -elimination involves release of two chlorine atoms and the formation of an additional carbon-carbon bond. Both pathways are thought to occur simultaneously (Arnold and Roberts, 2000). Figure 3 illustrates those pathways for the chlorinated ethene sequence starting from PCE, through TCE, DCE-isomers, VC and finally ethene and ethane. Both of the chlorinated acetylenes are highly unstable and degrade rapidly, primarily through reductive dechlorination to acetylene (Arnold and Roberts, 2000). Another ZVI-mediated transformation mechanism, hydrogenation, involves the addition of two hydrogen atoms across two carbon atoms with the removal of a C-C bond (e.g., reduction of acetylene to ethane, and ethene to ethane as shown in Figure 3).

Based on previous research, cVOC degradation in contact with ZVI appears to be first-order with respect to the concentration of the constituent (pseudo first-order) (Gillham et al., 2010):

$$\frac{\partial C}{\partial t} = -kt \quad (1)$$

After integration, the equation can be presented in the form of the exponential decay equation:

$$C = C_0 e^{-kt} \quad (2)$$

Where: C is the concentration in solution at a particular time (t),
C₀ is the initial concentration, and
k is the first-order rate constant.

The rate constant (k) is a measure of the reaction rate and can be calculated directly from Equation 2. The time at which the initial concentration declines by one-half, (C/C₀ = 0.5), is the half-life (t_{1/2}).

$$t_{1/2} = \frac{\ln(2)}{k} \quad (3)$$

4.3 Determination of Degradation Parameters from Column Data

Due to the complexity of the ZVI-induced dechlorination mechanisms (Figure 3), the laboratory data were interpreted using a multi-component kinetic model to quantify degradation rates of compounds that are present in the water initially, as well as potential degradation products. In the model, potential breakdown products are concurrently produced and degraded as described by first-order kinetic equations. Each pathway is characterized by a rate constant (k) and the mole fraction of the compound that follows that particular path (f). Since chlorinated acetylenes are unstable, short-lived, intermediates are rapidly reduced to ethene (Arnold and Roberts, 2000). These compounds are not typically detected in the solution phase and are therefore not explicitly contained in the degradation model. Therefore, first-order rate equations for each chlorinated ethene included in the model are as follows:

$$\frac{\partial PCE}{\partial t} = -k_{PCE} PCE \quad (4)$$

$$\frac{\partial TCE}{\partial t} = f_{PCE1} k_{PCE} PCE - k_{TCE} TCE \quad (5)$$

$$\frac{\partial cDCE}{\partial t} = f_{PCE2} k_{PCE} PCE + f_{TCE1} k_{TCE} TCE - k_{cDCE} cDCE \quad (6)$$

$$\frac{\partial VC}{\partial t} = f_{PCE3} k_{PCE} PCE + f_{TCE2} k_{TCE} TCE + f_{cDCE} k_{cDCE} cDCE - k_{VC} VC \quad (7)$$

These equations were adapted for the computer program Scientist® Version 3.0 (Micromath Research, 2008). The program can be used to fit the first-order equations to experimental data using the least squares best-fit method. The degradation rate and molar conversion are determined for each compound sequentially starting with the most chlorinated VOC.

The results from the model fitting of column data include half-lives for all cVOCs selected and statistical fit data including coefficient of determination (r^2) values. The half-lives determined from the VOC profiles from the last three column sampling events are shown in Table 4, along with the corresponding r^2 values.

The degradation model fit the cVOC concentration profiles with r^2 values of more than 0.99. Based on the chlorinated ethene profiles from the last three sampling events, the room-temperature calculated half-lives were 1.12 hrs for PCE, 0.68 hrs for TCE, 0.65 hrs for cDCE, 0.93 hrs for tDCE and 0.40 hrs for VC (Table 4). Molar conversions between higher and lower chlorinated compounds were not quantified because the degradation rates were relatively high and concentration peaks were not created in the column profiles.

The cVOC degradation half-lives values achieved at the end of this study are generally within the lower range of values (i.e., high range of degradation rates) expected for granular ZVI material (Gillham, et al., 2010). However, the half-life values for most cVOCs increased gradually within the test period indicating some loss in reactivity (Table 4). This process is likely related to the effect of nitrate reduction and precipitation of calcium carbonates. These processes are further addressed in Section 5.0.

The laboratory half-lives were obtained at a temperature of 22°C (72 degrees Fahrenheit [°F]). Based on the previous research, cVOC degradation half-lives increase by 100% per every 6°C to 8°C temperature decrease within a temperature range of 5 to 25°C (O'Hannesin et al., 2004). It is recommended that the laboratory-derived cVOC half-lives be temperature-corrected based on this trend, based on the minimum site groundwater temperature, for use in design of a ZVI PRB at the site.

5 Inorganic Chemistry Results and Discussion

Previous research has shown that the inorganic composition of groundwater being treated can have a profound influence on the reactivity of commercial granular ZVI materials. Most of these effects are related to long-term performance. Therefore, evaluation of changes in inorganic chemistry along the flow path through the ZVI column is a crucial component of design considerations for a ZVI PRB.

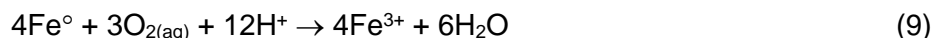
5.1 Column Data

ORP and pH profiles were collected in seven column sampling events. Samples for major anions were collected in three sampling events, and samples for major cations and alkalinity were collected during the final sampling event. The water sample inorganic chemical concentration data are summarized in Tables 5 and 6. Laboratory reports of analysis for the cations, alkalinity, and TOC are compiled in Appendix B.

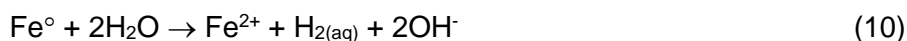
When iron is exposed to water, several reactions occur as a result of iron corrosion:



This iron corrosion drives the geochemical changes that occur as groundwater flows through the PRB. When groundwater first contacts the granular iron, any dissolved oxygen present is consumed via iron corrosion:



After the initial, rapid depletion of any dissolved oxygen and other oxidizers (e.g., nitrate), the corrosion of iron dominates to produce hydrogen and hydroxide, via reaction with water, resulting in an increase in pH and decline in ORP:



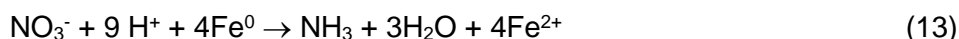
The ORP and pH profiles within the column are presented in Table 5. Figure 4 plots the ORP and pH profiles through the column during the final sampling event. The ORP decreased within the column from +117 millivolts (mV) in the influent to -128 mV in the effluent, all values are versus a silver/silver chloride reference electrode. The pH increased from an influent value of 7.17 to an effluent value of 8.94. The changes in ORP and pH along the ZVI column are expected as a result of the iron corrosion reaction shown in Eq. 10.

During the final sampling event, the calcium concentration decreased from 83 mg/L in the column influent to 11 mg/L in the column effluent (Table 6). The carbonate alkalinity value decreased from 239 mg/L in the column influent to 56 mg/L in the column effluent (Table 6). The losses of calcium and alkalinity indicate the formation of calcium carbonate, as well as iron carbonate minerals:



Dissolved iron decreased from an influent concentration of 0.05 mg/L to 0.014 mg/L in the effluent (Table 6). As indicated, reactions involving iron corrosions (Eq. 8 through 11) result in generation of oxidized ferrous or ferric iron. The dissolved iron concentration decreased along the column, indicating that the generated iron was retained within the ZVI bed and consumed by precipitation of iron (oxy)hydroxides and siderite.

Nitrate profiles collected from the column showed nitrate reduction, from concentrations in the column influent ranging from 4.4 to 4.9 mg/L (as N) to concentrations in the column effluent ranging from below detection limits to 0.28 mg/L (Table 5). Nitrate reduction by ZVI results in the production of ammonia/ammonium with nitrogen balances typically greater than 80% (Ritter et al., 2002; and Schlicker et al., 2000):



It is believed that this nitrate reduction causes the formation of iron (Fe) mineral precipitates on the surface of the granular iron which causes a gradual slow down in iron corrosion rate.). Different precipitates can form depending on the groundwater chemistry and some precipitates can slow corrosion rates. The rate of ZVI passivation by nitrate is expected to be directly proportional to the nitrate flux through the ZVI. Given the relatively low concentrations of nitrate in water at this site, ZVI passivation by nitrate may be relatively slow. However, this process should be considered for the field design, especially if higher nitrate concentrations are present along the line of the proposed PRB.

Sulfate concentrations, which ranged from 78 to 86 mg/L in the column influent, showed no substantial change along the column during the test (Table 5). Sulfate reduction is mediated by biological activity (sulfate reducing bacteria) and it is typically not observed in bench-scale ZVI column tests due to the length of the tests. Microbially mediated sulfate reduction has been observed in long-term ZVI columns and in mature ZVI PRBs (Wilkin et al., 2003).

During the final sampling event, the dissolved silicon concentration decreased from 11.6 mg/L in the column influent to 0.78 mg/L in the column effluent (Table 6). Losses in silicon are attributed to precipitation or adsorption on ZVI surfaces leading to the formation of a silica film or gel on the ZVI surface that may hinder constituent access to active sites (Klausen et al., 2003). During the final sampling event, TOC was not detected in the column influent or effluent above the detection limit of 1 mg/L.

5.2 Long-term ZVI Reactivity Considerations

Iron corrosion reactions (Eq. 8-10) promote reductive dechlorination, but at the same time are sources of ferrous iron and alkalinity. Because dissolved iron was detected at a trace concentration in the column effluent, iron (oxy)hydroxides and iron carbonate are expected to form in a ZVI PRB at the site. Typically, iron (oxy)hydroxides ultimately transform to magnetite, which is electron-conducting. As such, iron (oxy)hydroxides do not substantially reduce the reactivity of the iron and their rate of formation is not expected to cause a significant decline in PRB permeability (Gillham et al., 2010). However, reduction of nitrate by ZVI may lead to formation of ferrous iron (oxy)hydroxides that lead to a passivating effect on ZVI, as described above.

Based on the observed decreases in nitrate, carbonate alkalinity, calcium, and silicon in the ZVI column, precipitation of ferrous iron (oxy)hydroxides, calcium carbonate and silica on ZVI surfaces is expected to be the main process influencing ZVI longevity in PRB at the site. The observed gradual migration of cVOC concentration profiles and an increase in degradation half-lives (Section 4) over the duration of the column study were likely due to these effects. While there is little doubt that inorganic precipitates (mostly iron oxyhydroxides and carbonates) will form over time in a ZVI PRB at the site, their impact will be proportional to the groundwater velocity.

6 Summary and Conclusions

Bench-scale column treatability testing using site water indicated that:

- i) Connelly ZVI degraded the cVOCs present in the site water. The room-temperature degradation half-lives generated in the study ranged from 0.4 hrs for VC to 1.1 hrs for PCE. These values are generally in the lower range of values reported in literature (indicating a faster reaction rate) for granular ZVI sources and other groundwaters with comparable cVOC and chemical composition.
- ii) The ORP decreased within the ZVI column to negative values and the pH increased from neutral in the column influent to approximately 9 in the column effluent. Changes in ORP and pH along the ZVI column are expected as a result of the iron corrosion.
- iii) Losses in nitrate, calcium, carbonate alkalinity and silicon were observed within the ZVI column, and cVOC degradation rates decreased gradually within the test period. These trends are indicative of formation of secondary mineral phases such as iron (oxy)hydroxides, calcium carbonate and silica minerals on ZVI surfaces that likely resulted in a gradual decrease in reaction rate within the test period. It is recommended that this process be considered in the ZVI PRB design at the site.

The rates of cVOC degradation by ZVI decrease with water temperature. Therefore, it is recommended that the room-temperature laboratory-derived cVOC half-lives be temperature-corrected, using the minimum site groundwater temperature, for use in design of a ZVI PRB at the site.

7 References

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TABLES

TABLE 1
COLUMN AND MATERIALS SPECIFICATIONS
Tell City, IN Site

Parameter	Value	
Column Content	100% ZVI	
ZVI Type	Connelly GPM	
ZVI Size Range	US Mesh 8 to 50 (0.25 - 2 millimeters)	
ZVI Dry Weight (g)	1,773	
Column Length	1.80 feet (55 centimeters) ¹	
Column Inside Diameter	0.125 feet (3.8 centimeters)	
Measured Pore Volume (mL)	331	
Porosity	0.53	
Bulk Density (g/cm ³)	2.37	
Average Flow Rate (ft/day)	Flow Rate 1 11 May 2021 to 15 June 2021	0.57
Average Residence Time (h)		69.2
Average Flow Rate (ft/day)	Flow Rate 2 15 June 2021 to 15 July 2021	1.12
Average Residence Time (h)		35.1

Notes:
¹ - contains 5 cm of coarse sand in the influent end and 50 cm of ZVI
% - percent
ft/day - feet per day
g/cm³ - grams per centimeter cubed
h - hours
mL - milliliters
ZVI - zero valent iron

TABLE 2
COLUMN SAMPLING SCHEDULE
Tell City, IN Site

Event		Baseline (Week 0)				7 Sampling Events		4 Sampling Events	Endpoint	
Sample Location		pH, ORP	cVOCs, DHGs	Anions	Cations, Alkalinity, TOC	pH, ORP	cVOCs, DHGs	Anions	Cations, Alkalinity, TOC	Anions
Column Influent		•	•	•	•	•	•	•	•	•
Sampling Ports	A					•	•	•		
	B					•	•	•		
	C					•	•	•		
	D					•	•	•		
	E					•	•	•		
	F					•	•	•		
	G					•	•	•		
Column Effluent		•	•	•	•	•	•	•	•	•

Notes:
• indicates sample was collected
cVOCs - chlorinated volatile organic compounds
DHGs - dissolved hydrocarbon gases
TOC - total organic carbon

TABLE 3A
WATER SAMPLE cVOC AND DHG RESULTS
Tell City, IN Site

SiREM

Compound	Column Port			Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
	Column Distance (ft)			0.0	0.08	0.16	0.33	0.50	0.66	1.00	1.14	1.64
	Residence Time 1 (hours)			0.0	3.4	6.7	13.9	21.1	27.8	42.2	48.1	69.1
	Residence Time 2 (hours)			0.0	1.7	3.4	7.1	10.7	14.1	21.4	24.4	35.1
	Date	RT	PV	Concentration (mg/L)								
TCE	11-May-21	RT 1	0.0	--	--	--	--	--	--	--	--	--
	25-May-21		4.4	0.20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	08-Jun-21		8.8	0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	22-Jun-21	RT 2	15.0	2.76	0.143	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	29-Jun-21		19.4	2.05	0.121	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	6-Jul-21		23.6	2.36	0.205	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	12-Jul-21		27.3	2.30	0.328	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	15-Jul-21		28.6	1.80	0.332	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
cDCE	11-May-21	RT 1	0.0	--	--	--	--	--	--	--	--	--
	25-May-21		4.4	0.04	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01
	08-Jun-21		8.8	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	22-Jun-21	RT 2	15.0	13.45	0.792	0.144	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	6-Jul-21		23.6	11.47	1.015	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	12-Jul-21		27.3	11.08	1.46	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	15-Jul-21		28.6	9.13	1.550	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	15-Jul-21		28.6	9.13	1.550	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
VC	11-May-21	RT 1	0.0	--	--	--	--	--	--	--	--	--
	25-May-21		4.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	08-Jun-21		8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	22-Jun-21	RT 2	15.0	4.14	0.090	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	29-Jun-21		19.4	2.48	0.062	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	6-Jul-21		23.6	3.24	0.106	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	12-Jul-21		27.3	2.34	0.123	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	15-Jul-21		28.6	1.42	0.074	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethene	11-May-21	RT 1	0.0	--	--	--	--	--	--	--	--	--
	25-May-21		4.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
	08-Jun-21		8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	22-Jun-21	RT 2	15.0	<0.01	0.202	0.030	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	29-Jun-21		19.4	<0.01	0.115	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	6-Jul-21		23.6	<0.01	0.159	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	12-Jul-21		27.3	<0.01	0.011	0.010	0.016	0.016	0.016	0.018	0.017	0.022
	15-Jul-21		28.6	<0.01	0.131	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethane	11-May-21	RT 1	0.0	--	--	--	--	--	--	--	--	--
	25-May-21		4.4	<0.01	0.06	0.05	0.06	0.09	0.08	0.08	0.06	0.05
	08-Jun-21		8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	22-Jun-21	RT 2	15.0	<0.01	<0.005	4.02	5.01	5.03	4.58	4.68	5.22	3.34
	29-Jun-21		19.4	<0.01	3.162	2.92	2.78	2.97	3.51	3.37	4.53	4.78
	6-Jul-21		23.6	<0.01	3.454	3.33	2.51	2.89	3.21	3.30	4.31	4.36
	12-Jul-21		27.3	0.02	2.820	2.26	2.39	2.57	2.65	3.09	3.04	4.06
	15-Jul-21		28.6	0.05	1.716	2.06	1.71	1.69	2.01	2.05	2.65	2.67
Methane	11-May-21	RT 1	0.0	--	--	--	--	--	--	--	--	--
	25-May-21		4.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	08-Jun-21		8.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	22-Jun-21	RT 2	15.0	<0.05	<0.025	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	29-Jun-21		19.4	<0.05	<0.025	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	6-Jul-21		23.6	<0.05	<0.025	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	12-Jul-21		27.3	<0.05	<0.025	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	15-Jul-21		28.6	<0.05	<0.025	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PCE	22-Jun-21	RT 2	15.0	0.06	0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	29-Jun-21		19.4	0.04	0.007	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	6-Jul-21		23.6	0.06	0.011	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	12-Jul-21		27.3	0.05	0.015	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	15-Jul-21		28.6	0.04	0.012	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
tDCE	22-Jun-21	RT 2	15.0	0.17	0.008	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	29-Jun-21		19.4	0.26	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	6-Jul-21		23.6	0.15	0.006	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	12-Jul-21		27.3	0.15	0.007	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	15-Jul-21		28.6	0.16	0.051	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Notes:
< - not detected, the associated value is quantitation limit
-- - not applicable
cDCE - cis 1,2-dichloroethene
cVOC - chlorinated volatile organic compound
DHG - dissolved hydrocarbon gasses
ft - feet
mg/L - milligrams per liter
PCE - tetrachloroethene
PV - pore volumes
RT 1 - from 11 May 2021 to 15 June 2021 with a residence time of 69.2 hours
RT 2 - from 15 June 2021 to 15 July 2021 with a residence time of 35.1 hours
TCE - trichloroethene
tDCE - trans 1,2-dichloroethene
VC - vinyl chloride

TABLE 3B
WATER SAMPLE cVOC AND DHG RESULTS
Tell City, IN Site

Sample	Date	Trichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
		µg/L				
Column Influent	15-Jul-21	>100	>100	69.7	>100	>100
Column Effluent		<10	< 30	<0.5	<0.5	<5

Notes:
> - the compound is greater than the upper detection limit
< - the compound is not detected, the associated value is the detection limit
cVOC - chlorinated volatile organic compound
DHG - dissolved hydrocarbon gasses

TABLE 4
CALCULATED cVOC HALF-LIFE VALUES
Tell City, IN Site

Compound	Pore Volume	Influent Concentration (mg/L)	Half-life ^a (hours)	r ²
PCE	23.6	0.06	0.67	0.999
	27.3	0.05	0.90	0.998
	28.6	0.04	1.12	0.996
TCE	23.6	2.36	0.48	0.999
	27.3	2.30	0.60	0.999
	28.6	1.80	0.68	0.999
cDCE	23.6	11.47	0.48	0.999
	27.3	11.08	0.57	0.999
	28.6	9.13	0.65	0.999
tDCE	23.6	0.15	0.37	0.999
	27.3	0.15	0.39	0.999
	28.6	0.16	0.93	0.991
VC	23.6	3.24	0.35	0.999
	27.3	2.34	0.40	0.999
	28.6	1.42	0.40	0.999

Notes:

^a Half-life calculated based on test temperature of 22°C
cDCE - cis-1,2-dichloroethene
cVOC - chlorinated volatile organic compounds
mg/L - milligrams per liter
PCE - tetrachloroethene
r² - coefficient of determination
TCE - trichloroethene
tDCE - trans 1,2-dichloroethene
VC - vinyl chloride

TABLE 5
WATER SAMPLE pH, ORP AND ANION RESULTS
Tell City, IN Site

Constituent	Column Port			Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
	Column Distance (ft)			0.0	0.08	0.16	0.33	0.50	0.66	1.00	1.14	1.64
	Residence Time 1 (hours)			0.0	3.4	6.7	13.9	21.1	27.8	42.2	48.1	69.1
	Residence Time 2 (hours)			0.0	1.7	3.4	7.1	10.7	14.1	21.4	24.4	35.1
	Date	RT	PV	Values								
pH	11-May-21		0	6.71	--	--	--	--	--	--	--	--
	25-May-21	RT 1	4.4	6.91	8.47	8.90	9.34	9.52	9.57	9.49	9.57	9.20
	08-Jun-21		8.8	6.92	8.42	8.98	9.43	9.55	9.45	9.41	9.39	9.17
	22-Jun-21		15.0	6.87	7.64	8.22	8.79	9.20	9.35	9.37	9.26	9.48
	29-Jun-21	RT 2	19.4	6.82	7.12	8.16	8.87	9.09	9.28	9.33	9.24	9.22
	06-Jul-21		23.6	7.09	7.51	8.18	8.95	9.19	9.26	9.28	9.19	9.18
	12-Jul-21		27.3	7.16	7.63	8.21	8.97	9.23	9.41	9.38	9.46	9.35
	15-Jul-21		28.6	7.17	7.48	8.08	9.02	9.21	9.35	9.42	8.55	8.94
ORP (mV)	11-May-21		0	174	--	--	--	--	--	--	--	--
	25-May-21	RT 1	4.4	107	-166	-23	68	62	51	31	69	25
	08-Jun-21		8.8	121	-211	-132	-132	-46	-37	0	34	121
	22-Jun-21		15.0	127	-89	-64	-139	-97	27	9	54	135
	29-Jun-21	RT 2	19.4	155	-230	10	-155	-189	-123	-136	-115	-60
	06-Jul-21		23.6	128	-220	-232	-180	-215	-256	-125	-146	3
	12-Jul-21		27.3	165	-166	-160	-175	-193	-229	-177	-128	-116
	15-Jul-21		28.6	117	-94	-123	8	-124	-109	-115	-150	-128
Chloride (mg/L)	11-May-21		0	100	--	--	--	--	--	--	--	--
	08-Jun-21	RT 1	8.8	27	36	86	86	295	75	60	110	50
	29-Jun-21	RT 2	19.4	31	36	50	44	44	41	42	49	67
	15-Jul-21		28.6	42	37	106	36	124	50	36	78	82
Nitrate-Nitrogen (mg/L)	11-May-21		0	5.9	--	--	--	--	--	--	--	--
	08-Jun-21	RT 1	8.8	4.9	0.55	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	29-Jun-21	RT 2	19.4	4.4	<0.09	0.54	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	15-Jul-21		28.6	4.8	<0.09	<0.09	<0.09	0.25	0.25	<0.09	<0.09	0.28
Nitrite-Nitrogen (mg/L)	11-May-21		0	8	--	--	--	--	--	--	--	--
	08-Jun-21	RT 1	8.8	5.7	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	29-Jun-21	RT 2	19.4	4.4	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	15-Jul-21		28.6	5.7	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Sulfate (mg/L)	11-May-21		0	91	--	--	--	--	--	--	--	--
	08-Jun-21	RT 1	8.8	83	81	81	81	79	78	84	99	82
	29-Jun-21	RT 2	19.4	78	79	84	82	80	71	74	76	81
	15-Jul-21		28.6	86	82	81	81	69	63	58	56	64
Phosphate (mg/L)	11-May-21		0	<0.07	--	--	--	--	--	--	--	--
	08-Jun-21	RT 1	8.8	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
	29-Jun-21	RT 2	19.4	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
	15-Jul-21		28.6	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07

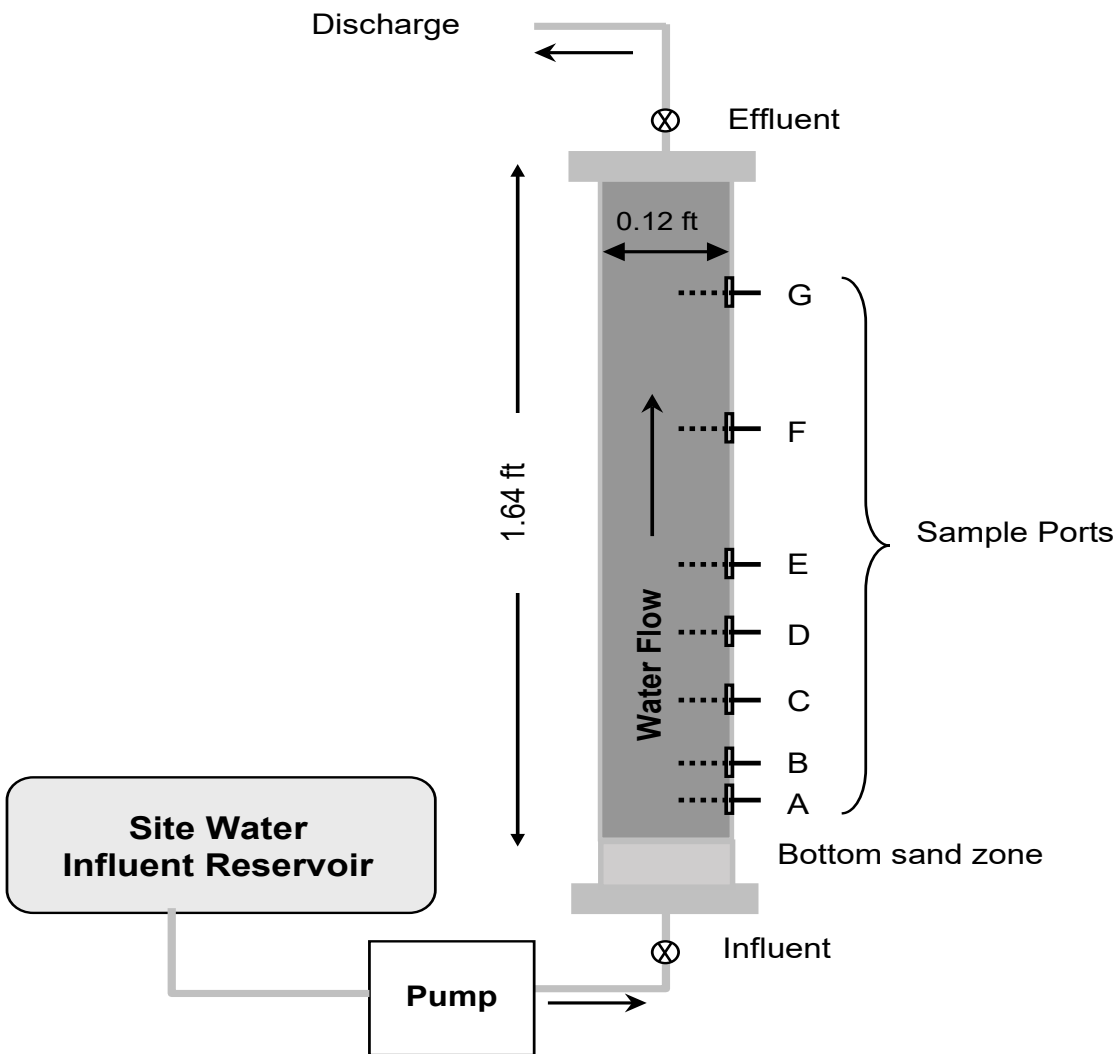
Notes:
-- - not applicable
< - not detected, associated value is quantitation limit
ft - feet
mg/L - milligrams per liter
mV - millivolts
ORP - oxidation-reduction potential
PV - pore volumes
RT 1 - from 11 May 2021 to 15 June 2021 with a residence time of 69.2 hours
RT 2 - from 15 June 2021 to 15 July 2021 with a residence time of 35.1 hours

TABLE 6
WATER SAMPLE CATIONS, TOC, and ALKALINITY RESULTS
Tell City, IN Site

Analysis	Units	Baseline Samples	Endpoint Samples	
Sample ID			Column Influent	Column Effluent
Sample Date		11-May-21	15-Jul-21	15-Jul-21
Alkalinity	mg/L as CaCO ₃	239	239	56
Total Organic Carbon	mg/L	1.0	<1	<1
Total Dissolved Solids	mg/L	451	429	200
Calcium (total)	mg/L	83.5	83.2	10.8
Iron (total)	mg/L	0.033	0.048	0.014
Potassium (total)	mg/L	1.87	2.39	2.76
Magnesium (total)	mg/L	27.0	26.3	15.2
Manganese (total)	mg/L	0.049	0.003	0.047
Sodium (total)	mg/L	31.0	30.4	31.9
Silicon (total)	mg/L	12.4	11.6	0.78


Notes:
< - not detected, associated value is quantitation limit
CaCO₃ - calcium carbonate
mg/L - milligrams per liter

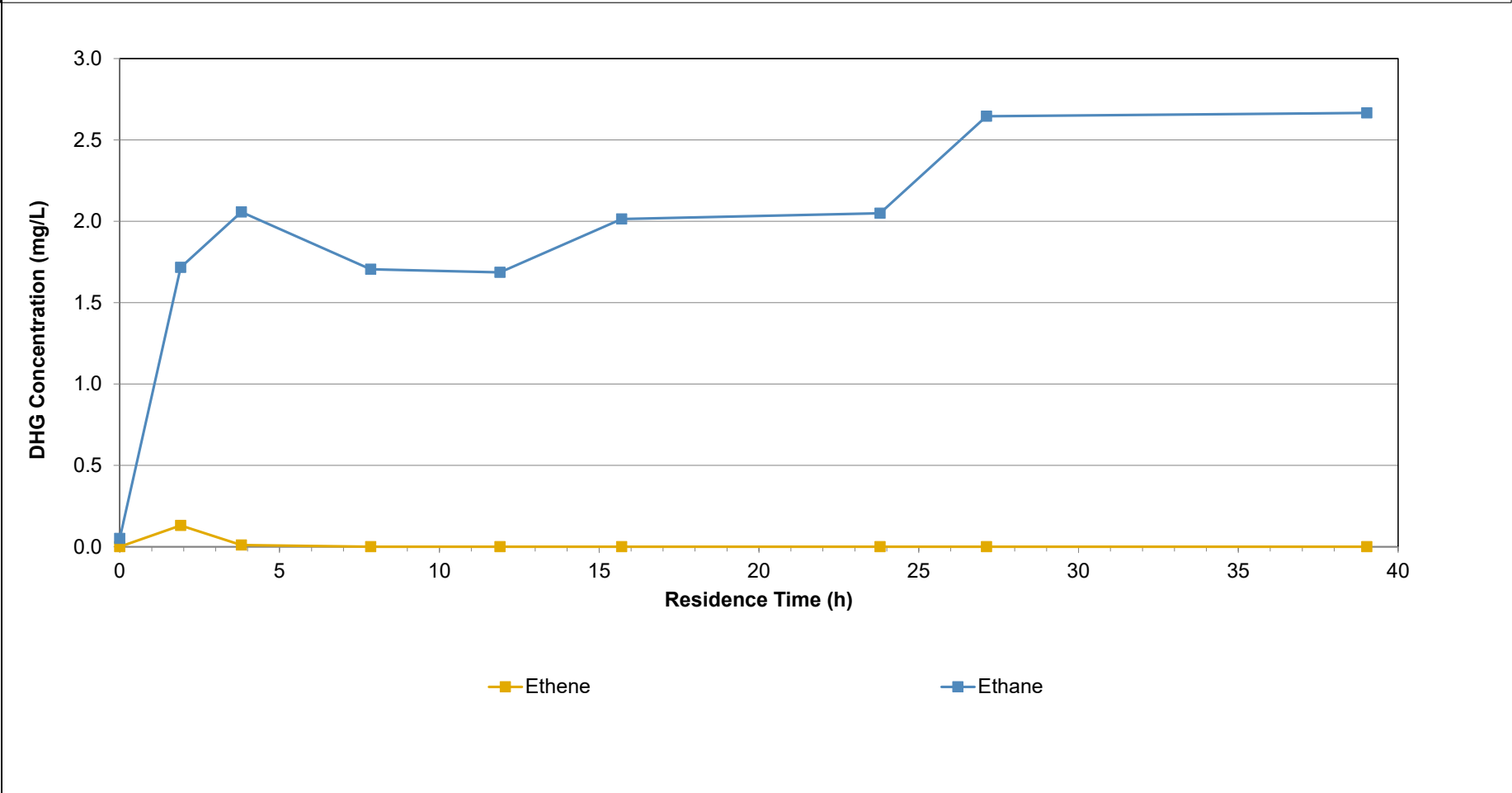
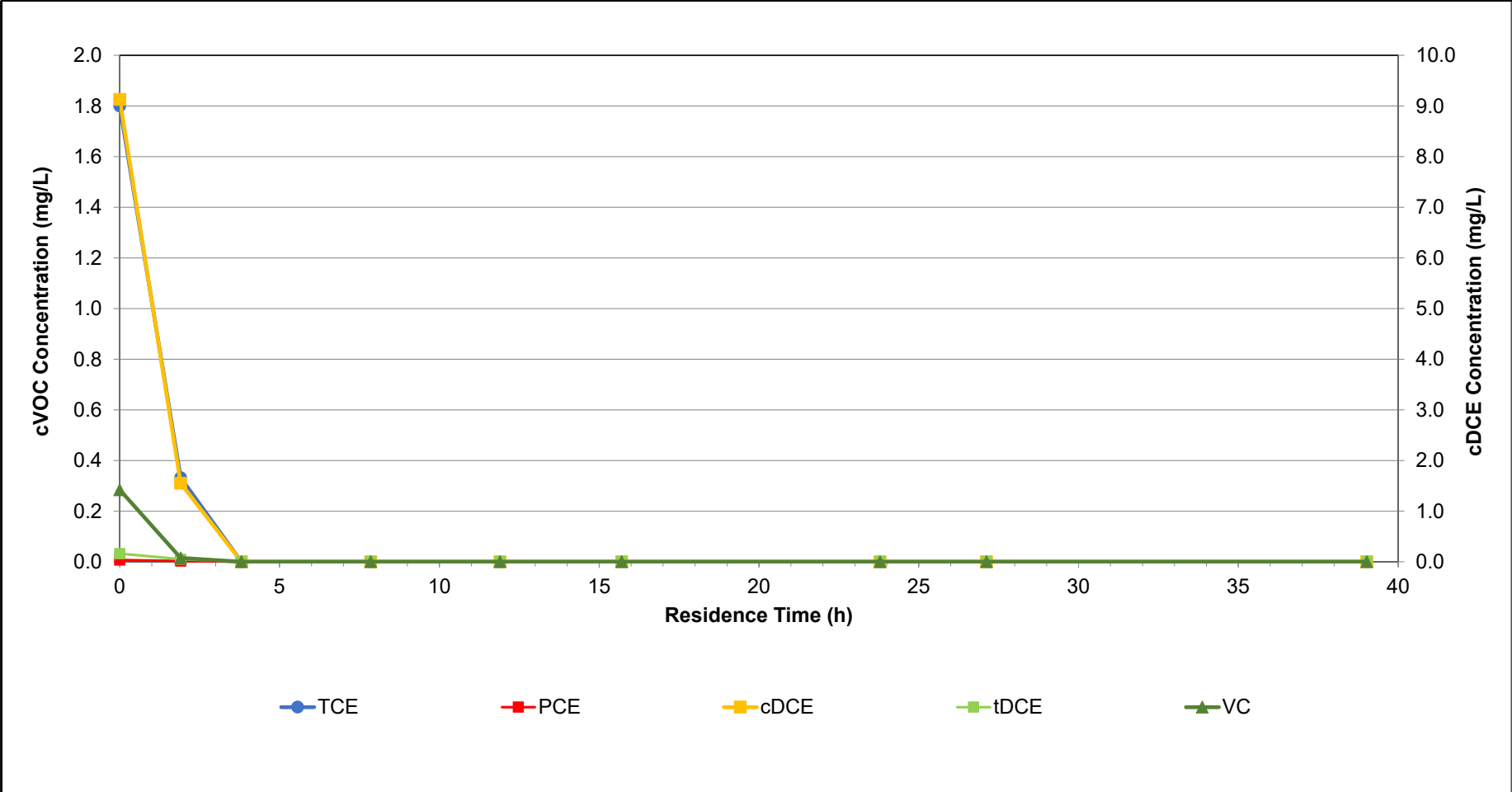
FIGURES




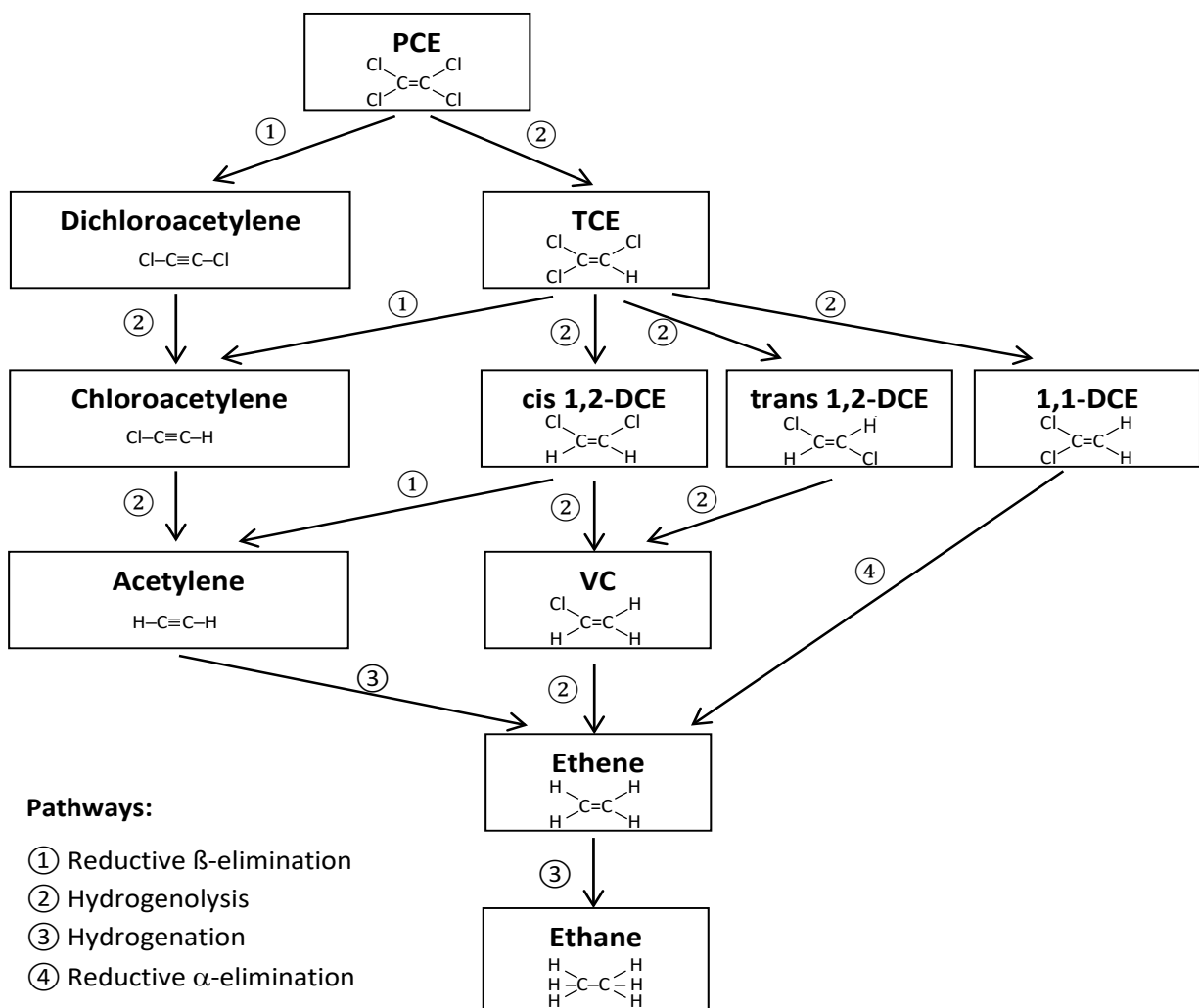
Notes:

ft - feet
ZVI - zero valent iron

Schematic of ZVI Column Study Set Up Tell City, IN Site	
	August 2021
	Figure: 1



Notes: cDCE - cis 1,2-dichloroethene cVOC - chlorinated volatile organic compound DHG -dissolved hydrocarbon gases h - hours mg/L - milligrams per liter		cVOC and DHG Results Versus Residence Time at End of Study Tell City, IN Site	
PCE - tetrachloroethene tDCE - trans 1,2-dichloroethene TCE - trichloroethene VC - vinyl chloride			August 2021
			Figure: 2



Notes:

1,1-DCE - 1,1-dichloroethene

cis 1,2-DCE - cis-1,2-dichloroethene

PCE - tetrachloroethene

trans 1,2-DCE - trans-1,2-dichloroethene

(modified from Arnold and Roberts, 2000)

TCE - trichloroethene

VC - vinyl chloride

ZVI - zero valent iron

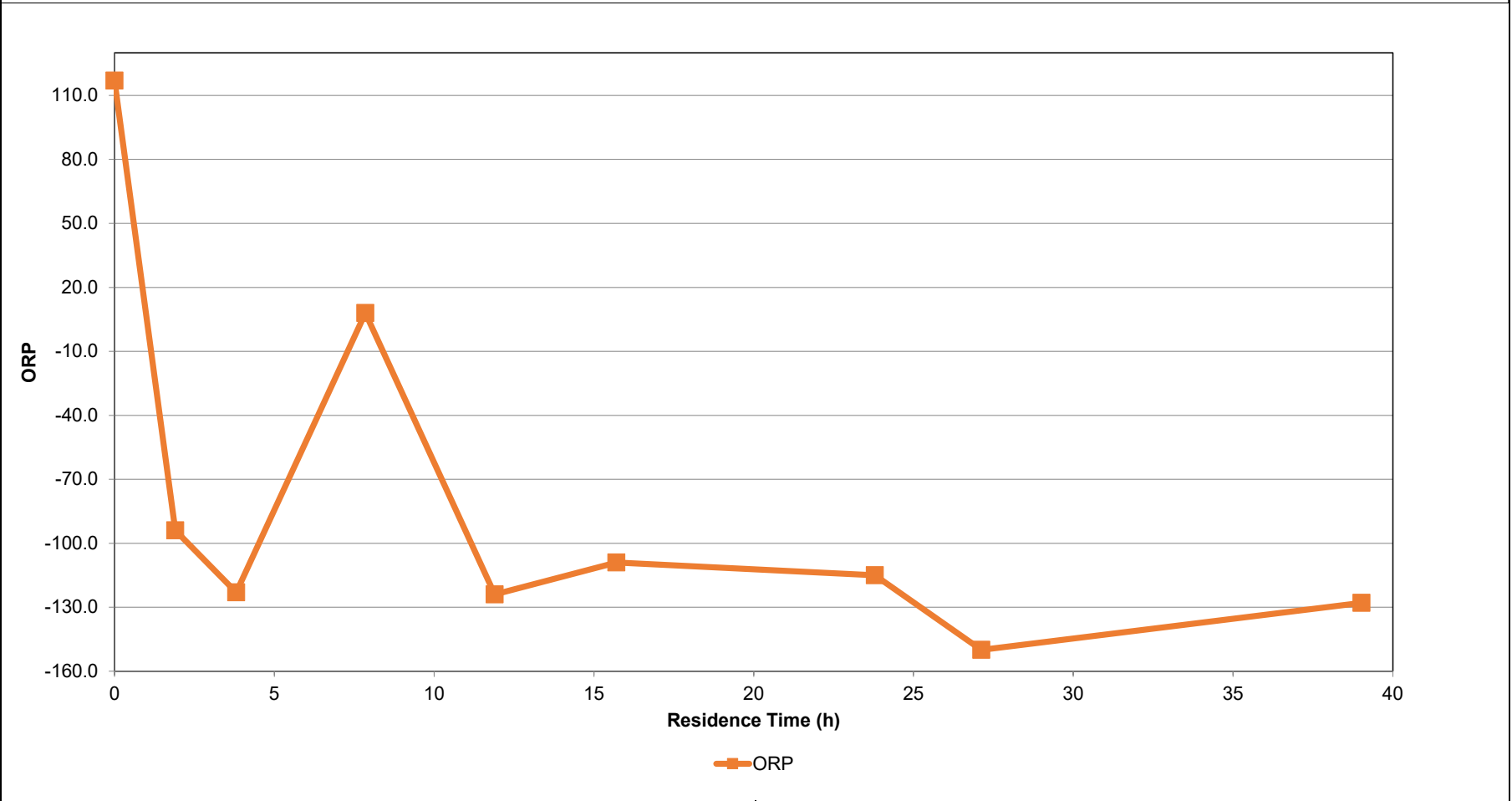
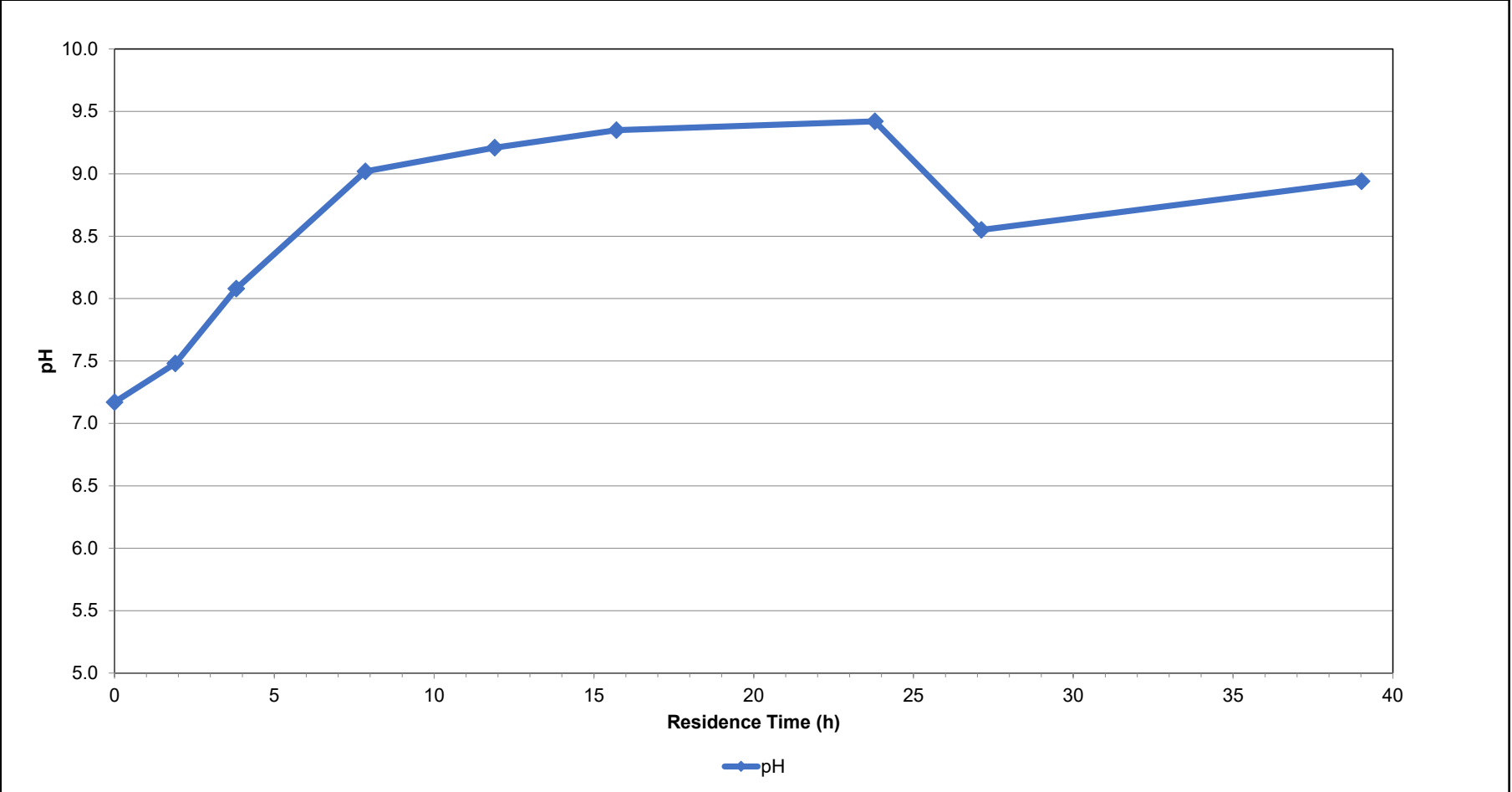
**Chlorinated Ethene Degradation
Pathways with ZVI**

Tell City, IN Site




August 2021

Figure: 3



Notes:
ORP - oxidation-reduction potential
DHG - dissolved hydrocarbon gases
h - hours
mV - millivolts

Column Water ORP and pH versus Residence	
Time at End of Study	
Tell City, IN Site	
	August 2021
	Figure: 4

APPENDIX A: CHAIN OF CUSTODY RECORD

[illegible]

APPENDIX B: EXTERNAL LABORATORY REPORTS

**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - K0L 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

SiREM Laboratory

Attn : Larissa Smith / Sandra Dworatzek

130 Stone Road W
 Guelph, ON
 N1G 3Z2, Canada

Phone: 519-515-0840
 Fax: 519-822-3151

21-May-2021

Date Rec. : 12 May 2021
 LR Report: CA13501-MAY21

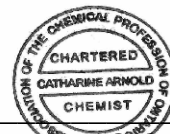
Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: T=0 Si-5000 Reservoir Groundwater
Sample Date & Time					11-May-21 14:30
Temp Upon Receipt [°C]	---	---	---	---	9.0
Alkalinity [mg/L as CaCO ₃]	13-May-21	15:00	14-May-21	10:50	239
TDS [mg/L]	14-May-21	11:55	17-May-21	16:17	451
TOC [mg/L]	14-May-21	18:00	19-May-21	11:24	1
Fe (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	0.033
Si (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	12.4
Na (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	31.0
Mg (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	27.0
Ca (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	83.5
K (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	1.87
Mn (tot) [mg/L]	18-May-21	18:58	20-May-21	17:32	0.0490

Catharine Arnold
 Catharine Arnold, B.Sc., C.Chem
 Project Specialist,
 Environment, Health & Safety



**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - K0L 2H0
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SiREM Laboratory

Attn : Michael Healey

130 Stone Road W
 Guelph, ON
 N1G 3Z2, Canada

Phone: 519-822-2265
 Fax: 519-822-3151

22-July-2021

Date Rec. : 19 July 2021
 LR Report: CA15276-JUL21

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time Completed	3: Analysis Completed Date	4: Analysis Completed Time	5: ODWS Limit	6: T=EP Si-5000 Reservoir Groundwater	7: T=EP Si-5000 Effluent
Sample Date & Time						15-Jul-21 14:30	15-Jul-21 14:30
Temp Upon Receipt [°C]	---	---	---	---	---	16.0	16.0
Alkalinity [mg/L as CaCO ₃]	20-Jul-21	10:50	20-Jul-21	16:49		239	56
TDS [mg/L]	20-Jul-21	16:30	21-Jul-21	15:34		429	200
TOC [mg/L]	21-Jul-21	10:39	21-Jul-21	14:44		< 1	< 1
Fe (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		0.048	0.014
Si (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		11.6	0.78
Na (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		30.4	31.9
Mg (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		26.3	15.2
Ca (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		83.2	10.8
K (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		2.39	2.76
Mn (tot) [mg/L]	21-Jul-21	07:00	21-Jul-21	16:02		0.00275	0.0474
1.1.10 VOC	***	***	***	***	***	***	***
Acetone [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 30	< 30
Bromomethane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
Carbon tetrachloride [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.2	< 0.2
Chlorobenzene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	5	< 0.5	< 0.5
Chloroform [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	0.8	< 0.5
1,2-Dichlorobenzene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
1,3-Dichlorobenzene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
1,4-Dichlorobenzene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
Dichlorodifluorometh [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	50	< 2	< 2
1,1-Dichloroethane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	200	0.6	< 0.5
1,2-Dichloroethane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
1,1-Dichloroethylene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	5	< 0.5	< 0.5
trans-1,2-Dichloroet [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	>100	< 0.5
cis-1,2-Dichloroethe [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	5	>100	< 30
1,2-Dichloropropane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	14	< 0.5	< 0.5
cis-1,3-Dichloroprop [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
trans-1,3-Dichloropr [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
1,3-dichloropropene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
Ethylenedibromide [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.2	< 0.2
n-Hexane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 1	< 1
MEK [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	2.4	< 20	< 20
MIBK [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 20	< 20
MtBE [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 2	< 2
Methylene Chloride [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	0.6	2.0

SGS Canada Inc.



P.O. Box 4300 - 185 Concession St.

Lakefield - Ontario - KOL 2H0

Phone: 705-652-2000 FAX: 705-652-6365

LR Report : CA15276-JUL21

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: ODWS Limit	6: T=EP Si-5000 Reservoir Groundwater	7: T=EP Si-5000 Effluent
Styrene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
Tetrachloroethylene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	30	69.7	< 0.5
1,1,1,2-Tetrachloroe [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	24	< 0.5	< 0.5
1,1,2,2-Tetrachloroe [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	5	< 0.5	< 0.5
1,1,1-Trichloroethan [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	2	< 0.5	< 0.5
1,1,2-Trichloroethan [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	1.0	< 0.5
Trichloroethylene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	>100	< 10
Trichlorofluorometha [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 5	< 5
Vinyl Chloride [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	300	>100	< 5
1.1.11 BTEX	***	***	***	***	***	***	***
Benzene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
Ethylbenzene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29	---	< 0.5	< 0.5
Toluene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
Xylene (total) [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
m-p-xylene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
o-xylene [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
1.1.9 THMs (VOC)	***	***	***	***	***	***	***
Bromodichloromethane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
Bromoform [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
Dibromochloromethane [µg/L]	20-Jul-21	12:03	22-Jul-21	11:29		< 0.5	< 0.5
Surrogates (VOCs)	***	***	***	***	***	***	***
Surr 1,2-Dichloroeth [Surr Rec %]	20-Jul-21	12:03	22-Jul-21	11:29		100	102
Surr 2-Bromo-1-Chlor [Surr Rec %]	20-Jul-21	12:03	22-Jul-21	11:29		92	89
Surr 4-Bromofluorobe [Surr Rec %]	20-Jul-21	12:03	22-Jul-21	11:29		102	95



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Environment, Health & Safety

General Electric Company

Treatability Study Report

GE Tell City

1412 13th Street

Tell City, Indiana

RCRA ID: IND006392773

August 26, 2021

Treatability Study Report

Tell City Facility
1412 13th Street
Tell City, Indiana
RCRA ID: IND006392773

August 26, 2021

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2.1	Column Construction and Preparation	1
2.2	Column Test Operation and Sampling	2
3	Results	4
3.1	cVOC Degradation Rate Constants	5
3.2	Inorganic Parameters	6
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Tables

Table 1. Analytical Results - Volatile Organic Compounds (VOCs)

Table 2. Analytical Results – Other Parameters

Table 3. Degradation Rate Constant Estimates

Figures

Figure 1. Treatability Testing Column

Appendices

Appendix A. Laboratory Reports

1 Introduction

The Arcadis U.S., Inc. (Arcadis) Treatability Testing Laboratory in Durham, North Carolina was retained to perform a column study to assess the use of zero-valent iron (ZVI) permeable reactive barrier (PRB) technology for the remediation of chlorinated volatile organic compounds (cVOCs) in groundwater from a site located in Tell City, Indiana (the site). The cVOCs in groundwater are tetrachloroethene (PCE) and trichloroethene (TCE), and their degradation products cis-1,2-dichloroethene (cDCE), trans-1,2-dichloroethene (tDCE), and vinyl chloride (VC). This report presents the testing materials and methods for the column study, the results of cVOC and inorganic parameter monitoring during the study, and the cVOC degradation parameters calculated from the study results.

2 Materials and Methods

2.1 Column Construction and Preparation

A glass column with a working height of 14 inches and an inner diameter of 2 inches was constructed by Tudor Scientific Glass Company for use in this bench scale treatability study. The column was mounted vertically and operated in an upflow manner such that influent site water entered the column at the bottom and exited at the top as shown in Figure 1. Each end of the column was closed with a nylon threaded fitting that allowed for the connection of stainless-steel Swagelok fittings.

Six sampling ports were installed by Tudor in the column sidewall at two-inch intervals. Ports were assigned numbers in sequential order beginning at the influent of the column. Port #1 was located 2 inches from the influent, Port #2 was located 4 inches from the influent, Port #3 was located 6 inches from the influent, Port #4 was located 8 inches from the influent, Port #5 was located 10 inches from the influent, and Port #6 was located 12 inches from the influent. Each port was sealed with a FETFE (fluoroelastomer with tetrafluoroethylene additives) septum and nylon screw cap.

The column was filled with 100% zero valent iron (ZVI). ZVI was obtained from Connelly GPM of Chicago, IL (product name CC-1004, -8 +50 mesh). The ZVI was dry-packed into the column in lifts while tapping to ensure consistent material compaction as the column was being filled. The total mass of ZVI packed into the column was 2,279.75 grams (g) occupying a volume of 721 cubic centimeters (cm³). The porosity of the ZVI bed was calculated to be 0.55 through direct measurements of bulk density (2.96 grams per milliliter [g/mL]) and particle density (6.55 g/mL) of the source CC-1004 ZVI. Following ZVI packing, the column was purged with carbon dioxide (CO₂) for 90 minutes.

A Masterflex L/S pump drive model 7523-70 peristaltic pump with Masterflex pumphead model 7013-21 and L/S-13 viton pumphead tubing was used to deliver water into the column during treatability testing. Influent and effluent tubing was 1/8-inch outer diameter PTFE (polytetrafluoroethylene) connected to the pumphead tubing and column with stainless-steel Swagelok fittings. Following CO₂ purging of the ZVI bed, deionized water was pumped through the column at a pump-indicated rate of 6.0 milliliters per minute [mL/min] for four and a half hours. The flow rate was then reduced to 0.2 mL/min for approximately 23 hours.

Following CO₂ sparging and deionized water flushing, the column was prepared for site groundwater flow. Site groundwater from MW-6S was delivered to the Arcadis Treatability Laboratory in 2.5 liter (L) amber glass jugs filled to zero-headspace and was refrigerated upon receipt. During column testing operations, influent sample water was

transferred into a FEP (fluorinated ethylene propylene) bag manufactured by American Durafilm. The square bag was 40 centimeters (cm) by 40 cm and held a maximum volume of approximately 8 L. The influent bag was fitted with two ¼-inch stainless steel Swagelok fittings that provided filling and column supply access points. Air volume within the bag was limited by removing any air voids that formed in the bag with a 60 mL syringe attached to one of the two bag fittings. The influent bag was replenished with MW-6S groundwater as necessary over the course of the study.

The column effluent line terminated inside a small refrigerator set to a temperature of approximately 4 to 5 degrees Celsius (°C). Effluent water was collected in a 2 L glass media bottle during column operations, which provided for throughput volume tracking by water mass.

2.2 Column Test Operation and Sampling

Column testing with site groundwater sourced from MW-6S was initiated at 14:46 on 5/6/21. Groundwater was delivered from the FEP influent bag into the column by the peristaltic pump at a target flow rate of 0.2 mL/min. From 5/6/21 through 5/11/21 the refrigerator where the column effluent line terminated proved to be faulty, resulting in intermittent frozen effluent line issues leading to column flow plugging. This issue was resolved with a new refrigerator beginning on 5/11/21.

Baseline samples of MW-6S groundwater were collected into 40 mL hydrochloric acid-preserved vials directly from an amber glass sample jug, chosen at random, on 5/6/21, 5/25/21, and 6/21/21 for analysis of volatile organic compounds (VOCs) prior to transfer into the influent bag. Each column sampling interval identified later in this text involved water sample collection at the following points in the system:

- Influent bag
- Port #1
- Port #2
- Port #3
- Port #4
- Port #6
- Effluent

Port sampling was performed by inserting a 22-gauge 1.5-inch needle with an attached luer valve through each of the port septa and into the ZVI bed. Porewater at each port location was then extracted using a 10 mL glass gastight syringe. Water collected from each port was then transferred into a 10 mL unpreserved amber glass vial with septum cap. All samples were analyzed by SGS Dayton, New Jersey for VOCs by USEPA Method 8260. While Method 8260 typically requires three 40 mL hydrochloric acid (HCl)-preserved volatile organic analysis (VOA) vials for each sample, the limited sample volume available from each port due to pore volume constraints necessitated the use of 10 mL samples. SGS Dayton was able to achieve adequate detection limits with this limited sample volume. Originally, Port #5 was planned for sampling with Port #6 serving as backup. However, during the first sampling event on 5/6/21, Port #5 did not produce water and Port #6 was brought online. For consistency throughout the study, Port #6 rather than Port #5 was sampled at each sampling interval for the remainder of the study.

Samples were collected from the influent bag by diverting the flow exiting the peristaltic pump into a 20 mL VOA vial through a needle perforating the septum of the vial cap. For effluent sampling, the effluent line was transferred from the bulk 2 L collection vessel to a 20 mL VOA vial through a needle perforating the septum of the vial cap. This

approach allowed for collection of time-discrete effluent samples with limited headspace, minimizing volatilization of VOCs. Influent and effluent samples were transferred into 10 mL unpreserved amber glass vials prior to submittal for laboratory analysis. The conductivity of the bulk effluent water collected prior to each column sampling interval was measured using a Hanna Instruments HI-2550 benchtop meter. The pH of the bulk effluent water collected prior to each column sampling interval was measured using an Accumet AB150 benchtop meter during each sampling interval from 6/17/21 through the end of the study.

From 5/11/21 through 6/21/21 the column was operated at a target flow rate of 0.2 mL/min with weekly sampling intervals occurring on the following dates:

- 5/13/21: 3.16 PV, 1.25 L cumulative throughput volume
- 5/20/21: 8.05 PV, 3.18 L cumulative throughput volume
- 5/28/21: 12.62 PV, 4.99 L cumulative throughput volume
- 6/3/21: 16.77 PV, 6.63 L cumulative throughput volume
- 6/10/21: 21.48 PV, 8.49 L cumulative throughput volume

The number of pore volumes (PVs) through the column and the volume of column throughput since 5/6/21 are also summarized above for each date. The pore volume and residence time represented by each column study sampling point at the 0.2 mL/min flow rate are summarized below:

Column Sampling Point	Pore Volume (cubic centimeters)	Residence Time (minutes)
Influent	0	0
Port #1	56	282
Port #2	113	564
Port #3	169	847
Port #4	226	1129
Port #6	339	1693
Effluent	395	1975

From 6/21/21 through 6/23/21 the column was operated at a target flow rate of 2.0 mL/min. The influent bag was filled with three 2.5 L jugs of MW-6S groundwater prior to operating the column at this increased flow rate. A sample of the influent bag water was collected into three 40 mL HCl-preserved vials immediately after filling. Column sampling intervals at this increased flow rate occurred on the following dates:

- 6/22/21: 35.05 PV, 13.85 L cumulative throughput volume
- 6/23/21: 41.79 PV, 16.51 L cumulative throughput volume

The number of PVs through the column and the volume of column throughput since 5/6/21 are also summarized above for each date. The pore volume and residence time represented by each port at the 2.0 mL/min flow rate are summarized below:

Column Sampling Point	Pore Volume (cubic centimeters)	Residence Time (minutes)
Influent	0	0
Port #1	56	28
Port #2	113	56
Port #3	169	85
Port #4	226	113
Port #6	339	169
Effluent	395	198

To provide SGS Dayton with adequate sample volume to perform dilutions, if needed, during Method 8260 analysis, two 10 mL vials were collected from each port during the 6/22/21 and 6/23/21 sampling intervals. One series of 10 mL port samples was collected first, and then the column was given time to recharge with groundwater (81 minutes at the 6/22/21 sampling interval and 55 minutes at the 6/23/21 sampling interval) before collection of the second series of samples. The two vials from each port were treated as duplicates from the same parent sample ID for submittal to SGS.

Prior to the 6/23/21 sampling event, samples of the influent water and bulk effluent water were collected for the following additional analyses by SGS Dayton:

- Alkalinity by SM2320 B-11
- Metals (Fe, Na, Mg, Ca, K, Mn) by Method 6010D
- Sulfate and chloride by EPA 300/SW846 9056A
- Total Organic Carbon by SM5310 B-11

The pH and conductivity of the influent and effluent water were also measured. These measurements were performed in-house using Accumet AB150 and Hanna Instruments HI-2550 benchtop meters, respectively.

The column study was terminated following the 6/23/21 sampling interval.

3 Results

Approximately 42 pore volumes of site groundwater were pumped through the ZVI column during the column study. VOC analytical results for the samples collected during each sampling event of the column study are provided in Table 1. Results for the other parameters analyzed in the influent and effluent samples collected during the final sampling event on 6/23/21 are provided in Table 2.

Chlorinated VOC compounds TCE, cDCE, tDCE and VC were detected in the in the column influent samples collected during course of the column study within the following concentration ranges:

Constituent	Range of Concentrations in Column Influent (µg/L)
TCE	3.6J – 12.7
cDCE	1430 – 5560
tDCE	3.8J – 24.4
VC	14.7 – 2330

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

µg/L = micrograms per liter

Neither TCE nor tDCE were detected in samples collected from the column sampling ports or in the column effluent samples (laboratory reporting limits of 2.7 µg/L and 2.7 µg/L, respectively) during the column study.

Concentrations of cDCE and VC were reduced to non-detectable values within a residence time of 85 minutes (laboratory reporting limits of 2.5 µg/L and 3.9 µg/L, respectively). The residence time required for cVOC degradation is a critical design parameter for a PRB. The following section describes estimation of degradation rate constants using the column study data.

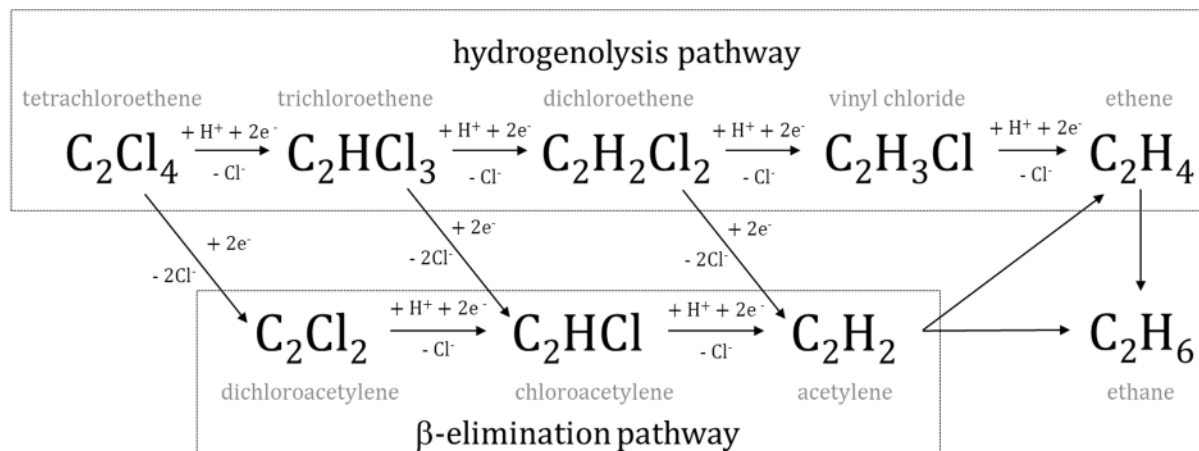
3.1 cVOC Degradation Rate Constants

The change in concentration of the target constituent over time as it reacts with ZVI can be expressed as:

$$C = C_0 e^{-k_1 f_i t} \quad (1)$$

where C_0 is the initial concentration of dissolved constituent, C is the concentration of dissolved constituent after a specific contact time (t), t is the contact time between the dissolved constituent and iron particles, k_1 is the effective rate constant, and f_i is the fraction of iron in the PRB.

Reductive dechlorination using ZVI predominantly follows a β -elimination pathway (Arnold and Roberts 2000; Roberts et al. 1996). While chlorinated intermediates are created during the β -elimination pathway, they have very short half lives. The hydrogenolysis and β -elimination pathways and the potential products generated are shown below.



Although there is some degradation along the hydrogenolysis pathway, it is minor relative to the elimination pathway.

The column study data reflect the net degradation of each compound at each sampling location, providing a bench-scale validation of the planned ZVI PRB cVOC groundwater remediation approach. Because the hydrogenolysis pathway is minor, pseudo first order rate constants were calculated to represent the effective rate of disappearance of each of the constituents under the test conditions.

Analytical data from the 6/22/21 and 6/23/21 sampling events, when cDCE and VC were detected in Port #1 and Port #2 samples, were used to estimate pseudo first order degradation rate constants for these constituents. These are summarized in Table 3 and ranged from 4.20 per hour to 5.11 per hour for cDCE and 4.43 per hour to 5.74 per hour for VC.

Due to the concurrent production and destruction of intermediates such as cDCE and VC, the actual degradation rates will be slightly higher than calculated pseudo first order rate constants. The calculated rate constants are therefore considered appropriate for use in the full-scale design. Because the rate of cVOC degradation by ZVI decreases with decreasing water temperature, these room-temperature laboratory-derived rates would be temperature-corrected in a site-specific design.

Because TCE and tDCE concentrations in the column influent samples were relatively low, and neither constituent was detected in samples collected from the column sampling ports or in the column effluent samples, degradation rate constants for these cVOCs were not calculated from this study.

3.2 Inorganic Parameters

The influent and effluent sample data from the final sampling event (Table 2) show that pH increased within the column from an influent value of 7.38 to an effluent value of 9.56. The change in pH along the ZVI column is expected as a result of the iron corrosion reaction.

Carbonate alkalinity and the dissolved calcium concentration both decreased within the column, from 80,100 µg/L to 25,600 µg/L and 242 mg/L to 137 mg/L, respectively. Losses of calcium and alkalinity through the column are with corrosion of the iron and a subsequent decrease in the solubility of carbonate species such as calcium carbonate and ferrous carbonate. These processes will tend to decrease the reactivity of the ZVI over time;

however, the rate of change in long term reactivity cannot be predicted accurately from a column study of this duration. Neither column fouling nor migration of the contaminant front through the column were observed during the study, indicating that the Site-specific geochemical conditions are compatible with the use of a ZVI PRB.

The sulfate concentration showed no substantial change between the column influent and effluent samples. Because sulfate reduction is mediated by biological activity, it is not typically observed in bench-scale ZVI column tests.

Changes in iron, manganese, conductivity, and chloride concentrations are consistent with some mineral precipitation and reductive dechlorination of cVOCs present in the column influent.

4 Conclusions

The column study demonstrated that Connelly ZVI was capable of destruction within the column to below detection limits of the cVOCs present in the site water. The kinetic parameters derived from the column study support the 2-foot-wide ZVI PRB approach as technically appropriate for degradation of cVOCs under site-specific groundwater conditions

Tables

Table 1
Analytical Results - Volatile Organic Compounds (VOCs)
Treatability Study Report
Tell City Facility
Tell City, Indiana

Sample Identification	MW-6S Groundwater (Baseline)						Influent														Port #1																	
Sample Collection Date	5/6/2021		5/25/2021		6/21/2021		5/13/2021		5/20/2021		5/28/2021		6/3/2021		6/10/2021		6/21/2021		6/22/2021		6/23/2021		5/13/2021		5/20/2021		5/28/2021		6/3/2021		6/10/2021		6/22/2021		6/23/2021		5/13/2021	
Method/Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
VOCs by USEPA Method 8260 (µg/L)																																						
Acetone	31		15	ND, a	31	ND, a	31	ND	15	ND, a	15	ND, a	15	ND, a	15	ND	15	ND, a	31	ND, a	15	ND, c	15	ND	15	ND, a	15	ND, a	15	ND, a	15	ND	15	ND, a	15	ND, b	15	ND
Benzene	4.3	ND	2.1	ND	4.3	ND	4.3	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	4.3	ND	2.1	ND, c	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND
Bromobenzene	5.5	ND	2.7	ND	5.5	ND	5.5	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	5.5	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
Bromochloromethane	4.8	ND	2.4	ND	4.8	ND	4.8	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	4.8	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
Bromodichloromethane	4.5	ND	2.3	ND	4.5	ND	4.5	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	4.5	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND
Bromoform	6.3	ND	3.2	ND	6.3	ND	6.3	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	6.3	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND
Bromomethane	16	ND	8.2	ND	16	ND	16	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	16	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND
2-Butanone (MEK)	69	ND	34	ND	69	ND	69	ND	34	ND	34	ND	34	ND	34	ND	34	ND	69	ND	34	ND	34	ND	34	ND	34	ND	34	ND	34	ND, a	34	ND	34	ND	34	ND
n-Butylbenzene	5.2	ND	2.6	ND	5.2	ND	5.2	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	5.2	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND
sec-Butylbenzene	6.2	ND	3.1	ND	6.2	ND	6.2	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	6.2	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND
tert-Butylbenzene	6.9	ND	3.4	ND	6.9	ND	6.9	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	6.9	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND
Carbon disulfide	4.6	ND	2.3	ND	4.6	ND	4.6	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	4.6	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND
Carbon tetrachloride	5.5	ND	2.8	ND	5.5	ND	5.5	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND, b	5.5	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
Chlorobenzene	5.6	ND	2.8	ND	5.6	ND	5.6	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	5.6	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
Chloroethane	7.3	ND	3.6	ND	7.3	ND	7.3	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	7.3	ND	3.6	ND, b	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND, b	3.6	ND
Chloroform	5	ND	2.5	ND	5	ND	5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
Chloromethane	7.6	ND	3.8	ND	7.6	ND	7.6	ND	3.8	ND	3.8	ND	3.8	ND	3.8	ND	3.8	ND, a	7.6	ND	3.8	ND	3.8	ND	3.8	ND	3.8	ND	3.8	ND	3.8	ND, a	3.8	ND	3.8	ND	3.8	ND
o-Chlorotoluene	6.3	ND	3.2	ND	6.3	ND	6.3	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	6.3	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND
p-Chlorotoluene	6	ND	3	ND	6	ND	6	ND	3	ND	3	ND	3	ND	3	ND	3	ND	6	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
1,2-Dibromo-3-chloropropane	5.3	ND	2.6	ND	5.3	ND	5.3	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	5.3	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND
Dibromochloromethane	5.6	ND	2.8	ND	5.6	ND	5.6	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	5.6	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
1,2-Dibromomethane	4.8	ND	2.4	ND	4.8	ND	4.8	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	4.8	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
1,2-Dichlorobenzene	5.3	ND	2.7	ND	5.3	ND	5.3	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	5.3	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
1,3-Dichlorobenzene	5.4	ND	2.7	ND	5.4	ND	5.4	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	5.4	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
1,4-Dichlorobenzene	5.1	ND	2.5	ND	5.1	ND	5.1	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	5.1	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
Dichlorodifluoromethane	5.6	ND	2.8	ND	5.6	ND, a	5.6	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	5.6	ND, a	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
1,1-Dichloroethane	5.7	ND	2.8	ND	5.7	ND	5.7	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	5.7	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
1,2-Dichloroethane	6	ND	3	ND	6	ND	6	ND	3	ND	3	ND	3	ND	3	ND	3	ND	6	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
1,1-Dichloroethene	5.9	ND	3	ND	5.9	ND	5.9	ND	3	ND	3	ND	3	ND	3	ND	3	ND	5.9	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
cis-1,2-Dichloroethene	3970		4180		5550		2680		2740		2490		1430		1990		4780		5560		4050		3.6	J	2.5	ND	2.5	ND	2.5	ND	2.5	ND	413		578		2.5	ND
trans-1,2-Dichloroethene	32.9		21.3		24.7		5.7																															

Table 1
Analytical Results - Volatile Organic Compounds (VOCs)
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Tell City Facility
Tell City, Indiana

Sample Identification			Port #6														Effluent													
Sample Collection Date	6/23/2021		5/14/2021	5/20/2021	5/28/2021	6/3/2021	6/10/2021	6/22/2021	6/23/2021	5/13/2021	5/20/2021	5/28/2021	6/3/2021	6/10/2021	6/22/2021	6/23/2021														
Method/Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
VOCs by USEPA Method 8260 (µg/L)																														
Acetone	15	ND, a	15	ND	15	ND, a	15	ND, a	15	ND, a	15	ND	15	ND, a	15	ND	15	ND	15	ND, a	15	ND, a	15	ND, a	15	ND	15	ND, b	15	ND, a
Benzene	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND
Bromobenzene	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
Bromochloromethane	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
Bromodichloromethane	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND
Bromoform	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND
Bromomethane	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND
2-Butanone (MEK)	34	ND	34	ND	34	ND	34	ND	34	ND	34	ND	34	ND, a	34	ND	34	ND	34	ND	34	ND	34	ND	34	ND	34	ND	34	ND
n-Butylbenzene	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND
sec-Butylbenzene	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND	3.1	ND
tert-Butylbenzene	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND	3.4	ND
Carbon disulfide	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND	2.3	ND
Carbon tetrachloride	2.8	ND, b	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND, b	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND, b
Chlorobenzene	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
Chloroethane	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND	3.6	ND, b	3.6	ND
Chloroform	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
Chloromethane	3.8	ND	3.8	ND, a	3.8	ND	3.8	ND	3.8	ND	3.8	ND, a	3.8	ND	3.8	ND	3.8	ND, a	3.8	ND	3.8	ND	3.8	ND	3.8	ND, a	3.8	ND	3.8	ND
o-Chlorotoluene	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND
p-Chlorotoluene	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
1,2-Dibromo-3-chloropropane	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND
Dibromochloromethane	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
1,2-Dibromoethane	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
1,2-Dichlorobenzene	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
1,3-Dichlorobenzene	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
1,4-Dichlorobenzene	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
Dichlorodifluoromethane	2.8	ND	2.8	ND, a	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND, a	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
1,1-Dichloroethane	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND	2.8	ND
1,2-Dichloroethane	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
1,1-Dichloroethene	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
cis-1,2-Dichloroethene	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	3.9	J	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
trans-1,2-Dichloroethene	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND
1,2-Dichloropropane	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
1,3-Dichloropropane	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND
2,2-Dichloropropane	2.6	ND, b	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND, b	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND	2.6	ND, b
1,1-Dichloropropene	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND	2.1	ND
cis-1,3-Dichloropropene	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
trans-1,3-Dichloropropene	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND	2.2	ND
Ethylbenzene	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
Hexachlorobutadiene	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND, a	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND, a	2.7	ND	2.7	ND
2-Hexanone	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND, a	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND
Iodomethane	8.2	ND	8.2	ND, a	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND, a	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND	8.2	ND
Isopropylbenzene	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND	3.2	ND
p-Isopropyltoluene	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND
Methyl Tert Butyl Ether	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND
4-Methyl-2-pentanone(MIBK)	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND	9.3	ND
Methylene bromide	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
Methylene chloride	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND
Naphthalene	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND	13	ND
n-Propylbenzene	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
Styrene	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND	2.4	ND
1,1,1,2-Tetrachloroethane	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	ND
1,1,2,2-Tetrachloroethane	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND	3.3	ND
Tetrachloroethene	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND	4.5	ND
Toluene	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7	ND	2.7									

Notes:

Bolded: Values represent results that are greater than the Method Detection Limit (MDL).

Definitions:

a : Associated CCV outside of control limits low.

b : Associated CCV outside of control limits high. Sample was ND.

B: Compound was found in the blank and the sample

J : Result is less than the laboratory reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

µg/L: Micrograms per liter

ND : Indicates the analyte was analyzed for but not detected.

Q : Qualifier

Table 2
Analytical Results - Other Parameters
Treatability Study Report
Tell City Facility
Tell City, Indiana

Sample Identification	Influent		Effluent	
Sample Collection Date	6/23/2021		6/23/2021	
Method/Analyte	Result	Q	Result	Q
Metals by USEPA Method 6010D (µg/L)				
Calcium	80100		25600	
Iron	1090		100	ND
Magnesium	21100		27200	
Manganese	764		78.7	
Potassium	10000	ND	10000	ND
Sodium	10000	ND	10000	ND
General Chemistry (mg/L)				
Alkalinity, Total as CaCO ₃	242	d	137	d
Chloride	19.1		21.1	
Sulfate	28.9		28.4	
Total Organic Carbon	1	ND	1	ND
In-Lab Measurements				
pH (s.u.)	7.38		9.56	
Conductivity (µS/cm)	355		215.8	

Notes:

Bolded: Values represent results that are greater than the Method Detection Limit (MDL).

Definitions:

d : Sample was titrated to a final pH of 4.5.

ND : Indicates the analyte was analyzed for but not detected.

Q : Qualifier

Table 3
 Degradation Rate Constant Estimates
 Treatability Study Report
 Tell City Facility
 Tell City, Indiana

Compound	Pore Volumes	Influent Concentration (µg/L)	Port #1 Concentration (µg/L)	Port #2 Concentration (µg/L)	Degradation Rate Constant, k (per hour)	r ²
cDCE	35.1	5560	413	48.3	5.11	0.9998
	41.8	4050	578	81.5	4.20	1.0000
VC	35.1	2330	77.5	11.3	5.74	0.9990
	41.8	1100	97.6	17.9	4.43	0.9988

Definitions:

cDCE : cis-1,2-dichloroethene

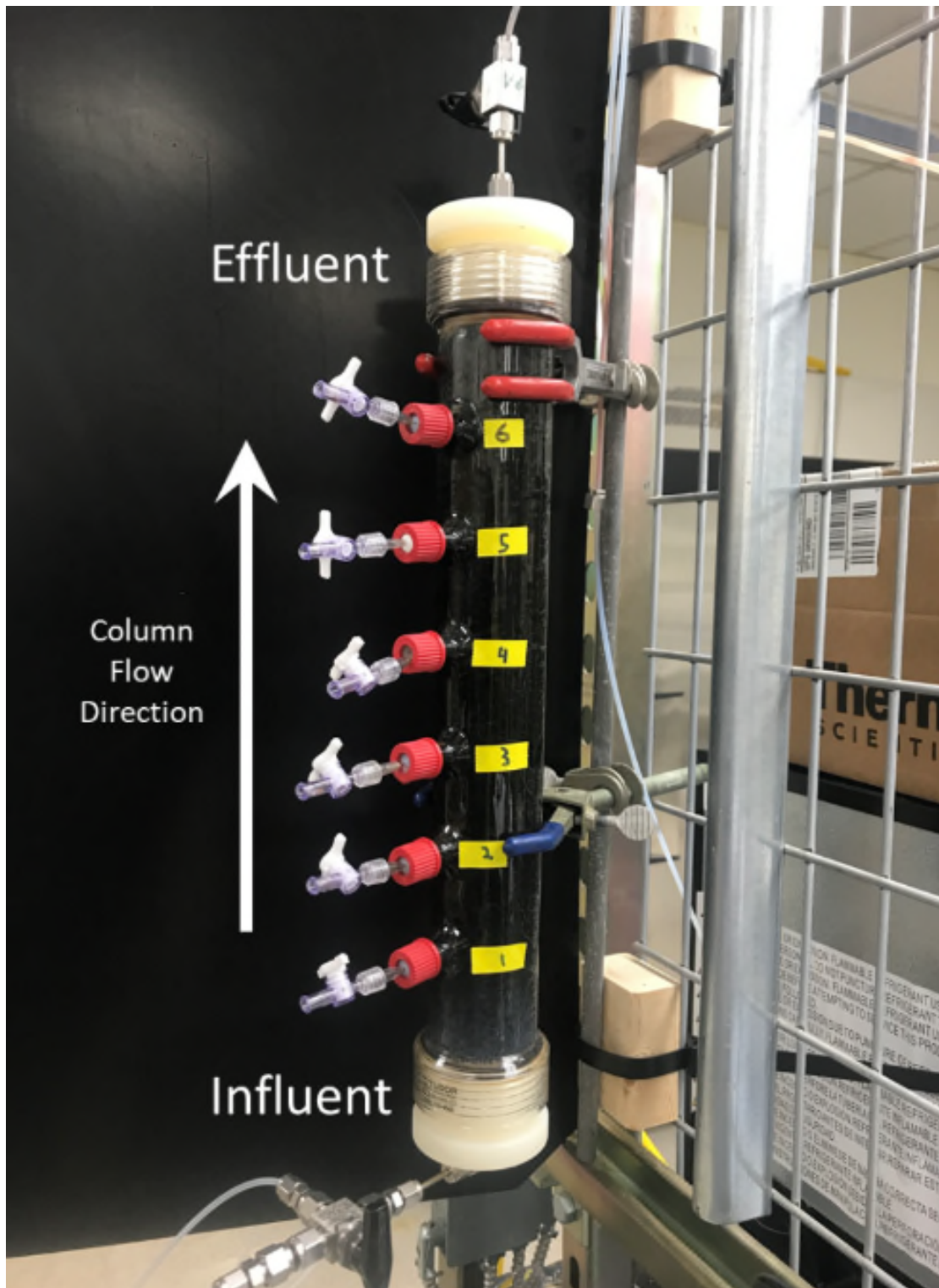
µg/L : micrograms per liter

r² : coefficient of variation

VC : vinyl chloride

VOC : volatile organic compound

Figures



Treatability Testing Column

General Electric
Tell City Facility
1412 13th Street, Tell City Indiana



Figure 1

Appendix A

Laboratory Reports

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street Treatability Study, Tell City, IN

30006312.3000L

SGS Job Number: JD25145

Sampling Dates: 05/06/21 - 05/14/21

Report to:

david.liles@Arcadis.com

ATTN: Distribution4

Total number of pages in report: 28



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



Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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

Sample Summary

Arcadis

Job No: JD25145

GE, 13th Street Treatability Study, Tell City, IN
 Project No: 30006312.3000L

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

JD25145-1	05/06/21	14:40	AB	05/15/21	AQ	Influent	MW-65 INFLUENT BASELINE
JD25145-2	05/13/21	13:45	AB	05/15/21	AQ	Influent	INFL-5/13/21
JD25145-3	05/13/21	13:20	AB	05/15/21	AQ	Water	PORT#1-5/13/21
JD25145-4	05/13/21	13:25	AB	05/15/21	AQ	Water	PORT#2-5/13/21
JD25145-5	05/13/21	13:30	AB	05/15/21	AQ	Water	PORT#3-5/13/21
JD25145-6	05/13/21	13:35	AB	05/15/21	AQ	Water	PORT#4-5/13/21
JD25145-7	05/14/21	10:25	AB	05/15/21	AQ	Water	PORT#6-5/14/21
JD25145-8	05/13/21	10:42	AB	05/15/21	AQ	Effluent	EFFL-5/13/21

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-65 INFLUENT BASELINE	Date Sampled:	05/06/21
Lab Sample ID:	JD25145-1	Date Received:	05/15/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329487.D	10	05/19/21 13:46	BK	n/a	n/a	VL9856
Run #2	4B104463.D	100	05/19/21 10:12	ED	n/a	n/a	V4B4520

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	3970 ^b	100	51	ug/l	
156-60-5	trans-1,2-Dichloroethene	32.9	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-65 INFLUENT BASELINE	Date Sampled:	05/06/21
Lab Sample ID:	JD25145-1	Date Received:	05/15/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone	ND	50	20	ug/l	
74-88-4	Iodomethane ^c	ND	20	16	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	12.7	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate ^d	ND	100	21	ug/l	
75-01-4	Vinyl chloride	1740	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	MW-65 INFLUENT BASELINE	
Lab Sample ID:	JD25145-1	Date Sampled: 05/06/21
Matrix:	AQ - Influent	Date Received: 05/15/21
Method:	SW846 8260D	Percent Solids: n/a
Project:	GE, 13th Street Treatability Study, Tell City, IN	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%	109%	80-121%
2037-26-5	Toluene-D8	103%	96%	80-120%
460-00-4	4-Bromofluorobenzene	98%	97%	80-120%

- (a) Dilution required due to high concentration of target compound.
 (b) Result is from Run# 2
 (c) Associated CCV outside of control limits low.
 (d) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	INFL-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-2	Date Received:	05/15/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329486.D	10	05/19/21 13:19	BK	n/a	n/a	VL9856
Run #2 ^b	4B104464.D	100	05/19/21 10:40	ED	n/a	n/a	V4B4520

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	2680 ^c	100	51	ug/l	
156-60-5	trans-1,2-Dichloroethene	5.7	10	5.4	ug/l	J
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-2	Date Received:	05/15/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone	ND	50	20	ug/l	
74-88-4	Iodomethane ^d	ND	20	16	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	ND	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate ^e	ND	100	21	ug/l	
75-01-4	Vinyl chloride	405	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	100%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	INFL-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-2	Date Received:	05/15/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	110%	80-121%
2037-26-5	Toluene-D8	104%	102%	80-120%
460-00-4	4-Bromofluorobenzene	98%	100%	80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time. Dilution required due to high concentration of target compound.
- (b) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
- (c) Result is from Run# 2
- (d) Associated CCV outside of control limits low.
- (e) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#1-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-3	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329489.D	5	05/19/21 14:52	BK	n/a	n/a	VL9856
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.6	5.0	2.5	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-3	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane ^b	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#1-5/13/21	
Lab Sample ID:	JD25145-3	Date Sampled: 05/13/21
Matrix:	AQ - Water	Date Received: 05/15/21
Method:	SW846 8260D	Percent Solids: n/a
Project:	GE, 13th Street Treatability Study, Tell City, IN	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		80-121%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to low sample volume.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#2-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-4	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329491.D	5	05/19/21 15:46	BK	n/a	n/a	VL9856
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-4	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane ^b	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	PORT#2-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-4	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		80-121%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) (pH= 4) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to low sample volume.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#3-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-5	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329492.D	5	05/19/21 16:13	BK	n/a	n/a	VL9856
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-5	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane ^b	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		85-118%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	PORT#3-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-5	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		80-121%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

(a) (pH= 4) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to low sample volume.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#4-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-6	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329545.D	5	05/20/21 16:22	EH	n/a	n/a	VL9858
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-6	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane ^b	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	PORT#4-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-6	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		80-121%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

(a) (pH= 5) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#6-5/14/21	Date Sampled:	05/14/21
Lab Sample ID:	JD25145-7	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329554.D	5	05/20/21 20:23	EH	n/a	n/a	VL9858
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-5/14/21	Date Sampled:	05/14/21
Lab Sample ID:	JD25145-7	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane ^b	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	PORT#6-5/14/21	Date Sampled:	05/14/21
Lab Sample ID:	JD25145-7	Date Received:	05/15/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		80-121%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) (pH= 5) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	EFFL-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-8	Date Received:	05/15/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L329544.D	5	05/20/21 15:55	EH	n/a	n/a	VL9858
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-8	Date Received:	05/15/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane ^b	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	EFFL-5/13/21	Date Sampled:	05/13/21
Lab Sample ID:	JD25145-8	Date Received:	05/15/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		80-121%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) (pH= 5) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



JD25145

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

PINK – Retained by Arcadis

SGS Sample Receipt Summary

Job Number: JD25145

Client:
Project:
Date / Time Received: 5/15/2021 9:50:00 AM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (2.5);

Cooler Temps (Corrected) °C: Cooler 1: (1.8);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 1 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 212820	pH 12+: 203117A	Other: (Specify)
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Comments

SM089-03
Rev. Date 12/7/17

JD25145: Chain of Custody

Page 2 of 2

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street Treatability Study, Tell City, IN

30006312.3000L

SGS Job Number: JD25401

Sampling Date: 05/20/21

Report to:

david.liles@Arcadis.com

ATTN: Distribution4

Total number of pages in report: 25



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



Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

Sample Summary

Arcadis**Job No: JD25401****GE, 13th Street Treatability Study, Tell City, IN**
Project No: 30006312.3000L

Sample Number	Collected		Matrix Received	Code	Type	Client Sample ID
	Date	Time By				

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

JD25401-1	05/20/21	11:45 AB	05/21/21	AQ	Influent	INFL-5/20/21
JD25401-2	05/20/21	11:30 AB	05/21/21	AQ	Water	PORT#1-5/20/21
JD25401-3	05/20/21	11:25 AB	05/21/21	AQ	Water	PORT#2-5/20/21
JD25401-4	05/20/21	11:20 AB	05/21/21	AQ	Water	PORT#3-5/20/21
JD25401-5	05/20/21	11:15 AB	05/21/21	AQ	Water	PORT#4-5/20/21
JD25401-6	05/20/21	11:10 AB	05/21/21	AQ	Water	PORT#6-5/20/21
JD25401-7	05/20/21	10:50 AB	05/21/21	AQ	Effluent	EFFL-5/20/21

Report of Analysis

Page 1 of 3

Client Sample ID:	INFL-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-1	Date Received:	05/21/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196917.D	5	05/25/21 14:27	EH	n/a	n/a	V2D8552
Run #2 ^a	2D196920.D	50	05/25/21 15:55	EH	n/a	n/a	V2D8552

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	2740 ^c	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	5.9	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-1	Date Received:	05/21/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	3.6	5.0	2.6	ug/l	J
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^d	ND	50	10	ug/l	
75-01-4	Vinyl chloride	346	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	100%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	INFL-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-1	Date Received:	05/21/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%	84%	80-121%
2037-26-5	Toluene-D8	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	97%	97%	80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Result is from Run# 2

(d) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#1-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-2	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196912.D	5	05/25/21 12:01	EH	n/a	n/a	V2D8552
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-2	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#1-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-2	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#2-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-3	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196913.D	5	05/25/21 12:30	EH	n/a	n/a	V2D8552
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-3	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#2-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-3	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	87%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#3-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-4	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196914.D	5	05/25/21 12:59	EH	n/a	n/a	V2D8552
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-4	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#3-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-4	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#4-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-5	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196915.D	5	05/25/21 13:29	EH	n/a	n/a	V2D8552
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-5	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#4-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-5	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#6-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-6	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196916.D	5	05/25/21 13:58	EH	n/a	n/a	V2D8552
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-6	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#6-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-6	Date Received:	05/21/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	EFFL-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-7	Date Received:	05/21/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D196911.D	5	05/25/21 11:32	EH	n/a	n/a	V2D8552
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-7	Date Received:	05/21/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	EFFL-5/20/21	Date Sampled:	05/20/21
Lab Sample ID:	JD25401-7	Date Received:	05/21/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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



Page 1 of 1

Lab Work Order#

JD 2540

20730826 GovG AR Form 08.27.2015

Distribution:

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK – Retained by Arcadis

PINK - Retained by
Temp - 1.6°C

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD25401

Client:
Project:
Date / Time Received: 5/21/2021 10:00:00 AM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (1.6);

Cooler Temps (Corrected) °C: Cooler 1: (0.9);

Cooler Security
Y or N

1. Custody Seals Present:

☒ ☐

3. COC Present:

☒ ☐

2. Custody Seals Intact:

☒ ☐

4. Smpl Dates/Time OK

☒ ☐
Cooler Temperature
Y or N

1. Temp criteria achieved:

☒ ☐

2. Cooler temp verification:

IR Gun

3. Cooler media:

Ice (Bag)

4. No. Coolers:

1

Quality Control Preservation
Y or N
N/A

1. Trip Blank present / cooler:

☐ ☐
☒

2. Trip Blank listed on COC:

☐ ☐
☒

3. Samples preserved properly:

☒ ☐

4. VOCs headspace free:

☐ ☐
☒
Sample Integrity - Documentation
Y or N

1. Sample labels present on bottles:

☒ ☐

2. Container labeling complete:

☒ ☐

3. Sample container label / COC agree:

☒ ☐
Sample Integrity - Condition
Y or N

1. Sample recvd within HT:

☒ ☐

2. All containers accounted for:

☒ ☐

3. Condition of sample:

Intact

Sample Integrity - Instructions
Y or N
N/A

1. Analysis requested is clear:

☒ ☐

2. Bottles received for unspecified tests

☐ ☒

3. Sufficient volume recvd for analysis:

☒ ☐

4. Compositing instructions clear:

☐ ☐
☒

5. Filtering instructions clear:

☐ ☐
☒
Test Strip Lot #s:
pH 1-12:

212820

pH 12+:

203117A

Other: (Specify)

Comments

SM089-03

Rev. Date 12/7/17

JD25401: Chain of Custody

Page 2 of 2

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street Treatability Study, Tell City, IN

SGS Job Number: JD25800

Sampling Dates: 05/25/21 - 05/28/21

Report to:

Arcadis

kelly.ramos@sgs.com

ATTN: David Liles

Total number of pages in report: 47



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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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

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Sample Summary

Arcadis

Job No: JD25800

GE, 13th Street Treatability Study, Tell City, IN

Sample Number	Collected		Matrix	Client
	Date	Time By	Received Code Type	Sample ID

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

JD25800-1	05/28/21	13:20	AB	05/29/21	AQ	Influent	INFL-5/28/21
JD25800-2	05/28/21	13:10	AB	05/29/21	AQ	Water	PORT#1-5/28/21
JD25800-3	05/28/21	13:05	AB	05/29/21	AQ	Water	PORT#2-5/28/21
JD25800-4	05/28/21	13:00	AB	05/29/21	AQ	Water	PORT#3-5/28/21
JD25800-5	05/28/21	12:55	AB	05/29/21	AQ	Water	PORT#4-5/28/21
JD25800-6	05/28/21	12:45	AB	05/29/21	AQ	Water	PORT#6-5/28/21
JD25800-7	05/28/21	11:49	AB	05/29/21	AQ	Effluent	EFFL-5/28/21
JD25800-8	05/25/21	13:31	AB	05/29/21	AQ	Water	MW-65-BASELINE #2

Summary of Hits

Job Number: JD25800
Account: Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN
Collected: 05/25/21 thru 05/28/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD25800-1 INFL-5/28/21

cis-1,2-Dichloroethene ^a	2490	50	25	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^b	6.9	5.0	2.7	ug/l	SW846 8260D
Trichloroethene ^b	4.4 J	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride ^b	485	5.0	3.9	ug/l	SW846 8260D

JD25800-2 PORT#1-5/28/21

No hits reported in this sample.

JD25800-3 PORT#2-5/28/21

No hits reported in this sample.

JD25800-4 PORT#3-5/28/21

No hits reported in this sample.

JD25800-5 PORT#4-5/28/21

No hits reported in this sample.

JD25800-6 PORT#6-5/28/21

No hits reported in this sample.

JD25800-7 EFFL-5/28/21

No hits reported in this sample.

JD25800-8 MW-65-BASELINE #2

cis-1,2-Dichloroethene	4180	50	25	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^c	21.3	5.0	2.7	ug/l	SW846 8260D
Trichloroethene ^c	10.2	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride	1390	50	39	ug/l	SW846 8260D

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

(b) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(c) ion required due to limited volume provided.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INFL-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-1	Date Received:	05/29/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264587.D	5	06/03/21 15:13	EH	n/a	n/a	VA10362
Run #2 ^b	A264585.D	50	06/03/21 14:15	EH	n/a	n/a	VA10362

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^c	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	2490 ^d	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	6.9	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-1	Date Received:	05/29/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	4.4	5.0	2.6	ug/l	J
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^e	ND	50	10	ug/l	
75-01-4	Vinyl chloride	485	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	108%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-1	Date Received:	05/29/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	101%	80-121%
2037-26-5	Toluene-D8	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	93%	92%	80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time. Dilution required due to limited volume provided.
- (b) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
- (c) Associated CCV outside of control limits low.
- (d) Result is from Run# 2
- (e) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#1-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-2	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264580.D	5	06/03/21 11:49	EH	n/a	n/a	VA10362
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-2	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-2	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-3	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264581.D	5	06/03/21 12:18	EH	n/a	n/a	VA10362
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-3	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-3	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#3-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-4	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264582.D	5	06/03/21 12:47	EH	n/a	n/a	VA10362
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-4	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-4	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#4-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-5	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264583.D	5	06/03/21 13:16	EH	n/a	n/a	VA10362
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-5	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-5	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#6-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-6	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264584.D	5	06/03/21 13:45	EH	n/a	n/a	VA10362
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-6	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-6	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

(a) (pH= 5) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-7	Date Received:	05/29/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264579.D	5	06/03/21 11:19	EH	n/a	n/a	VA10362
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-7	Date Received:	05/29/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-5/28/21	Date Sampled:	05/28/21
Lab Sample ID:	JD25800-7	Date Received:	05/29/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

- (a) (pH= 5) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	MW-65-BASELINE #2	Date Sampled:	05/25/21
Lab Sample ID:	JD25800-8	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264588.D	5	06/03/21 15:42	EH	n/a	n/a	VA10362
Run #2	A264586.D	50	06/03/21 14:44	EH	n/a	n/a	VA10362

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	4180 ^c	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	21.3	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-65-BASELINE #2	Date Sampled:	05/25/21
Lab Sample ID:	JD25800-8	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	10.2	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^d	ND	50	10	ug/l	
75-01-4	Vinyl chloride	1390 ^c	50	39	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	110%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-65-BASELINE #2	Date Sampled:	05/25/21
Lab Sample ID:	JD25800-8	Date Received:	05/29/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	102%	80-121%
2037-26-5	Toluene-D8	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	95%	93%	80-120%

- (a) ion required due to limited volume provided.
 (b) Associated CCV outside of control limits low.
 (c) Result is from Run# 2
 (d) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

7738 5804 4961

Lab Work Order #

JD25200

Contact & Company Name: Dave Liles / Arcadis		Telephone: 919-328-5574		Preservative: Filtered (✓) E B		Container Information: 4 3		Preservation Key: A. H ₂ SO B. HCL C. HNO D. NaOH E. None F. Other: G. Other: H. Other:		Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Enco 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10ml vial 10. Other:	
Address: City: State Zip		Fax: E-mail Address:		PARAMETER ANALYSIS & METHOD							
Project Name/Location (City, State): GE Tell City		Project #:		<div>Method 8260 VCLs * Method 8260 VCLs * U87</div>							
Sample's Printed Name: Andy Baumeister		Sampler's Signature:									
Sample ID		Collection Date Time		Type (✓) Comp Grab		Matrix		REMARKS			
INFL - 5/28/21		5/28/21 1320				W		* Use Tell City Project analyze list			
PORT #1 - 5/28/21		1310									
PORT #2 - 5/28/21		1305									
PORT #3 - 5/28/21		1300									
PORT #4 - 5/28/21		1255									
PORT #6 - 5/28/21		1245									
EFFL - 5/28/21		1149									
MW-65 - Baseline #2		5/28/21 1331									
Special Instructions/Comments: Standard TAT		Special QA/QC Instructions (✓):									
Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By			
Lab Name: IN-4		Cooler Custody Seal (✓) <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Printed Name: Andy Baumeister		Printed Name: Fedex		Printed Name: Fedex		Printed Name: Dominic Guerrero	
<input checked="" type="checkbox"/> Cooler packed with ice (✓) 2.2 °C				Signature: [Signature]		Signature:		Signature:		Signature: [Signature]	
Specify Turnaround Requirements:		Sample Receipt:		Firm: Arcadis		Firm/Carrier: Fedex		Firm/Carrier: Fedex		Firm: SGS	
Shipping Tracking #: 7738 5804 4961		Condition/Cooler Temp: 2.2 °C		Date/Time: 5/28/21 1600		Date/Time:		Date/Time: 5/29/21 9:35		Date/Time: 5/29/21 9:35	
Distribution:		WHITE - Laboratory returns with results				YELLOW - Lab copy				PINK - Retained by Arcadis	

JD25800: Chain of Custody

Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD25800

Client: ARCADIS

Project: GE Tell City

Date / Time Received: 5/29/2021 9:35:00 AM

Delivery Method: FedEx

Airbill #s: 7738 5804 4961

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.5);

Cooler Security

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments Samples -1 thru -7: Received 1 x 10mL ZHE unpreserved vial for 8260 VOC analysis. Limited volume. No screen designated.

SM089-03
Rev. Date 12/7/17

JD25800: Chain of Custody

Page 2 of 3

Response:

Response: Proceed with analysis

MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Instrument Performance Checks (BFB)**
- **Surrogate Recovery Summaries**

Method Blank Summary

Page 1 of 3

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10362-MB	A264578.D	1	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10362-MB	A264578.D	1	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
74-88-4	Iodomethane	ND	2.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD25800
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10362-MB	A264578.D	1	06/03/21	EH	n/a	n/a	VA10362

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

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105% 85-118%
17060-07-0	1,2-Dichloroethane-D4	101% 80-121%
2037-26-5	Toluene-D8	98% 80-120%
460-00-4	4-Bromofluorobenzene	94% 80-120%

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

Blank Spike Summary

Page 1 of 3

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10362-BS	A264576.D	1	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	258	129	63-137
71-43-2	Benzene	50	47.9	96	78-117
108-86-1	Bromobenzene	50	49.5	99	82-121
74-97-5	Bromochloromethane	50	50.6	101	83-124
75-27-4	Bromodichloromethane	50	47.5	95	83-123
75-25-2	Bromoform	50	47.2	94	80-140
74-83-9	Bromomethane	50	49.7	99	26-167
78-93-3	2-Butanone (MEK)	200	232	116	73-135
104-51-8	n-Butylbenzene	50	48.1	96	78-126
135-98-8	sec-Butylbenzene	50	50.0	100	78-122
98-06-6	tert-Butylbenzene	50	50.3	101	77-122
75-15-0	Carbon disulfide	50	46.0	92	60-131
56-23-5	Carbon tetrachloride	50	46.9	94	75-127
108-90-7	Chlorobenzene	50	47.7	95	83-115
75-00-3	Chloroethane	50	48.7	97	61-135
67-66-3	Chloroform	50	44.4	89	76-118
74-87-3	Chloromethane	50	48.6	97	46-144
95-49-8	o-Chlorotoluene	50	51.3	103	80-120
106-43-4	p-Chlorotoluene	50	47.0	94	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	48.4	97	75-135
124-48-1	Dibromochloromethane	50	47.9	96	84-128
106-93-4	1,2-Dibromoethane	50	48.9	98	82-129
95-50-1	1,2-Dichlorobenzene	50	48.4	97	85-117
541-73-1	1,3-Dichlorobenzene	50	48.2	96	83-116
106-46-7	1,4-Dichlorobenzene	50	48.8	98	82-115
75-71-8	Dichlorodifluoromethane	50	47.6	95	49-153
75-34-3	1,1-Dichloroethane	50	47.2	94	75-122
107-06-2	1,2-Dichloroethane	50	46.5	93	74-116
75-35-4	1,1-Dichloroethene	50	43.9	88	68-129
156-59-2	cis-1,2-Dichloroethene	50	47.5	95	78-120
156-60-5	trans-1,2-Dichloroethene	50	47.0	94	74-125
78-87-5	1,2-Dichloropropane	50	49.0	98	80-120
142-28-9	1,3-Dichloropropane	50	48.2	96	82-116
594-20-7	2,2-Dichloropropane	50	47.2	94	70-128
563-58-6	1,1-Dichloropropene	50	48.4	97	75-121
10061-01-5	cis-1,3-Dichloropropene	50	47.5	95	84-123

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10362-BS	A264576.D	1	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	48.0	96	84-124
100-41-4	Ethylbenzene	50	46.5	93	80-115
87-68-3	Hexachlorobutadiene	50	46.4	93	68-137
591-78-6	2-Hexanone	200	189	95	74-132
74-88-4	Iodomethane	50	46.4	93	10-200
98-82-8	Isopropylbenzene	50	46.7	93	79-120
99-87-6	p-Isopropyltoluene	50	49.6	99	80-122
1634-04-4	Methyl Tert Butyl Ether	50	46.9	94	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	187	94	77-129
74-95-3	Methylene bromide	50	49.4	99	83-121
75-09-2	Methylene chloride	50	46.6	93	74-125
91-20-3	Naphthalene	50	46.2	92	73-138
103-65-1	n-Propylbenzene	50	48.6	97	78-117
100-42-5	Styrene	50	48.4	97	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	50.4	101	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	51.5	103	78-122
127-18-4	Tetrachloroethene	50	48.1	96	75-125
108-88-3	Toluene	50	46.7	93	80-115
87-61-6	1,2,3-Trichlorobenzene	50	47.7	95	73-140
120-82-1	1,2,4-Trichlorobenzene	50	45.9	92	77-137
71-55-6	1,1,1-Trichloroethane	50	47.0	94	77-124
79-00-5	1,1,2-Trichloroethane	50	50.1	100	83-118
79-01-6	Trichloroethene	50	47.3	95	80-123
75-69-4	Trichlorofluoromethane	50	47.9	96	71-134
96-18-4	1,2,3-Trichloropropane	50	50.3	101	80-121
95-63-6	1,2,4-Trimethylbenzene	50	47.7	95	81-119
108-67-8	1,3,5-Trimethylbenzene	50	49.6	99	79-120
108-05-4	Vinyl Acetate	50	68.3	137* a	77-131
75-01-4	Vinyl chloride	50	52.0	104	56-138
	m,p-Xylene	100	95.1	95	81-118
95-47-6	o-Xylene	50	48.2	96	81-119
1330-20-7	Xylene (total)	150	143	95	81-118

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10362-BS	A264576.D	1	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	85-118%
17060-07-0	1,2-Dichloroethane-D4	98%	80-121%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	101%	80-120%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD25800
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD25800-8MS	A264589.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8MSD	A264590.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8 ^a	A264588.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8	A264586.D	50	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Compound	JD25800-8 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	1000	799	80	1000	731	73	9	52-133/18
71-43-2	Benzene	ND	250	236	94	250	218	87	8	55-129/11
108-86-1	Bromobenzene	ND	250	243	97	250	234	94	4	73-120/11
74-97-5	Bromochloromethane	ND	250	259	104	250	248	99	4	75-122/10
75-27-4	Bromodichloromethane	ND	250	240	96	250	224	90	7	74-123/11
75-25-2	Bromoform	ND	250	236	94	250	223	89	6	69-135/12
74-83-9	Bromomethane	ND	250	259	104	250	233	93	11	11-167/43
78-93-3	2-Butanone (MEK)	ND	1000	960	96	1000	888	89	8	64-131/15
104-51-8	n-Butylbenzene	ND	250	233	93	250	220	88	6	69-130/11
135-98-8	sec-Butylbenzene	ND	250	244	98	250	230	92	6	70-125/12
98-06-6	tert-Butylbenzene	ND	250	248	99	250	234	94	6	68-125/12
75-15-0	Carbon disulfide	ND	250	237	95	250	212	85	11	54-137/15
56-23-5	Carbon tetrachloride	ND	250	231	92	250	218	87	6	68-132/11
108-90-7	Chlorobenzene	ND	250	232	93	250	219	88	6	71-119/10
75-00-3	Chloroethane	ND	250	255	102	250	232	93	9	50-146/18
67-66-3	Chloroform	ND	250	227	91	250	211	84	7	67-120/11
74-87-3	Chloromethane	ND	250	245	98	250	215	86	13	42-146/17
95-49-8	o-Chlorotoluene	ND	250	247	99	250	240	96	3	71-120/12
106-43-4	p-Chlorotoluene	ND	250	231	92	250	219	88	5	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	235	94	250	221	88	6	65-130/15
124-48-1	Dibromochloromethane	ND	250	238	95	250	222	89	7	74-125/10
106-93-4	1,2-Dibromoethane	ND	250	244	98	250	228	91	7	74-125/9
95-50-1	1,2-Dichlorobenzene	ND	250	240	96	250	227	91	6	73-117/10
541-73-1	1,3-Dichlorobenzene	ND	250	236	94	250	222	89	6	73-117/10
106-46-7	1,4-Dichlorobenzene	ND	250	242	97	250	227	91	6	70-117/10
75-71-8	Dichlorodifluoromethane	ND	250	239	96	250	214	86	11	46-169/17
75-34-3	1,1-Dichloroethane	ND	250	246	98	250	228	91	8	66-124/13
107-06-2	1,2-Dichloroethane	ND	250	233	93	250	216	86	8	66-115/10
75-35-4	1,1-Dichloroethene	ND	250	241	96	250	219	88	10	60-136/15
156-59-2	cis-1,2-Dichloroethene	4180 ^c	250	3450	-136* ^b	250	3370	-168* ^b	2	55-133/12
156-60-5	trans-1,2-Dichloroethene	21.3	250	250	91	250	233	85	7	67-127/13
78-87-5	1,2-Dichloropropane	ND	250	241	96	250	226	90	6	72-120/11
142-28-9	1,3-Dichloropropane	ND	250	239	96	250	222	89	7	72-115/10
594-20-7	2,2-Dichloropropane	ND	250	228	91	250	211	84	8	61-133/12
563-58-6	1,1-Dichloropropene	ND	250	242	97	250	222	89	9	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND	250	242	97	250	221	88	9	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: JD25800
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD25800-8MS	A264589.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8MSD	A264590.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8 ^a	A264588.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8	A264586.D	50	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Compound	JD25800-8 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	242	97	250	222	89	9	73-122/11
100-41-4	Ethylbenzene	ND	250	225	90	250	211	84	6	44-136/10
87-68-3	Hexachlorobutadiene	ND	250	224	90	250	214	86	5	55-143/15
591-78-6	2-Hexanone	ND	1000	847	85	1000	802	80	5	64-129/13
74-88-4	Iodomethane	ND	250	248	99	250	229	92	8	10-200/61
98-82-8	Isopropylbenzene	ND	250	224	90	250	214	86	5	71-122/11
99-87-6	p-Isopropyltoluene	ND	250	239	96	250	228	91	5	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND	250	238	95	250	221	88	7	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	1000	902	90	1000	853	85	6	68-128/13
74-95-3	Methylene bromide	ND	250	252	101	250	235	94	7	74-118/10
75-09-2	Methylene chloride	ND	250	263	105	250	242	97	8	65-126/13
91-20-3	Naphthalene	ND	250	227	91	250	212	85	7	58-140/16
103-65-1	n-Propylbenzene	ND	250	237	95	250	224	90	6	64-123/11
100-42-5	Styrene	ND	250	237	95	250	222	89	7	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	238	95	250	230	92	3	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	260	104	250	247	99	5	68-120/15
127-18-4	Tetrachloroethene	ND	250	237	95	250	220	88	7	61-134/11
108-88-3	Toluene	ND	250	227	91	250	211	84	7	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND	250	233	93	250	221	88	5	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND	250	221	88	250	209	84	6	67-134/14
71-55-6	1,1,1-Trichloroethane	ND	250	234	94	250	220	88	6	66-130/12
79-00-5	1,1,2-Trichloroethane	ND	250	247	99	250	230	92	7	73-117/11
79-01-6	Trichloroethene	10.2	250	241	92	250	223	85	8	56-139/11
75-69-4	Trichlorofluoromethane	ND	250	258	103	250	232	93	11	63-150/16
96-18-4	1,2,3-Trichloropropane	ND	250	250	100	250	240	96	4	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND	250	232	93	250	222	89	4	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND	250	241	96	250	231	92	4	60-128/12
108-05-4	Vinyl Acetate	ND	250	381	152* ^d	250	362	145* ^d	5	66-128/15
75-01-4	Vinyl chloride	1390 ^c	250	1360	-48* ^b	250	1250	-92* ^b	8	48-148/17
	m,p-Xylene	ND	500	458	92	500	432	86	6	42-140/10
95-47-6	o-Xylene	ND	250	233	93	250	224	90	4	54-133/11
1330-20-7	Xylene (total)	ND	750	692	92	750	656	87	5	46-138/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD25800-8MS	A264589.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8MSD	A264590.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8 ^a	A264588.D	5	06/03/21	EH	n/a	n/a	VA10362
JD25800-8	A264586.D	50	06/03/21	EH	n/a	n/a	VA10362

The QC reported here applies to the following samples:

Method: SW846 8260D

JD25800-1, JD25800-2, JD25800-3, JD25800-4, JD25800-5, JD25800-6, JD25800-7, JD25800-8

CAS No.	Surrogate Recoveries	MS	MSD	JD25800-8	JD25800-8	Limits
1868-53-7	Dibromofluoromethane	107%	106%	107%	110%	85-118%
17060-07-0	1,2-Dichloroethane-D4	99%	99%	102%	102%	80-121%
2037-26-5	Toluene-D8	99%	99%	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	100%	101%	95%	93%	80-120%

(a) ion required due to limited volume provided.

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

(c) Result is from Run #2.

(d) Outside in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD25800
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: VA10354-BFB Injection Date: 05/27/21
Lab File ID: A264407.D Injection Time: 17:03
Instrument ID: GCMSA

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	9431	19.5	Pass
75	30.0 - 60.0% of mass 95	23709	49.1	Pass
95	Base peak, 100% relative abundance	48304	100.0	Pass
96	5.0 - 9.0% of mass 95	3181	6.59	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	37013	76.6	Pass
175	5.0 - 9.0% of mass 174	2712	5.61 (7.33) ^a	Pass
176	95.0 - 101.0% of mass 174	35512	73.5 (95.9) ^a	Pass
177	5.0 - 9.0% of mass 176	2385	4.94 (6.72) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA10354-IC10354	A264408.D	05/27/21	17:35	00:32	Initial cal 0.2
VA10354-IC10354	A264409.D	05/27/21	18:04	01:01	Initial cal 0.5
VA10354-IC10354	A264410.D	05/27/21	18:33	01:30	Initial cal 1
VA10354-IC10354	A264411.D	05/27/21	19:02	01:59	Initial cal 2
VA10354-IC10354	A264412.D	05/27/21	19:31	02:28	Initial cal 4
VA10354-IC10354	A264413.D	05/27/21	20:00	02:57	Initial cal 8
VA10354-IC10354	A264414.D	05/27/21	20:29	03:26	Initial cal 20
VA10354-ICC10354	A264415.D	05/27/21	20:58	03:55	Initial cal 50
VA10354-IC10354	A264416.D	05/27/21	21:27	04:24	Initial cal 100
VA10354-IC10354	A264417.D	05/27/21	21:56	04:53	Initial cal 200
VA10354-ICV10354	A264420.D	05/27/21	23:23	06:20	Initial cal verification 50
VA10354-ICV10354	A264421.D	05/27/21	23:51	06:48	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD25800

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: VA10354-BFB2

Injection Date: 05/28/21

Lab File ID: A264423.D

Injection Time: 09:33

Instrument ID: GCMSA

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	9580	19.4	Pass
75	30.0 - 60.0% of mass 95	24168	48.9	Pass
95	Base peak, 100% relative abundance	49458	100.0	Pass
96	5.0 - 9.0% of mass 95	3329	6.73	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	37082	75.0	Pass
175	5.0 - 9.0% of mass 174	2816	5.69 (7.59) ^a	Pass
176	95.0 - 101.0% of mass 174	36192	73.2 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	2411	4.87 (6.66) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA10354-ICV10354	A264424.D	05/28/21	10:01	00:28	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD25800
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: VA10362-BFB Injection Date: 06/03/21
Lab File ID: A264574.D Injection Time: 08:45
Instrument ID: GCMSA

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	10134	18.9	Pass
75	30.0 - 60.0% of mass 95	26016	48.5	Pass
95	Base peak, 100% relative abundance	53592	100.0	Pass
96	5.0 - 9.0% of mass 95	3464	6.46	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	41525	77.5	Pass
175	5.0 - 9.0% of mass 174	3227	6.02 (7.77) ^a	Pass
176	95.0 - 101.0% of mass 174	41208	76.9 (99.2) ^a	Pass
177	5.0 - 9.0% of mass 176	2656	4.96 (6.45) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA10362-CC10354	A264574.D	06/03/21	08:45	00:00	Continuing cal 20
VA10362-BS	A264576.D	06/03/21	09:47	01:02	Blank Spike
VA10362-MB	A264578.D	06/03/21	10:45	02:00	Method Blank
JD25800-7	A264579.D	06/03/21	11:19	02:34	EFFL-5/28/21
JD25800-2	A264580.D	06/03/21	11:49	03:04	PORT#1-5/28/21
JD25800-3	A264581.D	06/03/21	12:18	03:33	PORT#2-5/28/21
JD25800-4	A264582.D	06/03/21	12:47	04:02	PORT#3-5/28/21
JD25800-5	A264583.D	06/03/21	13:16	04:31	PORT#4-5/28/21
JD25800-6	A264584.D	06/03/21	13:45	05:00	PORT#6-5/28/21
JD25800-1	A264585.D	06/03/21	14:15	05:30	INFL-5/28/21
JD25800-8	A264586.D	06/03/21	14:44	05:59	MW-65-BASELINE #2
JD25800-1	A264587.D	06/03/21	15:13	06:28	INFL-5/28/21
JD25800-8	A264588.D	06/03/21	15:42	06:57	MW-65-BASELINE #2
JD25800-8MS	A264589.D	06/03/21	16:12	07:27	Matrix Spike
JD25800-8MSD	A264590.D	06/03/21	16:41	07:56	Matrix Spike Duplicate
ZZZZZZ	A264592.D	06/03/21	17:40	08:55	(unrelated sample)
ZZZZZZ	A264593.D	06/03/21	18:09	09:24	(unrelated sample)
ZZZZZZ	A264594.D	06/03/21	18:39	09:54	(unrelated sample)
ZZZZZZ	A264595.D	06/03/21	19:08	10:23	(unrelated sample)
ZZZZZZ	A264596.D	06/03/21	19:37	10:52	(unrelated sample)
ZZZZZZ	A264597.D	06/03/21	20:06	11:21	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD25800
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Method: SW846 8260D	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD25800-1	A264587.D	108	102	99	93
JD25800-1	A264585.D	108	101	99	92
JD25800-2	A264580.D	107	100	99	93
JD25800-3	A264581.D	106	101	100	94
JD25800-4	A264582.D	106	101	99	94
JD25800-5	A264583.D	107	101	99	94
JD25800-6	A264584.D	106	101	99	95
JD25800-7	A264579.D	106	101	99	97
JD25800-8	A264586.D	110	102	99	93
JD25800-8	A264588.D	107	102	99	95
JD25800-8MS	A264589.D	107	99	99	100
JD25800-8MSD	A264590.D	106	99	99	101
VA10362-BS	A264576.D	102	98	100	101
VA10362-MB	A264578.D	105	101	98	94

Surrogate Compounds	Recovery Limits
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S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street Treatability Study, Tell City, IN

SGS Job Number: JD26078

Sampling Date: 06/03/21

Report to:

david.liles@Arcadis.com

ATTN: Distribution4

Total number of pages in report: 26



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



Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

Sample Summary

Arcadis**Job No: JD26078****GE, 13th Street Treatability Study, Tell City, IN**

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:**Organics ND = Not detected above the MDL**

JD26078-1	06/03/21	15:00	06/04/21	AQ	Influent	INFL-6/3/21
JD26078-2	06/03/21	14:55	06/04/21	AQ	Water	PORT#1-6/3/21
JD26078-3	06/03/21	14:50	06/04/21	AQ	Water	PORT#2-6/3/21
JD26078-4	06/03/21	14:45	06/04/21	AQ	Water	PORT#3-6/3/21
JD26078-5	06/03/21	14:40	06/04/21	AQ	Water	PORT#4-6/3/21
JD26078-6	06/03/21	14:35	06/04/21	AQ	Water	PORT#6-6/3/21
JD26078-7	06/03/21	13:35	06/04/21	AQ	Effluent	EFFL-6/3/21

Report of Analysis

Page 1 of 3

Client Sample ID:	INFL-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-1	Date Received:	06/04/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264752.D	5	06/09/21 15:24	EH	n/a	n/a	VA10370
Run #2 ^b	A264751.D	50	06/09/21 14:55	EH	n/a	n/a	VA10370

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^c	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1430 ^d	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-1	Date Received:	06/04/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^e	ND	50	10	ug/l	
75-01-4	Vinyl chloride	14.7	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	109%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	INFL-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-1	Date Received:	06/04/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	101%	80-121%
2037-26-5	Toluene-D8	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	95%	95%	80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time. Dilution required due to limited volume provided.
- (b) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
- (c) Associated CCV outside of control limits high, sample was ND.
- (d) Result is from Run# 2
- (e) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#1-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-2	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264745.D	5	06/09/21 11:58	EH	n/a	n/a	VA10370
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-2	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#1-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-2	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#2-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-3	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264746.D	5	06/09/21 12:27	EH	n/a	n/a	VA10370
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-3	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#2-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-3	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#3-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-4	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264747.D	5	06/09/21 12:57	EH	n/a	n/a	VA10370
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-4	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#3-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-4	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#4-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-5	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264748.D	5	06/09/21 13:27	EH	n/a	n/a	VA10370
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-5	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#4-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-5	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#6-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-6	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264749.D	5	06/09/21 13:56	EH	n/a	n/a	VA10370
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-6	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#6-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-6	Date Received:	06/04/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	EFFL-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-7	Date Received:	06/04/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264744.D	5	06/09/21 11:29	EH	n/a	n/a	VA10370
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-7	Date Received:	06/04/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	EFFL-6/3/21	Date Sampled:	06/03/21
Lab Sample ID:	JD26078-7	Date Received:	06/04/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	96%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

ID#: WW

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Feel Ex # 77390317 6418

PN Ltd

Page 1 of 1

Lab Work Order #

JD26078

Contact & Company Name: Pave Labs/Analytix		Telephone: 914-328-5574		Preservative: E														Keys Preservation Key: A. H ₂ SO ₄ B. HCl C. HNO ₃ D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____ Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air NL - NAPL/Oil SW - Sample Wipe Other: _____															
Send Results to: Address: City: _____ State: _____ Zip: _____		Fax: _____		# of Containers: 9														Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: control 10. Other: _____															
Project Name/Location (City, State): GE Tell City				Project #:				PARAMETER ANALYSIS & METHOD <div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;"> Method 9160 VOCs * </div>																									
Sampling & Printed Name: Andy Bannister				Sample Signature:																													
Sample ID		Collection		Type (✓)		Matrix																											
		Date	Time	Comp	Grab																												
INFL - 6/3/21		6/3/21	1500			W	* Use Tell City Project analyte list <div style="border: 1px solid black; border-radius: 50%; width: 50px; height: 50px; display: flex; align-items: center; justify-content: center; margin: 10px auto;"> 801 </div>																										
PORT #1 - 6/3/21			1455																														
PORT #2 - 6/3/21			1450																														
PORT #3 - 6/3/21			1445																														
PORT #4 - 6/3/21			1440																														
PORT #6 - 6/3/21			1435																														
EFTL - 6/3/21			1335																														
Special Instructions/Comments: Standard TAT														<input type="checkbox"/> Special QA/QC Instructions (✓):																			
Laboratory Information and Receipt Lab Name: _____ <input type="checkbox"/> Cooler packed with ice (✓) Specify Turnaround Requirements: _____ Shipping Tracking #: _____														Cooler Custody Seal (✓) <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact Sample Receipt: IR-4 Condition/Cooler Temp: 36°C				Relinquished By: Printed Name: Andy Bannister Signature: _____ Firm: Analytix Date/Time: 6/3/21 1700				Received By: Printed Name: FedEx Signature: _____ Firm/Courier: _____ Date/Time: _____				Relinquished By: Printed Name: _____ Signature: _____ Firm/Courier: _____ Date/Time: 6/4/2021 10:30				Laboratory Received By: Printed Name: Dominic Guverriero Signature: _____ Firm: SBS Date/Time: 6/4/21 10:30			

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results

YELLOW – Lab copy

PINK – Retained by Arcadis

JD26078: Chain of Custody

Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD26078

Client: Arcadis

Project: GE Tell City

Date / Time Received: 6/4/2021 10:30:00 AM

Delivery Method: FedEx

Airbill #s: 7739 0317 6418

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Security
Y or N
Y or N

- | | |
|--|--|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK <input type="checkbox"/> <input checked="" type="checkbox"/> |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 1 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: <input type="checkbox"/> <input type="checkbox"/> | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 212820	pH 12+: 203117A	Other: (Specify)
--------------------	-----------------	-----------------	------------------

Comments

All samples: Collection date on COC states 6/3/2021. Date on vials state 6/2/2021. Please confirm collection date.

All samples: Received 1 x 10mL vial without headspace for 8260 analysis. Limited volume.

Please proceed as noted, correct collection date is 6/3

JD26078: Chain of Custody
Page 3 of 3

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street Treatability Study, Tell City, IN

SGS Job Number: JD26492

Sampling Date: 06/10/21

Report to:

david.liles@Arcadis.com

ATTN: Distribution4

Total number of pages in report: 25



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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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

Sample Summary

Arcadis**Job No: JD26492****GE, 13th Street Treatability Study, Tell City, IN**

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

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

JD26492-1	06/10/21	11:45	AB	06/11/21	AQ	Influent	INFL-6/10/21
JD26492-2	06/10/21	11:40	AB	06/11/21	AQ	Water	PORT#1-6/10/21
JD26492-3	06/10/21	11:35	AB	06/11/21	AQ	Water	PORT#2-6/10/21
JD26492-4	06/10/21	11:30	AB	06/11/21	AQ	Water	PORT#3-6/10/21
JD26492-5	06/10/21	11:25	AB	06/11/21	AQ	Water	PORT#4-6/10/21
JD26492-6	06/10/21	11:20	AB	06/11/21	AQ	Water	PORT#6-6/10/21
JD26492-7	06/10/21	10:00	AB	06/11/21	AQ	Effluent	EFFL-6/10/21

Report of Analysis

Page 1 of 3

Client Sample ID:	INFL-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-1	Date Received:	06/11/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264998.D	5	06/16/21 17:21	EH	n/a	n/a	VA10380
Run #2 ^a	A264991.D	50	06/16/21 13:58	EH	n/a	n/a	VA10380

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1990 ^c	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	3.8	5.0	2.7	ug/l	J
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-1	Date Received:	06/11/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^d	ND	50	10	ug/l	
75-01-4	Vinyl chloride	171	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	110%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-1	Date Received:	06/11/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	105%	80-121%
2037-26-5	Toluene-D8	98%	99%	80-120%
460-00-4	4-Bromofluorobenzene	89%	89%	80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Result is from Run# 2
- (d) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#1-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-2	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264993.D	5	06/16/21 14:56	EH	n/a	n/a	VA10380
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-2	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#1-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-2	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

(a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#2-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-3	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264994.D	5	06/16/21 15:25	EH	n/a	n/a	VA10380
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-3	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#2-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-3	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		80-121%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Page 1 of 3

Client Sample ID:	PORT#3-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-4	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264995.D	5	06/16/21 15:54	EH	n/a	n/a	VA10380
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-4	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	PORT#3-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-4	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#4-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-5	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264996.D	5	06/16/21 16:23	EH	n/a	n/a	VA10380
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-5	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	PORT#4-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-5	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	88%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

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Client Sample ID:	PORT#6-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-6	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264997.D	5	06/16/21 16:52	EH	n/a	n/a	VA10380
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-6	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	PORT#6-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-6	Date Received:	06/11/21
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

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Client Sample ID:	EFFL-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-7	Date Received:	06/11/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A264992.D	5	06/16/21 14:27	EH	n/a	n/a	VA10380
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane ^b	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-7	Date Received:	06/11/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene ^b	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene ^b	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	EFFL-6/10/21	Date Sampled:	06/10/21
Lab Sample ID:	JD26492-7	Date Received:	06/11/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	88%		80-120%

- (a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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



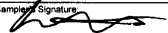
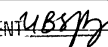
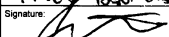
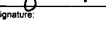
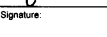
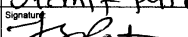
ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Lab Work Order # 511 26492

Contact & Company Name Andy Baumeister/Arads		Telephone: 919-328-5577		Preservative E		Filtered (✓)				Keys	
Address:		Fax:		# of Containers 1		Container Information 9				Preservation Key: A. H ₂ SO ₄ B. HCl C. HNO ₃ D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____	
City: _____ State: _____ Zip: _____		E-mail Address: andrew.baumeister@arads.com		PARAMETER ANALYSIS & METHOD <div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;"> Method 8160 1005 * </div>							
Project Name/Location (City, State): GE Tell City		Project #:		<div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;"> Method 8160 1005 * </div>							
Sampler's Printed Name: Andy Baumeister		Sampler's Signature: 									
Sample ID		Collection		Type (✓)		Matrix		REMARKS			
		Date	Time	Comp	Grab						
INFL - 6/10/21		6/10/21	1145			W	X		1	* Use Tell City project analyte list	
PORT #1 - 6/10/21			1146				X		2		
PORT #2 - 6/10/21			1135				X		3		
PORT #3 - 6/10/21			1130				X		4		
PORT #4 - 6/10/21			1125				X		5		
PORT #6 - 6/10/21			1120				X		6		
EFFL - 6/10/21		✓	1000	✓	✓		X		7		
INITIAL ASSESSMENT  LABEL VERIFICATION _____											
Special Instructions/Comments: Standard TAT <div style="float: right;"> <input type="checkbox"/> Special QA/QC Instructions (✓): </div>											
Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By			
Cooler Custody Seal (✓)		Printed Name: Andy Baumeister		Printed Name: Fedex		Printed Name: Fedex		Printed Name: Jeemitt Rette			
<input type="checkbox"/> Cooler packed with ice (✓) <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Signature: 		Signature: 		Signature: 		Signature: 			
Sample Receipt:		Firm: Arads		Firm/Courier: Fedex		Firm/Courier: Fedex		Firm:			
Shipping Tracking #:		Date/Time: 6/10/21 1700		Date/Time:		Date/Time: 6/11/21 1009		Date/Time:			

20730826 GofC AR Form 08.27.2015

Distribution:

WHITE - Laboratory returns with results

YELLOW - Lab copy

PINK – Retained by Arcadis

JD26492: Chain of Custody

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD26492

Client: _____

Project: _____

Date / Time Received: 6/11/2021 10:00:00 AM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.5);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 1 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Test Strip Lot #s: _____

pH 1-12: 212820

pH 12+: 203117A

Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JD26492: Chain of Custody

Page 2 of 2

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

GE, 13th Street Treatability Study, Tell City, IN

SGS Job Number: JD27244

Sampling Dates: 06/21/21 - 06/23/21

Report to:

Arcadis
150 West Market Suite 728
Indianapolis, IN 46204
david.liles@Arcadis.com; Andrew.Baumeister@arcadis.com
ATTN: David Liles

Total number of pages in report: 131



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

Caitlin Brice, M.S.
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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

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Sample Summary

Arcadis

Job No: JD27244

GE, 13th Street Treatability Study, Tell City, IN

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

JD27244-1	06/21/21	13:50	06/24/21	AQ	Influent	MW-6S BASELINE #3
JD27244-2	06/21/21	14:05	06/24/21	AQ	Influent	INFL-6/21/21
JD27244-3	06/22/21	13:45	06/24/21	AQ	Ground Water	INFL-6/22/21
JD27244-4	06/22/21	13:38	06/24/21	AQ	Ground Water	PORT#1-6/22/21
JD27244-5	06/22/21	13:36	06/24/21	AQ	Ground Water	PORT#2-6/22/21
JD27244-6	06/22/21	13:34	06/24/21	AQ	Ground Water	PORT#3-6/22/21
JD27244-7	06/22/21	13:32	06/24/21	AQ	Ground Water	PORT#4-6/22/21
JD27244-8	06/22/21	13:30	06/24/21	AQ	Ground Water	PORT#6-6/22/21
JD27244-9	06/22/21	13:27	06/24/21	AQ	Effluent	EFFL-6/22/21
JD27244-10	06/23/21	13:55	06/24/21	AQ	Influent	INFL-6/23/21
JD27244-11	06/23/21	13:45	06/24/21	AQ	Ground Water	PORT#1-6/23/21
JD27244-12	06/23/21	13:43	06/24/21	AQ	Ground Water	PORT#2-6/23/21



Sample Summary
(continued)

Arcadis

Job No: JD27244

GE, 13th Street Treatability Study, Tell City, IN

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD27244-13	06/23/21	13:41	06/24/21	AQ	Ground Water	PORT#3-6/23/21
JD27244-14	06/23/21	13:39	06/24/21	AQ	Ground Water	PORT#4-6/23/21
JD27244-15	06/23/21	13:37	06/24/21	AQ	Ground Water	PORT#6-6/23/21
JD27244-16	06/23/21	13:35	06/24/21	AQ	Effluent	EFFL-6/23/21
JD27244-17	06/23/21	14:40	06/24/21	AQ	Influent	INFL-6/23/21
JD27244-18	06/23/21	13:39	06/24/21	AQ	Effluent	EFFL-6/23/21

Summary of Hits

Job Number: JD27244
Account: Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN
Collected: 06/21/21 thru 06/23/21

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

JD27244-1 MW-6S BASELINE #3

cis-1,2-Dichloroethene	5550	100	51	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^a	24.7	10	5.4	ug/l	SW846 8260D
Trichloroethene ^a	11.7	10	5.3	ug/l	SW846 8260D
Vinyl chloride	2530	100	79	ug/l	SW846 8260D

JD27244-2 INFL-6/21/21

cis-1,2-Dichloroethene	4780	50	25	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^a	22.9	5.0	2.7	ug/l	SW846 8260D
Trichloroethene ^a	12.3	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride	1520	50	39	ug/l	SW846 8260D

JD27244-3 INFL-6/22/21

cis-1,2-Dichloroethene	5560	100	51	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^a	24.4	10	5.4	ug/l	SW846 8260D
Trichloroethene ^a	12.7	10	5.3	ug/l	SW846 8260D
Vinyl chloride	2330	100	79	ug/l	SW846 8260D

JD27244-4 PORT#1-6/22/21

cis-1,2-Dichloroethene ^b	413	5.0	2.5	ug/l	SW846 8260D
Vinyl chloride ^b	77.5	5.0	3.9	ug/l	SW846 8260D

JD27244-5 PORT#2-6/22/21

cis-1,2-Dichloroethene ^c	48.3	5.0	2.5	ug/l	SW846 8260D
Vinyl chloride ^c	11.3	5.0	3.9	ug/l	SW846 8260D

JD27244-6 PORT#3-6/22/21

No hits reported in this sample.

JD27244-7 PORT#4-6/22/21

No hits reported in this sample.

JD27244-8 PORT#6-6/22/21

cis-1,2-Dichloroethene ^c	3.9 J	5.0	2.5	ug/l	SW846 8260D
-------------------------------------	-------	-----	-----	------	-------------

Summary of Hits

Job Number: JD27244
Account: Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN
Collected: 06/21/21 thru 06/23/21

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

JD27244-9 EFFL-6/22/21

No hits reported in this sample.

JD27244-10 INFL-6/23/21

cis-1,2-Dichloroethene	4050	50	25	ug/l	SW846 8260D
trans-1,2-Dichloroethene ^a	18.5	5.0	2.7	ug/l	SW846 8260D
Trichloroethene ^a	10.3	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride	1100	50	39	ug/l	SW846 8260D

JD27244-11 PORT#1-6/23/21

cis-1,2-Dichloroethene ^c	578	5.0	2.5	ug/l	SW846 8260D
Vinyl chloride ^c	97.6	5.0	3.9	ug/l	SW846 8260D

JD27244-12 PORT#2-6/23/21

cis-1,2-Dichloroethene ^c	81.5	5.0	2.5	ug/l	SW846 8260D
Vinyl chloride ^c	17.9	5.0	3.9	ug/l	SW846 8260D

JD27244-13 PORT#3-6/23/21

No hits reported in this sample.

JD27244-14 PORT#4-6/23/21

No hits reported in this sample.

JD27244-15 PORT#6-6/23/21

No hits reported in this sample.

JD27244-16 EFFL-6/23/21

No hits reported in this sample.

JD27244-17 INFL-6/23/21

Calcium	80100	5000		ug/l	SW846 6010D
Iron	1090	100		ug/l	SW846 6010D
Magnesium	21100	5000		ug/l	SW846 6010D
Manganese	764	15		ug/l	SW846 6010D
Alkalinity, Total as CaCO ₃ ^d	242	5.0		mg/l	SM2320 B-11
Chloride	19.1	2.0		mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: JD27244
Account: Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN
Collected: 06/21/21 thru 06/23/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Sulfate		28.9	2.0		mg/l	EPA 300/SW846 9056A
JD27244-18	EFFL-6/23/21					
Calcium		25600	5000		ug/l	SW846 6010D
Magnesium		27200	5000		ug/l	SW846 6010D
Manganese		78.7	15		ug/l	SW846 6010D
Alkalinity, Total as CaCO ₃ ^d		137	5.0		mg/l	SM2320 B-11
Chloride		21.1	2.0		mg/l	EPA 300/SW846 9056A
Sulfate		28.4	2.0		mg/l	EPA 300/SW846 9056A

- (a) Dilution required due to high concentration of target compound.
- (b) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (c) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (d) Sample was titrated to a final pH of 4.5.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-6S BASELINE #3	Date Sampled:	06/21/21
Lab Sample ID:	JD27244-1	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165959.D	10	06/30/21 16:19	BK	n/a	n/a	V3B7477
Run #2	3B165961.D	100	06/30/21 17:17	BK	n/a	n/a	V3B7477

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	100	31	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	5550 ^c	100	51	ug/l	
156-60-5	trans-1,2-Dichloroethene	24.7	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6S BASELINE #3	Date Sampled:	06/21/21
Lab Sample ID:	JD27244-1	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone	ND	50	20	ug/l	
74-88-4	Iodomethane	ND	20	16	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	11.7	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate ^d	ND	100	21	ug/l	
75-01-4	Vinyl chloride	2530 ^c	100	79	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	112%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6S BASELINE #3	Date Sampled:	06/21/21
Lab Sample ID:	JD27244-1	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	111%	80-121%
2037-26-5	Toluene-D8	101%	101%	80-120%
460-00-4	4-Bromofluorobenzene	99%	97%	80-120%

- (a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low.
(c) Result is from Run# 2
(d) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	INFL-6/21/21	Date Sampled:	06/21/21
Lab Sample ID:	JD27244-2	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D197609.D	5	06/30/21 14:11	EH	n/a	n/a	V2D8586
Run #2	2D197610.D	50	06/30/21 14:40	EH	n/a	n/a	V2D8586

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride ^c	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	4780 ^d	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	22.9	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/21/21	Date Sampled:	06/21/21
Lab Sample ID:	JD27244-2	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane ^c	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane ^c	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	12.3	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	1520 ^d	50	39	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%	117%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/21/21	Date Sampled:	06/21/21
Lab Sample ID:	JD27244-2	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	117%	120%	80-121%
2037-26-5	Toluene-D8	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	101%	103%	80-120%

- (a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low.
(c) Associated CCV outside of control limits high, sample was ND.
(d) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	INFL-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-3	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3B165960.D	10	06/30/21 16:48	BK	n/a	n/a	V3B7477
Run #2	3B165962.D	100	06/30/21 17:46	BK	n/a	n/a	V3B7477

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	100	31	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	5560 ^c	100	51	ug/l	
156-60-5	trans-1,2-Dichloroethene	24.4	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-3	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone	ND	50	20	ug/l	
74-88-4	Iodomethane	ND	20	16	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	12.7	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate ^d	ND	100	21	ug/l	
75-01-4	Vinyl chloride	2330 ^c	100	79	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	114%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-3	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	114%	80-121%
2037-26-5	Toluene-D8	100%	100%	80-120%
460-00-4	4-Bromofluorobenzene	98%	94%	80-120%

- (a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low.
(c) Result is from Run# 2
(d) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	PORT#1-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-4	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2E169839.D	5	06/25/21 17:12	ED	n/a	n/a	V2E8492
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK) ^b	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	413	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-4	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone ^b	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	77.5	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-4	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	88%		80-120%

(a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

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

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

Report of Analysis

Client Sample ID:	PORT#2-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-5	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2E169840.D	5	06/25/21 17:43	ED	n/a	n/a	V2E8492
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK) ^b	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	48.3	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-5	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone ^b	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	11.3	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-5	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

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

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

Report of Analysis

Client Sample ID:	PORT#3-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-6	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2E169841.D	5	06/25/21 18:12	ED	n/a	n/a	V2E8492
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK) ^b	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-6	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone ^b	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-6	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

(a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-7	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2E169842.D	5	06/25/21 18:42	ED	n/a	n/a	V2E8492
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK) ^b	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-7	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone ^b	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-7	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

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

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

Report of Analysis

Client Sample ID:	PORT#6-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-8	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2E169843.D	5	06/25/21 19:13	ED	n/a	n/a	V2E8492
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK) ^b	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.9	5.0	2.5	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-8	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone ^b	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-8	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Dilution required due to limited volume provided.

(b) Associated CCV outside of control limits low.

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

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

Report of Analysis

Client Sample ID:	EFFL-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-9	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A265320.D	5	06/28/21 11:07	EH	n/a	n/a	VA10398
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane ^b	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-9	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-6/22/21	Date Sampled:	06/22/21
Lab Sample ID:	JD27244-9	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	INFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-10	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A265325.D	5	06/28/21 13:39	EH	n/a	n/a	VA10398
Run #2	A265324.D	50	06/28/21 13:11	EH	n/a	n/a	VA10398

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane ^c	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	4050 ^d	50	25	ug/l	
156-60-5	trans-1,2-Dichloroethene	18.5	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-10	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	10.3	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^b	ND	50	10	ug/l	
75-01-4	Vinyl chloride	1100 ^d	50	39	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	108%	85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-10	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%	96%	80-121%
2037-26-5	Toluene-D8	96%	99%	80-120%
460-00-4	4-Bromofluorobenzene	89%	88%	80-120%

- (a) Dilution required due to high concentration of target compound.
 (b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
 (c) Associated CCV outside of control limits high, sample was ND.
 (d) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	PORT#1-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-11	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A265321.D	5	06/28/21 11:35	EH	n/a	n/a	VA10398
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane ^b	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	578	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-11	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	97.6	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#1-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-11	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#2-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-12	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	A265322.D	5	06/28/21 12:04	EH	n/a	n/a	VA10398
Run #2							

Run	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane ^b	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	81.5	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-12	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	17.9	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#2-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-12	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		80-121%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

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

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

Report of Analysis

Client Sample ID:	PORT#3-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-13	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D197605.D	5	06/30/21 12:14	EH	n/a	n/a	V2D8586
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride ^c	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-13	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane ^c	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane ^c	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#3-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-13	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to high concentraton of non-target compound. Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	PORT#4-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-14	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D197606.D	5	06/30/21 12:43	EH	n/a	n/a	V2D8586
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride ^c	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-14	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane ^c	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane ^c	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#4-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-14	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to high concentraton of non-target compound.Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	PORT#6-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-15	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D197607.D	5	06/30/21 13:12	EH	n/a	n/a	V2D8586
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride ^c	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-15	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane ^c	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane ^c	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PORT#6-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-15	Date Received:	06/24/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	119%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
Dilution required due to high concentraton of non-target compound. Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID:	EFFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-16	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2D197604.D	5	06/30/21 11:45	EH	n/a	n/a	V2D8586
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^b	ND	50	15	ug/l	
71-43-2	Benzene	ND	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride ^c	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-16	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane ^c	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
74-88-4	Iodomethane	ND	10	8.2	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane ^c	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate ^c	ND	50	10	ug/l	
75-01-4	Vinyl chloride	ND	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		85-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-16	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	GE, 13th Street Treatability Study, Tell City, IN		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		80-121%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

- (a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time. Dilution required due to high concentraton of non-target compound. Dilution required due to limited volume provided.
- (b) Associated CCV outside of control limits low.
- (c) Associated CCV outside of control limits high, sample was ND.

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

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

Report of Analysis

Client Sample ID: INFL-6/23/21

Lab Sample ID: JD27244-17

Matrix: AQ - Influent

Date Sampled: 06/23/21

Date Received: 06/24/21

Percent Solids: n/a

Project: GE, 13th Street Treatability Study, Tell City, IN

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	80100	5000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Iron	1090	100	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Magnesium	21100	5000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Manganese	764	15	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Potassium	< 10000	10000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Sodium	< 10000	10000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹

(1) Instrument QC Batch: MA50781

(2) Prep QC Batch: MP27233

RL = Reporting Limit

Report of Analysis

Client Sample ID:	INFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-17	Date Received:	06/24/21
Matrix:	AQ - Influent	Percent Solids:	n/a
Project:	GE, 13th Street Treatability Study, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	242	5.0	mg/l	1	06/26/21 09:30	MP	SM2320 B-11
Chloride	19.1	2.0	mg/l	1	06/29/21 05:37	MH	EPA 300/SW846 9056A
Sulfate	28.9	2.0	mg/l	1	06/29/21 05:37	MH	EPA 300/SW846 9056A
Total Organic Carbon	< 1.0	1.0	mg/l	1	07/01/21 07:26	BM	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID: EFFL-6/23/21

Lab Sample ID: JD27244-18

Matrix: AQ - Effluent

Date Sampled: 06/23/21

Date Received: 06/24/21

Percent Solids: n/a

Project: GE, 13th Street Treatability Study, Tell City, IN

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	25600	5000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Iron	< 100	100	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Magnesium	27200	5000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Manganese	78.7	15	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Potassium	< 10000	10000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹
Sodium	< 10000	10000	ug/l	1	06/30/21	07/01/21	ND	SW846 6010D ¹

(1) Instrument QC Batch: MA50781

(2) Prep QC Batch: MP27233

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFFL-6/23/21	Date Sampled:	06/23/21
Lab Sample ID:	JD27244-18	Date Received:	06/24/21
Matrix:	AQ - Effluent	Percent Solids:	n/a
Project:	GE, 13th Street Treatability Study, Tell City, IN		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	137	5.0	mg/l	1	06/26/21 09:30	MP	SM2320 B-11
Chloride	21.1	2.0	mg/l	1	06/29/21 06:01	MH	EPA 300/SW846 9056A
Sulfate	28.4	2.0	mg/l	1	06/29/21 06:01	MH	EPA 300/SW846 9056A
Total Organic Carbon	< 1.0	1.0	mg/l	1	07/01/21 07:37	BM	SM5310 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

JD 27244



Page 1 of 2

4.4.1

~~V995~~
V995
810
A16
68
1988
G3073

3.85 IP

ALL SAMPLES RECEIVED
PRESERVED AS APPLICABLE

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4.1

JD27244: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: JD27244

Client: ARCADIS

Project: GE TELL CITY BENCH TEST

Date / Time Received: 6/24/2021 10:15:00 AM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.1);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s: pH 1-12: 212820 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD27244: Chain of Custody

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MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Instrument Performance Checks (BFB)**
- **Surrogate Recovery Summaries**

Method Blank Summary

Page 1 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E8492-MB	2E169825.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E8492-MB	2E169825.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
74-88-4	Iodomethane	ND	2.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E8492-MB	2E169825.D	1	06/25/21	ED	n/a	n/a	V2E8492

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

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 85-118%
17060-07-0	1,2-Dichloroethane-D4	90% 80-121%
2037-26-5	Toluene-D8	98% 80-120%
460-00-4	4-Bromofluorobenzene	90% 80-120%

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

Method Blank Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10398-MB	A265319.D	1	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10398-MB	A265319.D	1	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
74-88-4	Iodomethane	ND	2.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10398-MB	A265319.D	1	06/28/21	EH	n/a	n/a	VA10398

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

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105% 85-118%
17060-07-0	1,2-Dichloroethane-D4	90% 80-121%
2037-26-5	Toluene-D8	96% 80-120%
460-00-4	4-Bromofluorobenzene	88% 80-120%

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

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8586-MB	2D197602.D	1	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

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Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8586-MB	2D197602.D	1	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
74-88-4	Iodomethane	ND	2.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8586-MB	2D197602.D	1	06/30/21	EH	n/a	n/a	V2D8586

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

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	113% 85-118%
17060-07-0	1,2-Dichloroethane-D4	113% 80-121%
2037-26-5	Toluene-D8	98% 80-120%
460-00-4	4-Bromofluorobenzene	100% 80-120%

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

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7477-MB	3B165958.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7477-MB	3B165958.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
74-88-4	Iodomethane	ND	2.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7477-MB	3B165958.D	1	06/30/21	BK	n/a	n/a	V3B7477

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

JD27244-1, JD27244-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	110% 85-118%
17060-07-0	1,2-Dichloroethane-D4	105% 80-121%
2037-26-5	Toluene-D8	101% 80-120%
460-00-4	4-Bromofluorobenzene	93% 80-120%

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

Blank Spike Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E8492-BS	2E169823.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	140	70	63-137
71-43-2	Benzene	50	54.1	108	78-117
108-86-1	Bromobenzene	50	49.6	99	82-121
74-97-5	Bromochloromethane	50	54.5	109	83-124
75-27-4	Bromodichloromethane	50	51.6	103	83-123
75-25-2	Bromoform	50	61.0	122	80-140
74-83-9	Bromomethane	50	56.2	112	26-167
78-93-3	2-Butanone (MEK)	200	168	84	73-135
104-51-8	n-Butylbenzene	50	56.8	114	78-126
135-98-8	sec-Butylbenzene	50	52.4	105	78-122
98-06-6	tert-Butylbenzene	50	49.9	100	77-122
75-15-0	Carbon disulfide	50	58.0	116	60-131
56-23-5	Carbon tetrachloride	50	53.4	107	75-127
108-90-7	Chlorobenzene	50	52.6	105	83-115
75-00-3	Chloroethane	50	54.9	110	61-135
67-66-3	Chloroform	50	48.9	98	76-118
74-87-3	Chloromethane	50	53.6	107	46-144
95-49-8	o-Chlorotoluene	50	51.4	103	80-120
106-43-4	p-Chlorotoluene	50	46.5	93	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	52.1	104	75-135
124-48-1	Dibromochloromethane	50	53.0	106	84-128
106-93-4	1,2-Dibromoethane	50	49.0	98	82-129
95-50-1	1,2-Dichlorobenzene	50	50.6	101	85-117
541-73-1	1,3-Dichlorobenzene	50	50.6	101	83-116
106-46-7	1,4-Dichlorobenzene	50	52.2	104	82-115
75-71-8	Dichlorodifluoromethane	50	46.9	94	49-153
75-34-3	1,1-Dichloroethane	50	55.1	110	75-122
107-06-2	1,2-Dichloroethane	50	45.0	90	74-116
75-35-4	1,1-Dichloroethene	50	52.6	105	68-129
156-59-2	cis-1,2-Dichloroethene	50	54.5	109	78-120
156-60-5	trans-1,2-Dichloroethene	50	54.9	110	74-125
78-87-5	1,2-Dichloropropane	50	54.5	109	80-120
142-28-9	1,3-Dichloropropane	50	50.1	100	82-116
594-20-7	2,2-Dichloropropane	50	53.8	108	70-128
563-58-6	1,1-Dichloropropene	50	55.7	111	75-121
10061-01-5	cis-1,3-Dichloropropene	50	56.8	114	84-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E8492-BS	2E169823.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	52.9	106	84-124
100-41-4	Ethylbenzene	50	52.3	105	80-115
87-68-3	Hexachlorobutadiene	50	57.6	115	68-137
591-78-6	2-Hexanone	200	170	85	74-132
74-88-4	Iodomethane	50	49.5	99	10-200
98-82-8	Isopropylbenzene	50	54.8	110	79-120
99-87-6	p-Isopropyltoluene	50	54.0	108	80-122
1634-04-4	Methyl Tert Butyl Ether	50	46.8	94	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	181	91	77-129
74-95-3	Methylene bromide	50	50.2	100	83-121
75-09-2	Methylene chloride	50	51.8	104	74-125
91-20-3	Naphthalene	50	48.3	97	73-138
103-65-1	n-Propylbenzene	50	50.8	102	78-117
100-42-5	Styrene	50	59.0	118	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	55.7	111	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.1	94	78-122
127-18-4	Tetrachloroethene	50	47.7	95	75-125
108-88-3	Toluene	50	53.2	106	80-115
87-61-6	1,2,3-Trichlorobenzene	50	53.3	107	73-140
120-82-1	1,2,4-Trichlorobenzene	50	57.7	115	77-137
71-55-6	1,1,1-Trichloroethane	50	50.7	101	77-124
79-00-5	1,1,2-Trichloroethane	50	52.6	105	83-118
79-01-6	Trichloroethene	50	51.4	103	80-123
75-69-4	Trichlorofluoromethane	50	48.6	97	71-134
96-18-4	1,2,3-Trichloropropane	50	44.6	89	80-121
95-63-6	1,2,4-Trimethylbenzene	50	49.3	99	81-119
108-67-8	1,3,5-Trimethylbenzene	50	49.6	99	79-120
108-05-4	Vinyl Acetate	50	58.9	118	77-131
75-01-4	Vinyl chloride	50	54.0	108	56-138
	m,p-Xylene	100	112	112	81-118
95-47-6	o-Xylene	50	51.1	102	81-119
1330-20-7	Xylene (total)	150	163	109	81-118

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E8492-BS	2E169823.D	1	06/25/21	ED	n/a	n/a	V2E8492

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

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	85-118%
17060-07-0	1,2-Dichloroethane-D4	89%	80-121%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	85%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10398-BS	A265317.D	1	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	286	143* a	63-137
71-43-2	Benzene	50	49.5	99	78-117
108-86-1	Bromobenzene	50	49.7	99	82-121
74-97-5	Bromochloromethane	50	54.1	108	83-124
75-27-4	Bromodichloromethane	50	46.4	93	83-123
75-25-2	Bromoform	50	46.7	93	80-140
74-83-9	Bromomethane	50	53.1	106	26-167
78-93-3	2-Butanone (MEK)	200	240	120	73-135
104-51-8	n-Butylbenzene	50	49.5	99	78-126
135-98-8	sec-Butylbenzene	50	53.8	108	78-122
98-06-6	tert-Butylbenzene	50	52.9	106	77-122
75-15-0	Carbon disulfide	50	49.6	99	60-131
56-23-5	Carbon tetrachloride	50	47.0	94	75-127
108-90-7	Chlorobenzene	50	45.7	91	83-115
75-00-3	Chloroethane	50	56.7	113	61-135
67-66-3	Chloroform	50	44.4	89	76-118
74-87-3	Chloromethane	50	38.0	76	46-144
95-49-8	o-Chlorotoluene	50	52.9	106	80-120
106-43-4	p-Chlorotoluene	50	45.3	91	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	51.7	103	75-135
124-48-1	Dibromochloromethane	50	46.7	93	84-128
106-93-4	1,2-Dibromoethane	50	46.5	93	82-129
95-50-1	1,2-Dichlorobenzene	50	50.8	102	85-117
541-73-1	1,3-Dichlorobenzene	50	48.4	97	83-116
106-46-7	1,4-Dichlorobenzene	50	47.9	96	82-115
75-71-8	Dichlorodifluoromethane	50	37.9	76	49-153
75-34-3	1,1-Dichloroethane	50	48.0	96	75-122
107-06-2	1,2-Dichloroethane	50	40.9	82	74-116
75-35-4	1,1-Dichloroethene	50	51.6	103	68-129
156-59-2	cis-1,2-Dichloroethene	50	49.6	99	78-120
156-60-5	trans-1,2-Dichloroethene	50	50.3	101	74-125
78-87-5	1,2-Dichloropropane	50	48.3	97	80-120
142-28-9	1,3-Dichloropropane	50	45.3	91	82-116
594-20-7	2,2-Dichloropropane	50	46.0	92	70-128
563-58-6	1,1-Dichloropropene	50	48.6	97	75-121
10061-01-5	cis-1,3-Dichloropropene	50	44.9	90	84-123

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10398-BS	A265317.D	1	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	44.1	88	84-124
100-41-4	Ethylbenzene	50	45.7	91	80-115
87-68-3	Hexachlorobutadiene	50	47.4	95	68-137
591-78-6	2-Hexanone	200	162	81	74-132
74-88-4	Iodomethane	50	49.0	98	10-200
98-82-8	Isopropylbenzene	50	50.3	101	79-120
99-87-6	p-Isopropyltoluene	50	51.3	103	80-122
1634-04-4	Methyl Tert Butyl Ether	50	48.3	97	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	163	82	77-129
74-95-3	Methylene bromide	50	50.0	100	83-121
75-09-2	Methylene chloride	50	54.0	108	74-125
91-20-3	Naphthalene	50	44.3	89	73-138
103-65-1	n-Propylbenzene	50	49.7	99	78-117
100-42-5	Styrene	50	47.2	94	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	54.9	110	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	55.3	111	78-122
127-18-4	Tetrachloroethene	50	50.0	100	75-125
108-88-3	Toluene	50	48.1	96	80-115
87-61-6	1,2,3-Trichlorobenzene	50	43.5	87	73-140
120-82-1	1,2,4-Trichlorobenzene	50	43.4	87	77-137
71-55-6	1,1,1-Trichloroethane	50	46.1	92	77-124
79-00-5	1,1,2-Trichloroethane	50	48.6	97	83-118
79-01-6	Trichloroethene	50	47.2	94	80-123
75-69-4	Trichlorofluoromethane	50	46.3	93	71-134
96-18-4	1,2,3-Trichloropropane	50	52.5	105	80-121
95-63-6	1,2,4-Trimethylbenzene	50	51.2	102	81-119
108-67-8	1,3,5-Trimethylbenzene	50	54.0	108	79-120
108-05-4	Vinyl Acetate	50	72.1	144* a	77-131
75-01-4	Vinyl chloride	50	44.1	88	56-138
	m,p-Xylene	100	95.1	95	81-118
95-47-6	o-Xylene	50	51.3	103	81-119
1330-20-7	Xylene (total)	150	146	97	81-118

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA10398-BS	A265317.D	1	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	85-118%
17060-07-0	1,2-Dichloroethane-D4	90%	80-121%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	95%	80-120%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8586-BS	2D197600.D	1	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	148	74	63-137
71-43-2	Benzene	50	45.1	90	78-117
108-86-1	Bromobenzene	50	46.9	94	82-121
74-97-5	Bromochloromethane	50	49.2	98	83-124
75-27-4	Bromodichloromethane	50	52.0	104	83-123
75-25-2	Bromoform	50	49.7	99	80-140
74-83-9	Bromomethane	50	44.5	89	26-167
78-93-3	2-Butanone (MEK)	200	188	94	73-135
104-51-8	n-Butylbenzene	50	51.1	102	78-126
135-98-8	sec-Butylbenzene	50	49.1	98	78-122
98-06-6	tert-Butylbenzene	50	49.6	99	77-122
75-15-0	Carbon disulfide	50	43.2	86	60-131
56-23-5	Carbon tetrachloride	50	61.1	122	75-127
108-90-7	Chlorobenzene	50	45.8	92	83-115
75-00-3	Chloroethane	50	43.3	87	61-135
67-66-3	Chloroform	50	51.3	103	76-118
74-87-3	Chloromethane	50	42.3	85	46-144
95-49-8	o-Chlorotoluene	50	49.7	99	80-120
106-43-4	p-Chlorotoluene	50	47.1	94	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	53.3	107	75-135
124-48-1	Dibromochloromethane	50	50.7	101	84-128
106-93-4	1,2-Dibromoethane	50	50.4	101	82-129
95-50-1	1,2-Dichlorobenzene	50	49.6	99	85-117
541-73-1	1,3-Dichlorobenzene	50	46.5	93	83-116
106-46-7	1,4-Dichlorobenzene	50	46.3	93	82-115
75-71-8	Dichlorodifluoromethane	50	51.2	102	49-153
75-34-3	1,1-Dichloroethane	50	51.8	104	75-122
107-06-2	1,2-Dichloroethane	50	50.8	102	74-116
75-35-4	1,1-Dichloroethene	50	45.1	90	68-129
156-59-2	cis-1,2-Dichloroethene	50	48.7	97	78-120
156-60-5	trans-1,2-Dichloroethene	50	46.3	93	74-125
78-87-5	1,2-Dichloropropane	50	46.9	94	80-120
142-28-9	1,3-Dichloropropane	50	47.4	95	82-116
594-20-7	2,2-Dichloropropane	50	62.5	125	70-128
563-58-6	1,1-Dichloropropene	50	52.9	106	75-121
10061-01-5	cis-1,3-Dichloropropene	50	50.7	101	84-123

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8586-BS	2D197600.D	1	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	51.3	103	84-124
100-41-4	Ethylbenzene	50	45.6	91	80-115
87-68-3	Hexachlorobutadiene	50	53.3	107	68-137
591-78-6	2-Hexanone	200	175	88	74-132
74-88-4	Iodomethane	50	47.3	95	10-200
98-82-8	Isopropylbenzene	50	48.8	98	79-120
99-87-6	p-Isopropyltoluene	50	49.3	99	80-122
1634-04-4	Methyl Tert Butyl Ether	50	53.1	106	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	190	95	77-129
74-95-3	Methylene bromide	50	49.2	98	83-121
75-09-2	Methylene chloride	50	45.8	92	74-125
91-20-3	Naphthalene	50	50.9	102	73-138
103-65-1	n-Propylbenzene	50	47.1	94	78-117
100-42-5	Styrene	50	47.4	95	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	50.5	101	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.2	94	78-122
127-18-4	Tetrachloroethene	50	44.9	90	75-125
108-88-3	Toluene	50	45.2	90	80-115
87-61-6	1,2,3-Trichlorobenzene	50	53.0	106	73-140
120-82-1	1,2,4-Trichlorobenzene	50	52.6	105	77-137
71-55-6	1,1,1-Trichloroethane	50	59.6	119	77-124
79-00-5	1,1,2-Trichloroethane	50	45.9	92	83-118
79-01-6	Trichloroethene	50	47.4	95	80-123
75-69-4	Trichlorofluoromethane	50	56.2	112	71-134
96-18-4	1,2,3-Trichloropropane	50	47.2	94	80-121
95-63-6	1,2,4-Trimethylbenzene	50	47.8	96	81-119
108-67-8	1,3,5-Trimethylbenzene	50	46.6	93	79-120
108-05-4	Vinyl Acetate	50	69.2	138* a	77-131
75-01-4	Vinyl chloride	50	44.3	89	56-138
	m,p-Xylene	100	92.7	93	81-118
95-47-6	o-Xylene	50	48.5	97	81-119
1330-20-7	Xylene (total)	150	141	94	81-118

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8586-BS	2D197600.D	1	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	113%	85-118%
17060-07-0	1,2-Dichloroethane-D4	110%	80-121%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	99%	80-120%

(a) Outside control limits. This compound is not reported in associated samples.

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7477-BS	3B165956.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	174	87	63-137
71-43-2	Benzene	50	49.6	99	78-117
108-86-1	Bromobenzene	50	49.1	98	82-121
74-97-5	Bromochloromethane	50	53.2	106	83-124
75-27-4	Bromodichloromethane	50	51.3	103	83-123
75-25-2	Bromoform	50	53.6	107	80-140
74-83-9	Bromomethane	50	63.7	127	26-167
78-93-3	2-Butanone (MEK)	200	211	106	73-135
104-51-8	n-Butylbenzene	50	52.3	105	78-126
135-98-8	sec-Butylbenzene	50	51.8	104	78-122
98-06-6	tert-Butylbenzene	50	51.2	102	77-122
75-15-0	Carbon disulfide	50	51.4	103	60-131
56-23-5	Carbon tetrachloride	50	56.4	113	75-127
108-90-7	Chlorobenzene	50	50.7	101	83-115
75-00-3	Chloroethane	50	63.7	127	61-135
67-66-3	Chloroform	50	48.3	97	76-118
74-87-3	Chloromethane	50	52.7	105	46-144
95-49-8	o-Chlorotoluene	50	51.6	103	80-120
106-43-4	p-Chlorotoluene	50	49.8	100	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	50.2	100	75-135
124-48-1	Dibromochloromethane	50	52.1	104	84-128
106-93-4	1,2-Dibromoethane	50	46.6	93	82-129
95-50-1	1,2-Dichlorobenzene	50	49.5	99	85-117
541-73-1	1,3-Dichlorobenzene	50	49.4	99	83-116
106-46-7	1,4-Dichlorobenzene	50	48.6	97	82-115
75-71-8	Dichlorodifluoromethane	50	47.1	94	49-153
75-34-3	1,1-Dichloroethane	50	55.0	110	75-122
107-06-2	1,2-Dichloroethane	50	48.2	96	74-116
75-35-4	1,1-Dichloroethene	50	52.8	106	68-129
156-59-2	cis-1,2-Dichloroethene	50	51.0	102	78-120
156-60-5	trans-1,2-Dichloroethene	50	50.9	102	74-125
78-87-5	1,2-Dichloropropane	50	51.3	103	80-120
142-28-9	1,3-Dichloropropane	50	51.0	102	82-116
594-20-7	2,2-Dichloropropane	50	54.9	110	70-128
563-58-6	1,1-Dichloropropene	50	53.0	106	75-121
10061-01-5	cis-1,3-Dichloropropene	50	53.0	106	84-123

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7477-BS	3B165956.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	53.0	106	84-124
100-41-4	Ethylbenzene	50	48.4	97	80-115
87-68-3	Hexachlorobutadiene	50	45.1	90	68-137
591-78-6	2-Hexanone	200	210	105	74-132
74-88-4	Iodomethane	50	51.8	104	10-200
98-82-8	Isopropylbenzene	50	49.8	100	79-120
99-87-6	p-Isopropyltoluene	50	49.2	98	80-122
1634-04-4	Methyl Tert Butyl Ether	50	50.5	101	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	240	120	77-129
74-95-3	Methylene bromide	50	53.3	107	83-121
75-09-2	Methylene chloride	50	55.3	111	74-125
91-20-3	Naphthalene	50	50.9	102	73-138
103-65-1	n-Propylbenzene	50	51.9	104	78-117
100-42-5	Styrene	50	50.1	100	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	51.3	103	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	54.5	109	78-122
127-18-4	Tetrachloroethene	50	45.0	90	75-125
108-88-3	Toluene	50	49.8	100	80-115
87-61-6	1,2,3-Trichlorobenzene	50	48.1	96	73-140
120-82-1	1,2,4-Trichlorobenzene	50	48.8	98	77-137
71-55-6	1,1,1-Trichloroethane	50	53.5	107	77-124
79-00-5	1,1,2-Trichloroethane	50	50.6	101	83-118
79-01-6	Trichloroethene	50	47.8	96	80-123
75-69-4	Trichlorofluoromethane	50	63.2	126	71-134
96-18-4	1,2,3-Trichloropropane	50	52.3	105	80-121
95-63-6	1,2,4-Trimethylbenzene	50	50.6	101	81-119
108-67-8	1,3,5-Trimethylbenzene	50	50.5	101	79-120
108-05-4	Vinyl Acetate	50	63.1	126	77-131
75-01-4	Vinyl chloride	50	58.3	117	56-138
	m,p-Xylene	100	98.4	98	81-118
95-47-6	o-Xylene	50	49.2	98	81-119
1330-20-7	Xylene (total)	150	148	99	81-118

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B7477-BS	3B165956.D	1	06/30/21	BK	n/a	n/a	V3B7477

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

JD27244-1, JD27244-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	110%	85-118%
17060-07-0	1,2-Dichloroethane-D4	101%	80-121%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD26897-3MS	2E169836.D	1	06/25/21	ED	n/a	n/a	V2E8492
JD26897-3MSD	2E169837.D	1	06/25/21	ED	n/a	n/a	V2E8492
JD26897-3	2E169829.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Compound	JD26897-3 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	200	121	61	200	116	58	4	52-133/18
71-43-2	Benzene	ND	50	56.3	113	50	50.8	102	10	55-129/11
108-86-1	Bromobenzene	ND	50	50.7	101	50	46.7	93	8	73-120/11
74-97-5	Bromochloromethane	ND	50	56.5	113	50	50.2	100	12* a	75-122/10
75-27-4	Bromodichloromethane	ND	50	53.4	107	50	48.4	97	10	74-123/11
75-25-2	Bromoform	ND	50	62.3	125	50	55.8	112	11	69-135/12
74-83-9	Bromomethane	ND	50	59.6	119	50	52.3	105	13	11-167/43
78-93-3	2-Butanone (MEK)	ND	200	162	81	200	148	74	9	64-131/15
104-51-8	n-Butylbenzene	ND	50	56.4	113	50	53.7	107	5	69-130/11
135-98-8	sec-Butylbenzene	ND	50	52.3	105	50	49.7	99	5	70-125/12
98-06-6	tert-Butylbenzene	ND	50	50.2	100	50	46.9	94	7	68-125/12
75-15-0	Carbon disulfide	ND	50	60.7	121	50	56.3	113	8	54-137/15
56-23-5	Carbon tetrachloride	ND	50	56.1	112	50	51.7	103	8	68-132/11
108-90-7	Chlorobenzene	ND	50	53.5	107	50	48.6	97	10	71-119/10
75-00-3	Chloroethane	ND	50	57.9	116	50	51.7	103	11	50-146/18
67-66-3	Chloroform	ND	50	50.1	100	50	45.8	92	9	67-120/11
74-87-3	Chloromethane	ND	50	56.9	114	50	51.1	102	11	42-146/17
95-49-8	o-Chlorotoluene	ND	50	52.2	104	50	48.4	97	8	71-120/12
106-43-4	p-Chlorotoluene	ND	50	46.8	94	50	44.2	88	6	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	51.6	103	50	48.4	97	6	65-130/15
124-48-1	Dibromochloromethane	ND	50	53.8	108	50	48.7	97	10	74-125/10
106-93-4	1,2-Dibromoethane	ND	50	49.9	100	50	45.7	91	9	74-125/9
95-50-1	1,2-Dichlorobenzene	ND	50	50.7	101	50	46.3	93	9	73-117/10
541-73-1	1,3-Dichlorobenzene	ND	50	50.9	102	50	46.9	94	8	73-117/10
106-46-7	1,4-Dichlorobenzene	ND	50	52.9	106	50	48.3	97	9	70-117/10
75-71-8	Dichlorodifluoromethane	ND	50	50.3	101	50	44.0	88	13	46-169/17
75-34-3	1,1-Dichloroethane	1.8	50	59.0	114	50	54.3	105	8	66-124/13
107-06-2	1,2-Dichloroethane	ND	50	46.8	94	50	42.2	84	10	66-115/10
75-35-4	1,1-Dichloroethene	ND	50	55.7	111	50	51.6	103	8	60-136/15
156-59-2	cis-1,2-Dichloroethene	ND	50	56.6	113	50	51.2	102	10	55-133/12
156-60-5	trans-1,2-Dichloroethene	ND	50	58.2	116	50	53.6	107	8	67-127/13
78-87-5	1,2-Dichloropropane	ND	50	56.4	113	50	51.9	104	8	72-120/11
142-28-9	1,3-Dichloropropane	ND	50	50.9	102	50	47.1	94	8	72-115/10
594-20-7	2,2-Dichloropropane	ND	50	55.4	111	50	50.4	101	9	61-133/12
563-58-6	1,1-Dichloropropene	ND	50	59.0	118	50	54.2	108	8	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND	50	58.6	117	50	53.8	108	9	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD26897-3MS	2E169836.D	1	06/25/21	ED	n/a	n/a	V2E8492
JD26897-3MSD	2E169837.D	1	06/25/21	ED	n/a	n/a	V2E8492
JD26897-3	2E169829.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Compound	JD26897-3 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	50	53.8	108	50	49.4	99	9	73-122/11
100-41-4	Ethylbenzene	ND	50	53.6	107	50	48.7	97	10	44-136/10
87-68-3	Hexachlorobutadiene	ND	50	59.4	119	50	55.7	111	6	55-143/15
591-78-6	2-Hexanone	ND	200	163	82	200	152	76	7	64-129/13
74-88-4	Iodomethane	ND	50	51.0	102	50	46.0	92	10	10-200/61
98-82-8	Isopropylbenzene	ND	50	55.8	112	50	50.7	101	10	71-122/11
99-87-6	p-Isopropyltoluene	ND	50	54.0	108	50	50.4	101	7	72-124/11
1634-04-4	Methyl Tert Butyl Ether	5.7	50	54.7	98	50	51.1	91	7	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	200	185	93	200	170	85	8	68-128/13
74-95-3	Methylene bromide	ND	50	51.8	104	50	46.7	93	10	74-118/10
75-09-2	Methylene chloride	ND	50	53.0	106	50	48.5	97	9	65-126/13
91-20-3	Naphthalene	ND	50	47.6	95	50	45.7	91	4	58-140/16
103-65-1	n-Propylbenzene	ND	50	51.7	103	50	48.5	97	6	64-123/11
100-42-5	Styrene	ND	50	59.8	120	50	53.8	108	11	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	57.4	115	50	50.7	101	12* a	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	47.6	95	50	45.1	90	5	68-120/15
127-18-4	Tetrachloroethene	ND	50	48.8	98	50	44.6	89	9	61-134/11
108-88-3	Toluene	ND	50	54.3	109	50	49.3	99	10	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND	50	53.2	106	50	50.2	100	6	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND	50	57.5	115	50	53.5	107	7	67-134/14
71-55-6	1,1,1-Trichloroethane	ND	50	53.2	106	50	49.0	98	8	66-130/12
79-00-5	1,1,2-Trichloroethane	ND	50	53.1	106	50	48.7	97	9	73-117/11
79-01-6	Trichloroethene	ND	50	53.3	107	50	48.1	96	10	56-139/11
75-69-4	Trichlorofluoromethane	ND	50	53.5	107	50	46.3	93	14	63-150/16
96-18-4	1,2,3-Trichloropropane	ND	50	45.9	92	50	43.0	86	7	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND	50	49.8	100	50	46.3	93	7	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND	50	49.8	100	50	46.5	93	7	60-128/12
108-05-4	Vinyl Acetate	ND	50	61.7	123	50	55.6	111	10	66-128/15
75-01-4	Vinyl chloride	ND	50	58.5	117	50	52.9	106	10	48-148/17
	m,p-Xylene	ND	100	114	114	100	104	104	9	42-140/10
95-47-6	o-Xylene	ND	50	52.2	104	50	47.4	95	10	54-133/11
1330-20-7	Xylene (total)	ND	150	167	111	150	151	101	10	46-138/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD26897-3MS	2E169836.D	1	06/25/21	ED	n/a	n/a	V2E8492
JD26897-3MSD	2E169837.D	1	06/25/21	ED	n/a	n/a	V2E8492
JD26897-3	2E169829.D	1	06/25/21	ED	n/a	n/a	V2E8492

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-4, JD27244-5, JD27244-6, JD27244-7, JD27244-8

CAS No.	Surrogate Recoveries	MS	MSD	JD26897-3	Limits
1868-53-7	Dibromofluoromethane	101%	100%	98%	85-118%
17060-07-0	1,2-Dichloroethane-D4	91%	90%	92%	80-121%
2037-26-5	Toluene-D8	97%	97%	99%	80-120%
460-00-4	4-Bromofluorobenzene	85%	87%	92%	80-120%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27244-10MS	A265329.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10MSD	A265330.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10 ^a	A265325.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10	A265324.D	50	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Compound	JD27244-10 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	1000	696	70	1000	686	69	1	52-133/18
71-43-2	Benzene	ND	250	245	98	250	238	95	3	55-129/11
108-86-1	Bromobenzene	ND	250	247	99	250	251	100	2	73-120/11
74-97-5	Bromochloromethane	ND	250	267	107	250	267	107	0	75-122/10
75-27-4	Bromodichloromethane	ND	250	232	93	250	224	90	4	74-123/11
75-25-2	Bromoform	ND	250	234	94	250	241	96	3	69-135/12
74-83-9	Bromomethane	ND	250	231	92	250	265	106	14	11-167/43
78-93-3	2-Butanone (MEK)	ND	1000	1020	102	1000	969	97	5	64-131/15
104-51-8	n-Butylbenzene	ND	250	241	96	250	239	96	1	69-130/11
135-98-8	sec-Butylbenzene	ND	250	262	105	250	255	102	3	70-125/12
98-06-6	tert-Butylbenzene	ND	250	258	103	250	253	101	2	68-125/12
75-15-0	Carbon disulfide	ND	250	210	84	250	216	86	3	54-137/15
56-23-5	Carbon tetrachloride	ND	250	224	90	250	228	91	2	68-132/11
108-90-7	Chlorobenzene	ND	250	224	90	250	226	90	1	71-119/10
75-00-3	Chloroethane	ND	250	262	105	250	271	108	3	50-146/18
67-66-3	Chloroform	ND	250	223	89	250	218	87	2	67-120/11
74-87-3	Chloromethane	ND	250	184	74	250	184	74	0	42-146/17
95-49-8	o-Chlorotoluene	ND	250	262	105	250	257	103	2	71-120/12
106-43-4	p-Chlorotoluene	ND	250	225	90	250	223	89	1	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	257	103	250	268	107	4	65-130/15
124-48-1	Dibromochloromethane	ND	250	234	94	250	232	93	1	74-125/10
106-93-4	1,2-Dibromoethane	ND	250	233	93	250	233	93	0	74-125/9
95-50-1	1,2-Dichlorobenzene	ND	250	252	101	250	257	103	2	73-117/10
541-73-1	1,3-Dichlorobenzene	ND	250	240	96	250	245	98	2	73-117/10
106-46-7	1,4-Dichlorobenzene	ND	250	238	95	250	240	96	1	70-117/10
75-71-8	Dichlorodifluoromethane	ND	250	175	70	250	183	73	4	46-169/17
75-34-3	1,1-Dichloroethane	ND	250	240	96	250	233	93	3	66-124/13
107-06-2	1,2-Dichloroethane	ND	250	206	82	250	197	79	4	66-115/10
75-35-4	1,1-Dichloroethene	ND	250	244	98	250	252	101	3	60-136/15
156-59-2	cis-1,2-Dichloroethene	4050 ^c	250	3530	-208* ^b	250	3600	-180* ^b	2	55-133/12
156-60-5	trans-1,2-Dichloroethene	18.5	250	258	96	250	265	99	3	67-127/13
78-87-5	1,2-Dichloropropane	ND	250	245	98	250	233	93	5	72-120/11
142-28-9	1,3-Dichloropropane	ND	250	230	92	250	222	89	4	72-115/10
594-20-7	2,2-Dichloropropane	ND	250	214	86	250	212	85	1	61-133/12
563-58-6	1,1-Dichloropropene	ND	250	239	96	250	229	92	4	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND	250	225	90	250	219	88	3	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27244-10MS	A265329.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10MSD	A265330.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10 ^a	A265325.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10	A265324.D	50	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Compound	JD27244-10 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
10061-02-6	trans-1,3-Dichloropropene	ND		250	223	89	250	218	87	2	73-122/11
100-41-4	Ethylbenzene	ND		250	224	90	250	219	88	2	44-136/10
87-68-3	Hexachlorobutadiene	ND		250	224	90	250	233	93	4	55-143/15
591-78-6	2-Hexanone	ND		1000	715	72	1000	690	69	4	64-129/13
74-88-4	Iodomethane	ND		250	223	89	250	238	95	7	10-200/61
98-82-8	Isopropylbenzene	ND		250	243	97	250	237	95	3	71-122/11
99-87-6	p-Isopropyltoluene	ND		250	251	100	250	248	99	1	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND		250	234	94	250	228	91	3	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	823	82	1000	765	77	7	68-128/13
74-95-3	Methylene bromide	ND		250	253	101	250	244	98	4	74-118/10
75-09-2	Methylene chloride	ND		250	261	104	250	268	107	3	65-126/13
91-20-3	Naphthalene	ND		250	217	87	250	225	90	4	58-140/16
103-65-1	n-Propylbenzene	ND		250	246	98	250	237	95	4	64-123/11
100-42-5	Styrene	ND		250	231	92	250	234	94	1	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	265	106	250	261	104	2	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	283	113	250	276	110	3	68-120/15
127-18-4	Tetrachloroethene	ND		250	248	99	250	243	97	2	61-134/11
108-88-3	Toluene	ND		250	236	94	250	229	92	3	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND		250	210	84	250	216	86	3	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND		250	214	86	250	221	88	3	67-134/14
71-55-6	1,1,1-Trichloroethane	ND		250	218	87	250	221	88	1	66-130/12
79-00-5	1,1,2-Trichloroethane	ND		250	245	98	250	237	95	3	73-117/11
79-01-6	Trichloroethene	10.3		250	244	93	250	235	90	4	56-139/11
75-69-4	Trichlorofluoromethane	ND		250	214	86	250	229	92	7	63-150/16
96-18-4	1,2,3-Trichloropropane	ND		250	261	104	250	260	104	0	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND		250	250	100	250	246	98	2	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND		250	263	105	250	258	103	2	60-128/12
108-05-4	Vinyl Acetate	ND		250	375	150* ^d	250	371	148* ^d	1	66-128/15
75-01-4	Vinyl chloride	1100 ^c		250	1160	24* ^b	250	1140	16* ^b	2	48-148/17
	m,p-Xylene	ND		500	467	93	500	456	91	2	42-140/10
95-47-6	o-Xylene	ND		250	248	99	250	243	97	2	54-133/11
1330-20-7	Xylene (total)	ND		750	715	95	750	699	93	2	46-138/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27244-10MS	A265329.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10MSD	A265330.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10 ^a	A265325.D	5	06/28/21	EH	n/a	n/a	VA10398
JD27244-10	A265324.D	50	06/28/21	EH	n/a	n/a	VA10398

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-9, JD27244-10, JD27244-11, JD27244-12

CAS No.	Surrogate Recoveries	MS	MSD	JD27244-10	JD27244-10	Limits
1868-53-7	Dibromofluoromethane	106%	105%	108%	108%	85-118%
17060-07-0	1,2-Dichloroethane-D4	91%	88%	93%	96%	80-121%
2037-26-5	Toluene-D8	102%	99%	96%	99%	80-120%
460-00-4	4-Bromofluorobenzene	96%	95%	89%	88%	80-120%

(a) Dilution required due to high concentration of target compound.

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

(c) Result is from Run #2.

(d) Outside control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27244-2MS	2D197612.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2MSD	2D197613.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2 ^a	2D197609.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2	2D197610.D	50	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Compound	JD27244-2 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	1000	467	47* ^b	1000	482	48* ^b	3	52-133/18
71-43-2	Benzene	ND	250	212	85	250	226	90	6	55-129/11
108-86-1	Bromobenzene	ND	250	221	88	250	239	96	8	73-120/11
74-97-5	Bromochloromethane	ND	250	224	90	250	242	97	8	75-122/10
75-27-4	Bromodichloromethane	ND	250	241	96	250	249	100	3	74-123/11
75-25-2	Bromoform	ND	250	231	92	250	252	101	9	69-135/12
74-83-9	Bromomethane	ND	250	195	78	250	199	80	2	11-167/43
78-93-3	2-Butanone (MEK)	ND	1000	832	83	1000	861	86	3	64-131/15
104-51-8	n-Butylbenzene	ND	250	236	94	250	248	99	5	69-130/11
135-98-8	sec-Butylbenzene	ND	250	228	91	250	242	97	6	70-125/12
98-06-6	tert-Butylbenzene	ND	250	231	92	250	247	99	7	68-125/12
75-15-0	Carbon disulfide	ND	250	205	82	250	211	84	3	54-137/15
56-23-5	Carbon tetrachloride	ND	250	276	110	250	280	112	1	68-132/11
108-90-7	Chlorobenzene	ND	250	214	86	250	225	90	5	71-119/10
75-00-3	Chloroethane	ND	250	185	74	250	191	76	3	50-146/18
67-66-3	Chloroform	ND	250	226	90	250	238	95	5	67-120/11
74-87-3	Chloromethane	ND	250	178	71	250	187	75	5	42-146/17
95-49-8	o-Chlorotoluene	ND	250	228	91	250	246	98	8	71-120/12
106-43-4	p-Chlorotoluene	ND	250	217	87	250	231	92	6	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	248	99	250	266	106	7	65-130/15
124-48-1	Dibromochloromethane	ND	250	234	94	250	248	99	6	74-125/10
106-93-4	1,2-Dibromoethane	ND	250	228	91	250	248	99	8	74-125/9
95-50-1	1,2-Dichlorobenzene	ND	250	229	92	250	244	98	6	73-117/10
541-73-1	1,3-Dichlorobenzene	ND	250	214	86	250	229	92	7	73-117/10
106-46-7	1,4-Dichlorobenzene	ND	250	212	85	250	228	91	7	70-117/10
75-71-8	Dichlorodifluoromethane	ND	250	225	90	250	227	91	1	46-169/17
75-34-3	1,1-Dichloroethane	ND	250	235	94	250	245	98	4	66-124/13
107-06-2	1,2-Dichloroethane	ND	250	226	90	250	237	95	5	66-115/10
75-35-4	1,1-Dichloroethene	ND	250	217	87	250	229	92	5	60-136/15
156-59-2	cis-1,2-Dichloroethene	4780 ^d	250	3110	-420* ^c	250	3250	-364* ^c	4	55-133/12
156-60-5	trans-1,2-Dichloroethene	22.9	250	231	83	250	244	88	5	67-127/13
78-87-5	1,2-Dichloropropane	ND	250	220	88	250	226	90	3	72-120/11
142-28-9	1,3-Dichloropropane	ND	250	215	86	250	228	91	6	72-115/10
594-20-7	2,2-Dichloropropane	ND	250	253	101	250	251	100	1	61-133/12
563-58-6	1,1-Dichloropropene	ND	250	239	96	250	251	100	5	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND	250	238	95	250	249	100	5	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27244-2MS	2D197612.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2MSD	2D197613.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2 ^a	2D197609.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2	2D197610.D	50	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Compound	JD27244-2 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
10061-02-6	trans-1,3-Dichloropropene	ND		250	237	95	250	247	99	4	73-122/11
100-41-4	Ethylbenzene	ND		250	208	83	250	219	88	5	44-136/10
87-68-3	Hexachlorobutadiene	ND		250	250	100	250	261	104	4	55-143/15
591-78-6	2-Hexanone	ND		1000	642	64	1000	672	67	5	64-129/13
74-88-4	Iodomethane	ND		250	228	91	250	238	95	4	10-200/61
98-82-8	Isopropylbenzene	ND		250	223	89	250	237	95	6	71-122/11
99-87-6	p-Isopropyltoluene	ND		250	228	91	250	242	97	6	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND		250	240	96	250	247	99	3	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	686	69	1000	733	73	7	68-128/13
74-95-3	Methylene bromide	ND		250	224	90	250	241	96	7	74-118/10
75-09-2	Methylene chloride	ND		250	208	83	250	218	87	5	65-126/13
91-20-3	Naphthalene	ND		250	241	96	250	248	99	3	58-140/16
103-65-1	n-Propylbenzene	ND		250	218	87	250	231	92	6	64-123/11
100-42-5	Styrene	ND		250	216	86	250	230	92	6	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	235	94	250	250	100	6	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	217	87	250	232	93	7	68-120/15
127-18-4	Tetrachloroethene	ND		250	215	86	250	229	92	6	61-134/11
108-88-3	Toluene	ND		250	210	84	250	223	89	6	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND		250	247	99	250	264	106	7	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND		250	247	99	250	262	105	6	67-134/14
71-55-6	1,1,1-Trichloroethane	ND		250	261	104	250	272	109	4	66-130/12
79-00-5	1,1,2-Trichloroethane	ND		250	208	83	250	225	90	8	73-117/11
79-01-6	Trichloroethene	12.3		250	233	88	250	250	95	7	56-139/11
75-69-4	Trichlorofluoromethane	ND		250	239	96	250	242	97	1	63-150/16
96-18-4	1,2,3-Trichloropropane	ND		250	220	88	250	235	94	7	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND		250	224	90	250	234	94	4	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND		250	217	87	250	229	92	5	60-128/12
108-05-4	Vinyl Acetate	ND		250	309	124	250	315	126	2	66-128/15
75-01-4	Vinyl chloride	1520 ^d		250	1100	-204* ^c	250	1110	-200* ^c	1	48-148/17
	m,p-Xylene	ND		500	422	84	500	447	89	6	42-140/10
95-47-6	o-Xylene	ND		250	221	88	250	236	94	7	54-133/11
1330-20-7	Xylene (total)	ND		750	644	86	750	683	91	6	46-138/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27244-2MS	2D197612.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2MSD	2D197613.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2 ^a	2D197609.D	5	06/30/21	EH	n/a	n/a	V2D8586
JD27244-2	2D197610.D	50	06/30/21	EH	n/a	n/a	V2D8586

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-2, JD27244-13, JD27244-14, JD27244-15, JD27244-16

CAS No.	Surrogate Recoveries	MS	MSD	JD27244-2	JD27244-2	Limits
1868-53-7	Dibromofluoromethane	111%	108%	118%	117%	85-118%
17060-07-0	1,2-Dichloroethane-D4	106%	103%	117%	120%	80-121%
2037-26-5	Toluene-D8	95%	94%	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	100%	99%	101%	103%	80-120%

- (a) Dilution required due to high concentration of target compound.
- (b) Outside control limits due to matrix interference.
- (c) Outside control limits due to high level in sample relative to spike amount.
- (d) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27032-4MS	3B165964.D	1	06/30/21	BK	n/a	n/a	V3B7477
JD27032-4MSD	3B165965.D	1	06/30/21	BK	n/a	n/a	V3B7477
JD27032-4	3B165963.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Compound	JD27032-4 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	200	157	79	200	150	75	5	52-133/18
71-43-2	Benzene	3.5	50	53.2	99	50	53.4	100	0	55-129/11
108-86-1	Bromobenzene	ND	50	48.8	98	50	49.7	99	2	73-120/11
74-97-5	Bromochloromethane	ND	50	52.2	104	50	51.9	104	1	75-122/10
75-27-4	Bromodichloromethane	ND	50	53.0	106	50	50.7	101	4	74-123/11
75-25-2	Bromoform	ND	50	53.6	107	50	51.4	103	4	69-135/12
74-83-9	Bromomethane	ND	50	69.8	140	50	72.6	145	4	11-167/43
78-93-3	2-Butanone (MEK)	ND	200	196	98	200	193	97	2	64-131/15
104-51-8	n-Butylbenzene	ND	50	55.0	110	50	54.6	109	1	69-130/11
135-98-8	sec-Butylbenzene	ND	50	56.7	113	50	56.2	112	1	70-125/12
98-06-6	tert-Butylbenzene	ND	50	54.8	110	50	55.4	111	1	68-125/12
75-15-0	Carbon disulfide	ND	50	54.1	108	50	54.2	108	0	54-137/15
56-23-5	Carbon tetrachloride	ND	50	61.2	122	50	61.3	123	0	68-132/11
108-90-7	Chlorobenzene	ND	50	50.7	101	50	50.4	101	1	71-119/10
75-00-3	Chloroethane	ND	50	67.4	135	50	69.7	139	3	50-146/18
67-66-3	Chloroform	ND	50	50.1	100	50	49.8	100	1	67-120/11
74-87-3	Chloromethane	ND	50	54.7	109	50	59.4	119	8	42-146/17
95-49-8	o-Chlorotoluene	ND	50	52.5	105	50	52.3	105	0	71-120/12
106-43-4	p-Chlorotoluene	ND	50	51.4	103	50	51.3	103	0	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	49.3	99	50	48.4	97	2	65-130/15
124-48-1	Dibromochloromethane	ND	50	53.7	107	50	51.7	103	4	74-125/10
106-93-4	1,2-Dibromoethane	ND	50	45.7	91	50	43.8	88	4	74-125/9
95-50-1	1,2-Dichlorobenzene	ND	50	49.2	98	50	49.1	98	0	73-117/10
541-73-1	1,3-Dichlorobenzene	ND	50	49.0	98	50	50.2	100	2	73-117/10
106-46-7	1,4-Dichlorobenzene	ND	50	48.4	97	50	48.5	97	0	70-117/10
75-71-8	Dichlorodifluoromethane	ND	50	50.5	101	50	53.8	108	6	46-169/17
75-34-3	1,1-Dichloroethane	2.6	50	58.4	112	50	59.1	113	1	66-124/13
107-06-2	1,2-Dichloroethane	ND	50	50.3	101	50	48.5	97	4	66-115/10
75-35-4	1,1-Dichloroethene	ND	50	57.0	114	50	55.7	111	2	60-136/15
156-59-2	cis-1,2-Dichloroethene	7.0	50	57.5	101	50	57.2	100	1	55-133/12
156-60-5	trans-1,2-Dichloroethene	1.8	50	53.0	102	50	52.4	101	1	67-127/13
78-87-5	1,2-Dichloropropane	ND	50	50.7	101	50	49.1	98	3	72-120/11
142-28-9	1,3-Dichloropropane	ND	50	51.4	103	50	50.8	102	1	72-115/10
594-20-7	2,2-Dichloropropane	ND	50	59.7	119	50	58.8	118	2	61-133/12
563-58-6	1,1-Dichloropropene	ND	50	56.5	113	50	57.2	114	1	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND	50	52.5	105	50	51.7	103	2	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27032-4MS	3B165964.D	1	06/30/21	BK	n/a	n/a	V3B7477
JD27032-4MSD	3B165965.D	1	06/30/21	BK	n/a	n/a	V3B7477
JD27032-4	3B165963.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Compound	JD27032-4 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
10061-02-6	trans-1,3-Dichloropropene	ND		50	53.4	107	50	50.9	102	5	73-122/11
100-41-4	Ethylbenzene	ND		50	51.1	102	50	50.3	101	2	44-136/10
87-68-3	Hexachlorobutadiene	ND		50	50.6	101	50	50.9	102	1	55-143/15
591-78-6	2-Hexanone	ND		200	204	102	200	202	101	1	64-129/13
74-88-4	Iodomethane	ND		50	53.0	106	50	52.6	105	1	10-200/61
98-82-8	Isopropylbenzene	ND		50	53.7	107	50	52.5	105	2	71-122/11
99-87-6	p-Isopropyltoluene	ND		50	53.4	107	50	54.1	108	1	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND		50	49.1	98	50	47.9	96	2	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	233	117	200	222	111	5	68-128/13
74-95-3	Methylene bromide	ND		50	51.6	103	50	50.1	100	3	74-118/10
75-09-2	Methylene chloride	ND		50	54.8	110	50	51.8	104	6	65-126/13
91-20-3	Naphthalene	ND		50	51.7	103	50	51.6	103	0	58-140/16
103-65-1	n-Propylbenzene	ND		50	54.6	109	50	55.6	111	2	64-123/11
100-42-5	Styrene	ND		50	51.0	102	50	50.0	100	2	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	54.2	108	50	51.7	103	5	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	52.7	105	50	52.9	106	0	68-120/15
127-18-4	Tetrachloroethene	ND		50	48.4	97	50	48.7	97	1	61-134/11
108-88-3	Toluene	0.58	J	50	51.3	101	50	50.9	101	1	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND		50	48.6	97	50	49.2	98	1	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.9	98	50	49.2	98	1	67-134/14
71-55-6	1,1,1-Trichloroethane	ND		50	58.9	118	50	58.5	117	1	66-130/12
79-00-5	1,1,2-Trichloroethane	ND		50	49.9	100	50	48.1	96	4	73-117/11
79-01-6	Trichloroethene	ND		50	50.2	100	50	49.9	100	1	56-139/11
75-69-4	Trichlorofluoromethane	ND		50	72.6	145	50	72.0	144	1	63-150/16
96-18-4	1,2,3-Trichloropropane	ND		50	51.2	102	50	51.9	104	1	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND		50	53.7	107	50	53.8	108	0	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND		50	54.0	108	50	54.0	108	0	60-128/12
108-05-4	Vinyl Acetate	ND		50	63.4	127	50	60.1	120	5	66-128/15
75-01-4	Vinyl chloride	7.4		50	70.9	127	50	75.9	137	7	48-148/17
	m,p-Xylene	ND		100	104	104	100	103	103	1	42-140/10
95-47-6	o-Xylene	ND		50	51.5	103	50	51.0	102	1	54-133/11
1330-20-7	Xylene (total)	ND		150	155	103	150	154	103	1	46-138/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD27032-4MS	3B165964.D	1	06/30/21	BK	n/a	n/a	V3B7477
JD27032-4MSD	3B165965.D	1	06/30/21	BK	n/a	n/a	V3B7477
JD27032-4	3B165963.D	1	06/30/21	BK	n/a	n/a	V3B7477

The QC reported here applies to the following samples:

Method: SW846 8260D

JD27244-1, JD27244-3

CAS No.	Surrogate Recoveries	MS	MSD	JD27032-4	Limits
1868-53-7	Dibromofluoromethane	112%	112%	113%	85-118%
17060-07-0	1,2-Dichloroethane-D4	103%	101%	109%	80-121%
2037-26-5	Toluene-D8	102%	100%	103%	80-120%
460-00-4	4-Bromofluorobenzene	102%	104%	100%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2D8535-BFB Injection Date: 05/13/21
Lab File ID: 2D196632.D Injection Time: 20:51
Instrument ID: GCMS2D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	33928	18.1	Pass
75	30.0 - 60.0% of mass 95	86752	46.3	Pass
95	Base peak, 100% relative abundance	187541	100.0	Pass
96	5.0 - 9.0% of mass 95	12522	6.68	Pass
173	Less than 2.0% of mass 174	1485	0.79 (0.84) ^a	Pass
174	50.0 - 120.0% of mass 95	176746	94.2	Pass
175	5.0 - 9.0% of mass 174	13693	7.30 (7.75) ^a	Pass
176	95.0 - 101.0% of mass 174	173312	92.4 (98.1) ^a	Pass
177	5.0 - 9.0% of mass 176	11434	6.10 (6.60) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D8535-IC8535	2D196633.D	05/13/21	21:20	00:29	Initial cal 0.2
V2D8535-IC8535	2D196634.D	05/13/21	21:49	00:58	Initial cal 0.5
V2D8535-IC8535	2D196635.D	05/13/21	22:19	01:28	Initial cal 1
V2D8535-IC8535	2D196636.D	05/13/21	22:48	01:57	Initial cal 2
V2D8535-IC8535	2D196637.D	05/13/21	23:17	02:26	Initial cal 4
V2D8535-IC8535	2D196638.D	05/13/21	23:46	02:55	Initial cal 8
V2D8535-IC8535	2D196639.D	05/14/21	00:16	03:25	Initial cal 20
V2D8535-ICC8535	2D196640.D	05/14/21	00:45	03:54	Initial cal 50
V2D8535-IC8535	2D196641.D	05/14/21	01:15	04:24	Initial cal 100
V2D8535-IC8535	2D196642.D	05/14/21	01:43	04:52	Initial cal 200
V2D8535-ICV8535	2D196645.D	05/14/21	03:11	06:20	Initial cal verification 50
V2D8535-ICV8535	2D196646.D	05/14/21	03:40	06:49	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2D8535-BFB2

Injection Date: 05/14/21

Lab File ID: 2D196648.D

Injection Time: 13:05

Instrument ID: GCMS2D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	33789	17.3	Pass
75	30.0 - 60.0% of mass 95	90869	46.6	Pass
95	Base peak, 100% relative abundance	195136	100.0	Pass
96	5.0 - 9.0% of mass 95	12875	6.60	Pass
173	Less than 2.0% of mass 174	522	0.27 (0.27) ^a	Pass
174	50.0 - 120.0% of mass 95	194133	99.5	Pass
175	5.0 - 9.0% of mass 174	15230	7.80 (7.85) ^a	Pass
176	95.0 - 101.0% of mass 174	189056	96.9 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	12050	6.18 (6.37) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D8535-ICV8535	2D196649.D	05/14/21	14:25	01:20	Initial cal verification 50

Instrument Performance Check (BFB)

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Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2D8586-BFB Injection Date: 06/30/21
Lab File ID: 2D197598.D Injection Time: 08:38
Instrument ID: GCMS2D

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	37264	17.5	Pass
75	30.0 - 60.0% of mass 95	99432	46.7	Pass
95	Base peak, 100% relative abundance	212779	100.0	Pass
96	5.0 - 9.0% of mass 95	14306	6.72	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	202155	95.0	Pass
175	5.0 - 9.0% of mass 174	16084	7.56 (7.96) ^a	Pass
176	95.0 - 101.0% of mass 174	196800	92.5 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	12592	5.92 (6.40) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D8586-CC8535	2D197598.D	06/30/21	08:38	00:00	Continuing cal 20
V2D8586-BS	2D197600.D	06/30/21	09:41	01:03	Blank Spike
V2D8586-MB	2D197602.D	06/30/21	10:40	02:02	Method Blank
ZZZZZZ	2D197603.D	06/30/21	11:15	02:37	(unrelated sample)
JD27244-16	2D197604.D	06/30/21	11:45	03:07	EFFL-6/23/21
JD27244-13	2D197605.D	06/30/21	12:14	03:36	PORT#3-6/23/21
JD27244-14	2D197606.D	06/30/21	12:43	04:05	PORT#4-6/23/21
JD27244-15	2D197607.D	06/30/21	13:12	04:34	PORT#6-6/23/21
ZZZZZZ	2D197608.D	06/30/21	13:41	05:03	(unrelated sample)
JD27244-2	2D197609.D	06/30/21	14:11	05:33	INFL-6/21/21
JD27244-2	2D197610.D	06/30/21	14:40	06:02	INFL-6/21/21
ZZZZZZ	2D197611.D	06/30/21	15:09	06:31	(unrelated sample)
JD27244-2MS	2D197612.D	06/30/21	15:38	07:00	Matrix Spike
JD27244-2MSD	2D197613.D	06/30/21	16:07	07:29	Matrix Spike Duplicate
ZZZZZZ	2D197615.D	06/30/21	17:13	08:35	(unrelated sample)
ZZZZZZ	2D197616.D	06/30/21	17:42	09:04	(unrelated sample)
ZZZZZZ	2D197617.D	06/30/21	18:11	09:33	(unrelated sample)
ZZZZZZ	2D197618.D	06/30/21	18:40	10:02	(unrelated sample)
ZZZZZZ	2D197619.D	06/30/21	19:09	10:31	(unrelated sample)

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2E8308-BFB Injection Date: 12/05/20
Lab File ID: 2E166039.D Injection Time: 17:26
Instrument ID: GCMS2E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	17688	18.0	Pass
75	30.0 - 60.0% of mass 95	45440	46.4	Pass
95	Base peak, 100% relative abundance	98019	100.0	Pass
96	5.0 - 9.0% of mass 95	6429	6.56	Pass
173	Less than 2.0% of mass 174	448	0.46 (0.61) ^a	Pass
174	50.0 - 120.0% of mass 95	73581	75.1	Pass
175	5.0 - 9.0% of mass 174	5387	5.50 (7.32) ^a	Pass
176	95.0 - 101.0% of mass 174	71736	73.2 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	4756	4.85 (6.63) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E8308-IC8308	2E166040.D	12/05/20	18:06	00:40	Initial cal 0.2
V2E8308-IC8308	2E166041.D	12/05/20	18:35	01:09	Initial cal 0.5
V2E8308-IC8308	2E166042.D	12/05/20	19:05	01:39	Initial cal 1
V2E8308-IC8308	2E166043.D	12/05/20	19:35	02:09	Initial cal 2
V2E8308-IC8308	2E166044.D	12/05/20	20:05	02:39	Initial cal 4
V2E8308-IC8308	2E166045.D	12/05/20	20:35	03:09	Initial cal 8
V2E8308-IC8308	2E166046.D	12/05/20	21:05	03:39	Initial cal 20
V2E8308-ICC8308	2E166047.D	12/05/20	21:35	04:09	Initial cal 50
V2E8308-IC8308	2E166048.D	12/05/20	22:05	04:39	Initial cal 100
V2E8308-IC8308	2E166049.D	12/05/20	22:35	05:09	Initial cal 200
V2E8308-ICV8308	2E166052.D	12/06/20	00:05	06:39	Initial cal verification 50
V2E8308-ICV8308	2E166053.D	12/06/20	00:35	07:09	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2E8308-BFB2

Injection Date: 12/07/20

Lab File ID: 2E166056.D

Injection Time: 10:24

Instrument ID: GCMS2E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	17350	17.6	Pass
75	30.0 - 60.0% of mass 95	46011	46.6	Pass
95	Base peak, 100% relative abundance	98717	100.0	Pass
96	5.0 - 9.0% of mass 95	6553	6.64	Pass
173	Less than 2.0% of mass 174	514	0.52 (0.70) ^a	Pass
174	50.0 - 120.0% of mass 95	73909	74.9	Pass
175	5.0 - 9.0% of mass 174	5503	5.57 (7.45) ^a	Pass
176	95.0 - 101.0% of mass 174	72125	73.1 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	4838	4.90 (6.71) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E8308-ICV8308	2E166057.D	12/07/20	10:54	00:30	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 2

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2E8492-BFB Injection Date: 06/25/21
Lab File ID: 2E169821.D Injection Time: 07:51
Instrument ID: GCMS2E

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16161	17.3	Pass
75	30.0 - 60.0% of mass 95	41149	43.9	Pass
95	Base peak, 100% relative abundance	93664	100.0	Pass
96	5.0 - 9.0% of mass 95	6045	6.45	Pass
173	Less than 2.0% of mass 174	574	0.61 (0.71) ^a	Pass
174	50.0 - 120.0% of mass 95	80768	86.2	Pass
175	5.0 - 9.0% of mass 174	5631	6.01 (6.97) ^a	Pass
176	95.0 - 101.0% of mass 174	79480	84.9 (98.4) ^a	Pass
177	5.0 - 9.0% of mass 176	5370	5.73 (6.76) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E8492-CC8308	2E169821.D	06/25/21	07:51	00:00	Continuing cal 20
V2E8490-BS2	2E169823.D	06/25/21	09:00	01:09	Blank Spike
V2E8493-BS	2E169823.D	06/25/21	09:00	01:09	Blank Spike
V2E8492-BS	2E169823.D	06/25/21	09:00	01:09	Blank Spike
V2E8492-MB	2E169825.D	06/25/21	10:01	02:10	Method Blank
V2E8490-MB2	2E169825.D	06/25/21	10:01	02:10	Method Blank
V2E8493-MB	2E169825.D	06/25/21	10:01	02:10	Method Blank
JD26730-4DUP	2E169826.D	06/25/21	10:39	02:48	Duplicate
ZZZZZZ	2E169827.D	06/25/21	11:09	03:18	(unrelated sample)
ZZZZZZ	2E169828.D	06/25/21	11:39	03:48	(unrelated sample)
JD26897-3	2E169829.D	06/25/21	12:10	04:19	(used for QC only; not part of job JD27244)
JD26897-3Q	2E169829.D	06/25/21	12:10	04:19	(used for QC only; not part of job JD27244)
ZZZZZZ	2E169830.D	06/25/21	12:39	04:48	(unrelated sample)
ZZZZZZ	2E169831.D	06/25/21	13:10	05:19	(unrelated sample)
ZZZZZZ	2E169832.D	06/25/21	13:40	05:49	(unrelated sample)
ZZZZZZ	2E169833.D	06/25/21	14:11	06:20	(unrelated sample)
ZZZZZZ	2E169834.D	06/25/21	14:41	06:50	(unrelated sample)
ZZZZZZ	2E169835.D	06/25/21	15:11	07:20	(unrelated sample)
JD26897-3QMS	2E169836.D	06/25/21	15:42	07:51	Matrix Spike
JD26897-3MS	2E169836.D	06/25/21	15:42	07:51	Matrix Spike
JD26897-3QMSD	2E169837.D	06/25/21	16:12	08:21	Matrix Spike Duplicate
JD26897-3MSD	2E169837.D	06/25/21	16:12	08:21	Matrix Spike Duplicate
JD27244-4	2E169839.D	06/25/21	17:12	09:21	PORT#1-6/22/21
JD27244-5	2E169840.D	06/25/21	17:43	09:52	PORT#2-6/22/21

Instrument Performance Check (BFB)

Page 2 of 2

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V2E8492-BFB

Injection Date: 06/25/21

Lab File ID: 2E169821.D

Injection Time: 07:51

Instrument ID: GCMS2E

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD27244-6	2E169841.D	06/25/21	18:12	10:21	PORT#3-6/22/21
JD27244-7	2E169842.D	06/25/21	18:42	10:51	PORT#4-6/22/21
JD27244-8	2E169843.D	06/25/21	19:13	11:22	PORT#6-6/22/21
ZZZZZZ	2E169844.D	06/25/21	19:43	11:52	(unrelated sample)
V2E8494-BS	2E169848.D	06/25/21	21:42	13:51	Blank Spike

5.4.6

5

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V3B7429-BFB Injection Date: 04/22/21
Lab File ID: 3B164950.D Injection Time: 17:46
Instrument ID: GCMS3B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	9739	18.9	Pass
75	30.0 - 60.0% of mass 95	24437	47.4	Pass
95	Base peak, 100% relative abundance	51552	100.0	Pass
96	5.0 - 9.0% of mass 95	3625	7.03	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	48269	93.6	Pass
175	5.0 - 9.0% of mass 174	3815	7.40 (7.90) ^a	Pass
176	95.0 - 101.0% of mass 174	46952	91.1 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	3111	6.03 (6.63) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B7429-IC7429	3B164951.D	04/22/21	18:23	00:37	Initial cal 0.2
V3B7429-IC7429	3B164952.D	04/22/21	18:52	01:06	Initial cal 0.5
V3B7429-IC7429	3B164953.D	04/22/21	19:20	01:34	Initial cal 1
V3B7429-IC7429	3B164954.D	04/22/21	19:49	02:03	Initial cal 2
V3B7429-IC7429	3B164955.D	04/22/21	20:18	02:32	Initial cal 4
V3B7429-IC7429	3B164956.D	04/22/21	20:47	03:01	Initial cal 8
V3B7429-IC7429	3B164957.D	04/22/21	21:15	03:29	Initial cal 20
V3B7429-ICC7429	3B164958.D	04/22/21	21:44	03:58	Initial cal 50
V3B7429-IC7429	3B164959.D	04/22/21	22:13	04:27	Initial cal 100
V3B7429-IC7429	3B164960.D	04/22/21	22:41	04:55	Initial cal 200
V3B7429-ICV7429	3B164963.D	04/23/21	00:08	06:22	Initial cal verification 50
V3B7429-ICV7429	3B164964.D	04/23/21	00:37	06:51	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: V3B7477-BFB Injection Date: 06/30/21
Lab File ID: 3B165954.D Injection Time: 13:33
Instrument ID: GCMS3B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	8052	18.4	Pass
75	30.0 - 60.0% of mass 95	20936	47.9	Pass
95	Base peak, 100% relative abundance	43704	100.0	Pass
96	5.0 - 9.0% of mass 95	2865	6.56	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	38104	87.2	Pass
175	5.0 - 9.0% of mass 174	3186	7.29 (8.36) ^a	Pass
176	95.0 - 101.0% of mass 174	36776	84.1 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	2479	5.67 (6.74) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B7477-CC7429	3B165954.D	06/30/21	13:33	00:00	Continuing cal 20
V3B7477-BS	3B165956.D	06/30/21	14:41	01:08	Blank Spike
V3B7477-MB	3B165958.D	06/30/21	15:40	02:07	Method Blank
JD27244-1	3B165959.D	06/30/21	16:19	02:46	MW-6S BASELINE #3
JD27244-3	3B165960.D	06/30/21	16:48	03:15	INFL-6/22/21
JD27244-1	3B165961.D	06/30/21	17:17	03:44	MW-6S BASELINE #3
JD27244-3	3B165962.D	06/30/21	17:46	04:13	INFL-6/22/21
JD27032-4	3B165963.D	06/30/21	18:15	04:42	(used for QC only; not part of job JD27244)
JD27032-4MS	3B165964.D	06/30/21	18:45	05:12	Matrix Spike
JD27032-4MSD	3B165965.D	06/30/21	19:14	05:41	Matrix Spike Duplicate
ZZZZZZ	3B165967.D	06/30/21	20:12	06:39	(unrelated sample)
ZZZZZZ	3B165968.D	06/30/21	20:41	07:08	(unrelated sample)
ZZZZZZ	3B165969.D	06/30/21	21:10	07:37	(unrelated sample)
ZZZZZZ	3B165970.D	06/30/21	21:39	08:06	(unrelated sample)
ZZZZZZ	3B165971.D	06/30/21	22:08	08:35	(unrelated sample)
ZZZZZZ	3B165972.D	06/30/21	22:38	09:05	(unrelated sample)
ZZZZZZ	3B165973.D	06/30/21	23:07	09:34	(unrelated sample)
ZZZZZZ	3B165974.D	06/30/21	23:36	10:03	(unrelated sample)
ZZZZZZ	3B165975.D	07/01/21	00:05	10:32	(unrelated sample)

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: VA10354-BFB Injection Date: 05/27/21
Lab File ID: A264407.D Injection Time: 17:03
Instrument ID: GCMSA

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	9431	19.5	Pass
75	30.0 - 60.0% of mass 95	23709	49.1	Pass
95	Base peak, 100% relative abundance	48304	100.0	Pass
96	5.0 - 9.0% of mass 95	3181	6.59	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	37013	76.6	Pass
175	5.0 - 9.0% of mass 174	2712	5.61 (7.33) ^a	Pass
176	95.0 - 101.0% of mass 174	35512	73.5 (95.9) ^a	Pass
177	5.0 - 9.0% of mass 176	2385	4.94 (6.72) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA10354-IC10354	A264408.D	05/27/21	17:35	00:32	Initial cal 0.2
VA10354-IC10354	A264409.D	05/27/21	18:04	01:01	Initial cal 0.5
VA10354-IC10354	A264410.D	05/27/21	18:33	01:30	Initial cal 1
VA10354-IC10354	A264411.D	05/27/21	19:02	01:59	Initial cal 2
VA10354-IC10354	A264412.D	05/27/21	19:31	02:28	Initial cal 4
VA10354-IC10354	A264413.D	05/27/21	20:00	02:57	Initial cal 8
VA10354-IC10354	A264414.D	05/27/21	20:29	03:26	Initial cal 20
VA10354-ICC10354	A264415.D	05/27/21	20:58	03:55	Initial cal 50
VA10354-IC10354	A264416.D	05/27/21	21:27	04:24	Initial cal 100
VA10354-IC10354	A264417.D	05/27/21	21:56	04:53	Initial cal 200
VA10354-ICV10354	A264420.D	05/27/21	23:23	06:20	Initial cal verification 50
VA10354-ICV10354	A264421.D	05/27/21	23:51	06:48	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: VA10354-BFB2

Injection Date: 05/28/21

Lab File ID: A264423.D

Injection Time: 09:33

Instrument ID: GCMSA

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	9580	19.4	Pass
75	30.0 - 60.0% of mass 95	24168	48.9	Pass
95	Base peak, 100% relative abundance	49458	100.0	Pass
96	5.0 - 9.0% of mass 95	3329	6.73	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	37082	75.0	Pass
175	5.0 - 9.0% of mass 174	2816	5.69 (7.59) ^a	Pass
176	95.0 - 101.0% of mass 174	36192	73.2 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	2411	4.87 (6.66) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA10354-ICV10354	A264424.D	05/28/21	10:01	00:28	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Sample: VA10398-BFB Injection Date: 06/28/21
Lab File ID: A265316.D Injection Time: 08:53
Instrument ID: GCMSA

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	9075	17.6	Pass
75	30.0 - 60.0% of mass 95	23891	46.4	Pass
95	Base peak, 100% relative abundance	51477	100.0	Pass
96	5.0 - 9.0% of mass 95	3419	6.64	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	42453	82.5	Pass
175	5.0 - 9.0% of mass 174	3146	6.11 (7.41) ^a	Pass
176	95.0 - 101.0% of mass 174	41107	79.9 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2787	5.41 (6.78) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA10398-CC10354	A265316.D	06/28/21	08:53	00:00	Continuing cal 20
VA10398-BS	A265317.D	06/28/21	09:29	00:36	Blank Spike
VA10398-MB	A265319.D	06/28/21	10:28	01:35	Method Blank
JD27244-9	A265320.D	06/28/21	11:07	02:14	EFFL-6/22/21
JD27244-11	A265321.D	06/28/21	11:35	02:42	PORT#1-6/23/21
JD27244-12	A265322.D	06/28/21	12:04	03:11	PORT#2-6/23/21
ZZZZZZ	A265323.D	06/28/21	12:41	03:48	(unrelated sample)
JD27244-10	A265324.D	06/28/21	13:11	04:18	INFL-6/23/21
JD27244-10	A265325.D	06/28/21	13:39	04:46	INFL-6/23/21
ZZZZZZ	A265327.D	06/28/21	14:38	05:45	(unrelated sample)
ZZZZZZ	A265328.D	06/28/21	15:08	06:15	(unrelated sample)
JD27244-10MS	A265329.D	06/28/21	15:37	06:44	Matrix Spike
JD27244-10MSD	A265330.D	06/28/21	16:06	07:13	Matrix Spike Duplicate
ZZZZZZ	A265332.D	06/28/21	17:04	08:11	(unrelated sample)
ZZZZZZ	A265333.D	06/28/21	17:34	08:41	(unrelated sample)
ZZZZZZ	A265334.D	06/28/21	18:03	09:10	(unrelated sample)
ZZZZZZ	A265335.D	06/28/21	18:32	09:39	(unrelated sample)
ZZZZZZ	A265336.D	06/28/21	19:01	10:08	(unrelated sample)
ZZZZZZ	A265337.D	06/28/21	19:31	10:38	(unrelated sample)
ZZZZZZ	A265338.D	06/28/21	19:59	11:06	(unrelated sample)
VA10398-ECC10354A	A265339.D	06/28/21	20:29	11:36	Ending cal 50

Surrogate Recovery Summary

Page 1 of 2

Job Number: JD27244

Account: AGMINI Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

Method: SW846 8260D

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD27244-1	3B165961.D	112	111	101	97
JD27244-1	3B165959.D	112	103	101	99
JD27244-2	2D197610.D	117	120	99	103
JD27244-2	2D197609.D	118	117	99	101
JD27244-3	3B165962.D	114	114	100	94
JD27244-3	3B165960.D	111	106	100	98
JD27244-4	2E169839.D	98	89	97	88
JD27244-5	2E169840.D	99	90	97	89
JD27244-6	2E169841.D	98	89	98	89
JD27244-7	2E169842.D	98	90	98	90
JD27244-8	2E169843.D	100	91	98	89
JD27244-9	A265320.D	107	94	99	89
JD27244-10	A265324.D	108	96	99	88
JD27244-10	A265325.D	108	93	96	89
JD27244-11	A265321.D	107	92	98	89
JD27244-12	A265322.D	108	94	97	89
JD27244-13	2D197605.D	113	115	99	100
JD27244-14	2D197606.D	115	116	98	103
JD27244-15	2D197607.D	118	119	98	102
JD27244-16	2D197604.D	115	114	98	100
JD26897-3MS	2E169836.D	101	91	97	85
JD26897-3MSD	2E169837.D	100	90	97	87
JD27032-4MS	3B165964.D	112	103	102	102
JD27032-4MSD	3B165965.D	112	101	100	104
JD27244-10MS	A265329.D	106	91	102	96
JD27244-10MSD	A265330.D	105	88	99	95
JD27244-2MS	2D197612.D	111	106	95	100
JD27244-2MSD	2D197613.D	108	103	94	99
V2D8586-BS	2D197600.D	113	110	94	99
V2D8586-MB	2D197602.D	113	113	98	100
V2E8492-BS	2E169823.D	101	89	98	85
V2E8492-MB	2E169825.D	98	90	98	90
V3B7477-BS	3B165956.D	110	101	101	97
V3B7477-MB	3B165958.D	110	105	101	93
VA10398-BS	A265317.D	106	90	102	95
VA10398-MB	A265319.D	105	90	96	88

Surrogate
Compounds

Recovery
Limits

Surrogate Recovery Summary

Job Number: JD27244
Account: AGMINI Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Method: SW846 8260D	Matrix: AQ
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Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

5.5.1
5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD27244
Account: AGMINI - Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 06/30/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	17	46		
Antimony	6.0	1.7	4.7		
Arsenic	3.0	2.1	2.8		
Barium	200	.8	13		
Beryllium	1.0	.3	.5		
Bismuth	20	2.3	4		
Boron	100	2.3	63		
Cadmium	3.0	.3	1		
Calcium	5000	6.6	99	14.6	<5000
Cerium	100				
Chromium	10	.3	2		
Cobalt	50	.4	2.6		
Copper	10	.8	5.9		
Iron	100	5.3	32	1.3	<100
Lead	3.0	1.1	1.8		
Lithium	50	4.8	7.3		
Magnesium	5000	32	140	-27	<5000
Manganese	15	.1	1.4	0.20	<15
Molybdenum	20	.6	3.6		
Nickel	10	.4	1.7		
Phosphorus	50	1.2	18		
Potassium	10000	77	200	-22	<10000
Selenium	10	3.2	4.9		
Silicon	200	1.7	100		
Silver	10	1	1.9		
Sodium	10000	34	570	16.9	<10000
Strontium	10	.3	1		
Sulfur	50	3	45		
Thallium	10	1.8	1.8		
Tin	10	.8	3.7		
Titanium	10	.5	2.5		
Tungsten	50	2.6	40		
Vanadium	50	.6	1.8		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD27244
Account: AGMINI - Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 06/30/21

Metal	RL	IDL	MDL	MB raw	final
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Zinc 20 .1 6.9

Zirconium 10 .3 4.1

Associated samples MP27233: JD27244-17, JD27244-18

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21

Metal	JD27230-3 Original MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium	40600	65600	25000	100.0 75-125
Cerium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	192	26300	25000	104.4 75-125
Lead	anr			
Lithium				
Magnesium	17700	42900	25000	100.8 75-125
Manganese	16700	19000	2000	115.0 75-125
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	3500	29300	25000	103.2 75-125
Selenium	anr			
Silicon				
Silver	anr			
Sodium	155000	176000	25000	84.0 75-125
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21

Metal	JD27230-3 Original MS	Spikelet MPSPK2	% Rec	QC Limits
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Zinc anr

Zirconium

Associated samples MP27233: JD27244-17, JD27244-18

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21 06/30/21

Metal	JD27230-3 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit	JD27230-3 Original	DUP	RPD	QC Limits
Aluminum										
Antimony										
Arsenic	anr									
Barium	anr									
Beryllium										
Bismuth										
Boron										
Cadmium	anr									
Calcium	40600	65900	25000	101.2	0.5	20	40600	41100	1.2	0-20
Cerium										
Chromium	anr									
Cobalt										
Copper	anr									
Iron	192	26300	25000	104.4	0.0	20	192	183	4.8	0-20
Lead	anr									
Lithium										
Magnesium	17700	43100	25000	101.6	0.5	20	17700	17800	0.6	0-20
Manganese	16700	18400	2000	85.0	3.2	20	16700	17400	4.1	0-20
Molybdenum										
Nickel	anr									
Phosphorus										
Potassium	3500	29700	25000	104.8	1.4	20	3500	3470	0.9	0-20
Selenium	anr									
Silicon										
Silver	anr									
Sodium	155000	177000	25000	88.0	0.6	20	155000	156000	0.6	0-20
Strontium										
Sulfur										
Thallium										
Tin										
Titanium										
Tungsten										
Vanadium										

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21 06/30/21

Metal	JD27230-3 Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit	JD27230-3 Original DUP	RPD	QC Limits
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Zinc anr

Zirconium

Associated samples MP27233: JD27244-17, JD27244-18

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD27244

Account: AGMINI - Arcadis

Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233

Methods: SW846 6010D

Matrix Type: AQUEOUS

Units: ug/l

Prep Date:

06/30/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium	26700	25000	106.8	80-120
Cerium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	26900	25000	107.6	80-120
Lead	anr			
Lithium				
Magnesium	26500	25000	106.0	80-120
Manganese	1950	2000	97.5	80-120
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	26400	25000	105.6	80-120
Selenium	anr			
Silicon				
Silver	anr			
Sodium	26900	25000	107.6	80-120
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zinc anr

Zirconium

Associated samples MP27233: JD27244-17, JD27244-18

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

6.1.3

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SERIAL DILUTION RESULTS SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21

Metal	JD27230-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium	40600	40300	0.9	0-10
Cerium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	192	193	0.3	0-10
Lead	anr			
Lithium				
Magnesium	17700	17600	0.9	0-10
Manganese	16700	16300	2.2	0-10
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	3500	4030	15.0 (a)	0-10
Selenium	anr			
Silicon				
Silver	anr			
Sodium	155000	158000	2.3	0-10
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD27244
 Account: AGMINI - Arcadis
 Project: GE, 13th Street Treatability Study, Tell City, IN

QC Batch ID: MP27233
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 06/30/21

Metal	JD27230-3		QC	
	Original	SDL 1:5	%DIF	Limits

Zinc anr

Zirconium

Associated samples MP27233: JD27244-17, JD27244-18

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry

QC Data Summaries

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Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD27244
Account: AGMINI - Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN19472	5.0	0.0	mg/l	50	49.0	98.0	90-110%
Alkalinity, Total as CaCO3	GN19472			mg/l	250	249	99.6	90-110%
Chloride	GP34540/GN19518	2.0	0.0	mg/l	80	81.3	101.6	90-110%
Sulfate	GP34540/GN19518	2.0	0.96	mg/l	80	78.4	98.0	90-110%
Total Organic Carbon	GP34593/GN19621	1.0	0.0	mg/l	10	9.33	93.3	90-110%

Associated Samples:

Batch GN19472: JD27244-17, JD27244-18

Batch GP34540: JD27244-17, JD27244-18

Batch GP34593: JD27244-17, JD27244-18

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD27244
Account: AGMINI - Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN19472	JD27175-3	mg/l	106	105	0.9	0-10%
Chloride	GP34540/GN19518	JD27208-1	mg/l	56.2	56.0	0.4	0-20%
Sulfate	GP34540/GN19518	JD27208-1	mg/l	5.6	5.6	0.0	0-20%

Associated Samples:

Batch GN19472: JD27244-17, JD27244-18

Batch GP34540: JD27244-17, JD27244-18

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD27244
Account: AGMINI - Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP34540/GN19518	JD27208-1	mg/l	56.2	80	134	97.3	80-120%
Sulfate	GP34540/GN19518	JD27208-1	mg/l	5.6	80	82.7	96.4	80-120%
Total Organic Carbon	GP34593/GN19621	JD27245-3	mg/l	1.4	10	9.2	78.0	71-132%

Associated Samples:

Batch GP34540: JD27244-17, JD27244-18

Batch GP34593: JD27244-17, JD27244-18

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD27244
Account: AGMINI - Arcadis
Project: GE, 13th Street Treatability Study, Tell City, IN

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Total Organic Carbon	GP34593/GN19621	JD27245-3	mg/l	1.4	10	9.4	2.2	10%

Associated Samples:
Batch GP34593: JD27244-17, JD27244-18
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

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